Subcontract Lab Data

Report of Analysis

ANALYTICAL REPORT

Lab Number:	L1940945
Client:	SGS North America Inc. 2235 US Highway 130 Dayton, NJ 08810
ATTN:	Viktoriya Pushkova
Phone:	(732) 355-4553
Project Name:	SHEPLEY'S HILL (SHL), DEVENS
Project Number:	JC94537X
Report Date:	09/25/19

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Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1940945-01	EFFLUENT	WATER	Not Specified	09/06/19 09:51	09/09/19

Project Name:	SHEPLEY'S HILL (SHL), DEVENS	**Lab Number:**	L1940945
Project Number:	JC94537X	**Report Date:**	09/25/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Case Narrative (continued)

Report Submission

September 25, 2019: This final report includes the results of all requested analyses.

September 24, 2019: This is a preliminary report.

Sample Receipt

L1940945-01: The collection date and time on the chain of custody was 06-SEP-19 09:41; however, the collection date/time on the container label was 06-SEP-19 09:51. At the client's request, the collection date/time is reported as 06-SEP-19 09:51.

Volatile Organics by Method 624

L1940945-01: The pH of the sample was less than two. It should be noted that 2-chloroethylvinyl ether breaks down under acidic conditions. The sample was not appropriately preserved for the analysis of Acrolein.

Semivolatile Organics by Method 625

L1940945-01: The surrogate recovery was outside the acceptance criteria for phenol-d6 (13%); however, the criteria was achieved upon re-extraction outside of holding time. The results of both extractions are reported; however, all associated compounds are considered to have a potential bias.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Title: Technical Director/Representative

Date: 09/25/19

ORGANICS

VOLATILES

Project Name: SHEPLEY'S HILL (SHL), DEVENS **Lab Number:** L1940945

Project Number: JC94537X **Report Date:** 09/25/19

SAMPLE RESULTS

2

Lab ID: L1940945-01
Client ID: EFFLUENT
Sample Location: Not Specified

Date Collected: 09/06/19 09:51
Date Received: 09/09/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 128,624.1
Analytical Date: 09/11/19 20:03
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	1.0	--	1
1,1-Dichloroethane	ND		ug/l	1.5	--	1
Chloroform	ND		ug/l	1.0	--	1
Carbon tetrachloride	ND		ug/l	1.0	--	1
1,2-Dichloropropane	ND		ug/l	3.5	--	1
Dibromochloromethane	ND		ug/l	1.0	--	1
1,1,2-Trichloroethane	ND		ug/l	1.5	--	1
2-Chloroethylvinyl ether	ND		ug/l	10	--	1
Tetrachloroethene	ND		ug/l	1.0	--	1
Chlorobenzene	ND		ug/l	3.5	--	1
Trichlorofluoromethane	ND		ug/l	5.0	--	1
1,2-Dichloroethane	ND		ug/l	1.5	--	1
1,1,1-Trichloroethane	ND		ug/l	2.0	--	1
Bromodichloromethane	ND		ug/l	1.0	--	1
trans-1,3-Dichloropropene	ND		ug/l	1.5	--	1
cis-1,3-Dichloropropene	ND		ug/l	1.5	--	1
1,3-Dichloropropene, Total	ND		ug/l	1.5	--	1
Bromoform	ND		ug/l	1.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--	1
Benzene	ND		ug/l	1.0	--	1
Toluene	ND		ug/l	1.0	--	1
Ethylbenzene	ND		ug/l	1.0	--	1
Chloromethane	ND		ug/l	5.0	--	1
Bromomethane	ND		ug/l	5.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	2.0	--	1
1,1-Dichloroethene	ND		ug/l	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/l	1.5	--	1

Project Name: SHEPLEY'S HILL (SHL), DEVENS **Lab Number:** L1940945

Project Number: JC94537X **Report Date:** 09/25/19

SAMPLE RESULTS

2

Lab ID: L1940945-01 Date Collected: 09/06/19 09:51

Client ID: EFFLUENT Date Received: 09/09/19

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
cis-1,2-Dichloroethene	ND		ug/l	1.0	--	1
Trichloroethene	ND		ug/l	1.0	--	1
1,2-Dichlorobenzene	ND		ug/l	5.0	--	1
1,3-Dichlorobenzene	ND		ug/l	5.0	--	1
1,4-Dichlorobenzene	ND		ug/l	5.0	--	1
p/m-Xylene	ND		ug/l	2.0	--	1
o-xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
Styrene	ND		ug/l	1.0	--	1
Acetone	ND		ug/l	10	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	10	--	1
Vinyl acetate	ND		ug/l	10	--	1
4-Methyl-2-pentanone	ND		ug/l	10	--	1
2-Hexanone	ND		ug/l	10	--	1
Acrolein	ND		ug/l	8.0	--	1
Acrylonitrile	ND		ug/l	10	--	1
Dibromomethane	ND		ug/l	1.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	96		60-140
Fluorobenzene	112		60-140
4-Bromofluorobenzene	97		60-140

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 09/11/19 11:25
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1283377-4					
Methylene chloride	ND		ug/l	1.0	--
1,1-Dichloroethane	ND		ug/l	1.5	--
Chloroform	ND		ug/l	1.0	--
Carbon tetrachloride	ND		ug/l	1.0	--
1,2-Dichloropropane	ND		ug/l	3.5	--
Dibromochloromethane	ND		ug/l	1.0	--
1,1,2-Trichloroethane	ND		ug/l	1.5	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	1.0	--
Chlorobenzene	ND		ug/l	3.5	--
Trichlorofluoromethane	ND		ug/l	5.0	--
1,2-Dichloroethane	ND		ug/l	1.5	--
1,1,1-Trichloroethane	ND		ug/l	2.0	--
Bromodichloromethane	ND		ug/l	1.0	--
trans-1,3-Dichloropropene	ND		ug/l	1.5	--
cis-1,3-Dichloropropene	ND		ug/l	1.5	--
1,3-Dichloropropene, Total	ND		ug/l	1.5	--
Bromoform	ND		ug/l	1.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	--
Benzene	ND		ug/l	1.0	--
Toluene	ND		ug/l	1.0	--
Ethylbenzene	ND		ug/l	1.0	--
Chloromethane	ND		ug/l	5.0	--
Bromomethane	ND		ug/l	5.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	2.0	--
1,1-Dichloroethene	ND		ug/l	1.0	--
trans-1,2-Dichloroethene	ND		ug/l	1.5	--
cis-1,2-Dichloroethene	ND		ug/l	1.0	--

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Method Blank Analysis
Batch Quality Control

Analytical Method: 128,624.1
Analytical Date: 09/11/19 11:25
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1283377-4					
Trichloroethene	ND		ug/l	1.0	--
1,2-Dichlorobenzene	ND		ug/l	5.0	--
1,3-Dichlorobenzene	ND		ug/l	5.0	--
1,4-Dichlorobenzene	ND		ug/l	5.0	--
p/m-Xylene	ND		ug/l	2.0	--
o-xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
Styrene	ND		ug/l	1.0	--
Acetone	ND		ug/l	10	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	10	--
Vinyl acetate	ND		ug/l	10	--
4-Methyl-2-pentanone	ND		ug/l	10	--
2-Hexanone	ND		ug/l	10	--
Acrolein	ND		ug/l	8.0	--
Acrylonitrile	ND		ug/l	10	--
Dibromomethane	ND		ug/l	1.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Pentafluorobenzene	99		60-140
Fluorobenzene	112		60-140
4-Bromofluorobenzene	95		60-140

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1283377-3								
Methylene chloride	95		-		60-140	-		28
1,1-Dichloroethane	100		-		50-150	-		49
Chloroform	100		-		70-135	-		54
Carbon tetrachloride	110		-		70-130	-		41
1,2-Dichloropropane	115		-		35-165	-		55
Dibromochloromethane	90		-		70-135	-		50
1,1,2-Trichloroethane	95		-		70-130	-		45
2-Chloroethylvinyl ether	105		-		1-225	-		71
Tetrachloroethene	90		-		70-130	-		39
Chlorobenzene	90		-		65-135	-		53
Trichlorofluoromethane	95		-		50-150	-		84
1,2-Dichloroethane	115		-		70-130	-		49
1,1,1-Trichloroethane	120		-		70-130	-		36
Bromodichloromethane	100		-		65-135	-		56
trans-1,3-Dichloropropene	95		-		50-150	-		86
cis-1,3-Dichloropropene	105		-		25-175	-		58
Bromoform	90		-		70-130	-		42
1,1,2,2-Tetrachloroethane	105		-		60-140	-		61
Benzene	115		-		65-135	-		61
Toluene	105		-		70-130	-		41
Ethylbenzene	100		-		60-140	-		63
Chloromethane	80		-		1-205	-		60
Bromomethane	75		-		15-185	-		61

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1283377-3								
Vinyl chloride	90		-		5-195	-		66
Chloroethane	95		-		40-160	-		78
1,1-Dichloroethene	100		-		50-150	-		32
trans-1,2-Dichloroethene	100		-		70-130	-		45
cis-1,2-Dichloroethene	100		-		60-140	-		30
Trichloroethene	105		-		65-135	-		48
1,2-Dichlorobenzene	85		-		65-135	-		57
1,3-Dichlorobenzene	85		-		70-130	-		43
1,4-Dichlorobenzene	85		-		65-135	-		57
p/m-Xylene	92		-		60-140	-		30
o-xylene	90		-		60-140	-		30
Styrene	85		-		60-140	-		30
Acetone	92		-		40-160	-		30
Carbon disulfide	90		-		60-140	-		30
2-Butanone	104		-		60-140	-		30
Vinyl acetate	90		-		60-140	-		30
4-Methyl-2-pentanone	104		-		60-140	-		30
2-Hexanone	102		-		60-140	-		30
Acrolein	88		-		60-140	-		30
Acrylonitrile	95		-		60-140	-		60
Dibromomethane	105		-		70-130	-		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1283377-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Pentafluorobenzene	99				60-140
Fluorobenzene	112				60-140
4-Bromofluorobenzene	98				60-140

SEMIVOLATILES

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

SAMPLE RESULTS

Lab ID: L1940945-01
Client ID: EFFLUENT
Sample Location: Not Specified

Date Collected: 09/06/19 09:51
Date Received: 09/09/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 129,625.1
Analytical Date: 09/19/19 05:51
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 09/11/19 00:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/l	2.0	--	1
Benzidine[1]	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Hexachlorobenzene	ND		ug/l	2.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
2-Chloronaphthalene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene[1]	ND		ug/l	2.0	--	1
Fluoranthene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorobutadiene	ND		ug/l	2.0	--	1
Hexachlorocyclopentadiene[1]	ND		ug/l	10	--	1
Hexachloroethane	ND		ug/l	2.0	--	1
Isophorone	ND		ug/l	5.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NDPA/DPA[1]	ND		ug/l	2.0	--	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.2	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1

Project Name: SHEPLEY'S HILL (SHL), DEVENS **Lab Number:** L1940945

Project Number: JC94537X **Report Date:** 09/25/19

SAMPLE RESULTS

Lab ID: L1940945-01 Date Collected: 09/06/19 09:51

Client ID: EFFLUENT Date Received: 09/09/19

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dimethyl phthalate	ND		ug/l	5.0	--	1
Benzo(a)anthracene	ND		ug/l	2.0	--	1
Benzo(a)pyrene	ND		ug/l	2.0	--	1
Benzo(b)fluoranthene	ND		ug/l	2.0	--	1
Benzo(k)fluoranthene	ND		ug/l	2.0	--	1
Chrysene	ND		ug/l	2.0	--	1
Acenaphthylene	ND		ug/l	2.0	--	1
Anthracene	ND		ug/l	2.0	--	1
Benzo(ghi)perylene	ND		ug/l	2.0	--	1
Fluorene	ND		ug/l	2.0	--	1
Phenanthrene	ND		ug/l	2.0	--	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--	1
Pyrene	ND		ug/l	2.0	--	1
Aniline[1]	ND		ug/l	2.0	--	1
4-Chloroaniline[1]	ND		ug/l	5.0	--	1
1-Methylnaphthalene[1]	ND		ug/l	2.0	--	1
2-Nitroaniline[1]	ND		ug/l	5.0	--	1
3-Nitroaniline[1]	ND		ug/l	5.0	--	1
4-Nitroaniline[1]	ND		ug/l	5.0	--	1
Dibenzofuran[1]	ND		ug/l	2.0	--	1
2-Methylnaphthalene[1]	ND		ug/l	2.0	--	1
n-Nitrosodimethylamine[1]	ND		ug/l	2.0	--	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol[1]	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	5.0	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Pentachlorophenol	ND		ug/l	5.0	--	1
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol[1]	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol[1]	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol[1]	ND		ug/l	5.0	--	1

Project Name: SHEPLEY'S HILL (SHL), DEVENS **Lab Number:** L1940945

Project Number: JC94537X **Report Date:** 09/25/19

SAMPLE RESULTS

2

Lab ID: L1940945-01 Date Collected: 09/06/19 09:51

Client ID: EFFLUENT Date Received: 09/09/19

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzoic Acid[1]	ND		ug/l	50	--	1
Benzyl Alcohol[1]	ND		ug/l	2.0	--	1
Carbazole[1]	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	27		25-87
Phenol-d6	**13**	Q	16-65
Nitrobenzene-d5	59		42-122
2-Fluorobiphenyl	54		46-121
2,4,6-Tribromophenol	55		45-128
4-Terphenyl-d14	62		47-138

Project Name: SHEPLEY'S HILL (SHL), DEVENS **Lab Number:** L1940945

Project Number: JC94537X **Report Date:** 09/25/19

SAMPLE RESULTS

Lab ID: L1940945-01 RE
Client ID: EFFLUENT
Sample Location: Not Specified

Date Collected: 09/06/19 09:51
Date Received: 09/09/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 129,625.1
Analytical Date: 09/24/19 14:49
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 09/20/19 11:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/l	2.0	--	1
Benzidine[1]	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Hexachlorobenzene	ND		ug/l	2.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
2-Chloronaphthalene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene[1]	ND		ug/l	2.0	--	1
Fluoranthene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorobutadiene	ND		ug/l	2.0	--	1
Hexachlorocyclopentadiene[1]	ND		ug/l	10	--	1
Hexachloroethane	ND		ug/l	2.0	--	1
Isophorone	ND		ug/l	5.0	--	1
Naphthalene	ND		ug/l	2.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NDPA/DPA[1]	ND		ug/l	2.0	--	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.2	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1

Project Name: SHEPLEY'S HILL (SHL), DEVENS **Lab Number:** L1940945

Project Number: JC94537X **Report Date:** 09/25/19

SAMPLE RESULTS

2

Lab ID: L1940945-01 RE Date Collected: 09/06/19 09:51

Client ID: EFFLUENT Date Received: 09/09/19

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dimethyl phthalate	ND		ug/l	5.0	--	1
Benzo(a)anthracene	ND		ug/l	2.0	--	1
Benzo(a)pyrene	ND		ug/l	2.0	--	1
Benzo(b)fluoranthene	ND		ug/l	2.0	--	1
Benzo(k)fluoranthene	ND		ug/l	2.0	--	1
Chrysene	ND		ug/l	2.0	--	1
Acenaphthylene	ND		ug/l	2.0	--	1
Anthracene	ND		ug/l	2.0	--	1
Benzo(ghi)perylene	ND		ug/l	2.0	--	1
Fluorene	ND		ug/l	2.0	--	1
Phenanthrene	ND		ug/l	2.0	--	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--	1
Pyrene	ND		ug/l	2.0	--	1
Aniline[1]	ND		ug/l	2.0	--	1
4-Chloroaniline[1]	ND		ug/l	5.0	--	1
1-Methylnaphthalene[1]	ND		ug/l	2.0	--	1
2-Nitroaniline[1]	ND		ug/l	5.0	--	1
3-Nitroaniline[1]	ND		ug/l	5.0	--	1
4-Nitroaniline[1]	ND		ug/l	5.0	--	1
Dibenzofuran[1]	ND		ug/l	2.0	--	1
2-Methylnaphthalene[1]	ND		ug/l	2.0	--	1
n-Nitrosodimethylamine[1]	ND		ug/l	2.0	--	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol[1]	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	5.0	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Pentachlorophenol	ND		ug/l	5.0	--	1
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol[1]	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol[1]	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol[1]	ND		ug/l	5.0	--	1

Project Name: SHEPLEY'S HILL (SHL), DEVENS **Lab Number:** L1940945

Project Number: JC94537X **Report Date:** 09/25/19

SAMPLE RESULTS

2

Lab ID:	L1940945-01	RE	Date Collected:	09/06/19 09:51
Client ID:	EFFLUENT		Date Received:	09/09/19
Sample Location:	Not Specified		Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzoic Acid[1]	ND		ug/l	50	--	1
Benzyl Alcohol[1]	ND		ug/l	2.0	--	1
Carbazole[1]	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		25-87
Phenol-d6	29		16-65
Nitrobenzene-d5	71		42-122
2-Fluorobiphenyl	84		46-121
2,4,6-Tribromophenol	79		45-128
4-Terphenyl-d14	90		47-138

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 09/11/19 11:33
Analyst: CB

Extraction Method: EPA 625.1
Extraction Date: 09/10/19 20:02

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1282479-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine[1]	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene[1]	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene[1]	ND		ug/l	10	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA[1]	ND		ug/l	2.0	--
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.2	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 09/11/19 11:33
Analyst: CB

Extraction Method: EPA 625.1
Extraction Date: 09/10/19 20:02

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1282479-1					
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Aniline[1]	ND		ug/l	2.0	--
4-Chloroaniline[1]	ND		ug/l	5.0	--
1-Methylnaphthalene[1]	ND		ug/l	2.0	--
2-Nitroaniline[1]	ND		ug/l	5.0	--
3-Nitroaniline[1]	ND		ug/l	5.0	--
4-Nitroaniline[1]	ND		ug/l	5.0	--
Dibenzofuran[1]	ND		ug/l	2.0	--
2-Methylnaphthalene[1]	ND		ug/l	2.0	--
n-Nitrosodimethylamine[1]	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol[1]	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	5.0	--
4-Nitrophenol	ND		ug/l	10	--

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 09/11/19 11:33
Analyst: CB

Extraction Method: EPA 625.1
Extraction Date: 09/10/19 20:02

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1282479-1					
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Pentachlorophenol	ND		ug/l	5.0	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol[1]	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol[1]	ND		ug/l	5.0	--
2,4,5-Trichlorophenol[1]	ND		ug/l	5.0	--
Benzoic Acid[1]	ND		ug/l	50	--
Benzyl Alcohol[1]	ND		ug/l	2.0	--
Carbazole[1]	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	33		25-87
Phenol-d6	28		16-65
Nitrobenzene-d5	63		42-122
2-Fluorobiphenyl	60		46-121
2,4,6-Tribromophenol	68		45-128
4-Terphenyl-d14	69		47-138

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 09/20/19 11:45
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 09/19/19 11:59

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1286136-1					
Acenaphthene	ND		ug/l	2.0	--
Benzidine[1]	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Hexachlorobenzene	ND		ug/l	2.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
2-Chloronaphthalene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene[1]	ND		ug/l	2.0	--
Fluoranthene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorobutadiene	ND		ug/l	2.0	--
Hexachlorocyclopentadiene[1]	ND		ug/l	10	--
Hexachloroethane	ND		ug/l	2.0	--
Isophorone	ND		ug/l	5.0	--
Naphthalene	ND		ug/l	2.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA[1]	ND		ug/l	2.0	--
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.2	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 09/20/19 11:45
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 09/19/19 11:59

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1286136-1					
Benzo(a)anthracene	ND		ug/l	2.0	--
Benzo(a)pyrene	ND		ug/l	2.0	--
Benzo(b)fluoranthene	ND		ug/l	2.0	--
Benzo(k)fluoranthene	ND		ug/l	2.0	--
Chrysene	ND		ug/l	2.0	--
Acenaphthylene	ND		ug/l	2.0	--
Anthracene	ND		ug/l	2.0	--
Benzo(ghi)perylene	ND		ug/l	2.0	--
Fluorene	ND		ug/l	2.0	--
Phenanthrene	ND		ug/l	2.0	--
Dibenzo(a,h)anthracene	ND		ug/l	2.0	--
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	--
Pyrene	ND		ug/l	2.0	--
Aniline[1]	ND		ug/l	2.0	--
4-Chloroaniline[1]	ND		ug/l	5.0	--
1-Methylnaphthalene[1]	ND		ug/l	2.0	--
2-Nitroaniline[1]	ND		ug/l	5.0	--
3-Nitroaniline[1]	ND		ug/l	5.0	--
4-Nitroaniline[1]	ND		ug/l	5.0	--
Dibenzofuran[1]	ND		ug/l	2.0	--
2-Methylnaphthalene[1]	ND		ug/l	2.0	--
n-Nitrosodimethylamine[1]	ND		ug/l	2.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol[1]	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	5.0	--
4-Nitrophenol	ND		ug/l	10	--

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Method Blank Analysis
Batch Quality Control

Analytical Method: 129,625.1
Analytical Date: 09/20/19 11:45
Analyst: SZ

Extraction Method: EPA 625.1
Extraction Date: 09/19/19 11:59

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1286136-1					
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Pentachlorophenol	ND		ug/l	5.0	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol[1]	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol[1]	ND		ug/l	5.0	--
2,4,5-Trichlorophenol[1]	ND		ug/l	5.0	--
Benzoic Acid[1]	ND		ug/l	50	--
Benzyl Alcohol[1]	ND		ug/l	2.0	--
Carbazole[1]	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		25-87
Phenol-d6	32		16-65
Nitrobenzene-d5	63		42-122
2-Fluorobiphenyl	76		46-121
2,4,6-Tribromophenol	71		45-128
4-Terphenyl-d14	80		47-138

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1282479-3								
Acenaphthene	80		-		60-132	-		48
Benzidine[1]	38		-		0-70	-		30
1,2,4-Trichlorobenzene	68		-		57-130	-		50
Hexachlorobenzene	88		-		8-142	-		55
Bis(2-chloroethyl)ether	68		-		43-126	-		108
2-Chloronaphthalene	78		-		65-120	-		24
3,3'-Dichlorobenzidine	36		-		8-213	-		108
2,4-Dinitrotoluene	107		-		48-127	-		42
2,6-Dinitrotoluene	98		-		68-137	-		48
Azobenzene[1]	85		-		44-115	-		23
Fluoranthene	98		-		43-121	-		66
4-Chlorophenyl phenyl ether	87		-		38-145	-		61
4-Bromophenyl phenyl ether	93		-		65-120	-		43
Bis(2-chloroisopropyl)ether	63		-		63-139	-		76
Bis(2-chloroethoxy)methane	71		-		49-165	-		54
Hexachlorobutadiene	75		-		38-120	-		62
Hexachlorocyclopentadiene[1]	70		-		7-118	-		35
Hexachloroethane	64		-		55-120	-		52
Isophorone	82		-		47-180	-		93
Naphthalene	72		-		36-120	-		65
Nitrobenzene	78		-		54-158	-		62
NDPA/DPA[1]	92		-		45-112	-		36
n-Nitrosodi-n-propylamine	82		-		14-198	-		87

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1282479-3								
Bis(2-ethylhexyl)phthalate	93		-		29-137	-		82
Butyl benzyl phthalate	107		-		1-140	-		60
Di-n-butylphthalate	98		-		8-120	-		47
Di-n-octylphthalate	104		-		19-132	-		69
Diethyl phthalate	98		-		1-120	-		100
Dimethyl phthalate	97		-		1-120	-		183
Benzo(a)anthracene	91		-		42-133	-		53
Benzo(a)pyrene	91		-		32-148	-		72
Benzo(b)fluoranthene	92		-		42-140	-		71
Benzo(k)fluoranthene	95		-		25-146	-		63
Chrysene	82		-		44-140	-		87
Acenaphthylene	91		-		54-126	-		74
Anthracene	85		-		43-120	-		66
Benzo(ghi)perylene	94		-		1-195	-		97
Fluorene	90		-		70-120	-		38
Phenanthrene	78		-		65-120	-		39
Dibenzo(a,h)anthracene	103		-		1-200	-		126
Indeno(1,2,3-cd)pyrene	86		-		1-151	-		99
Pyrene	89		-		70-120	-		49
Aniline[1]	58		-		1-75	-		66
4-Chloroaniline[1]	58		-		10-100	-		53
1-Methylnaphthalene[1]	83		-		41-115	-		24
2-Nitroaniline[1]	94		-		43-131	-		24

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1282479-3								
3-Nitroaniline[1]	76		-		27-98	-		39
4-Nitroaniline[1]	80		-		41-112	-		37
Dibenzofuran[1]	84		-		23-126	-		22
2-Methylnaphthalene[1]	80		-		40-109	-		18
n-Nitrosodimethylamine[1]	44		-		15-68	-		17
2,4,6-Trichlorophenol	98		-		52-129	-		58
p-Chloro-m-cresol[1]	97		-		68-130	-		73
2-Chlorophenol	75		-		36-120	-		61
2,4-Dichlorophenol	87		-		53-122	-		50
2,4-Dimethylphenol	82		-		42-120	-		58
2-Nitrophenol	87		-		45-167	-		55
4-Nitrophenol	71		-		13-129	-		131
2,4-Dinitrophenol	91		-		1-173	-		132
4,6-Dinitro-o-cresol	101		-		56-130	-		203
Pentachlorophenol	76		-		38-152	-		86
Phenol	39		-		17-120	-		64
2-Methylphenol[1]	75		-		38-102	-		23
3-Methylphenol/4-Methylphenol[1]	76		-		35-103	-		26
2,4,5-Trichlorophenol[1]	100		-		47-126	-		28
Benzoic Acid[1]	20		-		2-55	-		27
Benzyl Alcohol[1]	74		-		31-103	-		23
Carbazole[1]	90		-		46-114	-		26

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X
Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1282479-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	52				25-87
Phenol-d6	36				16-65
Nitrobenzene-d5	65				42-122
2-Fluorobiphenyl	69				46-121
2,4,6-Tribromophenol	76				45-128
4-Terphenyl-d14	74				47-138

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1286136-3								
Acenaphthene	85		-		60-132	-		48
Benzidine[1]	47		-		0-70	-		30
1,2,4-Trichlorobenzene	75		-		57-130	-		50
Hexachlorobenzene	90		-		8-142	-		55
Bis(2-chloroethyl)ether	67		-		43-126	-		108
2-Chloronaphthalene	85		-		65-120	-		24
3,3'-Dichlorobenzidine	35		-		8-213	-		108
2,4-Dinitrotoluene	109		-		48-127	-		42
2,6-Dinitrotoluene	103		-		68-137	-		48
Azobenzene[1]	89		-		44-115	-		23
Fluoranthene	102		-		43-121	-		66
4-Chlorophenyl phenyl ether	93		-		38-145	-		61
4-Bromophenyl phenyl ether	97		-		65-120	-		43
Bis(2-chloroisopropyl)ether	65		-		63-139	-		76
Bis(2-chloroethoxy)methane	75		-		49-165	-		54
Hexachlorobutadiene	85		-		38-120	-		62
Hexachlorocyclopentadiene[1]	84		-		7-118	-		35
Hexachloroethane	74		-		55-120	-		52
Isophorone	86		-		47-180	-		93
Naphthalene	80		-		36-120	-		65
Nitrobenzene	80		-		54-158	-		62
NDPA/DPA[1]	96		-		45-112	-		36
n-Nitrosodi-n-propylamine	85		-		14-198	-		87

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1286136-3								
Bis(2-ethylhexyl)phthalate	97		-		29-137	-		82
Butyl benzyl phthalate	110		-		1-140	-		60
Di-n-butylphthalate	100		-		8-120	-		47
Di-n-octylphthalate	106		-		19-132	-		69
Diethyl phthalate	101		-		1-120	-		100
Dimethyl phthalate	102		-		1-120	-		183
Benzo(a)anthracene	93		-		42-133	-		53
Benzo(a)pyrene	93		-		32-148	-		72
Benzo(b)fluoranthene	95		-		42-140	-		71
Benzo(k)fluoranthene	94		-		25-146	-		63
Chrysene	85		-		44-140	-		87
Acenaphthylene	100		-		54-126	-		74
Anthracene	88		-		43-120	-		66
Benzo(ghi)perylene	98		-		1-195	-		97
Fluorene	94		-		70-120	-		38
Phenanthrene	81		-		65-120	-		39
Dibenzo(a,h)anthracene	109		-		1-200	-		126
Indeno(1,2,3-cd)pyrene	91		-		1-151	-		99
Pyrene	92		-		70-120	-		49
Aniline[1]	60		-		1-75	-		66
4-Chloroaniline[1]	69		-		10-100	-		53
1-Methylnaphthalene[1]	91		-		41-115	-		24
2-Nitroaniline[1]	97		-		43-131	-		24

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1286136-3								
3-Nitroaniline[1]	77		-		27-98	-		39
4-Nitroaniline[1]	82		-		41-112	-		37
Dibenzofuran[1]	89		-		23-126	-		22
2-Methylnaphthalene[1]	88		-		40-109	-		18
n-Nitrosodimethylamine[1]	44		-		15-68	-		17
2,4,6-Trichlorophenol	102		-		52-129	-		58
p-Chloro-m-cresol[1]	104		-		68-130	-		73
2-Chlorophenol	76		-		36-120	-		61
2,4-Dichlorophenol	91		-		53-122	-		50
2,4-Dimethylphenol	87		-		42-120	-		58
2-Nitrophenol	89		-		45-167	-		55
4-Nitrophenol	70		-		13-129	-		131
2,4-Dinitrophenol	92		-		1-173	-		132
4,6-Dinitro-o-cresol	105		-		56-130	-		203
Pentachlorophenol	82		-		38-152	-		86
Phenol	41		-		17-120	-		64
2-Methylphenol[1]	80		-		38-102	-		23
3-Methylphenol/4-Methylphenol[1]	80		-		35-103	-		26
2,4,5-Trichlorophenol[1]	106		-		47-126	-		28
Benzoic Acid[1]	20		-		2-55	-		27
Benzyl Alcohol[1]	76		-		31-103	-		23
Carbazole[1]	91		-		46-114	-		26

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1286136-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	54				25-87
Phenol-d6	38				16-65
Nitrobenzene-d5	70				42-122
2-Fluorobiphenyl	77				46-121
2,4,6-Tribromophenol	81				45-128
4-Terphenyl-d14	78				47-138

PCBS

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

SAMPLE RESULTS

Lab ID: L1940945-01
Client ID: EFFLUENT
Sample Location: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 127,608.3
Analytical Date: 09/13/19 21:13
Analyst: WR

Date Collected: 09/06/19 09:51
Date Received: 09/09/19
Field Prep: Not Specified

Extraction Method: EPA 608.3
Extraction Date: 09/11/19 17:57
Cleanup Method: EPA 3665A
Cleanup Date: 09/12/19
Cleanup Method: EPA 3660B
Cleanup Date: 09/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.250	--	1	A
Aroclor 1221	ND		ug/l	0.250	--	1	A
Aroclor 1232	ND		ug/l	0.250	--	1	A
Aroclor 1242	ND		ug/l	0.250	--	1	A
Aroclor 1248	ND		ug/l	0.250	--	1	A
Aroclor 1254	ND		ug/l	0.250	--	1	A
Aroclor 1260	ND		ug/l	0.200	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		37-123	B
Decachlorobiphenyl	67		38-114	B
2,4,5,6-Tetrachloro-m-xylene	63		37-123	A
Decachlorobiphenyl	62		38-114	A

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Method Blank Analysis
Batch Quality Control

Analytical Method: 127,608.3
Analytical Date: 09/13/19 22:00
Analyst: WR

Extraction Method: EPA 608.3
Extraction Date: 09/11/19 18:00
Cleanup Method: EPA 3665A
Cleanup Date: 09/12/19
Cleanup Method: EPA 3660B
Cleanup Date: 09/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1282998-1						
Aroclor 1016	ND		ug/l	0.250	--	A
Aroclor 1221	ND		ug/l	0.250	--	A
Aroclor 1232	ND		ug/l	0.250	--	A
Aroclor 1242	ND		ug/l	0.250	--	A
Aroclor 1248	ND		ug/l	0.250	--	A
Aroclor 1254	ND		ug/l	0.250	--	A
Aroclor 1260	ND		ug/l	0.200	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		37-123	B
Decachlorobiphenyl	76		38-114	B
2,4,5,6-Tetrachloro-m-xylene	66		37-123	A
Decachlorobiphenyl	75		38-114	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1282998-2									
Aroclor 1016	65		-		50-140	-		36	A
Aroclor 1260	67		-		8-140	-		38	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63				37-123	B
Decachlorobiphenyl	68				38-114	B
2,4,5,6-Tetrachloro-m-xylene	63				37-123	A
Decachlorobiphenyl	68				38-114	A

PESTICIDES

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

SAMPLE RESULTS

Lab ID: L1940945-01
Client ID: EFFLUENT
Sample Location: Not Specified

Date Collected: 09/06/19 09:51
Date Received: 09/09/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 127,608.3
Analytical Date: 09/16/19 13:43
Analyst: BM

Extraction Method: EPA 608.3
Extraction Date: 09/11/19 08:17
Cleanup Method: EPA 3620B
Cleanup Date: 09/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	--	1	A
Lindane	ND		ug/l	0.020	--	1	A
Alpha-BHC	ND		ug/l	0.020	--	1	A
Beta-BHC	ND		ug/l	0.020	--	1	A
Heptachlor	ND		ug/l	0.020	--	1	A
Aldrin	ND		ug/l	0.020	--	1	A
Heptachlor epoxide	ND		ug/l	0.020	--	1	A
Endrin	ND		ug/l	0.040	--	1	A
Endrin aldehyde	ND		ug/l	0.040	--	1	A
Endrin ketone[1]	ND		ug/l	0.040	--	1	A
Dieldrin	ND		ug/l	0.040	--	1	A
4,4'-DDE	ND		ug/l	0.040	--	1	A
4,4'-DDD	ND		ug/l	0.040	--	1	A
4,4'-DDT	ND		ug/l	0.040	--	1	A
Endosulfan I	ND		ug/l	0.020	--	1	A
Endosulfan II	ND		ug/l	0.040	--	1	A
Endosulfan sulfate	ND		ug/l	0.040	--	1	A
Methoxychlor[1]	ND		ug/l	0.100	--	1	A
Toxaphene	ND		ug/l	0.400	--	1	A
Chlordane	ND		ug/l	0.200	--	1	A
cis-Chlordane[1]	ND		ug/l	0.020	--	1	A
trans-Chlordane[1]	ND		ug/l	0.020	--	1	A

Project Name: SHEPLEY'S HILL (SHL), DEVENS **Lab Number:** L1940945

Project Number: JC94537X **Report Date:** 09/25/19

SAMPLE RESULTS

2

Lab ID:	L1940945-01	Date Collected:	09/06/19 09:51
Client ID:	EFFLUENT	Date Received:	09/09/19
Sample Location:	Not Specified	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	54		47-124	A
Decachlorobiphenyl	40		32-167	A
2,4,5,6-Tetrachloro-m-xylene	65		47-124	B
Decachlorobiphenyl	77		32-167	B

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Method Blank Analysis
Batch Quality Control

Analytical Method: 127,608.3
Analytical Date: 09/14/19 12:44
Analyst: BM

Extraction Method: EPA 608.3
Extraction Date: 09/11/19 08:17
Cleanup Method: EPA 3620B
Cleanup Date: 09/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1282658-1						
Delta-BHC	ND		ug/l	0.020	--	A
Lindane	ND		ug/l	0.020	--	A
Alpha-BHC	ND		ug/l	0.020	--	A
Beta-BHC	ND		ug/l	0.020	--	A
Heptachlor	ND		ug/l	0.020	--	A
Aldrin	ND		ug/l	0.020	--	A
Heptachlor epoxide	ND		ug/l	0.020	--	A
Endrin	ND		ug/l	0.040	--	A
Endrin aldehyde	ND		ug/l	0.040	--	A
Endrin ketone[1]	ND		ug/l	0.040	--	A
Dieldrin	ND		ug/l	0.040	--	A
4,4'-DDE	ND		ug/l	0.040	--	A
4,4'-DDD	ND		ug/l	0.040	--	A
4,4'-DDT	ND		ug/l	0.040	--	A
Endosulfan I	ND		ug/l	0.020	--	A
Endosulfan II	ND		ug/l	0.040	--	A
Endosulfan sulfate	ND		ug/l	0.040	--	A
Methoxychlor[1]	ND		ug/l	0.100	--	A
Toxaphene	ND		ug/l	0.400	--	A
Chlordane	ND		ug/l	0.200	--	A
cis-Chlordane[1]	ND		ug/l	0.020	--	A
trans-Chlordane[1]	ND		ug/l	0.020	--	A

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

2

Method Blank Analysis
Batch Quality Control

Analytical Method: 127,608.3
Analytical Date: 09/14/19 12:44
Analyst: BM

Extraction Method: EPA 608.3
Extraction Date: 09/11/19 08:17
Cleanup Method: EPA 3620B
Cleanup Date: 09/12/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG1282658-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		47-124	A
Decachlorobiphenyl	41		32-167	A
2,4,5,6-Tetrachloro-m-xylene	61		47-124	B
Decachlorobiphenyl	85		32-167	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1282658-2									
Delta-BHC	77		-		19-140	-		52	A
Lindane	76		-		32-140	-		39	A
Alpha-BHC	75		-		37-140	-		36	A
Beta-BHC	74		-		17-147	-		44	A
Heptachlor	58		-		34-140	-		43	A
Aldrin	62		-		42-140	-		35	A
Heptachlor epoxide	68		-		37-142	-		26	A
Endrin	76		-		30-147	-		48	A
Endrin aldehyde	62		-		30-150	-		30	A
Endrin ketone[1]	82		-		30-150	-		30	A
Dieldrin	73		-		36-146	-		49	A
4,4'-DDE	65		-		30-145	-		35	A
4,4'-DDD	70		-		31-141	-		39	A
4,4'-DDT	75		-		25-160	-		42	A
Endosulfan I	63		-		45-153	-		28	A
Endosulfan II	68		-		1-202	-		53	A
Endosulfan sulfate	62		-		26-144	-		38	A
Methoxychlor[1]	66		-		30-150	-		30	A
cis-Chlordane[1]	55		-		45-140	-		35	A
trans-Chlordane[1]	73		-		45-140	-		35	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X
Lab Number: L1940945
Report Date: 09/25/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG1282658-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	65				47-124	A
Decachlorobiphenyl	41				32-167	A
2,4,5,6-Tetrachloro-m-xylene	75				47-124	B
Decachlorobiphenyl	100				32-167	B

Project Name: SHEPLEY'S HILL (SHL), DEVENS
Project Number: JC94537X

Lab Number: L1940945
Report Date: 09/25/19

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1940945-01A	Vial HCl preserved	A	NA		5.0	Y	Absent		624.1(14)
L1940945-01B	Vial HCl preserved	A	NA		5.0	Y	Absent		624.1(14)
L1940945-01C	Vial HCl preserved	A	NA		5.0	Y	Absent		624.1(14)
L1940945-01D	Amber 1000ml unpreserved	A	7	7	5.0	Y	Absent		625.1(7)
L1940945-01E	Amber 1000ml unpreserved	A	7	7	5.0	Y	Absent		625.1(7)
L1940945-01F	Amber 1000ml unpreserved	A	7	7	5.0	Y	Absent		PCB-608.3(7)
L1940945-01G	Amber 1000ml unpreserved	A	7	7	5.0	Y	Absent		PESTICIDE-608.3(7)

*Values in parentheses indicate holding time in days

Project Name:	SHEPLEY'S HILL (SHL), DEVENS	**Lab Number:**	L1940945
Project Number:	JC94537X	**Report Date:**	09/25/19

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report

2

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: Data Usability Report

REFERENCES

127 Method 608.3: Organochlorine Pesticides and PCBs by GC/HSD, EPA 821-R-16-009, December 2016.

128 Method 624.1: Purgeables by GC/MS, EPA 821-R-16-008, December 2016.

129 Method 625.1: Base/Neutrals and Acids by GC/MS, EPA 821-R-16-007, December 2016.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

2

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L1940945

Page __ of __

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking #:
Bottle Order Control #:
SGS Guide #:
SGS Job #: JC94537X

Client / Reporting Information

Company Name: SGS North America
Street Address: 2235 Route 130
City / State / Zip: Dayton, NJ 8810
Project Contact / E-mail: Viktoriya Pushkova
Phone #:
Sampler(s) Name(s) / Phone #:

Project Information

Project Name: Shepley's Hill (SHL), Devens, MA
Street:
City / State:
Project #: JC94537X
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)
Company Name:
Street Address:
City / State / Zip:
Attention:

Requested Analysis

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	VOCs by 624*	ABS25SL *	PCB's PPL by 608	Pesticides PPL by 608 include Endrin Ketone, Gamma Chlordane	LAB USE ONLY
1	Effluent		9/6/19	09:41	LP		WW	7	3				4				X	X	X	X	

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

Turn Around Time (Business Days)

- [x] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other _____

All data available via Lablink

Approved By (SGS PM): / Date:

* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [x] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria_____
- [ ] CT RCP Criteria_____
- [ ] State Forms
- [x] EDD Format: ADRSEDD1
- [ ] DOD-QSMS

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

*See Attached Compound List
Sub to Alpha - Westborough
http://www.sgs.com/en/terms-and-conditions

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 Warren Akell	9/9/19 1130	1 MAL 9/9/19 1032	2		2
3		3	4		4
5		5			

Custody Seal #: ☐ Intact ☐ Not intact | Preserved where applicable: Absent ☐ Therm. ID: | On Ice ☐ | Cooler Temp. °C

EHSA-SAS-0023-02-FORM-Dayton - Standard COC_.xlsx

JC94537X – V624SL1 Compound List

20	Chloromethane	74-87-3
30	Bromomethane	74-83-9
40	Vinyl chloride	75-01-4
50	Chloroethane	75-00-3
60	Trichlorofluoromethane	75-69-4
80	Acetone	67-64-1
90	Carbon disulfide	75-15-0
110	1,1-Dichloroethene	75-35-4
130	1,1-Dichloroethane	75-34-3
160	trans-1,2-Dichloroethene	156-60-5
190	2-Butanone	78-93-3
200	1,1,1-Trichloroethane	71-55-6
220	Carbon tetrachloride	56-23-5
230	Bromodichloromethane	75-27-4
260	Trichloroethene	79-01-6
280	Dibromochloromethane	124-48-1
300	1,1,2-Trichloroethane	79-00-5
320	trans-1,3-Dichloropropene	10061-02-6
330	Bromoform	75-25-2
340	4-Methyl-2-pentanone	108-10-1
350	2-Hexanone	591-78-6
360	Tetrachloroethene	127-18-4
400	Chlorobenzene	108-90-7
410	Ethylbenzene	100-41-4
440	1,3-Dichlorobenzene	541-73-1
450	1,4-Dichlorobenzene	106-46-7
460	1,2-Dichlorobenzene	95-50-1
510	Toluene	108-88-3
530	Styrene	100-42-5
610	m,p-Xylenes	M,P-XYLENE
620	o-Xylene	95-47-6
640	Xylenes (total)	1330-20-7
660	1,2-Dichloroethane	107-06-2
700	cis-1,2-Dichloroethene	156-59-2
710	cis-1,3-Dichloropropene	10061-01-5
720	Chloroform	67-66-3
740	Benzene	71-43-2
750	1,2-Dichloropropane	78-87-5
760	Methylene bromide	74-95-3
770	Methylene chloride	75-09-2

V624SL1

780	1,1,2,2-Tetrachloroethane	79-34-5
790	Acrolein	107-02-8
800	Acrylonitrile	107-13-1
810	Vinyl Acetate	108-05-4
820	2-Chloroethyl vinyl ether	110-75-8

V62452

JC94537X - B625SL Compound List

10	Benzoic Acid	65-85-0	REG
20	2-Chlorophenol	95-57-8	REG
30	4-Chloro-3-methyl phenol	59-50-7	REG
40	2,4-Dichlorophenol	120-83-2	REG
50	2,4-Dimethylphenol	105-67-9	REG
60	2,4-Dinitrophenol	51-28-5	REG
70	4,6-Dinitro-o-cresol	534-52-1	REG
80	2-Methylphenol	95-48-7	REG
100	3 & 4-Methylphenol	M+P-CRESOLS	REG
110	2-Nitrophenol	88-75-5	REG
120	4-Nitrophenol	100-02-7	REG
130	Pentachlorophenol	87-86-5	REG
140	Phenol	108-95-2	REG
150	2,4,5-Trichlorophenol	95-95-4	REG
160	2,4,6-Trichlorophenol	88-06-2	REG
170	Acenaphthene	83-32-9	REG
180	Acenaphthylene	208-96-8	REG
190	Anthracene	120-12-7	REG
200	Benzidine	92-87-5	REG
210	Benzo(a)anthracene	56-55-3	REG
220	Benzo(a)pyrene	50-32-8	REG
230	Benzo(b)fluoranthene	205-99-2	REG
240	Benzo(g,h,i)perylene	191-24-2	REG
250	Benzo(k)fluoranthene	207-08-9	REG
260	Benzyl Alcohol	100-51-6	REG
270	4-Bromophenyl phenyl ether	101-55-3	REG
280	Butyl benzyl phthalate	85-68-7	REG
290	2-Chloronaphthalene	91-58-7	REG
300	4-Chloroaniline	106-47-8	REG
310	Carbazole	86-74-8	REG
320	Chrysene	218-01-9	REG
340	bis(2-Chloroethoxy)methane	111-91-1	REG
350	bis(2-Chloroethyl)ether	111-44-4	REG
360	2,2'-Oxybis(1-chloropropane)	108-60-1	REG
380	4-Chlorophenyl phenyl ether	7005-72-3	REG
390	1,2-Dichlorobenzene	95-50-1	REG
410	1,3-Dichlorobenzene	541-73-1	REG
420	1,4-Dichlorobenzene	106-46-7	REG
430	2,4-Dinitrotoluene	121-14-2	REG
440	2,6-Dinitrotoluene	606-20-2	REG

450	3,3'-Dichlorobenzidine	91-94-1	REG
470	Dibenzo(a,h)anthracene	53-70-3	REG
480	Dibenzofuran	132-64-9	REG
490	Di-n-butyl phthalate	84-74-2	REG
500	Di-n-octyl phthalate	117-84-0	REG
510	Diethyl phthalate	84-66-2	REG
520	Dimethyl phthalate	131-11-3	REG
530	bis(2-Ethylhexyl)phthalate	117-81-7	REG
540	Fluoranthene	206-44-0	REG
550	Fluorene	86-73-7	REG
560	Hexachlorobenzene	118-74-1	REG
570	Hexachlorobutadiene	87-68-3	REG
580	Hexachlorocyclopentadiene	77-47-4	REG
590	Hexachloroethane	67-72-1	REG
600	Indeno(1,2,3-cd)pyrene	193-39-5	REG
610	Isophorone	78-59-1	REG
620	2-Methylnaphthalene	91-57-6	REG
630	2-Nitroaniline	88-74-4	REG
640	3-Nitroaniline	99-09-2	REG
650	4-Nitroaniline	100-01-6	REG
680	Naphthalene	91-20-3	REG
690	Nitrobenzene	98-95-3	REG
700	n-Nitrosodimethylamine	62-75-9	REG
710	N-Nitroso-di-n-propylamine	621-64-7	REG
720	N-Nitrosodiphenylamine	86-30-6	REG
730	Phenanthrene	85-01-8	REG
740	Pyrene	129-00-0	REG
750	1,2,4-Trichlorobenzene	120-82-1	REG
755	Aniline	62-53-3	REG
757.5	1-Methylnaphthalene	90-12-0	REG
759.4	1,2-Diphenylhydrazine	122-66-7	REG

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS GW

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

FedEx Tracking # 1063 6339 2790
Bottle Order Control #
SGS Quote #
SGS Job # JC94537

Client / Reporting Information

Company Name: Sovereign Consulting Inc.
Street Address: 9 Payson Road, Suite 150
City / State / Zip: Foxborough MA 02035
Project Contact / E-mail: Steve Passafaro (spassafaro@sovcon.com)
Phone # / Fax #: (508) 339-3200
Sampler(s) Name(s) / Phone #: LOUIS A. PESCETTA; Sovereign Staff

Project Information

Project Name: Shepley's Hill (SHL), Devens, MA
Street:
City / State: Devens MA
Project #: AC001.M01
Client Purchase Order #:
Project Manager: Steve Passafaro

Billing Information (If different from Report to)

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

Requested Analysis (see TEST CODE sheet)

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	Total As - 6020A	Total Metals List - 6010C	Total Mercury - 7470A	Chloride 300.0	Nitrate - 353.2	Sulfate - 300.0	VOCs - 624	SVOCs - 625	PCBs - 608	Pesticides - 608	TPH - 1664A	LAB USE ONLY
1	Effluent		9/6/19	9:51	[illegible]	GW	14	3		2	6					X	X	X	X	X	X	X	X	X	X	X	
																											A31
																											L23
																											G51
					INITIAL ASESSMENT																						
					LABEL VERIFICATION																						

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

Turnaround Time (Business days)

Approved by (SGS Project Manager)/Date:

- [X] Std. 10 Business Days
- [X] 5 Day RUSH - Arsenic Only
- [ ] 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)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other See QAPP

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

Comments / Special Instructions

See Project QAPP for all specfic project requirements
5 - Day rush on Arsenic
6010 Metals List = Ba, Cd, Cr, Cu, Pb, Mg, Mn, Se, Ag

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 Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
[illegible]	9/6/19 1400	1 Thelma Fuhrer	2 Thelma Fuhrer	9.6.19 1:40	2 FEDEX
Relinquished by Sampler: 3 FEDEX	9/7/19 0945	3 [illegible]	4		4
Relinquished by: 5		5	Custody Seal # 23332 Intact / Not intact	Preserved where applicable	On Ice: X Cooler Temp: 6.0°C IP

IR7

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

http://www.sgs.com/...

JC94537X: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JC94537 **Client:** SOVEREIGN CONSULTING **Project:** SHEPLEY'S HILL (SHL), DEVENS, MA

Date / Time Received: 9/6/2019 2:00:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (6.0);

Cooler Temps (Corrected) °C: Cooler 1: (5.9);

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: 229517 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

JC94537X: Chain of Custody
Page 2 of 2

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Sovereign Consulting

Shepley's Hill (SHL), Devens, MA

AC001.M01.05

SGS Job Number: JC94613

Sampling Date: 09/06/19

Report to:

Sovereign Consulting
9 Payson Road Suite 150
Foxborough, MA 02035
SPassafaro@SovCon.com

ATTN: Steve Passafaro

Total number of pages in report: **1081**

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.

Mike Earp
General Manager

Client Service contact: Victoria Pushkova 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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Table of Contents

-1-

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **7**
Section 4: Sample Results **8**
- **4.1:** JC94613-1: EW-1 9
- **4.2:** JC94613-1A: EW-1 10
- **4.3:** JC94613-2: EW-4 15
- **4.4:** JC94613-2A: EW-4 16

Section 5: Misc. Forms **21**
- **5.1:** Chain of Custody 22
- **5.2:** Sample Tracking Chronicle 24
- **5.3:** Internal Chain of Custody 25
- **5.4:** QC Evaluation: DOD QSM5.x Limits 27

Section 6: MS Volatiles - QC Data Summaries **36**
- **6.1:** Method Blank Summary 37
- **6.2:** Blank Spike Summary 41
- **6.3:** Blank Spike/Blank Spike Duplicate Summary 42
- **6.4:** Matrix Spike Summary 45
- **6.5:** Matrix Spike/Matrix Spike Duplicate Summary 48
- **6.6:** Duplicate Summary 49
- **6.7:** Instrument Performance Checks (BFB) 52
- **6.8:** Internal Standard Area Summaries 56
- **6.9:** Surrogate Recovery Summaries 58
- **6.10:** Initial and Continuing Calibration Summaries 59
- **6.11:** Run Sequence Reports 93

Section 7: MS Volatiles - Raw Data **97**
- **7.1:** Samples 98
- **7.2:** Method Blanks 123
- **7.3:** Blank Spike/Blank Spike Duplicates 134
- **7.4:** Matrix Spike/Matrix Spike Duplicates 146
- **7.5:** Duplicates 161
- **7.6:** Instrument Performance Checks (BFB) 164
- **7.7:** Initial and Continuing Calibrations 172
- **7.8:** Instrument Run Logs 280

Section 8: GC Volatiles - QC Data Summaries **288**
- **8.1:** Method Blank Summary 289
- **8.2:** Laboratory Control Sample Summary 290
- **8.3:** Duplicate Summary 291
- **8.4:** Initial and Continuing Calibration Summaries 292
- **8.5:** Run Sequence Reports 298

Section 9: GC Volatiles - Raw Data **300**
- **9.1:** Samples 301

Table of Contents

9.2: Method Blanks 316
9.3: Laboratory Control Samples 322
9.4: Duplicates 325
9.5: Initial and Continuing Calibrations 328
9.6: Instrument Run Logs 366
Section 10: Metals Analysis - QC Data Summaries 370
10.1: Inst QC MA47429: Fe,Mn 371
10.2: Inst QC MA47431: As 397
10.3: Inst QC MA47439: As 437
10.4: Inst QC MA47448: As 465
10.5: Prep QC MP17232: Fe,Mn 492
10.6: Prep QC MP17232A: As 504
10.7: IDL and Linear Range Summaries 509
Section 11: Metals Analysis - Raw Data 515
11.1: Raw Data MA47429 516
11.2: Raw Data MA47431 558
11.3: Raw Data MA47439 804
11.4: Raw Data MA47448 963
11.5: Prep Logs 1074

SGS North America Inc.

Sample Summary

Sovereign Consulting

Job No: JC94613

Shepley's Hill (SHL), Devens, MA
Project No: AC001.M01.05

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC94613-1	09/06/19	11:40	LAP	09/07/19	AQ	Ground Water	EW-1
JC94613-1A	09/06/19	11:40	LAP	09/07/19	AQ	Ground Water	EW-1
JC94613-2	09/06/19	11:55	LAP	09/07/19	AQ	Ground Water	EW-4
JC94613-2A	09/06/19	11:55	LAP	09/07/19	AQ	Ground Water	EW-4

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Sovereign Consulting	**Job No**	JC94613
Site:	Shepley's Hill (SHL), Devens, MA	**Report Date**	9/23/2019 5:31:37 PM

On 09/07/2019, 2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 5.9 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC94613 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.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** V2V2532

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC94740-7MS, JC94740-9DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC94613-1A for Bromomethane: This compound in the associated ICV is outside the DOD criteria of 20%, biased high.

Matrix: AQ **Batch ID:** VA9819

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC94790-3MS, JC94790-3MSD were used as the QC samples indicated.
- JC94613-1A for Toluene-D8: Outside of DOD criteria, but within in house control limit. No full vial available for reanalysis.
- JC94790-3MS/MSD for Vinyl chloride are outside control limits.
- JC94790-3MS/MSD for Ethylbenzene, m,p-Xylene, o-Xylene are outside control limits due to high level in sample relative to spike amount.
- JC94790-3MS for Dichlorodifluoromethane are outside control limits due to matrix interference.

GC Volatiles By Method RSK-175

Matrix: AQ **Batch ID:** GAA1804

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC94702-11DUP were used as the QC samples indicated.

Metals Analysis By Method SW846 6010D

Matrix: AQ **Batch ID:** MP17232

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC94613-1AMS, JC94613-1AMSD, JC94613-1APS, JC94613-1ASDL were used as the QC samples for metals.

Metals Analysis By Method SW846 6020B

Matrix: AQ	**Batch ID:** MP17232A

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC94613-1MS, JC94613-1MSD, JC94613-1SDL were used as the QC samples for metals.

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: JC94613
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 09/06/19

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
JC94613-1	**EW-1**					
Arsenic		1630	38	25	ug/l	SW846 6020B
JC94613-1A	**EW-1**					
Benzene		1.1	0.50	0.45	ug/l	SW846 8260C
Chlorobenzene		0.76 J	1.0	0.75	ug/l	SW846 8260C
1,4-Dichlorobenzene		1.1	1.0	0.75	ug/l	SW846 8260C
cis-1,2-Dichloroethene		0.65 J	1.0	0.75	ug/l	SW846 8260C
Ethyl Ether		7.2	2.0	1.0	ug/l	SW846 8260C
Ethylbenzene		1.5	1.0	0.75	ug/l	SW846 8260C
m,p-Xylene		11.8	1.0	0.80	ug/l	SW846 8260C
Methane		2040	2.2	1.6	ug/l	RSK-175
Iron		65300	100	50	ug/l	SW846 6010D
Manganese		2090	15	5.0	ug/l	SW846 6010D
JC94613-2	**EW-4**					
Arsenic		3110	75	50	ug/l	SW846 6020B
JC94613-2A	**EW-4**					
Chlorobenzene		0.57 J	1.0	0.75	ug/l	SW846 8260C
Ethyl Ether		3.0	2.0	1.0	ug/l	SW846 8260C
Methane		4.9	0.11	0.080	ug/l	RSK-175
Iron		40100	100	50	ug/l	SW846 6010D
Manganese		2290	15	5.0	ug/l	SW846 6010D

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	EW-1		
Lab Sample ID:	JC94613-1	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
		Percent Solids:	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	1630	38	25	12	ug/l	25	09/10/19	09/12/19	SN	SW846 6020B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA47439
(2) Prep QC Batch: MP17232A

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:	EW-1		
Lab Sample ID:	JC94613-1A	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V61624.D	1	09/19/19 16:38	JP	n/a	n/a	V2V2532
Run #2	A253375.D	1	09/19/19 17:43	KC	n/a	n/a	VA9819

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	7.5 U	10	7.5	6.0	ug/l	
71-43-2	Benzene	1.1	0.50	0.45	0.43	ug/l	
108-86-1	Bromobenzene	0.75 U	1.0	0.75	0.55	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.48	ug/l	
75-27-4	Bromodichloromethane	0.75 U	1.0	0.75	0.58	ug/l	
75-25-2	Bromoform	0.75 U	1.0	0.75	0.63	ug/l	
74-83-9	Bromomethane [a]	1.8 U	2.0	1.8	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.5 U	10	7.5	6.9	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.5 U	2.0	1.5	0.62	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	2.0	1.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.0 U	2.0	1.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	0.75 U	1.0	0.75	0.55	ug/l	
108-90-7	Chlorobenzene	0.76	1.0	0.75	0.56	ug/l	J
75-00-3	Chloroethane	0.75 U [b]	1.0	0.75	0.73	ug/l	
67-66-3	Chloroform	0.75 U	1.0	0.75	0.50	ug/l	
74-87-3	Chloromethane	0.85 U	1.0	0.85	0.76	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	2.0	1.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	2.0	1.0	0.60	ug/l	
108-20-3	Di-Isopropyl ether	1.0 U	2.0	1.0	0.68	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.5 U	2.0	1.5	1.2	ug/l	
124-48-1	Dibromochloromethane	0.75 U	1.0	0.75	0.56	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75 U	1.0	0.75	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	1.0	0.75	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	1.1	1.0	0.75	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	1.5 U	2.0	1.5	1.4	ug/l	
75-34-3	1,1-Dichloroethane	0.75 U	1.0	0.75	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75 U	1.0	0.75	0.60	ug/l	
75-35-4	1,1-Dichloroethene	0.75 U	1.0	0.75	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.65	1.0	0.75	0.51	ug/l	J
156-60-5	trans-1,2-Dichloroethene	0.75 U	1.0	0.75	0.54	ug/l	

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

Report of Analysis

Client Sample ID:	EW-1		
Lab Sample ID:	JC94613-1A	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
78-87-5	1,2-Dichloropropane	0.75 U	1.0	0.75	0.51	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
594-20-7	2,2-Dichloropropane	0.75 U	1.0	0.75	0.52	ug/l	
563-58-6	1,1-Dichloropropene	0.90 U	1.0	0.90	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.43	ug/l	
123-91-1	1,4-Dioxane	75 U	130	75	69	ug/l	
60-29-7	Ethyl Ether	7.2	2.0	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	1.5	1.0	0.75	0.60	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.56	ug/l	
591-78-6	2-Hexanone	2.5 U	5.0	2.5	2.0	ug/l	
98-82-8	Isopropylbenzene	0.75 U	1.0	0.75	0.65	ug/l	
99-87-6	p-Isopropyltoluene	1.5 U	2.0	1.5	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.75 U	1.0	0.75	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5 U	5.0	3.5	1.9	ug/l	
74-95-3	Methylene bromide	0.75 U	1.0	0.75	0.48	ug/l	
75-09-2	Methylene chloride	1.5 U	2.0	1.5	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	0.98	ug/l	
103-65-1	n-Propylbenzene	1.0 U	2.0	1.0	0.60	ug/l	
100-42-5	Styrene	0.75 U	1.0	0.75	0.70	ug/l	
994-05-8	tert-Amyl Methyl Ether	1.0 U	2.0	1.0	0.47	ug/l	
637-92-3	tert-Butyl Ethyl Ether	1.0 U	2.0	1.0	0.56	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.75 U	1.0	0.75	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.75 U	1.0	0.75	0.65	ug/l	
127-18-4	Tetrachloroethene	0.90 U	1.0	0.90	0.90	ug/l	
109-99-9	Tetrahydrofuran	5.0 U	10	5.0	3.2	ug/l	
108-88-3	Toluene	0.75 U	1.0	0.75	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.75 U	1.0	0.75	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.75 U	1.0	0.75	0.53	ug/l	
79-01-6	Trichloroethene	0.75 U	1.0	0.75	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
75-01-4	Vinyl chloride	0.80 U	1.0	0.80	0.79	ug/l	
	m,p-Xylene	11.8	1.0	0.80	0.78	ug/l	
95-47-6	o-Xylene	0.75 U	1.0	0.75	0.59	ug/l	

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

Report of Analysis

Client Sample ID:	EW-1		
Lab Sample ID:	JC94613-1A	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	96%	80-120%
17060-07-0	1,2-Dichloroethane-D4	103%	102%	81-124%
2037-26-5	Toluene-D8	98%	87% [c]	80-120%
460-00-4	4-Bromofluorobenzene	99%	87%	80-120%

(a) This compound in the associated ICV is outside the DOD criteria of 20%, biased high.
(b) Result is from Run# 2
(c) Outside of DOD criteria, but within in house control limit. No full vial available for reanalysis.

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:	EW-1		
Lab Sample ID:	JC94613-1A	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA75443.D	1	09/18/19 09:45	TCH	n/a	n/a	GAA1804
Run #2	AA75445.D	20	09/18/19 10:21	TCH	n/a	n/a	GAA1804

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
74-82-8	Methane	2040 [a]	2.2	1.6	1.2	ug/l	
74-84-0	Ethane	ND	0.23	0.12	0.099	ug/l	

(a) Result is from Run# 2

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:	EW-1		
Lab Sample ID:	JC94613-1A	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
		Percent Solids:	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	65300	100	50	32	ug/l	1	09/10/19	09/11/19 GT	SW846 6010D [1]	SW846 3010A [2]
Manganese	2090	15	5.0	1.4	ug/l	1	09/10/19	09/11/19 GT	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA47429
(2) Prep QC Batch: MP17232

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:	EW-4		
Lab Sample ID:	JC94613-2	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
		Percent Solids:	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	3110	75	50	24	ug/l	50	09/10/19	09/13/19	SN	SW846 6020B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA47448
(2) Prep QC Batch: MP17232A

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:	EW-4		
Lab Sample ID:	JC94613-2A	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2V61625.D	1	09/19/19 17:04	JP	n/a	n/a	V2V2532
Run #2	A253376.D	1	09/19/19 18:11	KC	n/a	n/a	VA9819

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	7.5 U	10	7.5	6.0	ug/l	
71-43-2	Benzene	0.45 U	0.50	0.45	0.43	ug/l	
108-86-1	Bromobenzene	0.75 U	1.0	0.75	0.55	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.48	ug/l	
75-27-4	Bromodichloromethane	0.75 U	1.0	0.75	0.58	ug/l	
75-25-2	Bromoform	0.75 U	1.0	0.75	0.63	ug/l	
74-83-9	Bromomethane	1.8 U [a]	2.0	1.8	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.5 U	10	7.5	6.9	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.5 U	2.0	1.5	0.62	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	2.0	1.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.0 U	2.0	1.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	0.75 U	1.0	0.75	0.55	ug/l	
108-90-7	Chlorobenzene	0.57	1.0	0.75	0.56	ug/l	J
75-00-3	Chloroethane	0.75 U [a]	1.0	0.75	0.73	ug/l	
67-66-3	Chloroform	0.75 U	1.0	0.75	0.50	ug/l	
74-87-3	Chloromethane	0.85 U	1.0	0.85	0.76	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	2.0	1.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	2.0	1.0	0.60	ug/l	
108-20-3	Di-Isopropyl ether	1.0 U	2.0	1.0	0.68	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.5 U	2.0	1.5	1.2	ug/l	
124-48-1	Dibromochloromethane	0.75 U	1.0	0.75	0.56	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75 U	1.0	0.75	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	1.0	0.75	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	0.75 U	1.0	0.75	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	1.5 U	2.0	1.5	1.4	ug/l	
75-34-3	1,1-Dichloroethane	0.75 U	1.0	0.75	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75 U	1.0	0.75	0.60	ug/l	
75-35-4	1,1-Dichloroethene	0.75 U	1.0	0.75	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.75 U	1.0	0.75	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.75 U	1.0	0.75	0.54	ug/l	

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

Report of Analysis

Client Sample ID:	EW-4		
Lab Sample ID:	JC94613-2A	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
78-87-5	1,2-Dichloropropane	0.75 U	1.0	0.75	0.51	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
594-20-7	2,2-Dichloropropane	0.75 U	1.0	0.75	0.52	ug/l	
563-58-6	1,1-Dichloropropene	0.90 U	1.0	0.90	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.43	ug/l	
123-91-1	1,4-Dioxane	75 U	130	75	69	ug/l	
60-29-7	Ethyl Ether	3.0	2.0	1.0	0.51	ug/l	
100-41-4	Ethylbenzene	0.75 U	1.0	0.75	0.60	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.56	ug/l	
591-78-6	2-Hexanone	2.5 U	5.0	2.5	2.0	ug/l	
98-82-8	Isopropylbenzene	0.75 U	1.0	0.75	0.65	ug/l	
99-87-6	p-Isopropyltoluene	1.5 U	2.0	1.5	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.75 U	1.0	0.75	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5 U	5.0	3.5	1.9	ug/l	
74-95-3	Methylene bromide	0.75 U	1.0	0.75	0.48	ug/l	
75-09-2	Methylene chloride	1.5 U	2.0	1.5	1.0	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	0.98	ug/l	
103-65-1	n-Propylbenzene	1.0 U	2.0	1.0	0.60	ug/l	
100-42-5	Styrene	0.75 U	1.0	0.75	0.70	ug/l	
994-05-8	tert-Amyl Methyl Ether	1.0 U	2.0	1.0	0.47	ug/l	
637-92-3	tert-Butyl Ethyl Ether	1.0 U	2.0	1.0	0.56	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.75 U	1.0	0.75	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.75 U	1.0	0.75	0.65	ug/l	
127-18-4	Tetrachloroethene	0.90 U	1.0	0.90	0.90	ug/l	
109-99-9	Tetrahydrofuran	5.0 U	10	5.0	3.2	ug/l	
108-88-3	Toluene	0.75 U	1.0	0.75	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.75 U	1.0	0.75	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.75 U	1.0	0.75	0.53	ug/l	
79-01-6	Trichloroethene	0.75 U	1.0	0.75	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
75-01-4	Vinyl chloride	0.80 U	1.0	0.80	0.79	ug/l	
	m,p-Xylene	0.80 U	1.0	0.80	0.78	ug/l	
95-47-6	o-Xylene	0.75 U	1.0	0.75	0.59	ug/l	

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

Report of Analysis

Client Sample ID:	EW-4		
Lab Sample ID:	JC94613-2A	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	94%	80-120%
17060-07-0	1,2-Dichloroethane-D4	98%	103%	81-124%
2037-26-5	Toluene-D8	100%	89%	80-120%
460-00-4	4-Bromofluorobenzene	98%	90%	80-120%

(a) Result is from Run# 2

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:	EW-4		
Lab Sample ID:	JC94613-2A	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
Method:	RSK-175	**Percent Solids:**	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA75446.D	1	09/18/19 10:42	TCH	n/a	n/a	GAA1804
Run #2							

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
74-82-8	Methane	4.9	0.11	0.080	0.060	ug/l	
74-84-0	Ethane	0.12 U	0.23	0.12	0.099	ug/l	

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:	EW-4		
Lab Sample ID:	JC94613-2A	**Date Sampled:**	09/06/19
Matrix:	AQ - Ground Water	**Date Received:**	09/07/19
		Percent Solids:	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	40100	100	50	32	ug/l	1	09/10/19	09/11/19 GT	SW846 6010D [1]	SW846 3010A [2]
Manganese	2290	15	5.0	1.4	ug/l	1	09/10/19	09/11/19 GT	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA47429
(2) Prep QC Batch: MP17232

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

SGS

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

FED-EX Tracking # 1063639 2790
SGS Quote #
Bottle Order Control #
SGS Job # JC94613

Client / Reporting Information

Company Name: Sovereign Consulting Inc.
Street Address: 9 Payson Road, Suite 150
City: Foxborough State: MA Zip: 02035
Project Contact: Steve Passafaro E-mail: (spassafaro@sovcon.com)
Phone #: (508) 339-3200 Fax #:
Sampler(s) Name(s): Louis A. Prescott Phone #:
Sovereign Staff

Project Information

Project Name: Shepley's Hill (SHL), Devens, MA
Street:
City: Devens State: MA
Project #: AC001.M01
Client Purchase Order #:
Project Manager: Steve Passafaro

Billing Information (If different from Report to)
Company Name:
Street Address:
City State Zip
Attention:

Requested Analysis (see TEST CODE sheet)

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	Total As - 6020A	Total Fe & Mn - 6010C	VOCs - 8620	Dissolved Methane & Ethane
1	EW-1		9/6/19	11:40	LAP	GW	8	6		2						X	X	X	X
2	EW-4		9/6/19	11:55	LAP	GW	8	6		2						X	X	X	X

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 USE ONLY: A31 N899

INITIAL ASESSMENT SBx
LABEL VERIFICATION

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- [X] 5 Day RUSH - Arsenic Only
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Approved by (SGS Project Manager)/Date:

Emergency & Rush T/A data available via LabLink

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

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

Comments / Special Instructions
See Project QAPP for all specfic project requirements
5 - Day rush on Arsenic

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

Sample inventory is verified upon receipt in the Laboratory

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Louis A. Prescott 9/6/19	9/6/19 1400	2 [illegible]	2 [illegible]	9/6/19 1900	2 FedEx
Relinquished by Sampler: FedEx	Date Time: 9/7/19 0945	Received By: 3 [illegible]	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by:	Date Time:	Received By: 5	Custody Seal # 29332 [ ] Intact [ ] Not intact	Preserved where applicable ✓	On Ice ✓ Cooler Temp. 6.0°C IR7

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

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

SGS Sample Receipt Summary

Job Number: JC94613 **Client:** SOVEREIGN CONSULTING **Project:** SHEPLEY'S HILL (SHL), DEVENS, MA

Date / Time Received: 9/7/2019 9:45:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (6.0);

Cooler Temps (Corrected) °C: Cooler 1: (5.9);

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: 229517 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

JC94613: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Sovereign Consulting

Job No: JC94613

Shepley's Hill (SHL), Devens, MA
Project No: AC001.M01.05

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC94613-1 EW-1	Collected: 06-SEP-19 11:40 By: LAP		Received: 07-SEP-19 By: DG			
JC94613-1	SW846 6020B	12-SEP-19 15:36	SN	10-SEP-19	MR	ASMS
JC94613-2 EW-4	Collected: 06-SEP-19 11:55 By: LAP		Received: 07-SEP-19 By: DG			
JC94613-2	SW846 6020B	13-SEP-19 13:36	SN	10-SEP-19	MR	ASMS
JC94613-1A EW-1	Collected: 06-SEP-19 11:40 By: LAP		Received: 07-SEP-19 By: DG			
JC94613-1A	SW846 6010D	11-SEP-19 13:18	GT	10-SEP-19	MR	FE,MN
JC94613-1A	RSK-175	18-SEP-19 09:45	TCH			VRSK175ETHANE
JC94613-1A	RSK-175	18-SEP-19 10:21	TCH			VGC+ CH4
JC94613-1A	SW846 8260C	19-SEP-19 16:38	JP			V8260SL
JC94613-1A	SW846 8260C	19-SEP-19 17:43	KC			V8260SL
JC94613-2A EW-4	Collected: 06-SEP-19 11:55 By: LAP		Received: 07-SEP-19 By: DG			
JC94613-2A	SW846 6010D	11-SEP-19 13:43	GT	10-SEP-19	MR	FE,MN
JC94613-2A	RSK-175	18-SEP-19 10:42	TCH			VGC+ CH4,VRSK175ETHANE
JC94613-2A	SW846 8260C	19-SEP-19 17:04	JP			V8260SL
JC94613-2A	SW846 8260C	19-SEP-19 18:11	KC			V8260SL

SGS Internal Chain of Custody

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Received: 09/07/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC94613-1.1	Secured Storage	Dwayne Johnson	09/10/19 11:55	Retrieve from Storage
JC94613-1.1	Dwayne Johnson	Secured Staging Area	09/10/19 11:55	Return to Storage
JC94613-1.1	Secured Staging Area	Moustafa Ramadan	09/10/19 14:33	Retrieve from Storage
JC94613-1.1	Moustafa Ramadan	Secured Storage	09/10/19 18:45	Return to Storage
JC94613-1.1.1	Moustafa Ramadan	Metals Digestion	09/10/19 14:40	Digestate from JC94613-1.1
JC94613-1.1.1	Metals Digestion	Moustafa Ramadan	09/10/19 14:40	Digestate from JC94613-1.1
JC94613-1.1.1	Moustafa Ramadan	Metals Digestate Storage	09/10/19 14:40	Return to Storage
JC94613-1.5	Secured Storage	Joseph Toriello	09/17/19 10:18	Retrieve from Storage
JC94613-1.5	Joseph Toriello	Air Storage	09/17/19 10:18	Return to Storage
JC94613-1.5	Air Storage	Thomas Hilbig	09/25/19 08:38	Retrieve from Storage
JC94613-1.5	Thomas Hilbig		09/25/19 08:38	Depleted
JC94613-1.6	Secured Storage	Krizhka Cuenta	09/19/19 15:44	Retrieve from Storage
JC94613-1.6	Krizhka Cuenta	GCMSA	09/19/19 15:44	Load on Instrument
JC94613-1.6	GCMSA	Krizhka Cuenta	09/20/19 09:45	Unload from Instrument
JC94613-1.6	Krizhka Cuenta	Secured Storage	09/20/19 09:45	Return to Storage
JC94613-1.7	Secured Storage	Jessica Potts	09/19/19 15:49	Retrieve from Storage
JC94613-1.7	Jessica Potts	GCMS2V	09/19/19 15:49	Load on Instrument
JC94613-1.7	GCMS2V	Jessica Potts	09/20/19 09:29	Unload from Instrument
JC94613-1.7	Jessica Potts	Secured Storage	09/20/19 09:29	Return to Storage
JC94613-1.7	Secured Storage	Bridget Kelly	09/20/19 12:41	Retrieve from Storage
JC94613-1.7	Bridget Kelly	GCMS2C	09/20/19 12:41	Load on Instrument
JC94613-1.7	GCMS2C	Edward Durner	09/25/19 07:27	Unload from Instrument
JC94613-1.7	Edward Durner	Secured Storage	09/25/19 07:27	Return to Storage
JC94613-2.1	Secured Storage	Dwayne Johnson	09/10/19 11:55	Retrieve from Storage
JC94613-2.1	Dwayne Johnson	Secured Staging Area	09/10/19 11:55	Return to Storage
JC94613-2.1	Secured Staging Area	Moustafa Ramadan	09/10/19 14:33	Retrieve from Storage
JC94613-2.1	Moustafa Ramadan	Secured Storage	09/10/19 18:45	Return to Storage
JC94613-2.1.1	Moustafa Ramadan	Metals Digestion	09/10/19 14:40	Digestate from JC94613-2.1
JC94613-2.1.1	Metals Digestion	Moustafa Ramadan	09/10/19 14:40	Digestate from JC94613-2.1
JC94613-2.1.1	Moustafa Ramadan	Metals Digestate Storage	09/10/19 14:40	Return to Storage
JC94613-2.3	Secured Storage	Krizhka Cuenta	09/19/19 15:44	Retrieve from Storage
JC94613-2.3	Krizhka Cuenta	GCMSA	09/19/19 15:44	Load on Instrument
JC94613-2.3	GCMSA	Krizhka Cuenta	09/20/19 09:45	Unload from Instrument
JC94613-2.3	Krizhka Cuenta	Secured Storage	09/20/19 09:45	Return to Storage
JC94613-2.4	Secured Storage	Joseph Toriello	09/17/19 10:18	Retrieve from Storage
JC94613-2.4	Joseph Toriello	Air Storage	09/17/19 10:18	Return to Storage

SGS Internal Chain of Custody

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Received: 09/07/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC94613-2.4	Air Storage	Thomas Hilbig	09/25/19 08:38	Retrieve from Storage
JC94613-2.4	Thomas Hilbig		09/25/19 08:38	Depleted
JC94613-2.6	Secured Storage	Jessica Potts	09/19/19 15:49	Retrieve from Storage
JC94613-2.6	Jessica Potts	GCMS2V	09/19/19 15:49	Load on Instrument
JC94613-2.6	GCMS2V	Jessica Potts	09/20/19 09:29	Unload from Instrument
JC94613-2.6	Jessica Potts	Secured Storage	09/20/19 09:29	Return to Storage

QC Evaluation: DOD QSM5.x Limits

Job Number: JC94613
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 09/06/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V2V2532	SW846 8260C						
V2V2532-BS	67-64-1	Acetone	BSP	REC	92	%	39-160
V2V2532-BS	71-43-2	Benzene	BSP	REC	108	%	79-120
V2V2532-BS	108-86-1	Bromobenzene	BSP	REC	111	%	80-120
V2V2532-BS	74-97-5	Bromochloromethane	BSP	REC	112	%	78-123
V2V2532-BS	75-27-4	Bromodichloromethane	BSP	REC	110	%	79-125
V2V2532-BS	75-25-2	Bromoform	BSP	REC	110	%	66-130
V2V2532-BS	74-83-9	Bromomethane	BSP	REC	107	%	53-141
V2V2532-BS	78-93-3	2-Butanone (MEK)	BSP	REC	104	%	56-143
V2V2532-BS	104-51-8	n-Butylbenzene	BSP	REC	123	%	75-128
V2V2532-BS	135-98-8	sec-Butylbenzene	BSP	REC	119	%	77-126
V2V2532-BS	98-06-6	tert-Butylbenzene	BSP	REC	116	%	78-124
V2V2532-BS	75-15-0	Carbon disulfide	BSP	REC	97	%	64-133
V2V2532-BS	56-23-5	Carbon tetrachloride	BSP	REC	118	%	72-136
V2V2532-BS	108-90-7	Chlorobenzene	BSP	REC	110	%	82-118
V2V2532-BS	67-66-3	Chloroform	BSP	REC	106	%	79-124
V2V2532-BS	74-87-3	Chloromethane	BSP	REC	87	%	50-139
V2V2532-BS	95-49-8	o-Chlorotoluene	BSP	REC	113	%	79-122
V2V2532-BS	106-43-4	p-Chlorotoluene	BSP	REC	113	%	78-122
V2V2532-BS	108-20-3	Di-Isopropyl ether	BSP	REC	109	%	67-128
V2V2532-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	102	%	62-128
V2V2532-BS	124-48-1	Dibromochloromethane	BSP	REC	112	%	74-126
V2V2532-BS	106-93-4	1,2-Dibromoethane	BSP	REC	110	%	77-121
V2V2532-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	116	%	80-119
V2V2532-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	114	%	80-119
V2V2532-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	107	%	79-118
V2V2532-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	85	%	32-152
V2V2532-BS	75-34-3	1,1-Dichloroethane	BSP	REC	106	%	77-125
V2V2532-BS	107-06-2	1,2-Dichloroethane	BSP	REC	105	%	73-128
V2V2532-BS	75-35-4	1,1-Dichloroethene	BSP	REC	106	%	71-131
V2V2532-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	111	%	78-123
V2V2532-BS	156-60-5	trans-1,2-Dichloroethene	BSP	REC	103	%	75-124
V2V2532-BS	78-87-5	1,2-Dichloropropane	BSP	REC	109	%	78-122
V2V2532-BS	142-28-9	1,3-Dichloropropane	BSP	REC	107	%	80-119
V2V2532-BS	594-20-7	2,2-Dichloropropane	BSP	REC	118	%	60-139
V2V2532-BS	563-58-6	1,1-Dichloropropene	BSP	REC	110	%	79-125
V2V2532-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	116	%	75-124
V2V2532-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	116	%	73-127
V2V2532-BS	123-91-1	1,4-Dioxane	BSP	REC	102	%	59-139
V2V2532-BS	60-29-7	Ethyl Ether	BSP	REC	105	%	68-129
V2V2532-BS	100-41-4	Ethylbenzene	BSP	REC	113	%	79-121
V2V2532-BS	87-68-3	Hexachlorobutadiene	BSP	REC	120	%	66-134
V2V2532-BS	591-78-6	2-Hexanone	BSP	REC	105	%	57-139

* Sample used for QC is not from job JC94613

QC Evaluation: DOD QSM5.x Limits

Job Number: JC94613
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 09/06/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V2V2532-BS	98-82-8	Isopropylbenzene	BSP	REC	118	%	72-131
V2V2532-BS	99-87-6	p-Isopropyltoluene	BSP	REC	122	%	77-127
V2V2532-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	106	%	71-124
V2V2532-BS	108-10-1	4-Methyl-2-pentanone(MIBK)	BSP	REC	108	%	67-130
V2V2532-BS	74-95-3	Methylene bromide	BSP	REC	105	%	79-123
V2V2532-BS	75-09-2	Methylene chloride	BSP	REC	102	%	74-124
V2V2532-BS	91-20-3	Naphthalene	BSP	REC	109	%	61-128
V2V2532-BS	103-65-1	n-Propylbenzene	BSP	REC	116	%	76-126
V2V2532-BS	100-42-5	Styrene	BSP	REC	116	%	78-123
V2V2532-BS	994-05-8	tert-Amyl Methyl Ether	BSP	REC	111	%	68-128
V2V2532-BS	637-92-3	tert-Butyl Ethyl Ether	BSP	REC	112	%	70-127
V2V2532-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	113	%	78-124
V2V2532-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	102	%	71-121
V2V2532-BS	127-18-4	Tetrachloroethene	BSP	REC	99	%	74-129
V2V2532-BS	109-99-9	Tetrahydrofuran	BSP	REC	90	%	57-133
V2V2532-BS	108-88-3	Toluene	BSP	REC	109	%	80-121
V2V2532-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	106	%	69-129
V2V2532-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	118	%	69-130
V2V2532-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	112	%	74-131
V2V2532-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	106	%	80-119
V2V2532-BS	79-01-6	Trichloroethene	BSP	REC	110	%	79-123
V2V2532-BS	75-69-4	Trichlorofluoromethane	BSP	REC	110	%	65-141
V2V2532-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	105	%	73-122
V2V2532-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	115	%	76-124
V2V2532-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	116	%	75-124
V2V2532-BS	75-01-4	Vinyl chloride	BSP	REC	90	%	58-137
V2V2532-BS		m,p-Xylene	BSP	REC	115	%	80-121
V2V2532-BS	95-47-6	o-Xylene	BSP	REC	114	%	78-122
V2V2532-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	100	%	80-119
V2V2532-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	99	%	81-118
V2V2532-BS	2037-26-5	Toluene-D8	BSP	SURR	99	%	89-112
V2V2532-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	99	%	85-114
V2V2532-BSD	67-64-1	Acetone	BSD	REC	94	%	39-160
V2V2532-BSD	71-43-2	Benzene	BSD	REC	105	%	79-120
V2V2532-BSD	108-86-1	Bromobenzene	BSD	REC	112	%	80-120
V2V2532-BSD	74-97-5	Bromochloromethane	BSD	REC	110	%	78-123
V2V2532-BSD	75-27-4	Bromodichloromethane	BSD	REC	106	%	79-125
V2V2532-BSD	75-25-2	Bromoform	BSD	REC	109	%	66-130
V2V2532-BSD	74-83-9	Bromomethane	BSD	REC	101	%	53-141
V2V2532-BSD	78-93-3	2-Butanone (MEK)	BSD	REC	105	%	56-143
V2V2532-BSD	104-51-8	n-Butylbenzene	BSD	REC	125 [a]	%	75-128
V2V2532-BSD	135-98-8	sec-Butylbenzene	BSD	REC	120	%	77-126
V2V2532-BSD	98-06-6	tert-Butylbenzene	BSD	REC	118	%	78-124
V2V2532-BSD	75-15-0	Carbon disulfide	BSD	REC	93	%	64-133
V2V2532-BSD	56-23-5	Carbon tetrachloride	BSD	REC	113	%	72-136

* Sample used for QC is not from job JC94613

QC Evaluation: DOD QSM5.x Limits

Job Number: JC94613
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 09/06/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V2V2532-BSD	108-90-7	Chlorobenzene	BSD	REC	109	%	82-118
V2V2532-BSD	67-66-3	Chloroform	BSD	REC	103	%	79-124
V2V2532-BSD	74-87-3	Chloromethane	BSD	REC	85	%	50-139
V2V2532-BSD	95-49-8	o-Chlorotoluene	BSD	REC	113	%	79-122
V2V2532-BSD	106-43-4	p-Chlorotoluene	BSD	REC	114	%	78-122
V2V2532-BSD	108-20-3	Di-Isopropyl ether	BSD	REC	106	%	67-128
V2V2532-BSD	96-12-8	1,2-Dibromo-3-chloropropane	BSD	REC	111	%	62-128
V2V2532-BSD	124-48-1	Dibromochloromethane	BSD	REC	111	%	74-126
V2V2532-BSD	106-93-4	1,2-Dibromoethane	BSD	REC	108	%	77-121
V2V2532-BSD	95-50-1	1,2-Dichlorobenzene	BSD	REC	117	%	80-119
V2V2532-BSD	541-73-1	1,3-Dichlorobenzene	BSD	REC	117	%	80-119
V2V2532-BSD	106-46-7	1,4-Dichlorobenzene	BSD	REC	111	%	79-118
V2V2532-BSD	75-71-8	Dichlorodifluoromethane	BSD	REC	81	%	32-152
V2V2532-BSD	75-34-3	1,1-Dichloroethane	BSD	REC	103	%	77-125
V2V2532-BSD	107-06-2	1,2-Dichloroethane	BSD	REC	102	%	73-128
V2V2532-BSD	75-35-4	1,1-Dichloroethene	BSD	REC	102	%	71-131
V2V2532-BSD	156-59-2	cis-1,2-Dichloroethene	BSD	REC	107	%	78-123
V2V2532-BSD	156-60-5	trans-1,2-Dichloroethene	BSD	REC	100	%	75-124
V2V2532-BSD	78-87-5	1,2-Dichloropropane	BSD	REC	107	%	78-122
V2V2532-BSD	142-28-9	1,3-Dichloropropane	BSD	REC	106	%	80-119
V2V2532-BSD	594-20-7	2,2-Dichloropropane	BSD	REC	114	%	60-139
V2V2532-BSD	563-58-6	1,1-Dichloropropene	BSD	REC	107	%	79-125
V2V2532-BSD	10061-01-5	cis-1,3-Dichloropropene	BSD	REC	112	%	75-124
V2V2532-BSD	10061-02-6	trans-1,3-Dichloropropene	BSD	REC	116	%	73-127
V2V2532-BSD	123-91-1	1,4-Dioxane	BSD	REC	105	%	59-139
V2V2532-BSD	60-29-7	Ethyl Ether	BSD	REC	104	%	68-129
V2V2532-BSD	100-41-4	Ethylbenzene	BSD	REC	110	%	79-121
V2V2532-BSD	87-68-3	Hexachlorobutadiene	BSD	REC	120	%	66-134
V2V2532-BSD	591-78-6	2-Hexanone	BSD	REC	108	%	57-139
V2V2532-BSD	98-82-8	Isopropylbenzene	BSD	REC	115	%	72-131
V2V2532-BSD	99-87-6	p-Isopropyltoluene	BSD	REC	124 [a]	%	77-127
V2V2532-BSD	1634-04-4	Methyl Tert Butyl Ether	BSD	REC	106	%	71-124
V2V2532-BSD	108-10-1	4-Methyl-2-pentanone(MIBK)	BSD	REC	108	%	67-130
V2V2532-BSD	74-95-3	Methylene bromide	BSD	REC	105	%	79-123
V2V2532-BSD	75-09-2	Methylene chloride	BSD	REC	100	%	74-124
V2V2532-BSD	91-20-3	Naphthalene	BSD	REC	119	%	61-128
V2V2532-BSD	103-65-1	n-Propylbenzene	BSD	REC	118	%	76-126
V2V2532-BSD	100-42-5	Styrene	BSD	REC	116	%	78-123
V2V2532-BSD	994-05-8	tert-Amyl Methyl Ether	BSD	REC	110	%	68-128
V2V2532-BSD	637-92-3	tert-Butyl Ethyl Ether	BSD	REC	109	%	70-127
V2V2532-BSD	630-20-6	1,1,1,2-Tetrachloroethane	BSD	REC	111	%	78-124
V2V2532-BSD	79-34-5	1,1,2,2-Tetrachloroethane	BSD	REC	107	%	71-121
V2V2532-BSD	127-18-4	Tetrachloroethene	BSD	REC	99	%	74-129
V2V2532-BSD	109-99-9	Tetrahydrofuran	BSD	REC	96	%	57-133
V2V2532-BSD	108-88-3	Toluene	BSD	REC	107	%	80-121

* Sample used for QC is not from job JC94613

QC Evaluation: DOD QSM5.x Limits

Job Number: JC94613
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 09/06/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V2V2532-BSD	87-61-6	1,2,3-Trichlorobenzene	BSD	REC	114	%	69-129
V2V2532-BSD	120-82-1	1,2,4-Trichlorobenzene	BSD	REC	121	%	69-130
V2V2532-BSD	71-55-6	1,1,1-Trichloroethane	BSD	REC	108	%	74-131
V2V2532-BSD	79-00-5	1,1,2-Trichloroethane	BSD	REC	106	%	80-119
V2V2532-BSD	79-01-6	Trichloroethene	BSD	REC	107	%	79-123
V2V2532-BSD	75-69-4	Trichlorofluoromethane	BSD	REC	105	%	65-141
V2V2532-BSD	96-18-4	1,2,3-Trichloropropane	BSD	REC	111	%	73-122
V2V2532-BSD	95-63-6	1,2,4-Trimethylbenzene	BSD	REC	118	%	76-124
V2V2532-BSD	108-67-8	1,3,5-Trimethylbenzene	BSD	REC	117	%	75-124
V2V2532-BSD	75-01-4	Vinyl chloride	BSD	REC	88	%	58-137
V2V2532-BSD		m,p-Xylene	BSD	REC	113	%	80-121
V2V2532-BSD	95-47-6	o-Xylene	BSD	REC	112	%	78-122
V2V2532-BSD	1868-53-7	Dibromofluoromethane	BSD	SURR	98	%	80-119
V2V2532-BSD	17060-07-0	1,2-Dichloroethane-D4	BSD	SURR	97	%	81-118
V2V2532-BSD	2037-26-5	Toluene-D8	BSD	SURR	101	%	89-112
V2V2532-BSD	460-00-4	4-Bromofluorobenzene	BSD	SURR	100	%	85-114
JC94740-7MS*	67-64-1	Acetone	MS	REC	90	%	39-160
JC94740-7MS*	71-43-2	Benzene	MS	REC	104	%	79-120
JC94740-7MS*	108-86-1	Bromobenzene	MS	REC	103	%	80-120
JC94740-7MS*	74-97-5	Bromochloromethane	MS	REC	110	%	78-123
JC94740-7MS*	75-27-4	Bromodichloromethane	MS	REC	101	%	79-125
JC94740-7MS*	75-25-2	Bromoform	MS	REC	101	%	66-130
JC94740-7MS*	74-83-9	Bromomethane	MS	REC	70	%	53-141
JC94740-7MS*	78-93-3	2-Butanone (MEK)	MS	REC	102	%	56-143
JC94740-7MS*	104-51-8	n-Butylbenzene	MS	REC	115	%	75-128
JC94740-7MS*	135-98-8	sec-Butylbenzene	MS	REC	112	%	77-126
JC94740-7MS*	98-06-6	tert-Butylbenzene	MS	REC	111	%	78-124
JC94740-7MS*	75-15-0	Carbon disulfide	MS	REC	115	%	64-133
JC94740-7MS*	56-23-5	Carbon tetrachloride	MS	REC	120	%	72-136
JC94740-7MS*	108-90-7	Chlorobenzene	MS	REC	105	%	82-118
JC94740-7MS*	67-66-3	Chloroform	MS	REC	102	%	79-124
JC94740-7MS*	74-87-3	Chloromethane	MS	REC	89	%	50-139
JC94740-7MS*	95-49-8	o-Chlorotoluene	MS	REC	107	%	79-122
JC94740-7MS*	106-43-4	p-Chlorotoluene	MS	REC	105	%	78-122
JC94740-7MS*	108-20-3	Di-Isopropyl ether	MS	REC	105	%	67-128
JC94740-7MS*	96-12-8	1,2-Dibromo-3-chloropropane	MS	REC	98	%	62-128
JC94740-7MS*	124-48-1	Dibromochloromethane	MS	REC	104	%	74-126
JC94740-7MS*	106-93-4	1,2-Dibromoethane	MS	REC	102	%	77-121
JC94740-7MS*	95-50-1	1,2-Dichlorobenzene	MS	REC	107	%	80-119
JC94740-7MS*	541-73-1	1,3-Dichlorobenzene	MS	REC	106	%	80-119
JC94740-7MS*	106-46-7	1,4-Dichlorobenzene	MS	REC	101	%	79-118
JC94740-7MS*	75-71-8	Dichlorodifluoromethane	MS	REC	120	%	32-152
JC94740-7MS*	75-34-3	1,1-Dichloroethane	MS	REC	105	%	77-125
JC94740-7MS*	107-06-2	1,2-Dichloroethane	MS	REC	97	%	73-128
JC94740-7MS*	75-35-4	1,1-Dichloroethene	MS	REC	117	%	71-131

* Sample used for QC is not from job JC94613

QC Evaluation: DOD QSM5.x Limits

Job Number: JC94613
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 09/06/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
JC94740-7MS*	156-59-2	cis-1,2-Dichloroethene	MS	REC	107	%	78-123
JC94740-7MS*	156-60-5	trans-1,2-Dichloroethene	MS	REC	107	%	75-124
JC94740-7MS*	78-87-5	1,2-Dichloropropane	MS	REC	102	%	78-122
JC94740-7MS*	142-28-9	1,3-Dichloropropane	MS	REC	101	%	80-119
JC94740-7MS*	594-20-7	2,2-Dichloropropane	MS	REC	120	%	60-139
JC94740-7MS*	563-58-6	1,1-Dichloropropene	MS	REC	114	%	79-125
JC94740-7MS*	10061-01-5	cis-1,3-Dichloropropene	MS	REC	106	%	75-124
JC94740-7MS*	10061-02-6	trans-1,3-Dichloropropene	MS	REC	109	%	73-127
JC94740-7MS*	123-91-1	1,4-Dioxane	MS	REC	97	%	59-139
JC94740-7MS*	60-29-7	Ethyl Ether	MS	REC	107	%	68-129
JC94740-7MS*	100-41-4	Ethylbenzene	MS	REC	108	%	79-121
JC94740-7MS*	87-68-3	Hexachlorobutadiene	MS	REC	114	%	66-134
JC94740-7MS*	591-78-6	2-Hexanone	MS	REC	100	%	57-139
JC94740-7MS*	98-82-8	Isopropylbenzene	MS	REC	112	%	72-131
JC94740-7MS*	99-87-6	p-Isopropyltoluene	MS	REC	115	%	77-127
JC94740-7MS*	1634-04-4	Methyl Tert Butyl Ether	MS	REC	104	%	71-124
JC94740-7MS*	108-10-1	4-Methyl-2-pentanone(MIBK)	MS	REC	100	%	67-130
JC94740-7MS*	74-95-3	Methylene bromide	MS	REC	99	%	79-123
JC94740-7MS*	75-09-2	Methylene chloride	MS	REC	102	%	74-124
JC94740-7MS*	91-20-3	Naphthalene	MS	REC	103	%	61-128
JC94740-7MS*	103-65-1	n-Propylbenzene	MS	REC	110	%	76-126
JC94740-7MS*	100-42-5	Styrene	MS	REC	110	%	78-123
JC94740-7MS*	994-05-8	tert-Amyl Methyl Ether	MS	REC	104	%	68-128
JC94740-7MS*	637-92-3	tert-Butyl Ethyl Ether	MS	REC	106	%	70-127
JC94740-7MS*	630-20-6	1,1,1,2-Tetrachloroethane	MS	REC	104	%	78-124
JC94740-7MS*	79-34-5	1,1,2,2-Tetrachloroethane	MS	REC	95	%	71-121
JC94740-7MS*	127-18-4	Tetrachloroethene	MS	REC	111	%	74-129
JC94740-7MS*	109-99-9	Tetrahydrofuran	MS	REC	91	%	57-133
JC94740-7MS*	108-88-3	Toluene	MS	REC	105	%	80-121
JC94740-7MS*	87-61-6	1,2,3-Trichlorobenzene	MS	REC	102	%	69-129
JC94740-7MS*	120-82-1	1,2,4-Trichlorobenzene	MS	REC	107	%	69-130
JC94740-7MS*	71-55-6	1,1,1-Trichloroethane	MS	REC	112	%	74-131
JC94740-7MS*	79-00-5	1,1,2-Trichloroethane	MS	REC	99	%	80-119
JC94740-7MS*	79-01-6	Trichloroethene	MS	REC	107	%	79-123
JC94740-7MS*	75-69-4	Trichlorofluoromethane	MS	REC	116	%	65-141
JC94740-7MS*	96-18-4	1,2,3-Trichloropropane	MS	REC	97	%	73-122
JC94740-7MS*	95-63-6	1,2,4-Trimethylbenzene	MS	REC	107	%	76-124
JC94740-7MS*	108-67-8	1,3,5-Trimethylbenzene	MS	REC	110	%	75-124
JC94740-7MS*	75-01-4	Vinyl chloride	MS	REC	98	%	58-137
JC94740-7MS*		m,p-Xylene	MS	REC	110	%	80-121
JC94740-7MS*	95-47-6	o-Xylene	MS	REC	106	%	78-122
JC94740-7MS*	1868-53-7	Dibromofluoromethane	MS	SURR	102	%	80-119
JC94740-7MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	96	%	81-118
JC94740-7MS*	2037-26-5	Toluene-D8	MS	SURR	101	%	89-112
JC94740-7MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	98	%	85-114

* Sample used for QC is not from job JC94613

QC Evaluation: DOD QSM5.x Limits

Job Number: JC94613
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 09/06/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
JC94740-9DUP*	67-64-1	Acetone	DUP	RPD	0	%	20
JC94740-9DUP*	71-43-2	Benzene	DUP	RPD	0	%	20
JC94740-9DUP*	108-86-1	Bromobenzene	DUP	RPD	0	%	20
JC94740-9DUP*	74-97-5	Bromochloromethane	DUP	RPD	0	%	20
JC94740-9DUP*	75-27-4	Bromodichloromethane	DUP	RPD	0	%	20
JC94740-9DUP*	75-25-2	Bromoform	DUP	RPD	0	%	20
JC94740-9DUP*	74-83-9	Bromomethane	DUP	RPD	0	%	20
JC94740-9DUP*	78-93-3	2-Butanone (MEK)	DUP	RPD	0	%	20
JC94740-9DUP*	104-51-8	n-Butylbenzene	DUP	RPD	0	%	20
JC94740-9DUP*	135-98-8	sec-Butylbenzene	DUP	RPD	0	%	20
JC94740-9DUP*	98-06-6	tert-Butylbenzene	DUP	RPD	0	%	20
JC94740-9DUP*	75-15-0	Carbon disulfide	DUP	RPD	0	%	20
JC94740-9DUP*	56-23-5	Carbon tetrachloride	DUP	RPD	0	%	20
JC94740-9DUP*	108-90-7	Chlorobenzene	DUP	RPD	0	%	20
JC94740-9DUP*	67-66-3	Chloroform	DUP	RPD	0	%	20
JC94740-9DUP*	74-87-3	Chloromethane	DUP	RPD	0	%	20
JC94740-9DUP*	95-49-8	o-Chlorotoluene	DUP	RPD	0	%	20
JC94740-9DUP*	106-43-4	p-Chlorotoluene	DUP	RPD	0	%	20
JC94740-9DUP*	108-20-3	Di-Isopropyl ether	DUP	RPD	0	%	20
JC94740-9DUP*	96-12-8	1,2-Dibromo-3-chloropropane	DUP	RPD	0	%	20
JC94740-9DUP*	124-48-1	Dibromochloromethane	DUP	RPD	0	%	20
JC94740-9DUP*	106-93-4	1,2-Dibromoethane	DUP	RPD	0	%	20
JC94740-9DUP*	95-50-1	1,2-Dichlorobenzene	DUP	RPD	0	%	20
JC94740-9DUP*	541-73-1	1,3-Dichlorobenzene	DUP	RPD	0	%	20
JC94740-9DUP*	106-46-7	1,4-Dichlorobenzene	DUP	RPD	0	%	20
JC94740-9DUP*	75-71-8	Dichlorodifluoromethane	DUP	RPD	0	%	20
JC94740-9DUP*	75-34-3	1,1-Dichloroethane	DUP	RPD	0	%	20
JC94740-9DUP*	107-06-2	1,2-Dichloroethane	DUP	RPD	0	%	20
JC94740-9DUP*	75-35-4	1,1-Dichloroethene	DUP	RPD	0	%	20
JC94740-9DUP*	156-59-2	cis-1,2-Dichloroethene	DUP	RPD	0	%	20
JC94740-9DUP*	156-60-5	trans-1,2-Dichloroethene	DUP	RPD	0	%	20
JC94740-9DUP*	78-87-5	1,2-Dichloropropane	DUP	RPD	0	%	20
JC94740-9DUP*	142-28-9	1,3-Dichloropropane	DUP	RPD	0	%	20
JC94740-9DUP*	594-20-7	2,2-Dichloropropane	DUP	RPD	0	%	20
JC94740-9DUP*	563-58-6	1,1-Dichloropropene	DUP	RPD	0	%	20
JC94740-9DUP*	10061-01-5	cis-1,3-Dichloropropene	DUP	RPD	0	%	20
JC94740-9DUP*	10061-02-6	trans-1,3-Dichloropropene	DUP	RPD	0	%	20
JC94740-9DUP*	123-91-1	1,4-Dioxane	DUP	RPD	0	%	20
JC94740-9DUP*	60-29-7	Ethyl Ether	DUP	RPD	0	%	20
JC94740-9DUP*	100-41-4	Ethylbenzene	DUP	RPD	0	%	20
JC94740-9DUP*	87-68-3	Hexachlorobutadiene	DUP	RPD	0	%	20
JC94740-9DUP*	591-78-6	2-Hexanone	DUP	RPD	0	%	20
JC94740-9DUP*	98-82-8	Isopropylbenzene	DUP	RPD	0	%	20
JC94740-9DUP*	99-87-6	p-Isopropyltoluene	DUP	RPD	0	%	20
JC94740-9DUP*	1634-04-4	Methyl Tert Butyl Ether	DUP	RPD	0	%	20

* Sample used for QC is not from job JC94613

QC Evaluation: DOD QSM5.x Limits

Job Number: JC94613
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 09/06/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
JC94740-9DUP*	108-10-1	4-Methyl-2-pentanone(MIBK)	DUP	RPD	0	%	20
JC94740-9DUP*	74-95-3	Methylene bromide	DUP	RPD	0	%	20
JC94740-9DUP*	75-09-2	Methylene chloride	DUP	RPD	0	%	20
JC94740-9DUP*	91-20-3	Naphthalene	DUP	RPD	0	%	20
JC94740-9DUP*	103-65-1	n-Propylbenzene	DUP	RPD	0	%	20
JC94740-9DUP*	100-42-5	Styrene	DUP	RPD	0	%	20
JC94740-9DUP*	994-05-8	tert-Amyl Methyl Ether	DUP	RPD	0	%	20
JC94740-9DUP*	637-92-3	tert-Butyl Ethyl Ether	DUP	RPD	0	%	20
JC94740-9DUP*	630-20-6	1,1,1,2-Tetrachloroethane	DUP	RPD	0	%	20
JC94740-9DUP*	79-34-5	1,1,2,2-Tetrachloroethane	DUP	RPD	0	%	20
JC94740-9DUP*	127-18-4	Tetrachloroethene	DUP	RPD	0	%	20
JC94740-9DUP*	109-99-9	Tetrahydrofuran	DUP	RPD	0	%	20
JC94740-9DUP*	108-88-3	Toluene	DUP	RPD	0	%	20
JC94740-9DUP*	87-61-6	1,2,3-Trichlorobenzene	DUP	RPD	0	%	20
JC94740-9DUP*	120-82-1	1,2,4-Trichlorobenzene	DUP	RPD	0	%	20
JC94740-9DUP*	71-55-6	1,1,1-Trichloroethane	DUP	RPD	0	%	20
JC94740-9DUP*	79-00-5	1,1,2-Trichloroethane	DUP	RPD	0	%	20
JC94740-9DUP*	79-01-6	Trichloroethene	DUP	RPD	0	%	20
JC94740-9DUP*	75-69-4	Trichlorofluoromethane	DUP	RPD	0	%	20
JC94740-9DUP*	96-18-4	1,2,3-Trichloropropane	DUP	RPD	0	%	20
JC94740-9DUP*	95-63-6	1,2,4-Trimethylbenzene	DUP	RPD	0	%	20
JC94740-9DUP*	108-67-8	1,3,5-Trimethylbenzene	DUP	RPD	0	%	20
JC94740-9DUP*	75-01-4	Vinyl chloride	DUP	RPD	0	%	20
JC94740-9DUP*		m,p-Xylene	DUP	RPD	0	%	20
JC94740-9DUP*	95-47-6	o-Xylene	DUP	RPD	0	%	20
JC94740-9DUP*	1868-53-7	Dibromofluoromethane	DUP	SURR	101	%	80-119
JC94740-9DUP*	17060-07-0	1,2-Dichloroethane-D4	DUP	SURR	95	%	81-118
JC94740-9DUP*	2037-26-5	Toluene-D8	DUP	SURR	101	%	89-112
JC94740-9DUP*	460-00-4	4-Bromofluorobenzene	DUP	SURR	99	%	85-114
V2V2532-MB	1868-53-7	Dibromofluoromethane	MB	SURR	100	%	80-119
V2V2532-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	101	%	81-118
V2V2532-MB	2037-26-5	Toluene-D8	MB	SURR	101	%	89-112
V2V2532-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	100	%	85-114
JC94613-1A	1868-53-7	Dibromofluoromethane	SAMP	SURR	103	%	80-119
JC94613-1A	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	103	%	81-118
JC94613-1A	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
JC94613-1A	460-00-4	4-Bromofluorobenzene	SAMP	SURR	99	%	85-114
JC94613-2A	1868-53-7	Dibromofluoromethane	SAMP	SURR	103	%	80-119
JC94613-2A	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	98	%	81-118
JC94613-2A	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
JC94613-2A	460-00-4	4-Bromofluorobenzene	SAMP	SURR	98	%	85-114
VA9819	SW846 8260C						
VA9819-BS	74-83-9	Bromomethane	BSP	REC	94	%	53-141

* Sample used for QC is not from job JC94613

QC Evaluation: DOD QSM5.x Limits

Job Number: JC94613
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 09/06/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
VA9819-BS	75-00-3	Chloroethane	BSP	REC	88	%	60-138
VA9819-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	94	%	80-119
VA9819-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	106	%	81-118
VA9819-BS	2037-26-5	Toluene-D8	BSP	SURR	98	%	89-112
VA9819-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	91	%	85-114
JC94790-3MS*	74-83-9	Bromomethane	MS	REC	99	%	53-141
JC94790-3MS*	75-00-3	Chloroethane	MS	REC	91	%	60-138
JC94790-3MS*	1868-53-7	Dibromofluoromethane	MS	SURR	95	%	80-119
JC94790-3MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	104	%	81-118
JC94790-3MS*	2037-26-5	Toluene-D8	MS	SURR	94	%	89-112
JC94790-3MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	91	%	85-114
JC94790-3MSD*	74-83-9	Bromomethane	MSD	REC	97	%	53-141
JC94790-3MSD*	74-83-9	Bromomethane	MSD	RPD	1	%	20
JC94790-3MSD*	75-00-3	Chloroethane	MSD	REC	92	%	60-138
JC94790-3MSD*	75-00-3	Chloroethane	MSD	RPD	1	%	20
JC94790-3MSD*	1868-53-7	Dibromofluoromethane	MSD	SURR	97	%	80-119
JC94790-3MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	101	%	81-118
JC94790-3MSD*	2037-26-5	Toluene-D8	MSD	SURR	89	%	89-112
JC94790-3MSD*	460-00-4	4-Bromofluorobenzene	MSD	SURR	90	%	85-114
VA9819-MB	1868-53-7	Dibromofluoromethane	MB	SURR	95	%	80-119
VA9819-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	104	%	81-118
VA9819-MB	2037-26-5	Toluene-D8	MB	SURR	94	%	89-112
VA9819-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	86	%	85-114
JC94613-1A	1868-53-7	Dibromofluoromethane	SAMP	SURR	96	%	80-119
JC94613-1A	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	102	%	81-118
JC94613-1A	2037-26-5	Toluene-D8	SAMP	SURR	87 [b]	%	89-112
JC94613-1A	460-00-4	4-Bromofluorobenzene	SAMP	SURR	87	%	85-114
JC94613-2A	1868-53-7	Dibromofluoromethane	SAMP	SURR	94	%	80-119
JC94613-2A	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	103	%	81-118
JC94613-2A	2037-26-5	Toluene-D8	SAMP	SURR	89	%	89-112
JC94613-2A	460-00-4	4-Bromofluorobenzene	SAMP	SURR	90	%	85-114
MP17232	SW846 6010D						
MP17232-B1	7439-89-6	Iron	BSP	REC	98.8	%	87-115
MP17232-B1	7439-96-5	Manganese	BSP	REC	100	%	90-114
MP17232-S1	7439-89-6	Iron	MS	REC	113.6	%	87-115
MP17232-S1	7439-96-5	Manganese	MS	REC	97.5	%	90-114
MP17232-S2	7439-89-6	Iron	MSD	REC	105.6	%	87-115
MP17232-S2	7439-89-6	Iron	MSD	RPD	2.2	%	20
MP17232-S2	7439-96-5	Manganese	MSD	REC	99.5	%	90-114
MP17232-S2	7439-96-5	Manganese	MSD	RPD	1	%	20
MP17232A	SW846 6020B						

* Sample used for QC is not from job JC94613

QC Evaluation: DOD QSM5.x Limits

Job Number: JC94613
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 09/06/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP17232A-B2	7440-38-2	Arsenic	BSP	REC	86.6	%	84-116
MP17232A-S3	7440-38-2	Arsenic	MS	REC	100	%	84-116
MP17232A-S4	7440-38-2	Arsenic	MSD	REC	175 [c]	%	84-116
MP17232A-S4	7440-38-2	Arsenic	MSD	RPD	3.4	%	20

(a) High percent recoveries and no associated positive reported in the QC batch.
(b) Outside of DOD criteria, but within in house control limit. No full vial available for reanalysis.
(c) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

* Sample used for QC is not from job JC94613

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V2532-MB	2V61611.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
108-20-3	Di-Isopropyl ether	ND	2.0	0.68	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.82	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	

Method Blank Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V2532-MB	2V61611.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
123-91-1	1,4-Dioxane	ND	130	69	ug/l	
60-29-7	Ethyl Ether	ND	2.0	0.51	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.56	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	0.98	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
994-05-8	tert-Amyl Methyl Ether	ND	2.0	0.47	ug/l	
637-92-3	tert-Butyl Ethyl Ether	ND	2.0	0.56	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
109-99-9	Tetrahydrofuran	ND	10	3.2	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V2532-MB	2V61611.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	80-120%
17060-07-0	1,2-Dichloroethane-D4	101%	81-124%
2037-26-5	Toluene-D8	101%	80-120%
460-00-4	4-Bromofluorobenzene	100%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA9819-MB	A253365.D	1	09/19/19	KC	n/a	n/a	VA9819

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Compound	Result	RL	MDL	Units	Q
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	95%	80-120%
17060-07-0	1,2-Dichloroethane-D4	104%	81-124%
2037-26-5	Toluene-D8	94%	80-120%
460-00-4	4-Bromofluorobenzene	86%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VA9819-BS	A253363.D	1	09/19/19	KC	n/a	n/a	VA9819

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
74-83-9	Bromomethane	50	47.2	94	57-138
75-00-3	Chloroethane	50	44.0	88	63-132

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	80-120%
17060-07-0	1,2-Dichloroethane-D4	106%	81-124%
2037-26-5	Toluene-D8	98%	80-120%
460-00-4	4-Bromofluorobenzene	91%	80-120%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V2532-BS	2V61608.D	1	09/19/19	JP	n/a	n/a	V2V2532
V2V2532-BSD	2V61609.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	200	184	92	188	94	2	42-150/22
71-43-2	Benzene	50	53.9	108	52.3	105	3	80-120/20
108-86-1	Bromobenzene	50	55.3	111	55.9	112	1	82-118/20
74-97-5	Bromochloromethane	50	56.0	112	55.0	110	2	84-121/20
75-27-4	Bromodichloromethane	50	54.9	110	53.1	106	3	83-120/20
75-25-2	Bromoform	50	54.8	110	54.6	109	0	76-129/20
74-83-9	Bromomethane	50	53.6	107	50.7	101	6	57-138/20
78-93-3	2-Butanone (MEK)	200	207	104	210	105	1	64-137/20
104-51-8	n-Butylbenzene	50	61.6	123	62.5	125* [a]	1	81-123/20
135-98-8	sec-Butylbenzene	50	59.7	119	59.8	120	0	84-121/20
98-06-6	tert-Butylbenzene	50	57.8	116	59.1	118	2	83-122/20
75-15-0	Carbon disulfide	50	48.7	97	46.7	93	4	64-137/20
56-23-5	Carbon tetrachloride	50	59.0	118	56.6	113	4	75-135/20
108-90-7	Chlorobenzene	50	55.0	110	54.5	109	1	84-117/20
67-66-3	Chloroform	50	53.1	106	51.3	103	3	80-119/20
74-87-3	Chloromethane	50	43.6	87	42.4	85	3	46-136/20
95-49-8	o-Chlorotoluene	50	56.5	113	56.6	113	0	84-118/20
106-43-4	p-Chlorotoluene	50	56.4	113	56.8	114	1	83-116/20
108-20-3	Di-Isopropyl ether	50	54.4	109	53.2	106	2	73-128/20
96-12-8	1,2-Dibromo-3-chloropropane	50	51.0	102	55.3	111	8	72-127/20
124-48-1	Dibromochloromethane	50	55.9	112	55.7	111	0	80-123/20
106-93-4	1,2-Dibromoethane	50	54.8	110	54.0	108	1	84-117/20
95-50-1	1,2-Dichlorobenzene	50	58.1	116	58.5	117	1	84-119/20
541-73-1	1,3-Dichlorobenzene	50	57.2	114	58.7	117	3	81-117/20
106-46-7	1,4-Dichlorobenzene	50	53.3	107	55.3	111	4	82-117/20
75-71-8	Dichlorodifluoromethane	50	42.5	85	40.7	81	4	36-149/20
75-34-3	1,1-Dichloroethane	50	52.8	106	51.6	103	2	79-120/20
107-06-2	1,2-Dichloroethane	50	52.3	105	50.8	102	3	78-126/20
75-35-4	1,1-Dichloroethene	50	53.1	106	50.9	102	4	69-126/20
156-59-2	cis-1,2-Dichloroethene	50	55.5	111	53.5	107	4	80-120/20
156-60-5	trans-1,2-Dichloroethene	50	51.3	103	50.1	100	2	76-120/20
78-87-5	1,2-Dichloropropane	50	54.3	109	53.5	107	1	82-121/20
142-28-9	1,3-Dichloropropane	50	53.7	107	52.8	106	2	83-115/20
594-20-7	2,2-Dichloropropane	50	59.2	118	56.9	114	4	65-133/20
563-58-6	1,1-Dichloropropene	50	54.9	110	53.6	107	2	80-121/20
10061-01-5	cis-1,3-Dichloropropene	50	57.9	116	55.8	112	4	83-120/20

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V2532-BS	2V61608.D	1	09/19/19	JP	n/a	n/a	V2V2532
V2V2532-BSD	2V61609.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	50	58.2	116	57.9	116	1	82-121/20
123-91-1	1,4-Dioxane	1250	1270	102	1310	105	3	52-147/20
60-29-7	Ethyl Ether	50	52.7	105	52.0	104	1	78-124/20
100-41-4	Ethylbenzene	50	56.5	113	55.1	110	3	80-120/20
87-68-3	Hexachlorobutadiene	50	59.9	120	60.0	120	0	75-129/20
591-78-6	2-Hexanone	200	210	105	216	108	3	65-132/20
98-82-8	Isopropylbenzene	50	58.8	118	57.7	115	2	83-120/20
99-87-6	p-Isopropyltoluene	50	60.9	122	62.2	124* [a]	2	83-122/20
1634-04-4	Methyl Tert Butyl Ether	50	53.2	106	52.8	106	1	80-119/20
108-10-1	4-Methyl-2-pentanone(MIBK)	200	215	108	215	108	0	71-131/20
74-95-3	Methylene bromide	50	52.5	105	52.6	105	0	85-120/20
75-09-2	Methylene chloride	50	51.0	102	50.0	100	2	77-120/20
91-20-3	Naphthalene	50	54.5	109	59.7	119	9	73-131/20
103-65-1	n-Propylbenzene	50	57.8	116	59.1	118	2	82-119/20
100-42-5	Styrene	50	58.2	116	57.9	116	1	82-122/20
994-05-8	tert-Amyl Methyl Ether	50	55.3	111	55.2	110	0	81-124/20
637-92-3	tert-Butyl Ethyl Ether	50	56.0	112	54.7	109	2	79-128/20
630-20-6	1,1,1,2-Tetrachloroethane	50	56.3	113	55.5	111	1	82-121/20
79-34-5	1,1,2,2-Tetrachloroethane	50	51.0	102	53.6	107	5	76-119/20
127-18-4	Tetrachloroethene	50	49.3	99	49.4	99	0	70-131/20
109-99-9	Tetrahydrofuran	50	45.1	90	47.9	96	6	64-129/20
108-88-3	Toluene	50	54.7	109	53.4	107	2	80-120/20
87-61-6	1,2,3-Trichlorobenzene	50	53.1	106	57.0	114	7	76-134/20
120-82-1	1,2,4-Trichlorobenzene	50	59.1	118	60.5	121	2	79-132/20
71-55-6	1,1,1-Trichloroethane	50	55.9	112	53.8	108	4	81-128/20
79-00-5	1,1,2-Trichloroethane	50	52.9	106	53.1	106	0	83-118/20
79-01-6	Trichloroethene	50	55.1	110	53.7	107	3	80-120/20
75-69-4	Trichlorofluoromethane	50	54.9	110	52.5	105	4	64-136/20
96-18-4	1,2,3-Trichloropropane	50	52.4	105	55.4	111	6	79-120/20
95-63-6	1,2,4-Trimethylbenzene	50	57.4	115	59.0	118	3	84-120/20
108-67-8	1,3,5-Trimethylbenzene	50	58.1	116	58.7	117	1	83-119/20
75-01-4	Vinyl chloride	50	45.1	90	44.0	88	2	51-135/20
	m,p-Xylene	100	115	115	113	113	2	80-120/20
95-47-6	o-Xylene	50	57.1	114	56.2	112	2	80-120/20

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2V2532-BS	2V61608.D	1	09/19/19	JP	n/a	n/a	V2V2532
V2V2532-BSD	2V61609.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	100%	98%	80-120%
17060-07-0	1,2-Dichloroethane-D4	99%	97%	81-124%
2037-26-5	Toluene-D8	99%	101%	80-120%
460-00-4	4-Bromofluorobenzene	99%	100%	80-120%

(a) High percent recoveries and no associated positive reported in the QC batch.

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC94740-7MS	2V61621.D	1	09/19/19	JP	n/a	n/a	V2V2532
JC94740-7	2V61615.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Compound	JC94740-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
67-64-1	Acetone	ND		200	179	90	34-149
71-43-2	Benzene	ND		50	51.8	104	54-136
108-86-1	Bromobenzene	ND		50	51.6	103	78-122
74-97-5	Bromochloromethane	ND		50	54.9	110	79-124
75-27-4	Bromodichloromethane	ND		50	50.3	101	79-124
75-25-2	Bromoform	ND		50	50.5	101	71-130
74-83-9	Bromomethane	ND		50	34.8	70	53-142
78-93-3	2-Butanone (MEK)	ND		200	203	102	54-142
104-51-8	n-Butylbenzene	ND		50	57.7	115	73-133
135-98-8	sec-Butylbenzene	ND		50	55.8	112	76-132
98-06-6	tert-Butylbenzene	ND		50	55.3	111	76-131
75-15-0	Carbon disulfide	ND		50	57.6	115	59-145
56-23-5	Carbon tetrachloride	ND		50	59.8	120	70-143
108-90-7	Chlorobenzene	ND		50	52.4	105	78-123
67-66-3	Chloroform	ND		50	50.9	102	76-123
74-87-3	Chloromethane	ND		50	44.3	89	43-141
95-49-8	o-Chlorotoluene	ND		50	53.5	107	78-124
106-43-4	p-Chlorotoluene	ND		50	52.6	105	77-122
108-20-3	Di-Isopropyl ether	ND		50	52.6	105	68-130
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	49.2	98	66-130
124-48-1	Dibromochloromethane	ND		50	52.1	104	76-125
106-93-4	1,2-Dibromoethane	ND		50	51.2	102	78-119
95-50-1	1,2-Dichlorobenzene	ND		50	53.3	107	77-123
541-73-1	1,3-Dichlorobenzene	ND		50	52.9	106	76-122
106-46-7	1,4-Dichlorobenzene	ND		50	50.3	101	76-122
75-71-8	Dichlorodifluoromethane	ND		50	59.9	120	31-159
75-34-3	1,1-Dichloroethane	ND		50	52.3	105	73-126
107-06-2	1,2-Dichloroethane	ND		50	48.4	97	72-131
75-35-4	1,1-Dichloroethene	ND		50	58.4	117	63-136
156-59-2	cis-1,2-Dichloroethene	ND		50	53.4	107	60-136
156-60-5	trans-1,2-Dichloroethene	ND		50	53.4	107	70-126
78-87-5	1,2-Dichloropropane	ND		50	50.9	102	78-124
142-28-9	1,3-Dichloropropane	ND		50	50.6	101	78-118
594-20-7	2,2-Dichloropropane	ND		50	60.1	120	59-141
563-58-6	1,1-Dichloropropene	ND		50	56.8	114	75-130
10061-01-5	cis-1,3-Dichloropropene	ND		50	53.1	106	79-123

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC94740-7MS	2V61621.D	1	09/19/19	JP	n/a	n/a	V2V2532
JC94740-7	2V61615.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Compound	JC94740-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
10061-02-6	trans-1,3-Dichloropropene	ND		50	54.3	109	77-123
123-91-1	1,4-Dioxane	ND		1250	1210	97	49-146
60-29-7	Ethyl Ether	ND		50	53.3	107	72-127
100-41-4	Ethylbenzene	ND		50	53.8	108	51-140
87-68-3	Hexachlorobutadiene	ND		50	56.9	114	64-141
591-78-6	2-Hexanone	ND		200	199	100	56-139
98-82-8	Isopropylbenzene	ND		50	55.9	112	75-129
99-87-6	p-Isopropyltoluene	ND		50	57.6	115	76-131
1634-04-4	Methyl Tert Butyl Ether	ND		50	51.8	104	72-123
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	200	100	66-136
74-95-3	Methylene bromide	ND		50	49.6	99	81-121
75-09-2	Methylene chloride	ND		50	50.9	102	73-125
91-20-3	Naphthalene	ND		50	51.7	103	62-141
103-65-1	n-Propylbenzene	ND		50	55.1	110	68-133
100-42-5	Styrene	ND		50	55.2	110	75-129
994-05-8	tert-Amyl Methyl Ether	ND		50	51.9	104	75-127
637-92-3	tert-Butyl Ethyl Ether	ND		50	52.8	106	74-130
630-20-6	1,1,1,2-Tetrachloroethane	ND		50	52.1	104	77-124
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	47.6	95	71-122
127-18-4	Tetrachloroethene	68.6		50	124	111	61-139
109-99-9	Tetrahydrofuran	ND		50	45.6	91	54-129
108-88-3	Toluene	ND		50	52.4	105	60-135
87-61-6	1,2,3-Trichlorobenzene	ND		50	51.0	102	70-138
120-82-1	1,2,4-Trichlorobenzene	ND		50	53.6	107	72-137
71-55-6	1,1,1-Trichloroethane	ND		50	55.8	112	74-138
79-00-5	1,1,2-Trichloroethane	ND		50	49.4	99	78-121
79-01-6	Trichloroethene	2.3		50	55.7	107	62-141
75-69-4	Trichlorofluoromethane	ND		50	57.9	116	57-149
96-18-4	1,2,3-Trichloropropane	ND		50	48.6	97	74-122
95-63-6	1,2,4-Trimethylbenzene	ND		50	53.7	107	54-143
108-67-8	1,3,5-Trimethylbenzene	ND		50	54.9	110	67-133
75-01-4	Vinyl chloride	ND		50	49.0	98	43-146
	m,p-Xylene	ND		100	110	110	50-144
95-47-6	o-Xylene	ND		50	52.9	106	63-134

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC94740-7MS	2V61621.D	1	09/19/19	JP	n/a	n/a	V2V2532
JC94740-7	2V61615.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Surrogate Recoveries	MS	JC94740-7	Limits
1868-53-7	Dibromofluoromethane	102%	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	96%	100%	81-124%
2037-26-5	Toluene-D8	101%	99%	80-120%
460-00-4	4-Bromofluorobenzene	98%	99%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC94790-3MS	A253372.D	20	09/19/19	KC	n/a	n/a	VA9819
JC94790-3MSD	A253373.D	20	09/19/19	KC	n/a	n/a	VA9819
JC94790-3 [a]	A253370.D	20	09/19/19	KC	n/a	n/a	VA9819

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Compound	JC94790-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
74-83-9	Bromomethane	ND		1000	985	99	1000	974	97	1	53-142/14
75-00-3	Chloroethane	ND		1000	908	91	1000	921	92	1	57-141/14

CAS No.	Surrogate Recoveries	MS	MSD	JC94790-3	Limits
1868-53-7	Dibromofluoromethane	95%	97%	95%	80-120%
17060-07-0	1,2-Dichloroethane-D4	104%	101%	105%	81-124%
2037-26-5	Toluene-D8	94%	89%	94%	80-120%
460-00-4	4-Bromofluorobenzene	91%	90%	86%	80-120%

(a) Diluted due to high concentration of target compound.

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC94740-9DUP	2V61623.D	1	09/19/19	JP	n/a	n/a	V2V2532
JC94740-9	2V61616.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Compound	JC94740-9 ug/l	Q	DUP ug/l	Q	RPD	Limits
67-64-1	Acetone	ND		ND		nc	20
71-43-2	Benzene	ND		ND		nc	20
108-86-1	Bromobenzene	ND		ND		nc	20
74-97-5	Bromochloromethane	ND		ND		nc	20
75-27-4	Bromodichloromethane	ND		ND		nc	20
75-25-2	Bromoform	ND		ND		nc	20
74-83-9	Bromomethane	ND		ND		nc	20
78-93-3	2-Butanone (MEK)	ND		ND		nc	20
104-51-8	n-Butylbenzene	ND		ND		nc	20
135-98-8	sec-Butylbenzene	ND		ND		nc	20
98-06-6	tert-Butylbenzene	ND		ND		nc	20
75-15-0	Carbon disulfide	ND		ND		nc	20
56-23-5	Carbon tetrachloride	ND		ND		nc	20
108-90-7	Chlorobenzene	ND		ND		nc	20
67-66-3	Chloroform	ND		ND		nc	20
74-87-3	Chloromethane	ND		ND		nc	20
95-49-8	o-Chlorotoluene	ND		ND		nc	20
106-43-4	p-Chlorotoluene	ND		ND		nc	20
108-20-3	Di-Isopropyl ether	ND		ND		nc	20
96-12-8	1,2-Dibromo-3-chloropropane	ND		ND		nc	20
124-48-1	Dibromochloromethane	ND		ND		nc	20
106-93-4	1,2-Dibromoethane	ND		ND		nc	20
95-50-1	1,2-Dichlorobenzene	ND		ND		nc	20
541-73-1	1,3-Dichlorobenzene	ND		ND		nc	20
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	20
75-71-8	Dichlorodifluoromethane	ND		ND		nc	20
75-34-3	1,1-Dichloroethane	ND		ND		nc	20
107-06-2	1,2-Dichloroethane	ND		ND		nc	20
75-35-4	1,1-Dichloroethene	ND		ND		nc	20
156-59-2	cis-1,2-Dichloroethene	ND		ND		nc	20
156-60-5	trans-1,2-Dichloroethene	ND		ND		nc	20
78-87-5	1,2-Dichloropropane	ND		ND		nc	20
142-28-9	1,3-Dichloropropane	ND		ND		nc	20
594-20-7	2,2-Dichloropropane	ND		ND		nc	20
563-58-6	1,1-Dichloropropene	ND		ND		nc	20
10061-01-5	cis-1,3-Dichloropropene	ND		ND		nc	20

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC94740-9DUP	2V61623.D	1	09/19/19	JP	n/a	n/a	V2V2532
JC94740-9	2V61616.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Compound	JC94740-9 ug/l	Q	DUP ug/l	Q	RPD	Limits
10061-02-6	trans-1,3-Dichloropropene	ND		ND		nc	20
123-91-1	1,4-Dioxane	ND		ND		nc	20
60-29-7	Ethyl Ether	ND		ND		nc	20
100-41-4	Ethylbenzene	ND		ND		nc	20
87-68-3	Hexachlorobutadiene	ND		ND		nc	20
591-78-6	2-Hexanone	ND		ND		nc	20
98-82-8	Isopropylbenzene	ND		ND		nc	20
99-87-6	p-Isopropyltoluene	ND		ND		nc	20
1634-04-4	Methyl Tert Butyl Ether	ND		ND		nc	20
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		ND		nc	20
74-95-3	Methylene bromide	ND		ND		nc	20
75-09-2	Methylene chloride	ND		ND		nc	20
91-20-3	Naphthalene	ND		ND		nc	20
103-65-1	n-Propylbenzene	ND		ND		nc	20
100-42-5	Styrene	ND		ND		nc	20
994-05-8	tert-Amyl Methyl Ether	ND		ND		nc	20
637-92-3	tert-Butyl Ethyl Ether	ND		ND		nc	20
630-20-6	1,1,1,2-Tetrachloroethane	ND		ND		nc	20
79-34-5	1,1,2,2-Tetrachloroethane	ND		ND		nc	20
127-18-4	Tetrachloroethene	1.9		1.9		0	20
109-99-9	Tetrahydrofuran	ND		ND		nc	20
108-88-3	Toluene	ND		ND		nc	20
87-61-6	1,2,3-Trichlorobenzene	ND		ND		nc	20
120-82-1	1,2,4-Trichlorobenzene	ND		ND		nc	20
71-55-6	1,1,1-Trichloroethane	ND		ND		nc	20
79-00-5	1,1,2-Trichloroethane	ND		ND		nc	20
79-01-6	Trichloroethene	ND		ND		nc	20
75-69-4	Trichlorofluoromethane	ND		ND		nc	20
96-18-4	1,2,3-Trichloropropane	ND		ND		nc	20
95-63-6	1,2,4-Trimethylbenzene	ND		ND		nc	20
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	20
75-01-4	Vinyl chloride	ND		ND		nc	20
	m,p-Xylene	ND		ND		nc	20
95-47-6	o-Xylene	ND		ND		nc	20

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC94740-9DUP	2V61623.D	1	09/19/19	JP	n/a	n/a	V2V2532
JC94740-9	2V61616.D	1	09/19/19	JP	n/a	n/a	V2V2532

The QC reported here applies to the following samples: **Method:** SW846 8260C

JC94613-1A, JC94613-2A

CAS No.	Surrogate Recoveries	DUP	JC94740-9	Limits
1868-53-7	Dibromofluoromethane	101%	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	95%	96%	81-124%
2037-26-5	Toluene-D8	101%	100%	80-120%
460-00-4	4-Bromofluorobenzene	99%	100%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-BFB
Lab File ID: 2V61590.D
Instrument ID: GCMS2V
Injection Date: 09/18/19
Injection Time: 17:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	13458	17.1		Pass
75	30.0 - 60.0% of mass 95	36616	46.4		Pass
95	Base peak, 100% relative abundance	78925	100.0		Pass
96	5.0 - 9.0% of mass 95	5076	6.43		Pass
173	Less than 2.0% of mass 174	701	0.89	(0.90) [a]	Pass
174	50.0 - 120.0% of mass 95	78019	98.9		Pass
175	5.0 - 9.0% of mass 174	5738	7.27	(7.35) [a]	Pass
176	95.0 - 101.0% of mass 174	76840	97.4	(98.5) [a]	Pass
177	5.0 - 9.0% of mass 176	5014	6.35	(6.53) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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
V2V2531-IC2531	2V61591.D	09/18/19	17:51	00:40	Initial cal 0.2
V2V2531-IC2531	2V61592.D	09/18/19	18:16	01:05	Initial cal 0.5
V2V2531-IC2531	2V61593.D	09/18/19	18:42	01:31	Initial cal 1
V2V2531-IC2531	2V61594.D	09/18/19	19:07	01:56	Initial cal 2
V2V2531-IC2531	2V61595.D	09/18/19	19:33	02:22	Initial cal 4
V2V2531-IC2531	2V61596.D	09/18/19	19:59	02:48	Initial cal 8
V2V2531-IC2531	2V61597.D	09/18/19	20:25	03:14	Initial cal 20
V2V2531-ICC2531	2V61598.D	09/18/19	20:50	03:39	Initial cal 50
V2V2531-IC2531	2V61599.D	09/18/19	21:16	04:05	Initial cal 100
V2V2531-IC2531	2V61600.D	09/18/19	21:41	04:30	Initial cal 200
V2V2531-ICV2531	2V61603.D	09/18/19	22:58	05:47	Initial cal verification 50
V2V2531-ICV2531	2V61604.D	09/18/19	23:24	06:13	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2532-BFB
Lab File ID: 2V61607.D
Instrument ID: GCMS2V
Injection Date: 09/19/19
Injection Time: 09:00

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	13103	16.3		Pass
75	30.0 - 60.0% of mass 95	38323	47.6		Pass
95	Base peak, 100% relative abundance	80531	100.0		Pass
96	5.0 - 9.0% of mass 95	5447	6.76		Pass
173	Less than 2.0% of mass 174	1008	1.25	(1.22) [a]	Pass
174	50.0 - 120.0% of mass 95	82424	102.4		Pass
175	5.0 - 9.0% of mass 174	6276	7.79	(7.61) [a]	Pass
176	95.0 - 101.0% of mass 174	79493	98.7	(96.4) [a]	Pass
177	5.0 - 9.0% of mass 176	5158	6.40	(6.49) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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
V2V2532-CC2531	2V61607.D	09/19/19	09:00	00:00	Continuing cal 20
V2V2532-BS	2V61608.D	09/19/19	09:31	00:31	Blank Spike
V2V2520-BS2	2V61608.D	09/19/19	09:31	00:31	Blank Spike
V2V2532-BSD	2V61609.D	09/19/19	09:56	00:56	Blank Spike Duplicate
V2V2520-MB2	2V61611.D	09/19/19	10:58	01:58	Method Blank
V2V2532-MB	2V61611.D	09/19/19	10:58	01:58	Method Blank
JC94575-3MS	2V61612.D	09/19/19	11:30	02:30	Matrix Spike
ZZZZZZ	2V61614.D	09/19/19	12:23	03:23	(unrelated sample)
JC94740-7	2V61615.D	09/19/19	12:48	03:48	(used for QC only; not part of job JC94613)
JC94740-9	2V61616.D	09/19/19	13:14	04:14	(used for QC only; not part of job JC94613)
ZZZZZZ	2V61617.D	09/19/19	13:39	04:39	(unrelated sample)
ZZZZZZ	2V61618.D	09/19/19	14:05	05:05	(unrelated sample)
ZZZZZZ	2V61619.D	09/19/19	14:30	05:30	(unrelated sample)
ZZZZZZ	2V61620.D	09/19/19	14:56	05:56	(unrelated sample)
JC94740-7MS	2V61621.D	09/19/19	15:21	06:21	Matrix Spike
ZZZZZZ	2V61622.D	09/19/19	15:47	06:47	(unrelated sample)
JC94740-9DUP	2V61623.D	09/19/19	16:13	07:13	Duplicate
JC94613-1A	2V61624.D	09/19/19	16:38	07:38	EW-1
JC94613-2A	2V61625.D	09/19/19	17:04	08:04	EW-4
ZZZZZZ	2V61626.D	09/19/19	17:29	08:29	(unrelated sample)
ZZZZZZ	2V61627.D	09/19/19	17:55	08:55	(unrelated sample)
ZZZZZZ	2V61628.D	09/19/19	18:21	09:21	(unrelated sample)
ZZZZZZ	2V61629.D	09/19/19	18:46	09:46	(unrelated sample)
V2V2532-ECC2531	2V61630.D	09/19/19	19:12	10:12	Ending cal 50

Instrument Performance Check (BFB)

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9755-BFB
Lab File ID: A251984.D
Instrument ID: GCMSA
Injection Date: 07/29/19
Injection Time: 17:24

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	13974	17.6		Pass
75	30.0 - 60.0% of mass 95	36626	46.2		Pass
95	Base peak, 100% relative abundance	79333	100.0		Pass
96	5.0 - 9.0% of mass 95	5472	6.90		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	62256	78.5		Pass
175	5.0 - 9.0% of mass 174	4702	5.93	(7.55) [a]	Pass
176	95.0 - 101.0% of mass 174	61994	78.1	(99.6) [a]	Pass
177	5.0 - 9.0% of mass 176	4061	5.12	(6.55) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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
VA9755-IC9755	A251985.D	07/29/19	18:10	00:46	Initial cal 0.2
VA9755-IC9755	A251986.D	07/29/19	18:40	01:16	Initial cal 0.5
VA9755-IC9755	A251987.D	07/29/19	19:09	01:45	Initial cal 1
VA9755-IC9755	A251988.D	07/29/19	19:39	02:15	Initial cal 2
VA9755-IC9755	A251989.D	07/29/19	20:08	02:44	Initial cal 4
VA9755-IC9755	A251990.D	07/29/19	20:37	03:13	Initial cal 8
VA9755-IC9755	A251991.D	07/29/19	21:07	03:43	Initial cal 20
VA9755-ICC9755	A251992.D	07/29/19	21:36	04:12	Initial cal 50
VA9755-IC9755	A251993.D	07/29/19	22:06	04:42	Initial cal 100
VA9755-IC9755	A251994.D	07/29/19	22:36	05:12	Initial cal 200
VA9755-ICV9755	A251997.D	07/30/19	00:04	06:40	Initial cal verification 50
VA9755-ICV9755	A251998.D	07/30/19	00:33	07:09	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9819-BFB
Lab File ID: A253361.D
Instrument ID: GCMSA
Injection Date: 09/19/19
Injection Time: 10:59

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.95 - 40.0% of mass 95	10742	18.0		Pass
75	30.0 - 60.0% of mass 95	27573	46.2		Pass
95	Base peak, 100% relative abundance	59637	100.0		Pass
96	5.0 - 9.0% of mass 95	3888	6.52		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	51389	86.2		Pass
175	5.0 - 9.0% of mass 174	3977	6.67	(7.74) [a]	Pass
176	95.0 - 101.0% of mass 174	50234	84.2	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	3554	5.96	(7.07) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

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
VA9819-CC9755	A253361.D	09/19/19	10:59	00:00	Continuing cal 20
VA9819-BS	A253363.D	09/19/19	12:05	01:06	Blank Spike
VA9819-MB	A253365.D	09/19/19	13:01	02:02	Method Blank
ZZZZZZ	A253366.D	09/19/19	13:29	02:30	(unrelated sample)
ZZZZZZ	A253368.D	09/19/19	14:26	03:27	(unrelated sample)
ZZZZZZ	A253369.D	09/19/19	14:54	03:55	(unrelated sample)
JC94790-3	A253370.D	09/19/19	15:22	04:23	(used for QC only; not part of job JC94613)
ZZZZZZ	A253371.D	09/19/19	15:50	04:51	(unrelated sample)
JC94790-3MS	A253372.D	09/19/19	16:18	05:19	Matrix Spike
JC94790-3MSD	A253373.D	09/19/19	16:47	05:48	Matrix Spike Duplicate
JC94613-1A	A253375.D	09/19/19	17:43	06:44	EW-1
JC94613-2A	A253376.D	09/19/19	18:11	07:12	EW-4
ZZZZZZ	A253377.D	09/19/19	18:39	07:40	(unrelated sample)
ZZZZZZ	A253379.D	09/19/19	19:36	08:37	(unrelated sample)
ZZZZZZ	A253380.D	09/19/19	20:04	09:05	(unrelated sample)
ZZZZZZ	A253381.D	09/19/19	20:32	09:33	(unrelated sample)
VA9819-ECC9755	A253383.D	09/19/19	21:28	10:29	Ending cal 50

Internal Standard Area Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Check Std:	V2V2532-CC2531	**Injection Date:**	09/19/19
Lab File ID:	2V61607.D	**Injection Time:**	09:00
Instrument ID:	GCMS2V	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	111469	2.94	296335	4.14	414133	4.70	337640	7.09	156560	9.30
Upper Limit [a]	222938	3.44	592670	4.64	828266	5.20	675280	7.59	313120	9.80
Lower Limit [b]	55735	2.44	148168	3.64	207067	4.20	168820	6.59	78280	8.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2V2532-BS	108830	2.94	291531	4.14	411307	4.70	345118	7.09	163009	9.30
V2V2520-BS2	108830	2.94	291531	4.14	411307	4.70	345118	7.09	163009	9.30
V2V2532-BSD	109014	2.94	297513	4.14	418381	4.70	346899	7.09	157974	9.30
V2V2520-MB2	108262	2.94	288998	4.14	403434	4.70	329764	7.09	151166	9.30
V2V2532-MB	108262	2.94	288998	4.14	403434	4.70	329764	7.09	151166	9.30
JC94575-3MS	110745	2.94	291400	4.14	410667	4.70	341751	7.09	160301	9.30
ZZZZZZ	106554	2.94	292295	4.14	405866	4.70	331873	7.09	148522	9.30
JC94740-7	109259	2.94	285173	4.14	402921	4.70	330562	7.09	150850	9.30
JC94740-9	96341	2.94	277675	4.14	392652	4.70	320449	7.09	142021	9.30
ZZZZZZ	105471	2.94	278220	4.14	387553	4.70	323472	7.09	152825	9.30
ZZZZZZ	102609	2.94	277343	4.14	392093	4.70	319764	7.09	155806	9.30
ZZZZZZ	103884	2.94	283940	4.14	399631	4.70	321077	7.09	147409	9.30
ZZZZZZ	99879	2.94	276685	4.14	393501	4.70	326282	7.09	151394	9.30
JC94740-7MS	105060	2.94	284262	4.14	407218	4.70	333912	7.09	158511	9.30
ZZZZZZ	108960	2.94	284501	4.14	400752	4.70	326980	7.09	146835	9.30
JC94740-9DUP	105997	2.94	281429	4.14	397568	4.70	321172	7.09	144988	9.30
JC94613-1A	114114	2.94	278329	4.14	392810	4.70	330148	7.09	153787	9.30
JC94613-2A	105200	2.94	283099	4.14	401143	4.70	329987	7.09	148612	9.30
ZZZZZZ	105337	2.94	268700	4.14	386803	4.70	321950	7.09	147268	9.30
ZZZZZZ	110656	2.94	279104	4.14	394051	4.70	322166	7.09	146754	9.30
ZZZZZZ	95679	2.94	264329	4.14	374121	4.70	304839	7.09	136402	9.30
ZZZZZZ	99793	2.94	261081	4.14	369354	4.71	303391	7.09	137910	9.30
V2V2532-ECC253	107904	2.94	285199	4.14	401228	4.70	333577	7.09	160331	9.30

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(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.

Internal Standard Area Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Check Std:	VA9819-CC9755	**Injection Date:**	09/19/19
Lab File ID:	A253361.D	**Injection Time:**	10:59
Instrument ID:	GCMSA	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	342926	8.15	176359	10.52	266223	11.49	233040	14.88	134098	17.50
Upper Limit [a]	685852	8.65	352718	11.02	532446	11.99	466080	15.38	268196	18.00
Lower Limit [b]	171463	7.65	88180	10.02	133112	10.99	116520	14.38	67049	17.00

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
VA9819-BS	355414	8.14	188000	10.52	286438	11.49	250022	14.88	133723	17.50
VA9819-MB	335148	8.14	184954	10.53	277660	11.49	240089	14.88	150764	17.50
ZZZZZZ	351876	8.14	178154	10.53	267733	11.49	234510	14.88	133574	17.51
ZZZZZZ	364994	8.14	181538	10.52	272774	11.49	238224	14.88	153392	17.50
ZZZZZZ	373594	8.15	192313	10.53	293090	11.49	248269	14.88	141418	17.50
JC94790-3	350373	8.14	185302	10.53	282669	11.49	251214	14.89	142904	17.51
ZZZZZZ	345370	8.14	194082	10.52	306367	11.49	267791	14.88	143080	17.50
JC94790-3MS	369386	8.15	196071	10.53	302668	11.49	264289	14.88	141964	17.50
JC94790-3MSD	378979	8.14	205772	10.53	321090	11.49	290325	14.88	150369	17.50
JC94613-1A	382922	8.13	196358	10.52	296482	11.49	269253	14.88	161321	17.50
JC94613-2A	369012	8.14	194076	10.53	285783	11.49	257234	14.89	204729	17.51
ZZZZZZ	368157	8.15	211990	10.53	321650	11.49	283329	14.89	164893	17.50
ZZZZZZ	328567	8.15	202235	10.52	306620	11.49	284512	14.88	162718	17.50
ZZZZZZ	294232	8.14	210036	10.53	323591	11.49	292444	14.89	174145	17.51
ZZZZZZ	316242	8.14	205327	10.53	311704	11.49	284964	14.88	159541	17.51
VA9819-ECC9755	371849	8.14	211385	10.52	317085	11.49	268870	14.88	143501	17.50

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(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.

Surrogate Recovery Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JC94613-1A	2V61624.D	103	103	98	99
JC94613-1A	A253375.D	96	102	87 [a]	87
JC94613-2A	2V61625.D	103	98	100	98
JC94613-2A	A253376.D	94	103	89	90
JC94740-7MS	2V61621.D	102	96	101	98
JC94740-9DUP	2V61623.D	101	95	101	99
JC94790-3MS	A253372.D	95	104	94	91
JC94790-3MSD	A253373.D	97	101	89	90
V2V2532-BS	2V61608.D	100	99	99	99
V2V2532-BSD	2V61609.D	98	97	101	100
V2V2532-MB	2V61611.D	100	101	101	100
VA9819-BS	A253363.D	94	106	98	91
VA9819-MB	A253365.D	95	104	94	86

Surrogate Compounds		Recovery Limits
S1 =	Dibromofluoromethane	80-120%
S2 =	1,2-Dichloroethane-D4	81-124%
S3 =	Toluene-D8	80-120%
S4 =	4-Bromofluorobenzene	80-120%

(a) Outside of DOD criteria, but within in house control limit. No full vial available for reanalysis.

Initial Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-ICC2531
Lab FileID: 2V61598.D


```
                        Response Factor Report  MS2V

Method       : C:\msdchem\1\METHODS\M2V2531.M (RTE Integrator)
Title        : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update  : Fri Sep 20 12:27:31 2019
Response via : Initial Calibration

Calibration Files
4   =2V61595.D   0.5 =2V61592.D   8   =2V61596.D   50  =2V61598.D
100 =2V61599.D   1   =2V61593.D   200 =2V61600.D   20  =2V61597.D
2   =2V61594.D   0.2 =2V61591.D       =                =

Compound
        4     0.5   8     50    100   1     200   20    2     0.2    Avg   %RSD
-------------------------------------------------------------------------------

1) I   tert butyl alcohol-d9 ----------------ISTD---------------------
2)  ethanol
     0.141       0.141 0.147 0.151 0.156 0.132 0.149 0.149        0.146    5.06
3)  tertiary butyl alcohol
     1.726       1.770 2.095 2.160 1.956 1.897 1.987 1.887        1.935    7.67
4)  1,4-dioxane
     0.190       0.169 0.183 0.190 0.209 0.183 0.183 0.192        0.187    6.10

5) I   pentafluorobenzene    ----------------ISTD---------------------
6)  chlorodifluoromethane
     0.468 0.535 0.486 0.521 0.486 0.508 0.457 0.452 0.492        0.489    5.76
7)  dichlorodifluoromethane
     0.638 0.530 0.652 0.726 0.655 0.584 0.642 0.639 0.657        0.636    8.44
8)  chloromethane
     0.583       0.583 0.598 0.557 0.676 0.543 0.569 0.631        0.593    7.24
9)  vinyl chloride
     0.659 0.683 0.655 0.700 0.649 0.732 0.628 0.638 0.702 0.643  0.669    5.03
10)  bromomethane
     0.407       0.400 0.451 0.489 0.480 0.531 0.395 0.432        0.448   10.86
11)  chloroethane
     0.312 0.369 0.314 0.350 0.348 0.351 0.396 0.308 0.343        0.343    8.37
12)  trichlorofluoromethane
     0.787 0.700 0.777 0.819 0.775 0.727 0.778 0.735 0.784        0.765    4.78
13)  vinyl bromide
     0.326 0.374 0.330 0.369 0.356 0.345 0.358 0.337 0.332        0.348    5.05
14)  1,3-butadiene
     0.408 0.409 0.396 0.437 0.388 0.399 0.354 0.381 0.395        0.396    5.63
15)  ethyl ether
     0.219 0.212 0.215 0.241 0.233 0.214 0.228 0.217 0.187        0.219    7.03
16)  2-chloropropane
     0.511 0.554 0.521 0.570 0.534 0.528 0.519 0.494 0.524        0.529    4.30
17)  acrolein
     0.062       0.078 0.077 0.077       0.070 0.075              0.073    8.60
18)  freon 113
     0.362       0.344 0.379 0.355 0.254 0.342 0.338 0.290        0.333   12.22
19)  1,1-dichloroethene
     0.553 0.531 0.560 0.600 0.582 0.570 0.581 0.546 0.577        0.567    3.73
20)  acetone
     0.050       0.047 0.049 0.044 0.041 0.044 0.045 0.050        0.046    6.90
21)  acetonitrile
     0.049       0.049 0.053 0.049       0.047 0.050              0.049    4.18
22)  iodomethane
     *This compound does not meet initial calibration criteria*
     0.222       0.233 0.471 0.518       0.472 0.286 0.214        0.345   39.31
```

Initial Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-ICC2531
Lab FileID: 2V61598.D

```
23)  carbon disulfide
      1.008 1.070 1.008 1.060 1.024 1.136 0.988 0.956 1.046        1.033    5.09
24)  methylene chloride
      0.422 0.445 0.450 0.450 0.431 0.458 0.421 0.417 0.454        0.439    3.65
25)  methyl acetate
      0.352       0.346 0.368 0.348       0.342 0.355 0.334        0.349    3.05
26)  methyl tert butyl ether
      1.160 1.155 1.166 1.279 1.244 1.248 1.242 1.168 1.115 1.092  1.187    5.28
27)  trans-1,2-dichloroethene
      0.414 0.488 0.414 0.434 0.422 0.469 0.421 0.393 0.406 0.508  0.437    8.73
28)  hexane
      0.213       0.212 0.249 0.229       0.223 0.211 0.211        0.221    6.42
29)  di-isopropyl ether
      1.042 0.887 1.066 1.145 1.124 1.065 1.141 1.065 1.076 1.098  1.071    6.87
30)  ethyl tert-butyl ether
      1.047 1.070 1.061 1.175 1.151 1.020 1.164 1.074 1.033 0.970  1.077    6.23
31)  1,1-dichloroethane
      0.663 0.655 0.707 0.724 0.706 0.763 0.717 0.676 0.692 0.758  0.706    5.18
32)  chloroprene
      0.513 0.536 0.503 0.565 0.551 0.486 0.550 0.489 0.489 0.414  0.510    8.68
33)  acrylonitrile
      0.163 0.146 0.166 0.175 0.174 0.168 0.169 0.171 0.173        0.167    5.39
34)  vinyl acetate
                  0.076 0.073 0.087       0.088 0.069              0.079   10.86
35)  ethyl acetate
      0.066       0.062 0.075 0.073       0.075 0.066              0.070    8.09
36)  2-butanone
      0.054       0.057 0.065 0.061 0.048 0.061 0.058 0.052        0.057    9.62
37)  2,2-dichloropropane
      0.560 0.537 0.560 0.630 0.623 0.645 0.643 0.558 0.603 0.466  0.582    9.78
38)  cis-1,2-dichloroethene
      0.441 0.486 0.474 0.502 0.506 0.540 0.504 0.463 0.469 0.423  0.481    7.15
39)  propionitrile
      0.066 0.060 0.068 0.072 0.069 0.062 0.069 0.067 0.066 0.065  0.066    5.10
40)  methyl acrylate
      0.072       0.085 0.087 0.085       0.087 0.078 0.070        0.081    8.96
41)  bromochloromethane
      0.254 0.212 0.253 0.274 0.258 0.226 0.233 0.245 0.242        0.244    7.53
42)  tetrahydrofuran
      0.059       0.070 0.070 0.069       0.068 0.064 0.063        0.066    6.38
43)  chloroform
      0.795       0.767 0.818 0.802 0.851 0.801 0.751 0.851        0.805    4.44
44)  dibromofluoromethane (s)
      0.445 0.449 0.460 0.455 0.448 0.450 0.457 0.447 0.453 0.456  0.452    1.08
45)  methacrylonitrile
      0.192       0.193 0.205 0.198 0.178 0.197 0.194 0.203        0.195    4.22
46)  1,1,1-trichloroethane
      0.650 0.682 0.683 0.738 0.726 0.719 0.722 0.649 0.710 0.681  0.696    4.54
47)  cyclohexane
      0.498       0.537 0.570 0.542 0.422 0.556 0.497 0.574        0.525    9.63
48)  1,1-dichloropropene
      0.525 0.558 0.519 0.591 0.582 0.576 0.584 0.515 0.535 0.592  0.558    5.62
49)  carbon tetrachloride
      0.614 0.460 0.613 0.676 0.672 0.579 0.676 0.596 0.597        0.609   11.09
50)  isobutyl alcohol
      0.012       0.012 0.014 0.014       0.014 0.013              0.013    7.26
51)  tert-amyl alcohol
      0.022       0.025 0.025 0.024       0.023 0.024 0.024        0.024    4.11

52) I   1,4-difluorobenzene   ----------------ISTD---------------------
```

Initial Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-ICC2531
Lab FileID: 2V61598.D

```
53)  1,2-dichloroethane-d4 (s)
      0.285 0.282 0.294 0.286 0.283 0.278 0.289 0.282 0.276 0.277  0.283    1.96
54)  n-butyl alcohol
      0.011       0.012 0.013 0.012 0.010 0.012 0.012 0.010        0.011    8.72
55)  benzene
      1.105 1.046 1.099 1.165 1.153 1.167 1.136 1.086 1.183 1.182  1.132    4.06
56)  tert-amyl methyl ether
      0.824 0.756 0.834 0.894 0.889 0.838 0.895 0.830 0.772 0.738  0.827    6.88
57)  iso-octane
      0.558       0.573 0.649 0.609 0.474 0.603 0.567 0.503        0.567   10.00
58)  heptane
      0.132       0.121 0.144 0.135       0.132 0.127 0.107        0.128    9.14
59)  isopropyl acetate
      0.078       0.073 0.082 0.081       0.080 0.082              0.079    4.18
60)  1,2-dichloroethane
      0.400 0.451 0.418 0.428 0.423 0.439 0.419 0.400 0.410        0.421    4.03
61)  trichloroethene
      0.325 0.330 0.312 0.337 0.334 0.324 0.338 0.314 0.313 0.313  0.324    3.23
62)  ethyl acrylate
      0.371       0.392 0.431 0.431 0.371 0.418 0.405 0.396        0.402    5.96
63)  2-nitropropane
      0.080       0.070 0.088 0.097       0.099 0.078              0.085   13.32
64)  2-chloroethyl vinyl ether
      0.173       0.183 0.204 0.205       0.210 0.188 0.160        0.189    9.80
65)  methyl methacrylate
      0.089       0.086 0.107 0.105       0.105 0.097 0.084        0.096   10.50
66)  1,2-dichloropropane
      0.290 0.271 0.285 0.304 0.304 0.270 0.307 0.284 0.303        0.291    4.94
67)  methylcyclohexane
      0.395       0.382 0.454 0.434       0.435 0.380 0.310        0.398   12.17
68)  dibromomethane
      0.226 0.213 0.233 0.244 0.238 0.232 0.234 0.226 0.230        0.231    3.77
69)  bromodichloromethane
      0.444 0.433 0.442 0.471 0.465 0.445 0.458 0.427 0.453        0.449    3.24
70)  epichlorohydrin
      0.023       0.026 0.032 0.034       0.032 0.027              0.029   14.67
71)  cis-1,3-dichloropropene
      0.449 0.437 0.466 0.509 0.511 0.444 0.508 0.464 0.466 0.441  0.469    6.26
72)  4-methyl-2-pentanone
      0.124 0.128 0.135 0.142 0.140 0.126 0.142 0.133 0.125 0.104  0.130    8.93
73)  3-methyl-1-butanol
      0.010       0.011 0.013 0.012       0.012 0.012 0.009        0.011   10.99

74) I   chlorobenzene-d5      ----------------ISTD---------------------
75)  toluene-d8 (s)
      1.290 1.295 1.260 1.269 1.267 1.285 1.243 1.292 1.293 1.295  1.279    1.41
76)  toluene
      0.849 0.973 0.865 0.919 0.910 0.888 0.887 0.859 0.924 0.863  0.894    4.28
77)  ethyl methacrylate
      0.448 0.434 0.492 0.520 0.517 0.491 0.510 0.478 0.451        0.482    6.62
78)  trans-1,3-dichloropropene
      0.489 0.414 0.522 0.559 0.568 0.481 0.560 0.524 0.471 0.476  0.506    9.69
79)  1,1,2-trichloroethane
      0.295 0.287 0.298 0.313 0.308 0.327 0.299 0.307 0.297        0.303    3.95
80)  2-hexanone
      0.151 0.138 0.159 0.175 0.170 0.148 0.165 0.166 0.150        0.158    7.61
81)  tetrachloroethene
      0.431 0.403 0.368 0.511 0.405 0.414 0.459 0.407 0.395 0.378  0.417   10.04
82)  1,3-dichloropropane
      0.522 0.501 0.558 0.572 0.567 0.542 0.547 0.550 0.559        0.546    4.14
```

Initial Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-ICC2531
Lab FileID: 2V61598.D

```
 83)  butyl acetate
       0.229       0.240 0.263 0.261 0.228 0.249 0.249 0.219        0.242    6.56
 84)  dibromochloromethane
       0.454 0.412 0.463 0.505 0.503 0.474 0.483 0.465 0.458        0.469    6.00
 85)  1,2-dibromoethane
       0.423 0.397 0.453 0.472 0.464 0.458 0.448 0.446 0.435 0.383  0.438    6.62
 86)  n-butyl ether
       1.145 1.047 1.152 1.317 1.337 1.221 1.347 1.209 1.162 1.097  1.203    8.55
 87)  chlorobenzene
       0.984 0.958 1.019 1.079 1.083 1.111 1.061 1.009 1.033 1.152  1.049    5.68
 88)  1,1,1,2-tetrachloroethane
       0.399 0.401 0.418 0.432 0.441 0.369 0.440 0.417 0.385 0.432  0.413    5.84
 89)  ethylbenzene
       1.628 1.600 1.601 1.757 1.770 1.610 1.784 1.599 1.669 1.771  1.679    4.87
 90)  m,p-xylene
       0.619 0.612 0.627 0.690 0.694 0.620 0.693 0.637 0.628 0.649  0.647    5.11
 91)  o-xylene
       1.232 1.094 1.234 1.372 1.394 1.338 1.414 1.258 1.310 1.294  1.294    7.35
 92)  styrene
       1.015 0.923 0.986 1.161 1.163 0.942 1.169 1.049 0.992 1.069  1.047    8.77
 93)  butyl acrylate
       0.278       0.294 0.344 0.347 0.243 0.345 0.311 0.284        0.306   12.44
 94)  n-amyl acetate
       0.221       0.248 0.281 0.283 0.179 0.282 0.263 0.229        0.248   14.86
 95)  bromoform
       0.325 0.343 0.349 0.375 0.372 0.363 0.364 0.349 0.329        0.352    5.04
 96)  isopropylbenzene
       1.462 1.464 1.509 1.688 1.701 1.536 1.681 1.493 1.526 1.426  1.549    6.65
 97)  cis-1,4-dichloro-2-butene
       0.156       0.173 0.204 0.209       0.212 0.247              0.200   16.01

 98) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 99)  4-bromofluorobenzene (s)
       0.886 0.897 0.884 0.882 0.888 0.907 0.901 0.913 0.905 0.915  0.898    1.38
100)  bromobenzene
       0.974 0.979 0.956 1.054 1.051 1.058 1.050 1.015 0.955 1.030  1.012    4.17
101)  1,1,2,2-tetrachloroethane
       1.082 1.013 1.065 1.114 1.113 1.099 1.102 1.118 1.163 1.210  1.108    4.80
102)  trans-1,4-dichloro-2-butene
       0.211       0.243 0.275 0.287       0.298 0.275 0.232        0.260   12.32
103)  1,2,3-trichloropropane
       0.297       0.332 0.344 0.337 0.304 0.327 0.345 0.318        0.326    5.47
104)  n-propylbenzene
       3.603 3.455 3.574 3.974 4.005 3.591 3.995 3.771 3.833 3.414  3.722    6.02
105)  2-chlorotoluene
       0.834 0.776 0.848 0.897 0.913 0.912 0.900 0.857 0.832 0.825  0.859    5.25
106)  4-chlorotoluene
       0.797 0.886 0.835 0.893 0.911 0.924 0.900 0.874 0.866 0.765  0.865    5.94
107)  1,3,5-trimethylbenzene
       2.524 2.378 2.493 2.822 2.879 2.588 2.874 2.672 2.510 2.619  2.636    6.57
108)  tert-butylbenzene
       0.609       0.566 0.628 0.663 0.485 0.643 0.615 0.632        0.605    9.28
109)  1,2,4-trimethylbenzene
       2.457 2.240 2.523 2.830 2.865 2.527 2.885 2.694 2.544 2.950  2.651    8.64
110)  sec-butylbenzene
       2.872 2.994 2.913 3.362 3.409 3.040 3.417 3.107 2.908 3.050  3.107    6.83
111)  1,3-dichlorobenzene
       1.583 1.431 1.561 1.764 1.790 1.739 1.792 1.695 1.680 1.618  1.665    7.01
112)  p-isopropyltoluene
       2.393 2.183 2.517 2.898 2.946 2.439 2.954 2.723 2.400        2.606   10.84
```

Initial Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-ICC2531
Lab FileID: 2V61598.D

```
113)  1,4-dichlorobenzene
       1.690 1.745 1.652 1.786 1.814 1.765 1.816 1.711 1.759 2.055  1.779    6.19
114)  1,2-dichlorobenzene
       1.533 1.376 1.526 1.698 1.720 1.534 1.735 1.651 1.636 1.314  1.572    9.11
115)  benzyl chloride
      *This compound does not meet initial calibration criteria*
       1.485 1.504 1.503 1.821 1.913 1.531 1.955 1.886 1.526        1.680   12.24
116)  n-butylbenzene
       1.053 0.999 1.063 1.305 1.353 1.166 1.391 1.167 1.062        1.173   12.30
117)  hexachloroethane
       0.468       0.447 0.516 0.539 0.414 0.554 0.492 0.512        0.493    9.65
118)  1,2-dibromo-3-chloropropane
       0.243       0.261 0.283 0.284 0.203 0.288 0.264 0.273        0.262   10.70
119)  nitrobenzene
                                                                    0.000   -1.00
120)  1,3,5-trichlorobenzene
       0.984 0.835 0.993 1.131 1.147 1.030 1.127 1.060 1.061 0.591  0.996   17.00
121)  1,2,4-trichlorobenzene
       0.804 0.656 0.807 0.958 0.980 0.829 0.970 0.879 0.897 0.800  0.858   11.65
122)  hexachlorobutadiene
       0.325       0.352 0.396 0.406 0.362 0.394 0.361 0.358        0.369    7.42
123)  naphthalene
       2.016       2.139 2.603 2.668 1.967 2.672 2.442 2.094        2.325   13.02
124)  1,2,3-trichlorobenzene
       0.693       0.720 0.813 0.825 0.667 0.803 0.767 0.726        0.752    7.82
125)  2-ethylhexyl acrylate
                   0.251 0.366 0.415       0.456 0.321              0.362   22.13
             ----- Linear regression -----  Coefficient =  0.9961
               Response Ratio = -0.00833 + 0.44924 *A

126)  2-methylnaphthalene
       0.397       0.399 0.565 0.585       0.560 0.468              0.496   17.31
127)  bis(chloromethyl)ether
                                                                    0.000   -1.00
128)  ethylenimine
                                                                    0.000   -1.00
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2V2531.M         Mon Sep 23 15:40:01 2019   RPT1
```

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-ICV2531
Lab FileID: 2V61603.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\V2V2531\2V61603.D Vial: 17
Acq On : 18 Sep 2019 10:58 pm Operator: jessicap
Sample : icv2531-50 Inst : MS2V
Misc : MS37628,V2V2531,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2V2531.M (RTE Integrator)
Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update : Fri Sep 20 12:27:31 2019
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	TrueValue	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	500.00	1.000	1.000	0.0	96	0.00	2.94
2		ethanol	5000.00	0.146	0.158	-8.2	103	0.00	2.38
3	M	tertiary butyl alcohol	250.00	1.935	2.174	-12.4	100	0.00	2.99
4		1,4-dioxane	1250.00	0.187	0.194	-3.7	102	0.00	5.13
5	I	pentafluorobenzene	50.00	1.000	1.000	0.0	102	0.00	4.14
6		chlorodifluoromethane	50.00	0.489	0.433	11.5	85	0.00	1.58
7		dichlorodifluoromethane	50.00	0.636	0.531	16.5	75	0.00	1.57
8		chloromethane	50.00	0.593	0.500	15.7	86	0.00	1.71
9		vinyl chloride	50.00	0.669	0.596	10.9	87	0.00	1.80
10		bromomethane	50.00	0.448	0.545	-21.7	124	0.00	2.04
11		chloroethane	50.00	0.343	0.271	21.0	79	0.00	2.12
12		trichlorofluoromethane	50.00	0.765	0.708	7.5	88	0.00	2.30
13		vinyl bromide	50.00	0.348	0.395	-13.5	110	0.00	2.25
14		1,3-butadiene	50.00	0.396	0.416	-5.1	97	0.00	1.83
15		ethyl ether	50.00	0.219	0.229	-4.6	97	0.00	2.48
16		2-chloropropane	50.00	0.529	0.546	-3.2	98	0.00	2.56
17		acrolein	50.00	0.073	0.066	9.6	87	0.00	2.57
18		freon 113	50.00	0.333	0.353	-6.0	96	0.00	2.64
19		1,1-dichloroethene	50.00	0.567	0.536	5.5	91	0.00	2.65
20		acetone	200.00	0.046	0.045	2.2	93	0.00	2.65
21		acetonitrile	500.00	0.049	0.052	-6.1	100	0.00	2.84
22		iodomethane	50.00	0.345	0.395	-14.5	86	0.00	2.76
23		carbon disulfide	50.00	1.033	1.047	-1.4	101	0.00	2.82
24		methylene chloride	50.00	0.439	0.429	2.3	98	0.00	2.97
25		methyl acetate	50.00	0.349	0.315	9.7	88	0.00	2.86
26		methyl tert butyl ether	50.00	1.187	1.201	-1.2	96	0.00	3.13
27		trans-1,2-dichloroethene	50.00	0.437	0.419	4.1	99	0.00	3.15
28		hexane	50.00	0.221	0.216	2.3	89	0.00	3.32
29		di-isopropyl ether	50.00	1.071	1.091	-1.9	98	0.00	3.43
30		ethyl tert-butyl ether	50.00	1.077	1.116	-3.6	97	0.00	3.68
31	M	1,1-dichloroethane	50.00	0.706	0.715	-1.3	101	0.00	3.43
32		chloroprene	50.00	0.510	0.549	-7.6	100	0.00	3.49
33		acrylonitrile		----------NA----------					
34		vinyl acetate	50.00	0.079	0.066	16.5	92	0.00	3.41
35		ethyl acetate	50.00	0.070	0.072	-2.9	98	0.00	3.80
36		2-butanone	200.00	0.057	0.063	-10.5	99	0.00	3.79
37		2,2-dichloropropane	50.00	0.582	0.585	-0.5	95	0.00	3.83
38		cis-1,2-dichloroethene	50.00	0.481	0.480	0.2	98	0.00	3.82
39		propionitrile	500.00	0.066	0.073	-10.6	104	0.00	3.83
40		methyl acrylate	50.00	0.081	0.085	-4.9	99	0.00	3.85
41		bromochloromethane	50.00	0.244	0.268	-9.8	100	0.00	3.98

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-ICV2531
Lab FileID: 2V61603.D

42		tetrahydrofuran	50.00	0.066	0.066	0.0	96	0.00	4.00
43		chloroform	50.00	0.805	0.808	-0.4	101	0.00	4.04
44	S	dibromofluoromethane (s)	50.00	0.452	0.449	0.7	101	0.00	4.15
45		methacrylonitrile	50.00	0.195	0.199	-2.1	99	0.00	3.94
46		1,1,1-trichloroethane	50.00	0.696	0.698	-0.3	97	0.00	4.18
47		cyclohexane	50.00	0.525	0.545	-3.8	98	0.00	4.24
48		1,1-dichloropropene	50.00	0.558	0.567	-1.6	98	0.00	4.28
49		carbon tetrachloride	50.00	0.609	0.665	-9.2	101	0.00	4.29
50		isobutyl alcohol	500.00	0.013	0.014	-7.7	103	0.00	4.29
51		tert-amyl alcohol	250.00	0.024	0.026	-8.3	106	0.00	4.38
52	I	1,4-difluorobenzene	50.00	1.000	1.000	0.0	102	0.00	4.70
53	S	1,2-dichloroethane-d4 (s)	50.00	0.283	0.279	1.4	100	0.00	4.40
54		n-butyl alcohol	2500.00	0.011	0.012	-9.1	99	0.00	4.76
55	M	benzene	50.00	1.132	1.140	-0.7	100	0.00	4.43
56		tert-amyl methyl ether	50.00	0.827	0.862	-4.2	99	0.00	4.49
57		iso-octane	50.00	0.567	0.638	-12.5	101	0.00	4.49
58		heptane	50.00	0.128	0.162	-26.6	115	0.00	4.60
59		isopropyl acetate	50.00	0.079	0.079	0.0	100	0.00	4.40
60		1,2-dichloroethane	50.00	0.421	0.411	2.4	98	0.00	4.45
61		trichloroethene	50.00	0.324	0.339	-4.6	103	0.00	4.90
62		ethyl acrylate	50.00	0.402	0.423	-5.2	101	0.00	4.92
63		2-nitropropane	50.00	0.085	0.086	-1.2	100	0.00	5.44
64		2-chloroethyl vinyl ether	250.00	0.189	0.245	-29.6	123	0.00	5.47
65		methyl methacrylate	50.00	0.096	0.100	-4.2	95	0.00	5.10
66		1,2-dichloropropane	50.00	0.291	0.298	-2.4	100	0.00	5.09
67		methylcyclohexane	50.00	0.398	0.439	-10.3	99	0.00	5.09
68		dibromomethane	50.00	0.231	0.236	-2.2	99	0.00	5.16
69		bromodichloromethane	50.00	0.449	0.447	0.4	97	0.00	5.28
70		epichlorohydrin	250.00	0.029	0.033	-13.8	107	0.00	5.53
71		cis-1,3-dichloropropene	50.00	0.469	0.501	-6.8	101	0.00	5.62
72		4-methyl-2-pentanone	200.00	0.130	0.139	-6.9	100	0.00	5.72
73		3-methyl-1-butanol	1000.00	0.011	0.012	-9.1	99	0.00	5.74
74	I	chlorobenzene-d5	50.00	1.000	1.000	0.0	102	0.00	7.09
75	S	toluene-d8 (s)	50.00	1.279	1.271	0.6	102	0.00	5.85
76		toluene	50.00	0.894	0.900	-0.7	100	0.00	5.90
77		ethyl methacrylate	50.00	0.482	0.501	-3.9	98	0.00	6.10
78		trans-1,3-dichloropropene	50.00	0.506	0.563	-11.3	103	0.00	6.07
79		1,1,2-trichloroethane	50.00	0.303	0.310	-2.3	101	0.00	6.24
80		2-hexanone	200.00	0.158	0.165	-4.4	96	0.00	6.41
81		tetrachloroethene		----------NA----------					
82		1,3-dichloropropane	50.00	0.546	0.560	-2.6	100	0.00	6.39
83		butyl acetate	50.00	0.242	0.262	-8.3	102	0.00	6.50
84		dibromochloromethane	50.00	0.469	0.511	-9.0	104	0.00	6.58
85		1,2-dibromoethane	50.00	0.438	0.466	-6.4	101	0.00	6.69
86		n-butyl ether	50.00	1.203	1.342	-11.6	104	0.00	7.18
87		chlorobenzene	50.00	1.049	1.095	-4.4	104	0.00	7.12
88		1,1,1,2-tetrachloroethane	50.00	0.413	0.430	-4.1	102	0.00	7.19
89		ethylbenzene	50.00	1.679	1.731	-3.1	101	0.00	7.20
90		m,p-xylene	100.00	0.647	0.681	-5.3	101	0.00	7.31
91		o-xylene	50.00	1.294	1.348	-4.2	100	0.00	7.67
92		styrene	50.00	1.047	1.136	-8.5	100	0.00	7.69
93		butyl acrylate	50.00	0.306	0.334	-9.2	99	0.00	7.60
94		n-amyl acetate	50.00	0.248	0.266	-7.3	97	0.00	7.80
95		bromoform	50.00	0.352	0.395	-12.2	108	0.00	7.86
96		isopropylbenzene	50.00	1.549	1.654	-6.8	100	0.00	8.01
97		cis-1,4-dichloro-2-butene	50.00	0.200	0.193	3.5	97	0.00	8.06
98	I	1,4-dichlorobenzene-d4	50.00	1.000	1.000	0.0	99	0.00	9.30

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-ICV2531
Lab FileID: 2V61603.D

99	S	4-bromofluorobenzene (s)	50.00	0.898	0.893	0.6	101	0.00	8.18
100		bromobenzene	50.00	1.012	1.060	-4.7	100	0.00	8.32
101		1,1,2,2-tetrachloroethane	50.00	1.108	1.107	0.1	99	0.00	8.29
102		trans-1,4-dichloro-2-bute	50.00	0.260	0.281	-8.1	101	0.00	8.33
103		1,2,3-trichloropropane	50.00	0.326	0.336	-3.1	97	0.00	8.35
104		n-propylbenzene	50.00	3.722	4.060	-9.1	102	0.00	8.40
105		2-chlorotoluene	50.00	0.859	0.897	-4.4	99	0.00	8.50
106		4-chlorotoluene	50.00	0.865	0.929	-7.4	103	0.00	8.61
107		1,3,5-trimethylbenzene	50.00	2.636	2.833	-7.5	100	0.00	8.58
108		tert-butylbenzene	50.00	0.605	0.634	-4.8	100	0.00	8.88
109		1,2,4-trimethylbenzene	50.00	2.651	2.911	-9.8	102	0.00	8.94
110		sec-butylbenzene	50.00	3.107	3.373	-8.6	100	0.00	9.10
111		1,3-dichlorobenzene	50.00	1.665	1.813	-8.9	102	0.00	9.22
112		p-isopropyltoluene	50.00	2.606	2.956	-13.4	101	0.00	9.25
113		1,4-dichlorobenzene	50.00	1.779	1.835	-3.1	102	0.00	9.32
114		1,2-dichlorobenzene	50.00	1.572	1.728	-9.9	101	0.00	9.67
115		benzyl chloride	50.00	1.680	2.277	-35.5#	124	0.00	9.43
116		n-butylbenzene	50.00	1.173	1.298	-10.7	99	0.00	9.65
117		hexachloroethane	50.00	0.493	0.524	-6.3	101	0.00	9.95
118		1,2-dibromo-3-chloropropa	50.00	0.262	0.274	-4.6	96	0.00	10.44
119		nitrobenzene	50.00	0.000	0.064	0.0	0#	0.00	10.63
120		1,3,5-trichlorobenzene	50.00	0.996	1.170	-17.5	103	0.00	10.63
121		1,2,4-trichlorobenzene	50.00	0.858	0.946	-10.3	98	0.00	11.24
122		hexachlorobutadiene	50.00	0.369	0.385	-4.3	97	0.00	11.37
123		naphthalene	50.00	2.325	2.572	-10.6	98	0.00	11.48
124		1,2,3-trichlorobenzene	50.00	0.752	0.790	-5.1	97	0.00	11.69

		----------TrueValue	CC-RF	Calc.	% Drift	----------		R.T.
125	2-ethylhexyl acrylate	10.00	0.084	10.240	-2.4	114	0.00	11.41

		----------TrueValue	AvgRF	CCRF	% Dev	----------		R.T.
126	2-methylnaphthalene	25.00	0.496	0.508	-2.4	89	0.00	12.54
127	bis(chloromethyl)ether		----------NA----------					
128	ethylenimine		----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V61598.D M2V2531.M Mon Sep 23 15:39:52 2019 RPT1

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-ICV2531
Lab FileID: 2V61604.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\V2V2531\2V61604.D          Vial: 18
Acq On    : 18 Sep 2019  11:24 pm                    Operator: jessicap
Sample    : icv2531-50                               Inst    : MS2V
Misc      : MS37628,V2V2531,5,,,,1                   Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\M2V2531.M (RTE Integrator)
Title        : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update  : Thu Sep 19 11:02:25 2019
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	TrueValue	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	500.00	1.000	1.000	0.0	91	0.00	2.94
2		ethanol		----------NA----------					
3	M	tertiary butyl alcohol		----------NA----------					
4		1,4-dioxane		----------NA----------					
5	I	pentafluorobenzene	50.00	1.000	1.000	0.0	99	0.00	4.14
6		chlorodifluoromethane		----------NA----------					
7		dichlorodifluoromethane		----------NA----------					
8		chloromethane		----------NA----------					
9		vinyl chloride		----------NA----------					
10		bromomethane		----------NA----------					
11		chloroethane		----------NA----------					
12		trichlorofluoromethane		----------NA----------					
13		vinyl bromide		----------NA----------					
14		1,3-butadiene		----------NA----------					
15		ethyl ether		----------NA----------					
16		2-chloropropane		----------NA----------					
17		acrolein		----------NA----------					
18		freon 113		----------NA----------					
19		1,1-dichloroethene		----------NA----------					
20		acetone		----------NA----------					
21		acetonitrile		----------NA----------					
22		iodomethane		----------NA----------					
23		carbon disulfide		----------NA----------					
24		methylene chloride		----------NA----------					
25		methyl acetate		----------NA----------					
26		methyl tert butyl ether		----------NA----------					
27		trans-1,2-dichloroethene		----------NA----------					
28		hexane		----------NA----------					
29		di-isopropyl ether		----------NA----------					
30		ethyl tert-butyl ether		----------NA----------					
31	M	1,1-dichloroethane		----------NA----------					
32		chloroprene		----------NA----------					
33		acrylonitrile	50.00	0.167	0.179	-7.2	101	0.00	3.11
34		vinyl acetate		----------NA----------					
35		ethyl acetate		----------NA----------					
36		2-butanone		----------NA----------					
37		2,2-dichloropropane		----------NA----------					
38		cis-1,2-dichloroethene		----------NA----------					
39		propionitrile		----------NA----------					
40		methyl acrylate		----------NA----------					
41		bromochloromethane		----------NA----------					

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-ICV2531
Lab FileID: 2V61604.D

42		tetrahydrofuran		----------NA----------					
43		chloroform		----------NA----------					
44	S	dibromofluoromethane (s)	50.00	0.452	0.448	0.9	98	0.00	4.15
45		methacrylonitrile		----------NA----------					
46		1,1,1-trichloroethane		----------NA----------					
47		cyclohexane		----------NA----------					
48		1,1-dichloropropene		----------NA----------					
49		carbon tetrachloride		----------NA----------					
50		isobutyl alcohol		----------NA----------					
51		tert-amyl alcohol		----------NA----------					
52	I	1,4-difluorobenzene	50.00	1.000	1.000	0.0	98	0.00	4.70
53	S	1,2-dichloroethane-d4 (s)	50.00	0.283	0.279	1.4	96	0.00	4.39
54		n-butyl alcohol		----------NA----------					
55	M	benzene		----------NA----------					
56		tert-amyl methyl ether		----------NA----------					
57		iso-octane		----------NA----------					
58		heptane		----------NA----------					
59		isopropyl acetate		----------NA----------					
60		1,2-dichloroethane		----------NA----------					
61		trichloroethene		----------NA----------					
62		ethyl acrylate		----------NA----------					
63		2-nitropropane		----------NA----------					
64		2-chloroethyl vinyl ether		----------NA----------					
65		methyl methacrylate		----------NA----------					
66		1,2-dichloropropane		----------NA----------					
67		methylcyclohexane		----------NA----------					
68		dibromomethane		----------NA----------					
69		bromodichloromethane		----------NA----------					
70		epichlorohydrin		----------NA----------					
71		cis-1,3-dichloropropene		----------NA----------					
72		4-methyl-2-pentanone		----------NA----------					
73		3-methyl-1-butanol		----------NA----------					
74	I	chlorobenzene-d5	50.00	1.000	1.000	0.0	95	0.00	7.09
75	S	toluene-d8 (s)	50.00	1.279	1.272	0.5	96	0.00	5.85
76		toluene		----------NA----------					
77		ethyl methacrylate		----------NA----------					
78		trans-1,3-dichloropropene		----------NA----------					
79		1,1,2-trichloroethane		----------NA----------					
80		2-hexanone		----------NA----------					
81		tetrachloroethene	50.00	0.417	0.444	-6.5	83	0.00	6.34
82		1,3-dichloropropane		----------NA----------					
83		butyl acetate		----------NA----------					
84		dibromochloromethane		----------NA----------					
85		1,2-dibromoethane		----------NA----------					
86		n-butyl ether		----------NA----------					
87		chlorobenzene		----------NA----------					
88		1,1,1,2-tetrachloroethane		----------NA----------					
89		ethylbenzene		----------NA----------					
90		m,p-xylene		----------NA----------					
91		o-xylene		----------NA----------					
92		styrene		----------NA----------					
93		butyl acrylate		----------NA----------					
94		n-amyl acetate		----------NA----------					
95		bromoform		----------NA----------					
96		isopropylbenzene		----------NA----------					
97		cis-1,4-dichloro-2-butene		----------NA----------					
98	I	1,4-dichlorobenzene-d4	50.00	1.000	1.000	0.0	90	0.00	9.30

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2531-ICV2531
Lab FileID: 2V61604.D

```
 99 S   4-bromofluorobenzene (s)    50.00   0.898   0.901     -0.3   92   0.00    8.18
100     bromobenzene                        ----------NA----------
101     1,1,2,2-tetrachloroethane           ----------NA----------
102     trans-1,4-dichloro-2-bute           ----------NA----------
103     1,2,3-trichloropropane              ----------NA----------
104     n-propylbenzene                     ----------NA----------
105     2-chlorotoluene                     ----------NA----------
106     4-chlorotoluene                     ----------NA----------
107     1,3,5-trimethylbenzene              ----------NA----------
108     tert-butylbenzene                   ----------NA----------
109     1,2,4-trimethylbenzene              ----------NA----------
110     sec-butylbenzene                    ----------NA----------
111     1,3-dichlorobenzene                 ----------NA----------
112     p-isopropyltoluene                  ----------NA----------
113     1,4-dichlorobenzene                 ----------NA----------
114     1,2-dichlorobenzene                 ----------NA----------
115     benzyl chloride                     ----------NA----------
116     n-butylbenzene                      ----------NA----------
117     hexachloroethane                    ----------NA----------
118     1,2-dibromo-3-chloropropa           ----------NA----------
119     nitrobenzene                        ----------NA----------
120     1,3,5-trichlorobenzene              ----------NA----------
121     1,2,4-trichlorobenzene              ----------NA----------
122     hexachlorobutadiene                 ----------NA----------
123     naphthalene                         ----------NA----------
124     1,2,3-trichlorobenzene              ----------NA----------
125     2-ethylhexyl acrylate               ----------NA----------
126     2-methylnaphthalene                 ----------NA----------
127     bis(chloromethyl)ether              ----------NA----------
128     ethylenimine                        ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     2V61598.D  M2V2531.M        Thu Sep 19 13:26:07 2019   RPT1
```

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2532-CC2531
Lab FileID: 2V61607.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\kr...019\v2v2532\2v61607.d Vial: 2
Acq On    : 19 Sep 2019   9:00 am                    Operator: jessicap
Sample    : cc2531-20                                Inst    : MS2V
Misc      : MS37628,V2V2532,5,,,,1                   Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\M2V2531.M (RTE Integrator)
Title        : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update  : Thu Sep 19 11:02:25 2019
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 : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	99	0.00	2.94
2		ethanol	0.146	0.153	-4.8	102	0.00	2.38
3	M	tertiary butyl alcohol	1.935	2.067	-6.8	103	0.00	2.99
4		1,4-dioxane	0.187	0.191	-2.1	103	0.00	5.13
5	I	pentafluorobenzene	1.000	1.000	0.0	101	0.00	4.14
6		chlorodifluoromethane	0.489	0.449	8.2	101	0.00	1.58
7		dichlorodifluoromethane	0.636	0.654	-2.8	104	0.00	1.57
8		chloromethane	0.593	0.575	3.0	102	0.00	1.71
9		vinyl chloride	0.669	0.635	5.1	101	0.00	1.80
10		bromomethane	0.448	0.481	-7.4	123	0.00	2.04
11		chloroethane	0.343	0.327	4.7	108	0.00	2.12
12		trichlorofluoromethane	0.765	0.858	-12.2	119	0.00	2.30
13		vinyl bromide	0.348	0.394	-13.2	119	0.00	2.25
14		1,3-butadiene	0.396	0.344	13.1	92	0.00	1.83
15		ethyl ether	0.219	0.224	-2.3	105	0.00	2.47
16		2-chloropropane	0.529	0.531	-0.4	109	0.00	2.56
17		acrolein	0.073	0.083	-13.7	111	0.00	2.56
18		freon 113	0.333	0.364	-9.3	109	0.00	2.64
19		1,1-dichloroethene	0.567	0.587	-3.5	109	0.00	2.65
20		acetone	0.046	0.045	2.2	103	0.00	2.65
21		acetonitrile	0.049	0.049	0.0	100	0.00	2.84
22		iodomethane	0.345	0.247	28.4#	88	0.00	2.76
23		carbon disulfide	1.033	1.018	1.5	108	0.00	2.82
24		methylene chloride	0.439	0.438	0.2	107	0.00	2.97
25		methyl acetate	0.349	0.331	5.2	95	0.00	2.86
26		methyl tert butyl ether	1.187	1.199	-1.0	104	0.00	3.13
27		trans-1,2-dichloroethene	0.437	0.436	0.2	112	0.00	3.15
28		hexane	0.221	0.249	-12.7	120	0.00	3.32
29		di-isopropyl ether	1.071	1.118	-4.4	107	0.00	3.43
30		ethyl tert-butyl ether	1.077	1.149	-6.7	109	0.00	3.68
31	M	1,1-dichloroethane	0.706	0.720	-2.0	108	0.00	3.43
32		chloroprene	0.510	0.554	-8.6	115	0.00	3.49
33		acrylonitrile	0.167	0.171	-2.4	101	0.00	3.10
34		vinyl acetate	0.079	0.073	7.6	107	0.00	3.41
35		ethyl acetate	0.070	0.070	0.0	108	0.00	3.81
36		2-butanone	0.057	0.059	-3.5	103	0.00	3.79
37		2,2-dichloropropane	0.582	0.639	-9.8	116	0.00	3.83
38		cis-1,2-dichloroethene	0.481	0.500	-4.0	110	0.00	3.82
39		propionitrile	0.066	0.068	-3.0	103	0.00	3.83
40		methyl acrylate	0.081	0.080	1.2	103	0.00	3.84
41		bromochloromethane	0.244	0.261	-7.0	108	0.00	3.98

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2532-CC2531
Lab FileID: 2V61607.D

42		tetrahydrofuran	0.071	0.064	9.9	101	0.00	3.99
43		chloroform	0.805	0.823	-2.2	111	0.00	4.04
44	S	dibromofluoromethane (s)	0.452	0.448	0.9	102	0.00	4.15
45		methacrylonitrile	0.195	0.192	1.5	100	0.00	3.94
46		1,1,1-trichloroethane	0.696	0.743	-6.8	116	0.00	4.18
47		cyclohexane	0.525	0.592	-12.8	121	0.00	4.24
48		1,1-dichloropropene	0.558	0.582	-4.3	115	0.00	4.28
49		carbon tetrachloride	0.609	0.672	-10.3	114	0.00	4.29
50		isobutyl alcohol	0.013	0.013	0.0	104	0.00	4.28
51		tert-amyl alcohol	0.024	0.025	-4.2	106	0.00	4.38
52	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	4.70
53	S	1,2-dichloroethane-d4 (s)	0.283	0.271	4.2	99	0.00	4.39
54		n-butyl alcohol	0.011	0.011	0.0	101	0.00	4.76
55	M	benzene	1.132	1.164	-2.8	111	0.00	4.43
56		tert-amyl methyl ether	0.827	0.876	-5.9	109	0.00	4.49
57		iso-octane	0.567	0.663	-16.9	121	0.00	4.49
58		heptane	0.128	0.144	-12.5	117	0.00	4.61
59		isopropyl acetate	0.079	0.078	1.3	98	0.00	4.41
60		1,2-dichloroethane	0.421	0.427	-1.4	110	0.00	4.45
61		trichloroethene	0.324	0.336	-3.7	110	0.00	4.90
62		ethyl acrylate	0.402	0.406	-1.0	103	0.00	4.92
63		2-nitropropane	0.085	0.086	-1.2	114	0.00	5.44
64		2-chloroethyl vinyl ether	0.189	0.198	-4.8	109	0.00	5.47
65		methyl methacrylate	0.096	0.099	-3.1	106	0.00	5.10
66		1,2-dichloropropane	0.291	0.297	-2.1	108	0.00	5.09
67		methylcyclohexane	0.398	0.440	-10.6	120	0.00	5.09
68		dibromomethane	0.231	0.240	-3.9	109	0.00	5.16
69		bromodichloromethane	0.449	0.464	-3.3	112	0.00	5.28
70		epichlorohydrin	0.029	0.027	6.9	106	0.00	5.53
71		cis-1,3-dichloropropene	0.469	0.505	-7.7	112	0.00	5.62
72		4-methyl-2-pentanone	0.130	0.133	-2.3	103	0.00	5.72
73		3-methyl-1-butanol	0.011	0.011	0.0	102	0.00	5.74
74	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	7.09
75	S	toluene-d8 (s)	1.279	1.296	-1.3	103	0.00	5.85
76		toluene	0.894	0.950	-6.3	114	0.00	5.90
77		ethyl methacrylate	0.482	0.518	-7.5	112	0.00	6.10
78		trans-1,3-dichloropropene	0.506	0.563	-11.3	111	0.00	6.07
79		1,1,2-trichloroethane	0.303	0.320	-5.6	107	0.00	6.24
80		2-hexanone	0.158	0.165	-4.4	103	0.00	6.41
81		tetrachloroethene	0.417	0.398	4.6	101	0.00	6.34
82		1,3-dichloropropane	0.546	0.571	-4.6	107	0.00	6.39
83		butyl acetate	0.242	0.258	-6.6	106	0.00	6.50
84		dibromochloromethane	0.469	0.504	-7.5	112	0.00	6.58
85		1,2-dibromoethane	0.438	0.465	-6.2	108	0.00	6.69
86		n-butyl ether	1.203	1.337	-11.1	114	0.00	7.18
87		chlorobenzene	1.049	1.117	-6.5	114	0.00	7.12
88		1,1,1,2-tetrachloroethane	0.413	0.438	-6.1	108	0.00	7.19
89		ethylbenzene	1.679	1.810	-7.8	117	0.00	7.20
90		m,p-xylene	0.647	0.706	-9.1	114	0.00	7.31
91		o-xylene	1.294	1.415	-9.4	116	0.00	7.67
92		styrene	1.047	1.170	-11.7	115	0.00	7.69
93		butyl acrylate	0.306	0.318	-3.9	105	0.00	7.59
94		n-amyl acetate	0.248	0.267	-7.7	105	0.00	7.80
95		bromoform	0.352	0.375	-6.5	111	0.00	7.86
96		isopropylbenzene	1.549	1.717	-10.8	119	0.00	8.01
97		cis-1,4-dichloro-2-butene	0.200	0.189	5.5	79	0.00	8.06
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	9.30

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2532-CC2531
Lab FileID: 2V61607.D

99	S	4-bromofluorobenzene (s)	0.898	0.891	0.8	105	0.00	8.18
100		bromobenzene	1.012	1.090	-7.7	115	0.00	8.32
101		1,1,2,2-tetrachloroethane	1.108	1.163	-5.0	112	0.00	8.29
102		trans-1,4-dichloro-2-bute	0.260	0.277	-6.5	108	0.00	8.33
103		1,2,3-trichloropropane	0.326	0.337	-3.4	105	0.00	8.35
104		n-propylbenzene	3.722	4.162	-11.8	119	0.00	8.40
105		2-chlorotoluene	0.859	0.961	-11.9	120	0.00	8.50
106		4-chlorotoluene	0.865	0.930	-7.5	114	0.00	8.61
107		1,3,5-trimethylbenzene	2.636	2.946	-11.8	118	0.00	8.58
108		tert-butylbenzene	0.605	0.660	-9.1	115	0.00	8.88
109		1,2,4-trimethylbenzene	2.651	2.916	-10.0	116	0.00	8.94
110		sec-butylbenzene	3.107	3.449	-11.0	119	0.00	9.10
111		1,3-dichlorobenzene	1.665	1.820	-9.3	115	0.00	9.22
112		p-isopropyltoluene	2.606	2.986	-14.6	118	0.00	9.25
113		1,4-dichlorobenzene	1.779	1.843	-3.6	116	0.00	9.32
114		1,2-dichlorobenzene	1.572	1.737	-10.5	113	0.00	9.67
115		benzyl chloride	1.680	1.915	-14.0	109	0.00	9.43
116		n-butylbenzene	1.173	1.308	-11.5	120	0.00	9.65
117		hexachloroethane	0.493	0.529	-7.3	115	0.00	9.95
118		1,2-dibromo-3-chloropropa	0.262	0.265	-1.1	108	0.00	10.44
119		nitrobenzene		----------NA----------				
120		1,3,5-trichlorobenzene	0.996	1.140	-14.5	115	0.00	10.63
121		1,2,4-trichlorobenzene	0.858	0.925	-7.8	113	0.00	11.24
122		hexachlorobutadiene	0.369	0.409	-10.8	122	0.00	11.37
123		naphthalene	2.325	2.394	-3.0	105	0.00	11.48
124		1,2,3-trichlorobenzene	0.752	0.751	0.1	105	0.00	11.69
		----------	True	Calc.	% Drift	----------		
125		2-ethylhexyl acrylate	4.000	3.802	4.9	108	0.00	11.41
		----------	AvgRF	CCRF	% Dev	----------		
126		2-methylnaphthalene	0.496	0.322	35.1#	74	0.00	12.53
127		bis(chloromethyl)ether		----------NA----------				
128		ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V61597.D M2V2531.M Fri Sep 20 01:14:29 2019

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2532-ECC2531
Lab FileID: 2V61630.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\kr...019\v2v2532\2v61630.d Vial: 25
Acq On    : 19 Sep 2019   7:12 pm                    Operator: jessicap
Sample    : ecc2531-50                               Inst    : MS2V
Misc      : MS37676,V2V2532,5,,,,1                   Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\msdchem\1\METHODS\M2V2531.M (RTE Integrator)
Title        : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
Last Update  : Thu Sep 19 11:02:25 2019
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  50%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	90	0.00	2.94
2		ethanol	0.146	0.149	-2.1	91	0.00	2.38
3	M	tertiary butyl alcohol	1.935	2.088	-7.9	90	0.00	2.99
4		1,4-dioxane	0.187	0.187	0.0	93	0.00	5.13
5	I	pentafluorobenzene	1.000	1.000	0.0	98	0.00	4.14
6		chlorodifluoromethane	0.489	0.488	0.2	92	0.00	1.58
7		dichlorodifluoromethane	0.636	0.505	20.6	68	0.00	1.57
8		chloromethane	0.593	0.505	14.8	83	0.00	1.71
9		vinyl chloride	0.669	0.605	9.6	85	0.00	1.80
10		bromomethane	0.448	0.362	19.2	79	0.00	2.04
11		chloroethane	0.343	0.320	6.7	90	0.00	2.12
12		trichlorofluoromethane	0.765	0.755	1.3	90	0.00	2.30
13		vinyl bromide	0.348	0.351	-0.9	93	0.00	2.25
14		1,3-butadiene	0.396	0.401	-1.3	90	0.00	1.83
15		ethyl ether	0.219	0.228	-4.1	93	0.00	2.47
16		2-chloropropane	0.529	0.532	-0.6	92	0.00	2.56
17		acrolein	0.073	0.065	11.0	83	0.00	2.57
18		freon 113	0.333	0.347	-4.2	90	0.00	2.64
19		1,1-dichloroethene	0.567	0.590	-4.1	97	0.00	2.65
20		acetone	0.046	0.042	8.7	84	0.00	2.65
21		acetonitrile	0.049	0.049	0.0	90	0.00	2.84
22		iodomethane	0.345	0.343	0.6	72	0.00	2.76
23		carbon disulfide	1.033	1.043	-1.0	97	0.00	2.82
24		methylene chloride	0.439	0.426	3.0	93	0.00	2.97
25		methyl acetate	0.349	0.341	2.3	91	0.00	2.86
26		methyl tert butyl ether	1.187	1.209	-1.9	93	0.00	3.13
27		trans-1,2-dichloroethene	0.437	0.430	1.6	97	0.00	3.15
28		hexane	0.221	0.223	-0.9	88	0.00	3.32
29		di-isopropyl ether	1.071	1.110	-3.6	95	0.00	3.43
30		ethyl tert-butyl ether	1.077	1.126	-4.5	94	0.00	3.68
31	M	1,1-dichloroethane	0.706	0.708	-0.3	96	0.00	3.43
32		chloroprene	0.510	0.548	-7.5	95	0.00	3.49
33		acrylonitrile	0.167	0.167	0.0	94	0.00	3.10
34		vinyl acetate	0.079	0.079	0.0	107	0.00	3.41
35		ethyl acetate	0.070	0.074	-5.7	96	0.00	3.80
36		2-butanone	0.057	0.059	-3.5	89	0.00	3.79
37		2,2-dichloropropane	0.582	0.644	-10.7	100	0.00	3.83
38		cis-1,2-dichloroethene	0.481	0.493	-2.5	96	0.00	3.82
39		propionitrile	0.066	0.067	-1.5	92	0.00	3.83
40		methyl acrylate	0.081	0.083	-2.5	94	0.00	3.85
41		bromochloromethane	0.244	0.260	-6.6	93	0.00	3.98

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2532-ECC2531
Lab FileID: 2V61630.D

42		tetrahydrofuran	0.071	0.065	8.5	91	0.00	4.00
43		chloroform	0.805	0.802	0.4	96	0.00	4.04
44	S	dibromofluoromethane (s)	0.452	0.454	-0.4	98	0.00	4.15
45		methacrylonitrile	0.195	0.199	-2.1	95	0.00	3.94
46		1,1,1-trichloroethane	0.696	0.739	-6.2	98	0.00	4.18
47		cyclohexane	0.525	0.520	1.0	90	0.00	4.24
48		1,1-dichloropropene	0.558	0.587	-5.2	97	0.00	4.28
49		carbon tetrachloride	0.609	0.676	-11.0	98	0.00	4.29
50		isobutyl alcohol	0.013	0.013	0.0	92	0.00	4.29
51		tert-amyl alcohol	0.024	0.024	0.0	95	0.00	4.38
52	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	4.70
53	S	1,2-dichloroethane-d4 (s)	0.283	0.284	-0.4	98	0.00	4.39
54		n-butyl alcohol	0.011	0.012	-9.1	91	0.00	4.76
55	M	benzene	1.132	1.158	-2.3	98	0.00	4.43
56		tert-amyl methyl ether	0.827	0.870	-5.2	96	0.00	4.49
57		iso-octane	0.567	0.592	-4.4	90	0.00	4.49
58		heptane	0.128	0.132	-3.1	90	0.00	4.61
59		isopropyl acetate	0.079	0.079	0.0	94	0.00	4.40
60		1,2-dichloroethane	0.421	0.412	2.1	94	0.00	4.45
61		trichloroethene	0.324	0.336	-3.7	98	0.00	4.90
62		ethyl acrylate	0.402	0.414	-3.0	94	0.00	4.92
63		2-nitropropane	0.085	0.087	-2.4	97	0.00	5.44
64		2-chloroethyl vinyl ether	0.189	0.208	-10.1	101	0.00	5.48
65		methyl methacrylate	0.096	0.101	-5.2	92	0.00	5.10
66		1,2-dichloropropane	0.291	0.295	-1.4	95	0.00	5.09
67		methylcyclohexane	0.398	0.407	-2.3	88	0.00	5.09
68		dibromomethane	0.231	0.231	0.0	93	0.00	5.16
69		bromodichloromethane	0.449	0.459	-2.2	96	0.00	5.28
70		epichlorohydrin	0.029	0.030	-3.4	93	0.00	5.53
71		cis-1,3-dichloropropene	0.469	0.497	-6.0	96	0.00	5.62
72		4-methyl-2-pentanone	0.130	0.135	-3.8	94	0.00	5.72
73		3-methyl-1-butanol	0.011	0.012	-9.1	91	0.00	5.74
74	I	chlorobenzene-d5	1.000	1.000	0.0	97	0.00	7.09
75	S	toluene-d8 (s)	1.279	1.284	-0.4	99	0.00	5.85
76		toluene	0.894	0.917	-2.6	97	0.00	5.90
77		ethyl methacrylate	0.482	0.505	-4.8	95	0.00	6.10
78		trans-1,3-dichloropropene	0.506	0.548	-8.3	95	0.00	6.07
79		1,1,2-trichloroethane	0.303	0.309	-2.0	96	0.00	6.24
80		2-hexanone	0.158	0.163	-3.2	91	0.00	6.41
81		tetrachloroethene	0.417	0.392	6.0	75	0.00	6.34
82		1,3-dichloropropane	0.546	0.558	-2.2	95	0.00	6.39
83		butyl acetate	0.242	0.253	-4.5	94	0.00	6.50
84		dibromochloromethane	0.469	0.489	-4.3	94	0.00	6.57
85		1,2-dibromoethane	0.438	0.459	-4.8	95	0.00	6.69
86		n-butyl ether	1.203	1.301	-8.1	96	0.00	7.18
87		chlorobenzene	1.049	1.086	-3.5	98	0.00	7.12
88		1,1,1,2-tetrachloroethane	0.413	0.430	-4.1	97	0.00	7.19
89		ethylbenzene	1.679	1.769	-5.4	98	0.00	7.20
90		m,p-xylene	0.647	0.690	-6.6	97	0.00	7.31
91		o-xylene	1.294	1.361	-5.2	97	0.00	7.67
92		styrene	1.047	1.147	-9.6	96	0.00	7.69
93		butyl acrylate	0.306	0.331	-8.2	94	0.00	7.60
94		n-amyl acetate	0.248	0.278	-12.1	96	0.00	7.80
95		bromoform	0.352	0.360	-2.3	94	0.00	7.86
96		isopropylbenzene	1.549	1.698	-9.6	98	0.00	8.01
97		cis-1,4-dichloro-2-butene	0.200	0.186	7.0	89	0.00	8.06
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	9.30

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: V2V2532-ECC2531
Lab FileID: 2V61630.D

99	S	4-bromofluorobenzene (s)	0.898	0.879	2.1	98	0.00	8.18
100		bromobenzene	1.012	1.014	-0.2	95	0.00	8.32
101		1,1,2,2-tetrachloroethane	1.108	1.073	3.2	95	0.00	8.29
102		trans-1,4-dichloro-2-bute	0.260	0.260	0.0	93	0.00	8.33
103		1,2,3-trichloropropane	0.326	0.325	0.3	93	0.00	8.35
104		n-propylbenzene	3.722	3.942	-5.9	98	0.00	8.40
105		2-chlorotoluene	0.859	0.904	-5.2	99	0.00	8.50
106		4-chlorotoluene	0.865	0.895	-3.5	99	0.00	8.61
107		1,3,5-trimethylbenzene	2.636	2.801	-6.3	98	0.00	8.58
108		tert-butylbenzene	0.605	0.651	-7.6	102	0.00	8.89
109		1,2,4-trimethylbenzene	2.651	2.776	-4.7	97	0.00	8.94
110		sec-butylbenzene	3.107	3.338	-7.4	98	0.00	9.10
111		1,3-dichlorobenzene	1.665	1.733	-4.1	97	0.00	9.22
112		p-isopropyltoluene	2.606	2.908	-11.6	99	0.00	9.25
113		1,4-dichlorobenzene	1.779	1.757	1.2	97	0.00	9.32
114		1,2-dichlorobenzene	1.572	1.655	-5.3	96	0.00	9.67
115		benzyl chloride	1.680	1.818	-8.2	98	0.00	9.43
116		n-butylbenzene	1.173	1.305	-11.3	99	0.00	9.65
117		hexachloroethane	0.493	0.517	-4.9	99	0.00	9.95
118		1,2-dibromo-3-chloropropa	0.262	0.264	-0.8	92	0.00	10.44
119		nitrobenzene		----------NA----------				
120		1,3,5-trichlorobenzene	0.996	1.109	-11.3	97	0.00	10.63
121		1,2,4-trichlorobenzene	0.858	0.922	-7.5	95	0.00	11.24
122		hexachlorobutadiene	0.369	0.391	-6.0	97	0.00	11.37
123		naphthalene	2.325	2.434	-4.7	92	0.00	11.48
124		1,2,3-trichlorobenzene	0.752	0.768	-2.1	93	0.00	11.69
		----------	True	Calc.	% Drift	----------		
125		2-ethylhexyl acrylate	10.000	8.757	12.4	95	0.00	11.41
		----------	AvgRF	CCRF	% Dev	----------		
126		2-methylnaphthalene	0.496	0.432	12.9	75	0.00	12.54
127		bis(chloromethyl)ether		----------NA----------				
128		ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2V61598.D M2V2531.M Fri Sep 20 01:36:54 2019

6.10.5

6

Initial Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Sample: VA9755-ICC9755
Lab FileID: A251992.D

Response Factor Report MSA

```
Method       : C:\MSDCHEM\1\METHODS\MA9755.M (RTE Integrator)
Title        : SW-846  8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
Last Update  : Tue Jul 30 12:20:13 2019
Response via : Initial Calibration

Calibration Files
4   =A251989.D   2   =A251988.D   20  =A251991.D   50  =A251992.D
100 =A251993.D   1   =A251987.D   200 =A251994.D   0.5 =A251986.D
8   =A251990.D   0.2 =A251985.D       =                 =

Compound
        4     2     20    50    100   1     200   0.5   8     0.2    Avg   %RSD
-------------------------------------------------------------------------------

1) I   Tert Butyl Alcohol-d9 ----------------ISTD---------------------
2)  ethanol
                                                                     0.000#  -1.00
3)  tertiary butyl alcohol
     1.048 1.102 1.031 1.062 1.110 1.021 1.068       1.052        1.062    2.95
4)  1,4-dioxane
     0.058       0.055 0.062 0.064       0.063       0.048        0.058   10.80

5) I   pentafluorobenzene    ----------------ISTD---------------------
6)  chlorodifluoromethane
     1.355 1.362 1.309 1.300 1.304 1.333 1.210 1.479 1.278        1.326    5.52
7)  dichlorodifluoromethane
     1.257 1.431 1.307 1.329 1.320 1.300 1.246 1.231 1.272        1.299    4.60
8)  chloromethane
     1.378 1.667 1.722 1.695 1.646 1.525 1.595       1.374        1.575    8.70
9)  vinyl chloride
     1.283 1.370 1.334 1.323 1.319 1.279 1.255 1.218 1.259 0.989  1.263    8.40
10)  1,3-butadiene
     0.947 0.974 0.902 0.906 0.932 0.888 0.864       0.888        0.913    3.94
11)  bromomethane
     0.868 0.946 0.849 0.834 0.817 0.877       0.928 0.844 0.988  0.883    6.54
12)  chloroethane
     0.776 0.838 0.751 0.748 0.749 0.757 0.680 0.879 0.744        0.769    7.53
13)  vinyl bromide
     0.788 0.835 0.797 0.806 0.809 0.785 0.772       0.785        0.797    2.46
14)  trichlorofluoromethane
     1.316 1.439 1.301 1.305 1.331 1.325 1.273 1.231 1.259        1.309    4.49
15)  ethyl ether
     0.363 0.350 0.354 0.348 0.368 0.321 0.352 0.255 0.351        0.340   10.18
16)  acrolein
     0.182 0.164 0.184 0.183 0.192       0.188       0.183        0.182    4.88
17)  freon 113
     0.602 0.577 0.588 0.581 0.603 0.588 0.573 0.506 0.577        0.577    5.00
18)  1,1-dichloroethene
     0.806 0.820 0.771 0.743 0.803 0.835 0.776 0.854 0.754        0.796    4.69
19)  acetone
     0.102 0.117 0.105 0.106 0.108 0.109 0.105       0.101        0.107    4.56
20)  acetonitrile
     0.169       0.152 0.153 0.156       0.151       0.152        0.155    4.34
21)  iodomethane
     1.185 1.160 1.133 1.134 1.201 1.095 1.158 1.171 1.118        1.151    2.93
22)  carbon disulfide
     2.573 2.654 2.397 2.363 2.476 2.856 2.325 3.031 2.380        2.562    9.55
23)  methylene chloride
```

Initial Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9755-ICC9755
Lab FileID: A251992.D

```
      0.990 1.022 0.868 0.827 0.886 1.161 0.856       0.876        0.936   12.13
24)  methyl acetate
      0.776 0.830 0.700 0.666 0.716       0.680       0.655        0.717    8.87
25)  methyl tert butyl ether
      2.333 2.307 2.233 2.172 2.229 2.254 2.120 2.333 2.194 2.049  2.222    4.16
26)  trans-1,2-dichloroethene
      0.643 0.671 0.612 0.578 0.620 0.638 0.591 0.746 0.609 0.563  0.627    8.38
27)  hexane
      0.949 1.019 0.956 0.928 0.958 0.992 0.883 0.991 0.940        0.957    4.19
28)  di-isopropyl ether
      2.527 2.535 2.441 2.352 2.432 2.445 2.276 2.677 2.386 2.134  2.421    6.17
29)  ethyl tert-butyl ether
      2.316 2.366 2.257 2.193 2.275 2.323 2.132 2.364 2.177 2.035  2.244    4.82
30)  2-butanone
      0.112 0.111 0.115 0.117 0.119 0.099 0.117       0.108        0.112    5.76
31)  1,1-dichloroethane
      1.152 1.186 1.157 1.115 1.170 1.203 1.089 1.254 1.160 1.011  1.150    5.78
32)  chloroprene
      0.919 0.968 0.933 0.901 0.953 0.932 0.887 1.047 0.887        0.936    5.34
33)  acrylonitrile
      0.400 0.340 0.384 0.369 0.393       0.374       0.378        0.377    5.19
34)  vinyl acetate
      0.135       0.140 0.144 0.142       0.143       0.126        0.139    4.85
35)  ethyl acetate
      0.123       0.152 0.142 0.148       0.143       0.134        0.140    7.55
36)  2,2-dichloropropane
      1.061 1.183 1.003 0.963 0.995 1.131 0.916 1.408 1.011        1.075   13.93
37)  cis-1,2-dichloroethene
      0.692 0.722 0.690 0.649 0.694 0.775 0.653 0.770 0.686 0.731  0.706    6.11
38)  methyl acrylate
      0.106 0.108 0.123 0.122 0.129       0.127       0.120        0.119    7.64
39)  propionitrile
      0.165 0.168 0.168 0.163 0.165 0.149 0.159 0.163 0.162        0.163    3.57
40)  bromochloromethane
      0.322 0.328 0.329 0.310 0.327 0.308 0.315 0.335 0.313        0.321    2.99
41)  tetrahydrofuran
      0.325 0.369 0.331 0.317 0.328 0.363 0.323       0.319        0.334    6.03
42)  chloroform
      1.107 1.139 1.063 1.001 1.064 1.185 1.004 1.306 1.060        1.103    8.75
43)  tert-butyl formate
      0.553 0.569 0.568 0.566 0.604 0.495 0.590 0.541 0.535        0.558    5.75
44)  dibromofluoromethane (s)
      0.543 0.554 0.565 0.537 0.551 0.555 0.568 0.546 0.556 0.559  0.553    1.74
45)  methacrylonitrile
      0.347 0.350 0.348 0.339 0.356 0.290 0.349       0.337        0.339    6.16
46)  cyclohexane
      1.184 1.349 1.247 1.214 1.252 1.304 1.213 1.278 1.212        1.250    4.19
47)  1,1,1-trichloroethane
      1.031 1.110 1.034 1.027 1.092 1.006 1.039 1.088 1.032 0.863  1.032    6.65
48)  iso-butyl alcohol
      0.123       0.120 0.119 0.122       0.118       0.119        0.120    1.52
49)  1,1-dichloropropene
      0.825 0.826 0.823 0.796 0.838 0.846 0.802 0.860 0.790 0.770  0.818    3.39
50)  carbon tetrachloride
      0.889 0.835 0.870 0.855 0.912 0.874 0.882 0.890 0.854        0.873    2.65
51)  tert-amyl alcohol
      0.100 0.098 0.098 0.098 0.103       0.101       0.095        0.099    2.81

52) I   1,4-difluorobenzene   ----------------ISTD---------------------
53)  1,2-dichloroethane-d4 (s)
```

Initial Calibration Summary

Job Number: JC94613 **Sample:** VA9755-ICC9755
Account: SCMAW Sovereign Consulting **Lab FileID:** A251992.D
Project: Shepley's Hill (SHL), Devens, MA

```
      0.368 0.378 0.370 0.360 0.359 0.372 0.353 0.382 0.375 0.378  0.370    2.56
54)  benzene
      1.507 1.519 1.435 1.391 1.429 1.503 1.322 1.657 1.435 1.575  1.477    6.50
55)  iso-octane
      1.481 1.503 1.439 1.425 1.487 1.465 1.355 1.650 1.393 1.539  1.474    5.57
56)  tert-amyl methyl ether
      1.358 1.355 1.291 1.246 1.277 1.361 1.169 1.492 1.273 1.268  1.309    6.66
57)  heptane
      0.272 0.285 0.283 0.276 0.286 0.283 0.265 0.292 0.270        0.279    3.14
58)  isopropyl acetate
      0.094 0.095 0.104 0.103 0.106       0.101       0.094        0.099    5.03
59)  1,2-dichloroethane
      0.483 0.500 0.459 0.434 0.455 0.547 0.424       0.463        0.471    8.34
60)  n-butyl alcohol
      0.020 0.020 0.018 0.018 0.019 0.019 0.017       0.018        0.019    5.01
61)  ethyl acrylate
      0.514 0.507 0.500 0.530 0.549 0.448 0.528       0.484        0.508    6.14
62)  trichloroethene
      0.341 0.348 0.332 0.326 0.336 0.341 0.316 0.366 0.323 0.419  0.345    8.59
63)  2-nitropropane
      0.133       0.126 0.130 0.138       0.133       0.128        0.131    3.37
64)  methylcyclohexane
      0.777 0.798 0.768 0.744 0.779 0.823 0.721 0.848 0.756 0.746  0.776    4.96
65)  2-chloroethyl vinyl ether
      0.127 0.123 0.128 0.136 0.149 0.113 0.151 0.117 0.118        0.129   10.64
66)  methyl methacrylate
      0.099 0.085 0.102 0.103 0.111       0.109       0.095        0.101    8.57
67)  1,2-dichloropropane
      0.379 0.380 0.379 0.374 0.385 0.388 0.362 0.416 0.376        0.382    3.84
68)  dibromomethane
      0.233 0.214 0.223 0.218 0.225 0.215 0.216 0.205 0.211        0.218    3.72
69)  bromodichloromethane
      0.443 0.473 0.452 0.450 0.474 0.458 0.446 0.516 0.445 0.441  0.460    4.98
70)  epichlorohydrin
      0.055 0.054 0.053 0.055 0.057 0.052 0.055       0.051        0.054    3.84
71)  cis-1,3-dichloropropene
      0.526 0.545 0.535 0.552 0.573 0.511 0.549 0.527 0.513 0.523  0.535    3.60
72)  4-methyl-2-pentanone
      0.220 0.234 0.220 0.218 0.221 0.204 0.207 0.220 0.209 0.167  0.212    8.47
73)  3-methyl-1-butanol
      0.044 0.047 0.043 0.043 0.043 0.041 0.040       0.042        0.043    4.78

74) I   chlorobenzene-d5      ----------------ISTD--------------------
75)  toluene-d8 (s)
      1.401 1.394 1.439 1.443 1.441 1.419 1.376 1.368 1.435 1.408  1.412    1.95
76)  toluene
      0.975 1.027 0.971 0.987 1.008 1.038 0.900 1.063 0.966 1.048  0.998    4.87
77)  trans-1,3-dichloropropene
      0.573 0.593 0.568 0.582 0.592 0.566 0.536 0.621 0.568 0.568  0.577    3.88
78)  ethyl methacrylate
      0.586 0.586 0.581 0.584 0.592 0.507 0.532 0.582 0.565 0.546  0.566    5.06
79)  1,1,2-trichloroethane
      0.318 0.321 0.310 0.314 0.321 0.335 0.291 0.307 0.297 0.314  0.313    4.04
80)  2-hexanone
      0.274 0.270 0.248 0.238 0.237 0.259 0.210 0.262 0.261        0.251    7.99
81)  tetrachloroethene
      0.380 0.391 0.374 0.375 0.386 0.387 0.344 0.383 0.377 0.325  0.372    5.62
82)  1,3-dichloropropane
      0.610 0.644 0.594 0.595 0.623 0.629 0.569 0.617 0.595 0.539  0.602    5.11
83)  butyl acetate
```

Initial Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9755-ICC9755
Lab FileID: A251992.D

```
      0.414 0.417 0.376 0.365 0.354 0.372 0.319       0.386        0.375    8.45
 84)  dibromochloromethane
      0.383 0.355 0.373 0.378 0.401 0.360 0.367 0.398 0.360 0.325  0.370    5.98
 85)  1,2-dibromoethane
      0.404 0.413 0.386 0.384 0.405 0.386 0.371 0.381 0.385 0.412  0.393    3.71
 86)  n-butyl ether
      1.893 1.942 1.873 1.781 1.736 1.978 1.506 2.044 1.881        1.848    8.60
 87)  chlorobenzene
      0.967 0.979 0.954 0.959 0.993 1.033 0.924 1.004 0.944 1.012  0.977    3.46
 88)  1,1,1,2-tetrachloroethane
      0.448 0.417 0.461 0.453 0.466 0.465 0.413 0.411 0.459 0.397  0.439    6.04
 89)  ethylbenzene
      1.750 1.839 1.746 1.724 1.750 1.832 1.554 1.855 1.772 1.805  1.763    4.88
 90)  m,p-xylene
      0.668 0.699 0.657 0.648 0.666 0.687 0.607 0.695 0.654 0.776  0.676    6.51
 91)  o-xylene
      0.729 0.730 0.716 0.711 0.728 0.705 0.656 0.776 0.714 0.766  0.723    4.57
 92)  styrene
      1.096 1.098 1.061 1.027 1.039 1.084 0.942 1.171 1.065 1.166  1.075    6.20
 93)  butyl acrylate
      1.051 1.061 1.001 0.943 0.899 1.010 0.765       1.017        0.968   10.15
 94)  n-amyl acetate
      0.454 0.460 0.410 0.374 0.357 0.406 0.310       0.412        0.398   12.55
 95)  bromoform
      0.255 0.253 0.247 0.252 0.258 0.253 0.234 0.263 0.247        0.251    3.33
 96)  isopropylbenzene
      2.006 2.021 2.039 1.980 1.992 2.022 1.744 2.256 2.013 2.084  2.016    6.16
 97)  cis-1,4-dichloro-2-butene
      0.236 0.218 0.229 0.227 0.225       0.199       0.218        0.222    5.39

 98) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 99)  4-bromofluorobenzene (s)
      0.944 0.940 0.961 0.971 1.009 0.929 1.009 0.934 0.946 0.943  0.959    3.04
100)  bromobenzene
      0.792 0.757 0.767 0.775 0.842 0.723 0.791 0.818 0.747 0.914  0.793    6.92
101)  1,1,2,2-tetrachloroethane
      1.181 1.252 1.235 1.224 1.300 1.232 1.186 1.241 1.190 1.251  1.229    2.95
102)  trans-1,4-dichloro-2-butene
      0.269 0.284 0.261 0.276 0.286       0.249       0.264        0.270    4.81
103)  1,2,3-trichloropropane
      0.302 0.314 0.320 0.305 0.330 0.318 0.301 0.239 0.302        0.304    8.58
104)  n-propylbenzene
      4.142 4.167 4.247 4.145 4.382 4.128 3.932 4.333 4.115 4.376  4.197    3.33
105)  2-chlorotoluene
      0.805 0.818 0.848 0.848 0.918 0.793 0.873 0.860 0.792 0.725  0.828    6.44
106)  4-chlorotoluene
      2.329 2.300 2.297 2.285 2.406 2.298 2.211 2.447 2.277 2.737  2.359    6.31
107)  1,3,5-trimethylbenzene
      3.038 3.081 3.246 3.267 3.543 2.958 3.277 3.171 3.098 3.127  3.180    5.16
108)  tert-butylbenzene
      2.602 2.621 2.901 3.075 3.357 2.553 3.065       2.675        2.856   10.15
109)  1,2,4-trimethylbenzene
      2.988 3.101 3.165 3.103 3.327 3.072 3.076 3.390 3.081 3.419  3.172    4.74
110)  sec-butylbenzene
      4.096 4.106 4.404 4.528 4.847 3.930 4.380 4.275 4.137 4.250  4.295    6.08
111)  1,3-dichlorobenzene
      1.525 1.560 1.492 1.465 1.556 1.531 1.419 1.685 1.480 1.670  1.538    5.52
112)  p-isopropyltoluene
      3.403 3.398 3.524 3.579 3.838 3.442 3.519 3.626 3.410 3.703  3.544    4.11
113)  1,4-dichlorobenzene
```

Initial Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9755-ICC9755
Lab FileID: A251992.D

```
       1.517 1.564 1.513 1.482 1.551 1.565 1.428 1.786 1.462 1.899  1.577    9.47
114)  1,2-dichlorobenzene
       1.613 1.715 1.622 1.570 1.647 1.647 1.531 1.730 1.586 1.806  1.647    5.03
115)  n-butylbenzene
       1.795 1.862 1.844 1.785 1.869 1.785 1.715 1.967 1.822 2.039  1.848    5.12
116)  1,2-dibromo-3-chloropropane
       0.376 0.393 0.362 0.353 0.380 0.334 0.351 0.318 0.351        0.358    6.56
117)  1,3,5-trichlorobenzene
       1.466 1.512 1.434 1.387 1.469 1.462 1.416 1.568 1.403 1.668  1.479    5.78
118)  2-ethylhexyl acrylate
                    0.880 1.055 1.230       1.286       0.766        1.043   21.28
             ----- Linear regression -----  Coefficient =  0.9966
               Response Ratio = -0.02288 + 1.28364 *A

119)  1,2,4-trichlorobenzene
       1.400 1.468 1.408 1.318 1.416 1.423 1.359 1.501 1.402        1.411    3.80
120)  hexachlorobutadiene
       0.555 0.576 0.559 0.575 0.641 0.570 0.636 0.617 0.530        0.584    6.56
121)  naphthalene
       4.857 4.934 4.765 4.541 4.709 4.817 4.307 5.213 4.742        4.765    5.27
122)  1,2,3-trichlorobenzene
       1.530 1.614 1.516 1.455 1.563 1.447 1.493 1.715 1.492        1.536    5.52
123)  hexachloroethane
       0.479 0.448 0.560 0.601 0.690       0.661       0.503        0.563   16.35
124)  2-methylnaphthalene
       2.443       2.859 3.018 3.294       3.149       2.514        2.880   11.91
125)  ethylenimine
                                                                    0.000#  -1.00
126)  bis(chloromethyl)ether
                                                                    0.000#  -1.00
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MA9755.M          Tue Jul 30 12:23:39 2019   RPT1
```

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9755-ICV9755
Lab FileID: A251997.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\VA9755\A251997.D Vial: 14
Acq On : 30 Jul 2019 12:04 am Operator: edwardd
Sample : icv9755-50 Inst : MSA
Misc : MS36311,VA9755,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA9755.M (RTE Integrator)
Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
Last Update : Tue Jul 30 12:20:13 2019
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	112	0.00	8.16
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol	1.062	1.064	-0.2	112	0.01	8.29
4		1,4-dioxane	0.058	0.061	-5.2	109	0.00	12.17
5	I	pentafluorobenzene	1.000	1.000	0.0	112	0.00	10.54
6	M	chlorodifluoromethane	1.326	1.240	6.5	106	0.00	4.59
7	M	dichlorodifluoromethane	1.299	1.297	0.2	109	0.00	4.56
8	M	chloromethane	1.575	1.293	17.9	85	0.01	5.01
9	M	vinyl chloride	1.263	1.351	-7.0	114	0.00	5.27
10		1,3-butadiene	0.913	1.095	-19.9	135	0.00	5.28
11	M	bromomethane	0.883	1.054	-19.4	141	0.00	5.94
12	M	chloroethane	0.769	0.659	14.3	98	0.00	6.11
13		vinyl bromide	0.797	0.883	-10.8	122	0.01	6.51
14	M	trichlorofluoromethane	1.309	1.239	5.3	106	0.00	6.64
15	M	ethyl ether	0.340	0.352	-3.5	113	0.00	7.01
16	M	acrolein	0.182	0.198	-8.8	121	0.01	7.26
17		freon 113	0.577	0.655	-13.5	126	0.00	7.50
18	M	1,1-dichloroethene	0.796	0.700	12.1	105	0.00	7.49
19	M	acetone	0.107	0.103	3.7	108	0.00	7.47
20	M	acetonitrile		----------NA----------				
21	M	iodomethane	1.151	1.280	-11.2	126	0.01	7.77
22	M	carbon disulfide	2.562	2.625	-2.5	124	0.00	7.93
23	M	methylene chloride	0.936	0.810	13.5	109	0.00	8.23
24	M	methyl acetate	0.717	0.679	5.3	114	0.00	7.96
25	M	methyl tert butyl ether	2.222	2.111	5.0	109	0.00	8.60
26	M	trans-1,2-dichloroethene	0.627	0.587	6.4	113	0.00	8.63
27		hexane	0.957	0.977	-2.1	118	0.00	9.01
28	M	di-isopropyl ether	2.421	2.257	6.8	107	0.00	9.23
29	M	ethyl tert-butyl ether	2.244	2.180	2.9	111	0.00	9.71
30	M	2-butanone	0.112	0.118	-5.4	113	0.00	9.91
31	M	1,1-dichloroethane	1.150	1.128	1.9	113	0.00	9.24
32	M	chloroprene	0.936	0.959	-2.5	119	0.00	9.35
33	M	acrylonitrile		----------NA----------				
34	M	vinyl acetate	0.139	0.130	6.5	101	0.00	9.17
35	M	ethyl acetate	0.140	0.136	2.9	107	0.00	9.92
36	M	2,2-dichloropropane	1.075	0.863	19.7	100	0.00	10.03
37	M	cis-1,2-dichloroethene	0.706	0.647	8.4	111	0.00	9.99
38		methyl acrylate	0.119	0.123	-3.4	112	0.00	10.01
39	M	propionitrile	0.163	0.163	0.0	112	0.00	9.99
40	M	bromochloromethane	0.321	0.317	1.2	114	0.00	10.29
41	M	tetrahydrofuran	0.334	0.323	3.3	114	0.00	10.31

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9755-ICV9755
Lab FileID: A251997.D

42	M	chloroform	1.103	1.025	7.1	114	0.00	10.38
43		tert-butyl formate	0.558	0.531	4.8	105	0.00	10.42
44	S	dibromofluoromethane (s)	0.553	0.555	-0.4	115	0.00	10.57
45	M	methacrylonitrile	0.339	0.339	0.0	112	0.00	10.20
46		cyclohexane	1.250	1.222	2.2	112	0.00	10.78
47	M	1,1,1-trichloroethane	1.032	1.005	2.6	109	0.00	10.66
48		iso-butyl alcohol	0.120	0.119	0.8	112	0.00	10.78
49		1,1-dichloropropene	0.818	0.794	2.9	111	0.00	10.83
50		carbon tetrachloride	0.873	0.869	0.5	113	0.00	10.86
51		tert-amyl alcohol	0.099	0.101	-2.0	116	0.00	10.95
52	I	1,4-difluorobenzene	1.000	1.000	0.0	112	0.00	11.50
53	S	1,2-dichloroethane-d4 (s)	0.370	0.360	2.7	112	0.00	11.01
54	M	benzene	1.477	1.378	6.7	111	0.00	11.09
55	M	iso-octane	1.474	1.573	-6.7	124	0.00	11.18
56		tert-amyl methyl ether	1.309	1.239	5.3	112	0.00	11.16
57	M	heptane	0.279	0.318	-14.0	129	0.00	11.34
58	M	isopropyl acetate	0.099	0.096	3.0	105	0.00	10.98
59	M	1,2-dichloroethane	0.471	0.424	10.0	110	0.00	11.11
60		n-butyl alcohol	0.019	0.018	5.3	108	0.00	11.55
61		ethyl acrylate	0.508	0.516	-1.6	109	0.00	11.80
62	M	trichloroethene	0.345	0.330	4.3	114	0.00	11.83
63	M	2-nitropropane	0.131	0.135	-3.1	117	0.00	12.61
64	m	methylcyclohexane	0.776	0.729	6.1	110	0.00	12.15
65	M	2-chloroethyl vinyl ether	0.129	0.151	-17.1	125	0.00	12.64
66	M	methyl methacrylate	0.101	0.103	-2.0	112	0.00	12.08
67	M	1,2-dichloropropane	0.382	0.366	4.2	110	0.00	12.13
68	M	dibromomethane	0.218	0.215	1.4	111	0.00	12.25
69	M	bromodichloromethane	0.460	0.431	6.3	108	0.00	12.40
70		epichlorohydrin	0.054	0.056	-3.7	113	0.00	12.74
71	M	cis-1,3-dichloropropene	0.535	0.527	1.5	107	0.00	12.89
72	M	4-methyl-2-pentanone	0.212	0.216	-1.9	111	0.00	12.99
73	M	3-methyl-1-butanol	0.043	0.043	0.0	112	0.00	12.99
74	I	chlorobenzene-d5	1.000	1.000	0.0	111	0.00	14.89
75	S	toluene-d8 (s)	1.412	1.446	-2.4	111	0.00	13.22
76		toluene	0.998	0.959	3.9	108	0.00	13.31
77		trans-1,3-dichloropropene	0.577	0.564	2.3	108	0.00	13.50
78		ethyl methacrylate	0.566	0.575	-1.6	109	0.00	13.48
79		1,1,2-trichloroethane	0.313	0.305	2.6	108	0.00	13.74
80		2-hexanone	0.251	0.229	8.8	107	0.00	13.91
81	M	tetrachloroethene		----------NA----------				
82	M	1,3-dichloropropane	0.602	0.584	3.0	109	0.00	13.94
83	M	butyl acetate	0.375	0.350	6.7	106	0.00	14.00
84	M	dibromochloromethane	0.370	0.385	-4.1	113	0.00	14.22
85	M	1,2-dibromoethane	0.393	0.391	0.5	113	0.00	14.39
86	M	n-butyl ether	1.848	1.826	1.2	114	0.00	14.87
87	M	chlorobenzene	0.977	0.954	2.4	110	0.00	14.93
88	M	1,1,1,2-tetrachloroethane	0.439	0.454	-3.4	111	0.00	15.00
89	M	ethylbenzene	1.763	1.692	4.0	109	0.00	14.99
90	M	m,p-xylene	0.676	0.639	5.5	109	0.00	15.12
91	M	o-xylene	0.723	0.709	1.9	111	0.00	15.58
92	M	styrene	1.075	1.012	5.9	109	0.00	15.59
93		butyl acrylate	0.968	0.887	8.4	104	0.00	15.37
94		n-amyl acetate	0.398	0.344	13.6	102	0.00	15.60
95	M	bromoform	0.251	0.266	-6.0	117	0.00	15.85
96		isopropylbenzene	2.016	1.976	2.0	111	0.00	15.97
97		cis-1,4-dichloro-2-butene	0.222	0.213	4.1	104	0.00	16.00
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	17.51

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9755-ICV9755
Lab FileID: A251997.D

99	S	4-bromofluorobenzene (s)	0.959	0.984	-2.6	111	0.00	16.20
100	M	bromobenzene	0.793	0.764	3.7	108	0.00	16.41
101	M	1,1,2,2-tetrachloroethane	1.229	1.234	-0.4	110	0.00	16.28
102	M	trans-1,4-dichloro-2-bute	0.270	0.276	-2.2	109	0.00	16.31
103	M	1,2,3-trichloropropane	0.304	0.306	-0.7	110	0.00	16.38
104	M	n-propylbenzene	4.197	4.201	-0.1	111	0.00	16.43
105	M	2-chlorotoluene	0.828	0.847	-2.3	109	0.00	16.59
106	M	4-chlorotoluene	2.359	2.280	3.3	109	0.00	16.72
107	M	1,3,5-trimethylbenzene	3.180	3.297	-3.7	110	0.00	16.61
108	M	tert-butylbenzene	2.856	3.066	-7.4	109	0.00	16.99
109	M	1,2,4-trimethylbenzene	3.172	3.216	-1.4	113	0.00	17.05
110	M	sec-butylbenzene	4.295	4.560	-6.2	110	0.00	17.24
111	M	1,3-dichlorobenzene	1.538	1.472	4.3	110	0.00	17.44
112	M	p-isopropyltoluene	3.544	3.663	-3.4	112	0.00	17.38
113	M	1,4-dichlorobenzene	1.577	1.474	6.5	109	0.00	17.54
114	M	1,2-dichlorobenzene	1.647	1.590	3.5	111	0.00	17.96
115	M	n-butylbenzene	1.848	1.793	3.0	110	0.00	17.84
116	M	1,2-dibromo-3-chloropropa	0.358	0.352	1.7	109	0.00	18.81
117	M	1,3,5-trichlorobenzene	1.479	1.420	4.0	112	0.00	19.02
		----------	True	Calc.	% Drift	----------		
118		2-ethylhexyl acrylate	10.000	9.242	7.6	111	0.00	19.74
		----------	AvgRF	CCRF	% Dev	----------		
119	M	1,2,4-trichlorobenzene	1.411	1.329	5.8	110	0.00	19.77
120	M	hexachlorobutadiene	0.584	0.548	6.2	104	0.00	19.89
121	M	naphthalene	4.765	4.602	3.4	111	0.00	20.10
122	M	1,2,3-trichlorobenzene	1.536	1.470	4.3	110	0.00	20.34
123	M	hexachloroethane	0.563	0.620	-10.1	113	0.00	18.29
124		2-methylnaphthalene	2.880	3.166	-9.9	115	0.00	21.41
125		ethylenimine		----------NA----------				
126		bis(chloromethyl)ether		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
A251992.D MA9755.M Tue Jul 30 12:24:02 2019 RPT1

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9755-ICV9755
Lab FileID: A251998.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\VA9755\A251998.D          Vial: 15
Acq On    : 30 Jul 2019  12:33 am                   Operator: edwardd
Sample    : icv9755-50                              Inst    : MSA
Misc      : MS36311,VA9755,5,,,,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MA9755.M (RTE Integrator)
Title        : SW-846  8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
Last Update  : Tue Jul 30 12:20:13 2019
Response via : Multiple Level Calibration

Min. RRF     :   0.010  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	112	0.00	8.15
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	107	0.00	10.53
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane		----------NA----------				
8	M	chloromethane		----------NA----------				
9	M	vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11	M	bromomethane		----------NA----------				
12	M	chloroethane		----------NA----------				
13		vinyl bromide		----------NA----------				
14	M	trichlorofluoromethane		----------NA----------				
15	M	ethyl ether		----------NA----------				
16	M	acrolein		----------NA----------				
17		freon 113		----------NA----------				
18	M	1,1-dichloroethene		----------NA----------				
19	M	acetone		----------NA----------				
20	M	acetonitrile	0.155	0.153	1.3	106	0.00	7.91
21	M	iodomethane		----------NA----------				
22	M	carbon disulfide		----------NA----------				
23	M	methylene chloride		----------NA----------				
24	M	methyl acetate		----------NA----------				
25	M	methyl tert butyl ether		----------NA----------				
26	M	trans-1,2-dichloroethene		----------NA----------				
27		hexane		----------NA----------				
28	M	di-isopropyl ether		----------NA----------				
29	M	ethyl tert-butyl ether		----------NA----------				
30	M	2-butanone		----------NA----------				
31	M	1,1-dichloroethane		----------NA----------				
32	M	chloroprene		----------NA----------				
33	M	acrylonitrile	0.377	0.363	3.7	105	0.00	8.52
34	M	vinyl acetate		----------NA----------				
35	M	ethyl acetate		----------NA----------				
36	M	2,2-dichloropropane		----------NA----------				
37	M	cis-1,2-dichloroethene		----------NA----------				
38		methyl acrylate		----------NA----------				
39	M	propionitrile		----------NA----------				
40	M	bromochloromethane		----------NA----------				
41	M	tetrahydrofuran		----------NA----------				

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Job Number: JC94613
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Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9755-ICV9755
Lab FileID: A251998.D

42	M	chloroform		----------NA----------				
43		tert-butyl formate		----------NA----------				
44	S	dibromofluoromethane (s)	0.553	0.552	0.2	110	0.00	10.57
45	M	methacrylonitrile		----------NA----------				
46		cyclohexane		----------NA----------				
47	M	1,1,1-trichloroethane		----------NA----------				
48		iso-butyl alcohol		----------NA----------				
49		1,1-dichloropropene		----------NA----------				
50		carbon tetrachloride		----------NA----------				
51		tert-amyl alcohol		----------NA----------				
52	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	11.50
53	S	1,2-dichloroethane-d4 (s)	0.370	0.376	-1.6	108	0.00	11.01
54	M	benzene		----------NA----------				
55	M	iso-octane		----------NA----------				
56		tert-amyl methyl ether		----------NA----------				
57	M	heptane		----------NA----------				
58	M	isopropyl acetate		----------NA----------				
59	M	1,2-dichloroethane		----------NA----------				
60		n-butyl alcohol		----------NA----------				
61		ethyl acrylate		----------NA----------				
62	M	trichloroethene		----------NA----------				
63	M	2-nitropropane		----------NA----------				
64	m	methylcyclohexane		----------NA----------				
65	M	2-chloroethyl vinyl ether		----------NA----------				
66	M	methyl methacrylate		----------NA----------				
67	M	1,2-dichloropropane		----------NA----------				
68	M	dibromomethane		----------NA----------				
69	M	bromodichloromethane		----------NA----------				
70		epichlorohydrin		----------NA----------				
71	M	cis-1,3-dichloropropene		----------NA----------				
72	M	4-methyl-2-pentanone		----------NA----------				
73	M	3-methyl-1-butanol		----------NA----------				
74	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	14.89
75	S	toluene-d8 (s)	1.412	1.375	2.6	98	0.00	13.22
76		toluene		----------NA----------				
77		trans-1,3-dichloropropene		----------NA----------				
78		ethyl methacrylate		----------NA----------				
79		1,1,2-trichloroethane		----------NA----------				
80		2-hexanone		----------NA----------				
81	M	tetrachloroethene	0.372	0.402	-8.1	110	0.00	13.91
82	M	1,3-dichloropropane		----------NA----------				
83	M	butyl acetate		----------NA----------				
84	M	dibromochloromethane		----------NA----------				
85	M	1,2-dibromoethane		----------NA----------				
86	M	n-butyl ether		----------NA----------				
87	M	chlorobenzene		----------NA----------				
88	M	1,1,1,2-tetrachloroethane		----------NA----------				
89	M	ethylbenzene		----------NA----------				
90	M	m,p-xylene		----------NA----------				
91	M	o-xylene		----------NA----------				
92	M	styrene		----------NA----------				
93		butyl acrylate		----------NA----------				
94		n-amyl acetate		----------NA----------				
95	M	bromoform		----------NA----------				
96		isopropylbenzene		----------NA----------				
97		cis-1,4-dichloro-2-butene		----------NA----------				
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	116	0.00	17.51

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9755-ICV9755
Lab FileID: A251998.D

```
 99 S   4-bromofluorobenzene (s)    0.959   0.913      4.8  109   0.00   16.20
100 M   bromobenzene                         ----------NA----------
101 M   1,1,2,2-tetrachloroethane            ----------NA----------
102 M   trans-1,4-dichloro-2-bute            ----------NA----------
103 M   1,2,3-trichloropropane               ----------NA----------
104 M   n-propylbenzene                      ----------NA----------
105 M   2-chlorotoluene                      ----------NA----------
106 M   4-chlorotoluene                      ----------NA----------
107 M   1,3,5-trimethylbenzene               ----------NA----------
108 M   tert-butylbenzene                    ----------NA----------
109 M   1,2,4-trimethylbenzene               ----------NA----------
110 M   sec-butylbenzene                     ----------NA----------
111 M   1,3-dichlorobenzene                  ----------NA----------
112 M   p-isopropyltoluene                   ----------NA----------
113 M   1,4-dichlorobenzene                  ----------NA----------
114 M   1,2-dichlorobenzene                  ----------NA----------
115 M   n-butylbenzene                       ----------NA----------
116 M   1,2-dibromo-3-chloropropa            ----------NA----------
117 M   1,3,5-trichlorobenzene               ----------NA----------

            ------------------------ True    Calc.   % Drift  ------------
118     2-ethylhexyl acrylate                ----------NA----------

            ------------------------ AvgRF   CCRF     % Dev   -------------
119 M   1,2,4-trichlorobenzene               ----------NA----------
120 M   hexachlorobutadiene                  ----------NA----------
121 M   naphthalene                          ----------NA----------
122 M   1,2,3-trichlorobenzene               ----------NA----------
123 M   hexachloroethane                     ----------NA----------
124     2-methylnaphthalene                  ----------NA----------
125     ethylenimine                         ----------NA----------
126     bis(chloromethyl)ether               ----------NA----------
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     A251992.D  MA9755.M         Tue Jul 30 12:24:03 2019   RPT1
```

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9819-CC9755
Lab FileID: A253361.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\VA9819\A253361.D          Vial: 3
Acq On    : 19 Sep 2019  10:59 am                   Operator: krizhkac
Sample    : cc9755-20                               Inst    : MSA
Misc      : MS37678,VA9819,5,,,,1                   Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MA9755.M (RTE Integrator)
Title        : SW-846  8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
Last Update  : Tue Aug 20 13:28:09 2019
Response via : Multiple Level Calibration

Min. RRF     :   0.010  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	81	0.00	8.15
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol	1.062	1.180	-11.1	93	0.00	8.27
4		1,4-dioxane	0.058	0.071	-22.4#	105	0.00	12.17
5	I	pentafluorobenzene	1.000	1.000	0.0	78	0.00	10.52
6	M	chlorodifluoromethane	1.326	1.643	-23.9#	98	-0.02	4.57
7	M	dichlorodifluoromethane	1.299	1.805	-39.0#	108	0.00	4.54
8	M	chloromethane	1.575	2.280	-44.8#	103	0.00	4.98
9	M	vinyl chloride	1.263	1.949	-54.3#	114	-0.02	5.24
10		1,3-butadiene	0.913	1.059	-16.0	92	-0.02	5.26
11	M	bromomethane	0.883	0.936	-6.0	86	-0.02	5.91
12	M	chloroethane	0.769	0.755	1.8	79	0.00	6.10
13		vinyl bromide	0.797	0.786	1.4	77	-0.03	6.47
14	M	trichlorofluoromethane	1.309	1.372	-4.8	82	-0.03	6.61
15	M	ethyl ether	0.340	0.329	3.2	73	0.00	7.00
16	M	acrolein	0.182	0.181	0.5	77	0.00	7.25
17		freon 113	0.577	0.606	-5.0	81	0.00	7.51
18	M	1,1-dichloroethene	0.796	0.570	28.4#	58	-0.04	7.46
19	M	acetone	0.107	0.122	-14.0	91	0.00	7.46
20	M	acetonitrile	0.155	0.148	4.5	76	0.00	7.90
21	M	iodomethane	1.151	1.103	4.2	76	-0.03	7.73
22	M	carbon disulfide	2.562	1.939	24.3#	63	-0.05	7.88
23	M	methylene chloride	0.936	0.679	27.5#	61	-0.03	8.21
24	M	methyl acetate	0.717	0.721	-0.6	81	-0.02	7.95
25	M	methyl tert butyl ether	2.222	2.336	-5.1	82	0.00	8.59
26	M	trans-1,2-dichloroethene	0.627	0.577	8.0	74	0.00	8.63
27		hexane	0.957	0.744	22.3#	61	0.00	9.00
28	M	di-isopropyl ether	2.421	2.218	8.4	71	-0.02	9.21
29	M	ethyl tert-butyl ether	2.244	2.184	2.7	76	0.00	9.70
30	M	2-butanone	0.112	0.110	1.8	75	-0.02	9.89
31	M	1,1-dichloroethane	1.150	1.091	5.1	74	0.00	9.23
32	M	chloroprene	0.936	0.837	10.6	70	0.00	9.34
33	M	acrylonitrile	0.377	0.388	-2.9	79	0.00	8.51
34	M	vinyl acetate	0.139	0.124	10.8	69	0.00	9.15
35	M	ethyl acetate	0.140	0.130	7.1	67	-0.02	9.91
36	M	2,2-dichloropropane	1.075	1.125	-4.7	88	0.00	10.02
37	M	cis-1,2-dichloroethene	0.706	0.655	7.2	74	-0.02	9.97
38		methyl acrylate	0.119	0.105	11.8	66	-0.02	10.00
39	M	propionitrile	0.163	0.149	8.6	69	0.00	9.98
40	M	bromochloromethane	0.321	0.327	-1.9	78	0.00	10.28
41	M	tetrahydrofuran	0.334	0.307	8.1	73	0.00	10.30

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9819-CC9755
Lab FileID: A253361.D

42	M	chloroform	1.103	1.035	6.2	76	0.00	10.37
43		tert-butyl formate	0.558	0.536	3.9	74	-0.02	10.40
44	S	dibromofluoromethane (s)	0.553	0.522	5.6	72	-0.02	10.56
45	M	methacrylonitrile	0.339	0.319	5.9	72	-0.02	10.17
46		cyclohexane	1.250	1.131	9.5	71	0.00	10.76
47	M	1,1,1-trichloroethane	1.032	1.115	-8.0	84	0.00	10.64
48		iso-butyl alcohol	0.120	0.111	7.5	73	0.00	10.76
49		1,1-dichloropropene	0.818	0.700	14.4	66	0.00	10.82
50		carbon tetrachloride	0.873	0.925	-6.0	83	0.00	10.85
51		tert-amyl alcohol	0.099	0.113	-14.1	90	0.00	10.94
52	I	1,4-difluorobenzene	1.000	1.000	0.0	69	-0.02	11.49
53	S	1,2-dichloroethane-d4 (s)	0.370	0.387	-4.6	72	0.00	11.00
54	M	benzene	1.477	1.422	3.7	68	0.00	11.07
55	M	iso-octane	1.474	1.261	14.5	60	0.00	11.17
56		tert-amyl methyl ether	1.309	1.464	-11.8	78	0.00	11.15
57	M	heptane	0.279	0.242	13.3	59	0.00	11.33
58	M	isopropyl acetate	0.099	0.114	-15.2	76	0.00	10.96
59	M	1,2-dichloroethane	0.471	0.486	-3.2	73	0.00	11.09
60		n-butyl alcohol	0.019	0.021	-10.5	80	0.00	11.53
61		ethyl acrylate	0.508	0.550	-8.3	76	0.00	11.79
62	M	trichloroethene	0.345	0.327	5.2	68	0.00	11.82
63	M	2-nitropropane	0.131	0.185	-41.2#	101	-0.02	12.60
64	m	methylcyclohexane	0.776	0.726	6.4	65	0.00	12.14
65	M	2-chloroethyl vinyl ether	0.129	0.208	-61.2#	112	0.00	12.64
66	M	methyl methacrylate	0.101	0.114	-12.9	77	0.00	12.07
67	M	1,2-dichloropropane	0.382	0.366	4.2	66	0.00	12.12
68	M	dibromomethane	0.218	0.220	-0.9	68	0.00	12.23
69	M	bromodichloromethane	0.460	0.466	-1.3	71	-0.02	12.39
70		epichlorohydrin	0.054	0.061	-13.0	80	0.00	12.73
71	M	cis-1,3-dichloropropene	0.535	0.551	-3.0	71	0.00	12.88
72	M	4-methyl-2-pentanone	0.212	0.240	-13.2	75	0.00	12.98
73	M	3-methyl-1-butanol	0.043	0.052	-20.9#	84	0.00	12.98
74	I	chlorobenzene-d5	1.000	1.000	0.0	79	0.00	14.88
75	S	toluene-d8 (s)	1.412	1.361	3.6	75	0.00	13.22
76		toluene	0.998	0.896	10.2	73	0.00	13.30
77		trans-1,3-dichloropropene	0.577	0.563	2.4	79	0.00	13.49
78		ethyl methacrylate	0.566	0.600	-6.0	82	0.00	13.47
79		1,1,2-trichloroethane	0.313	0.298	4.8	77	0.00	13.73
80		2-hexanone	0.251	0.261	-4.0	84	0.00	13.91
81	M	tetrachloroethene	0.372	0.401	-7.8	85	0.00	13.91
82	M	1,3-dichloropropane	0.602	0.584	3.0	78	0.00	13.93
83	M	butyl acetate	0.375	0.372	0.8	79	0.00	13.99
84	M	dibromochloromethane	0.370	0.388	-4.9	83	0.00	14.21
85	M	1,2-dibromoethane	0.393	0.394	-0.3	81	0.00	14.38
86	M	n-butyl ether	1.848	1.804	2.4	77	0.00	14.86
87	M	chlorobenzene	0.977	0.981	-0.4	82	0.00	14.92
88	M	1,1,1,2-tetrachloroethane	0.439	0.487	-10.9	84	0.00	14.99
89	M	ethylbenzene	1.763	1.792	-1.6	82	0.00	14.98
90	M	m,p-xylene	0.676	0.674	0.3	81	0.00	15.12
91	M	o-xylene	0.723	0.752	-4.0	84	0.00	15.57
92	M	styrene	1.075	1.150	-7.0	86	0.00	15.58
93		butyl acrylate	0.968	1.004	-3.7	80	0.00	15.37
94		n-amyl acetate	0.398	0.432	-8.5	84	0.00	15.60
95	M	bromoform	0.251	0.302	-20.3#	97	0.00	15.84
96		isopropylbenzene	2.016	2.045	-1.4	80	0.00	15.96
97		cis-1,4-dichloro-2-butene	0.222	0.233	-5.0	81	0.00	16.00
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	89	0.00	17.50

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9819-CC9755
Lab FileID: A253361.D

99	S	4-bromofluorobenzene (s)	0.959	0.846	11.8	78	0.00	16.19
100	M	bromobenzene	0.793	0.798	-0.6	92	0.00	16.40
101	M	1,1,2,2-tetrachloroethane	1.229	1.193	2.9	86	0.00	16.27
102	M	trans-1,4-dichloro-2-bute	0.270	0.307	-13.7	104	0.00	16.30
103	M	1,2,3-trichloropropane	0.304	0.331	-8.9	91	0.00	16.37
104	M	n-propylbenzene	4.197	3.953	5.8	82	0.00	16.43
105	M	2-chlorotoluene	0.828	0.810	2.2	85	0.00	16.58
106	M	4-chlorotoluene	2.359	2.196	6.9	85	0.00	16.71
107	M	1,3,5-trimethylbenzene	3.180	3.069	3.5	84	0.00	16.60
108	M	tert-butylbenzene	2.856	2.497	12.6	76	0.00	16.99
109	M	1,2,4-trimethylbenzene	3.172	3.015	4.9	84	0.00	17.04
110	M	sec-butylbenzene	4.295	3.957	7.9	80	0.00	17.23
111	M	1,3-dichlorobenzene	1.538	1.533	0.3	91	0.00	17.43
112	M	p-isopropyltoluene	3.544	3.401	4.0	86	0.00	17.38
113	M	1,4-dichlorobenzene	1.577	1.565	0.8	92	0.00	17.53
114	M	1,2-dichlorobenzene	1.647	1.671	-1.5	91	0.00	17.95
115	M	n-butylbenzene	1.848	1.722	6.8	83	0.00	17.83
116	M	1,2-dibromo-3-chloropropa	0.358	0.402	-12.3	98	-0.02	18.79
117	M	1,3,5-trichlorobenzene	1.479	1.496	-1.1	92	0.00	19.01
		----------	True	Calc.	% Drift	----------		
118		2-ethylhexyl acrylate	4.000	3.379	15.5	80	0.00	19.74
		----------	AvgRF	CCRF	% Dev	----------		
119	M	1,2,4-trichlorobenzene	1.411	1.511	-7.1	95	0.00	19.76
120	M	hexachlorobutadiene	0.584	0.533	8.7	84	0.00	19.89
121	M	naphthalene	4.765	5.165	-8.4	96	0.00	20.09
122	M	1,2,3-trichlorobenzene	1.536	1.761	-14.6	103	0.00	20.34
123	M	hexachloroethane	0.563	0.554	1.6	88	0.00	18.28
124		2-methylnaphthalene	2.880	2.761	4.1	86	0.00	21.40
125		ethylenimine		----------NA----------				
126		bis(chloromethyl)ether		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
A251991.D MA9755.M Thu Sep 19 13:44:00 2019 RPT1

6.10.9

6

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Sample: VA9819-ECC9755
Lab FileID: A253383.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\data\da...0-19\va9819\a253383.d Vial: 25
Acq On    : 19 Sep 2019   9:28 pm                    Operator: krizhkac
Sample    : ecc9755-50                               Inst    : MSA
Misc      : MS37727,VA9819,5,,,,1                    Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MA9755.M (RTE Integrator)
Title        : SW-846  8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
Last Update  : Tue Jul 30 12:20:13 2019
Response via : Multiple Level Calibration

Min. RRF     :   0.010  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  50%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Tert Butyl Alcohol-d9	1.000	1.000	0.0	91	0.00	8.14
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol	1.062	1.136	-7.0	97	0.00	8.27
4		1,4-dioxane	0.058	0.073	-25.9	107	-0.01	12.16
5	I	pentafluorobenzene	1.000	1.000	0.0	95	-0.01	10.52
6	M	chlorodifluoromethane	1.326	1.754	-32.3	128	0.00	4.58
7	M	dichlorodifluoromethane	1.299	1.332	-2.5	95	0.00	4.56
8	M	chloromethane	1.575	1.909	-21.2	107	0.00	4.99
9	M	vinyl chloride	1.263	1.786	-41.4	128	-0.02	5.24
10		1,3-butadiene	0.913	1.515	-65.9#	159	0.00	5.27
11	M	bromomethane	0.883	0.843	4.5	96	-0.02	5.92
12	M	chloroethane	0.769	0.679	11.7	86	0.00	6.11
13		vinyl bromide	0.797	0.713	10.5	84	-0.02	6.47
14	M	trichlorofluoromethane	1.309	1.152	12.0	84	-0.02	6.61
15	M	ethyl ether	0.340	0.325	4.4	89	0.00	7.00
16	M	acrolein	0.182	0.138	24.2	72	0.00	7.25
17		freon 113	0.577	0.544	5.7	89	0.00	7.50
18	M	1,1-dichloroethene	0.796	0.573	28.0	73	-0.04	7.46
19	M	acetone	0.107	0.108	-0.9	97	-0.01	7.45
20	M	acetonitrile	0.155	0.129	16.8	80	0.00	7.90
21	M	iodomethane	1.151	1.100	4.4	92	-0.03	7.73
22	M	carbon disulfide	2.562	1.994	22.2	80	-0.04	7.89
23	M	methylene chloride	0.936	0.649	30.7	75	-0.02	8.21
24	M	methyl acetate	0.717	0.657	8.4	94	-0.01	7.95
25	M	methyl tert butyl ether	2.222	2.184	1.7	96	0.00	8.59
26	M	trans-1,2-dichloroethene	0.627	0.564	10.0	93	0.00	8.63
27		hexane	0.957	0.658	31.2	67	0.00	9.00
28	M	di-isopropyl ether	2.421	2.064	14.7	83	-0.01	9.22
29	M	ethyl tert-butyl ether	2.244	2.067	7.9	90	-0.01	9.70
30	M	2-butanone	0.112	0.101	9.8	83	-0.02	9.89
31	M	1,1-dichloroethane	1.150	1.025	10.9	87	0.00	9.23
32	M	chloroprene	0.936	0.817	12.7	86	0.00	9.34
33	M	acrylonitrile	0.377	0.359	4.8	92	0.00	8.51
34	M	vinyl acetate	0.139	0.120	13.7	79	0.00	9.16
35	M	ethyl acetate	0.140	0.115	17.9	77	-0.01	9.91
36	M	2,2-dichloropropane	1.075	1.050	2.3	104	0.00	10.02
37	M	cis-1,2-dichloroethene	0.706	0.637	9.8	93	-0.01	9.97
38		methyl acrylate	0.119	0.106	10.9	83	-0.01	10.00
39	M	propionitrile	0.163	0.137	16.0	80	-0.01	9.97
40	M	bromochloromethane	0.321	0.316	1.6	97	0.00	10.28
41	M	tetrahydrofuran	0.334	0.291	12.9	87	-0.01	10.30

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9819-ECC9755
Lab FileID: A253383.D

42	M	chloroform	1.103	0.981	11.1	93	-0.01	10.37
43		tert-butyl formate	0.558	0.633	-13.4	106	-0.01	10.41
44	S	dibromofluoromethane (s)	0.553	0.510	7.8	90	0.00	10.57
45	M	methacrylonitrile	0.339	0.297	12.4	83	0.00	10.18
46		cyclohexane	1.250	0.979	21.7	77	0.00	10.77
47	M	1,1,1-trichloroethane	1.032	1.042	-1.0	97	0.00	10.65
48		iso-butyl alcohol	0.120	0.102	15.0	81	0.00	10.76
49		1,1-dichloropropene	0.818	0.682	16.6	82	-0.01	10.82
50		carbon tetrachloride	0.873	0.894	-2.4	99	0.00	10.85
51		tert-amyl alcohol	0.099	0.102	-3.0	99	0.00	10.94
52	I	1,4-difluorobenzene	1.000	1.000	0.0	83	-0.01	11.49
53	S	1,2-dichloroethane-d4 (s)	0.370	0.364	1.6	84	-0.01	11.00
54	M	benzene	1.477	1.398	5.3	84	-0.01	11.07
55	M	iso-octane	1.474	1.163	21.1	68	0.00	11.18
56		tert-amyl methyl ether	1.309	1.377	-5.2	92	-0.01	11.15
57	M	heptane	0.279	0.212	24.0	64	0.00	11.33
58	M	isopropyl acetate	0.099	0.106	-7.1	86	0.00	10.97
59	M	1,2-dichloroethane	0.471	0.458	2.8	88	-0.01	11.09
60		n-butyl alcohol	0.019	0.019	0.0	85	-0.01	11.53
61		ethyl acrylate	0.508	0.498	2.0	78	-0.01	11.79
62	M	trichloroethene	0.345	0.320	7.2	82	0.00	11.82
63	M	2-nitropropane	0.131	0.162	-23.7	104	-0.01	12.60
64	m	methylcyclohexane	0.776	0.657	15.3	73	0.00	12.14
65	M	2-chloroethyl vinyl ether	0.129	0.193	-49.6	118	-0.01	12.64
66	M	methyl methacrylate	0.101	0.110	-8.9	88	-0.01	12.07
67	M	1,2-dichloropropane	0.382	0.355	7.1	79	-0.01	12.12
68	M	dibromomethane	0.218	0.208	4.6	80	-0.01	12.23
69	M	bromodichloromethane	0.460	0.442	3.9	82	-0.01	12.39
70		epichlorohydrin	0.054	0.054	0.0	82	0.00	12.73
71	M	cis-1,3-dichloropropene	0.535	0.492	8.0	74	0.00	12.88
72	M	4-methyl-2-pentanone	0.212	0.231	-9.0	88	0.00	12.99
73	M	3-methyl-1-butanol	0.043	0.048	-11.6	93	-0.01	12.98
74	I	chlorobenzene-d5	1.000	1.000	0.0	90	0.00	14.88
75	S	toluene-d8 (s)	1.412	1.327	6.0	83	0.00	13.22
76		toluene	0.998	0.901	9.7	82	0.00	13.29
77		trans-1,3-dichloropropene	0.577	0.514	10.9	80	0.00	13.49
78		ethyl methacrylate	0.566	0.583	-3.0	90	0.00	13.47
79		1,1,2-trichloroethane	0.313	0.283	9.6	81	-0.01	13.73
80		2-hexanone	0.251	0.234	6.8	89	-0.01	13.91
81	M	tetrachloroethene	0.372	0.402	-8.1	97	-0.01	13.91
82	M	1,3-dichloropropane	0.602	0.544	9.6	83	-0.01	13.93
83	M	butyl acetate	0.375	0.335	10.7	83	0.00	13.99
84	M	dibromochloromethane	0.370	0.374	-1.1	89	0.00	14.21
85	M	1,2-dibromoethane	0.393	0.377	4.1	89	0.00	14.38
86	M	n-butyl ether	1.848	1.741	5.8	88	0.00	14.86
87	M	chlorobenzene	0.977	0.958	1.9	90	0.00	14.92
88	M	1,1,1,2-tetrachloroethane	0.439	0.497	-13.2	99	-0.01	14.99
89	M	ethylbenzene	1.763	1.748	0.9	92	0.00	14.98
90	M	m,p-xylene	0.676	0.667	1.3	93	0.00	15.12
91	M	o-xylene	0.723	0.756	-4.6	96	0.00	15.57
92	M	styrene	1.075	1.065	0.9	94	-0.01	15.58
93		butyl acrylate	0.968	0.899	7.1	86	0.00	15.36
94		n-amyl acetate	0.398	0.373	6.3	90	0.00	15.59
95	M	bromoform	0.251	0.283	-12.7	102	0.00	15.85
96		isopropylbenzene	2.016	2.088	-3.6	95	0.00	15.96
97		cis-1,4-dichloro-2-butene	0.222	0.119	46.4	47#	0.00	16.00
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	17.50

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: VA9819-ECC9755
Lab FileID: A253383.D

99	S	4-bromofluorobenzene (s)	0.959	0.866	9.7	86	0.00	16.19
100	M	bromobenzene	0.793	0.790	0.4	98	-0.01	16.40
101	M	1,1,2,2-tetrachloroethane	1.229	1.234	-0.4	97	-0.01	16.27
102	M	trans-1,4-dichloro-2-bute	0.270	0.158	41.5	55	-0.01	16.30
103	M	1,2,3-trichloropropane	0.304	0.319	-4.9	101	-0.01	16.37
104	M	n-propylbenzene	4.197	4.062	3.2	95	0.00	16.43
105	M	2-chlorotoluene	0.828	0.869	-5.0	99	0.00	16.58
106	M	4-chlorotoluene	2.359	2.184	7.4	92	0.00	16.71
107	M	1,3,5-trimethylbenzene	3.180	3.285	-3.3	97	0.00	16.60
108	M	tert-butylbenzene	2.856	2.818	1.3	88	-0.01	16.98
109	M	1,2,4-trimethylbenzene	3.172	3.184	-0.4	99	0.00	17.04
110	M	sec-butylbenzene	4.295	4.317	-0.5	92	0.00	17.24
111	M	1,3-dichlorobenzene	1.538	1.500	2.5	99	0.00	17.43
112	M	p-isopropyltoluene	3.544	3.601	-1.6	97	0.00	17.38
113	M	1,4-dichlorobenzene	1.577	1.520	3.6	99	0.00	17.53
114	M	1,2-dichlorobenzene	1.647	1.663	-1.0	102	0.00	17.95
115	M	n-butylbenzene	1.848	1.710	7.5	92	0.00	17.83
116	M	1,2-dibromo-3-chloropropa	0.358	0.402	-12.3	110	-0.01	18.80
117	M	1,3,5-trichlorobenzene	1.479	1.491	-0.8	104	0.00	19.02
		----------	True	Calc.	% Drift	----------		
118		2-ethylhexyl acrylate	10.000	10.216	-2.2	109	0.00	19.74
		----------	AvgRF	CCRF	% Dev	----------		
119	M	1,2,4-trichlorobenzene	1.411	1.509	-6.9	110	0.00	19.76
120	M	hexachlorobutadiene	0.584	0.553	5.3	93	0.00	19.89
121	M	naphthalene	4.765	5.162	-8.3	110	-0.01	20.09
122	M	1,2,3-trichlorobenzene	1.536	1.623	-5.7	108	0.00	20.34
123	M	hexachloroethane	0.563	0.636	-13.0	102	-0.01	18.28
124		2-methylnaphthalene	2.880	3.394	-17.8	109	0.00	21.41
125		ethylenimine		----------NA----------				
126		bis(chloromethyl)ether		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
A251992.D MA9755.M Fri Sep 20 00:12:23 2019

6.10.10

6

Run Sequence Report

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Run ID: V2V2531 **Method:** SW846 8260C **Instrument ID:** GCMS2V

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2V2531-BFB	2V61590.D	09/18/19 17:11	n/a	BFB Tune
V2V2531-IC2531	2V61591.D	09/18/19 17:51	n/a	Initial cal 0.2
V2V2531-IC2531	2V61592.D	09/18/19 18:16	n/a	Initial cal 0.5
V2V2531-IC2531	2V61593.D	09/18/19 18:42	n/a	Initial cal 1
V2V2531-IC2531	2V61594.D	09/18/19 19:07	n/a	Initial cal 2
V2V2531-IC2531	2V61595.D	09/18/19 19:33	n/a	Initial cal 4
V2V2531-IC2531	2V61596.D	09/18/19 19:59	n/a	Initial cal 8
V2V2531-IC2531	2V61597.D	09/18/19 20:25	n/a	Initial cal 20
V2V2531-ICC2531	2V61598.D	09/18/19 20:50	n/a	Initial cal 50
V2V2531-IC2531	2V61599.D	09/18/19 21:16	n/a	Initial cal 100
V2V2531-IC2531	2V61600.D	09/18/19 21:41	n/a	Initial cal 200
V2V2531-ICV2531	2V61603.D	09/18/19 22:58	n/a	Initial cal verification 50
V2V2531-ICV2531	2V61604.D	09/18/19 23:24	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Run ID: V2V2532 **Method:** SW846 8260C **Instrument ID:** GCMS2V

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2V2532-BFB	2V61607.D	09/19/19 09:00	n/a	BFB Tune
V2V2532-CC2531	2V61607.D	09/19/19 09:00	n/a	Continuing cal 20
V2V2532-BS	2V61608.D	09/19/19 09:31	n/a	Blank Spike
V2V2532-BSD	2V61609.D	09/19/19 09:56	n/a	Blank Spike Duplicate
V2V2532-MB	2V61611.D	09/19/19 10:58	n/a	Method Blank
ZZZZZZ	2V61614.D	09/19/19 12:23	n/a	(unrelated sample)
JC94740-7	2V61615.D	09/19/19 12:48	n/a	(used for QC only; not part of job JC94613)
JC94740-9	2V61616.D	09/19/19 13:14	n/a	(used for QC only; not part of job JC94613)
ZZZZZZ	2V61617.D	09/19/19 13:39	n/a	(unrelated sample)
ZZZZZZ	2V61618.D	09/19/19 14:05	n/a	(unrelated sample)
ZZZZZZ	2V61619.D	09/19/19 14:30	n/a	(unrelated sample)
ZZZZZZ	2V61620.D	09/19/19 14:56	n/a	(unrelated sample)
JC94740-7MS	2V61621.D	09/19/19 15:21	n/a	Matrix Spike
ZZZZZZ	2V61622.D	09/19/19 15:47	n/a	(unrelated sample)
JC94740-9DUP	2V61623.D	09/19/19 16:13	n/a	Duplicate
JC94613-1A	2V61624.D	09/19/19 16:38	n/a	EW-1
JC94613-2A	2V61625.D	09/19/19 17:04	n/a	EW-4
ZZZZZZ	2V61626.D	09/19/19 17:29	n/a	(unrelated sample)
ZZZZZZ	2V61627.D	09/19/19 17:55	n/a	(unrelated sample)
ZZZZZZ	2V61628.D	09/19/19 18:21	n/a	(unrelated sample)
ZZZZZZ	2V61629.D	09/19/19 18:46	n/a	(unrelated sample)
V2V2532-ECC2531	2V61630.D	09/19/19 19:12	n/a	Ending cal 50

Run Sequence Report

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Run ID: VA9755 **Method:** SW846 8260C **Instrument ID:** GCMSA

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VA9755-BFB	A251984.D	07/29/19 17:24	n/a	BFB Tune
VA9755-IC9755	A251985.D	07/29/19 18:10	n/a	Initial cal 0.2
VA9755-IC9755	A251986.D	07/29/19 18:40	n/a	Initial cal 0.5
VA9755-IC9755	A251987.D	07/29/19 19:09	n/a	Initial cal 1
VA9755-IC9755	A251988.D	07/29/19 19:39	n/a	Initial cal 2
VA9755-IC9755	A251989.D	07/29/19 20:08	n/a	Initial cal 4
VA9755-IC9755	A251990.D	07/29/19 20:37	n/a	Initial cal 8
VA9755-IC9755	A251991.D	07/29/19 21:07	n/a	Initial cal 20
VA9755-ICC9755	A251992.D	07/29/19 21:36	n/a	Initial cal 50
VA9755-IC9755	A251993.D	07/29/19 22:06	n/a	Initial cal 100
VA9755-IC9755	A251994.D	07/29/19 22:36	n/a	Initial cal 200
VA9755-ICV9755	A251997.D	07/30/19 00:04	n/a	Initial cal verification 50
VA9755-ICV9755	A251998.D	07/30/19 00:33	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Run ID: VA9819 **Method:** SW846 8260C **Instrument ID:** GCMSA

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VA9819-BFB	A253361.D	09/19/19 10:59	n/a	BFB Tune
VA9819-CC9755	A253361.D	09/19/19 10:59	n/a	Continuing cal 20
VA9819-BS	A253363.D	09/19/19 12:05	n/a	Blank Spike
VA9819-MB	A253365.D	09/19/19 13:01	n/a	Method Blank
ZZZZZZ	A253366.D	09/19/19 13:29	n/a	(unrelated sample)
ZZZZZZ	A253368.D	09/19/19 14:26	n/a	(unrelated sample)
ZZZZZZ	A253369.D	09/19/19 14:54	n/a	(unrelated sample)
JC94790-3	A253370.D	09/19/19 15:22	n/a	(used for QC only; not part of job JC94613)
ZZZZZZ	A253371.D	09/19/19 15:50	n/a	(unrelated sample)
JC94790-3MS	A253372.D	09/19/19 16:18	n/a	Matrix Spike
JC94790-3MSD	A253373.D	09/19/19 16:47	n/a	Matrix Spike Duplicate
JC94613-1A	A253375.D	09/19/19 17:43	n/a	EW-1
JC94613-2A	A253376.D	09/19/19 18:11	n/a	EW-4
ZZZZZZ	A253377.D	09/19/19 18:39	n/a	(unrelated sample)
ZZZZZZ	A253379.D	09/19/19 19:36	n/a	(unrelated sample)
ZZZZZZ	A253380.D	09/19/19 20:04	n/a	(unrelated sample)
ZZZZZZ	A253381.D	09/19/19 20:32	n/a	(unrelated sample)
VA9819-ECC9755	A253383.D	09/19/19 21:28	n/a	Ending cal 50

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : X:\voa-gcms\complete\2019\dayton201909\9-20-2019\kristelv\v2v2532\
Data File : 2v61624.d
Acq On : 19 Sep 2019 4:38 pm
Operator : jessicap
Sample : JC94613-1A Inst : MS2V
Misc : MS37467,V2V2532,5,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:49:29 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.942	65	114114	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	278329	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	392810	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	330148	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	153787	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	130062	51.70	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.40%			
53) 1,2-dichloroethane-d4 (s)	4.399	65	114616	51.51	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.02%			
75) toluene-d8 (s)	5.846	98	415332	49.18	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.36%			
99) 4-bromofluorobenzene (s)	8.179	95	136908	49.57	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.14%			
Target Compounds						Qvalue
6) chlorodifluoromethane	1.584	51	45795	16.81	ug/L	97
15) ethyl ether	2.475	74	8716	7.17	ug/L	94
38) cis-1,2-dichloroethene	3.817	96	1748	0.65	ug/L	90
55) benzene	4.431	78	9807	1.10	ug/L	94
67) methylcyclohexane	5.086	83	1214	0.39	ug/L	87
87) chlorobenzene	7.120	112	5266	0.76	ug/L	92
89) ethylbenzene	7.199	91	16965	1.53	ug/L	96
90) m,p-xylene	7.314	106	50328	11.78	ug/L	94
91) o-xylene	7.666	91	3922	0.46	ug/L	99
96) isopropylbenzene	8.012	105	2638	0.26	ug/L	95
109) 1,2,4-trimethylbenzene	8.940	105	2391	0.29	ug/L	87
113) 1,4-dichlorobenzene	9.322	146	5757	1.05	ug/L	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\voa-gcms\complete\2019\dayton201909\9-20-2019\kristelv\v2v2532\
Data File : 2v61624.d
Acq On : 19 Sep 2019 4:38 pm
Operator : jessicap
Sample : JC94613-1A Inst : MS2V
Misc : MS37467,V2V2532,5,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:49:29 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

M2V2531.M Mon Sep 23 20:18:02 2019 Page: 2

#6
chlorodifluoromethane
Concen: 16.81 ug/L
RT: 1.584 min Scan# 28
Delta R.T. 0.000 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion: 51 Resp: 45795

Ion	Ratio	Lower	Upper
51	100		
67	19.3	0.0	49.2
50	7.7	0.0	41.0

#15
ethyl ether
Concen: 7.17 ug/L
RT: 2.475 min Scan# 198
Delta R.T. 0.000 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion: 74 Resp: 8716

Ion	Ratio	Lower	Upper
74	100		
45	96.3	56.9	116.9
59	123.8	96.6	156.6

#38
cis-1,2-dichloroethene
Concen: 0.65 ug/L
RT: 3.817 min Scan# 454
Delta R.T. 0.000 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion: 96 Resp: 1748

Ion	Ratio	Lower	Upper
96	100		
61	114.2	100.6	160.6
98	63.3	35.4	95.4

#55
benzene
Concen: 1.10 ug/L
RT: 4.431 min Scan# 571
Delta R.T. 0.000 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion: 78 Resp: 9807

Ion	Ratio	Lower	Upper
78	100		
77	26.7	0.0	53.9
52	16.4	0.0	43.7

#67
methylcyclohexane
Concen: 0.39 ug/L
RT: 5.086 min Scan# 696
Delta R.T. 0.000 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion: 83 Resp: 1214

Ion	Ratio	Lower	Upper
83	100		
55	61.7	39.7	99.7
98	34.8	16.4	76.4

#87
chlorobenzene
Concen: 0.76 ug/L
RT: 7.120 min Scan# 1084
Delta R.T. 0.000 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion:112 Resp: 5266

Ion	Ratio	Lower	Upper
112	100		
77	57.2	20.2	80.2
114	29.2	2.3	62.3

#89
ethylbenzene
Concen: 1.53 ug/L
RT: 7.199 min Scan# 1099
Delta R.T. 0.000 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion: 91 Resp: 16965

Ion	Ratio	Lower	Upper
91	100		
106	30.2	2.2	62.2
77	10.8	0.0	38.1

#90
m,p-xylene
Concen: 11.78 ug/L
RT: 7.314 min Scan# 1121
Delta R.T. 0.000 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion:106 Resp: 50328

Ion	Ratio	Lower	Upper
106	100		
91	183.0	162.5	222.5

#91
o-xylene
Concen: 0.46 ug/L
RT: 7.666 min Scan# 1188
Delta R.T. -0.005 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion: 91 Resp: 3922

Ion	Ratio	Lower	Upper
91	100		
106	49.7	19.0	79.0

#96
isopropylbenzene
Concen: 0.26 ug/L
RT: 8.012 min Scan# 1254
Delta R.T. 0.000 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion:105 Resp: 2638

Ion	Ratio	Lower	Upper
105	100		
120	28.5	6.3	46.3
77	11.4	0.0	33.8

#109
1,2,4-trimethylbenzene
Concen: 0.29 ug/L
RT: 8.940 min Scan# 1431
Delta R.T. 0.000 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion:105 Resp: 2391

Ion	Ratio	Lower	Upper
105	100		
120	42.8	18.3	78.3
119	0.0	0.0	43.0

#113
1,4-dichlorobenzene
Concen: 1.05 ug/L
RT: 9.322 min Scan# 1504
Delta R.T. 0.000 min
Lab File: 2v61624.d
Acq: 19 Sep 2019 4:38 pm

Tgt Ion:146 Resp: 5757

Ion	Ratio	Lower	Upper
146	100		
111	42.1	4.7	64.7
148	79.9	35.3	95.3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\9-20-19\va9819\
Data File : a253375.d
Acq On : 19 Sep 2019 5:43 pm
Operator : krizhkac
Sample : jc94613-1a Inst : MSA
Misc : MS37467,VA9819,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Results File: MA9755.RES
Quant Time: Sep 19 23:57:02 2019
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.134	65	382922	500.00	ug/L	-0.02
5) pentafluorobenzene	10.523	168	196358	50.00	ug/L	-0.01
52) 1,4-difluorobenzene	11.490	114	296482	50.00	ug/L	-0.01
74) chlorobenzene-d5	14.883	117	269253	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.502	152	161321	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.565	113	104693	48.17	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.34%			
53) 1,2-dichloroethane-d4 (s)	10.999	65	111591	50.93	ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.86%			
75) toluene-d8 (s)	13.215	98	332023	43.65	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 87.30%			
99) 4-bromofluorobenzene (s)	16.190	95	134517	43.50	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 87.00%			
Target Compounds						Qvalue
15) ethyl ether	6.999	74	8250	6.18	ug/L	84
37) cis-1,2-dichloroethene	9.969	96	1881	0.68	ug/L	89
54) benzene	11.072	78	9176	1.05	ug/L	88
87) chlorobenzene	14.920	112	3422	0.65	ug/L	84
89) ethylbenzene	14.983	91	15413	1.62	ug/L	90
90) m,p-xylene	15.113	106	41518	11.41	ug/L	88
91) o-xylene	15.573	106	2311	0.59	ug/L	99
96) isopropylbenzene	15.960	105	3515	0.32	ug/L	91
113) 1,4-dichlorobenzene	17.534	146	5429	1.07	ug/L	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\9-20-19\va9819\
Data File : a253375.d
Acq On : 19 Sep 2019 5:43 pm
Operator : krizhkac
Sample : jc94613-1a Inst : MSA
Misc : MS37467,VA9819,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Results File: MA9755.RES
Quant Time: Sep 19 23:57:02 2019
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

MA9755.M Mon Sep 23 06:29:25 2019 Page: 2

#15
ethyl ether
Concen: 6.18 ug/L
RT: 6.999 min Scan# 557
Delta R.T. -0.011 min
Lab File: a253375.d
Acq: 19 Sep 2019 5:43 pm

Tgt Ion: 74 Resp: 8250

Ion	Ratio	Lower	Upper
74	100		
45	104.2	89.6	149.6
59	120.8	112.9	172.9

#37
cis-1,2-dichloroethene
Concen: 0.68 ug/L
RT: 9.969 min Scan# 1125
Delta R.T. -0.016 min
Lab File: a253375.d
Acq: 19 Sep 2019 5:43 pm

Tgt Ion: 96 Resp: 1881

Ion	Ratio	Lower	Upper
96	100		
61	121.7	107.6	167.6
98	67.4	33.5	93.5

#54
benzene
Concen: 1.05 ug/L
RT: 11.072 min Scan# 1336
Delta R.T. -0.011 min
Lab File: a253375.d
Acq: 19 Sep 2019 5:43 pm

Tgt Ion: 78 Resp: 9176

Ion	Ratio	Lower	Upper
78	100		
77	17.2	0.0	53.7
52	11.7	0.0	46.2

#87
chlorobenzene
Concen: 0.65 ug/L
RT: 14.920 min Scan# 2072
Delta R.T. -0.006 min
Lab File: a253375.d
Acq: 19 Sep 2019 5:43 pm

Tgt Ion:112 Resp: 3422

Ion	Ratio	Lower	Upper
112	100		
77	75.7	28.3	88.3
114	32.6	1.5	61.5

#89
ethylbenzene
Concen: 1.62 ug/L
RT: 14.983 min Scan# 2084
Delta R.T. -0.006 min
Lab File: a253375.d
Acq: 19 Sep 2019 5:43 pm

Tgt Ion: 91 Resp: 15413

Ion	Ratio	Lower	Upper
91	100		
106	36.6	0.6	60.6
77	11.2	0.0	38.8

#90
m,p-xylene
Concen: 11.41 ug/L
RT: 15.113 min Scan# 2109
Delta R.T. -0.011 min
Lab File: a253375.d
Acq: 19 Sep 2019 5:43 pm

Tgt Ion:106 Resp: 41518

Ion	Ratio	Lower	Upper
106	100		
91	210.6	162.8	222.8

7.1.2

7

#91
o-xylene
Concen: 0.59 ug/L
RT: 15.573 min Scan# 2197
Delta R.T. -0.006 min
Lab File: a253375.d
Acq: 19 Sep 2019 5:43 pm

Tgt Ion:106 Resp: 2311

Ion	Ratio	Lower	Upper
106	100		
91	209.4	181.4	241.4

#96
isopropylbenzene
Concen: 0.32 ug/L
RT: 15.960 min Scan# 2271
Delta R.T. -0.006 min
Lab File: a253375.d
Acq: 19 Sep 2019 5:43 pm

Tgt Ion:105 Resp: 3515

Ion	Ratio	Lower	Upper
105	100		
120	27.9	6.1	46.1
77	8.4	0.0	35.7

7.1.2

7

#113
1,4-dichlorobenzene
Concen: 1.07 ug/L
RT: 17.534 min Scan# 2572
Delta R.T. -0.006 min
Lab File: a253375.d
Acq: 19 Sep 2019 5:43 pm

Tgt Ion:146 Resp: 5429

Ion	Ratio	Lower	Upper
146	100		
111	38.8	10.0	70.0
148	55.8	36.3	96.3

7.1.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092319\v2v2532 reprocess\
Data File : 2v61625.d
Acq On : 19 Sep 2019 5:04 pm
Operator : jessicap
Sample : JC94613-2A Inst : MS2V
Misc : MS37467,V2V2532,5,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 23 01:43:49 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Fri Sep 20 12:27:31 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.936	65	105200	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	283099	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	401143	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	329987	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	148612	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.148	113	131405	51.36	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.72%			
53) 1,2-dichloroethane-d4 (s)	4.394	65	111520	49.08	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.16%			
75) toluene-d8 (s)	5.846	98	420017	49.76	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.52%			
99) 4-bromofluorobenzene (s)	8.179	95	130474	48.89	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.78%			
Target Compounds						Qvalue
6) chlorodifluoromethane	1.584	51	10979	3.96	ug/L	96
15) ethyl ether	2.470	74	3651	2.95	ug/L	96
38) cis-1,2-dichloroethene	3.822	96	687	0.25	ug/L #	71
55) benzene	4.431	78	3127	0.34	ug/L	94
87) chlorobenzene	7.120	112	3929	0.57	ug/L	90
113) 1,4-dichlorobenzene	9.322	146	2405	0.45	ug/L	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092319\v2v2532 reprocess\
Data File : 2v61625.d
Acq On : 19 Sep 2019 5:04 pm
Operator : jessicap
Sample : JC94613-2A Inst : MS2V
Misc : MS37467,V2V2532,5,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 23 01:43:49 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Fri Sep 20 12:27:31 2019
Response via : Initial Calibration

M2V2531.M Mon Sep 23 01:44:23 2019 Page: 2

#6
chlorodifluoromethane
Concen: 3.96 ug/L
RT: 1.584 min Scan# 28
Delta R.T. 0.000 min
Lab File: 2v61625.d
Acq: 19 Sep 2019 5:04 pm

Tgt Ion: 51 Resp: 10979

Ion	Ratio	Lower	Upper
51	100		
67	19.5	0.0	49.2
50	7.4	0.0	41.0

#15
ethyl ether
Concen: 2.95 ug/L
RT: 2.470 min Scan# 197
Delta R.T. -0.005 min
Lab File: 2v61625.d
Acq: 19 Sep 2019 5:04 pm

Tgt Ion: 74 Resp: 3651

Ion	Ratio	Lower	Upper
74	100		
45	88.3	56.9	116.9
59	120.7	96.6	156.6

#38
cis-1,2-dichloroethene
Concen: 0.25 ug/L
RT: 3.822 min Scan# 455
Delta R.T. 0.005 min
Lab File: 2v61625.d
Acq: 19 Sep 2019 5:04 pm

Tgt Ion: 96 Resp: 687

Ion	Ratio	Lower	Upper
96	100		
61	87.3	100.6	160.6#
98	56.1	35.4	95.4

#55
benzene
Concen: 0.34 ug/L
RT: 4.431 min Scan# 571
Delta R.T. 0.000 min
Lab File: 2v61625.d
Acq: 19 Sep 2019 5:04 pm

Tgt Ion: 78 Resp: 3127

Ion	Ratio	Lower	Upper
78	100		
77	26.9	0.0	53.9
52	16.4	0.0	43.7

#87
chlorobenzene
Concen: 0.57 ug/L
RT: 7.120 min Scan# 1084
Delta R.T. 0.000 min
Lab File: 2v61625.d
Acq: 19 Sep 2019 5:04 pm

Tgt Ion:112 Resp: 3929

Ion	Ratio	Lower	Upper
112	100		
77	46.0	20.2	80.2
114	23.2	2.3	62.3

#113
1,4-dichlorobenzene
Concen: 0.45 ug/L
RT: 9.322 min Scan# 1504
Delta R.T. 0.000 min
Lab File: 2v61625.d
Acq: 19 Sep 2019 5:04 pm

Tgt Ion:146 Resp: 2405

Ion	Ratio	Lower	Upper
146	100		
111	44.6	4.7	64.7
148	69.5	35.3	95.3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\9-20-19\va9819\
Data File : a253376.d
Acq On : 19 Sep 2019 6:11 pm
Operator : krizhkac
Sample : jc94613-2a Inst : MSA
Misc : MS37467,VA9819,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Results File: MA9755.RES
Quant Time: Sep 19 23:59:23 2019
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.142	65	369012	500.00	ug/L	0.00
5) pentafluorobenzene	10.526	168	194076	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.488	114	285783	50.00	ug/L	-0.01
74) chlorobenzene-d5	14.886	117	257234	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.505	152	204729	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.563	113	101280	47.15	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.30%			
53) 1,2-dichloroethane-d4 (s)	10.996	65	108687	51.46	ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.92%			
75) toluene-d8 (s)	13.213	98	322676	44.41	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 88.82%			
99) 4-bromofluorobenzene (s)	16.188	95	176219	44.90	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 89.80%			
Target Compounds						Qvalue
15) ethyl ether	7.008	74	3408	2.58	ug/L #	57
54) benzene	11.080	78	3454	0.41	ug/L	87
87) chlorobenzene	14.918	112	2188	0.44	ug/L	90
90) m,p-xylene	15.116	106	1925	0.55	ug/L #	57
113) 1,4-dichlorobenzene	17.537	146	3081	0.48	ug/L	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\9-20-19\va9819\
Data File : a253376.d
Acq On : 19 Sep 2019 6:11 pm
Operator : krizhkac
Sample : jc94613-2a Inst : MSA
Misc : MS37467,VA9819,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Results File: MA9755.RES
Quant Time: Sep 19 23:59:23 2019
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

MA9755.M Mon Sep 23 06:29:35 2019 Page: 2

#15
ethyl ether
Concen: 2.58 ug/L
RT: 7.008 min Scan# 558
Delta R.T. -0.003 min
Lab File: a253376.d
Acq: 19 Sep 2019 6:11 pm

Tgt Ion: 74 Resp: 3408

Ion	Ratio	Lower	Upper
74	100		
45	74.7	89.6	149.6#
59	87.6	112.9	172.9#

#54
benzene
Concen: 0.41 ug/L
RT: 11.080 min Scan# 1337
Delta R.T. -0.003 min
Lab File: a253376.d
Acq: 19 Sep 2019 6:11 pm

Tgt Ion: 78 Resp: 3454

Ion	Ratio	Lower	Upper
78	100		
77	15.2	0.0	53.7
52	13.4	0.0	46.2

#87
chlorobenzene
Concen: 0.44 ug/L
RT: 14.918 min Scan# 2071
Delta R.T. -0.008 min
Lab File: a253376.d
Acq: 19 Sep 2019 6:11 pm

Tgt Ion:112 Resp: 2188

Ion	Ratio	Lower	Upper
112	100		
77	69.0	28.3	88.3
114	30.1	1.5	61.5

#90
m,p-xylene
Concen: 0.55 ug/L
RT: 15.116 min Scan# 2109
Delta R.T. -0.008 min
Lab File: a253376.d
Acq: 19 Sep 2019 6:11 pm

Tgt Ion:106 Resp: 1925

Ion	Ratio	Lower	Upper
106	100		
91	129.2	162.8	222.8#

7.1.4

7

#113
1,4-dichlorobenzene
Concen: 0.48 ug/L
RT: 17.537 min Scan# 2572
Delta R.T. -0.003 min
Lab File: a253376.d
Acq: 19 Sep 2019 6:11 pm

Tgt Ion:146 Resp: 3081

Ion	Ratio	Lower	Upper
146	100		
111	32.6	10.0	70.0
148	59.3	36.3	96.3

7.1.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61611.d
Acq On : 19 Sep 2019 10:58 am
Operator : jessicap
Sample : mb Inst : MS2V
Misc : MS37677,V2V2532,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:06:52 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.936	65	108262	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	288998	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	403434	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	329764	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	151166	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	130064	49.79	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.58%			
53) 1,2-dichloroethane-d4 (s)	4.399	65	115223	50.42	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.84%			
75) toluene-d8 (s)	5.846	98	426481	50.56	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.12%			
99) 4-bromofluorobenzene (s)	8.179	95	135176	49.80	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.60%			
Target Compounds						Qvalue
10) bromomethane	2.045	96	357	0.14	ug/L	87
23) carbon disulfide	2.821	76	908	0.15	ug/L	80
121) 1,2,4-trichlorobenzene	11.246	180	350	0.13	ug/L #	70
123) naphthalene	11.488	128	2381	0.34	ug/L	70
124) 1,2,3-trichlorobenzene	11.697	180	649	0.29	ug/L #	72
126) 2-methylnaphthalene	12.536	142	1697	1.13	ug/L	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61611.d
Acq On : 19 Sep 2019 10:58 am
Operator : jessicap
Sample : mb Inst : MS2V
Misc : MS37677,V2V2532,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:06:52 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

M2V2531.M Fri Sep 20 01:15:05 2019 Page: 2

#10
bromomethane
Concen: 0.14 ug/L
RT: 2.045 min Scan# 116
Delta R.T. 0.005 min
Lab File: 2v61611.d
Acq: 19 Sep 2019 10:58 am

Tgt Ion: 96 Resp: 357

Ion	Ratio	Lower	Upper
96	100		
94	96.9	77.1	137.1
95	0.0	0.0	44.6

#23
carbon disulfide
Concen: 0.15 ug/L
RT: 2.821 min Scan# 264
Delta R.T. 0.005 min
Lab File: 2v61611.d
Acq: 19 Sep 2019 10:58 am

Tgt Ion: 76 Resp: 908

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.1
44	7.3	0.0	44.1

#121
1,2,4-trichlorobenzene
Concen: 0.13 ug/L
RT: 11.246 min Scan# 1871
Delta R.T. 0.010 min
Lab File: 2v61611.d
Acq: 19 Sep 2019 10:58 am

Tgt Ion:180 Resp: 350

Ion	Ratio	Lower	Upper
180	100		
182	72.4	62.7	122.7
184	0.0	1.1	61.1#

#123
naphthalene
Concen: 0.34 ug/L
RT: 11.488 min Scan# 1917
Delta R.T. 0.005 min
Lab File: 2v61611.d
Acq: 19 Sep 2019 10:58 am

Tgt Ion:128 Resp: 2381

Ion	Ratio	Lower	Upper
128	100		
129	0.0	0.0	40.8
127	0.0	0.0	42.3

#124
1,2,3-trichlorobenzene
Concen: 0.29 ug/L
RT: 11.697 min Scan# 1957
Delta R.T. 0.005 min
Lab File: 2v61611.d
Acq: 19 Sep 2019 10:58 am

Tgt Ion:180 Resp: 649

Ion	Ratio	Lower	Upper
180	100		
182	77.6	65.8	125.8
184	0.0	1.7	61.7#

#126
2-methylnaphthalene
Concen: 1.13 ug/L
RT: 12.536 min Scan# 2117
Delta R.T. -0.000 min
Lab File: 2v61611.d
Acq: 19 Sep 2019 10:58 am

Tgt Ion:142 Resp: 1697

Ion	Ratio	Lower	Upper
142	100		
141	70.3	67.8	107.8
115	41.5	13.7	53.7

7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9819\
Data File : A253365.D
Acq On : 19 Sep 2019 1:01 pm
Operator : krizhkac
Sample : mb
Misc : MS37678,VA9819,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 13:46:40 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.144	65	335148	500.00 ug/L	0.00
5) pentafluorobenzene	10.528	168	184954	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.490	114	277660	50.00 ug/L	-0.01
74) chlorobenzene-d5	14.883	117	240089	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.502	152	150764	50.00 ug/L	0.00
System Monitoring Compounds					
44) dibromofluoromethane (s)	10.565	113	96853	47.31 ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.62%		
53) 1,2-dichloroethane-d4 (s)	10.999	65	107214	52.25 ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 104.50%		
75) toluene-d8 (s)	13.215	98	318438	46.95 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.90%		
99) 4-bromofluorobenzene (s)	16.190	95	123588	42.76 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 85.52%		
Target Compounds					Qvalue
22) carbon disulfide	7.888	76	1120	0.12 ug/L	49
59) 1,2-dichloroethane	11.109	62	283	0.11 ug/L #	49
115) n-butylbenzene	17.837	92	600	0.11 ug/L #	75
117) 1,3,5-trichlorobenzene	19.024	180	659	0.15 ug/L #	57
119) 1,2,4-trichlorobenzene	19.771	180	747	0.18 ug/L #	70
121) naphthalene	20.101	128	2464	0.17 ug/L	97
122) 1,2,3-trichlorobenzene	20.336	180	729	0.16 ug/L #	54

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9819\
Data File : A253365.D
Acq On : 19 Sep 2019 1:01 pm
Operator : krizhkac
Sample : mb
Misc : MS37678,VA9819,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 13:46:40 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

MA9755.M Thu Sep 19 13:47:32 2019 RPT1

#22
carbon disulfide
Concen: 0.12 ug/L
RT: 7.888 min Scan# 727
Delta R.T. -0.042 min
Lab File: A253365.D
Acq: 19 Sep 2019 1:01 pm

Tgt Ion: 76 Resp: 1120

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	39.0
44	38.3	0.0	41.0

#59
1,2-dichloroethane
Concen: 0.11 ug/L
RT: 11.109 min Scan# 1343
Delta R.T. 0.005 min
Lab File: A253365.D
Acq: 19 Sep 2019 1:01 pm

Tgt Ion: 62 Resp: 283

Ion	Ratio	Lower	Upper
62	100		
98	0.0	0.0	39.9
64	0.0	3.4	63.4#

7.2.2

7

#115
n-butylbenzene
Concen: 0.11 ug/L
RT: 17.837 min Scan# 2630
Delta R.T. -0.001 min
Lab File: A253365.D
Acq: 19 Sep 2019 1:01 pm

Tgt Ion: 92 Resp: 600

Ion	Ratio	Lower	Upper
92	100		
134	0.0	15.3	75.3#
91	159.9	150.0	210.0

#117
1,3,5-trichlorobenzene
Concen: 0.15 ug/L
RT: 19.024 min Scan# 2857
Delta R.T. -0.001 min
Lab File: A253365.D
Acq: 19 Sep 2019 1:01 pm

Tgt Ion:180 Resp: 659

Ion	Ratio	Lower	Upper
180	100		
182	55.3	62.8	122.8#
145	0.0	0.0	58.7

#119
1,2,4-trichlorobenzene
Concen: 0.18 ug/L
RT: 19.771 min Scan# 3000
Delta R.T. 0.005 min
Lab File: A253365.D
Acq: 19 Sep 2019 1:01 pm

Tgt Ion:180 Resp: 747

Ion	Ratio	Lower	Upper
180	100		
182	76.2	66.9	126.9
184	0.0	0.8	60.8#

#121
naphthalene
Concen: 0.17 ug/L
RT: 20.101 min Scan# 3063
Delta R.T. -0.001 min
Lab File: A253365.D
Acq: 19 Sep 2019 1:01 pm

Tgt Ion:128 Resp: 2464

Ion	Ratio	Lower	Upper
128	100		
129	13.1	0.0	41.0
127	12.9	0.0	43.3

#122
1,2,3-trichlorobenzene
Concen: 0.16 ug/L
RT: 20.336 min Scan# 3108
Delta R.T. -0.011 min
Lab File: A253365.D
Acq: 19 Sep 2019 1:01 pm

Tgt Ion:180 Resp: 729

Ion	Ratio	Lower	Upper
180	100		
182	52.8	66.7	126.7#
184	56.9	0.6	60.6

7.2.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61608.d
Acq On : 19 Sep 2019 9:31 am
Operator : jessicap
Sample : bs Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:02:15 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.942	65	108830	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	291531	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	411307	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	345118	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	163009	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	131686	49.98	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.96%			
53) 1,2-dichloroethane-d4 (s)	4.394	65	115386	49.53	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.06%			
75) toluene-d8 (s)	5.846	98	437263	49.53	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.06%			
99) 4-bromofluorobenzene (s)	8.179	95	144470	49.35	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.70%			
Target Compounds						Qvalue
2) ethanol	2.381	45	161980	5106.32	ug/L	98
3) tertiary butyl alcohol	2.994	59	122735	291.45	ug/L	98
4) 1,4-dioxane	5.133	88	51642	1265.70	ug/L	97
6) chlorodifluoromethane	1.584	51	123412	43.25	ug/L	99
7) dichlorodifluoromethane	1.573	85	157504	42.48	ug/L	99
8) chloromethane	1.715	50	150674	43.61	ug/L	98
9) vinyl chloride	1.804	62	175984	45.12	ug/L	98
10) bromomethane	2.045	96	140037	53.61	ug/L	99
11) chloroethane	2.118	64	94804	47.35	ug/L	99
12) trichlorofluoromethane	2.297	101	244970	54.94	ug/L	99
13) vinyl bromide	2.255	106	108240	53.40	ug/L	97
14) 1,3-butadiene	1.830	54	97316	42.11	ug/L	99
15) ethyl ether	2.475	74	67132	52.69	ug/L	97
16) 2-chloropropane	2.559	43	159229	51.67	ug/L	99
17) acrolein	2.569	56	21217	49.66	ug/L	93
18) freon 113	2.643	151	111410	57.40	ug/L	98
19) 1,1-dichloroethene	2.648	61	175540	53.14	ug/L	99
20) acetone	2.653	58	49400	183.72	ug/L	100
21) acetonitrile	2.842	41	142480	494.09	ug/L	99
22) iodomethane	2.758	142	107709	53.57	ug/L	95
23) carbon disulfide	2.816	76	293384	48.72	ug/L	98
24) methylene chloride	2.968	84	130429	50.99	ug/L	97
25) methyl acetate	2.858	43	100000	49.10	ug/L	98
26) methyl tert butyl ether	3.130	73	368413	53.23	ug/L	98
27) trans-1,2-dichloroethene	3.146	96	130693	51.30	ug/L	96
28) hexane	3.324	56	72114	55.96	ug/L	95
29) di-isopropyl ether	3.434	45	339834	54.42	ug/L	97
30) ethyl tert-butyl ether	3.676	59	351528	56.00	ug/L	98
31) 1,1-dichloroethane	3.434	63	217175	52.75	ug/L	99
32) chloroprene	3.487	53	167635	56.43	ug/L	97
33) acrylonitrile	3.104	53	49317	50.56	ug/L	96
34) vinyl acetate	3.413	86	22822	49.71	ug/L #	87
35) ethyl acetate	3.801	45	19282	47.49	ug/L #	70
36) 2-butanone	3.791	72	69009	206.82	ug/L	93
37) 2,2-dichloropropane	3.828	77	201166	59.23	ug/L	99
38) cis-1,2-dichloroethene	3.817	96	155494	55.47	ug/L	99
39) propionitrile	3.833	54	198267	512.17	ug/L	97
40) methyl acrylate	3.843	85	24055	51.04	ug/L #	86
41) bromochloromethane	3.980	128	79739	56.01	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61608.d
Acq On : 19 Sep 2019 9:31 am
Operator : jessicap
Sample : bs Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:02:15 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42)	tetrahydrofuran	3.995	71	18579	45.14	ug/L	97
43)	chloroform	4.037	83	249110	53.10	ug/L	99
45)	methacrylonitrile	3.943	67	58004	51.01	ug/L	96
46)	1,1,1-trichloroethane	4.179	97	227037	55.93	ug/L	98
47)	cyclohexane	4.237	84	180171	58.90	ug/L	99
48)	1,1-dichloropropene	4.284	75	178445	54.86	ug/L	98
49)	carbon tetrachloride	4.289	119	209469	58.97	ug/L	96
50)	isobutyl alcohol	4.284	42	39751	518.14	ug/L	94
51)	tert-amyl alcohol	4.378	55	33790	243.03	ug/L	89
54)	n-butyl alcohol	4.761	56	239354	2573.02	ug/L	99
55)	benzene	4.431	78	501785	53.87	ug/L	100
56)	tert-amyl methyl ether	4.493	73	375919	55.26	ug/L	99
57)	iso-octane	4.493	57	286621	61.44	ug/L	97
58)	heptane	4.609	57	63259	59.89	ug/L	95
59)	isopropyl acetate	4.404	87	33332	51.14	ug/L	99
60)	1,2-dichloroethane	4.452	62	181184	52.32	ug/L	97
61)	trichloroethene	4.897	95	147035	55.14	ug/L	96
62)	ethyl acrylate	4.913	55	172597	52.20	ug/L	99
63)	2-nitropropane	5.442	41	34454	49.09	ug/L	98
64)	2-chloroethyl vinyl ether	5.479	63	441371	283.74	ug/L	99
65)	methyl methacrylate	5.096	100	42132	53.27	ug/L	97
66)	1,2-dichloropropane	5.091	63	129857	54.27	ug/L	95
67)	methylcyclohexane	5.086	83	193963	59.19	ug/L	99
68)	dibromomethane	5.159	93	99594	52.50	ug/L	96
69)	bromodichloromethane	5.280	83	202867	54.95	ug/L	99
70)	epichlorohydrin	5.526	57	62240	261.55	ug/L	97
71)	cis-1,3-dichloropropene	5.621	75	223734	57.95	ug/L	99
72)	4-methyl-2-pentanone	5.720	58	229516	214.60	ug/L	99
73)	3-methyl-1-butanol	5.741	70	97181	1046.44	ug/L	93
76)	toluene	5.904	92	337627	54.73	ug/L	98
77)	ethyl methacrylate	6.098	69	181318	54.48	ug/L	99
78)	trans-1,3-dichloropropene	6.072	75	203437	58.20	ug/L	100
79)	1,1,2-trichloroethane	6.245	83	110673	52.88	ug/L	96
80)	2-hexanone	6.407	58	229019	210.18	ug/L	97
81)	tetrachloroethene	6.339	164	141821	49.26	ug/L	96
82)	1,3-dichloropropane	6.386	76	202665	53.75	ug/L	98
83)	butyl acetate	6.496	56	92446	55.31	ug/L	97
84)	dibromochloromethane	6.575	129	180940	55.94	ug/L	98
85)	1,2-dibromoethane	6.690	107	165538	54.77	ug/L	93
86)	n-butyl ether	7.178	57	481946	58.03	ug/L	100
87)	chlorobenzene	7.120	112	397949	54.97	ug/L	98
88)	1,1,1,2-tetrachloroethane	7.194	131	160615	56.29	ug/L	98
89)	ethylbenzene	7.199	91	655225	56.54	ug/L	100
90)	m,p-xylene	7.319	106	512559	114.81	ug/L	99
91)	o-xylene	7.671	91	510053	57.11	ug/L	98
92)	styrene	7.686	104	420893	58.25	ug/L	99
93)	butyl acrylate	7.597	56	120187	56.92	ug/L	95
94)	n-amyl acetate	7.802	70	100438	58.60	ug/L	98
95)	bromoform	7.859	173	133262	54.83	ug/L	100
96)	isopropylbenzene	8.012	105	628801	58.83	ug/L	98
97)	cis-1,4-dichloro-2-butene	8.059	88	70148	50.79	ug/L	96
100)	bromobenzene	8.321	156	182540	55.31	ug/L	97
101)	1,1,2,2-tetrachloroethane	8.295	83	184326	51.03	ug/L	96
102)	trans-1,4-dichloro-2-b...	8.331	53	46056	54.30	ug/L	94
103)	1,2,3-trichloropropane	8.352	110	55574	52.36	ug/L	99
104)	n-propylbenzene	8.405	91	701061	57.78	ug/L	99
105)	2-chlorotoluene	8.499	126	158373	56.52	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61608.d
Acq On : 19 Sep 2019 9:31 am
Operator : jessicap
Sample : bs Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:02:15 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
106) 4-chlorotoluene	8.614	126	158984	56.37 ug/L	95
107) 1,3,5-trimethylbenzene	8.578	105	499552	58.13 ug/L	98
108) tert-butylbenzene	8.882	134	113939	57.76 ug/L	98
109) 1,2,4-trimethylbenzene	8.940	105	496265	57.41 ug/L	98
110) sec-butylbenzene	9.102	105	604473	59.67 ug/L	99
111) 1,3-dichlorobenzene	9.223	146	310316	57.16 ug/L	98
112) p-isopropyltoluene	9.249	119	517744	60.94 ug/L	99
113) 1,4-dichlorobenzene	9.322	146	309431	53.35 ug/L	99
114) 1,2-dichlorobenzene	9.674	146	297558	58.05 ug/L	99
115) benzyl chloride	9.427	91	326106	59.52 ug/L	99
116) n-butylbenzene	9.647	92	235626	61.60 ug/L	96
117) hexachloroethane	9.946	201	92503	57.59 ug/L	98
118) 1,2-dibromo-3-chloropr...	10.439	157	43651	51.04 ug/L	93
120) 1,3,5-trichlorobenzene	10.633	180	199294	61.38 ug/L	97
121) 1,2,4-trichlorobenzene	11.236	180	165130	59.05 ug/L	95
122) hexachlorobutadiene	11.378	225	72119	59.92 ug/L	97
123) naphthalene	11.482	128	413337	54.53 ug/L	99
124) 1,2,3-trichlorobenzene	11.692	180	130112	53.10 ug/L	96
125) 2-ethylhexyl acrylate	11.414	70	12528	9.48 ug/L	94
126) 2-methylnaphthalene	12.536	142	30294	18.75 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61608.d
Acq On : 19 Sep 2019 9:31 am
Operator : jessicap
Sample : bs Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:02:15 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61609.d
Acq On : 19 Sep 2019 9:56 am
Operator : jessicap
Sample : bsd Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:03:42 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.942	65	109014	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	297513	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	418381	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	346899	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	157974	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	131328	48.84	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 97.68%						
53) 1,2-dichloroethane-d4 (s)	4.399	65	114360	48.26	ug/L	0.00
Spiked Amount 50.000 Range 81 - 124 Recovery = 96.52%						
75) toluene-d8 (s)	5.846	98	446082	50.27	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 100.54%						
99) 4-bromofluorobenzene (s)	8.179	95	141509	49.88	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 99.76%						
Target Compounds						Qvalue
2) ethanol	2.386	45	170543	5367.19	ug/L	99
3) tertiary butyl alcohol	2.994	59	127222	301.59	ug/L	96
4) 1,4-dioxane	5.133	88	53692	1313.72	ug/L	96
6) chlorodifluoromethane	1.584	51	120905	41.52	ug/L	99
7) dichlorodifluoromethane	1.573	85	154141	40.74	ug/L	98
8) chloromethane	1.715	50	149564	42.42	ug/L	100
9) vinyl chloride	1.804	62	175275	44.04	ug/L	99
10) bromomethane	2.045	96	135178	50.71	ug/L	99
11) chloroethane	2.118	64	90932	44.51	ug/L	98
12) trichlorofluoromethane	2.297	101	238947	52.52	ug/L	96
13) vinyl bromide	2.255	106	110164	53.26	ug/L	98
14) 1,3-butadiene	1.830	54	93078	39.46	ug/L	99
15) ethyl ether	2.475	74	67647	52.03	ug/L	97
16) 2-chloropropane	2.564	43	155268	49.37	ug/L	98
17) acrolein	2.569	56	21253	48.74	ug/L	90
18) freon 113	2.643	151	106673	53.86	ug/L	99
19) 1,1-dichloroethene	2.648	61	171444	50.85	ug/L	98
20) acetone	2.653	58	51476	187.59	ug/L	96
21) acetonitrile	2.842	41	147768	502.12	ug/L	98
22) iodomethane	2.763	142	117164	57.11	ug/L	97
23) carbon disulfide	2.816	76	286920	46.68	ug/L	99
24) methylene chloride	2.968	84	130523	50.00	ug/L	98
25) methyl acetate	2.858	43	104469	50.26	ug/L	97
26) methyl tert butyl ether	3.136	73	372685	52.77	ug/L	99
27) trans-1,2-dichloroethene	3.151	96	130251	50.10	ug/L	91
28) hexane	3.324	56	70439	53.56	ug/L	98
29) di-isopropyl ether	3.434	45	338854	53.18	ug/L	96
30) ethyl tert-butyl ether	3.676	59	350463	54.71	ug/L	99
31) 1,1-dichloroethane	3.440	63	216937	51.64	ug/L	99
32) chloroprene	3.487	53	168132	55.46	ug/L	96
33) acrylonitrile	3.109	53	50684	50.91	ug/L	96
34) vinyl acetate	3.413	86	24145	51.53	ug/L	95
35) ethyl acetate	3.801	45	22446	54.17	ug/L	95
36) 2-butanone	3.791	72	71554	210.13	ug/L	95
37) 2,2-dichloropropane	3.833	77	197356	56.94	ug/L	98
38) cis-1,2-dichloroethene	3.817	96	153119	53.53	ug/L	98
39) propionitrile	3.833	54	207204	524.49	ug/L	98
40) methyl acrylate	3.843	85	25822	53.69	ug/L #	80
41) bromochloromethane	3.985	128	79931	55.02	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61609.d
Acq On : 19 Sep 2019 9:56 am
Operator : jessicap
Sample : bsd Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:03:42 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
42) tetrahydrofuran	3.995	71	20106	47.86 ug/L	98
43) chloroform	4.037	83	245573	51.30 ug/L	97
45) methacrylonitrile	3.943	67	59947	51.66 ug/L	98
46) 1,1,1-trichloroethane	4.179	97	222904	53.81 ug/L	97
47) cyclohexane	4.237	84	175115	56.10 ug/L	99
48) 1,1-dichloropropene	4.284	75	177773	53.56 ug/L	99
49) carbon tetrachloride	4.289	119	205137	56.59 ug/L	100
50) isobutyl alcohol	4.289	42	41259	526.98 ug/L	94
51) tert-amyl alcohol	4.378	55	36561	257.67 ug/L	95
54) n-butyl alcohol	4.761	56	252159	2664.84 ug/L	98
55) benzene	4.431	78	495279	52.27 ug/L	99
56) tert-amyl methyl ether	4.494	73	381884	55.19 ug/L	99
57) iso-octane	4.494	57	278267	58.64 ug/L	99
58) heptane	4.609	57	61600	57.33 ug/L	93
59) isopropyl acetate	4.404	87	33666	50.78 ug/L	98
60) 1,2-dichloroethane	4.452	62	179071	50.84 ug/L	99
61) trichloroethene	4.897	95	145635	53.69 ug/L	96
62) ethyl acrylate	4.918	55	177990	52.93 ug/L	99
63) 2-nitropropane	5.437	41	39335	55.10 ug/L	92
64) 2-chloroethyl vinyl ether	5.479	63	448559	283.49 ug/L	100
65) methyl methacrylate	5.096	100	43292	53.81 ug/L	96
66) 1,2-dichloropropane	5.091	63	130242	53.51 ug/L	95
67) methylcyclohexane	5.086	83	188329	56.50 ug/L	98
68) dibromomethane	5.159	93	101505	52.61 ug/L	93
69) bromodichloromethane	5.280	83	199274	53.06 ug/L	100
70) epichlorohydrin	5.526	57	65904	272.26 ug/L	97
71) cis-1,3-dichloropropene	5.621	75	219172	55.81 ug/L	98
72) 4-methyl-2-pentanone	5.720	58	234280	215.35 ug/L	100
73) 3-methyl-1-butanol	5.741	70	101484	1074.29 ug/L	97
76) toluene	5.904	92	331074	53.39 ug/L	97
77) ethyl methacrylate	6.098	69	183167	54.75 ug/L	99
78) trans-1,3-dichloropropene	6.072	75	203471	57.91 ug/L	98
79) 1,1,2-trichloroethane	6.245	83	111703	53.10 ug/L	99
80) 2-hexanone	6.407	58	236225	215.68 ug/L	100
81) tetrachloroethene	6.339	164	143030	49.42 ug/L	98
82) 1,3-dichloropropane	6.386	76	199929	52.75 ug/L	99
83) butyl acetate	6.496	56	92448	55.03 ug/L	97
84) dibromochloromethane	6.575	129	181166	55.73 ug/L	98
85) 1,2-dibromoethane	6.690	107	163917	53.96 ug/L	92
86) n-butyl ether	7.178	57	478711	57.34 ug/L	100
87) chlorobenzene	7.120	112	396575	54.50 ug/L	99
88) 1,1,1,2-tetrachloroethane	7.194	131	159164	55.49 ug/L	98
89) ethylbenzene	7.199	91	641485	55.07 ug/L	98
90) m,p-xylene	7.320	106	508133	113.24 ug/L	98
91) o-xylene	7.671	91	504858	56.24 ug/L	100
92) styrene	7.687	104	420402	57.88 ug/L	99
93) butyl acrylate	7.597	56	122164	57.56 ug/L	94
94) n-amyl acetate	7.802	70	99246	57.61 ug/L	96
95) bromoform	7.860	173	133412	54.61 ug/L	98
96) isopropylbenzene	8.012	105	619658	57.68 ug/L	99
97) cis-1,4-dichloro-2-butene	8.059	88	71911	51.80 ug/L	96
100) bromobenzene	8.321	156	178687	55.87 ug/L	99
101) 1,1,2,2-tetrachloroethane	8.295	83	187611	53.60 ug/L	99
102) trans-1,4-dichloro-2-b...	8.326	53	46705	56.82 ug/L	96
103) 1,2,3-trichloropropane	8.352	110	57007	55.43 ug/L	94
104) n-propylbenzene	8.405	91	694956	59.10 ug/L	98
105) 2-chlorotoluene	8.499	126	153779	56.63 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61609.d
Acq On : 19 Sep 2019 9:56 am
Operator : jessicap
Sample : bsd Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:03:42 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
106) 4-chlorotoluene	8.615	126	155362	56.84 ug/L	96
107) 1,3,5-trimethylbenzene	8.578	105	489106	58.73 ug/L	98
108) tert-butylbenzene	8.882	134	113017	59.12 ug/L	97
109) 1,2,4-trimethylbenzene	8.940	105	494290	59.00 ug/L	97
110) sec-butylbenzene	9.102	105	587191	59.81 ug/L	100
111) 1,3-dichlorobenzene	9.223	146	308819	58.69 ug/L	99
112) p-isopropyltoluene	9.249	119	512127	62.20 ug/L	99
113) 1,4-dichlorobenzene	9.322	146	310634	55.26 ug/L	98
114) 1,2-dichlorobenzene	9.674	146	290557	58.49 ug/L	99
115) benzyl chloride	9.427	91	328612	61.89 ug/L	98
116) n-butylbenzene	9.647	92	231706	62.50 ug/L	98
117) hexachloroethane	9.946	201	90564	58.18 ug/L	98
118) 1,2-dibromo-3-chloropr...	10.444	157	45809	55.27 ug/L	95
120) 1,3,5-trichlorobenzene	10.633	180	198893	63.21 ug/L	95
121) 1,2,4-trichlorobenzene	11.236	180	163932	60.49 ug/L	98
122) hexachlorobutadiene	11.372	225	70012	60.02 ug/L	97
123) naphthalene	11.482	128	438893	59.75 ug/L	99
124) 1,2,3-trichlorobenzene	11.692	180	135474	57.05 ug/L	99
125) 2-ethylhexyl acrylate	11.414	70	13576	10.49 ug/L	92
126) 2-methylnaphthalene	12.536	142	41256	26.35 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61609.d
Acq On : 19 Sep 2019 9:56 am
Operator : jessicap
Sample : bsd Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:03:42 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9819\
Data File : A253363.D
Acq On : 19 Sep 2019 12:05 pm
Operator : krizhkac
Sample : bs
Misc : MS37678,VA9819,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 13:41:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.140	65	355414	500.00 ug/L	0.00
5) pentafluorobenzene	10.524	168	188000	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.492	114	286438	50.00 ug/L	0.00
74) chlorobenzene-d5	14.885	117	250022	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.504	152	133723	50.00 ug/L	0.00

System Monitoring Compounds					
44) dibromofluoromethane (s)	10.566	113	97709	46.96 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.92%		
53) 1,2-dichloroethane-d4 (s)	11.000	65	111866	52.85 ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 105.70%		
75) toluene-d8 (s)	13.217	98	346373	49.04 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.08%		
99) 4-bromofluorobenzene (s)	16.192	95	116655	45.51 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 91.02%		

Target Compounds					Qvalue
3) tertiary butyl alcohol	8.261	59	208995	276.87 ug/L	85
4) 1,4-dioxane	12.161	88	63483	1529.97 ug/L	94
6) chlorodifluoromethane	4.575	51	314793	63.16 ug/L	98
7) dichlorodifluoromethane	4.533	85	286924	58.73 ug/L	99
8) chloromethane	4.977	50	402937	68.03 ug/L	97
9) vinyl chloride	5.234	62	347009	73.08 ug/L	98
10) 1,3-butadiene	5.265	54	192822	56.19 ug/L	97
11) bromomethane	5.918	94	156831	47.21 ug/L	97
12) chloroethane	6.096	64	127079	43.95 ug/L	97
13) vinyl bromide	6.478	106	136194	45.44 ug/L	98
14) trichlorofluoromethane	6.614	101	244359	49.66 ug/L	99
15) ethyl ether	7.006	74	59148	46.25 ug/L	94
16) acrolein	7.246	56	29749	43.42 ug/L	99
17) freon 113	7.487	151	111983	51.59 ug/L	93
18) 1,1-dichloroethene	7.461	96	103725	34.67 ug/L	99
19) acetone	7.461	58	75345	187.82 ug/L	96
20) acetonitrile	7.900	41	252869	432.56 ug/L	98
21) iodomethane	7.727	142	199981	46.22 ug/L	98
22) carbon disulfide	7.884	76	353432	36.69 ug/L	98
23) methylene chloride	8.208	84	124444	35.36 ug/L	97
24) methyl acetate	7.947	43	131564	48.77 ug/L	99
25) methyl tert butyl ether	8.595	73	419456	50.20 ug/L	98
26) trans-1,2-dichloroethene	8.627	96	106867	45.31 ug/L	94
27) hexane	9.003	57	142108	39.48 ug/L	99
28) di-isopropyl ether	9.217	45	413556	45.44 ug/L	94
29) ethyl tert-butyl ether	9.698	59	405912	48.11 ug/L	98
30) 2-butanone	9.897	72	79571	188.66 ug/L #	81
31) 1,1-dichloroethane	9.228	63	201704	46.66 ug/L	99
32) chloroprene	9.332	53	163026	46.31 ug/L	95
33) acrylonitrile	8.512	53	69243	48.86 ug/L	93
34) vinyl acetate	9.155	86	24318	46.69 ug/L	97
35) ethyl acetate	9.907	45	22311	42.32 ug/L #	78
36) 2,2-dichloropropane	10.012	77	213928	52.95 ug/L	96
37) cis-1,2-dichloroethene	9.975	96	122059	45.96 ug/L	98
38) methyl acrylate	9.991	85	21497	47.96 ug/L	99
39) propionitrile	9.975	54	279588	457.45 ug/L	93
40) bromochloromethane	10.279	128	61284	50.82 ug/L	89
41) tetrahydrofuran	10.300	42	59043	46.95 ug/L	98
42) chloroform	10.368	83	194809	46.96 ug/L	99
43) tert-butyl formate	10.409	59	117503	56.02 ug/L	97
45) methacrylonitrile	10.185	67	59225	46.41 ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9819\
Data File : A253363.D
Acq On : 19 Sep 2019 12:05 pm
Operator : krizhkac
Sample : bs
Misc : MS37678,VA9819,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 13:41:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cyclohexane	10.765	84	208829	44.42	ug/L	97
47) 1,1,1-trichloroethane	10.650	97	211012	54.37	ug/L	95
48) iso-butyl alcohol	10.754	43	215007	475.82	ug/L	92
49) 1,1-dichloropropene	10.817	75	138231	44.96	ug/L	98
50) carbon tetrachloride	10.854	117	180498	54.96	ug/L	99
51) tert-amyl alcohol	10.937	73	104834	281.99	ug/L	93
54) benzene	11.073	78	414634	49.00	ug/L	98
55) iso-octane	11.178	57	399654	47.34	ug/L	98
56) tert-amyl methyl ether	11.152	73	406416	54.19	ug/L	99
57) heptane	11.329	71	74880	46.85	ug/L	98
58) isopropyl acetate	10.969	87	32086	56.33	ug/L	97
59) 1,2-dichloroethane	11.094	62	142835	52.98	ug/L	98
60) n-butyl alcohol	11.533	41	292281	2743.15	ug/L	92
61) ethyl acrylate	11.790	55	153316	52.72	ug/L	99
62) trichloroethene	11.821	95	97825	49.52	ug/L	94
63) 2-nitropropane	12.600	41	53456	71.05	ug/L	83
64) methylcyclohexane	12.140	83	217398	48.90	ug/L	96
65) 2-chloroethyl vinyl ether	12.636	63	291009	393.92	ug/L	97
66) methyl methacrylate	12.067	100	32314	55.98	ug/L	95
67) 1,2-dichloropropane	12.119	63	107281	49.03	ug/L	93
68) dibromomethane	12.234	93	64399	51.65	ug/L	95
69) bromodichloromethane	12.396	83	139510	52.96	ug/L	99
70) epichlorohydrin	12.731	57	86694	279.08	ug/L	100
71) cis-1,3-dichloropropene	12.877	75	157330	51.30	ug/L	95
72) 4-methyl-2-pentanone	12.982	58	281807	232.02	ug/L	96
73) 3-methyl-1-butanol	12.982	55	296861	1207.26	ug/L	99
76) toluene	13.295	92	237587	47.59	ug/L	96
77) trans-1,3-dichloropropene	13.489	75	139201	48.26	ug/L	98
78) ethyl methacrylate	13.473	69	149268	52.72	ug/L	97
79) 1,1,2-trichloroethane	13.734	83	74075	47.37	ug/L	97
80) 2-hexanone	13.907	58	241131	192.09	ug/L	99
81) tetrachloroethene	13.907	166	97743	52.51	ug/L	98
82) 1,3-dichloropropane	13.933	76	142813	47.48	ug/L	98
83) butyl acetate	13.991	56	88061	46.92	ug/L	97
84) dibromochloromethane	14.210	129	100128	54.14	ug/L	99
85) 1,2-dibromoethane	14.383	107	97346	49.57	ug/L	97
86) n-butyl ether	14.858	57	462336	50.03	ug/L	98
87) chlorobenzene	14.921	112	251625	51.51	ug/L	99
88) 1,1,1,2-tetrachloroethane	14.989	131	127933	58.28	ug/L	98
89) ethylbenzene	14.984	91	462901	52.52	ug/L	100
90) m,p-xylene	15.120	106	354386	104.89	ug/L	100
91) o-xylene	15.569	106	198153	54.81	ug/L	97
92) styrene	15.580	104	282048	52.47	ug/L	96
93) butyl acrylate	15.360	55	233522	48.22	ug/L	99
94) n-amyl acetate	15.596	70	94140	47.31	ug/L	94
95) bromoform	15.841	173	75498	60.07	ug/L	98
96) isopropylbenzene	15.961	105	555300	55.09	ug/L	99
97) cis-1,4-dichloro-2-butene	15.998	75	56900	51.27	ug/L	94
100) bromobenzene	16.401	156	110491	52.12	ug/L	95
101) 1,1,2,2-tetrachloroethane	16.270	83	167899	51.08	ug/L	96
102) trans-1,4-dichloro-2-b...	16.307	53	40651	56.34	ug/L	94
103) 1,2,3-trichloropropane	16.369	110	44617	54.95	ug/L	95
104) n-propylbenzene	16.427	91	574748	51.21	ug/L	98
105) 2-chlorotoluene	16.584	126	122589	55.35	ug/L	92
106) 4-chlorotoluene	16.709	91	310916	49.28	ug/L	99
107) 1,3,5-trimethylbenzene	16.605	105	464588	54.62	ug/L	99
108) tert-butylbenzene	16.986	119	392365	51.37	ug/L	100
109) 1,2,4-trimethylbenzene	17.044	105	448403	52.85	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9819\
Data File : A253363.D
Acq On : 19 Sep 2019 12:05 pm
Operator : krizhkac
Sample : bs
Misc : MS37678,VA9819,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 13:41:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) sec-butylbenzene	17.232	105	618288	53.82 ug/L	99
111) 1,3-dichlorobenzene	17.431	146	215121	52.29 ug/L	98
112) p-isopropyltoluene	17.373	119	509299	53.73 ug/L	99
113) 1,4-dichlorobenzene	17.535	146	214413	50.85 ug/L	95
114) 1,2-dichlorobenzene	17.953	146	233741	53.08 ug/L	98
115) n-butylbenzene	17.833	92	246030	49.77 ug/L	99
116) 1,2-dibromo-3-chloropr...	18.800	157	56289	58.86 ug/L	98
117) 1,3,5-trichlorobenzene	19.015	180	210227	53.16 ug/L	98
118) 2-ethylhexyl acrylate	19.736	70	27652	8.95 ug/L	94
119) 1,2,4-trichlorobenzene	19.762	180	207039	54.88 ug/L	99
120) hexachlorobutadiene	19.888	225	79701	51.00 ug/L	98
121) naphthalene	20.092	128	695172	54.55 ug/L	99
122) 1,2,3-trichlorobenzene	20.337	180	222803	54.23 ug/L	96
123) hexachloroethane	18.283	201	90295	59.96 ug/L	98
124) 2-methylnaphthalene	21.404	142	210406	27.32 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.3.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9819\
Data File : A253363.D
Acq On : 19 Sep 2019 12:05 pm
Operator : krizhkac
Sample : bs
Misc : MS37678,VA9819,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 13:41:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61621.d
Acq On : 19 Sep 2019 3:21 pm
Operator : jessicap
Sample : JC94740-7ms Inst : MS2V
Misc : MS37553,V2V2532,5,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:35:21 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.942	65	105060	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	284262	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	407218	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	333912	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	158511	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	131232	51.08	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.16%			
53) 1,2-dichloroethane-d4 (s)	4.394	65	110726	48.00	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 96.00%			
75) toluene-d8 (s)	5.846	98	429969	50.34	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.68%			
99) 4-bromofluorobenzene (s)	8.179	95	139995	49.18	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.36%			
Target Compounds						Qvalue
2) ethanol	2.381	45	151688	4953.47	ug/L	99
3) tertiary butyl alcohol	2.994	59	103259	254.00	ug/L	98
4) 1,4-dioxane	5.133	88	47737	1211.97	ug/L	98
6) chlorodifluoromethane	1.584	51	164507	59.12	ug/L	98
7) dichlorodifluoromethane	1.573	85	216613	59.92	ug/L	99
8) chloromethane	1.715	50	149242	44.30	ug/L	99
9) vinyl chloride	1.804	62	186275	48.98	ug/L	100
10) bromomethane	2.040	96	88722	34.83	ug/L	97
11) chloroethane	2.118	64	91599	46.92	ug/L	99
12) trichlorofluoromethane	2.297	101	251511	57.85	ug/L	97
13) vinyl bromide	2.255	106	102365	51.80	ug/L	99
14) 1,3-butadiene	1.830	54	142238	63.12	ug/L	96
15) ethyl ether	2.475	74	66214	53.30	ug/L	99
16) 2-chloropropane	2.564	43	166176	55.30	ug/L	99
17) acrolein	2.569	56	20565	49.36	ug/L	96
18) freon 113	2.643	151	123224	65.11	ug/L	99
19) 1,1-dichloroethene	2.648	61	188119	58.40	ug/L	98
20) acetone	2.653	58	46969	179.15	ug/L	96
21) acetonitrile	2.842	41	135070	480.37	ug/L	99
22) iodomethane	2.758	142	85784	43.76	ug/L	99
23) carbon disulfide	2.816	76	337975	57.56	ug/L	99
24) methylene chloride	2.968	84	126830	50.85	ug/L	99
25) methyl acetate	2.858	43	96264	48.48	ug/L	99
26) methyl tert butyl ether	3.136	73	349732	51.83	ug/L	99
27) trans-1,2-dichloroethene	3.151	96	132622	53.39	ug/L	94
28) hexane	3.324	56	85772	68.26	ug/L	97
29) di-isopropyl ether	3.434	45	320090	52.57	ug/L	97
30) ethyl tert-butyl ether	3.676	59	323342	52.83	ug/L	98
31) 1,1-dichloroethane	3.440	63	209843	52.27	ug/L	100
32) chloroprene	3.492	53	168342	58.12	ug/L	98
33) acrylonitrile	3.109	53	46059	48.42	ug/L	98
34) vinyl acetate	3.413	86	23141	51.69	ug/L #	91
35) ethyl acetate	3.801	45	18480	46.68	ug/L	89
36) 2-butanone	3.791	72	66016	202.91	ug/L	98
37) 2,2-dichloropropane	3.833	77	199017	60.10	ug/L	97
38) cis-1,2-dichloroethene	3.817	96	146009	53.42	ug/L	99
39) propionitrile	3.833	54	188097	498.32	ug/L	99
40) methyl acrylate	3.849	85	23392	50.91	ug/L #	85
41) bromochloromethane	3.980	128	76162	54.87	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61621.d
Acq On : 19 Sep 2019 3:21 pm
Operator : jessicap
Sample : JC94740-7ms Inst : MS2V
Misc : MS37553,V2V2532,5,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:35:21 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42) tetrahydrofuran	3.995	71	18319	45.64	ug/L	100
43) chloroform	4.037	83	233036	50.95	ug/L	99
45) methacrylonitrile	3.943	67	54163	48.85	ug/L	99
46) 1,1,1-trichloroethane	4.179	97	220827	55.79	ug/L	97
47) cyclohexane	4.237	84	170256	57.08	ug/L	97
48) 1,1-dichloropropene	4.284	75	180054	56.77	ug/L	99
49) carbon tetrachloride	4.289	119	207177	59.82	ug/L	99
50) isobutyl alcohol	4.289	42	37531	501.71	ug/L	95
51) tert-amyl alcohol	4.378	55	31503	232.37	ug/L	88
54) n-butyl alcohol	4.761	56	219230	2380.36	ug/L	98
55) benzene	4.431	78	477708	51.80	ug/L	99
56) tert-amyl methyl ether	4.493	73	349630	51.92	ug/L	97
57) iso-octane	4.493	57	308419	66.78	ug/L	99
58) heptane	4.609	57	72130	68.98	ug/L	90
59) isopropyl acetate	4.404	87	31417	48.68	ug/L	98
60) 1,2-dichloroethane	4.452	62	165993	48.42	ug/L	95
61) trichloroethene	4.897	95	147104	55.72	ug/L	98
62) ethyl acrylate	4.918	55	162307	49.59	ug/L	98
63) 2-nitropropane	5.437	41	33372	48.03	ug/L	93
65) methyl methacrylate	5.096	100	41033	52.40	ug/L	96
66) 1,2-dichloropropane	5.091	63	120653	50.93	ug/L	100
67) methylcyclohexane	5.086	83	204366	62.99	ug/L	100
68) dibromomethane	5.159	93	93129	49.59	ug/L	95
69) bromodichloromethane	5.280	83	183779	50.28	ug/L	100
70) epichlorohydrin	5.526	57	56015	237.75	ug/L	97
71) cis-1,3-dichloropropene	5.621	75	202832	53.06	ug/L	98
72) 4-methyl-2-pentanone	5.720	58	211362	199.61	ug/L	98
73) 3-methyl-1-butanol	5.741	70	88141	958.62	ug/L	98
76) toluene	5.904	92	312482	52.35	ug/L	98
77) ethyl methacrylate	6.098	69	165047	51.25	ug/L	97
78) trans-1,3-dichloropropene	6.072	75	183731	54.32	ug/L	97
79) 1,1,2-trichloroethane	6.245	83	99999	49.39	ug/L	97
80) 2-hexanone	6.412	58	209393	198.62	ug/L	96
81) tetrachloroethene	6.339	164	346808	124.49	ug/L	97
82) 1,3-dichloropropane	6.386	76	184565	50.59	ug/L	98
83) butyl acetate	6.496	56	81537	50.42	ug/L	100
84) dibromochloromethane	6.575	129	163178	52.15	ug/L	99
85) 1,2-dibromoethane	6.690	107	149717	51.20	ug/L	95
86) n-butyl ether	7.178	57	443925	55.24	ug/L	99
87) chlorobenzene	7.120	112	366806	52.37	ug/L	99
88) 1,1,1,2-tetrachloroethane	7.194	131	143737	52.06	ug/L	99
89) ethylbenzene	7.199	91	603004	53.78	ug/L	98
90) m,p-xylene	7.319	106	473728	109.67	ug/L	99
91) o-xylene	7.671	91	457336	52.93	ug/L	100
92) styrene	7.686	104	385769	55.18	ug/L	98
93) butyl acrylate	7.597	56	108409	53.07	ug/L	95
94) n-amyl acetate	7.802	70	88305	53.25	ug/L	96
95) bromoform	7.859	173	118680	50.47	ug/L	98
96) isopropylbenzene	8.012	105	578088	55.90	ug/L	98
97) cis-1,4-dichloro-2-butene	8.059	88	61610	46.10	ug/L	94
100) bromobenzene	8.321	156	165679	51.63	ug/L	99
101) 1,1,2,2-tetrachloroethane	8.295	83	167319	47.64	ug/L	97
102) trans-1,4-dichloro-2-b...	8.331	53	40895	49.58	ug/L	92
103) 1,2,3-trichloropropane	8.352	110	50182	48.62	ug/L	99
104) n-propylbenzene	8.405	91	649728	55.07	ug/L	98
105) 2-chlorotoluene	8.499	126	145635	53.45	ug/L	93
106) 4-chlorotoluene	8.614	126	144156	52.56	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61621.d
Acq On : 19 Sep 2019 3:21 pm
Operator : jessicap
Sample : JC94740-7ms Inst : MS2V
Misc : MS37553,V2V2532,5,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:35:21 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
107) 1,3,5-trimethylbenzene	8.578	105	458537	54.87 ug/L	99
108) tert-butylbenzene	8.882	134	106085	55.31 ug/L	98
109) 1,2,4-trimethylbenzene	8.940	105	451292	53.69 ug/L	97
110) sec-butylbenzene	9.102	105	549713	55.80 ug/L	100
111) 1,3-dichlorobenzene	9.223	146	279166	52.88 ug/L	99
112) p-isopropyltoluene	9.249	119	475765	57.59 ug/L	99
113) 1,4-dichlorobenzene	9.322	146	283706	50.30 ug/L	99
114) 1,2-dichlorobenzene	9.674	146	265568	53.28 ug/L	97
115) benzyl chloride	9.427	91	308324	57.88 ug/L	99
116) n-butylbenzene	9.647	92	214798	57.75 ug/L	98
117) hexachloroethane	9.946	201	82384	52.74 ug/L	99
118) 1,2-dibromo-3-chloropr...	10.444	157	40955	49.24 ug/L	98
120) 1,3,5-trichlorobenzene	10.633	180	177898	56.35 ug/L	95
121) 1,2,4-trichlorobenzene	11.236	180	145785	53.61 ug/L	98
122) hexachlorobutadiene	11.372	225	66568	56.88 ug/L	97
123) naphthalene	11.482	128	381111	51.71 ug/L	98
124) 1,2,3-trichlorobenzene	11.692	180	121459	50.97 ug/L	99
125) 2-ethylhexyl acrylate	11.414	70	10819	8.52 ug/L	93
126) 2-methylnaphthalene	12.536	142	37455	23.84 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61621.d
Acq On : 19 Sep 2019 3:21 pm
Operator : jessicap
Sample : JC94740-7ms Inst : MS2V
Misc : MS37553,V2V2532,5,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:35:21 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : R:\voa-gcms\complete\2019\dayton201909\9-20-2019\davem1\va9819\
Data File : a253372.d
Acq On : 19 Sep 2019 4:18 pm
Operator : krizhkac
Sample : jc94790-3ms
Misc : MS37533,VA9819,5,,,,20
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 16:46:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.151	65	369386	500.00	ug/L	0.00
5) pentafluorobenzene	10.530	168	196071	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.492	114	302668	50.00	ug/L	0.00
74) chlorobenzene-d5	14.885	117	264289	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.504	152	141964	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.566	113	103295	47.60	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.20%			
53) 1,2-dichloroethane-d4 (s)	11.000	65	116435	52.06	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 104.12%			
75) toluene-d8 (s)	13.217	98	349765	46.85	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.70%			
99) 4-bromofluorobenzene (s)	16.192	95	123280	45.30	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 90.60%			

Target Compounds						Qvalue
3) tertiary butyl alcohol	8.266	59	207908	265.01	ug/L #	1
4) 1,4-dioxane	12.161	88	65531	1519.59	ug/L	98
6) chlorodifluoromethane	4.591	51	389842	74.99	ug/L	98
7) dichlorodifluoromethane	4.549	85	410218	80.51	ug/L	99
8) chloromethane	4.988	50	430752	69.73	ug/L	98
9) vinyl chloride	5.260	62	389962	78.74	ug/L	95
10) 1,3-butadiene	5.270	54	359433	100.43	ug/L	97
11) bromomethane	5.924	94	170582	49.24	ug/L	94
12) chloroethane	6.107	64	136837	45.38	ug/L	96
13) vinyl bromide	6.483	106	147691	47.25	ug/L	100
14) trichlorofluoromethane	6.624	101	262542	51.16	ug/L	99
15) ethyl ether	7.006	74	62370	46.76	ug/L	93
16) acrolein	7.246	56	35234	49.31	ug/L #	1
17) freon 113	7.497	151	126090	55.70	ug/L	93
18) 1,1-dichloroethene	7.461	96	120755	38.70	ug/L	100
19) acetone	7.450	58	73595	175.90	ug/L	98
20) acetonitrile	7.905	41	256591	420.86	ug/L	97
21) iodomethane	7.738	142	231618	51.33	ug/L	99
22) carbon disulfide	7.890	76	431041	42.91	ug/L	99
23) methylene chloride	8.214	84	142040	38.70	ug/L	94
24) methyl acetate	7.947	43	135495	48.16	ug/L	99
25) methyl tert butyl ether	8.595	73	478148	54.87	ug/L #	51
26) trans-1,2-dichloroethene	8.627	96	109291	44.43	ug/L	93
27) hexane	8.998	57	203426	54.20	ug/L	99
28) di-isopropyl ether	9.223	45	410671	43.26	ug/L	97
29) ethyl tert-butyl ether	9.698	59	413229	46.96	ug/L	99
30) 2-butanone	9.892	72	76191	173.21	ug/L	92
31) 1,1-dichloroethane	9.228	63	200723	44.52	ug/L	99
32) chloroprene	9.338	53	168895	46.00	ug/L	98
33) acrylonitrile	8.512	53	73689	49.86	ug/L	96
34) vinyl acetate	9.155	86	24370	44.87	ug/L #	93
35) ethyl acetate	9.913	45	23805	43.30	ug/L #	91
36) 2,2-dichloropropane	10.023	77	217209	51.55	ug/L	96
37) cis-1,2-dichloroethene	9.976	96	124128	44.81	ug/L	94
38) methyl acrylate	9.996	85	21700	46.42	ug/L #	87
39) propionitrile	9.976	54	272146	426.94	ug/L	99
40) bromochloromethane	10.279	128	65047	51.72	ug/L	90
41) tetrahydrofuran	10.305	42	57353	43.73	ug/L	98
42) chloroform	10.368	83	192636	44.52	ug/L	98
43) tert-butyl formate	10.415	59	89465	40.90	ug/L	96
45) methacrylonitrile	10.185	67	59005	44.33	ug/L	95
46) cyclohexane	10.775	84	260680	53.16	ug/L	94
47) 1,1,1-trichloroethane	10.655	97	207957	51.38	ug/L	95
48) iso-butyl alcohol	10.760	43	251317	533.28	ug/L	95
49) 1,1-dichloropropene	10.817	75	139711	43.57	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : R:\voa-gcms\complete\2019\dayton201909\9-20-2019\davem1\va9819\
Data File : a253372.d
Acq On : 19 Sep 2019 4:18 pm
Operator : krizhkac
Sample : jc94790-3ms
Misc : MS37533,VA9819,5,,,,20
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 16:46:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) carbon tetrachloride	10.854	117	179576	52.43 ug/L	100
51) tert-amyl alcohol	10.943	73	113503	292.74 ug/L	91
54) benzene	11.073	78	517069	57.82 ug/L	98
55) iso-octane	11.178	57	503175	56.41 ug/L	98
56) tert-amyl methyl ether	11.157	73	409225	51.64 ug/L	96
57) heptane	11.335	71	87646	51.89 ug/L	96
58) isopropyl acetate	10.969	87	31369	52.12 ug/L	98
59) 1,2-dichloroethane	11.094	62	137685	48.34 ug/L	99
60) n-butyl alcohol	11.533	41	281194	2497.58 ug/L	98
61) ethyl acrylate	11.790	55	156428	50.91 ug/L	99
62) trichloroethene	11.821	95	96128	46.06 ug/L	93
63) 2-nitropropane	12.600	41	39915	50.21 ug/L #	78
64) methylcyclohexane	12.140	83	271631	57.82 ug/L	97
65) 2-chloroethyl vinyl ether	12.637	63	68504	87.76 ug/L	98
66) methyl methacrylate	12.072	100	32914	53.96 ug/L #	87
67) 1,2-dichloropropane	12.119	63	105818	45.77 ug/L	94
68) dibromomethane	12.234	93	62806	47.67 ug/L	89
69) bromodichloromethane	12.396	83	133840	48.09 ug/L	99
70) epichlorohydrin	12.731	57	97003	295.52 ug/L	92
71) cis-1,3-dichloropropene	12.882	75	153130	47.25 ug/L	99
72) 4-methyl-2-pentanone	12.987	58	266305	207.50 ug/L	97
73) 3-methyl-1-butanol	12.982	55	285421	1098.50 ug/L	98
76) toluene	13.295	92	490402	92.92 ug/L	95
77) trans-1,3-dichloropropene	13.489	75	135303	44.38 ug/L	98
78) ethyl methacrylate	13.473	69	148511	49.63 ug/L	99
79) 1,1,2-trichloroethane	13.734	83	71040	42.98 ug/L	94
80) 2-hexanone	13.907	58	232079	174.90 ug/L	98
81) tetrachloroethene	13.907	166	96230	48.90 ug/L	99
82) 1,3-dichloropropane	13.933	76	139266	43.80 ug/L	98
83) butyl acetate	13.991	56	88420	44.57 ug/L	99
84) dibromochloromethane	14.210	129	95797	49.00 ug/L	97
85) 1,2-dibromoethane	14.383	107	98495	47.45 ug/L	97
86) n-butyl ether	14.858	57	436394	44.67 ug/L	98
87) chlorobenzene	14.921	112	244425	47.33 ug/L	98
88) 1,1,1,2-tetrachloroethane	14.989	131	121235	52.25 ug/L	99
89) ethylbenzene	14.984	91	1574360	168.98 ug/L	97
90) m,p-xylene	15.115	106	1869029	523.34 ug/L	97
91) o-xylene	15.569	106	736606	192.76 ug/L	95
92) styrene	15.580	104	298706	52.57 ug/L	75
93) butyl acrylate	15.366	55	224868	43.93 ug/L	100
94) n-amyl acetate	15.596	70	91355	43.43 ug/L	97
95) bromoform	15.841	173	71749	54.01 ug/L	97
96) isopropylbenzene	15.962	105	598242	56.15 ug/L	98
97) cis-1,4-dichloro-2-butene	15.993	75	26495	22.59 ug/L	89
100) bromobenzene	16.401	156	109439	48.62 ug/L	90
101) 1,1,2,2-tetrachloroethane	16.270	83	159334	45.66 ug/L	98
102) trans-1,4-dichloro-2-b...	16.307	53	18572	24.24 ug/L	90
103) 1,2,3-trichloropropane	16.369	110	41595	48.26 ug/L	96
104) n-propylbenzene	16.427	91	762608	64.00 ug/L	97
105) 2-chlorotoluene	16.584	126	115641	49.18 ug/L	94
106) 4-chlorotoluene	16.709	91	295981	44.19 ug/L	100
107) 1,3,5-trimethylbenzene	16.605	105	794360	87.97 ug/L	100
108) tert-butylbenzene	16.986	119	384160	47.38 ug/L	99
109) 1,2,4-trimethylbenzene	17.044	105	1674251	185.88 ug/L	96
110) sec-butylbenzene	17.232	105	602439	49.40 ug/L	100
111) 1,3-dichlorobenzene	17.431	146	204353	46.79 ug/L	99
112) p-isopropyltoluene	17.373	119	495597	49.25 ug/L	98
113) 1,4-dichlorobenzene	17.535	146	202572	45.25 ug/L	96
114) 1,2-dichlorobenzene	17.953	146	219069	46.86 ug/L	99
115) n-butylbenzene	17.833	92	245111	46.71 ug/L	99
116) 1,2-dibromo-3-chloropr...	18.800	157	54247	53.43 ug/L	96
117) 1,3,5-trichlorobenzene	19.020	180	204243	48.65 ug/L	96
118) 2-ethylhexyl acrylate	19.736	70	32383	9.78 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : R:\voa-gcms\complete\2019\dayton201909\9-20-2019\davem1\va9819\
Data File : a253372.d
Acq On : 19 Sep 2019 4:18 pm
Operator : krizhkac
Sample : jc94790-3ms
Misc : MS37533,VA9819,5,,,,20
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 16:46:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
119) 1,2,4-trichlorobenzene	19.762	180	197770	49.38 ug/L	99
120) hexachlorobutadiene	19.888	225	80786	48.69 ug/L	99
121) naphthalene	20.092	128	1081179	79.91 ug/L	99
122) 1,2,3-trichlorobenzene	20.337	180	217019	49.76 ug/L	97
123) hexachloroethane	18.283	201	84466	52.84 ug/L	98
124) 2-methylnaphthalene	21.404	142	357290	43.70 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.4.2

7

Quantitation Report (QT Reviewed)

Data Path : R:\voa-gcms\complete\2019\dayton201909\9-20-2019\davem1\va9819\
Data File : a253372.d
Acq On : 19 Sep 2019 4:18 pm
Operator : krizhkac
Sample : jc94790-3ms
Misc : MS37533,VA9819,5,,,,20
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 16:46:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Manual Integrations APPROVED (compounds with "m" flag)
MoHui Huang
09/20/19 14:59

Quantitation Report (QT Reviewed)

Data Path : R:\voa-gcms\complete\2019\dayton201909\9-20-2019\davem1\va9819\
Data File : a253373.d
Acq On : 19 Sep 2019 4:47 pm
Operator : krizhkac
Sample : jc94790-3msd
Misc : MS37533,VA9819,5,,,,20
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 19 23:46:52 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Tert Butyl Alcohol-d9	8.145	65	378979	500.00 ug/L	0.00
5) pentafluorobenzene	10.529	168	205772	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.491	114	321090	50.00 ug/L	-0.01
74) chlorobenzene-d5	14.884	117	290325	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.503	152	150369	50.00 ug/L	0.00
System Monitoring Compounds					
44) dibromofluoromethane (s)	10.565	113	110053	48.32 ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.64%		
53) 1,2-dichloroethane-d4 (s)	10.999	65	119809	50.49 ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.98%		
75) toluene-d8 (s)	13.216	98	364079	44.39 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 88.78%		
99) 4-bromofluorobenzene (s)	16.191	95	130043	45.11 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 90.22%		
Target Compounds					Qvalue
3) tertiary butyl alcohol	8.270	59	214393	266.36 ug/L #	1
4) 1,4-dioxane	12.170	88	66707	1507.71 ug/L	97
6) chlorodifluoromethane	4.590	51	378626	69.40 ug/L	98
7) dichlorodifluoromethane	4.569	85	386936	72.36 ug/L	98
8) chloromethane	4.992	50	489182	75.46 ug/L	99
9) vinyl chloride	5.254	62	422622	81.32 ug/L	98
10) 1,3-butadiene	5.280	54	381578	101.59 ug/L	97
11) bromomethane	5.928	94	177023	48.69 ug/L	98
12) chloroethane	6.111	64	145694	46.04 ug/L	97
13) vinyl bromide	6.477	106	150552	45.89 ug/L	98
14) trichlorofluoromethane	6.623	101	270106	50.15 ug/L	96
15) ethyl ether	7.010	74	66518	47.52 ug/L	89
16) acrolein	7.240	56	36853	49.15 ug/L #	1
17) freon 113	7.502	151	130117	54.77 ug/L	95
18) 1,1-dichloroethene	7.460	96	125490	38.32 ug/L	99
19) acetone	7.460	58	77843	177.28 ug/L	98
20) acetonitrile	7.899	41	249944m	390.63 ug/L	
21) iodomethane	7.732	142	243971	51.52 ug/L	98
22) carbon disulfide	7.894	76	459323	43.57 ug/L	99
23) methylene chloride	8.213	84	150857	39.17 ug/L	94
24) methyl acetate	7.951	43	142023	48.10 ug/L	100
25) methyl tert butyl ether	8.600	73	494141	54.03 ug/L #	51
26) trans-1,2-dichloroethene	8.626	96	118881	46.05 ug/L	93
27) hexane	9.002	57	214371	54.42 ug/L	99
28) di-isopropyl ether	9.222	45	428040	42.97 ug/L	96
29) ethyl tert-butyl ether	9.703	59	429369	46.50 ug/L	99
30) 2-butanone	9.896	72	80808	175.04 ug/L	95
31) 1,1-dichloroethane	9.232	63	213550	45.14 ug/L	98
32) chloroprene	9.337	53	174879	45.39 ug/L	98
33) acrylonitrile	8.516	53	76615	49.40 ug/L	93
34) vinyl acetate	9.154	86	25716	45.11 ug/L #	94
35) ethyl acetate	9.912	45	24862	43.09 ug/L	95
36) 2,2-dichloropropane	10.022	77	221148	50.01 ug/L	98
37) cis-1,2-dichloroethene	9.975	96	131243	45.15 ug/L	97
38) methyl acrylate	10.001	85	23466	47.83 ug/L #	79
39) propionitrile	9.975	54	282806	422.75 ug/L	94
40) bromochloromethane	10.283	128	65391	49.54 ug/L	89
41) tetrahydrofuran	10.304	42	61438	44.63 ug/L	98
42) chloroform	10.372	83	203288	44.77 ug/L	98
43) tert-butyl formate	10.409	59	92682	40.37 ug/L	97
45) methacrylonitrile	10.179	67	61970	44.37 ug/L	98
46) cyclohexane	10.775	84	276531	53.74 ug/L	92
47) 1,1,1-trichloroethane	10.649	97	218876	51.53 ug/L	96
48) iso-butyl alcohol	10.764	43	261368	528.46 ug/L	99
49) 1,1-dichloropropene	10.822	75	147132	43.73 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : R:\voa-gcms\complete\2019\dayton201909\9-20-2019\davem1\va9819\
Data File : a253373.d
Acq On : 19 Sep 2019 4:47 pm
Operator : krizhkac
Sample : jc94790-3msd
Misc : MS37533,VA9819,5,,,,20
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 19 23:46:52 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
50) carbon tetrachloride	10.858	117	186231	51.81 ug/L	99
51) tert-amyl alcohol	10.942	73	118564	291.38 ug/L	95
54) benzene	11.078	78	545343	57.49 ug/L	99
55) iso-octane	11.177	57	521997	55.16 ug/L	98
56) tert-amyl methyl ether	11.156	73	428599	50.98 ug/L	97
57) heptane	11.334	71	90643	50.59 ug/L	94
58) isopropyl acetate	10.968	87	32494	50.89 ug/L	98
59) 1,2-dichloroethane	11.088	62	146893	48.61 ug/L	97
60) n-butyl alcohol	11.533	41	294701	2467.37 ug/L	94
61) ethyl acrylate	11.789	55	162484	49.85 ug/L	99
62) trichloroethene	11.820	95	101479	45.83 ug/L	87
63) 2-nitropropane	12.599	41	40802	48.38 ug/L	78
64) methylcyclohexane	12.144	83	284275	57.04 ug/L	97
65) 2-chloroethyl vinyl ether	12.636	63	58958	71.20 ug/L	98
66) methyl methacrylate	12.071	100	33239	51.37 ug/L	96
67) 1,2-dichloropropane	12.123	63	108523	44.24 ug/L	90
68) dibromomethane	12.233	93	65523	46.88 ug/L	93
69) bromodichloromethane	12.395	83	139751	47.33 ug/L	99
70) epichlorohydrin	12.735	57	97978	281.37 ug/L	92
71) cis-1,3-dichloropropene	12.881	75	159051	46.27 ug/L	97
72) 4-methyl-2-pentanone	12.986	58	278952	204.88 ug/L	97
73) 3-methyl-1-butanol	12.986	55	295415	1071.73 ug/L	98
76) toluene	13.300	92	515379	88.89 ug/L	96
77) trans-1,3-dichloropropene	13.488	75	138855	41.46 ug/L	98
78) ethyl methacrylate	13.472	69	156173	47.51 ug/L	96
79) 1,1,2-trichloroethane	13.734	83	74362	40.95 ug/L	98
80) 2-hexanone	13.906	58	241696	165.82 ug/L	96
81) tetrachloroethene	13.911	166	100147	46.33 ug/L	98
82) 1,3-dichloropropane	13.937	76	141075	40.39 ug/L	100
83) butyl acetate	13.990	56	90241	41.41 ug/L	95
84) dibromochloromethane	14.209	129	101456	47.24 ug/L	97
85) 1,2-dibromoethane	14.382	107	102750	45.06 ug/L	99
86) n-butyl ether	14.858	57	505556	47.11 ug/L	98
87) chlorobenzene	14.920	112	261015	46.01 ug/L	99
88) 1,1,1,2-tetrachloroethane	14.993	131	129878	50.95 ug/L	99
89) ethylbenzene	14.983	91	1665727	162.75 ug/L	97
90) m,p-xylene	15.114	106	1967090	501.40 ug/L	96
91) o-xylene	15.574	106	788854	187.92 ug/L	93
92) styrene	15.579	104	321356	51.48 ug/L	71
93) butyl acrylate	15.365	55	234995	41.79 ug/L	99
94) n-amyl acetate	15.595	70	104371	45.17 ug/L	97
95) bromoform	15.846	173	76320	52.30 ug/L	97
96) isopropylbenzene	15.961	105	633746	54.15 ug/L	99
97) cis-1,4-dichloro-2-butene	15.997	75	23576	18.30 ug/L	86
100) bromobenzene	16.400	156	114488	48.02 ug/L	97
101) 1,1,2,2-tetrachloroethane	16.269	83	172727	46.73 ug/L	98
102) trans-1,4-dichloro-2-b...	16.301	53	20300	25.02 ug/L	91
103) 1,2,3-trichloropropane	16.368	110	44686	48.95 ug/L	96
104) n-propylbenzene	16.426	91	807537	63.99 ug/L	99
105) 2-chlorotoluene	16.583	126	122627	49.24 ug/L	99
106) 4-chlorotoluene	16.708	91	321535	45.32 ug/L	100
107) 1,3,5-trimethylbenzene	16.604	105	848147	88.67 ug/L	100
108) tert-butylbenzene	16.985	119	411174	47.87 ug/L	98
109) 1,2,4-trimethylbenzene	17.043	105	1824018	191.19 ug/L	98
110) sec-butylbenzene	17.231	105	642593	49.75 ug/L	99
111) 1,3-dichlorobenzene	17.430	146	215085	46.49 ug/L	98
112) p-isopropyltoluene	17.377	119	530675	49.79 ug/L	99
113) 1,4-dichlorobenzene	17.534	146	221142	46.64 ug/L	96
114) 1,2-dichlorobenzene	17.953	146	235736	47.60 ug/L	99
115) n-butylbenzene	17.832	92	264407	47.57 ug/L	100
116) 1,2-dibromo-3-chloropr...	18.799	157	57012	53.02 ug/L	98
117) 1,3,5-trichlorobenzene	19.019	180	226312	50.89 ug/L	99
118) 2-ethylhexyl acrylate	19.735	70	42668	11.94 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : R:\voa-gcms\complete\2019\dayton201909\9-20-2019\davem1\va9819\
Data File : a253373.d
Acq On : 19 Sep 2019 4:47 pm
Operator : krizhkac
Sample : jc94790-3msd
Misc : MS37533,VA9819,5,,,,20
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 19 23:46:52 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
119) 1,2,4-trichlorobenzene	19.761	180	238534	56.23 ug/L	99
120) hexachlorobutadiene	19.892	225	96113	54.69 ug/L	99
121) naphthalene	20.096	128	1443361	100.72 ug/L	100
122) 1,2,3-trichlorobenzene	20.342	180	258823	56.03 ug/L	99
123) hexachloroethane	18.282	201	91382	53.97 ug/L	98
124) 2-methylnaphthalene	21.403	142	394724	45.58 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.4.3

7

Quantitation Report (QT Reviewed)

Data Path : R:\voa-gcms\complete\2019\dayton201909\9-20-2019\davem1\va9819\
Data File : a253373.d
Acq On : 19 Sep 2019 4:47 pm
Operator : krizhkac
Sample : jc94790-3msd
Misc : MS37533,VA9819,5,,,,20
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 19 23:46:52 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Manual Integration Approval Summary

Sample Number:	JC94790-3MSD	**Method:**	SW846 8260C
Lab FileID:	A253373.D	**Analyst approved:**	09/20/19 00:15 Dave Moriente
Injection Time:	09/19/19 16:47	**Supervisor approved:**	09/20/19 14:59 MoHui Huang

Parameter	CAS	Sig#	R.T. (min.)	Reason
Acetonitrile	75-05-8		7.90	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\davem1\9-20-19\va9819\
Data File : a253373.d
Acq On : 19 Sep 2019 4:47 pm
Operator : krizhkac
Sample : jc94790-3msd Inst : MSA
Misc : MS37533,VA9819,5,,,,20
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Results File: MA9755.RES
Quant Time: Sep 19 22:11:10 2019
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

TIC: a253373.d\data.ms

(20) acetonitrile (M)

8.019min (+0.110) 791.86ug/L

response 506669

Ion	Exp%	Act%
41.00	100	100
40.00	52.80	15.94#
39.00	18.40	58.62#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\davem1\9-20-19\va9819\
Data File : a253373.d
Acq On : 19 Sep 2019 4:47 pm
Operator : krizhkac
Sample : jc94790-3msd Inst : MSA
Misc : MS37533,VA9819,5,,,,20
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Results File: MA9755.RES
Quant Time: Sep 19 22:11:10 2019
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

TIC: a253373.d\data.ms

(20) acetonitrile (M)

7.899min (-0.010) 390.63ug/L m

response 249944

Ion	Exp%	Act%
41.00	100	100
40.00	52.80	54.81
39.00	18.40	20.71
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61623.d
Acq On : 19 Sep 2019 4:13 pm
Operator : jessicap
Sample : JC94740-9dup Inst : MS2V
Misc : MS37553,V2V2532,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:40:35 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.936	65	105997	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	281429	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	397568	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	321172	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	144988	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.148	113	127868	50.27	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.54%			
53) 1,2-dichloroethane-d4 (s)	4.394	65	106945	47.49	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 94.98%			
75) toluene-d8 (s)	5.846	98	415915	50.63	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.26%			
99) 4-bromofluorobenzene (s)	8.179	95	129116	49.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.18%			
Target Compounds						Qvalue
81) tetrachloroethene	6.339	164	4984	1.86	ug/L	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61623.d
Acq On : 19 Sep 2019 4:13 pm
Operator : jessicap
Sample : JC94740-9dup Inst : MS2V
Misc : MS37553,V2V2532,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:40:35 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

M2V2531.M Fri Sep 20 01:15:45 2019 Page: 2

#81
tetrachloroethene
Concen: 1.86 ug/L
RT: 6.339 min Scan# 935
Delta R.T. -0.005 min
Lab File: 2v61623.d
Acq: 19 Sep 2019 4:13 pm

Tgt Ion:164 Resp: 4984

Ion	Ratio	Lower	Upper
164	100		
166	105.2	94.9	154.9
168	58.4	31.1	91.1
129	80.7	65.2	105.2

7.5.1

7

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\V2V2531\2V61590.D Vial: 4
Acq On : 18 Sep 2019 5:11 pm Operator: jessicap
Sample : bfb Inst : MS2V
Misc : MS37628,V2V2531,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2V2531.M (RTE Integrator)
Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)

AutoFind: Scans 1285, 1286, 1287; Background Corrected with Scan 1276

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.1	13458	PASS
75	95	30	60	46.4	36616	PASS
95	95	100	100	100.0	78925	PASS
96	95	5	9	6.4	5076	PASS
173	174	0.00	2	0.9	701	PASS
174	95	50	120	98.9	78019	PASS
175	174	5	9	7.4	5738	PASS
176	174	95	101	98.5	76840	PASS
177	176	5	9	6.5	5014	PASS

2V61590.D M2V2531.M Thu Sep 19 12:45:02 2019 RPT1

Average of 8.174 to 8.185 min.: 2V61590.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	566	51.00	4255	68.00	7600	79.95	841
37.05	3322	52.00	189	69.00	7644	80.95	3581
38.05	3118	55.00	143	70.05	520	81.85	774
39.05	1227	56.00	1279	72.05	458	86.95	3636
40.00	240	57.00	2147	73.00	3462	87.95	3694
44.00	593	60.00	592	74.05	12835	91.00	384
45.00	764	61.00	3500	75.00	36616	92.05	2071
47.10	820	62.00	3455	76.00	3031	93.00	3383
48.05	465	63.00	2641	76.95	469	94.00	9996
49.00	2886	64.00	293	78.00	265	95.00	78925
50.00	13458	67.00	148	78.95	3665	96.00	5076

Average of 8.174 to 8.185 min.: 2V61590.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.00	72	129.95	375	158.90	65		
103.95	450	134.80	104	172.05	322		
104.80	61	136.90	163	173.05	701		
105.95	435	140.95	909	174.00	78019		
110.80	64	142.95	1041	175.00	5738		
115.90	333	146.00	59	176.00	76840		
116.85	537	147.95	135	176.95	5014		
117.95	211	149.00	59	177.90	79		
118.90	573	149.80	127				
127.85	387	155.00	243				
128.90	60	156.85	162				

SW-846 Method 8260

Data File : C:\msdchem\1\data\kr...019\v2v2532\2v61607.d Vial: 2
Acq On : 19 Sep 2019 9:00 am Operator: jessicap
Sample : bfb Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\METHODS\M2V2531.M (RTE Integrator)
Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)

AutoFind: Scans 1285, 1286, 1287; Background Corrected with Scan 1276

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.3	13103	PASS
75	95	30	60	47.6	38323	PASS
95	95	100	100	100.0	80531	PASS
96	95	5	9	6.8	5447	PASS
173	174	0.00	2	1.2	1008	PASS
174	95	50	120	102.4	82424	PASS
175	174	5	9	7.6	6276	PASS
176	174	95	101	96.4	79493	PASS
177	176	5	9	6.5	5158	PASS

2v61607.d M2V2531.M Thu Sep 19 23:58:33 2019

Average of 8.174 to 8.185 min.: 2v61607.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	696	51.10	4021	69.05	7803	80.90	3497
37.05	3629	52.10	59	70.05	741	81.90	850
38.00	3314	56.05	1334	71.95	495	87.00	3576
39.05	1343	57.10	2281	73.00	3547	88.00	3603
40.00	10	60.00	662	74.00	13051	88.70	119
43.95	463	61.00	3499	75.05	38323	90.95	361
44.95	499	62.00	3538	76.05	3430	92.00	2408
47.00	868	63.05	2614	76.95	481	93.00	3691
48.00	383	64.10	344	78.00	497	94.00	10018
49.05	2919	67.05	174	78.90	3540	95.00	80531
50.05	13103	68.00	7514	79.95	912	96.00	5447

Average of 8.174 to 8.185 min.: 2v61607.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.10	185	127.90	403	173.05	1008		
103.95	435	128.90	59	174.00	82424		
104.80	64	129.95	400	174.95	6276		
105.80	170	134.90	163	176.00	79493		
105.95	335	136.95	197	177.00	5158		
107.00	60	140.90	1010				
115.85	350	142.95	1068				
116.90	614	143.90	68				
117.75	189	147.95	238				
118.00	90	154.85	247				
118.90	537	172.05	150				

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\VA9755\A251984.D Vial: 1
Acq On : 29 Jul 2019 5:24 pm Operator: edwardd
Sample : bfb Inst : MSA
Misc : MS36311,VA9755,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA9755.M (RTE Integrator)
Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um

AutoFind: Scans 2315, 2316, 2317; Background Corrected with Scan 2305

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	13974	PASS
75	95	30	60	46.2	36626	PASS
95	95	100	100	100.0	79333	PASS
96	95	5	9	6.9	5472	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	78.5	62256	PASS
175	174	5	9	7.6	4702	PASS
176	174	95	101	99.6	61994	PASS
177	176	5	9	6.6	4061	PASS

A251984.D MA9755.M Tue Jul 30 12:25:42 2019 RPT1

Average of 16.194 to 16.204 min.: A251984.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	723	49.10	2978	64.05	138	78.15	119
37.15	3460	50.15	13974	68.05	7015	79.00	1272
38.15	2989	51.15	4324	69.05	7266	80.00	375
39.15	1361	52.15	164	70.05	595	81.00	1399
40.05	87	55.10	218	72.05	429	82.05	298
41.15	52	56.05	946	73.05	3212	87.05	3607
44.05	216	57.10	1886	74.10	11867	88.00	3453
45.10	560	60.05	702	75.10	36626	91.00	175
47.10	1176	61.10	3112	76.10	3086	92.05	2029
47.75	90	62.05	3391	77.05	523	93.05	2796
48.10	452	63.10	2347	77.95	270	94.10	8542

Average of 16.194 to 16.204 min.: A251984.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.05	79333	128.10	221	175.95	61994		
96.05	5472	130.00	284	176.95	4061		
96.95	60	134.95	55	207.05	45		
103.95	309	136.95	69				
106.00	238	140.95	622				
107.05	59	142.95	536				
115.15	51	147.90	136				
115.95	75	155.05	137				
116.90	380	156.75	60				
117.90	290	173.95	62256				
119.00	315	175.00	4702				

SW-846 Method 8260

Data File : C:\msdchem\1\DATA\VA9819\A253361.D Vial: 3
Acq On : 19 Sep 2019 10:59 am Operator: krizhkac
Sample : bfb Inst : MSA
Misc : MS37678,VA9819,5,,,,1 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MA9755.M (RTE Integrator)
Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um

AutoFind: Scans 2314, 2315, 2316; Background Corrected with Scan 2304

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	10742	PASS
75	95	30	60	46.2	27573	PASS
95	95	100	100	100.0	59637	PASS
96	95	5	9	6.5	3888	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	86.2	51389	PASS
175	174	5	9	7.7	3977	PASS
176	174	95	101	97.8	50234	PASS
177	176	5	9	7.1	3554	PASS

A253361.D MA9755.M Thu Sep 19 13:42:40 2019 RPT1

Average of 16.186 to 16.197 min.: A253361.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	492	50.10	10742	63.05	1868	76.85	90
37.15	2772	51.10	3131	64.15	162	77.05	241
38.10	2466	51.75	52	67.15	180	77.95	101
39.10	963	52.15	59	68.05	5398	78.10	156
39.95	78	55.15	103	69.05	5786	78.95	1131
43.05	61	56.10	580	70.05	476	80.00	341
44.05	224	57.10	1378	72.10	328	81.00	1126
45.05	444	57.75	50	73.10	2289	81.95	257
47.10	661	60.10	539	74.05	8919	87.00	2584
48.00	418	61.05	2796	75.05	27573	87.95	2459
49.10	2156	62.10	2194	76.10	2425	91.05	108

Average of 16.186 to 16.197 min.: A253361.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.05	1628	127.90	198	177.00	3554		
93.05	2256	129.65	54	206.95	79		
94.10	6502	129.85	55				
95.05	59637	130.05	181				
96.05	3888	141.00	552				
104.00	221	143.00	594				
105.95	205	154.95	60				
115.95	168	172.45	107				
117.00	300	173.95	51389				
117.95	214	175.00	3977				
118.90	283	175.95	50234				

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61591.D
Acq On : 18 Sep 2019 5:51 pm
Operator : jessicap
Sample : ic2531-0.2
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 10:52:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.936	65	115732	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	301597	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	419581	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	338302	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	149759	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	137386	50.09	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.18%			
53) 1,2-dichloroethane-d4 (s)	4.399	65	116240	48.47	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 96.94%			
75) toluene-d8 (s)	5.846	98	438229	51.04	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.08%			
99) 4-bromofluorobenzene (s)	8.179	95	137090	51.90	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.80%			
Target Compounds						Qvalue
9) vinyl chloride	1.804	62	776	0.18	ug/L	74
26) methyl tert butyl ether	3.130	73	1317	0.17	ug/L	67
27) trans-1,2-dichloroethene	3.146	96	613	0.23	ug/L #	37
29) di-isopropyl ether	3.434	45	1325	0.19	ug/L	91
30) ethyl tert-butyl ether	3.670	59	1170	0.17	ug/L	90
31) 1,1-dichloroethane	3.434	63	915	0.21	ug/L	87
32) chloroprene	3.492	53	500	0.15	ug/L #	65
37) 2,2-dichloropropane	3.828	77	562	0.15	ug/L #	46
38) cis-1,2-dichloroethene	3.817	96	510	0.17	ug/L	92
39) propionitrile	3.833	54	789	1.82	ug/L #	41
46) 1,1,1-trichloroethane	4.174	97	822	0.18	ug/L #	1
48) 1,1-dichloropropene	4.278	75	714	0.20	ug/L #	39
55) benzene	4.431	78	1984	0.20	ug/L	91
56) tert-amyl methyl ether	4.493	73	1238	0.17	ug/L #	76
61) trichloroethene	4.892	95	525	0.19	ug/L #	72
71) cis-1,3-dichloropropene	5.626	75	740	0.17	ug/L	90
72) 4-methyl-2-pentanone	5.726	58	696	0.58	ug/L	85
76) toluene	5.904	92	1168	0.19	ug/L	95
78) trans-1,3-dichloropropene	6.077	75	644	0.17	ug/L #	61
81) tetrachloroethene	6.344	164	511	0.15	ug/L #	57
85) 1,2-dibromoethane	6.696	107	518	0.16	ug/L #	54
86) n-butyl ether	7.183	57	1484	0.17	ug/L	84
87) chlorobenzene	7.120	112	1559	0.21	ug/L	74
88) 1,1,1,2-tetrachloroethane	7.199	131	585	0.20	ug/L #	58
89) ethylbenzene	7.199	91	2397	0.20	ug/L	87
90) m,p-xylene	7.319	106	1756	0.38	ug/L	88
91) o-xylene	7.676	91	1751	0.19	ug/L	88
92) styrene	7.692	104	1446	0.18	ug/L	69
96) isopropylbenzene	8.006	105	1929	0.17	ug/L	92
100) bromobenzene	8.321	156	617	0.20	ug/L	96
101) 1,1,2,2-tetrachloroethane	8.295	83	725	0.22	ug/L	67
104) n-propylbenzene	8.410	91	2045	0.17	ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61591.D
Acq On : 18 Sep 2019 5:51 pm
Operator : jessicap
Sample : ic2531-0.2
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 10:52:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
105) 2-chlorotoluene	8.504	126	494	0.18	ug/L	#	56
106) 4-chlorotoluene	8.614	126	458	0.17	ug/L	#	26
107) 1,3,5-trimethylbenzene	8.578	105	1569	0.19	ug/L		91
109) 1,2,4-trimethylbenzene	8.945	105	1767	0.21	ug/L		80
110) sec-butylbenzene	9.102	105	1827	0.18	ug/L		84
111) 1,3-dichlorobenzene	9.228	146	969	0.18	ug/L		94
113) 1,4-dichlorobenzene	9.317	146	1231	0.23	ug/L		69
114) 1,2-dichlorobenzene	9.679	146	787	0.15	ug/L		82
120) 1,3,5-trichlorobenzene	10.638	180	354	0.10	ug/L	#	87
121) 1,2,4-trichlorobenzene	11.236	180	479	0.17	ug/L	#	57

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61591.D
Acq On : 18 Sep 2019 5:51 pm
Operator : jessicap
Sample : ic2531-0.2
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 19 10:52:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61592.D
Acq On : 18 Sep 2019 6:16 pm
Operator : jessicap
Sample : ic2531-0.5
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 23 15:38:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.936	65	115609	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	297086	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	410147	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	334717	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	151093	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	133271	49.32	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 98.64%						
53) 1,2-dichloroethane-d4 (s)	4.399	65	115730	49.37	ug/L	0.00
Spiked Amount 50.000 Range 81 - 124 Recovery = 98.74%						
75) toluene-d8 (s)	5.846	98	433342	51.02	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 102.04%						
99) 4-bromofluorobenzene (s)	8.179	95	135520	50.85	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 101.70%						
Target Compounds						Qvalue
6) chlorodifluoromethane	1.584	51	1589	0.51	ug/L	84
7) dichlorodifluoromethane	1.573	85	1576	0.37	ug/L	96
9) vinyl chloride	1.804	62	2029	0.49	ug/L	75
11) chloroethane	2.113	64	1095	0.53	ug/L	96
12) trichlorofluoromethane	2.291	101	2081	0.43	ug/L	95
13) vinyl bromide	2.255	106	1112	0.51	ug/L	79
14) 1,3-butadiene	1.835	54	1215	0.47	ug/L	87
15) ethyl ether	2.475	74	629	0.44	ug/L	85
16) 2-chloropropane	2.564	43	1647	0.49	ug/L	90
19) 1,1-dichloroethene	2.648	61	1579	0.44	ug/L	88
23) carbon disulfide	2.816	76	3179	0.50	ug/L	92
24) methylene chloride	2.968	84	1323	0.49	ug/L	87
26) methyl tert butyl ether	3.136	73	3432	0.45	ug/L	95
27) trans-1,2-dichloroethene	3.151	96	1450	0.56	ug/L	91
29) di-isopropyl ether	3.434	45	2636	0.39	ug/L	85
30) ethyl tert-butyl ether	3.676	59	3180	0.46	ug/L	95
31) 1,1-dichloroethane	3.440	63	1945	0.45	ug/L	85
32) chloroprene	3.487	53	1593	0.47	ug/L	76
33) acrylonitrile	3.104	53	433	0.42	ug/L #	68
37) 2,2-dichloropropane	3.833	77	1594	0.43	ug/L	76
38) cis-1,2-dichloroethene	3.817	96	1444	0.48	ug/L	97
39) propionitrile	3.838	54	1787	4.19	ug/L	89
41) bromochloromethane	3.985	128	630	0.39	ug/L	81
46) 1,1,1-trichloroethane	4.184	97	2027	0.46	ug/L	94
48) 1,1-dichloropropene	4.294	75	1659	0.47	ug/L #	62
49) carbon tetrachloride	4.294	119	1366	0.34	ug/L	95
55) benzene	4.431	78	4292	0.45	ug/L	89
56) tert-amyl methyl ether	4.488	73	3101	0.42	ug/L	96
60) 1,2-dichloroethane	4.452	62	1851	0.53	ug/L	83
61) trichloroethene	4.897	95	1352	0.49	ug/L	87
66) 1,2-dichloropropane	5.091	63	1113	0.45	ug/L	67
68) dibromomethane	5.159	93	873	0.44	ug/L #	79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61592.D
Acq On : 18 Sep 2019 6:16 pm
Operator : jessicap
Sample : ic2531-0.5
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 23 15:38:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
69) bromodichloromethane	5.280	83	1777	0.46	ug/L		88
71) cis-1,3-dichloropropene	5.621	75	1791	0.43	ug/L		74
72) 4-methyl-2-pentanone	5.726	58	2100	1.80	ug/L	#	77
76) toluene	5.909	92	3256	0.53	ug/L	#	69
77) ethyl methacrylate	6.103	69	1451	0.42	ug/L		84
78) trans-1,3-dichloropropene	6.077	75	1385	0.37	ug/L		96
79) 1,1,2-trichloroethane	6.239	83	959	0.46	ug/L		86
80) 2-hexanone	6.407	58	1851	1.58	ug/L	#	70
81) tetrachloroethene	6.344	164	1349	0.39	ug/L	#	77
82) 1,3-dichloropropane	6.391	76	1677	0.44	ug/L		87
84) dibromochloromethane	6.575	129	1378	0.41	ug/L		94
85) 1,2-dibromoethane	6.690	107	1329	0.42	ug/L		99
86) n-butyl ether	7.178	57	3505	0.40	ug/L		97
87) chlorobenzene	7.115	112	3207	0.44	ug/L		73
88) 1,1,1,2-tetrachloroethane	7.194	131	1343	0.46	ug/L		94
89) ethylbenzene	7.199	91	5356	0.46	ug/L		90
90) m,p-xylene	7.319	106	4096	0.89	ug/L		92
91) o-xylene	7.676	91	3661	0.40	ug/L		94
92) styrene	7.692	104	3091	0.40	ug/L		84
95) bromoform	7.859	173	1148	0.46	ug/L		82
96) isopropylbenzene	8.006	105	4900	0.43	ug/L		95
100) bromobenzene	8.321	156	1479	0.46	ug/L	#	70
101) 1,1,2,2-tetrachloroethane	8.295	83	1530	0.45	ug/L		95
104) n-propylbenzene	8.405	91	5221	0.43	ug/L		93
105) 2-chlorotoluene	8.504	126	1173	0.43	ug/L		77
106) 4-chlorotoluene	8.614	126	1338	0.50	ug/L	#	74
107) 1,3,5-trimethylbenzene	8.578	105	3593	0.42	ug/L		96
109) 1,2,4-trimethylbenzene	8.940	105	3385	0.40	ug/L		95
110) sec-butylbenzene	9.102	105	4524	0.45	ug/L		93
111) 1,3-dichlorobenzene	9.228	146	2162	0.41	ug/L		87
112) p-isopropyltoluene	9.254	119	3299	0.38	ug/L		89
113) 1,4-dichlorobenzene	9.317	146	2637	0.49	ug/L		91
114) 1,2-dichlorobenzene	9.674	146	2079	0.41	ug/L		91
115) benzyl chloride	9.427	91	2273	0.41	ug/L		97
116) n-butylbenzene	9.653	92	1509	0.38	ug/L		84
120) 1,3,5-trichlorobenzene	10.638	180	1261	0.37	ug/L	#	75
121) 1,2,4-trichlorobenzene	11.236	180	991	0.34	ug/L		87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61592.D
Acq On : 18 Sep 2019 6:16 pm
Operator : jessicap
Sample : ic2531-0.5
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 23 15:38:54 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61593.D
Acq On : 18 Sep 2019 6:42 pm
Operator : jessicap
Sample : ic2531-1
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 10:56:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.936	65	111817	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	286135	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	396454	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	321633	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	146030	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	128850	49.51	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 99.02%						
53) 1,2-dichloroethane-d4 (s)	4.399	65	110374	48.71	ug/L	0.00
Spiked Amount 50.000 Range 81 - 124 Recovery = 97.42%						
75) toluene-d8 (s)	5.846	98	413364	50.64	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 101.28%						
99) 4-bromofluorobenzene (s)	8.179	95	132502	51.44	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 102.88%						
Target Compounds						Qvalue
2) ethanol	2.380	45	3479	105.62	ug/L	98
3) tertiary butyl alcohol	2.994	59	2187	4.67	ug/L	93
4) 1,4-dioxane	5.133	88	1170	28.59	ug/L	93
6) chlorodifluoromethane	1.589	51	2905	0.97	ug/L	84
7) dichlorodifluoromethane	1.573	85	3342	0.80	ug/L	90
8) chloromethane	1.720	50	3868	1.13	ug/L	96
9) vinyl chloride	1.804	62	4190	1.05	ug/L	96
10) bromomethane	2.045	96	2745	1.06	ug/L	86
11) chloroethane	2.118	64	2007	1.00	ug/L	95
12) trichlorofluoromethane	2.302	101	4161	0.89	ug/L	96
13) vinyl bromide	2.255	106	1976	0.94	ug/L	87
14) 1,3-butadiene	1.830	54	2284	0.91	ug/L	87
15) ethyl ether	2.470	74	1224	0.89	ug/L	87
16) 2-chloropropane	2.564	43	3023	0.93	ug/L	96
18) freon 113	2.648	151	1456	0.67	ug/L	92
19) 1,1-dichloroethene	2.648	61	3262	0.95	ug/L	96
20) acetone	2.658	58	935	3.34	ug/L	97
23) carbon disulfide	2.821	76	6501	1.07	ug/L	97
24) methylene chloride	2.968	84	2619	1.02	ug/L	90
26) methyl tert butyl ether	3.135	73	7144	0.98	ug/L	88
27) trans-1,2-dichloroethene	3.151	96	2682	1.08	ug/L	98
29) di-isopropyl ether	3.434	45	6097	0.93	ug/L	85
30) ethyl tert-butyl ether	3.681	59	5840	0.87	ug/L	98
31) 1,1-dichloroethane	3.440	63	4364	1.05	ug/L	93
32) chloroprene	3.492	53	2782	0.86	ug/L	94
33) acrylonitrile	3.115	53	962	0.96	ug/L #	77
36) 2-butanone	3.791	72	1107	2.97	ug/L #	81
37) 2,2-dichloropropane	3.828	77	3694	1.02	ug/L	99
38) cis-1,2-dichloroethene	3.822	96	3093	1.08	ug/L	80
39) propionitrile	3.833	54	3549	8.64	ug/L	93
41) bromochloromethane	3.985	128	1296	0.83	ug/L #	69
43) chloroform	4.037	83	4872	1.04	ug/L	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61593.D
Acq On : 18 Sep 2019 6:42 pm
Operator : jessicap
Sample : ic2531-1
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 10:56:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) methacrylonitrile	3.948	67	1019	0.87	ug/L		83
46) 1,1,1-trichloroethane	4.174	97	4114	0.97	ug/L	#	44
47) cyclohexane	4.242	84	2417	0.74	ug/L	#	87
48) 1,1-dichloropropene	4.284	75	3296	0.97	ug/L		91
49) carbon tetrachloride	4.289	119	3311	0.86	ug/L		96
54) n-butyl alcohol	4.766	56	3878	39.01	ug/L		88
55) benzene	4.431	78	9255	1.00	ug/L		97
56) tert-amyl methyl ether	4.493	73	6642	0.94	ug/L		92
57) iso-octane	4.499	57	3761	0.73	ug/L		91
60) 1,2-dichloroethane	4.451	62	3482	1.03	ug/L		89
61) trichloroethene	4.902	95	2572	0.96	ug/L		81
62) ethyl acrylate	4.923	55	2942	0.86	ug/L		74
66) 1,2-dichloropropane	5.091	63	2139	0.89	ug/L		98
68) dibromomethane	5.165	93	1837	0.95	ug/L		89
69) bromodichloromethane	5.285	83	3531	0.95	ug/L		99
71) cis-1,3-dichloropropene	5.621	75	3517	0.87	ug/L		89
72) 4-methyl-2-pentanone	5.720	58	3998	3.55	ug/L		98
76) toluene	5.904	92	5714	0.97	ug/L	#	78
77) ethyl methacrylate	6.098	69	3159	0.94	ug/L		96
78) trans-1,3-dichloropropene	6.072	75	3097	0.86	ug/L		89
79) 1,1,2-trichloroethane	6.239	83	2104	1.04	ug/L	#	69
80) 2-hexanone	6.412	58	3800	3.37	ug/L	#	83
81) tetrachloroethene	6.339	164	2664	0.81	ug/L		92
82) 1,3-dichloropropane	6.391	76	3484	0.95	ug/L		82
83) butyl acetate	6.496	56	1467	0.87	ug/L		84
84) dibromochloromethane	6.575	129	3049	0.94	ug/L		74
85) 1,2-dibromoethane	6.696	107	2947	0.97	ug/L		93
86) n-butyl ether	7.178	57	7853	0.93	ug/L		99
87) chlorobenzene	7.120	112	7145	1.03	ug/L		97
88) 1,1,1,2-tetrachloroethane	7.199	131	2376	0.86	ug/L		95
89) ethylbenzene	7.199	91	10355	0.92	ug/L		96
90) m,p-xylene	7.314	106	7974	1.80	ug/L		90
91) o-xylene	7.676	91	8609	0.98	ug/L		95
92) styrene	7.692	104	6060	0.81	ug/L		93
93) butyl acrylate	7.597	56	1562	0.71	ug/L	#	75
94) n-amyl acetate	7.802	70	1152	0.64	ug/L	#	68
95) bromoform	7.859	173	2334	0.97	ug/L		95
96) isopropylbenzene	8.012	105	9883	0.91	ug/L		89
100) bromobenzene	8.321	156	3091	1.00	ug/L		86
101) 1,1,2,2-tetrachloroethane	8.300	83	3209	0.99	ug/L		88
103) 1,2,3-trichloropropane	8.358	110	889	0.88	ug/L		80
104) n-propylbenzene	8.405	91	10488	0.90	ug/L		96
105) 2-chlorotoluene	8.504	126	2663	1.02	ug/L		74
106) 4-chlorotoluene	8.620	126	2700	1.04	ug/L		96
107) 1,3,5-trimethylbenzene	8.578	105	7559	0.92	ug/L		88
108) tert-butylbenzene	8.887	134	1417	0.77	ug/L	#	80
109) 1,2,4-trimethylbenzene	8.945	105	7380	0.89	ug/L		79
110) sec-butylbenzene	9.102	105	8878	0.90	ug/L		94
111) 1,3-dichlorobenzene	9.223	146	5079	0.99	ug/L		97
112) p-isopropyltoluene	9.249	119	7122	0.84	ug/L		90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61593.D
Acq On : 18 Sep 2019 6:42 pm
Operator : jessicap
Sample : ic2531-1
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 10:56:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
113) 1,4-dichlorobenzene	9.317	146	5154	0.99	ug/L	82
114) 1,2-dichlorobenzene	9.679	146	4479	0.90	ug/L	89
115) benzyl chloride	9.432	91	4471	0.84	ug/L	97
116) n-butylbenzene	9.647	92	3406	0.89	ug/L #	79
117) hexachloroethane	9.941	201	1208	0.80	ug/L	94
118) 1,2-dibromo-3-chloropr...	10.444	157	594	0.72	ug/L	81
120) 1,3,5-trichlorobenzene	10.633	180	3009	0.91	ug/L	96
121) 1,2,4-trichlorobenzene	11.236	180	2421	0.87	ug/L	94
122) hexachlorobutadiene	11.378	225	1057	0.91	ug/L	88
123) naphthalene	11.482	128	5745	0.76	ug/L	95
124) 1,2,3-trichlorobenzene	11.703	180	1949	0.82	ug/L #	64

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61593.D
Acq On : 18 Sep 2019 6:42 pm
Operator : jessicap
Sample : ic2531-1
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 19 10:56:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61594.D
Acq On : 18 Sep 2019 7:07 pm
Operator : jessicap
Sample : ic2531-2
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 10:58:17 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.936	65	109535	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	293695	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	408480	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	330577	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	147917	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	133002	49.79	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 99.58%						
53) 1,2-dichloroethane-d4 (s)	4.394	65	112633	48.24	ug/L	0.00
Spiked Amount 50.000 Range 81 - 124 Recovery = 96.48%						
75) toluene-d8 (s)	5.846	98	427529	50.96	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 101.92%						
99) 4-bromofluorobenzene (s)	8.179	95	133931	51.34	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 102.68%						
Target Compounds						Qvalue
2) ethanol	2.381	45	6528	202.32	ug/L	84
3) tertiary butyl alcohol	2.989	59	4134	9.01	ug/L	94
4) 1,4-dioxane	5.138	88	2107	52.55	ug/L	80
6) chlorodifluoromethane	1.584	51	5776	1.89	ug/L	97
7) dichlorodifluoromethane	1.573	85	7716	1.81	ug/L	92
8) chloromethane	1.715	50	7417	2.11	ug/L	90
9) vinyl chloride	1.804	62	8244	2.01	ug/L	96
10) bromomethane	2.045	96	5075	1.91	ug/L	92
11) chloroethane	2.118	64	4032	1.96	ug/L	97
12) trichlorofluoromethane	2.302	101	9211	1.91	ug/L	93
13) vinyl bromide	2.255	106	3902	1.80	ug/L	94
14) 1,3-butadiene	1.830	54	4643	1.81	ug/L	95
15) ethyl ether	2.475	74	2201	1.55	ug/L	85
16) 2-chloropropane	2.559	43	6160	1.84	ug/L	88
18) freon 113	2.643	151	3411	1.53	ug/L #	85
19) 1,1-dichloroethene	2.648	61	6776	1.92	ug/L	91
20) acetone	2.653	58	2327	8.09	ug/L	91
22) iodomethane	2.763	142	2509	0.91	ug/L	87
23) carbon disulfide	2.816	76	12291	1.97	ug/L	99
24) methylene chloride	2.968	84	5333	2.02	ug/L	91
25) methyl acetate	2.858	43	3927	1.82	ug/L	90
26) methyl tert butyl ether	3.136	73	13097	1.74	ug/L	94
27) trans-1,2-dichloroethene	3.146	96	4765	1.87	ug/L	82
28) hexane	3.324	56	2473	1.69	ug/L #	73
29) di-isopropyl ether	3.434	45	12638	1.88	ug/L	97
30) ethyl tert-butyl ether	3.676	59	12132	1.76	ug/L	91
31) 1,1-dichloroethane	3.440	63	8132	1.91	ug/L	93
32) chloroprene	3.487	53	5740	1.73	ug/L	87
33) acrylonitrile	3.104	53	2035	1.98	ug/L #	72
36) 2-butanone	3.796	72	2453	6.41	ug/L #	89
37) 2,2-dichloropropane	3.833	77	7080	1.91	ug/L	96
38) cis-1,2-dichloroethene	3.817	96	5510	1.87	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61594.D
Acq On : 18 Sep 2019 7:07 pm
Operator : jessicap
Sample : ic2531-2
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 10:58:17 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) propionitrile	3.838	54	7730	18.34	ug/L		83
40) methyl acrylate	3.849	85	825	1.61	ug/L	#	77
41) bromochloromethane	3.985	128	2840	1.77	ug/L		87
42) tetrahydrofuran	4.006	71	741	1.79	ug/L		95
43) chloroform	4.037	83	9997	2.08	ug/L		92
45) methacrylonitrile	3.943	67	2387	1.99	ug/L		88
46) 1,1,1-trichloroethane	4.179	97	8341	1.92	ug/L		80
47) cyclohexane	4.237	84	6747	2.01	ug/L		89
48) 1,1-dichloropropene	4.284	75	6285	1.81	ug/L		93
49) carbon tetrachloride	4.289	119	7014	1.77	ug/L		93
51) tert-amyl alcohol	4.373	55	1417	9.70	ug/L	#	45
54) n-butyl alcohol	4.761	56	8251	80.55	ug/L		91
55) benzene	4.431	78	19322	2.03	ug/L		98
56) tert-amyl methyl ether	4.493	73	12617	1.73	ug/L		95
57) iso-octane	4.493	57	8220	1.55	ug/L		92
58) heptane	4.614	57	1755	1.49	ug/L	#	67
60) 1,2-dichloroethane	4.452	62	6703	1.92	ug/L		93
61) trichloroethene	4.897	95	5122	1.86	ug/L		91
62) ethyl acrylate	4.913	55	6470	1.84	ug/L		98
64) 2-chloroethyl vinyl ether	5.479	63	13061	7.85	ug/L		93
65) methyl methacrylate	5.096	100	1369	1.56	ug/L	#	86
66) 1,2-dichloropropane	5.096	63	4955	2.00	ug/L		90
67) methylcyclohexane	5.086	83	5068	1.37	ug/L		93
68) dibromomethane	5.159	93	3752	1.88	ug/L		91
69) bromodichloromethane	5.280	83	7403	1.92	ug/L		97
71) cis-1,3-dichloropropene	5.621	75	7616	1.83	ug/L		90
72) 4-methyl-2-pentanone	5.726	58	8162	7.03	ug/L		94
73) 3-methyl-1-butanol	5.741	70	3061	29.50	ug/L		83
76) toluene	5.904	92	12221	2.01	ug/L		90
77) ethyl methacrylate	6.098	69	5957	1.73	ug/L		94
78) trans-1,3-dichloropropene	6.077	75	6234	1.69	ug/L		89
79) 1,1,2-trichloroethane	6.245	83	3921	1.89	ug/L		90
80) 2-hexanone	6.407	58	7923	6.85	ug/L		99
81) tetrachloroethene	6.339	164	5228	1.55	ug/L		91
82) 1,3-dichloropropane	6.386	76	7386	1.95	ug/L		90
83) butyl acetate	6.502	56	2900	1.67	ug/L		92
84) dibromochloromethane	6.580	129	6060	1.82	ug/L		97
85) 1,2-dibromoethane	6.696	107	5748	1.84	ug/L		87
86) n-butyl ether	7.178	57	15359	1.76	ug/L		98
87) chlorobenzene	7.120	112	13653	1.91	ug/L		97
88) 1,1,1,2-tetrachloroethane	7.194	131	5093	1.78	ug/L		95
89) ethylbenzene	7.199	91	22070	1.90	ug/L		96
90) m,p-xylene	7.319	106	16596	3.64	ug/L		82
91) o-xylene	7.671	91	17325	1.91	ug/L		98
92) styrene	7.686	104	13114	1.71	ug/L		93
93) butyl acrylate	7.597	56	3761	1.65	ug/L		97
94) n-amyl acetate	7.802	70	3032	1.63	ug/L		93
95) bromoform	7.859	173	4351	1.76	ug/L		95
96) isopropylbenzene	8.012	105	20180	1.81	ug/L		94
100) bromobenzene	8.321	156	5653	1.81	ug/L		88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61594.D
Acq On : 18 Sep 2019 7:07 pm
Operator : jessicap
Sample : ic2531-2
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 10:58:17 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
101) 1,1,2,2-tetrachloroethane	8.295	83	6883	2.09	ug/L		92
102) trans-1,4-dichloro-2-b...	8.321	53	1370	1.68	ug/L		68
103) 1,2,3-trichloropropane	8.347	110	1879	1.85	ug/L		85
104) n-propylbenzene	8.405	91	22680	1.93	ug/L		98
105) 2-chlorotoluene	8.499	126	4924	1.86	ug/L		95
106) 4-chlorotoluene	8.620	126	5126	1.94	ug/L		87
107) 1,3,5-trimethylbenzene	8.578	105	14852	1.78	ug/L		93
108) tert-butylbenzene	8.887	134	3739	2.01	ug/L	#	86
109) 1,2,4-trimethylbenzene	8.940	105	15052	1.80	ug/L		89
110) sec-butylbenzene	9.097	105	17208	1.73	ug/L		99
111) 1,3-dichlorobenzene	9.223	146	9941	1.90	ug/L		92
112) p-isopropyltoluene	9.249	119	14198	1.66	ug/L		99
113) 1,4-dichlorobenzene	9.322	146	10408	1.97	ug/L		92
114) 1,2-dichlorobenzene	9.674	146	9677	1.93	ug/L		89
115) benzyl chloride	9.427	91	9026	1.68	ug/L		96
116) n-butylbenzene	9.647	92	6286	1.63	ug/L		94
117) hexachloroethane	9.946	201	3027	1.98	ug/L	#	69
118) 1,2-dibromo-3-chloropr...	10.439	157	1616	1.93	ug/L		85
120) 1,3,5-trichlorobenzene	10.633	180	6275	1.88	ug/L		97
121) 1,2,4-trichlorobenzene	11.236	180	5305	1.87	ug/L		79
122) hexachlorobutadiene	11.372	225	2118	1.81	ug/L		84
123) naphthalene	11.488	128	12387	1.61	ug/L		94
124) 1,2,3-trichlorobenzene	11.692	180	4297	1.79	ug/L		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61594.D
Acq On : 18 Sep 2019 7:07 pm
Operator : jessicap
Sample : ic2531-2
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 19 10:58:17 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61595.D
Acq On : 18 Sep 2019 7:33 pm
Operator : jessicap
Sample : ic2531-4
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 10:58:45 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.936	65	119127	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	296281	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	403634	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	334232	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	154917	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.148	113	131938	48.96	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 97.92%						
53) 1,2-dichloroethane-d4 (s)	4.394	65	115148	49.91	ug/L	0.00
Spiked Amount 50.000 Range 81 - 124 Recovery = 99.82%						
75) toluene-d8 (s)	5.846	98	431051	50.82	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 101.64%						
99) 4-bromofluorobenzene (s)	8.179	95	137260	50.23	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 100.46%						
Target Compounds						Qvalue
2) ethanol	2.381	45	13420	382.43	ug/L	93
3) tertiary butyl alcohol	2.994	59	8223	16.47	ug/L	96
4) 1,4-dioxane	5.123	88	4517	103.59	ug/L	88
6) chlorodifluoromethane	1.584	51	11093	3.59	ug/L	94
7) dichlorodifluoromethane	1.573	85	15127	3.52	ug/L	97
8) chloromethane	1.715	50	13818	3.90	ug/L	97
9) vinyl chloride	1.804	62	15623	3.77	ug/L	98
10) bromomethane	2.045	96	9640	3.60	ug/L	97
11) chloroethane	2.124	64	7399	3.57	ug/L	96
12) trichlorofluoromethane	2.297	101	18654	3.84	ug/L	98
13) vinyl bromide	2.255	106	7731	3.54	ug/L	98
14) 1,3-butadiene	1.830	54	9665	3.74	ug/L	97
15) ethyl ether	2.475	74	5182	3.62	ug/L	91
16) 2-chloropropane	2.564	43	12119	3.59	ug/L	94
17) acrolein	2.569	56	1471	3.21	ug/L	97
18) freon 113	2.648	151	8581	3.83	ug/L #	83
19) 1,1-dichloroethene	2.648	61	13097	3.69	ug/L	96
20) acetone	2.653	58	4706	16.23	ug/L	91
21) acetonitrile	2.842	41	11588	36.91	ug/L	96
22) iodomethane	2.763	142	5252	1.88	ug/L	91
23) carbon disulfide	2.816	76	23900	3.81	ug/L	98
24) methylene chloride	2.963	84	10014	3.75	ug/L	97
25) methyl acetate	2.858	43	8354	3.83	ug/L	92
26) methyl tert butyl ether	3.130	73	27489	3.63	ug/L	94
27) trans-1,2-dichloroethene	3.151	96	9821	3.82	ug/L	91
28) hexane	3.330	56	5046	3.42	ug/L #	86
29) di-isopropyl ether	3.435	45	24687	3.64	ug/L	97
30) ethyl tert-butyl ether	3.676	59	24805	3.56	ug/L	96
31) 1,1-dichloroethane	3.440	63	15710	3.65	ug/L	95
32) chloroprene	3.492	53	12160	3.63	ug/L	89
33) acrylonitrile	3.109	53	3867	3.72	ug/L	96
35) ethyl acetate	3.802	45	1574	3.53	ug/L	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61595.D
Acq On : 18 Sep 2019 7:33 pm
Operator : jessicap
Sample : ic2531-4
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 10:58:45 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
36) 2-butanone	3.791	72	5109	13.22 ug/L #	91
37) 2,2-dichloropropane	3.833	77	13280	3.56 ug/L	95
38) cis-1,2-dichloroethene	3.817	96	10455	3.51 ug/L	90
39) propionitrile	3.833	54	15683	36.88 ug/L	90
40) methyl acrylate	3.844	85	1711	3.31 ug/L	98
41) bromochloromethane	3.980	128	6024	3.71 ug/L	97
42) tetrahydrofuran	3.996	71	1398	3.35 ug/L #	68
43) chloroform	4.037	83	18839	3.88 ug/L	98
45) methacrylonitrile	3.948	67	4553	3.76 ug/L	93
46) 1,1,1-trichloroethane	4.179	97	15411	3.52 ug/L	98
47) cyclohexane	4.237	84	11815	3.50 ug/L	97
48) 1,1-dichloropropene	4.284	75	12451	3.55 ug/L	95
49) carbon tetrachloride	4.289	119	14557	3.63 ug/L	97
50) isobutyl alcohol	4.289	42	2942	34.50 ug/L #	80
51) tert-amyl alcohol	4.378	55	2627	17.82 ug/L #	85
54) n-butyl alcohol	4.761	56	17338	171.29 ug/L	95
55) benzene	4.431	78	35677	3.79 ug/L	98
56) tert-amyl methyl ether	4.494	73	26605	3.69 ug/L	95
57) iso-octane	4.494	57	18030	3.44 ug/L	98
58) heptane	4.609	57	4259	3.66 ug/L #	78
59) isopropyl acetate	4.410	87	2505	3.80 ug/L #	45
60) 1,2-dichloroethane	4.452	62	12921	3.74 ug/L	93
61) trichloroethene	4.897	95	10509	3.86 ug/L	92
62) ethyl acrylate	4.918	55	11973	3.44 ug/L	95
63) 2-nitropropane	5.437	41	2591	3.65 ug/L	92
64) 2-chloroethyl vinyl ether	5.474	63	27971	17.02 ug/L	96
65) methyl methacrylate	5.102	100	2866	3.30 ug/L #	41
66) 1,2-dichloropropane	5.091	63	9364	3.82 ug/L	96
67) methylcyclohexane	5.086	83	12744	3.48 ug/L	97
68) dibromomethane	5.165	93	7294	3.70 ug/L	98
69) bromodichloromethane	5.280	83	14329	3.77 ug/L	92
70) epichlorohydrin	5.521	57	3729	14.52 ug/L	97
71) cis-1,3-dichloropropene	5.621	75	14502	3.53 ug/L	96
72) 4-methyl-2-pentanone	5.721	58	16065	14.00 ug/L	89
73) 3-methyl-1-butanol	5.741	70	6535	63.74 ug/L	87
76) toluene	5.904	92	22694	3.69 ug/L	96
77) ethyl methacrylate	6.098	69	11978	3.45 ug/L	98
78) trans-1,3-dichloropropene	6.077	75	13062	3.49 ug/L	92
79) 1,1,2-trichloroethane	6.245	83	7875	3.76 ug/L	98
80) 2-hexanone	6.407	58	16138	13.79 ug/L	95
81) tetrachloroethene	6.339	164	11530	3.37 ug/L	88
82) 1,3-dichloropropane	6.386	76	13948	3.65 ug/L	95
83) butyl acetate	6.502	56	6113	3.48 ug/L	91
84) dibromochloromethane	6.575	129	12146	3.60 ug/L	94
85) 1,2-dibromoethane	6.690	107	11320	3.59 ug/L	90
86) n-butyl ether	7.178	57	30627	3.48 ug/L	99
87) chlorobenzene	7.120	112	26302	3.65 ug/L	96
88) 1,1,1,2-tetrachloroethane	7.194	131	10676	3.70 ug/L	94
89) ethylbenzene	7.199	91	43525	3.70 ug/L	99
90) m,p-xylene	7.320	106	33112	7.18 ug/L	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61595.D
Acq On : 18 Sep 2019 7:33 pm
Operator : jessicap
Sample : ic2531-4
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 10:58:45 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) o-xylene	7.671	91	32933	3.59	ug/L	98
92) styrene	7.687	104	27146	3.50	ug/L	94
93) butyl acrylate	7.598	56	7424	3.23	ug/L #	90
94) n-amyl acetate	7.807	70	5907	3.14	ug/L	88
95) bromoform	7.860	173	8698	3.47	ug/L	91
96) isopropylbenzene	8.012	105	39097	3.46	ug/L	96
97) cis-1,4-dichloro-2-butene	8.059	88	4171	3.06	ug/L	96
100) bromobenzene	8.321	156	12069	3.70	ug/L	99
101) 1,1,2,2-tetrachloroethane	8.295	83	13406	3.88	ug/L	95
102) trans-1,4-dichloro-2-b...	8.332	53	2618	3.07	ug/L	90
103) 1,2,3-trichloropropane	8.352	110	3684	3.46	ug/L	99
104) n-propylbenzene	8.405	91	44659	3.63	ug/L	99
105) 2-chlorotoluene	8.499	126	10342	3.72	ug/L	90
106) 4-chlorotoluene	8.615	126	9881	3.57	ug/L	89
107) 1,3,5-trimethylbenzene	8.578	105	31279	3.58	ug/L	98
108) tert-butylbenzene	8.882	134	7550	3.88	ug/L #	82
109) 1,2,4-trimethylbenzene	8.940	105	30454	3.47	ug/L	100
110) sec-butylbenzene	9.102	105	35594	3.42	ug/L	97
111) 1,3-dichlorobenzene	9.223	146	19622	3.59	ug/L	98
112) p-isopropyltoluene	9.249	119	29652	3.30	ug/L	94
113) 1,4-dichlorobenzene	9.322	146	20944	3.79	ug/L	98
114) 1,2-dichlorobenzene	9.669	146	19000	3.61	ug/L	95
115) benzyl chloride	9.427	91	18410	3.26	ug/L	91
116) n-butylbenzene	9.653	92	13051	3.23	ug/L	97
117) hexachloroethane	9.941	201	5798	3.63	ug/L	97
118) 1,2-dibromo-3-chloropr...	10.444	157	3011	3.43	ug/L	92
119) nitrobenzene	10.628	77	476	2.33	ug/L	68
120) 1,3,5-trichlorobenzene	10.628	180	12199	3.48	ug/L	90
121) 1,2,4-trichlorobenzene	11.236	180	9959	3.36	ug/L	89
122) hexachlorobutadiene	11.373	225	4023	3.28	ug/L	96
123) naphthalene	11.488	128	24983	3.10	ug/L	94
124) 1,2,3-trichlorobenzene	11.692	180	8584	3.41	ug/L	92
126) 2-methylnaphthalene	12.536	142	2457	1.40	ug/L	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61595.D
Acq On : 18 Sep 2019 7:33 pm
Operator : jessicap
Sample : ic2531-4
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 19 10:58:45 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61596.D
Acq On : 18 Sep 2019 7:59 pm
Operator : jessicap
Sample : ic2531-8
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 08:02:29 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.941	65	120453	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	289979	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	401924	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	334742	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	158113	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	133410	50.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.18%			
53) 1,2-dichloroethane-d4 (s)	4.399	65	118093	51.41	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.82%			
75) toluene-d8 (s)	5.846	98	421920	49.67	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.34%			
99) 4-bromofluorobenzene (s)	8.179	95	139754	50.11	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.22%			
Target Compounds						Qvalue
2) ethanol	2.380	45	27192	766.35	ug/L	96
3) tertiary butyl alcohol	2.994	59	17056	33.80	ug/L	99
4) 1,4-dioxane	5.133	88	8132	184.44	ug/L	95
6) chlorodifluoromethane	1.583	51	22566	7.46	ug/L	99
7) dichlorodifluoromethane	1.573	85	30232	7.18	ug/L	97
8) chloromethane	1.715	50	27049	7.80	ug/L	97
9) vinyl chloride	1.804	62	30407	7.49	ug/L	95
10) bromomethane	2.045	96	18565	7.09	ug/L	86
11) chloroethane	2.124	64	14561	7.17	ug/L	94
12) trichlorofluoromethane	2.297	101	36057	7.59	ug/L	96
13) vinyl bromide	2.255	106	15329	7.16	ug/L	97
14) 1,3-butadiene	1.830	54	18396	7.26	ug/L	99
15) ethyl ether	2.475	74	9988	7.13	ug/L	84
16) 2-chloropropane	2.564	43	24182	7.31	ug/L	92
17) acrolein	2.574	56	3621	8.06	ug/L	84
18) freon 113	2.648	151	15943	7.26	ug/L	92
19) 1,1-dichloroethene	2.648	61	25980	7.47	ug/L	99
20) acetone	2.658	58	8744	30.80	ug/L #	81
21) acetonitrile	2.842	41	22771	74.10	ug/L	98
22) iodomethane	2.758	142	10797	3.96	ug/L	90
23) carbon disulfide	2.816	76	46763	7.61	ug/L	98
24) methylene chloride	2.968	84	20899	8.00	ug/L	96
25) methyl acetate	2.858	43	16033	7.52	ug/L	99
26) methyl tert butyl ether	3.130	73	54108	7.29	ug/L	98
27) trans-1,2-dichloroethene	3.151	96	19213	7.64	ug/L	88
28) hexane	3.329	56	9840	6.81	ug/L	91
29) di-isopropyl ether	3.434	45	49448	7.45	ug/L	98
30) ethyl tert-butyl ether	3.675	59	49238	7.23	ug/L	99
31) 1,1-dichloroethane	3.440	63	32807	7.79	ug/L	98
32) chloroprene	3.492	53	23316	7.12	ug/L	99
33) acrylonitrile	3.104	53	7682	7.56	ug/L	84
34) vinyl acetate	3.413	86	3530	8.32	ug/L #	59

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61596.D
Acq On : 18 Sep 2019 7:59 pm
Operator : jessicap
Sample : ic2531-8
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 08:02:29 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) ethyl acetate	3.801	45	2872	6.58	ug/L		91
36) 2-butanone	3.791	72	10638	28.13	ug/L		95
37) 2,2-dichloropropane	3.833	77	25982	7.11	ug/L		99
38) cis-1,2-dichloroethene	3.822	96	21990	7.55	ug/L		99
39) propionitrile	3.833	54	31425	75.50	ug/L		95
40) methyl acrylate	3.848	85	3965	7.83	ug/L	#	84
41) bromochloromethane	3.980	128	11743	7.40	ug/L		89
42) tetrahydrofuran	3.995	71	3252	7.96	ug/L		86
43) chloroform	4.037	83	35590	7.50	ug/L		90
45) methacrylonitrile	3.948	67	8932	7.53	ug/L		92
46) 1,1,1-trichloroethane	4.174	97	31709	7.40	ug/L		97
47) cyclohexane	4.236	84	24936	7.54	ug/L		91
48) 1,1-dichloropropene	4.284	75	24070	7.02	ug/L		89
49) carbon tetrachloride	4.294	119	28455	7.26	ug/L		93
50) isobutyl alcohol	4.284	42	5463	65.45	ug/L		97
51) tert-amyl alcohol	4.378	55	5700	39.50	ug/L		87
54) n-butyl alcohol	4.761	56	37680	373.84	ug/L		90
55) benzene	4.430	78	70699	7.55	ug/L		97
56) tert-amyl methyl ether	4.493	73	53628	7.46	ug/L		95
57) iso-octane	4.499	57	36858	7.07	ug/L		98
58) heptane	4.609	57	7765	6.70	ug/L		86
59) isopropyl acetate	4.404	87	4718	7.19	ug/L	#	89
60) 1,2-dichloroethane	4.451	62	26861	7.80	ug/L		91
61) trichloroethene	4.897	95	20093	7.41	ug/L		93
62) ethyl acrylate	4.918	55	25207	7.27	ug/L		98
63) 2-nitropropane	5.442	41	4484	6.35	ug/L		90
64) 2-chloroethyl vinyl ether	5.479	63	58977	36.05	ug/L		99
65) methyl methacrylate	5.102	100	5511	6.38	ug/L	#	91
66) 1,2-dichloropropane	5.091	63	18353	7.52	ug/L		92
67) methylcyclohexane	5.086	83	24535	6.73	ug/L		96
68) dibromomethane	5.159	93	14982	7.64	ug/L		99
69) bromodichloromethane	5.280	83	28425	7.50	ug/L		99
70) epichlorohydrin	5.526	57	8392	32.82	ug/L		99
71) cis-1,3-dichloropropene	5.621	75	29966	7.33	ug/L		96
72) 4-methyl-2-pentanone	5.720	58	34811	30.46	ug/L		99
73) 3-methyl-1-butanol	5.741	70	13907	136.22	ug/L		96
76) toluene	5.904	92	46308	7.52	ug/L		88
77) ethyl methacrylate	6.098	69	26336	7.56	ug/L		99
78) trans-1,3-dichloropropene	6.077	75	27984	7.47	ug/L		96
79) 1,1,2-trichloroethane	6.245	83	15958	7.61	ug/L		93
80) 2-hexanone	6.412	58	33960	28.98	ug/L		97
81) tetrachloroethene	6.339	164	19690	5.75	ug/L		94
82) 1,3-dichloropropane	6.386	76	29874	7.80	ug/L		97
83) butyl acetate	6.501	56	12836	7.30	ug/L		91
84) dibromochloromethane	6.575	129	24810	7.34	ug/L		94
85) 1,2-dibromoethane	6.690	107	24247	7.67	ug/L		97
86) n-butyl ether	7.178	57	61675	7.00	ug/L		97
87) chlorobenzene	7.120	112	54557	7.55	ug/L		97
88) 1,1,1,2-tetrachloroethane	7.194	131	22388	7.75	ug/L		86
89) ethylbenzene	7.199	91	85749	7.29	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61596.D
Acq On : 18 Sep 2019 7:59 pm
Operator : jessicap
Sample : ic2531-8
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 08:02:29 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
90)	m,p-xylene	7.314	106	67142	14.53	ug/L		98
91)	o-xylene	7.671	91	66103	7.20	ug/L		99
92)	styrene	7.686	104	52805	6.79	ug/L		99
93)	butyl acrylate	7.597	56	15765	6.84	ug/L		98
94)	n-amyl acetate	7.802	70	13293	7.06	ug/L		96
95)	bromoform	7.859	173	18704	7.46	ug/L		99
96)	isopropylbenzene	8.011	105	80796	7.15	ug/L		97
97)	cis-1,4-dichloro-2-butene	8.059	88	9252	6.79	ug/L		91
100)	bromobenzene	8.326	156	24191	7.26	ug/L		93
101)	1,1,2,2-tetrachloroethane	8.295	83	26947	7.65	ug/L		96
102)	trans-1,4-dichloro-2-b...	8.326	53	6138	7.05	ug/L		93
103)	1,2,3-trichloropropane	8.347	110	8394	7.71	ug/L		99
104)	n-propylbenzene	8.405	91	90426	7.19	ug/L		99
105)	2-chlorotoluene	8.499	126	21443	7.56	ug/L		94
106)	4-chlorotoluene	8.614	126	21115	7.48	ug/L		94
107)	1,3,5-trimethylbenzene	8.578	105	63079	7.07	ug/L		97
108)	tert-butylbenzene	8.882	134	14311	7.21	ug/L		91
109)	1,2,4-trimethylbenzene	8.939	105	63835	7.13	ug/L		96
110)	sec-butylbenzene	9.102	105	73696	6.93	ug/L		98
111)	1,3-dichlorobenzene	9.223	146	39495	7.08	ug/L		99
112)	p-isopropyltoluene	9.249	119	63671	6.95	ug/L		100
113)	1,4-dichlorobenzene	9.322	146	41801	7.40	ug/L		97
114)	1,2-dichlorobenzene	9.673	146	38614	7.19	ug/L		99
115)	benzyl chloride	9.427	91	38015	6.60	ug/L		97
116)	n-butylbenzene	9.647	92	26894	6.52	ug/L		97
117)	hexachloroethane	9.946	201	11305	6.93	ug/L		95
118)	1,2-dibromo-3-chloropr...	10.444	157	6592	7.36	ug/L		99
119)	nitrobenzene	10.633	77	1086	5.22	ug/L		79
120)	1,3,5-trichlorobenzene	10.633	180	25129	7.03	ug/L		99
121)	1,2,4-trichlorobenzene	11.236	180	20414	6.74	ug/L		97
122)	hexachlorobutadiene	11.372	225	8893	7.10	ug/L		96
123)	naphthalene	11.488	128	54105	6.57	ug/L		98
124)	1,2,3-trichlorobenzene	11.697	180	18202	7.08	ug/L		95
125)	2-ethylhexyl acrylate	11.414	70	1270	1.10	ug/L	#	57
126)	2-methylnaphthalene	12.531	142	5051	2.83	ug/L		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61596.D
Acq On : 18 Sep 2019 7:59 pm
Operator : jessicap
Sample : ic2531-8
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 19 08:02:29 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61597.D
Acq On : 18 Sep 2019 8:25 pm
Operator : jessicap
Sample : ic2531-20
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 08:02:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.936	65	112870	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	292120	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	401488	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	327750	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	145814	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.148	113	130609	49.16	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.32%			
53) 1,2-dichloroethane-d4 (s)	4.399	65	113258	49.36	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.72%			
75) toluene-d8 (s)	5.846	98	423516	50.92	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.84%			
99) 4-bromofluorobenzene (s)	8.179	95	133123	51.76	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.52%			
Target Compounds						Qvalue
2) ethanol	2.381	45	67194	2020.96	ug/L	99
3) tertiary butyl alcohol	2.994	59	44862	94.86	ug/L	97
4) 1,4-dioxane	5.128	88	20700	501.02	ug/L	98
6) chlorodifluoromethane	1.584	51	52823	17.34	ug/L	95
7) dichlorodifluoromethane	1.573	85	74652	17.60	ug/L	99
8) chloromethane	1.715	50	66467	19.02	ug/L	97
9) vinyl chloride	1.804	62	74604	18.25	ug/L	98
10) bromomethane	2.045	96	46142	17.50	ug/L	99
11) chloroethane	2.119	64	35979	17.60	ug/L	97
12) trichlorofluoromethane	2.297	101	85840	17.94	ug/L	99
13) vinyl bromide	2.255	106	39379	18.26	ug/L	99
14) 1,3-butadiene	1.830	54	44541	17.46	ug/L	97
15) ethyl ether	2.475	74	25373	17.98	ug/L	90
16) 2-chloropropane	2.564	43	57668	17.30	ug/L	97
17) acrolein	2.569	56	8788	19.43	ug/L	94
18) freon 113	2.648	151	39459	17.84	ug/L	88
19) 1,1-dichloroethene	2.648	61	63761	18.20	ug/L	97
20) acetone	2.653	58	20827	72.83	ug/L	90
21) acetonitrile	2.842	41	58104	187.69	ug/L	99
22) iodomethane	2.763	142	33399	12.15	ug/L	98
23) carbon disulfide	2.816	76	111709	18.04	ug/L	98
24) methylene chloride	2.968	84	48671	18.50	ug/L	97
25) methyl acetate	2.858	43	41506	19.32	ug/L	99
26) methyl tert butyl ether	3.136	73	136500	18.27	ug/L	98
27) trans-1,2-dichloroethene	3.151	96	45961	18.13	ug/L	94
28) hexane	3.330	56	24665	16.95	ug/L	96
29) di-isopropyl ether	3.434	45	124474	18.61	ug/L	100
30) ethyl tert-butyl ether	3.676	59	125496	18.28	ug/L	98
31) 1,1-dichloroethane	3.440	63	78936	18.60	ug/L	97
32) chloroprene	3.487	53	57088	17.31	ug/L	94
33) acrylonitrile	3.109	53	20009	19.55	ug/L	94
34) vinyl acetate	3.419	86	8071	18.88	ug/L #	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61597.D
Acq On : 18 Sep 2019 8:25 pm
Operator : jessicap
Sample : ic2531-20
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 08:02:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) ethyl acetate	3.802	45	7699	17.51 ug/L #	86
36) 2-butanone	3.791	72	27282	71.62 ug/L	93
37) 2,2-dichloropropane	3.828	77	65220	17.71 ug/L	97
38) cis-1,2-dichloroethene	3.817	96	54067	18.43 ug/L	96
39) propionitrile	3.833	54	78446	187.08 ug/L	99
40) methyl acrylate	3.843	85	9154	17.95 ug/L #	71
41) bromochloromethane	3.985	128	28682	17.94 ug/L	98
42) tetrahydrofuran	3.995	71	7519	18.27 ug/L	88
43) chloroform	4.037	83	87754	18.35 ug/L	95
45) methacrylonitrile	3.943	67	22725	19.01 ug/L	95
46) 1,1,1-trichloroethane	4.179	97	75844	17.58 ug/L	95
47) cyclohexane	4.237	84	58057	17.43 ug/L	98
48) 1,1-dichloropropene	4.284	75	60192	17.42 ug/L	97
49) carbon tetrachloride	4.289	119	69640	17.63 ug/L	95
50) isobutyl alcohol	4.284	42	15206	180.85 ug/L	92
51) tert-amyl alcohol	4.373	55	13951	95.97 ug/L	89
54) n-butyl alcohol	4.761	56	93389	927.55 ug/L	98
55) benzene	4.431	78	174473	18.65 ug/L	97
56) tert-amyl methyl ether	4.494	73	133261	18.57 ug/L	98
57) iso-octane	4.499	57	91089	17.49 ug/L	98
58) heptane	4.609	57	20409	17.62 ug/L	88
59) isopropyl acetate	4.404	87	13217	20.16 ug/L	95
60) 1,2-dichloroethane	4.452	62	64257	18.69 ug/L	97
61) trichloroethene	4.897	95	50376	18.60 ug/L	94
62) ethyl acrylate	4.918	55	65112	18.81 ug/L	99
63) 2-nitropropane	5.443	41	12569	17.82 ug/L	86
64) 2-chloroethyl vinyl ether	5.474	63	150989	92.38 ug/L	97
65) methyl methacrylate	5.097	100	15540	18.01 ug/L	94
66) 1,2-dichloropropane	5.091	63	45559	18.68 ug/L	98
67) methylcyclohexane	5.086	83	60958	16.74 ug/L	96
68) dibromomethane	5.159	93	36368	18.56 ug/L	98
69) bromodichloromethane	5.280	83	68549	18.12 ug/L	100
70) epichlorohydrin	5.526	57	21318	83.47 ug/L	93
71) cis-1,3-dichloropropene	5.621	75	74450	18.23 ug/L	98
72) 4-methyl-2-pentanone	5.720	58	85429	74.83 ug/L	95
73) 3-methyl-1-butanol	5.741	70	36970	362.52 ug/L	95
76) toluene	5.904	92	112604	18.69 ug/L	99
77) ethyl methacrylate	6.098	69	62696	18.39 ug/L	98
78) trans-1,3-dichloropropene	6.072	75	68702	18.74 ug/L	98
79) 1,1,2-trichloroethane	6.240	83	40191	19.59 ug/L	97
80) 2-hexanone	6.413	58	86789	75.64 ug/L	92
81) tetrachloroethene	6.339	164	53337	15.91 ug/L	95
82) 1,3-dichloropropane	6.386	76	72066	19.21 ug/L	96
83) butyl acetate	6.496	56	32686	18.99 ug/L	98
84) dibromochloromethane	6.580	129	60965	18.43 ug/L	98
85) 1,2-dibromoethane	6.690	107	58442	18.89 ug/L	91
86) n-butyl ether	7.178	57	158536	18.37 ug/L	99
87) chlorobenzene	7.120	112	132309	18.71 ug/L	99
88) 1,1,1,2-tetrachloroethane	7.194	131	54614	19.30 ug/L	95
89) ethylbenzene	7.199	91	209594	18.19 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61597.D
Acq On : 18 Sep 2019 8:25 pm
Operator : jessicap
Sample : ic2531-20
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 08:02:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
90)	m,p-xylene	7.314	106	166992	36.92	ug/L		98
91)	o-xylene	7.671	91	164867	18.34	ug/L		98
92)	styrene	7.687	104	137463	18.06	ug/L		99
93)	butyl acrylate	7.597	56	40795	18.09	ug/L		88
94)	n-amyl acetate	7.802	70	34477	18.70	ug/L		96
95)	bromoform	7.860	173	45752	18.63	ug/L		98
96)	isopropylbenzene	8.012	105	195676	17.68	ug/L		97
97)	cis-1,4-dichloro-2-butene	8.059	88	32374	24.26	ug/L		96
100)	bromobenzene	8.321	156	59179	19.25	ug/L		99
101)	1,1,2,2-tetrachloroethane	8.295	83	65185	20.06	ug/L		97
102)	trans-1,4-dichloro-2-b...	8.332	53	16012	19.93	ug/L		98
103)	1,2,3-trichloropropane	8.352	110	20129	20.06	ug/L		92
104)	n-propylbenzene	8.405	91	219922	18.97	ug/L		99
105)	2-chlorotoluene	8.499	126	49983	19.10	ug/L		94
106)	4-chlorotoluene	8.615	126	50981	19.58	ug/L		87
107)	1,3,5-trimethylbenzene	8.578	105	155844	18.93	ug/L		96
108)	tert-butylbenzene	8.882	134	35853	19.58	ug/L	#	91
109)	1,2,4-trimethylbenzene	8.945	105	157155	19.04	ug/L		99
110)	sec-butylbenzene	9.102	105	181210	18.48	ug/L		99
111)	1,3-dichlorobenzene	9.223	146	98882	19.22	ug/L		99
112)	p-isopropyltoluene	9.249	119	158822	18.79	ug/L		98
113)	1,4-dichlorobenzene	9.322	146	99786	19.16	ug/L		99
114)	1,2-dichlorobenzene	9.674	146	96289	19.45	ug/L		98
115)	benzyl chloride	9.427	91	109979	20.71	ug/L		98
116)	n-butylbenzene	9.648	92	68046	17.88	ug/L		99
117)	hexachloroethane	9.946	201	28706	19.07	ug/L		100
118)	1,2-dibromo-3-chloropr...	10.444	157	15397	18.65	ug/L		95
119)	nitrobenzene	10.638	77	3552	18.50	ug/L		96
120)	1,3,5-trichlorobenzene	10.633	180	61832	18.74	ug/L		96
121)	1,2,4-trichlorobenzene	11.236	180	51242	18.34	ug/L		97
122)	hexachlorobutadiene	11.372	225	21065	18.23	ug/L		95
123)	naphthalene	11.483	128	142435	18.77	ug/L		99
124)	1,2,3-trichlorobenzene	11.692	180	44740	18.87	ug/L		96
125)	2-ethylhexyl acrylate	11.409	70	3747	3.52	ug/L		90
126)	2-methylnaphthalene	12.536	142	13642	8.29	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.2.7

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61597.D
Acq On : 18 Sep 2019 8:25 pm
Operator : jessicap
Sample : ic2531-20
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 19 08:02:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61598.D
Acq On : 18 Sep 2019 8:50 pm
Operator : jessicap
Sample : icc2531-50
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 08:02:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.942	65	119316	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	290464	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	408669	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	342565	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	162658	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	132084	50.00	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 100.00%						
53) 1,2-dichloroethane-d4 (s)	4.394	65	116787	50.00	ug/L	0.00
Spiked Amount 50.000 Range 81 - 124 Recovery = 100.00%						
75) toluene-d8 (s)	5.846	98	434671	50.00	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 100.00%						
99) 4-bromofluorobenzene (s)	8.179	95	143446	50.00	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 100.00%						
Target Compounds						Qvalue
2) ethanol	2.381	45	175737	5000.00	ug/L	100
3) tertiary butyl alcohol	2.994	59	124978	250.00	ug/L	100
4) 1,4-dioxane	5.133	88	54594	1250.00	ug/L	100
6) chlorodifluoromethane	1.584	51	151438	50.00	ug/L	100
7) dichlorodifluoromethane	1.573	85	210915	50.00	ug/L	100
8) chloromethane	1.715	50	173767	50.00	ug/L	100
9) vinyl chloride	1.804	62	203272	50.00	ug/L	100
10) bromomethane	2.040	96	131108	50.00	ug/L	100
11) chloroethane	2.118	64	101656	50.00	ug/L	100
12) trichlorofluoromethane	2.297	101	237933	50.00	ug/L	100
13) vinyl bromide	2.255	106	107198	50.00	ug/L	100
14) 1,3-butadiene	1.830	54	126834	50.00	ug/L	100
15) ethyl ether	2.475	74	70140	50.00	ug/L	100
16) 2-chloropropane	2.559	43	165688	50.00	ug/L	100
17) acrolein	2.569	56	22487	50.00	ug/L	100
18) freon 113	2.643	151	109948	50.00	ug/L	100
19) 1,1-dichloroethene	2.648	61	174189	50.00	ug/L	100
20) acetone	2.653	58	56866	200.00	ug/L	100
21) acetonitrile	2.842	41	153910	500.00	ug/L	100
22) iodomethane	2.758	142	136717	50.00	ug/L	100
23) carbon disulfide	2.816	76	307802	50.00	ug/L	100
24) methylene chloride	2.968	84	130806	50.00	ug/L	100
25) methyl acetate	2.858	43	106805	50.00	ug/L	100
26) methyl tert butyl ether	3.136	73	371520	50.00	ug/L	100
27) trans-1,2-dichloroethene	3.146	96	126006	50.00	ug/L	100
28) hexane	3.324	56	72352	50.00	ug/L	100
29) di-isopropyl ether	3.434	45	332533	50.00	ug/L	100
30) ethyl tert-butyl ether	3.676	59	341299	50.00	ug/L	100
31) 1,1-dichloroethane	3.434	63	210346	49.84	ug/L	100
32) chloroprene	3.487	53	163982	50.00	ug/L	100
33) acrylonitrile	3.104	53	50894	50.00	ug/L	100
34) vinyl acetate	3.413	86	21254	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61598.D
Acq On : 18 Sep 2019 8:50 pm
Operator : jessicap
Sample : icc2531-50
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 08:02:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) ethyl acetate	3.801	45	21865	50.00	ug/L	100
36) 2-butanone	3.791	72	75752	200.00	ug/L	100
37) 2,2-dichloropropane	3.828	77	183055	50.00	ug/L	100
38) cis-1,2-dichloroethene	3.817	96	145817	50.00	ug/L	100
39) propionitrile	3.833	54	208472	500.00	ug/L	100
40) methyl acrylate	3.849	85	25358	50.00	ug/L	100
41) bromochloromethane	3.985	128	79486	50.00	ug/L	100
42) tetrahydrofuran	3.995	71	20457	50.00	ug/L	100
43) chloroform	4.037	83	237700	50.00	ug/L	100
45) methacrylonitrile	3.943	67	59422	50.00	ug/L	100
46) 1,1,1-trichloroethane	4.179	97	214505	50.00	ug/L	100
47) cyclohexane	4.237	84	165583	50.00	ug/L	100
48) 1,1-dichloropropene	4.284	75	171794	50.00	ug/L	100
49) carbon tetrachloride	4.289	119	196390	50.00	ug/L	100
50) isobutyl alcohol	4.289	42	41803	500.00	ug/L	100
51) tert-amyl alcohol	4.378	55	36136	250.00	ug/L	100
54) n-butyl alcohol	4.761	56	256211	2500.00	ug/L	100
55) benzene	4.431	78	476181	50.00	ug/L	100
56) tert-amyl methyl ether	4.493	73	365315	50.00	ug/L	100
57) iso-octane	4.493	57	265041	50.00	ug/L	100
58) heptane	4.609	57	58955	50.00	ug/L	100
59) isopropyl acetate	4.404	87	33366	50.00	ug/L	100
60) 1,2-dichloroethane	4.452	62	174989	50.00	ug/L	100
61) trichloroethene	4.897	95	137825	50.00	ug/L	100
62) ethyl acrylate	4.918	55	176184	50.00	ug/L	100
63) 2-nitropropane	5.437	41	35888	50.00	ug/L	100
64) 2-chloroethyl vinyl ether	5.479	63	415896	250.00	ug/L	100
65) methyl methacrylate	5.096	100	43920	50.00	ug/L	100
66) 1,2-dichloropropane	5.091	63	124136	50.00	ug/L	100
67) methylcyclohexane	5.086	83	185343	50.00	ug/L	100
68) dibromomethane	5.159	93	99724	50.00	ug/L	100
69) bromodichloromethane	5.280	83	192579	50.00	ug/L	100
70) epichlorohydrin	5.526	57	64991	250.00	ug/L	100
71) cis-1,3-dichloropropene	5.621	75	207812	50.00	ug/L	100
72) 4-methyl-2-pentanone	5.720	58	232426	200.00	ug/L	100
73) 3-methyl-1-butanol	5.741	70	103805	1000.00	ug/L	100
76) toluene	5.904	92	314916	50.00	ug/L	100
77) ethyl methacrylate	6.098	69	178138	50.00	ug/L	100
78) trans-1,3-dichloropropene	6.072	75	191596	50.00	ug/L	100
79) 1,1,2-trichloroethane	6.245	83	107238	50.00	ug/L	100
80) 2-hexanone	6.407	58	239847	200.00	ug/L	100
81) tetrachloroethene	6.344	164	175153	50.00	ug/L	100
82) 1,3-dichloropropane	6.386	76	196069	50.00	ug/L	100
83) butyl acetate	6.496	56	89965	50.00	ug/L	100
84) dibromochloromethane	6.575	129	172915	50.00	ug/L	100
85) 1,2-dibromoethane	6.690	107	161717	50.00	ug/L	100
86) n-butyl ether	7.178	57	451028	50.00	ug/L	100
87) chlorobenzene	7.120	112	369584	50.00	ug/L	100
88) 1,1,1,2-tetrachloroethane	7.194	131	147848	50.00	ug/L	100
89) ethylbenzene	7.199	91	602046	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61598.D
Acq On : 18 Sep 2019 8:50 pm
Operator : jessicap
Sample : icc2531-50
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 08:02:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) m,p-xylene	7.314	106	472746	100.00	ug/L	100
91) o-xylene	7.671	91	469864	50.00	ug/L	100
92) styrene	7.686	104	397735	50.00	ug/L	100
93) butyl acrylate	7.597	56	117868	50.00	ug/L	100
94) n-amyl acetate	7.802	70	96330	50.00	ug/L	100
95) bromoform	7.859	173	128350	50.00	ug/L	100
96) isopropylbenzene	8.012	105	578256	50.00	ug/L	100
97) cis-1,4-dichloro-2-butene	8.059	88	69739	50.00	ug/L	100
100) bromobenzene	8.321	156	171448	50.00	ug/L	100
101) 1,1,2,2-tetrachloroethane	8.295	83	181248	50.00	ug/L	100
102) trans-1,4-dichloro-2-b...	8.331	53	44802	50.00	ug/L	100
103) 1,2,3-trichloropropane	8.352	110	55976	50.00	ug/L	100
104) n-propylbenzene	8.405	91	646409	49.97	ug/L	100
105) 2-chlorotoluene	8.499	126	145932	50.00	ug/L	100
106) 4-chlorotoluene	8.614	126	145245	50.00	ug/L	100
107) 1,3,5-trimethylbenzene	8.578	105	459098	50.00	ug/L	100
108) tert-butylbenzene	8.882	134	102132	50.00	ug/L	100
109) 1,2,4-trimethylbenzene	8.940	105	460250	50.00	ug/L	100
110) sec-butylbenzene	9.102	105	546847	50.00	ug/L	100
111) 1,3-dichlorobenzene	9.223	146	286972	50.00	ug/L	100
112) p-isopropyltoluene	9.249	119	471441	50.00	ug/L	100
113) 1,4-dichlorobenzene	9.322	146	290439	50.00	ug/L	100
114) 1,2-dichlorobenzene	9.674	146	276123	50.00	ug/L	100
115) benzyl chloride	9.427	91	296252	50.00	ug/L	100
116) n-butylbenzene	9.647	92	212305	50.00	ug/L	100
117) hexachloroethane	9.946	201	83967	50.00	ug/L	100
118) 1,2-dibromo-3-chloropr...	10.444	157	46050	50.00	ug/L	100
119) nitrobenzene	10.633	77	10711	50.00	ug/L	100
120) 1,3,5-trichlorobenzene	10.633	180	183986	50.00	ug/L	100
121) 1,2,4-trichlorobenzene	11.236	180	155796	50.00	ug/L	100
122) hexachlorobutadiene	11.372	225	64467	50.00	ug/L	100
123) naphthalene	11.482	128	423341	50.00	ug/L	100
124) 1,2,3-trichlorobenzene	11.692	180	132251	50.00	ug/L	100
125) 2-ethylhexyl acrylate	11.414	70	11891	10.00	ug/L	100
126) 2-methylnaphthalene	12.536	142	45913	25.00	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61598.D
Acq On : 18 Sep 2019 8:50 pm
Operator : jessicap
Sample : icc2531-50
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 19 08:02:33 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61599.D
Acq On : 18 Sep 2019 9:16 pm
Operator : jessicap
Sample : ic2531-100
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 08:02:35 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.942	65	111307	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	294767	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	414901	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	349943	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	163930	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.148	113	131923	49.21	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 98.42%						
53) 1,2-dichloroethane-d4 (s)	4.394	65	117340	49.48	ug/L	0.00
Spiked Amount 50.000 Range 81 - 124 Recovery = 98.96%						
75) toluene-d8 (s)	5.846	98	443232	49.91	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 99.82%						
99) 4-bromofluorobenzene (s)	8.179	95	145632	50.37	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 100.74%						
Target Compounds						Qvalue
2) ethanol	2.386	45	336600	10265.90	ug/L	98
3) tertiary butyl alcohol	2.994	59	240424	515.54	ug/L	97
4) 1,4-dioxane	5.133	88	105755	2595.63	ug/L	92
6) chlorodifluoromethane	1.584	51	286334	93.16	ug/L	99
7) dichlorodifluoromethane	1.573	85	385997	90.17	ug/L	99
8) chloromethane	1.715	50	328457	93.13	ug/L	100
9) vinyl chloride	1.804	62	382336	92.67	ug/L	100
10) bromomethane	2.035	96	288009	108.23	ug/L	99
11) chloroethane	2.113	64	205192	99.45	ug/L	99
12) trichlorofluoromethane	2.291	101	456708	94.57	ug/L	97
13) vinyl bromide	2.250	106	209850	96.45	ug/L	100
14) 1,3-butadiene	1.830	54	228579	88.79	ug/L	98
15) ethyl ether	2.475	74	137646	96.69	ug/L	98
16) 2-chloropropane	2.559	43	314800	93.61	ug/L	99
17) acrolein	2.569	56	45570	99.85	ug/L	97
18) freon 113	2.643	151	209040	93.68	ug/L	99
19) 1,1-dichloroethene	2.648	61	342873	96.98	ug/L	99
20) acetone	2.653	58	103791	359.71	ug/L	95
21) acetonitrile	2.842	41	291800	934.12	ug/L	98
22) iodomethane	2.758	142	305182	109.98	ug/L	96
23) carbon disulfide	2.816	76	603486	96.60	ug/L	99
24) methylene chloride	2.968	84	254010	95.68	ug/L	99
25) methyl acetate	2.858	43	205198	94.66	ug/L	100
26) methyl tert butyl ether	3.136	73	733219	97.24	ug/L	100
27) trans-1,2-dichloroethene	3.146	96	249020	97.37	ug/L	98
28) hexane	3.324	56	134923	91.89	ug/L	98
29) di-isopropyl ether	3.434	45	662613	98.18	ug/L	97
30) ethyl tert-butyl ether	3.676	59	678527	97.95	ug/L	98
31) 1,1-dichloroethane	3.434	63	416116	97.16	ug/L	99
32) chloroprene	3.487	53	324539	97.51	ug/L	98
33) acrylonitrile	3.104	53	102714	99.44	ug/L	98
34) vinyl acetate	3.414	86	51338	119.01	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61599.D
Acq On : 18 Sep 2019 9:16 pm
Operator : jessicap
Sample : ic2531-100
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 08:02:35 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) ethyl acetate	3.801	45	43264	97.49 ug/L #	86
36) 2-butanone	3.791	72	143953	374.52 ug/L	94
37) 2,2-dichloropropane	3.828	77	367201	98.83 ug/L	98
38) cis-1,2-dichloroethene	3.817	96	298018	100.70 ug/L	97
39) propionitrile	3.838	54	407640	963.41 ug/L	70
40) methyl acrylate	3.843	85	50206	97.55 ug/L #	78
41) bromochloromethane	3.985	128	151866	94.14 ug/L	99
42) tetrahydrofuran	3.995	71	40452	97.43 ug/L	94
43) chloroform	4.037	83	472991	98.04 ug/L	99
45) methacrylonitrile	3.943	67	116572	96.66 ug/L	96
46) 1,1,1-trichloroethane	4.179	97	428259	98.37 ug/L	98
47) cyclohexane	4.237	84	319271	95.00 ug/L	96
48) 1,1-dichloropropene	4.284	75	343225	98.44 ug/L	98
49) carbon tetrachloride	4.289	119	396393	99.45 ug/L	98
50) isobutyl alcohol	4.289	42	80205	945.32 ug/L	92
51) tert-amyl alcohol	4.383	55	71988	490.76 ug/L	96
54) n-butyl alcohol	4.766	56	499405	4799.79 ug/L	99
55) benzene	4.431	78	956560	98.93 ug/L	99
56) tert-amyl methyl ether	4.494	73	737379	99.41 ug/L	97
57) iso-octane	4.499	57	505440	93.92 ug/L	98
58) heptane	4.609	57	112334	93.84 ug/L	95
59) isopropyl acetate	4.404	87	66913	98.77 ug/L	95
60) 1,2-dichloroethane	4.452	62	350612	98.68 ug/L	97
61) trichloroethene	4.897	95	277372	99.11 ug/L	98
62) ethyl acrylate	4.918	55	357393	99.90 ug/L	99
63) 2-nitropropane	5.443	41	80202	110.06 ug/L	99
64) 2-chloroethyl vinyl ether	5.479	63	850845	503.77 ug/L	99
65) methyl methacrylate	5.097	100	87335	97.93 ug/L	98
66) 1,2-dichloropropane	5.091	63	252244	100.07 ug/L	97
67) methylcyclohexane	5.086	83	360465	95.78 ug/L	99
68) dibromomethane	5.159	93	197142	97.36 ug/L	95
69) bromodichloromethane	5.280	83	386093	98.74 ug/L	99
70) epichlorohydrin	5.526	57	139583	528.87 ug/L	86
71) cis-1,3-dichloropropene	5.621	75	423768	100.43 ug/L	98
72) 4-methyl-2-pentanone	5.720	58	465972	394.94 ug/L	97
73) 3-methyl-1-butanol	5.741	70	205369	1948.69 ug/L	98
76) toluene	5.904	92	637016	99.01 ug/L	99
77) ethyl methacrylate	6.098	69	361723	99.39 ug/L	98
78) trans-1,3-dichloropropene	6.072	75	397222	101.48 ug/L	99
79) 1,1,2-trichloroethane	6.245	83	215497	98.36 ug/L	98
80) 2-hexanone	6.407	58	475774	388.37 ug/L	100
81) tetrachloroethene	6.339	164	283455	79.21 ug/L	96
82) 1,3-dichloropropane	6.386	76	396846	99.07 ug/L	100
83) butyl acetate	6.496	56	182327	99.20 ug/L	97
84) dibromochloromethane	6.575	129	351971	99.63 ug/L	98
85) 1,2-dibromoethane	6.690	107	324798	98.30 ug/L	95
86) n-butyl ether	7.178	57	935789	101.55 ug/L	99
87) chlorobenzene	7.120	112	758168	100.41 ug/L	99
88) 1,1,1,2-tetrachloroethane	7.194	131	308350	102.08 ug/L	99
89) ethylbenzene	7.199	91	1238656	100.70 ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61599.D
Acq On : 18 Sep 2019 9:16 pm
Operator : jessicap
Sample : ic2531-100
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 08:02:35 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
90) m,p-xylene	7.314	106	971661	201.20 ug/L	98
91) o-xylene	7.671	91	975355	101.60 ug/L	100
92) styrene	7.687	104	814201	100.20 ug/L	99
93) butyl acrylate	7.597	56	243203	100.99 ug/L	99
94) n-amyl acetate	7.802	70	198180	100.70 ug/L	99
95) bromoform	7.860	173	260582	99.37 ug/L	96
96) isopropylbenzene	8.012	105	1190515	100.77 ug/L	99
97) cis-1,4-dichloro-2-butene	8.059	88	146427	102.77 ug/L	99
100) bromobenzene	8.321	156	344670	99.74 ug/L	97
101) 1,1,2,2-tetrachloroethane	8.295	83	364877	99.88 ug/L	98
102) trans-1,4-dichloro-2-b...	8.331	53	94249	104.37 ug/L	99
103) 1,2,3-trichloropropane	8.352	110	110630	98.05 ug/L	97
104) n-propylbenzene	8.405	91	1313057	100.73 ug/L	98
105) 2-chlorotoluene	8.499	126	299440	101.80 ug/L	99
106) 4-chlorotoluene	8.615	126	298750	102.05 ug/L	94
107) 1,3,5-trimethylbenzene	8.578	105	943912	102.00 ug/L	98
108) tert-butylbenzene	8.882	134	217432	105.62 ug/L	99
109) 1,2,4-trimethylbenzene	8.940	105	939176	101.24 ug/L	99
110) sec-butylbenzene	9.102	105	1117766	101.41 ug/L	99
111) 1,3-dichlorobenzene	9.223	146	586809	101.45 ug/L	99
112) p-isopropyltoluene	9.249	119	965916	101.65 ug/L	99
113) 1,4-dichlorobenzene	9.322	146	594645	101.58 ug/L	99
114) 1,2-dichlorobenzene	9.674	146	563984	101.33 ug/L	98
115) benzyl chloride	9.427	91	627337	105.06 ug/L	98
116) n-butylbenzene	9.647	92	443587	103.66 ug/L	97
117) hexachloroethane	9.946	201	176817	104.47 ug/L	97
118) 1,2-dibromo-3-chloropr...	10.444	157	93112	100.31 ug/L	97
119) nitrobenzene	10.633	77	24037	111.34 ug/L	93
120) 1,3,5-trichlorobenzene	10.633	180	376021	101.39 ug/L	97
121) 1,2,4-trichlorobenzene	11.236	180	321278	102.31 ug/L	97
122) hexachlorobutadiene	11.378	225	133217	102.52 ug/L	97
123) naphthalene	11.483	128	874724	102.51 ug/L	99
124) 1,2,3-trichlorobenzene	11.692	180	270345	101.42 ug/L	99
125) 2-ethylhexyl acrylate	11.414	70	27227	22.72 ug/L	96
126) 2-methylnaphthalene	12.536	142	95927	51.83 ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61599.D
Acq On : 18 Sep 2019 9:16 pm
Operator : jessicap
Sample : ic2531-100
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 19 08:02:35 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61600.D
Acq On : 18 Sep 2019 9:41 pm
Operator : jessicap
Sample : ic2531-200
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 08:02:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.952	65	116062	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	309658	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	439916	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	377559	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	175971	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	141507	50.25	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 100.50%						
53) 1,2-dichloroethane-d4 (s)	4.394	65	127171	50.58	ug/L	0.00
Spiked Amount 50.000 Range 81 - 124 Recovery = 101.16%						
75) toluene-d8 (s)	5.846	98	469324	48.98	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 97.96%						
99) 4-bromofluorobenzene (s)	8.179	95	158479	51.06	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 102.12%						
Target Compounds						Qvalue
2) ethanol	2.396	45	613361	17940.38	ug/L	98
3) tertiary butyl alcohol	3.004	59	440406	905.67	ug/L	97
4) 1,4-dioxane	5.138	88	212615	5004.58	ug/L	100
6) chlorodifluoromethane	1.583	51	566047	175.31	ug/L	100
7) dichlorodifluoromethane	1.573	85	795004	176.78	ug/L	99
8) chloromethane	1.715	50	673147	181.69	ug/L	99
9) vinyl chloride	1.804	62	777518	179.40	ug/L	100
10) bromomethane	2.029	96	657342	235.15	ug/L	100
11) chloroethane	2.108	64	490307	226.21	ug/L	98
12) trichlorofluoromethane	2.291	101	963408	189.90	ug/L	98
13) vinyl bromide	2.249	106	443784	194.16	ug/L	99
14) 1,3-butadiene	1.830	54	438974	162.32	ug/L	98
15) ethyl ether	2.470	74	282104	188.64	ug/L	94
16) 2-chloropropane	2.559	43	643270	182.09	ug/L	99
17) acrolein	2.569	56	86269	179.93	ug/L	95
18) freon 113	2.643	151	423270	180.56	ug/L	97
19) 1,1-dichloroethene	2.643	61	720117	193.89	ug/L	99
20) acetone	2.658	58	219442	723.95	ug/L	99
21) acetonitrile	2.842	41	576789	1757.64	ug/L	100
22) iodomethane	2.758	142	584140	200.39	ug/L	99
23) carbon disulfide	2.816	76	1223729	186.46	ug/L	100
24) methylene chloride	2.968	84	520874	186.76	ug/L	96
25) methyl acetate	2.858	43	423368	185.91	ug/L	98
26) methyl tert butyl ether	3.130	73	1538699	194.25	ug/L	98
27) trans-1,2-dichloroethene	3.146	96	521143	193.97	ug/L	97
28) hexane	3.324	56	275835	178.82	ug/L	98
29) di-isopropyl ether	3.434	45	1413608	199.38	ug/L	99
30) ethyl tert-butyl ether	3.675	59	1441913	198.15	ug/L	99
31) 1,1-dichloroethane	3.434	63	888579	197.50	ug/L	100
32) chloroprene	3.487	53	681785	195.00	ug/L	98
33) acrylonitrile	3.109	53	209647	193.20	ug/L	99
34) vinyl acetate	3.413	86	109366	241.34	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61600.D
Acq On : 18 Sep 2019 9:41 pm
Operator : jessicap
Sample : ic2531-200
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 08:02:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
35) ethyl acetate	3.801	45	92867	199.20 ug/L #	85
36) 2-butanone	3.791	72	304394	753.84 ug/L	96
37) 2,2-dichloropropane	3.828	77	796053	203.96 ug/L	98
38) cis-1,2-dichloroethene	3.817	96	623986	200.70 ug/L	99
39) propionitrile	3.838	54	849898	1912.05 ug/L	69
40) methyl acrylate	3.849	85	107886	199.54 ug/L #	83
41) bromochloromethane	3.985	128	288887	170.46 ug/L	96
42) tetrahydrofuran	3.995	71	84100	192.81 ug/L	98
43) chloroform	4.037	83	991841	195.70 ug/L	100
45) methacrylonitrile	3.943	67	244627	193.08 ug/L	98
46) 1,1,1-trichloroethane	4.179	97	894002	195.47 ug/L	98
47) cyclohexane	4.236	84	688440	195.00 ug/L	94
48) 1,1-dichloropropene	4.284	75	723936	197.64 ug/L	99
49) carbon tetrachloride	4.289	119	836846	199.85 ug/L	98
50) isobutyl alcohol	4.294	42	170319	1910.89 ug/L	95
51) tert-amyl alcohol	4.389	55	141696	919.53 ug/L #	83
54) n-butyl alcohol	4.771	56	1048982	9508.50 ug/L	99
55) benzene	4.430	78	1999810	195.07 ug/L	100
56) tert-amyl methyl ether	4.493	73	1575469	200.32 ug/L	98
57) iso-octane	4.493	57	1060724	185.89 ug/L	97
58) heptane	4.609	57	232325	183.04 ug/L	93
59) isopropyl acetate	4.404	87	140589	195.71 ug/L #	89
60) 1,2-dichloroethane	4.451	62	737395	195.73 ug/L	97
61) trichloroethene	4.897	95	594734	200.43 ug/L	96
62) ethyl acrylate	4.918	55	735978	194.03 ug/L	99
63) 2-nitropropane	5.442	41	174515	225.87 ug/L	99
64) 2-chloroethyl vinyl ether	5.479	63	1851983	1034.18 ug/L	99
65) methyl methacrylate	5.096	100	185234	195.90 ug/L	98
66) 1,2-dichloropropane	5.091	63	539705	201.94 ug/L	97
67) methylcyclohexane	5.086	83	765092	191.74 ug/L	98
68) dibromomethane	5.159	93	412270	192.02 ug/L	99
69) bromodichloromethane	5.280	83	806791	194.59 ug/L	99
70) epichlorohydrin	5.532	57	284867	1017.96 ug/L	95
71) cis-1,3-dichloropropene	5.621	75	894685	199.97 ug/L	96
72) 4-methyl-2-pentanone	5.720	58	1001221	800.34 ug/L	98
73) 3-methyl-1-butanol	5.746	70	427314	3824.11 ug/L	97
76) toluene	5.904	92	1340001	193.04 ug/L	98
77) ethyl methacrylate	6.098	69	770352	196.18 ug/L	97
78) trans-1,3-dichloropropene	6.072	75	845875	200.28 ug/L	97
79) 1,1,2-trichloroethane	6.245	83	451090	190.83 ug/L	98
80) 2-hexanone	6.412	58	997621	754.78 ug/L	99
81) tetrachloroethene	6.339	164	693561	179.64 ug/L	98
82) 1,3-dichloropropane	6.386	76	825748	191.06 ug/L	100
83) butyl acetate	6.501	56	376046	189.62 ug/L	99
84) dibromochloromethane	6.580	129	729470	191.38 ug/L	96
85) 1,2-dibromoethane	6.690	107	676533	189.78 ug/L	96
86) n-butyl ether	7.178	57	2034119	204.60 ug/L	100
87) chlorobenzene	7.120	112	1602804	196.74 ug/L	98
88) 1,1,1,2-tetrachloroethane	7.194	131	664295	203.83 ug/L	99
89) ethylbenzene	7.199	91	2694152	203.01 ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61600.D
Acq On : 18 Sep 2019 9:41 pm
Operator : jessicap
Sample : ic2531-200
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 08:02:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90)	m,p-xylene	7.319	106	2092622	401.63	ug/L	100
91)	o-xylene	7.676	91	2135589	206.19	ug/L	99
92)	styrene	7.686	104	1764953	201.31	ug/L	98
93)	butyl acrylate	7.597	56	521409	200.68	ug/L	96
94)	n-amyl acetate	7.802	70	425302	200.29	ug/L	94
95)	bromoform	7.859	173	549201	194.12	ug/L	98
96)	isopropylbenzene	8.011	105	2539311	199.22	ug/L	99
97)	cis-1,4-dichloro-2-butene	8.059	88	320465	208.46	ug/L	97
100)	bromobenzene	8.321	156	738827	199.17	ug/L	95
101)	1,1,2,2-tetrachloroethane	8.295	83	775942	197.86	ug/L	99
102)	trans-1,4-dichloro-2-b...	8.331	53	209974	216.61	ug/L	98
103)	1,2,3-trichloropropane	8.352	110	229878	189.80	ug/L	94
104)	n-propylbenzene	8.405	91	2812297	200.97	ug/L	100
105)	2-chlorotoluene	8.499	126	633170	200.53	ug/L	96
106)	4-chlorotoluene	8.614	126	633686	201.64	ug/L	98
107)	1,3,5-trimethylbenzene	8.578	105	2023089	203.66	ug/L	100
108)	tert-butylbenzene	8.882	134	452269	204.66	ug/L	97
109)	1,2,4-trimethylbenzene	8.945	105	2030423	203.89	ug/L	99
110)	sec-butylbenzene	9.102	105	2405270	203.28	ug/L	99
111)	1,3-dichlorobenzene	9.223	146	1261312	203.14	ug/L	98
112)	p-isopropyltoluene	9.249	119	2079335	203.85	ug/L	99
113)	1,4-dichlorobenzene	9.322	146	1277922	203.35	ug/L	98
114)	1,2-dichlorobenzene	9.674	146	1221423	204.44	ug/L	98
115)	benzyl chloride	9.427	91	1375913	214.65	ug/L	98
116)	n-butylbenzene	9.647	92	979326	213.19	ug/L	96
117)	hexachloroethane	9.946	201	389948	214.64	ug/L	96
118)	1,2-dibromo-3-chloropr...	10.444	157	202475	203.21	ug/L	98
119)	nitrobenzene	10.633	77	56000	241.64	ug/L	94
120)	1,3,5-trichlorobenzene	10.633	180	793181	199.25	ug/L	97
121)	1,2,4-trichlorobenzene	11.236	180	682514	202.47	ug/L	98
122)	hexachlorobutadiene	11.378	225	277011	198.59	ug/L	99
123)	naphthalene	11.482	128	1881068	205.36	ug/L	99
124)	1,2,3-trichlorobenzene	11.692	180	564923	197.42	ug/L	99
125)	2-ethylhexyl acrylate	11.414	70	64172	49.88	ug/L	94
126)	2-methylnaphthalene	12.536	142	197071	99.19	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61600.D
Acq On : 18 Sep 2019 9:41 pm
Operator : jessicap
Sample : ic2531-200
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 19 08:02:37 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 08:01:57 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61603.D
Acq On : 18 Sep 2019 10:58 pm
Operator : jessicap
Sample : icv2531-50
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 15:39:26 2019
Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Fri Sep 20 12:27:31 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.942	65	115122	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	297346	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	418780	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	350047	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	161659	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.148	113	133423	49.65	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 99.30%						
53) 1,2-dichloroethane-d4 (s)	4.399	65	116901	49.28	ug/L	0.00
Spiked Amount 50.000 Range 81 - 124 Recovery = 98.56%						
75) toluene-d8 (s)	5.846	98	444843	49.68	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 99.36%						
99) 4-bromofluorobenzene (s)	8.179	95	144429	49.75	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 99.50%						
Target Compounds						Qvalue
2) ethanol	2.381	45	181562	5410.81	ug/L	96
3) tertiary butyl alcohol	2.994	59	125160	280.96	ug/L	98
4) 1,4-dioxane	5.133	88	55849	1294.00	ug/L	95
6) chlorodifluoromethane	1.584	51	128699	44.22	ug/L	99
7) dichlorodifluoromethane	1.573	85	157912	41.76	ug/L	97
8) chloromethane	1.715	50	148716	42.20	ug/L	99
9) vinyl chloride	1.804	62	177293	44.57	ug/L	98
10) bromomethane	2.040	96	161970	60.79	ug/L	99
11) chloroethane	2.118	64	80489	39.42	ug/L	98
12) trichlorofluoromethane	2.297	101	210388	46.27	ug/L	99
13) vinyl bromide	2.255	106	117420	56.80	ug/L	100
14) 1,3-butadiene	1.830	54	123608	52.44	ug/L	99
15) ethyl ether	2.475	74	68165	52.45	ug/L	98
16) 2-chloropropane	2.559	43	162256	51.62	ug/L	97
17) acrolein	2.569	56	19615	45.01	ug/L	98
18) freon 113	2.643	151	105039	53.06	ug/L	95
19) 1,1-dichloroethene	2.648	61	159340	47.29	ug/L	99
20) acetone	2.653	58	53040	193.40	ug/L	93
21) acetonitrile	2.837	41	154456	525.15	ug/L	99
22) iodomethane	2.758	142	117475	57.29	ug/L	99
23) carbon disulfide	2.816	76	311420	50.70	ug/L	100
24) methylene chloride	2.968	84	127674	48.94	ug/L	99
25) methyl acetate	2.858	43	93683	45.10	ug/L	95
26) methyl tert butyl ether	3.130	73	714198	101.18	ug/L	98
27) trans-1,2-dichloroethene	3.146	96	124588	47.95	ug/L	98
28) hexane	3.324	56	64167	48.82	ug/L	98
29) di-isopropyl ether	3.434	45	324477	50.95	ug/L	99
30) ethyl tert-butyl ether	3.676	59	331758	51.82	ug/L	98
31) 1,1-dichloroethane	3.434	63	212621	50.64	ug/L	100
32) chloroprene	3.487	53	163213	53.87	ug/L	99
34) vinyl acetate	3.414	86	19645	41.95	ug/L #	92
35) ethyl acetate	3.801	45	21434	51.76	ug/L #	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61603.D
Acq On : 18 Sep 2019 10:58 pm
Operator : jessicap
Sample : icv2531-50
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 15:39:26 2019
Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Fri Sep 20 12:27:31 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) 2-butanone	3.791	72	75052	220.53	ug/L		97
37) 2,2-dichloropropane	3.828	77	173857	50.19	ug/L		96
38) cis-1,2-dichloroethene	3.817	96	142607	49.88	ug/L		98
39) propionitrile	3.833	54	217244	550.21	ug/L		97
40) methyl acrylate	3.849	85	25140	52.30	ug/L		97
41) bromochloromethane	3.985	128	79767	54.94	ug/L		97
42) tetrahydrofuran	3.995	71	19630	49.86	ug/L		88
43) chloroform	4.037	83	240138	50.19	ug/L		100
45) methacrylonitrile	3.943	67	59063	50.93	ug/L		95
46) 1,1,1-trichloroethane	4.179	97	207494	50.12	ug/L		99
47) cyclohexane	4.237	84	162074	51.95	ug/L		99
48) 1,1-dichloropropene	4.284	75	168604	50.82	ug/L		99
49) carbon tetrachloride	4.289	119	197776	54.59	ug/L		98
50) isobutyl alcohol	4.289	42	42981	549.28	ug/L		94
51) tert-amyl alcohol	4.378	55	38128	268.87	ug/L		96
54) n-butyl alcohol	4.761	56	253285	2674.19	ug/L		99
55) benzene	4.431	78	477277	50.32	ug/L		100
56) tert-amyl methyl ether	4.494	73	360816	52.10	ug/L		98
57) iso-octane	4.494	57	267290	56.28	ug/L		100
58) heptane	4.604	57	67749	63.00	ug/L		87
59) isopropyl acetate	4.404	87	33268	50.13	ug/L	#	90
60) 1,2-dichloroethane	4.452	62	172003	48.79	ug/L		100
61) trichloroethene	4.897	95	142140	52.36	ug/L		96
62) ethyl acrylate	4.918	55	177255	52.66	ug/L		99
63) 2-nitropropane	5.443	41	35860	50.19	ug/L		94
64) 2-chloroethyl vinyl ether	5.474	63	512096	323.33	ug/L		98
65) methyl methacrylate	5.097	100	41936	52.08	ug/L		99
66) 1,2-dichloropropane	5.091	63	124711	51.19	ug/L		94
67) methylcyclohexane	5.086	83	183696	55.05	ug/L		98
68) dibromomethane	5.159	93	99033	51.28	ug/L		99
69) bromodichloromethane	5.280	83	187106	49.77	ug/L		97
70) epichlorohydrin	5.526	57	69735	287.81	ug/L		97
71) cis-1,3-dichloropropene	5.621	75	209870	53.39	ug/L		97
72) 4-methyl-2-pentanone	5.720	58	232294	213.32	ug/L		98
73) 3-methyl-1-butanol	5.741	70	102905	1088.30	ug/L		98
76) toluene	5.904	92	315149	50.37	ug/L		100
77) ethyl methacrylate	6.098	69	175353	51.94	ug/L		99
78) trans-1,3-dichloropropene	6.072	75	197220	55.62	ug/L		98
79) 1,1,2-trichloroethane	6.245	83	108597	51.16	ug/L		99
80) 2-hexanone	6.407	58	231302	209.29	ug/L		99
82) 1,3-dichloropropane	6.386	76	196115	51.28	ug/L		99
83) butyl acetate	6.496	56	91783	54.14	ug/L		98
84) dibromochloromethane	6.575	129	178993	54.56	ug/L		98
85) 1,2-dibromoethane	6.690	107	163182	53.23	ug/L		96
86) n-butyl ether	7.178	57	469887	55.78	ug/L		100
87) chlorobenzene	7.120	112	383337	52.21	ug/L		100
88) 1,1,1,2-tetrachloroethane	7.194	131	150623	52.04	ug/L		98
89) ethylbenzene	7.199	91	605837	51.54	ug/L		100
90) m,p-xylene	7.314	106	476745	105.29	ug/L		100
91) o-xylene	7.671	91	471893	52.09	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61603.D
Acq On : 18 Sep 2019 10:58 pm
Operator : jessicap
Sample : icv2531-50
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 15:39:26 2019
Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Fri Sep 20 12:27:31 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92)	styrene	7.687	104	397639	54.26	ug/L	99
93)	butyl acrylate	7.597	56	116879	54.57	ug/L	99
94)	n-amyl acetate	7.802	70	93013	53.51	ug/L	98
95)	bromoform	7.860	173	138194	56.06	ug/L	98
96)	isopropylbenzene	8.012	105	579119	53.42	ug/L	99
97)	cis-1,4-dichloro-2-butene	8.059	88	67722	48.34	ug/L	98
100)	bromobenzene	8.321	156	171297	52.34	ug/L	99
101)	1,1,2,2-tetrachloroethane	8.290	83	178960	49.96	ug/L	99
102)	trans-1,4-dichloro-2-b...	8.326	53	45458	54.04	ug/L	98
103)	1,2,3-trichloropropane	8.352	110	54346	51.63	ug/L	97
104)	n-propylbenzene	8.405	91	656372	54.55	ug/L	100
105)	2-chlorotoluene	8.499	126	144999	52.18	ug/L	98
106)	4-chlorotoluene	8.615	126	150261	53.72	ug/L	96
107)	1,3,5-trimethylbenzene	8.578	105	458050	53.74	ug/L	98
108)	tert-butylbenzene	8.882	134	102515	52.41	ug/L	98
109)	1,2,4-trimethylbenzene	8.940	105	470614	54.90	ug/L	98
110)	sec-butylbenzene	9.102	105	545267	54.28	ug/L	100
111)	1,3-dichlorobenzene	9.223	146	293048	54.43	ug/L	98
112)	p-isopropyltoluene	9.249	119	477912	56.72	ug/L	99
113)	1,4-dichlorobenzene	9.322	146	296614	51.56	ug/L	99
114)	1,2-dichlorobenzene	9.674	146	279298	54.94	ug/L	97
115)	benzyl chloride	9.427	91	368119	67.75	ug/L	100
116)	n-butylbenzene	9.647	92	209786	55.30	ug/L	97
117)	hexachloroethane	9.946	201	84656	53.14	ug/L	98
118)	1,2-dibromo-3-chloropr...	10.439	157	44278	52.20	ug/L	99
120)	1,3,5-trichlorobenzene	10.633	180	189098	58.73	ug/L	98
121)	1,2,4-trichlorobenzene	11.236	180	152944	55.15	ug/L	97
122)	hexachlorobutadiene	11.372	225	62243	52.15	ug/L	96
123)	naphthalene	11.483	128	415838	55.32	ug/L	99
124)	1,2,3-trichlorobenzene	11.692	180	127705	52.55	ug/L	99
125)	2-ethylhexyl acrylate	11.414	70	13526	10.24	ug/L	95
126)	2-methylnaphthalene	12.536	142	41047	25.62	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61603.D
Acq On : 18 Sep 2019 10:58 pm
Operator : jessicap
Sample : icv2531-50
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 23 15:39:26 2019
Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Fri Sep 20 12:27:31 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61604.D
Acq On : 18 Sep 2019 11:24 pm
Operator : jessicap
Sample : icv2531-50
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 19 13:24:44 2019
Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.936	65	108878	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	287346	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	402216	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	326399	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	145935	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	128784	49.59	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 99.18%						
53) 1,2-dichloroethane-d4 (s)	4.394	65	112032	49.17	ug/L	0.00
Spiked Amount 50.000 Range 81 - 124 Recovery = 98.34%						
75) toluene-d8 (s)	5.846	98	415307	49.74	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 99.48%						
99) 4-bromofluorobenzene (s)	8.179	95	131551	50.20	ug/L	0.00
Spiked Amount 50.000 Range 80 - 120 Recovery = 100.40%						
Target Compounds						Qvalue
33) acrylonitrile	3.109	53	51494	53.56	ug/L	99
81) tetrachloroethene	6.339	164	144987	53.24	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.12

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\V2V2531\
Data File : 2V61604.D
Acq On : 18 Sep 2019 11:24 pm
Operator : jessicap
Sample : icv2531-50
Misc : MS37628,V2V2531,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 19 13:24:44 2019
Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61607.d
Acq On : 19 Sep 2019 9:00 am
Operator : jessicap
Sample : cc2531-20 Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:00:21 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.936	65	111469	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	296335	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	414133	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	337640	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	156560	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	132732	49.56	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.12%			
53) 1,2-dichloroethane-d4 (s)	4.394	65	112277	47.86	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 95.72%			
75) toluene-d8 (s)	5.846	98	437455	50.65	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.30%			
99) 4-bromofluorobenzene (s)	8.179	95	139562	49.64	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.28%			
Target Compounds						Qvalue
2) ethanol	2.381	45	68307	2102.36	ug/L	96
3) tertiary butyl alcohol	2.989	59	46082	106.84	ug/L	93
4) 1,4-dioxane	5.128	88	21290	509.44	ug/L	98
6) chlorodifluoromethane	1.584	51	53258	18.36	ug/L	97
7) dichlorodifluoromethane	1.573	85	77501	20.57	ug/L	97
8) chloromethane	1.715	50	68112	19.39	ug/L	95
9) vinyl chloride	1.804	62	75318	19.00	ug/L	98
10) bromomethane	2.045	96	56968	21.46	ug/L	96
11) chloroethane	2.118	64	38804	19.07	ug/L	96
12) trichlorofluoromethane	2.297	101	101738	22.45	ug/L	97
13) vinyl bromide	2.255	106	46710	22.67	ug/L	92
14) 1,3-butadiene	1.830	54	40815	17.37	ug/L	97
15) ethyl ether	2.475	74	26533	20.49	ug/L	97
16) 2-chloropropane	2.564	43	62963	20.10	ug/L	96
17) acrolein	2.564	56	9795	22.55	ug/L	98
18) freon 113	2.643	151	43138	21.87	ug/L	99
19) 1,1-dichloroethene	2.648	61	69559	20.71	ug/L	99
20) acetone	2.653	58	21400	78.30	ug/L	93
21) acetonitrile	2.842	41	58103	198.22	ug/L	97
22) iodomethane	2.758	142	29248	14.31	ug/L	95
23) carbon disulfide	2.816	76	120696	19.72	ug/L	98
24) methylene chloride	2.968	84	51913	19.97	ug/L	98
25) methyl acetate	2.858	43	39277	18.97	ug/L	98
26) methyl tert butyl ether	3.130	73	142180	20.21	ug/L	98
27) trans-1,2-dichloroethene	3.146	96	51699	19.96	ug/L	97
28) hexane	3.324	56	29525	22.54	ug/L	93
29) di-isopropyl ether	3.434	45	132567	20.89	ug/L	99
30) ethyl tert-butyl ether	3.676	59	136178	21.34	ug/L	98
31) 1,1-dichloroethane	3.434	63	85350	20.40	ug/L	98
32) chloroprene	3.487	53	65701	21.76	ug/L	96
33) acrylonitrile	3.104	53	20239	20.41	ug/L	95
34) vinyl acetate	3.413	86	8629	18.49	ug/L	94
35) ethyl acetate	3.807	45	8330	20.18	ug/L #	1
36) 2-butanone	3.791	72	28080	82.79	ug/L #	91
37) 2,2-dichloropropane	3.828	77	75724	21.94	ug/L	98
38) cis-1,2-dichloroethene	3.817	96	59241	20.79	ug/L	99
39) propionitrile	3.833	54	80859	205.49	ug/L	97
40) methyl acrylate	3.843	85	9473	19.78	ug/L #	78
41) bromochloromethane	3.985	128	30962	21.40	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61607.d
Acq On : 19 Sep 2019 9:00 am
Operator : jessicap
Sample : cc2531-20 Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:00:21 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	tetrahydrofuran	3.990	71	7571	18.10	ug/L		87
43)	chloroform	4.037	83	97611	20.47	ug/L		99
45)	methacrylonitrile	3.943	67	22814	19.74	ug/L		97
46)	1,1,1-trichloroethane	4.179	97	88093	21.35	ug/L		97
47)	cyclohexane	4.237	84	70224	22.59	ug/L		98
48)	1,1-dichloropropene	4.284	75	69043	20.88	ug/L		98
49)	carbon tetrachloride	4.289	119	79681	22.07	ug/L		98
50)	isobutyl alcohol	4.284	42	15739	201.83	ug/L		93
51)	tert-amyl alcohol	4.378	55	14751	104.37	ug/L		95
54)	n-butyl alcohol	4.761	56	93988	1003.46	ug/L		99
55)	benzene	4.431	78	192863	20.56	ug/L		100
56)	tert-amyl methyl ether	4.493	73	145128	21.19	ug/L		99
57)	iso-octane	4.493	57	109800	23.38	ug/L		99
58)	heptane	4.609	57	23800	22.38	ug/L		96
59)	isopropyl acetate	4.410	87	12931	19.70	ug/L	#	80
60)	1,2-dichloroethane	4.452	62	70740	20.29	ug/L		99
61)	trichloroethene	4.897	95	55611	20.71	ug/L		97
62)	ethyl acrylate	4.918	55	67324	20.22	ug/L		99
63)	2-nitropropane	5.442	41	14284	20.21	ug/L		94
64)	2-chloroethyl vinyl ether	5.474	63	164089	104.77	ug/L		98
65)	methyl methacrylate	5.096	100	16408	20.61	ug/L		94
66)	1,2-dichloropropane	5.091	63	49210	20.43	ug/L		92
67)	methylcyclohexane	5.086	83	72866	22.08	ug/L		99
68)	dibromomethane	5.159	93	39780	20.83	ug/L		96
69)	bromodichloromethane	5.280	83	76834	20.67	ug/L		99
70)	epichlorohydrin	5.526	57	22685	94.68	ug/L		93
71)	cis-1,3-dichloropropene	5.621	75	83577	21.50	ug/L		98
72)	4-methyl-2-pentanone	5.720	58	87986	81.71	ug/L		96
73)	3-methyl-1-butanol	5.741	70	37563	401.72	ug/L		94
76)	toluene	5.904	92	128270	21.25	ug/L		97
77)	ethyl methacrylate	6.098	69	69948	21.48	ug/L		98
78)	trans-1,3-dichloropropene	6.072	75	76009	22.22	ug/L		99
79)	1,1,2-trichloroethane	6.245	83	43152	21.08	ug/L		95
80)	2-hexanone	6.407	58	89391	83.86	ug/L		99
81)	tetrachloroethene	6.339	164	53806	19.10	ug/L		99
82)	1,3-dichloropropane	6.386	76	77050	20.89	ug/L		98
83)	butyl acetate	6.496	56	34793	21.28	ug/L		93
84)	dibromochloromethane	6.580	129	68105	21.52	ug/L		99
85)	1,2-dibromoethane	6.690	107	62850	21.26	ug/L		96
86)	n-butyl ether	7.178	57	180533	22.22	ug/L		99
87)	chlorobenzene	7.120	112	150805	21.29	ug/L		99
88)	1,1,1,2-tetrachloroethane	7.194	131	59186	21.20	ug/L		99
89)	ethylbenzene	7.199	91	244510	21.57	ug/L		99
90)	m,p-xylene	7.314	106	190582	43.64	ug/L		99
91)	o-xylene	7.671	91	191129	21.87	ug/L		97
92)	styrene	7.686	104	158037	22.36	ug/L		95
93)	butyl acrylate	7.592	56	42993	20.81	ug/L		98
94)	n-amyl acetate	7.802	70	36089	21.52	ug/L		99
95)	bromoform	7.860	173	50693	21.32	ug/L		100
96)	isopropylbenzene	8.012	105	231885	22.17	ug/L		99
97)	cis-1,4-dichloro-2-butene	8.059	88	25549	18.91	ug/L		97
100)	bromobenzene	8.321	156	68270	21.54	ug/L		100
101)	1,1,2,2-tetrachloroethane	8.295	83	72828	20.99	ug/L		99
102)	trans-1,4-dichloro-2-b...	8.326	53	17343	21.29	ug/L		96
103)	1,2,3-trichloropropane	8.352	110	21111	20.71	ug/L		93
104)	n-propylbenzene	8.405	91	260636	22.37	ug/L		96
105)	2-chlorotoluene	8.499	126	60185	22.37	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61607.d
Acq On : 19 Sep 2019 9:00 am
Operator : jessicap
Sample : cc2531-20 Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:00:21 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
106) 4-chlorotoluene	8.615	126	58251	21.50 ug/L	99
107) 1,3,5-trimethylbenzene	8.578	105	184477	22.35 ug/L	99
108) tert-butylbenzene	8.882	134	41358	21.83 ug/L	91
109) 1,2,4-trimethylbenzene	8.940	105	182607	21.99 ug/L	99
110) sec-butylbenzene	9.102	105	216005	22.20 ug/L	100
111) 1,3-dichlorobenzene	9.223	146	113959	21.85 ug/L	99
112) p-isopropyltoluene	9.249	119	186979	22.92 ug/L	99
113) 1,4-dichlorobenzene	9.322	146	115433	20.72 ug/L	97
114) 1,2-dichlorobenzene	9.674	146	108769	22.09 ug/L	98
115) benzyl chloride	9.427	91	119898	22.79 ug/L	99
116) n-butylbenzene	9.647	92	81891	22.29 ug/L	99
117) hexachloroethane	9.946	201	33106	21.46 ug/L	98
118) 1,2-dibromo-3-chloropr...	10.439	157	16616	20.23 ug/L	95
120) 1,3,5-trichlorobenzene	10.633	180	71411	22.90 ug/L	97
121) 1,2,4-trichlorobenzene	11.236	180	57919	21.56 ug/L	93
122) hexachlorobutadiene	11.372	225	25642	22.18 ug/L	97
123) naphthalene	11.482	128	149918	20.59 ug/L	98
124) 1,2,3-trichlorobenzene	11.692	180	47005	19.97 ug/L	98
125) 2-ethylhexyl acrylate	11.414	70	4044	3.80 ug/L	87
126) 2-methylnaphthalene	12.531	142	10070	6.49 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61607.d
Acq On : 19 Sep 2019 9:00 am
Operator : jessicap
Sample : cc2531-20 Inst : MS2V
Misc : MS37628,V2V2532,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 00:00:21 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:02:25 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61630.d
Acq On : 19 Sep 2019 7:12 pm
Operator : jessicap
Sample : ecc2531-50 Inst : MS2V
Misc : MS37676,V2V2532,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 01:13:19 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.942	65	107904	500.00	ug/L	0.00
5) pentafluorobenzene	4.142	168	285199	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.703	114	401228	50.00	ug/L	0.00
74) chlorobenzene-d5	7.094	117	333577	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	9.296	152	160331	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	4.147	113	129618	50.29	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.58%			
53) 1,2-dichloroethane-d4 (s)	4.394	65	113904	50.12	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.24%			
75) toluene-d8 (s)	5.846	98	428184	50.18	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.36%			
99) 4-bromofluorobenzene (s)	8.179	95	140888	48.93	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.86%			
Target Compounds						Qvalue
2) ethanol	2.381	45	160285	5096.25	ug/L	95
3) tertiary butyl alcohol	2.994	59	112671	269.85	ug/L	98
4) 1,4-dioxane	5.133	88	50549	1249.54	ug/L	94
6) chlorodifluoromethane	1.584	51	139292	49.90	ug/L	99
7) dichlorodifluoromethane	1.573	85	144046	39.72	ug/L	98
8) chloromethane	1.715	50	144081	42.62	ug/L	98
9) vinyl chloride	1.804	62	172597	45.24	ug/L	98
10) bromomethane	2.040	96	103255	40.41	ug/L	97
11) chloroethane	2.118	64	91351	46.64	ug/L	99
12) trichlorofluoromethane	2.297	101	215328	49.37	ug/L	99
13) vinyl bromide	2.255	106	99998	50.43	ug/L	97
14) 1,3-butadiene	1.830	54	114466	50.63	ug/L	99
15) ethyl ether	2.475	74	65126	52.25	ug/L	97
16) 2-chloropropane	2.559	43	151668	50.31	ug/L	98
17) acrolein	2.569	56	18620	44.55	ug/L	97
18) freon 113	2.643	151	98867	52.07	ug/L	96
19) 1,1-dichloroethene	2.648	61	168182	52.04	ug/L	97
20) acetone	2.653	58	47615	181.02	ug/L	95
21) acetonitrile	2.837	41	138384	490.54	ug/L	98
22) iodomethane	2.758	142	97798	49.73	ug/L	94
23) carbon disulfide	2.816	76	297585	50.51	ug/L	99
24) methylene chloride	2.968	84	121457	48.54	ug/L	96
25) methyl acetate	2.858	43	97365	48.87	ug/L	99
26) methyl tert butyl ether	3.130	73	344933	50.95	ug/L	98
27) trans-1,2-dichloroethene	3.146	96	122776	49.26	ug/L	97
28) hexane	3.324	56	63481	50.35	ug/L	97
29) di-isopropyl ether	3.434	45	316694	51.84	ug/L	99
30) ethyl tert-butyl ether	3.676	59	321062	52.29	ug/L	99
31) 1,1-dichloroethane	3.434	63	201987	50.15	ug/L	99
32) chloroprene	3.487	53	156201	53.75	ug/L	98
33) acrylonitrile	3.104	53	47702	49.99	ug/L	96
34) vinyl acetate	3.413	86	22662	50.46	ug/L	98
35) ethyl acetate	3.801	45	21000	52.87	ug/L	89
36) 2-butanone	3.791	72	67297	206.16	ug/L	95
37) 2,2-dichloropropane	3.828	77	183573	55.25	ug/L	99
38) cis-1,2-dichloroethene	3.817	96	140496	51.24	ug/L	97
39) propionitrile	3.833	54	190937	504.18	ug/L	99
40) methyl acrylate	3.849	85	23749	51.51	ug/L	96
41) bromochloromethane	3.980	128	74119	53.22	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61630.d
Acq On : 19 Sep 2019 7:12 pm
Operator : jessicap
Sample : ecc2531-50 Inst : MS2V
Misc : MS37676,V2V2532,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 01:13:19 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	tetrahydrofuran	3.995	71	18541	46.05	ug/L		95
43)	chloroform	4.037	83	228686	49.83	ug/L		99
45)	methacrylonitrile	3.943	67	56746	51.01	ug/L		98
46)	1,1,1-trichloroethane	4.179	97	210838	53.09	ug/L		98
47)	cyclohexane	4.237	84	148281	49.55	ug/L		99
48)	1,1-dichloropropene	4.284	75	167456	52.63	ug/L		97
49)	carbon tetrachloride	4.289	119	192674	55.45	ug/L		98
50)	isobutyl alcohol	4.289	42	38375	511.31	ug/L		88
51)	tert-amyl alcohol	4.378	55	34376	252.73	ug/L		95
54)	n-butyl alcohol	4.761	56	233207	2569.92	ug/L		100
55)	benzene	4.431	78	464777	51.15	ug/L		100
56)	tert-amyl methyl ether	4.494	73	349165	52.62	ug/L		98
57)	iso-octane	4.494	57	237661	52.23	ug/L		100
58)	heptane	4.609	57	52992	51.43	ug/L		93
59)	isopropyl acetate	4.404	87	31521	49.57	ug/L		96
60)	1,2-dichloroethane	4.452	62	165276	48.93	ug/L		95
61)	trichloroethene	4.897	95	134702	51.79	ug/L		100
62)	ethyl acrylate	4.918	55	166106	51.50	ug/L		99
63)	2-nitropropane	5.442	41	34876	50.94	ug/L		97
64)	2-chloroethyl vinyl ether	5.479	63	418210	275.61	ug/L		100
65)	methyl methacrylate	5.096	100	40561	52.57	ug/L	#	89
66)	1,2-dichloropropane	5.091	63	118371	50.71	ug/L		96
67)	methylcyclohexane	5.086	83	163270	51.07	ug/L		98
68)	dibromomethane	5.159	93	92601	50.04	ug/L		98
69)	bromodichloromethane	5.280	83	184239	51.16	ug/L		100
70)	epichlorohydrin	5.526	57	60525	260.73	ug/L		89
71)	cis-1,3-dichloropropene	5.621	75	199273	52.91	ug/L		98
72)	4-methyl-2-pentanone	5.720	58	217426	208.40	ug/L		97
73)	3-methyl-1-butanol	5.741	70	94250	1040.37	ug/L		93
76)	toluene	5.904	92	305946	51.31	ug/L		97
77)	ethyl methacrylate	6.098	69	168418	52.35	ug/L		97
78)	trans-1,3-dichloropropene	6.072	75	182782	54.10	ug/L		98
79)	1,1,2-trichloroethane	6.245	83	103090	50.96	ug/L		98
80)	2-hexanone	6.407	58	217911	206.91	ug/L		100
81)	tetrachloroethene	6.339	164	130787	47.00	ug/L		96
82)	1,3-dichloropropane	6.386	76	186014	51.04	ug/L		98
83)	butyl acetate	6.496	56	84543	52.33	ug/L		96
84)	dibromochloromethane	6.575	129	163005	52.14	ug/L		97
85)	1,2-dibromoethane	6.690	107	153030	52.39	ug/L		94
86)	n-butyl ether	7.178	57	434090	54.07	ug/L		99
87)	chlorobenzene	7.120	112	362162	51.76	ug/L		99
88)	1,1,1,2-tetrachloroethane	7.194	131	143350	51.98	ug/L		98
89)	ethylbenzene	7.199	91	590203	52.69	ug/L		100
90)	m,p-xylene	7.314	106	460185	106.65	ug/L		100
91)	o-xylene	7.671	91	453967	52.59	ug/L		99
92)	styrene	7.686	104	382640	54.79	ug/L		98
93)	butyl acrylate	7.597	56	110429	54.11	ug/L		96
94)	n-amyl acetate	7.802	70	92834	56.04	ug/L		98
95)	bromoform	7.860	173	120212	51.17	ug/L		97
96)	isopropylbenzene	8.012	105	566451	54.83	ug/L		99
97)	cis-1,4-dichloro-2-butene	8.059	88	61993	46.43	ug/L		97
100)	bromobenzene	8.321	156	162622	50.10	ug/L		99
101)	1,1,2,2-tetrachloroethane	8.295	83	172024	48.42	ug/L		99
102)	trans-1,4-dichloro-2-b...	8.331	53	41632	49.90	ug/L		99
103)	1,2,3-trichloropropane	8.352	110	52120	49.93	ug/L		93
104)	n-propylbenzene	8.405	91	631969	52.96	ug/L		100
105)	2-chlorotoluene	8.499	126	144944	52.60	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61630.d
Acq On : 19 Sep 2019 7:12 pm
Operator : jessicap
Sample : ecc2531-50 Inst : MS2V
Misc : MS37676,V2V2532,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 01:13:19 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
106) 4-chlorotoluene	8.615	126	143521	51.73 ug/L	95
107) 1,3,5-trimethylbenzene	8.578	105	449165	53.14 ug/L	97
108) tert-butylbenzene	8.887	134	104306	53.76 ug/L	97
109) 1,2,4-trimethylbenzene	8.940	105	445151	52.36 ug/L	98
110) sec-butylbenzene	9.102	105	535257	53.72 ug/L	99
111) 1,3-dichlorobenzene	9.223	146	277866	52.03 ug/L	98
112) p-isopropyltoluene	9.249	119	466307	55.81 ug/L	100
113) 1,4-dichlorobenzene	9.322	146	281694	49.37 ug/L	98
114) 1,2-dichlorobenzene	9.674	146	265421	52.65 ug/L	99
115) benzyl chloride	9.427	91	291402	54.08 ug/L	99
116) n-butylbenzene	9.647	92	209189	55.60 ug/L	98
117) hexachloroethane	9.946	201	82894	52.47 ug/L	96
118) 1,2-dibromo-3-chloropr...	10.444	157	42297	50.28 ug/L	98
120) 1,3,5-trichlorobenzene	10.633	180	177844	55.69 ug/L	95
121) 1,2,4-trichlorobenzene	11.236	180	147862	53.76 ug/L	96
122) hexachlorobutadiene	11.372	225	62683	52.95 ug/L	96
123) naphthalene	11.482	128	390289	52.35 ug/L	99
124) 1,2,3-trichlorobenzene	11.692	180	123195	51.11 ug/L	98
125) 2-ethylhexyl acrylate	11.414	70	11279	8.76 ug/L	99
126) 2-methylnaphthalene	12.536	142	34619	21.79 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.14

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\SEPTEMBER\092019\v2v2532\
Data File : 2v61630.d
Acq On : 19 Sep 2019 7:12 pm
Operator : jessicap
Sample : ecc2531-50 Inst : MS2V
Misc : MS37676,V2V2532,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2V2531.M
Quant Results File: M2V2531.RES
Quant Time: Sep 20 01:13:19 2019
Quant Title : SW 846 Method 8260C, Rxi-624 (30m x 0.25mm x 1.4um)
QLast Update : Thu Sep 19 11:01:41 2019
Response via : Initial Calibration

Abundance
TIC: 2v61630.d\data.ms
1600000
1500000
1400000
1300000
1200000
1100000
1000000
900000
800000
700000
600000
500000
400000
300000
200000
100000
0
Time-->
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
1,3-butadiene
trichlorofluoromethane
2-chloropropane
1,1-dichloroethene
chloroprene
ethyl tert-butyl ether
trichloroethene
2-chloroethyl vinyl ether
4-methyl-2-pentanone
toluene-d8 (s)
2-hexanone
tetrachloroethene
chlorobenzene-d5
n-butyl ether
o-xylene
styrene
isopropylbenzene
n-propylbenzene
1,3,5-trimethylbenzene
1,2,4-trimethylbenzene
sec-butylbenzene
4-isopropyltoluene
1,2-dichlorobenzene-d4
1,2-dichlorobenzene
hexachloroethane
1,3,5-trichlorobenzene
1,2,4-trichlorobenzene
naphthalene
1,2,3-trichlorobenzene
2-methylnaphthalene
1,2-dibromo-3-chloropropane
hexachlorobutadiene
2-ethylhexyl acrylate
benzyl chloride
butyl acrylate
n-amyl acetate
bromoform
cis-1,4-dichloro-2-butene
4-bromofluorobenzene (s)
2-chlorotoluene
4-chlorotoluene
tert-butylbenzene
1,2-dibromoethane
1,4-dichlorobenzene-d4
1,4-dichlorobenzene
cis-1,3-dichloropropene
3-methyl-1-butanol
1,1,2-trichloroethane
1,2-dichloroethane-d4
1,2-dichloroethane
dibromochloromethane
bromodichloromethane
dibromomethane
methyl methacrylate
methyl tert butyl ether
1,4-difluorobenzene,I
n-butyl alcohol
ethyl acrylate
heptane
benzene,M
cyclohexane
1,4-dioxane
2-nitropropane
epichlorohydrin
chloroform
methylene chloride
carbon disulfide
methyl acrylate
vinyl acetate
hexane
acrylonitrile
methacrylonitrile
propionitrile
iodomethane
acrolein
ethyl ether
ethanol
vinyl bromide
bromomethane
chloroethane
vinyl chloride
chloromethane
dichlorodifluoromethane
1,1-dichloroethane
acetone
1,2-dichloroethane
1,1,1-trichloroethane
1,2-dichloropropane
1,2-dichloroethene
1,1,2,2-tetrachloroethane
1,2,3-trichloropropane
1,2-dichloropropane-d6
1,2-dichloropropane
1,1,2-trichloroethane
1,2-dibromo-3-chloropropane
1,3-dichloropropane
1,4-dichlorobenzene-d4
1,4-dichlorobenzene
1,2-dichlorobenzene-d4
1,2-dichlorobenzene
1,2-dichlorobenzene
1,2-dichlorobenzene

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251985.D
Acq On : 29 Jul 2019 6:10 pm
Operator : edwardd
Sample : ic9755-0.2
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 30 11:44:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:38:00 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.166	65	463804	500.00 ug/L	0.02
5) pentafluorobenzene	10.539	168	237966	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.501	114	395347	50.00 ug/L	0.00
74) chlorobenzene-d5	14.894	117	298793	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.514	152	165120	50.00 ug/L	0.00

System Monitoring Compounds					
44) dibromofluoromethane (s)	10.576	113	133092	52.06 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery	= 104.12%	
53) 1,2-dichloroethane-d4 (s)	11.010	65	149464	52.57 ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery	= 105.14%	
75) toluene-d8 (s)	13.221	98	420630	48.78 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery	= 97.56%	
99) 4-bromofluorobenzene (s)	16.196	95	155701	48.56 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery	= 97.12%	

Target Compounds					Qvalue
9) vinyl chloride	5.264	62	941	0.15 ug/L	72
11) bromomethane	5.934	94	940	0.24 ug/L #	65
25) methyl tert butyl ether	8.610	73	1950	0.19 ug/L #	51
26) trans-1,2-dichloroethene	8.636	96	536	0.19 ug/L #	76
28) di-isopropyl ether	9.227	45	2031	0.18 ug/L	74
29) ethyl tert-butyl ether	9.698	59	1937	0.19 ug/L	86
31) 1,1-dichloroethane	9.238	63	962	0.18 ug/L	65
37) cis-1,2-dichloroethene	9.996	96	696	0.23 ug/L #	70
47) 1,1,1-trichloroethane	10.660	97	821	0.17 ug/L #	23
49) 1,1-dichloropropene	10.827	75	733	0.19 ug/L #	45
54) benzene	11.078	78	2491	0.23 ug/L	92
55) iso-octane	11.183	57	2434	0.22 ug/L	90
56) tert-amyl methyl ether	11.162	73	2005	0.20 ug/L	89
62) trichloroethene	11.831	95	663	0.26 ug/L	71
64) methylcyclohexane	12.144	83	1179	0.20 ug/L	83
69) bromodichloromethane	12.406	83	698	0.20 ug/L	91
71) cis-1,3-dichloropropene	12.892	75	827	0.19 ug/L	88
72) 4-methyl-2-pentanone	12.997	58	1056	0.61 ug/L #	39
76) toluene	13.305	92	1253	0.21 ug/L	91
77) trans-1,3-dichloropropene	13.509	75	679	0.20 ug/L #	65
78) ethyl methacrylate	13.493	69	652	0.19 ug/L	86
79) 1,1,2-trichloroethane	13.749	83	375	0.20 ug/L #	42
81) tetrachloroethene	13.922	166	389	0.17 ug/L	84
82) 1,3-dichloropropane	13.948	76	644	0.18 ug/L	79
84) dibromochloromethane	14.210	129	389	0.17 ug/L #	21
85) 1,2-dibromoethane	14.403	107	493	0.22 ug/L #	64
87) chlorobenzene	14.931	112	1209	0.21 ug/L #	69
88) 1,1,1,2-tetrachloroethane	15.004	131	474	0.18 ug/L	89
89) ethylbenzene	14.994	91	2157	0.21 ug/L	83
90) m,p-xylene	15.135	106	1854	0.48 ug/L	99
91) o-xylene	15.585	106	915	0.22 ug/L	95
92) styrene	15.600	104	1393	0.23 ug/L	96
96) isopropylbenzene	15.966	105	2491	0.21 ug/L	97
100) bromobenzene	16.411	156	604	0.24 ug/L #	74
101) 1,1,2,2-tetrachloroethane	16.280	83	826	0.20 ug/L	79
104) n-propylbenzene	16.437	91	2890	0.21 ug/L	93
105) 2-chlorotoluene	16.588	126	479	0.17 ug/L #	55
106) 4-chlorotoluene	16.724	91	1808	0.24 ug/L	88
107) 1,3,5-trimethylbenzene	16.609	105	2065	0.19 ug/L	91
109) 1,2,4-trimethylbenzene	17.054	105	2258	0.22 ug/L	97
110) sec-butylbenzene	17.237	105	2807	0.19 ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251985.D
Acq On : 29 Jul 2019 6:10 pm
Operator : edwardd
Sample : ic9755-0.2
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 30 11:44:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:38:00 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
111) 1,3-dichlorobenzene	17.440	146	1103	0.23	ug/L	87
112) p-isopropyltoluene	17.383	119	2446	0.21	ug/L	93
113) 1,4-dichlorobenzene	17.545	146	1254	0.26	ug/L	86
114) 1,2-dichlorobenzene	17.963	146	1193	0.23	ug/L	96
115) n-butylbenzene	17.843	92	1347	0.23	ug/L	89
117) 1,3,5-trichlorobenzene	19.035	180	1102	0.24	ug/L #	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251985.D
Acq On : 29 Jul 2019 6:10 pm
Operator : edwardd
Sample : ic9755-0.2
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 30 11:44:32 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:38:00 2019
Response via : Initial Calibration

Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 07/31/19 01:39

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251986.D
Acq On : 29 Jul 2019 6:40 pm
Operator : edwardd
Sample : ic9755-0.5
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 30 11:47:30 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:38:00 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.151	65	465402	500.00 ug/L	0.00
5) pentafluorobenzene	10.535	168	230777	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.502	114	379734	50.00 ug/L	0.00
74) chlorobenzene-d5	14.890	117	296832	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.509	152	162514	50.00 ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.577	113	125906	50.78 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.56%		
53) 1,2-dichloroethane-d4 (s)	11.011	65	144923	53.07 ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 106.14%		
75) toluene-d8 (s)	13.222	98	406058	47.40 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.80%		
99) 4-bromofluorobenzene (s)	16.197	95	151781	48.10 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.20%		

Target Compounds

					Qvalue
6) chlorodifluoromethane	4.585	51	3414	0.57 ug/L	68
7) dichlorodifluoromethane	4.580	85	2842	0.46 ug/L	73
9) vinyl chloride	5.260	62	2810	0.46 ug/L	78
11) bromomethane	5.945	94	2141	0.56 ug/L	85
12) chloroethane	6.133	64	2029m	0.59 ug/L	
14) trichlorofluoromethane	6.656	101	2841	0.47 ug/L	72
15) ethyl ether	7.022	74	588	0.37 ug/L #	72
17) freon 113	7.503	151	1167	0.44 ug/L #	70
18) 1,1-dichloroethene	7.503	96	1971m	0.57 ug/L	
21) iodomethane	7.769	142	2703	0.52 ug/L	86
22) carbon disulfide	7.957	76	6996	0.64 ug/L	87
25) methyl tert butyl ether	8.600	73	5384	0.54 ug/L	89
26) trans-1,2-dichloroethene	8.637	96	1722	0.65 ug/L #	76
27) hexane	9.008	57	2288	0.53 ug/L #	81
28) di-isopropyl ether	9.223	45	6179	0.57 ug/L	84
29) ethyl tert-butyl ether	9.709	59	5456	0.54 ug/L	81
31) 1,1-dichloroethane	9.238	63	2893	0.56 ug/L	85
32) chloroprene	9.343	53	2416	0.58 ug/L	84
36) 2,2-dichloropropane	10.028	77	3250	0.73 ug/L	93
37) cis-1,2-dichloroethene	9.986	96	1778	0.59 ug/L	93
39) propionitrile	10.007	54	3768	5.01 ug/L #	67
40) bromochloromethane	10.300	128	774	0.54 ug/L	92
42) chloroform	10.383	83	3015	0.65 ug/L	94
43) tert-butyl formate	10.435	59	1248	0.48 ug/L #	13
46) cyclohexane	10.775	84	2950	0.53 ug/L	91
47) 1,1,1-trichloroethane	10.660	97	2511	0.53 ug/L	91
49) 1,1-dichloropropene	10.828	75	1984	0.54 ug/L	94
50) carbon tetrachloride	10.864	117	2055	0.52 ug/L	94
54) benzene	11.079	78	6292	0.60 ug/L	96
55) iso-octane	11.183	57	6265	0.58 ug/L	93
56) tert-amyl methyl ether	11.173	73	5665	0.60 ug/L	99
57) heptane	11.340	71	1107	0.53 ug/L	89
62) trichloroethene	11.831	95	1388	0.56 ug/L	96
64) methylcyclohexane	12.145	83	3221	0.57 ug/L	91
65) 2-chloroethyl vinyl ether	12.652	63	2217	2.15 ug/L	95
67) 1,2-dichloropropane	12.129	63	1579	0.56 ug/L	82
68) dibromomethane	12.250	93	780	0.47 ug/L	90
69) bromodichloromethane	12.406	83	1960	0.57 ug/L	79
71) cis-1,3-dichloropropene	12.893	75	2003	0.48 ug/L	94
72) 4-methyl-2-pentanone	13.002	58	3348	2.02 ug/L #	75
76) toluene	13.300	92	3156	0.54 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251986.D
Acq On : 29 Jul 2019 6:40 pm
Operator : edwardd
Sample : ic9755-0.5
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 30 11:47:30 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:38:00 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
77) trans-1,3-dichloropropene	13.504	75	1843	0.53 ug/L	95
78) ethyl methacrylate	13.483	69	1729	0.50 ug/L	88
79) 1,1,2-trichloroethane	13.745	83	910	0.49 ug/L #	78
80) 2-hexanone	13.923	58	3105	2.20 ug/L #	87
81) tetrachloroethene	13.917	166	1137	0.51 ug/L	89
82) 1,3-dichloropropane	13.943	76	1832	0.52 ug/L	88
84) dibromochloromethane	14.221	129	1181	0.53 ug/L	81
85) 1,2-dibromoethane	14.393	107	1131	0.50 ug/L	91
86) n-butyl ether	14.869	57	6066	0.57 ug/L #	40
87) chlorobenzene	14.932	112	2981	0.52 ug/L	87
88) 1,1,1,2-tetrachloroethane	14.999	131	1220	0.45 ug/L	86
89) ethylbenzene	14.994	91	5506	0.54 ug/L	96
90) m,p-xylene	15.120	106	4124	1.07 ug/L	91
91) o-xylene	15.580	106	2304	0.55 ug/L	93
92) styrene	15.590	104	3477	0.57 ug/L	90
95) bromoform	15.846	173	781	0.52 ug/L	67
96) isopropylbenzene	15.972	105	6698	0.57 ug/L	99
100) bromobenzene	16.406	156	1330	0.53 ug/L	91
101) 1,1,2,2-tetrachloroethane	16.275	83	2017	0.51 ug/L	90
103) 1,2,3-trichloropropane	16.380	110	389	0.39 ug/L #	53
104) n-propylbenzene	16.437	91	7042	0.52 ug/L	94
105) 2-chlorotoluene	16.584	126	1398	0.51 ug/L #	63
106) 4-chlorotoluene	16.720	91	3977	0.54 ug/L	98
107) 1,3,5-trimethylbenzene	16.605	105	5153	0.49 ug/L	99
109) 1,2,4-trimethylbenzene	17.054	105	5509	0.55 ug/L	98
110) sec-butylbenzene	17.242	105	6947	0.47 ug/L	94
111) 1,3-dichlorobenzene	17.441	146	2738	0.57 ug/L	95
112) p-isopropyltoluene	17.383	119	5893	0.51 ug/L	97
113) 1,4-dichlorobenzene	17.540	146	2903	0.60 ug/L	98
114) 1,2-dichlorobenzene	17.964	146	2812	0.55 ug/L	92
115) n-butylbenzene	17.838	92	3197	0.55 ug/L #	76
116) 1,2-dibromo-3-chloropr...	18.800	157	516	0.45 ug/L	75
117) 1,3,5-trichlorobenzene	19.025	180	2549	0.57 ug/L	93
119) 1,2,4-trichlorobenzene	19.773	180	2439	0.57 ug/L	97
120) hexachlorobutadiene	19.893	225	1003	0.54 ug/L #	81
121) naphthalene	20.107	128	8472	0.57 ug/L	97
122) 1,2,3-trichlorobenzene	20.348	180	2787	0.59 ug/L	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251986.D
Acq On : 29 Jul 2019 6:40 pm
Operator : edwardd
Sample : ic9755-0.5
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 30 11:47:30 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:38:00 2019
Response via : Initial Calibration

Manual Integration Approval Summary

Sample Number:	VA9755-IC9755	**Method:**	SW846 8260C
Lab FileID:	A251986.D	**Analyst approved:**	07/30/19 12:26 Robert Szot
Injection Time:	07/29/19 18:40	**Supervisor approved:**	07/31/19 01:39 Kanya Veerawat

Parameter	CAS	Sig#	R.T. (min.)	Reason
Chloroethane	75-00-3		6.13	Poor instrument integration
1,1-Dichloroethene	75-35-4		7.50	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251986.D
Acq On : 29 Jul 2019 6:40 pm
Operator : edwardd
Sample : ic9755-0.5
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 30 11:38:35 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:38:00 2019
Response via : Initial Calibration

TIC: A251986.D\data.ms

(12) chloroethane (M)

6.133min (+0.027) 0.44ug/L

response 1530

Ion	Exp%	Act%
64.00	100	100
66.00	31.10	0.00#
49.00	23.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251986.D
Acq On : 29 Jul 2019 6:40 pm
Operator : edwardd
Sample : ic9755-0.5
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 30 11:38:35 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:38:00 2019
Response via : Initial Calibration

TIC: A251986.D\data.ms

(12) chloroethane (M)

6.133min (+0.027) 0.59ug/L m

response 2029

Ion	Exp%	Act%
64.00	100	100
66.00	31.10	0.00#
49.00	23.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251986.D
Acq On : 29 Jul 2019 6:40 pm
Operator : edwardd
Sample : ic9755-0.5
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 30 11:38:35 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:38:00 2019
Response via : Initial Calibration

TIC: A251986.D\data.ms

(18) 1,1-dichloroethene (M)

7.503min (+0.006) 0.42ug/L

response 1451

Ion	Exp%	Act%
96.00	100	100
61.00	163.70	120.00#
63.00	53.30	41.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251986.D
Acq On : 29 Jul 2019 6:40 pm
Operator : edwardd
Sample : ic9755-0.5
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 30 11:38:35 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:38:00 2019
Response via : Initial Calibration

TIC: A251986.D\data.ms

(18) 1,1-dichloroethene (M)

7.503min (+0.006) 0.57ug/L m

response 1971

Ion	Exp%	Act%
96.00	100	100
61.00	163.70	120.00#
63.00	53.30	41.86
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251987.D
Acq On : 29 Jul 2019 7:09 pm
Operator : edwardd
Sample : ic9755-1
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 30 11:56:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:54:50 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.150	65	437367	500.00	ug/L	0.00
5) pentafluorobenzene	10.534	168	227432	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.501	114	380697	50.00	ug/L	0.00
74) chlorobenzene-d5	14.889	117	286148	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.508	152	159885	50.00	ug/L	0.00

System Monitoring Compounds						
44) dibromofluoromethane (s)	10.576	113	126203	51.65	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.30%			
53) 1,2-dichloroethane-d4 (s)	11.010	65	141803	51.79	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.58%			
75) toluene-d8 (s)	13.221	98	406010	49.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.34%			
99) 4-bromofluorobenzene (s)	16.196	95	148543	47.85	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.70%			

Target Compounds						Qvalue
3) tertiary butyl alcohol	8.270	59	4466	4.81	ug/L	68
6) chlorodifluoromethane	4.585	51	6062	1.03	ug/L	87
7) dichlorodifluoromethane	4.574	85	5915	0.98	ug/L	84
8) chloromethane	4.998	50	6937	0.90	ug/L	85
9) vinyl chloride	5.259	62	5817	0.97	ug/L	95
10) 1,3-butadiene	5.254	54	4039	0.98	ug/L	91
11) bromomethane	5.949	94	3991	1.05	ug/L #	67
12) chloroethane	6.122	64	3442	1.01	ug/L	76
13) vinyl bromide	6.503	106	3570	0.97	ug/L #	94
14) trichlorofluoromethane	6.639	101	6026	1.02	ug/L	80
15) ethyl ether	7.010	74	1458	0.92	ug/L #	63
17) freon 113	7.502	151	2675	1.01	ug/L #	93
18) 1,1-dichloroethene	7.486	96	3797	1.12	ug/L	85
19) acetone	7.497	58	1989	4.13	ug/L #	58
21) iodomethane	7.768	142	4982	0.97	ug/L	92
22) carbon disulfide	7.931	76	12993	1.21	ug/L	87
23) methylene chloride	8.244	84	5283	1.40	ug/L	95
25) methyl tert butyl ether	8.605	73	10251	1.04	ug/L	97
26) trans-1,2-dichloroethene	8.642	96	2904	1.10	ug/L #	80
27) hexane	9.013	57	4511	1.07	ug/L #	89
28) di-isopropyl ether	9.222	45	11120	1.04	ug/L	96
29) ethyl tert-butyl ether	9.708	59	10565	1.06	ug/L	93
30) 2-butanone	9.922	72	1803	3.40	ug/L #	84
31) 1,1-dichloroethane	9.238	63	5471	1.08	ug/L	95
32) chloroprene	9.353	53	4240	1.03	ug/L	93
36) 2,2-dichloropropane	10.027	77	5145	1.17	ug/L	99
37) cis-1,2-dichloroethene	9.985	96	3524	1.19	ug/L	84
39) propionitrile	9.990	54	6775	9.14	ug/L	81
40) bromochloromethane	10.294	128	1403	1.00	ug/L	91
41) tetrahydrofuran	10.330	42	1653	1.15	ug/L	70
42) chloroform	10.377	83	5390	1.18	ug/L	92
43) tert-butyl formate	10.414	59	2253	0.88	ug/L #	81
45) methacrylonitrile	10.205	67	1319	0.86	ug/L	91
46) cyclohexane	10.775	84	5932	1.07	ug/L	95
47) 1,1,1-trichloroethane	10.649	97	4575	0.98	ug/L	91
49) 1,1-dichloropropene	10.827	75	3850	1.06	ug/L	94
50) carbon tetrachloride	10.858	117	3976	1.02	ug/L	95
54) benzene	11.083	78	11441	1.08	ug/L	96
55) iso-octane	11.182	57	11155	1.03	ug/L	87
56) tert-amyl methyl ether	11.167	73	10366	1.09	ug/L	95
57) heptane	11.344	71	2152	1.02	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251987.D
Acq On : 29 Jul 2019 7:09 pm
Operator : edwardd
Sample : ic9755-1
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 30 11:56:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:54:50 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
59) 1,2-dichloroethane	11.104	62	4163	1.26 ug/L	90
60) n-butyl alcohol	11.559	41	7181	176.53 ug/L #	18
61) ethyl acrylate	11.810	55	3412	0.85 ug/L	83
62) trichloroethene	11.831	95	2599	1.05 ug/L	92
64) methylcyclohexane	12.144	83	6264	1.11 ug/L	92
65) 2-chloroethyl vinyl ether	12.646	63	4311	4.17 ug/L	96
67) 1,2-dichloropropane	12.129	63	2951	1.04 ug/L	84
68) dibromomethane	12.244	93	1638	0.99 ug/L	94
69) bromodichloromethane	12.400	83	3485	1.02 ug/L	83
70) epichlorohydrin	12.751	57	1982	4.70 ug/L #	57
71) cis-1,3-dichloropropene	12.892	75	3888	0.93 ug/L	95
72) 4-methyl-2-pentanone	12.996	58	6228	3.75 ug/L	85
73) 3-methyl-1-butanol	12.991	55	6284	19.18 ug/L	96
76) toluene	13.300	92	5940	1.05 ug/L	98
77) trans-1,3-dichloropropene	13.498	75	3238	0.97 ug/L	94
78) ethyl methacrylate	13.483	69	2899	0.87 ug/L #	78
79) 1,1,2-trichloroethane	13.744	83	1917	1.07 ug/L	88
80) 2-hexanone	13.917	58	5918	4.33 ug/L	89
81) tetrachloroethene	13.917	166	2213	1.03 ug/L	89
82) 1,3-dichloropropane	13.943	76	3601	1.06 ug/L	93
83) butyl acetate	14.000	56	2129	1.02 ug/L #	75
84) dibromochloromethane	14.215	129	2061	0.95 ug/L	91
85) 1,2-dibromoethane	14.392	107	2209	1.01 ug/L	98
86) n-butyl ether	14.863	57	11322	1.11 ug/L	72
87) chlorobenzene	14.926	112	5914	1.08 ug/L	96
88) 1,1,1,2-tetrachloroethane	14.994	131	2661	1.03 ug/L	92
89) ethylbenzene	14.994	91	10486	1.06 ug/L	99
90) m,p-xylene	15.124	106	7863	2.12 ug/L	98
91) o-xylene	15.574	106	4032	0.99 ug/L #	75
92) styrene	15.590	104	6204	1.06 ug/L	98
93) butyl acrylate	15.375	55	5782	1.07 ug/L	91
94) n-amyl acetate	15.610	70	2322	1.09 ug/L #	74
95) bromoform	15.856	173	1450	1.01 ug/L	89
96) isopropylbenzene	15.971	105	11569	1.02 ug/L	95
100) bromobenzene	16.405	156	2312	0.93 ug/L	89
101) 1,1,2,2-tetrachloroethane	16.280	83	3938	1.01 ug/L	84
103) 1,2,3-trichloropropane	16.384	110	1017	1.04 ug/L	88
104) n-propylbenzene	16.437	91	13199	1.00 ug/L	95
105) 2-chlorotoluene	16.588	126	2537	0.94 ug/L	93
106) 4-chlorotoluene	16.719	91	7349	1.01 ug/L	94
107) 1,3,5-trimethylbenzene	16.614	105	9458	0.91 ug/L	99
108) tert-butylbenzene	16.991	119	8163	0.83 ug/L	92
109) 1,2,4-trimethylbenzene	17.048	105	9824	0.99 ug/L	96
110) sec-butylbenzene	17.242	105	12568	0.87 ug/L	97
111) 1,3-dichlorobenzene	17.435	146	4895	1.04 ug/L	90
112) p-isopropyltoluene	17.378	119	11007	0.96 ug/L	97
113) 1,4-dichlorobenzene	17.540	146	5005	1.06 ug/L	86
114) 1,2-dichlorobenzene	17.963	146	5266	1.05 ug/L	95
115) n-butylbenzene	17.838	92	5707	1.00 ug/L	89
116) 1,2-dibromo-3-chloropr...	18.810	157	1069	0.95 ug/L	85
117) 1,3,5-trichlorobenzene	19.024	180	4675	1.05 ug/L	94
119) 1,2,4-trichlorobenzene	19.772	180	4550	1.08 ug/L	94
120) hexachlorobutadiene	19.897	225	1824	0.99 ug/L	92
121) naphthalene	20.101	128	15404	1.06 ug/L	96
122) 1,2,3-trichlorobenzene	20.352	180	4627	0.99 ug/L	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251987.D
Acq On : 29 Jul 2019 7:09 pm
Operator : edwardd
Sample : ic9755-1
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 30 11:56:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:54:50 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251988.D
Acq On : 29 Jul 2019 7:39 pm
Operator : edwardd
Sample : ic9755-2
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 30 12:00:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:59:14 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.155	65	437958	500.00	ug/L	0.00
5) pentafluorobenzene	10.534	168	223564	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.501	114	371967	50.00	ug/L	0.00
74) chlorobenzene-d5	14.888	117	283437	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.513	152	155466	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.575	113	123927	51.60	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.20%			
53) 1,2-dichloroethane-d4 (s)	11.009	65	140548	52.54	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 105.08%			
75) toluene-d8 (s)	13.221	98	395248	48.32	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.64%			
99) 4-bromofluorobenzene (s)	16.195	95	146130	48.41	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.82%			

Target Compounds

						Qvalue
3) tertiary butyl alcohol	8.285	59	9656	10.38	ug/L	88
6) chlorodifluoromethane	4.584	51	12181	2.10	ug/L	98
7) dichlorodifluoromethane	4.558	85	12793	2.15	ug/L	90
8) chloromethane	4.997	50	14908	1.97	ug/L	86
9) vinyl chloride	5.274	62	12247	2.07	ug/L	91
10) 1,3-butadiene	5.279	54	8708	2.15	ug/L	98
11) bromomethane	5.933	94	8464	2.27	ug/L	86
12) chloroethane	6.121	64	7490	2.24	ug/L	94
13) vinyl bromide	6.492	106	7469	2.07	ug/L #	94
14) trichlorofluoromethane	6.633	101	12866	2.20	ug/L	95
15) ethyl ether	7.020	74	3131	2.01	ug/L	90
16) acrolein	7.276	56	1465	1.79	ug/L	99
17) freon 113	7.512	151	5163	1.99	ug/L #	92
18) 1,1-dichloroethene	7.496	96	7332	2.21	ug/L	95
19) acetone	7.486	58	4172	8.81	ug/L #	77
21) iodomethane	7.784	142	10377	2.05	ug/L	92
22) carbon disulfide	7.940	76	23732	2.25	ug/L	91
23) methylene chloride	8.254	84	9142	2.47	ug/L	94
24) methyl acetate	7.972	43	7419	2.48	ug/L #	81
25) methyl tert butyl ether	8.610	73	20627	2.12	ug/L	99
26) trans-1,2-dichloroethene	8.636	96	6000	2.32	ug/L	87
27) hexane	9.012	57	9108	2.20	ug/L	97
28) di-isopropyl ether	9.221	45	22673	2.16	ug/L	94
29) ethyl tert-butyl ether	9.713	59	21157	2.16	ug/L	91
30) 2-butanone	9.917	72	3961	7.60	ug/L #	81
31) 1,1-dichloroethane	9.237	63	10610	2.13	ug/L	98
32) chloroprene	9.347	53	8655	2.15	ug/L	97
33) acrylonitrile	8.542	53	3037	1.84	ug/L	92
36) 2,2-dichloropropane	10.016	77	10575	2.46	ug/L	94
37) cis-1,2-dichloroethene	9.985	96	6459	2.22	ug/L	84
38) methyl acrylate	10.021	85	964	1.77	ug/L #	35
39) propionitrile	9.990	54	15035	20.64	ug/L	92
40) bromochloromethane	10.288	128	2929	2.11	ug/L	89
41) tetrahydrofuran	10.314	42	3300	2.33	ug/L	91
42) chloroform	10.382	83	10187	2.28	ug/L	95
43) tert-butyl formate	10.419	59	5085	2.01	ug/L	92
45) methacrylonitrile	10.199	67	3132	2.07	ug/L	90
46) cyclohexane	10.774	84	12065	2.22	ug/L	98
47) 1,1,1-trichloroethane	10.659	97	9929	2.16	ug/L	87
49) 1,1-dichloropropene	10.826	75	7388	2.08	ug/L	96
50) carbon tetrachloride	10.858	117	7465	1.95	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251988.D
Acq On : 29 Jul 2019 7:39 pm
Operator : edwardd
Sample : ic9755-2
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 30 12:00:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:59:14 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
51) tert-amyl alcohol	10.957	73	4363	9.98 ug/L	90
54) benzene	11.082	78	22603	2.18 ug/L	94
55) iso-octane	11.177	57	22359	2.11 ug/L	95
56) tert-amyl methyl ether	11.161	73	20160	2.17 ug/L	99
57) heptane	11.344	71	4247	2.07 ug/L	94
58) isopropyl acetate	10.978	87	1412	1.85 ug/L #	54
59) 1,2-dichloroethane	11.109	62	7443	2.31 ug/L	98
60) n-butyl alcohol	11.548	41	14911	375.15 ug/L #	19
61) ethyl acrylate	11.799	55	7546	1.92 ug/L	95
62) trichloroethene	11.835	95	5176	2.13 ug/L	89
64) methylcyclohexane	12.149	83	11878	2.14 ug/L	98
65) 2-chloroethyl vinyl ether	12.640	63	9126	9.04 ug/L	94
66) methyl methacrylate	12.076	100	1272	1.65 ug/L	89
67) 1,2-dichloropropane	12.128	63	5649	2.03 ug/L	95
68) dibromomethane	12.243	93	3182	1.97 ug/L	85
69) bromodichloromethane	12.405	83	7037	2.10 ug/L	91
70) epichlorohydrin	12.745	57	4046	9.81 ug/L	92
71) cis-1,3-dichloropropene	12.891	75	8102	1.97 ug/L	93
72) 4-methyl-2-pentanone	12.991	58	13907	8.57 ug/L	99
73) 3-methyl-1-butanol	12.991	55	13922	43.49 ug/L	97
76) toluene	13.304	92	11648	2.08 ug/L	97
77) trans-1,3-dichloropropene	13.498	75	6726	2.04 ug/L	97
78) ethyl methacrylate	13.482	69	6648	2.01 ug/L	97
79) 1,1,2-trichloroethane	13.743	83	3643	2.04 ug/L	91
80) 2-hexanone	13.916	58	12261	9.07 ug/L	99
81) tetrachloroethene	13.911	166	4430	2.08 ug/L	95
82) 1,3-dichloropropane	13.937	76	7301	2.16 ug/L	97
83) butyl acetate	14.000	56	4725	2.28 ug/L	99
84) dibromochloromethane	14.214	129	4020	1.88 ug/L	96
85) 1,2-dibromoethane	14.392	107	4681	2.15 ug/L	88
86) n-butyl ether	14.862	57	22015	2.18 ug/L	85
87) chlorobenzene	14.930	112	11097	2.04 ug/L	92
88) 1,1,1,2-tetrachloroethane	14.998	131	4726	1.84 ug/L	92
89) ethylbenzene	14.988	91	20848	2.13 ug/L	97
90) m,p-xylene	15.129	106	15841	4.31 ug/L	93
91) o-xylene	15.579	106	8277	2.05 ug/L	92
92) styrene	15.589	104	12448	2.14 ug/L	100
93) butyl acrylate	15.375	55	12030	2.25 ug/L	94
94) n-amyl acetate	15.610	70	5220	2.46 ug/L	88
95) bromoform	15.850	173	2873	2.01 ug/L	93
96) isopropylbenzene	15.971	105	22914	2.04 ug/L	98
97) cis-1,4-dichloro-2-butene	16.002	75	2477	1.93 ug/L #	82
100) bromobenzene	16.405	156	4709	1.95 ug/L #	82
101) 1,1,2,2-tetrachloroethane	16.279	83	7783	2.05 ug/L	94
102) trans-1,4-dichloro-2-b...	16.316	53	1765	2.06 ug/L	88
103) 1,2,3-trichloropropane	16.378	110	1953	2.06 ug/L	76
104) n-propylbenzene	16.436	91	25910	2.01 ug/L	98
105) 2-chlorotoluene	16.593	126	5089	1.93 ug/L	85
106) 4-chlorotoluene	16.718	91	14304	2.01 ug/L	99
107) 1,3,5-trimethylbenzene	16.608	105	19157	1.89 ug/L	95
108) tert-butylbenzene	16.995	119	16297	1.70 ug/L	93
109) 1,2,4-trimethylbenzene	17.048	105	19284	2.00 ug/L	99
110) sec-butylbenzene	17.241	105	25532	1.81 ug/L	97
111) 1,3-dichlorobenzene	17.440	146	9698	2.13 ug/L	95
112) p-isopropyltoluene	17.382	119	21130	1.90 ug/L	97
113) 1,4-dichlorobenzene	17.544	146	9723	2.11 ug/L	95
114) 1,2-dichlorobenzene	17.962	146	10663	2.18 ug/L	97
115) n-butylbenzene	17.842	92	11576	2.09 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251988.D
Acq On : 29 Jul 2019 7:39 pm
Operator : edwardd
Sample : ic9755-2
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 30 12:00:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:59:14 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
116) 1,2-dibromo-3-chloropr...	18.809	157	2447	2.23 ug/L	85
117) 1,3,5-trichlorobenzene	19.024	180	9400	2.18 ug/L	94
119) 1,2,4-trichlorobenzene	19.771	180	9128	2.23 ug/L	90
120) hexachlorobutadiene	19.892	225	3580	2.00 ug/L	93
121) naphthalene	20.106	128	30684	2.17 ug/L	98
122) 1,2,3-trichlorobenzene	20.352	180	10037	2.22 ug/L	95
123) hexachloroethane	18.292	201	2786	1.49 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.18

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251988.D
Acq On : 29 Jul 2019 7:39 pm
Operator : edwardd
Sample : ic9755-2
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 30 12:00:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 11:59:14 2019
Response via : Initial Calibration

MA9755.M Wed Jul 31 07:56:25 2019 RPT1 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251989.D
Acq On : 29 Jul 2019 8:08 pm
Operator : edwardd
Sample : ic9755-4
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 30 12:02:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:02:14 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.151	65	419875	500.00	ug/L	0.00
5) pentafluorobenzene	10.535	168	222032	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.497	114	369170	50.00	ug/L	0.00
74) chlorobenzene-d5	14.890	117	281980	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.509	152	153206	50.00	ug/L	0.00

System Monitoring Compounds

44) dibromofluoromethane (s)	10.571	113	120561	50.54	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.08%			
53) 1,2-dichloroethane-d4 (s)	11.011	65	135909	51.19	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.38%			
75) toluene-d8 (s)	13.222	98	394928	48.53	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.06%			
99) 4-bromofluorobenzene (s)	16.197	95	144565	48.60	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.20%			

Target Compounds

						Qvalue
3) tertiary butyl alcohol	8.271	59	17608	19.74	ug/L	89
4) 1,4-dioxane	12.166	88	4883	93.93	ug/L	98
6) chlorodifluoromethane	4.585	51	24073	4.17	ug/L	97
7) dichlorodifluoromethane	4.570	85	22331	3.78	ug/L	97
8) chloromethane	4.998	50	24480	3.25	ug/L	99
9) vinyl chloride	5.260	62	22792	3.88	ug/L	88
10) 1,3-butadiene	5.265	54	16828	4.18	ug/L	94
11) bromomethane	5.939	94	15425	4.16	ug/L	90
12) chloroethane	6.122	64	13777	4.15	ug/L	96
13) vinyl bromide	6.504	106	13998	3.91	ug/L	98
14) trichlorofluoromethane	6.640	101	23368	4.03	ug/L	92
15) ethyl ether	7.022	74	6445	4.17	ug/L	76
16) acrolein	7.278	56	3237	3.99	ug/L	68
17) freon 113	7.503	151	10699	4.15	ug/L	98
18) 1,1-dichloroethene	7.503	96	14310	4.33	ug/L	95
19) acetone	7.476	58	7248	15.41	ug/L #	79
20) acetonitrile	7.926	41	29977	44.07	ug/L	86
21) iodomethane	7.780	142	21055	4.18	ug/L	96
22) carbon disulfide	7.936	76	45701	4.36	ug/L	99
23) methylene chloride	8.250	84	17591	4.79	ug/L	95
24) methyl acetate	7.968	43	13780	4.64	ug/L	89
25) methyl tert butyl ether	8.595	73	41441	4.30	ug/L	99
26) trans-1,2-dichloroethene	8.632	96	11419	4.45	ug/L	91
27) hexane	9.008	57	16849	4.09	ug/L	96
28) di-isopropyl ether	9.223	45	44888	4.30	ug/L	98
29) ethyl tert-butyl ether	9.704	59	41133	4.22	ug/L	99
30) 2-butanone	9.907	72	7945	15.35	ug/L #	88
31) 1,1-dichloroethane	9.238	63	20463	4.13	ug/L	99
32) chloroprene	9.348	53	16316	4.08	ug/L	97
33) acrylonitrile	8.532	53	7099	4.33	ug/L	91
34) vinyl acetate	9.170	86	2404	3.77	ug/L #	44
35) ethyl acetate	9.923	45	2178	3.45	ug/L #	62
36) 2,2-dichloropropane	10.028	77	18843	4.41	ug/L	96
37) cis-1,2-dichloroethene	9.981	96	12294	4.26	ug/L	94
38) methyl acrylate	10.022	85	1875	3.46	ug/L #	14
39) propionitrile	9.986	54	29343	40.57	ug/L	96
40) bromochloromethane	10.289	128	5726	4.16	ug/L	93
41) tetrahydrofuran	10.315	42	5780	4.11	ug/L	94
42) chloroform	10.378	83	19658	4.42	ug/L	99
43) tert-butyl formate	10.420	59	9831	3.91	ug/L	96
45) methacrylonitrile	10.195	67	6167	4.10	ug/L #	79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251989.D
Acq On : 29 Jul 2019 8:08 pm
Operator : edwardd
Sample : ic9755-4
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 30 12:02:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:02:14 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
46) cyclohexane	10.775	84	21033	3.90 ug/L	91
47) 1,1,1-trichloroethane	10.655	97	18306	4.02 ug/L	94
48) iso-butyl alcohol	10.775	43	21768	41.17 ug/L	99
49) 1,1-dichloropropene	10.828	75	14654	4.15 ug/L	98
50) carbon tetrachloride	10.859	117	15785	4.16 ug/L	96
51) tert-amyl alcohol	10.943	73	8863	20.41 ug/L	87
54) benzene	11.078	78	44519	4.34 ug/L	97
55) iso-octane	11.178	57	43746	4.16 ug/L	99
56) tert-amyl methyl ether	11.162	73	40108	4.36 ug/L	92
57) heptane	11.340	71	8031	3.94 ug/L	90
58) isopropyl acetate	10.979	87	2775	3.66 ug/L #	59
59) 1,2-dichloroethane	11.099	62	14254	4.45 ug/L	96
60) n-butyl alcohol	11.544	41	29170	739.46 ug/L #	19
61) ethyl acrylate	11.805	55	15187	3.88 ug/L	98
62) trichloroethene	11.826	95	10060	4.18 ug/L	99
63) 2-nitropropane	12.610	41	3930	4.10 ug/L #	74
64) methylcyclohexane	12.145	83	22944	4.17 ug/L	97
65) 2-chloroethyl vinyl ether	12.642	63	18718	18.68 ug/L	99
66) methyl methacrylate	12.082	100	2925	3.83 ug/L #	59
67) 1,2-dichloropropane	12.124	63	11181	4.05 ug/L	97
68) dibromomethane	12.239	93	6871	4.28 ug/L	85
69) bromodichloromethane	12.401	83	13097	3.94 ug/L	100
70) epichlorohydrin	12.741	57	8146	19.90 ug/L	96
71) cis-1,3-dichloropropene	12.887	75	15549	3.82 ug/L	96
72) 4-methyl-2-pentanone	12.992	58	25993	16.13 ug/L	94
73) 3-methyl-1-butanol	12.992	55	26189	82.43 ug/L	97
76) toluene	13.300	92	21993	3.95 ug/L	93
77) trans-1,3-dichloropropene	13.499	75	12936	3.94 ug/L	95
78) ethyl methacrylate	13.483	69	13224	4.02 ug/L	91
79) 1,1,2-trichloroethane	13.745	83	7165	4.04 ug/L	92
80) 2-hexanone	13.917	58	24762	18.41 ug/L	88
81) tetrachloroethene	13.912	166	8567	4.05 ug/L	93
82) 1,3-dichloropropane	13.943	76	13771	4.10 ug/L	92
83) butyl acetate	14.001	56	9329	4.53 ug/L	98
84) dibromochloromethane	14.215	129	8630	4.05 ug/L	91
85) 1,2-dibromoethane	14.388	107	9118	4.21 ug/L	95
86) n-butyl ether	14.864	57	42700	4.25 ug/L	93
87) chlorobenzene	14.926	112	21825	4.03 ug/L	94
88) 1,1,1,2-tetrachloroethane	14.999	131	10114	3.96 ug/L	98
89) ethylbenzene	14.989	91	39466	4.06 ug/L	98
90) m,p-xylene	15.125	106	30150	8.25 ug/L	97
91) o-xylene	15.580	106	16438	4.10 ug/L	91
92) styrene	15.590	104	24726	4.27 ug/L	97
93) butyl acrylate	15.371	55	23715	4.46 ug/L	98
94) n-amyl acetate	15.606	70	10248	4.86 ug/L	98
95) bromoform	15.852	173	5756	4.05 ug/L	91
96) isopropylbenzene	15.967	105	45243	4.05 ug/L	95
97) cis-1,4-dichloro-2-butene	16.003	75	5332	4.17 ug/L	96
100) bromobenzene	16.411	156	9709	4.09 ug/L	90
101) 1,1,2,2-tetrachloroethane	16.280	83	14479	3.86 ug/L	94
102) trans-1,4-dichloro-2-b...	16.312	53	3295	3.90 ug/L	85
103) 1,2,3-trichloropropane	16.380	110	3700	3.96 ug/L	97
104) n-propylbenzene	16.437	91	50766	4.00 ug/L	99
105) 2-chlorotoluene	16.589	126	9865	3.80 ug/L	94
106) 4-chlorotoluene	16.720	91	28548	4.08 ug/L	99
107) 1,3,5-trimethylbenzene	16.610	105	37239	3.72 ug/L	97
108) tert-butylbenzene	16.991	119	31895	3.39 ug/L	99
109) 1,2,4-trimethylbenzene	17.049	105	36627	3.85 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251989.D
Acq On : 29 Jul 2019 8:08 pm
Operator : edwardd
Sample : ic9755-4
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 30 12:02:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:02:14 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) sec-butylbenzene	17.242	105	50198	3.62 ug/L	98
111) 1,3-dichlorobenzene	17.436	146	18689	4.16 ug/L	98
112) p-isopropyltoluene	17.383	119	41706	3.80 ug/L	98
113) 1,4-dichlorobenzene	17.540	146	18595	4.10 ug/L	98
114) 1,2-dichlorobenzene	17.959	146	19769	4.11 ug/L	95
115) n-butylbenzene	17.844	92	22003	4.02 ug/L	94
116) 1,2-dibromo-3-chloropr...	18.811	157	4608	4.26 ug/L	98
117) 1,3,5-trichlorobenzene	19.025	180	17974	4.23 ug/L	96
119) 1,2,4-trichlorobenzene	19.773	180	17160	4.25 ug/L	99
120) hexachlorobutadiene	19.893	225	6803	3.86 ug/L	92
121) naphthalene	20.102	128	59527	4.28 ug/L	99
122) 1,2,3-trichlorobenzene	20.348	180	18747	4.20 ug/L	98
123) hexachloroethane	18.288	201	5874	3.19 ug/L	96
124) 2-methylnaphthalene	21.414	142	14971	1.62 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.19

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251989.D
Acq On : 29 Jul 2019 8:08 pm
Operator : edwardd
Sample : ic9755-4
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 30 12:02:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:02:14 2019
Response via : Initial Calibration

MA9755.M Wed Jul 31 07:56:26 2019 RPT1

7.7.19
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251990.D
Acq On : 29 Jul 2019 8:37 pm
Operator : edwardd
Sample : ic9755-8
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 30 12:06:01 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.155	65	434566	500.00 ug/L	0.00
5) pentafluorobenzene	10.534	168	231976	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.501	114	392800	50.00 ug/L	0.00
74) chlorobenzene-d5	14.889	117	289861	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.513	152	155419	50.00 ug/L	0.00

System Monitoring Compounds					
44) dibromofluoromethane (s)	10.576	113	128877	51.71 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery	= 103.42%	
53) 1,2-dichloroethane-d4 (s)	11.010	65	147295	52.14 ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery	= 104.28%	
75) toluene-d8 (s)	13.221	98	415910	49.72 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery	= 99.44%	
99) 4-bromofluorobenzene (s)	16.196	95	147086	48.74 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery	= 97.48%	

Target Compounds					Qvalue
3) tertiary butyl alcohol	8.286	59	36585	39.62 ug/L	96
4) 1,4-dioxane	12.175	88	8274	153.78 ug/L	95
6) chlorodifluoromethane	4.590	51	47439	7.86 ug/L	95
7) dichlorodifluoromethane	4.558	85	47226	7.66 ug/L	95
8) chloromethane	4.992	50	50997	6.49 ug/L	98
9) vinyl chloride	5.259	62	46746	7.62 ug/L	94
10) 1,3-butadiene	5.285	54	32952	7.84 ug/L	98
11) bromomethane	5.944	94	31315	8.09 ug/L	98
12) chloroethane	6.116	64	27604	7.95 ug/L	94
13) vinyl bromide	6.498	106	29136	7.79 ug/L	98
14) trichlorofluoromethane	6.634	101	46720	7.72 ug/L	97
15) ethyl ether	7.021	74	13015	8.07 ug/L	86
16) acrolein	7.266	56	6781	8.00 ug/L	92
17) freon 113	7.517	151	21429	7.95 ug/L	98
18) 1,1-dichloroethene	7.496	96	27980	8.11 ug/L	98
19) acetone	7.475	58	15012	30.55 ug/L	97
20) acetonitrile	7.920	41	56568	79.60 ug/L	93
21) iodomethane	7.768	142	41497	7.89 ug/L	91
22) carbon disulfide	7.936	76	88334	8.06 ug/L	97
23) methylene chloride	8.233	84	32520	8.47 ug/L	99
24) methyl acetate	7.967	43	24299	7.82 ug/L	98
25) methyl tert butyl ether	8.605	73	81439	8.08 ug/L	99
26) trans-1,2-dichloroethene	8.631	96	22616	8.43 ug/L	98
27) hexane	9.012	57	34889	8.11 ug/L	97
28) di-isopropyl ether	9.227	45	88565	8.12 ug/L	96
29) ethyl tert-butyl ether	9.708	59	80803	7.94 ug/L	95
30) 2-butanone	9.917	72	16033	29.65 ug/L	94
31) 1,1-dichloroethane	9.237	63	43071	8.32 ug/L	97
32) chloroprene	9.347	53	32907	7.87 ug/L	97
33) acrylonitrile	8.531	53	14028	8.18 ug/L	93
34) vinyl acetate	9.175	86	4686	7.04 ug/L #	79
35) ethyl acetate	9.927	45	4961	7.52 ug/L #	72
36) 2,2-dichloropropane	10.027	77	37529	8.40 ug/L	99
37) cis-1,2-dichloroethene	9.985	96	25477	8.46 ug/L	97
38) methyl acrylate	10.016	85	4453	7.87 ug/L #	76
39) propionitrile	9.990	54	60213	79.67 ug/L	98
40) bromochloromethane	10.293	128	11600	8.07 ug/L	94
41) tetrahydrofuran	10.314	42	11843	8.06 ug/L	96
42) chloroform	10.377	83	39333	8.47 ug/L	99
43) tert-butyl formate	10.414	59	19839	7.56 ug/L	97
45) methacrylonitrile	10.194	67	12491	7.94 ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251990.D
Acq On : 29 Jul 2019 8:37 pm
Operator : edwardd
Sample : ic9755-8
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 30 12:06:01 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
46) cyclohexane	10.780	84	44980	7.99 ug/L	99
47) 1,1,1-trichloroethane	10.659	97	38308	8.04 ug/L	97
48) iso-butyl alcohol	10.769	43	44342	80.28 ug/L	97
49) 1,1-dichloropropene	10.827	75	29314	7.94 ug/L	98
50) carbon tetrachloride	10.858	117	31702	7.99 ug/L	99
51) tert-amyl alcohol	10.957	73	17552	38.68 ug/L	93
54) benzene	11.083	78	90162	8.25 ug/L	98
55) iso-octane	11.182	57	87530	7.82 ug/L	99
56) tert-amyl methyl ether	11.166	73	80018	8.17 ug/L	97
57) heptane	11.339	71	16994	7.83 ug/L	96
58) isopropyl acetate	10.978	87	5904	7.32 ug/L #	79
59) 1,2-dichloroethane	11.104	62	29098	8.54 ug/L	95
60) n-butyl alcohol	11.548	41	55754	1328.34 ug/L #	19
61) ethyl acrylate	11.799	55	30436	7.31 ug/L	97
62) trichloroethene	11.830	95	20290	7.92 ug/L	97
63) 2-nitropropane	12.609	41	8017	7.87 ug/L	82
64) methylcyclohexane	12.149	83	47526	8.13 ug/L	98
65) 2-chloroethyl vinyl ether	12.646	63	36953	34.66 ug/L	99
66) methyl methacrylate	12.076	100	5992	7.38 ug/L #	79
67) 1,2-dichloropropane	12.134	63	23654	8.05 ug/L	98
68) dibromomethane	12.243	93	13257	7.76 ug/L	97
69) bromodichloromethane	12.405	83	27952	7.91 ug/L	99
70) epichlorohydrin	12.745	57	16049	36.85 ug/L	99
71) cis-1,3-dichloropropene	12.892	75	32248	7.44 ug/L	96
72) 4-methyl-2-pentanone	12.996	58	52510	30.63 ug/L	93
73) 3-methyl-1-butanol	12.986	55	52804	156.21 ug/L	99
76) toluene	13.305	92	44820	7.83 ug/L	90
77) trans-1,3-dichloropropene	13.498	75	26341	7.80 ug/L	96
78) ethyl methacrylate	13.477	69	26220	7.75 ug/L	96
79) 1,1,2-trichloroethane	13.744	83	13757	7.55 ug/L	94
80) 2-hexanone	13.916	58	48467	35.05 ug/L	95
81) tetrachloroethene	13.916	166	17499	8.05 ug/L	96
82) 1,3-dichloropropane	13.942	76	27576	7.99 ug/L	97
83) butyl acetate	14.000	56	17902	8.45 ug/L	95
84) dibromochloromethane	14.214	129	16674	7.62 ug/L	99
85) 1,2-dibromoethane	14.392	107	17845	8.02 ug/L	97
86) n-butyl ether	14.863	57	87254	8.45 ug/L	97
87) chlorobenzene	14.925	112	43784	7.87 ug/L	96
88) 1,1,1,2-tetrachloroethane	14.993	131	21276	8.10 ug/L	95
89) ethylbenzene	14.988	91	82172	8.22 ug/L	99
90) m,p-xylene	15.124	106	60704	16.16 ug/L	99
91) o-xylene	15.579	106	33093	8.03 ug/L	98
92) styrene	15.589	104	49410	8.30 ug/L	96
93) butyl acrylate	15.370	55	47184	8.63 ug/L	97
94) n-amyl acetate	15.600	70	19093	8.81 ug/L	95
95) bromoform	15.851	173	11467	7.85 ug/L	99
96) isopropylbenzene	15.966	105	93350	8.13 ug/L	99
97) cis-1,4-dichloro-2-butene	16.002	75	10120	7.69 ug/L	91
100) bromobenzene	16.410	156	18587	7.71 ug/L	93
101) 1,1,2,2-tetrachloroethane	16.279	83	29601	7.78 ug/L	95
102) trans-1,4-dichloro-2-b...	16.311	53	6553	7.64 ug/L	97
103) 1,2,3-trichloropropane	16.379	110	7522	7.94 ug/L	95
104) n-propylbenzene	16.436	91	102327	7.94 ug/L	99
105) 2-chlorotoluene	16.588	126	19705	7.48 ug/L	98
106) 4-chlorotoluene	16.713	91	56630	7.97 ug/L	97
107) 1,3,5-trimethylbenzene	16.609	105	77028	7.58 ug/L	98
108) tert-butylbenzene	16.996	119	66525	6.96 ug/L	98
109) 1,2,4-trimethylbenzene	17.048	105	76608	7.94 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251990.D
Acq On : 29 Jul 2019 8:37 pm
Operator : edwardd
Sample : ic9755-8
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 30 12:06:01 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) sec-butylbenzene	17.241	105	102871	7.31 ug/L	99
111) 1,3-dichlorobenzene	17.435	146	36808	8.08 ug/L	93
112) p-isopropyltoluene	17.383	119	84807	7.62 ug/L	99
113) 1,4-dichlorobenzene	17.539	146	36345	7.89 ug/L	99
114) 1,2-dichlorobenzene	17.958	146	39432	8.08 ug/L	99
115) n-butylbenzene	17.843	92	45317	8.17 ug/L	97
116) 1,2-dibromo-3-chloropr...	18.810	157	8723	7.95 ug/L	94
117) 1,3,5-trichlorobenzene	19.024	180	34880	8.09 ug/L	96
118) 2-ethylhexyl acrylate	19.746	70	3811	1.16 ug/L	92
119) 1,2,4-trichlorobenzene	19.766	180	34874	8.51 ug/L	98
120) hexachlorobutadiene	19.892	225	13177	7.37 ug/L	98
121) naphthalene	20.101	128	117928	8.35 ug/L	98
122) 1,2,3-trichlorobenzene	20.347	180	37090	8.20 ug/L	98
123) hexachloroethane	18.292	201	12502	6.69 ug/L	97
124) 2-methylnaphthalene	21.413	142	31258	3.33 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.20

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251990.D
Acq On : 29 Jul 2019 8:37 pm
Operator : edwardd
Sample : ic9755-8
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 30 12:06:01 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251991.D
Acq On : 29 Jul 2019 9:07 pm
Operator : edwardd
Sample : ic9755-20
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 30 12:06:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.151	65	421424	500.00 ug/L	0.00
5) pentafluorobenzene	10.535	168	225718	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.502	114	386873	50.00 ug/L	0.00
74) chlorobenzene-d5	14.890	117	293150	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.509	152	151348	50.00 ug/L	0.00

System Monitoring Compounds					
44) dibromofluoromethane (s)	10.577	113	127585	52.62 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.24%		
53) 1,2-dichloroethane-d4 (s)	11.011	65	143137	51.44 ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.88%		
75) toluene-d8 (s)	13.222	98	421847	49.87 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.74%		
99) 4-bromofluorobenzene (s)	16.197	95	145370	49.47 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.94%		

Target Compounds					Qvalue
3) tertiary butyl alcohol	8.282	59	86911	97.06 ug/L	96
4) 1,4-dioxane	12.177	88	23195	444.54 ug/L	97
6) chlorodifluoromethane	4.586	51	118177	20.14 ug/L	97
7) dichlorodifluoromethane	4.565	85	118017	19.66 ug/L	96
8) chloromethane	4.993	50	155434	20.32 ug/L	97
9) vinyl chloride	5.260	62	120455	20.17 ug/L	97
10) 1,3-butadiene	5.286	54	81445	19.90 ug/L	96
11) bromomethane	5.945	94	76632	20.35 ug/L	99
12) chloroethane	6.107	64	67847	20.09 ug/L	96
13) vinyl bromide	6.504	106	71957	19.78 ug/L	100
14) trichlorofluoromethane	6.635	101	117434	19.93 ug/L	100
15) ethyl ether	7.011	74	31990	20.38 ug/L	91
16) acrolein	7.252	56	16599	20.13 ug/L	95
17) freon 113	7.503	151	53050	20.23 ug/L	100
18) 1,1-dichloroethene	7.498	96	69617	20.74 ug/L	91
19) acetone	7.471	58	37988	79.44 ug/L	97
20) acetonitrile	7.916	41	137234	198.47 ug/L	99
21) iodomethane	7.780	142	102291	19.99 ug/L	97
22) carbon disulfide	7.931	76	216447	20.29 ug/L	99
23) methylene chloride	8.229	84	78342	20.98 ug/L	99
24) methyl acetate	7.963	43	63173	20.91 ug/L	98
25) methyl tert butyl ether	8.601	73	201573	20.56 ug/L	99
26) trans-1,2-dichloroethene	8.637	96	55293	21.19 ug/L	97
27) hexane	9.008	57	86334	20.62 ug/L	100
28) di-isopropyl ether	9.223	45	220389	20.76 ug/L	94
29) ethyl tert-butyl ether	9.704	59	203736	20.58 ug/L	98
30) 2-butanone	9.908	72	41483	78.84 ug/L	95
31) 1,1-dichloroethane	9.239	63	104420	20.74 ug/L	98
32) chloroprene	9.343	53	84270	20.72 ug/L	96
33) acrylonitrile	8.527	53	34642	20.77 ug/L	94
34) vinyl acetate	9.171	86	12678	19.57 ug/L #	91
35) ethyl acetate	9.923	45	13711	21.37 ug/L #	80
36) 2,2-dichloropropane	10.023	77	90535	20.83 ug/L	96
37) cis-1,2-dichloroethene	9.986	96	62336	21.27 ug/L	96
38) methyl acrylate	10.012	85	11139	20.24 ug/L	95
39) propionitrile	9.986	54	151721	206.32 ug/L	93
40) bromochloromethane	10.295	128	29660	21.20 ug/L	92
41) tetrahydrofuran	10.310	42	29857	20.87 ug/L	99
42) chloroform	10.378	83	95971	21.23 ug/L	98
43) tert-butyl formate	10.415	59	51270	20.08 ug/L	99
45) methacrylonitrile	10.190	67	31395	20.52 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251991.D
Acq On : 29 Jul 2019 9:07 pm
Operator : edwardd
Sample : ic9755-20
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 30 12:06:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
46) cyclohexane	10.770	84	112621	20.55 ug/L	99
47) 1,1,1-trichloroethane	10.655	97	93355	20.14 ug/L	99
48) iso-butyl alcohol	10.770	43	107938	200.83 ug/L	97
49) 1,1-dichloropropene	10.828	75	74284	20.68 ug/L	98
50) carbon tetrachloride	10.859	117	78510	20.34 ug/L	100
51) tert-amyl alcohol	10.953	73	44277	100.28 ug/L	96
54) benzene	11.084	78	222047	20.64 ug/L	99
55) iso-octane	11.183	57	222737	20.20 ug/L	99
56) tert-amyl methyl ether	11.162	73	199809	20.72 ug/L	98
57) heptane	11.340	71	43730	20.46 ug/L	98
58) isopropyl acetate	10.974	87	16055	20.22 ug/L	96
59) 1,2-dichloroethane	11.105	62	71048	21.17 ug/L	98
60) n-butyl alcohol	11.544	41	139116	3365.21 ug/L #	15
61) ethyl acrylate	11.795	55	77421	18.89 ug/L	98
62) trichloroethene	11.832	95	51434	20.38 ug/L	97
63) 2-nitropropane	12.605	41	19533	19.47 ug/L #	79
64) methylcyclohexane	12.145	83	118919	20.65 ug/L	99
65) 2-chloroethyl vinyl ether	12.642	63	98871	94.17 ug/L	98
66) methyl methacrylate	12.077	100	15816	19.77 ug/L #	84
67) 1,2-dichloropropane	12.130	63	58624	20.26 ug/L	97
68) dibromomethane	12.245	93	34450	20.47 ug/L	95
69) bromodichloromethane	12.401	83	70001	20.10 ug/L	99
70) epichlorohydrin	12.741	57	40921	95.40 ug/L	99
71) cis-1,3-dichloropropene	12.888	75	82729	19.38 ug/L	99
72) 4-methyl-2-pentanone	12.992	58	136158	80.63 ug/L	98
73) 3-methyl-1-butanol	12.987	55	133347	400.53 ug/L	99
76) toluene	13.301	92	113865	19.68 ug/L	94
77) trans-1,3-dichloropropene	13.499	75	66638	19.52 ug/L	98
78) ethyl methacrylate	13.478	69	68177	19.93 ug/L	98
79) 1,1,2-trichloroethane	13.740	83	36306	19.70 ug/L	99
80) 2-hexanone	13.918	58	116091	83.01 ug/L	97
81) tetrachloroethene	13.918	166	43912	19.96 ug/L	97
82) 1,3-dichloropropane	13.944	76	69673	19.97 ug/L	97
83) butyl acetate	13.996	56	44059	20.57 ug/L	98
84) dibromochloromethane	14.216	129	43684	19.73 ug/L	99
85) 1,2-dibromoethane	14.388	107	45242	20.11 ug/L	96
86) n-butyl ether	14.864	57	219645	21.03 ug/L	99
87) chlorobenzene	14.927	112	111843	19.88 ug/L	99
88) 1,1,1,2-tetrachloroethane	14.995	131	54104	20.37 ug/L	98
89) ethylbenzene	14.989	91	204772	20.26 ug/L	98
90) m,p-xylene	15.120	106	154141	40.59 ug/L	95
91) o-xylene	15.575	106	83907	20.12 ug/L	100
92) styrene	15.585	104	124455	20.67 ug/L	97
93) butyl acrylate	15.371	55	117386	21.24 ug/L	99
94) n-amyl acetate	15.601	70	48119	21.96 ug/L	98
95) bromoform	15.852	173	28915	19.58 ug/L	99
96) isopropylbenzene	15.967	105	239074	20.59 ug/L	99
97) cis-1,4-dichloro-2-butene	16.004	75	26895	20.21 ug/L	95
100) bromobenzene	16.406	156	46408	19.77 ug/L	97
101) 1,1,2,2-tetrachloroethane	16.275	83	74777	20.19 ug/L	97
102) trans-1,4-dichloro-2-b...	16.312	53	15822	18.93 ug/L	97
103) 1,2,3-trichloropropane	16.375	110	19384	21.02 ug/L	87
104) n-propylbenzene	16.437	91	257132	20.50 ug/L	99
105) 2-chlorotoluene	16.589	126	51339	20.00 ug/L	96
106) 4-chlorotoluene	16.715	91	139065	20.10 ug/L	97
107) 1,3,5-trimethylbenzene	16.610	105	196488	19.87 ug/L	99
108) tert-butylbenzene	16.992	119	175613	18.87 ug/L	96
109) 1,2,4-trimethylbenzene	17.049	105	191634	20.40 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251991.D
Acq On : 29 Jul 2019 9:07 pm
Operator : edwardd
Sample : ic9755-20
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 30 12:06:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) sec-butylbenzene	17.237	105	266637	19.45 ug/L	98
111) 1,3-dichlorobenzene	17.436	146	90318	20.36 ug/L	97
112) p-isopropyltoluene	17.384	119	213318	19.69 ug/L	99
113) 1,4-dichlorobenzene	17.541	146	91592	20.42 ug/L	97
114) 1,2-dichlorobenzene	17.959	146	98217	20.67 ug/L	98
115) n-butylbenzene	17.839	92	111661	20.67 ug/L	97
116) 1,2-dibromo-3-chloropr...	18.811	157	21914	20.51 ug/L	99
117) 1,3,5-trichlorobenzene	19.025	180	86784	20.67 ug/L	97
118) 2-ethylhexyl acrylate	19.747	70	10656	3.34 ug/L	96
119) 1,2,4-trichlorobenzene	19.768	180	85221	21.36 ug/L	99
120) hexachlorobutadiene	19.893	225	33822	19.42 ug/L	98
121) naphthalene	20.102	128	288490	20.99 ug/L	100
122) 1,2,3-trichlorobenzene	20.348	180	91768	20.83 ug/L	97
123) hexachloroethane	18.288	201	33917	18.64 ug/L	98
124) 2-methylnaphthalene	21.415	142	86552	9.46 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251991.D
Acq On : 29 Jul 2019 9:07 pm
Operator : edwardd
Sample : ic9755-20
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 30 12:06:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251992.D
Acq On : 29 Jul 2019 9:36 pm
Operator : edwardd
Sample : icc9755-50
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 30 12:07:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.150	65	408194	500.00	ug/L	0.00
5) pentafluorobenzene	10.534	168	222284	50.00	ug/L	0.00
52) 1,4-difluorobenzene	11.501	114	381226	50.00	ug/L	0.00
74) chlorobenzene-d5	14.889	117	297741	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.508	152	148747	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.576	113	119399	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery	=	100.00%	
53) 1,2-dichloroethane-d4 (s)	11.010	65	137086	50.00	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery	=	100.00%	
75) toluene-d8 (s)	13.221	98	429611	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery	=	100.00%	
99) 4-bromofluorobenzene (s)	16.196	95	144408	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery	=	100.00%	

Target Compounds						Qvalue
3) tertiary butyl alcohol	8.275	59	216832	250.00	ug/L	100
4) 1,4-dioxane	12.176	88	63174	1250.00	ug/L	100
6) chlorodifluoromethane	4.585	51	288995	50.00	ug/L	100
7) dichlorodifluoromethane	4.553	85	295517	50.00	ug/L	100
8) chloromethane	4.992	50	376678	50.00	ug/L	100
9) vinyl chloride	5.259	62	293998	50.00	ug/L	100
10) 1,3-butadiene	5.275	54	201486	50.00	ug/L	100
11) bromomethane	5.933	94	185442	50.00	ug/L	100
12) chloroethane	6.106	64	166278	50.00	ug/L	100
13) vinyl bromide	6.493	106	179096	50.00	ug/L	100
14) trichlorofluoromethane	6.634	101	290124	50.00	ug/L	100
15) ethyl ether	7.010	74	77288	50.00	ug/L	100
16) acrolein	7.251	56	40609	50.00	ug/L	100
17) freon 113	7.502	151	129135	50.00	ug/L	100
18) 1,1-dichloroethene	7.497	96	165264	50.00	ug/L	100
19) acetone	7.465	58	94184	200.00	ug/L	100
20) acetonitrile	7.910	41	340470	500.00	ug/L	100
21) iodomethane	7.758	142	252016	50.00	ug/L	100
22) carbon disulfide	7.930	76	525198	50.00	ug/L	100
23) methylene chloride	8.234	84	183897	50.00	ug/L	100
24) methyl acetate	7.962	43	148009	49.74	ug/L	100
25) methyl tert butyl ether	8.600	73	482734	50.00	ug/L	100
26) trans-1,2-dichloroethene	8.631	96	128497	50.00	ug/L	100
27) hexane	9.007	57	206174	50.00	ug/L	100
28) di-isopropyl ether	9.227	45	522850	50.00	ug/L	100
29) ethyl tert-butyl ether	9.708	59	487456	50.00	ug/L	100
30) 2-butanone	9.907	72	103626	200.00	ug/L	100
31) 1,1-dichloroethane	9.237	63	247889	50.00	ug/L	100
32) chloroprene	9.342	53	200273	50.00	ug/L	100
33) acrylonitrile	8.516	53	82132	50.00	ug/L	100
34) vinyl acetate	9.164	86	31902	50.00	ug/L	100
35) ethyl acetate	9.922	45	31587	50.00	ug/L	100
36) 2,2-dichloropropane	10.022	77	214053	50.00	ug/L	100
37) cis-1,2-dichloroethene	9.985	96	144336	50.00	ug/L	100
38) methyl acrylate	10.011	85	27094	50.00	ug/L	100
39) propionitrile	9.985	54	362082	500.00	ug/L	100
40) bromochloromethane	10.288	128	68894	50.00	ug/L	100
41) tetrahydrofuran	10.309	42	70435	50.00	ug/L	100
42) chloroform	10.377	83	222597	50.00	ug/L	100
43) tert-butyl formate	10.419	59	125728	50.00	ug/L	100
45) methacrylonitrile	10.189	67	75334	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251992.D
Acq On : 29 Jul 2019 9:36 pm
Operator : edwardd
Sample : icc9755-50
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 30 12:07:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
46) cyclohexane	10.775	84	269884	50.00 ug/L	100
47) 1,1,1-trichloroethane	10.654	97	228227	50.00 ug/L	100
48) iso-butyl alcohol	10.769	43	263851	498.51 ug/L	100
49) 1,1-dichloropropene	10.827	75	176879	50.00 ug/L	100
50) carbon tetrachloride	10.858	117	190082	50.00 ug/L	100
51) tert-amyl alcohol	10.947	73	108704	250.00 ug/L	100
54) benzene	11.083	78	530149	50.00 ug/L	100
55) iso-octane	11.182	57	543337	50.00 ug/L	100
56) tert-amyl methyl ether	11.161	73	475067	50.00 ug/L	100
57) heptane	11.339	71	105288	50.00 ug/L	100
58) isopropyl acetate	10.973	87	39116	50.00 ug/L	100
59) 1,2-dichloroethane	11.104	62	165319	50.00 ug/L	100
60) n-butyl alcohol	11.543	41	350552	8605.46 ug/L #	12
61) ethyl acrylate	11.799	55	201918	50.00 ug/L	100
62) trichloroethene	11.825	95	124323	50.00 ug/L	100
63) 2-nitropropane	12.615	41	49433	50.00 ug/L	100
64) methylcyclohexane	12.144	83	283780	50.00 ug/L	100
65) 2-chloroethyl vinyl ether	12.646	63	258652	250.00 ug/L	100
66) methyl methacrylate	12.076	100	39423	50.00 ug/L	100
67) 1,2-dichloropropane	12.129	63	142574	50.00 ug/L	100
68) dibromomethane	12.244	93	82939	50.00 ug/L	100
69) bromodichloromethane	12.406	83	171578	50.00 ug/L	100
70) epichlorohydrin	12.740	57	105673	250.00 ug/L	100
71) cis-1,3-dichloropropene	12.887	75	210353	50.00 ug/L	100
72) 4-methyl-2-pentanone	12.991	58	332794	200.00 ug/L	100
73) 3-methyl-1-butanol	12.991	55	328070	1000.00 ug/L	100
76) toluene	13.300	92	293845	50.00 ug/L	100
77) trans-1,3-dichloropropene	13.498	75	173394	50.00 ug/L	100
78) ethyl methacrylate	13.477	69	173763	50.00 ug/L	100
79) 1,1,2-trichloroethane	13.744	83	93568	50.00 ug/L	100
80) 2-hexanone	13.917	58	283660	199.69 ug/L	100
81) tetrachloroethene	13.917	166	111707	50.00 ug/L	100
82) 1,3-dichloropropane	13.943	76	177160	50.00 ug/L	100
83) butyl acetate	13.995	56	108759	50.00 ug/L	100
84) dibromochloromethane	14.215	129	112446	50.00 ug/L	100
85) 1,2-dibromoethane	14.387	107	114221	50.00 ug/L	100
86) n-butyl ether	14.863	57	530362	50.00 ug/L	100
87) chlorobenzene	14.926	112	285673	50.00 ug/L	100
88) 1,1,1,2-tetrachloroethane	14.999	131	134894	50.00 ug/L	100
89) ethylbenzene	14.988	91	513244	50.00 ug/L	100
90) m,p-xylene	15.124	106	385743	100.00 ug/L	100
91) o-xylene	15.579	106	211752	50.00 ug/L	100
92) styrene	15.589	104	305833	50.00 ug/L	100
93) butyl acrylate	15.370	55	280720	50.00 ug/L	100
94) n-amyl acetate	15.600	70	111278	50.00 ug/L	100
95) bromoform	15.851	173	75008	50.00 ug/L	100
96) isopropylbenzene	15.966	105	589646	50.00 ug/L	100
97) cis-1,4-dichloro-2-butene	16.003	75	67581	50.00 ug/L	100
100) bromobenzene	16.410	156	115346	50.00 ug/L	100
101) 1,1,2,2-tetrachloroethane	16.280	83	182015	50.00 ug/L	100
102) trans-1,4-dichloro-2-b...	16.311	53	41062	50.00 ug/L	100
103) 1,2,3-trichloropropane	16.379	110	45321	50.00 ug/L	100
104) n-propylbenzene	16.436	91	616490	50.00 ug/L	100
105) 2-chlorotoluene	16.588	126	126133	50.00 ug/L	100
106) 4-chlorotoluene	16.714	91	339907	50.00 ug/L	100
107) 1,3,5-trimethylbenzene	16.609	105	485969	50.00 ug/L	100
108) tert-butylbenzene	16.996	119	457326	50.00 ug/L	100
109) 1,2,4-trimethylbenzene	17.048	105	461551	50.00 ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251992.D
Acq On : 29 Jul 2019 9:36 pm
Operator : edwardd
Sample : icc9755-50
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 30 12:07:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	17.236	105	673496	50.00	ug/L	100
111) 1,3-dichlorobenzene	17.435	146	217973	50.00	ug/L	100
112) p-isopropyltoluene	17.383	119	532360	50.00	ug/L	100
113) 1,4-dichlorobenzene	17.540	146	220419	50.00	ug/L	100
114) 1,2-dichlorobenzene	17.958	146	233470	50.00	ug/L	100
115) n-butylbenzene	17.838	92	265503	50.00	ug/L	100
116) 1,2-dibromo-3-chloropr...	18.810	157	52496	50.00	ug/L	100
117) 1,3,5-trichlorobenzene	19.024	180	206351	50.00	ug/L	100
118) 2-ethylhexyl acrylate	19.746	70	31373	10.00	ug/L	100
119) 1,2,4-trichlorobenzene	19.767	180	196021	50.00	ug/L	100
120) hexachlorobutadiene	19.892	225	85600	50.00	ug/L	100
121) naphthalene	20.101	128	675506	50.00	ug/L	100
122) 1,2,3-trichlorobenzene	20.347	180	216444	50.00	ug/L	100
123) hexachloroethane	18.292	201	89397	50.00	ug/L	100
124) 2-methylnaphthalene	21.413	142	224449	24.95	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251992.D
Acq On : 29 Jul 2019 9:36 pm
Operator : edwardd
Sample : icc9755-50
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 30 12:07:12 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251993.D
Acq On : 29 Jul 2019 10:06 pm
Operator : edwardd
Sample : ic9755-100
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 30 12:08:27 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.155	65	414853	500.00 ug/L	0.00
5) pentafluorobenzene	10.534	168	229682	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.501	114	399869	50.00 ug/L	0.00
74) chlorobenzene-d5	14.894	117	320958	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.513	152	149869	50.00 ug/L	0.00
System Monitoring Compounds					
44) dibromofluoromethane (s)	10.576	113	126546	51.29 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.58%		
53) 1,2-dichloroethane-d4 (s)	11.010	65	143616	49.94 ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.88%		
75) toluene-d8 (s)	13.226	98	462638	49.95 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.90%		
99) 4-bromofluorobenzene (s)	16.196	95	151234	51.97 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.94%		

Target Compounds					Qvalue
3) tertiary butyl alcohol	8.281	59	460478	522.39 ug/L	99
4) 1,4-dioxane	12.170	88	133457	2598.28 ug/L	98
6) chlorodifluoromethane	4.595	51	598863	100.27 ug/L	98
7) dichlorodifluoromethane	4.564	85	606354	99.29 ug/L	98
8) chloromethane	5.008	50	756030	97.12 ug/L	98
9) vinyl chloride	5.259	62	606095	99.76 ug/L	98
10) 1,3-butadiene	5.285	54	427980	102.79 ug/L	99
11) bromomethane	5.944	94	375195	97.90 ug/L	97
12) chloroethane	6.121	64	344005	100.11 ug/L	99
13) vinyl bromide	6.503	106	371758	100.44 ug/L	99
14) trichlorofluoromethane	6.634	101	611561	102.00 ug/L	99
15) ethyl ether	7.015	74	169271	105.98 ug/L	95
16) acrolein	7.261	56	88285	105.20 ug/L	95
17) freon 113	7.507	151	276988	103.79 ug/L	100
18) 1,1-dichloroethene	7.507	96	368889	108.01 ug/L	99
19) acetone	7.470	58	198638	408.22 ug/L	97
20) acetonitrile	7.909	41	716104	1017.77 ug/L	98
21) iodomethane	7.779	142	551922	105.97 ug/L	97
22) carbon disulfide	7.941	76	1137482	104.80 ug/L	99
23) methylene chloride	8.244	84	407083	107.12 ug/L	97
24) methyl acetate	7.957	43	329007	107.00 ug/L	99
25) methyl tert butyl ether	8.600	73	1024118	102.66 ug/L	99
26) trans-1,2-dichloroethene	8.631	96	284958	107.31 ug/L	97
27) hexane	9.007	57	439974	103.26 ug/L	100
28) di-isopropyl ether	9.227	45	1117247	103.40 ug/L	98
29) ethyl tert-butyl ether	9.708	59	1045271	103.76 ug/L	100
30) 2-butanone	9.907	72	219267	409.56 ug/L	97
31) 1,1-dichloroethane	9.237	63	537282	104.88 ug/L	98
32) chloroprene	9.347	53	437569	105.72 ug/L	99
33) acrylonitrile	8.521	53	180742	106.49 ug/L	94
34) vinyl acetate	9.164	86	65444	99.27 ug/L	95
35) ethyl acetate	9.922	45	68002	104.18 ug/L	96
36) 2,2-dichloropropane	10.027	77	457265	103.37 ug/L	97
37) cis-1,2-dichloroethene	9.985	96	318686	106.84 ug/L	99
38) methyl acrylate	10.011	85	59326	105.96 ug/L	97
39) propionitrile	9.990	54	757161	1011.89 ug/L	89
40) bromochloromethane	10.288	128	150278	105.55 ug/L	94
41) tetrahydrofuran	10.309	42	150791	103.59 ug/L	98
42) chloroform	10.377	83	488926	106.29 ug/L	98
43) tert-butyl formate	10.414	59	277620	106.85 ug/L	99
45) methacrylonitrile	10.194	67	163472	105.00 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251993.D
Acq On : 29 Jul 2019 10:06 pm
Operator : edwardd
Sample : ic9755-100
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 30 12:08:27 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
46) cyclohexane	10.774	84	574901	103.08 ug/L	99
47) 1,1,1-trichloroethane	10.654	97	501746	106.38 ug/L	98
48) iso-butyl alcohol	10.774	43	562141	1027.88 ug/L	95
49) 1,1-dichloropropene	10.827	75	385057	105.34 ug/L	98
50) carbon tetrachloride	10.858	117	418855	106.63 ug/L	100
51) tert-amyl alcohol	10.952	73	237041	527.59 ug/L	96
54) benzene	11.083	78	1142698	102.75 ug/L	99
55) iso-octane	11.187	57	1188850	104.30 ug/L	98
56) tert-amyl methyl ether	11.161	73	1021233	102.47 ug/L	99
57) heptane	11.339	71	228602	103.50 ug/L	97
58) isopropyl acetate	10.978	87	84404	102.86 ug/L	96
59) 1,2-dichloroethane	11.104	62	363928	104.94 ug/L	100
60) n-butyl alcohol	11.548	41	744215	17417.46 ug/L #	13
61) ethyl acrylate	11.799	55	439181	103.68 ug/L	99
62) trichloroethene	11.830	95	268455	102.93 ug/L	95
63) 2-nitropropane	12.609	41	110610	106.66 ug/L	89
64) methylcyclohexane	12.149	83	623177	104.68 ug/L	99
65) 2-chloroethyl vinyl ether	12.646	63	595814	549.03 ug/L	99
66) methyl methacrylate	12.076	100	89061	107.69 ug/L	92
67) 1,2-dichloropropane	12.128	63	308012	102.98 ug/L	99
68) dibromomethane	12.243	93	180043	103.48 ug/L	99
69) bromodichloromethane	12.406	83	378722	105.22 ug/L	98
70) epichlorohydrin	12.740	57	229626	517.92 ug/L	100
71) cis-1,3-dichloropropene	12.887	75	458214	103.84 ug/L	98
72) 4-methyl-2-pentanone	12.996	58	705421	404.17 ug/L	96
73) 3-methyl-1-butanol	12.991	55	686763	1995.75 ug/L	99
76) toluene	13.305	92	647117	102.15 ug/L	98
77) trans-1,3-dichloropropene	13.498	75	380121	101.68 ug/L	99
78) ethyl methacrylate	13.477	69	379893	101.41 ug/L	97
79) 1,1,2-trichloroethane	13.744	83	206171	102.20 ug/L	95
80) 2-hexanone	13.916	58	608938	397.67 ug/L	94
81) tetrachloroethene	13.916	166	247802	102.89 ug/L	97
82) 1,3-dichloropropane	13.943	76	399928	104.71 ug/L	99
83) butyl acetate	13.995	56	227538	97.04 ug/L	97
84) dibromochloromethane	14.220	129	257437	106.19 ug/L	98
85) 1,2-dibromoethane	14.392	107	260098	105.62 ug/L	100
86) n-butyl ether	14.863	57	1114076	97.43 ug/L	100
87) chlorobenzene	14.925	112	637671	103.54 ug/L	97
88) 1,1,1,2-tetrachloroethane	14.999	131	299139	102.86 ug/L	99
89) ethylbenzene	14.988	91	1123143	101.50 ug/L	99
90) m,p-xylene	15.124	106	854824	205.57 ug/L	100
91) o-xylene	15.579	106	467274	102.35 ug/L	94
92) styrene	15.589	104	667197	101.19 ug/L	98
93) butyl acrylate	15.370	55	577045	95.34 ug/L	98
94) n-amyl acetate	15.600	70	229439	95.64 ug/L	95
95) bromoform	15.851	173	165456	102.31 ug/L	94
96) isopropylbenzene	15.966	105	1278670	100.58 ug/L	98
97) cis-1,4-dichloro-2-butene	16.002	75	144603	99.25 ug/L	97
100) bromobenzene	16.410	156	252329	108.56 ug/L	99
101) 1,1,2,2-tetrachloroethane	16.279	83	389587	106.22 ug/L	98
102) trans-1,4-dichloro-2-b...	16.311	53	85584	103.43 ug/L	98
103) 1,2,3-trichloropropane	16.379	110	98903	108.30 ug/L	94
104) n-propylbenzene	16.436	91	1313336	105.72 ug/L	97
105) 2-chlorotoluene	16.588	126	275164	108.26 ug/L	99
106) 4-chlorotoluene	16.713	91	721269	105.30 ug/L	98
107) 1,3,5-trimethylbenzene	16.609	105	1062078	108.46 ug/L	99
108) tert-butylbenzene	16.996	119	1006121	109.18 ug/L	98
109) 1,2,4-trimethylbenzene	17.048	105	997358	107.24 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251993.D
Acq On : 29 Jul 2019 10:06 pm
Operator : edwardd
Sample : ic9755-100
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 30 12:08:27 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) sec-butylbenzene	17.241	105	1452926	107.06 ug/L	99
111) 1,3-dichlorobenzene	17.435	146	466519	106.21 ug/L	98
112) p-isopropyltoluene	17.383	119	1150510	107.25 ug/L	98
113) 1,4-dichlorobenzene	17.539	146	464861	104.66 ug/L	99
114) 1,2-dichlorobenzene	17.958	146	493528	104.90 ug/L	100
115) n-butylbenzene	17.843	92	560099	104.69 ug/L	96
116) 1,2-dibromo-3-chloropr...	18.805	157	113901	107.67 ug/L	96
117) 1,3,5-trichlorobenzene	19.024	180	440426	105.92 ug/L	97
118) 2-ethylhexyl acrylate	19.746	70	73752	23.33 ug/L	98
119) 1,2,4-trichlorobenzene	19.767	180	424460	107.46 ug/L	98
120) hexachlorobutadiene	19.892	225	192065	111.35 ug/L	98
121) naphthalene	20.101	128	1411546	103.70 ug/L	99
122) 1,2,3-trichlorobenzene	20.347	180	468628	107.45 ug/L	99
123) hexachloroethane	18.292	201	206679	114.73 ug/L	99
124) 2-methylnaphthalene	21.413	142	493673	54.46 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251993.D
Acq On : 29 Jul 2019 10:06 pm
Operator : edwardd
Sample : ic9755-100
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 30 12:08:27 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251994.D
Acq On : 29 Jul 2019 10:36 pm
Operator : edwardd
Sample : ic9755-200
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 30 12:20:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.159	65	428012	500.00 ug/L	0.00
5) pentafluorobenzene	10.532	168	233291	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.500	114	418486	50.00 ug/L	0.00
74) chlorobenzene-d5	14.893	117	364652	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.512	152	165640	50.00 ug/L	0.00

System Monitoring Compounds					
44) dibromofluoromethane (s)	10.574	113	132482	52.86 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.72%		
53) 1,2-dichloroethane-d4 (s)	11.013	65	147799	49.11 ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.22%		
75) toluene-d8 (s)	13.225	98	501793	47.68 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.36%		
99) 4-bromofluorobenzene (s)	16.200	95	167087	51.95 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.90%		

Target Compounds					Qvalue
3) tertiary butyl alcohol	8.290	59	913848	1004.85 ug/L	95
4) 1,4-dioxane	12.174	88	270518	5104.80 ug/L	99
6) chlorodifluoromethane	4.588	51	1129415	186.18 ug/L	97
7) dichlorodifluoromethane	4.557	85	1162259	187.37 ug/L	97
8) chloromethane	5.006	50	1488786	188.30 ug/L	99
9) vinyl chloride	5.257	62	1171466	189.83 ug/L	98
10) 1,3-butadiene	5.289	54	806380	190.67 ug/L	97
12) chloroethane	6.110	64	634191	181.70 ug/L	98
13) vinyl bromide	6.496	106	720091	191.55 ug/L	99
14) trichlorofluoromethane	6.632	101	1187500	195.00 ug/L	100
15) ethyl ether	7.014	74	328318	202.38 ug/L	96
16) acrolein	7.249	56	175383	205.75 ug/L	96
17) freon 113	7.511	151	534827	197.31 ug/L	99
18) 1,1-dichloroethene	7.511	96	724183	208.76 ug/L	99
19) acetone	7.469	58	392832	794.82 ug/L	96
20) acetonitrile	7.908	41	1405555	1966.75 ug/L	99
21) iodomethane	7.777	142	1080194	204.20 ug/L	99
22) carbon disulfide	7.939	76	2169843	196.83 ug/L	98
23) methylene chloride	8.243	84	798728	206.92 ug/L	96
24) methyl acetate	7.960	43	634883	203.29 ug/L	100
25) methyl tert butyl ether	8.603	73	1978278	195.24 ug/L	100
26) trans-1,2-dichloroethene	8.629	96	551166	204.35 ug/L	96
27) hexane	9.006	57	824004	190.40 ug/L	99
28) di-isopropyl ether	9.231	45	2124262	193.56 ug/L	98
29) ethyl tert-butyl ether	9.712	59	1989631	194.45 ug/L	99
30) 2-butanone	9.910	72	436780	803.22 ug/L	99
31) 1,1-dichloroethane	9.236	63	1016494	195.36 ug/L	99
32) chloroprene	9.346	53	827861	196.93 ug/L	98
33) acrylonitrile	8.525	53	349240	202.58 ug/L	95
34) vinyl acetate	9.168	86	133509	199.38 ug/L	98
35) ethyl acetate	9.926	45	133365	201.15 ug/L	98
36) 2,2-dichloropropane	10.031	77	855092	190.31 ug/L	99
37) cis-1,2-dichloroethene	9.984	96	609314	201.12 ug/L	99
38) methyl acrylate	10.015	85	118307	208.03 ug/L	96
39) propionitrile	9.989	54	1487751	1957.51 ug/L	94
40) bromochloromethane	10.292	128	293796	203.16 ug/L	96
41) tetrahydrofuran	10.313	42	301431	203.88 ug/L	99
42) chloroform	10.376	83	936826	200.50 ug/L	99
43) tert-butyl formate	10.423	59	550322	208.53 ug/L	99
45) methacrylonitrile	10.193	67	325417	205.79 ug/L	99
46) cyclohexane	10.778	84	1132343	199.89 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251994.D
Acq On : 29 Jul 2019 10:36 pm
Operator : edwardd
Sample : ic9755-200
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 30 12:20:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
47) 1,1,1-trichloroethane	10.658	97	969348	202.35 ug/L	99
48) iso-butyl alcohol	10.773	43	1105107	1989.44 ug/L	96
49) 1,1-dichloropropene	10.825	75	748722	201.66 ug/L	98
50) carbon tetrachloride	10.862	117	822804	206.22 ug/L	100
51) tert-amyl alcohol	10.951	73	471587	1033.40 ug/L	96
54) benzene	11.081	78	2212276	190.07 ug/L	98
55) iso-octane	11.186	57	2267546	190.09 ug/L	99
56) tert-amyl methyl ether	11.165	73	1957594	187.69 ug/L	98
57) heptane	11.338	71	442782	191.55 ug/L	98
58) isopropyl acetate	10.977	87	169526	197.40 ug/L #	89
59) 1,2-dichloroethane	11.102	62	709879	195.58 ug/L	100
60) n-butyl alcohol	11.552	41	1457005	32582.49 ug/L #	12
61) ethyl acrylate	11.803	55	883601	199.32 ug/L	100
62) trichloroethene	11.829	95	529559	194.01 ug/L	96
63) 2-nitropropane	12.613	41	222946	205.43 ug/L	94
64) methylcyclohexane	12.148	83	1206291	193.62 ug/L	99
65) 2-chloroethyl vinyl ether	12.650	63	1264482	1113.37 ug/L	98
66) methyl methacrylate	12.080	100	181627	209.85 ug/L	94
67) 1,2-dichloropropane	12.132	63	605505	193.44 ug/L	99
68) dibromomethane	12.242	93	360967	198.23 ug/L	98
69) bromodichloromethane	12.404	83	746066	198.06 ug/L	99
70) epichlorohydrin	12.744	57	463386	998.67 ug/L	99
71) cis-1,3-dichloropropene	12.890	75	918483	198.88 ug/L	99
72) 4-methyl-2-pentanone	12.995	58	1386234	758.91 ug/L	89
73) 3-methyl-1-butanol	12.995	55	1337032	3712.59 ug/L	98
76) toluene	13.303	92	1313360	182.47 ug/L	98
77) trans-1,3-dichloropropene	13.497	75	781789	184.07 ug/L	99
78) ethyl methacrylate	13.481	69	776447	182.43 ug/L	99
79) 1,1,2-trichloroethane	13.742	83	424867	185.38 ug/L	97
80) 2-hexanone	13.915	58	1227372	705.50 ug/L	93
81) tetrachloroethene	13.915	166	501592	183.32 ug/L	96
82) 1,3-dichloropropane	13.946	76	829916	191.25 ug/L	99
83) butyl acetate	13.999	56	464973	174.54 ug/L	94
84) dibromochloromethane	14.218	129	535766	194.52 ug/L	98
85) 1,2-dibromoethane	14.391	107	541761	193.64 ug/L	100
86) n-butyl ether	14.866	57	2196243	169.06 ug/L	98
87) chlorobenzene	14.929	112	1347134	192.52 ug/L	98
88) 1,1,1,2-tetrachloroethane	14.997	131	602229	182.26 ug/L	99
89) ethylbenzene	14.992	91	2267019	180.33 ug/L	96
90) m,p-xylene	15.123	106	1770839	374.84 ug/L	96
91) o-xylene	15.577	106	957355	184.58 ug/L	95
92) styrene	15.588	104	1374269	183.45 ug/L	96
93) butyl acrylate	15.368	55	1115427	162.22 ug/L	97
94) n-amyl acetate	15.604	70	452057	165.85 ug/L	94
95) bromoform	15.849	173	340588	185.38 ug/L	97
96) isopropylbenzene	15.970	105	2544079	176.14 ug/L	95
97) cis-1,4-dichloro-2-butene	16.006	75	290039	175.21 ug/L	98
100) bromobenzene	16.409	156	523827	203.91 ug/L	98
101) 1,1,2,2-tetrachloroethane	16.278	83	785489	193.77 ug/L	97
102) trans-1,4-dichloro-2-b...	16.315	53	165268	180.72 ug/L	97
103) 1,2,3-trichloropropane	16.377	110	199741	197.89 ug/L	95
104) n-propylbenzene	16.435	91	2605002	189.73 ug/L	96
105) 2-chlorotoluene	16.592	126	578209	205.83 ug/L	95
106) 4-chlorotoluene	16.717	91	1464633	193.47 ug/L	99
107) 1,3,5-trimethylbenzene	16.607	105	2171430	200.63 ug/L	97
108) tert-butylbenzene	16.994	119	2030506	199.36 ug/L	96
109) 1,2,4-trimethylbenzene	17.052	105	2038180	198.28 ug/L	96
110) sec-butylbenzene	17.240	105	2901956	193.47 ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251994.D
Acq On : 29 Jul 2019 10:36 pm
Operator : edwardd
Sample : ic9755-200
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 30 12:20:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
111) 1,3-dichlorobenzene	17.439	146	940322	193.70 ug/L	96
112) p-isopropyltoluene	17.381	119	2331748	196.67 ug/L	94
113) 1,4-dichlorobenzene	17.543	146	946074	192.72 ug/L	100
114) 1,2-dichlorobenzene	17.961	146	1014559	195.12 ug/L	99
115) n-butylbenzene	17.841	92	1136505	192.20 ug/L	94
116) 1,2-dibromo-3-chloropr...	18.808	157	232604	198.95 ug/L	98
117) 1,3,5-trichlorobenzene	19.023	180	938259	204.16 ug/L	97
118) 2-ethylhexyl acrylate	19.744	70	170360	48.76 ug/L	97
119) 1,2,4-trichlorobenzene	19.770	180	900592	206.29 ug/L	99
120) hexachlorobutadiene	19.896	225	421291	220.98 ug/L	97
121) naphthalene	20.100	128	2853395	189.66 ug/L	97
122) 1,2,3-trichlorobenzene	20.351	180	989526	205.27 ug/L	99
123) hexachloroethane	18.291	201	437645	219.81 ug/L	98
124) 2-methylnaphthalene	21.412	142	1043317	104.14 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251994.D
Acq On : 29 Jul 2019 10:36 pm
Operator : edwardd
Sample : ic9755-200
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 30 12:20:28 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:05:46 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251997.D
Acq On : 30 Jul 2019 12:04 am
Operator : edwardd
Sample : icv9755-50
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 30 12:22:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:20:13 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.158	65	455729	500.00 ug/L	0.00
5) pentafluorobenzene	10.536	168	248167	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.498	114	428668	50.00 ug/L	0.00
74) chlorobenzene-d5	14.891	117	330583	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.510	152	162413	50.00 ug/L	0.00

System Monitoring Compounds					
44) dibromofluoromethane (s)	10.573	113	137740	50.15 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.30%		
53) 1,2-dichloroethane-d4 (s)	11.012	65	154132	48.65 ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.30%		
75) toluene-d8 (s)	13.223	98	477993	51.19 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.38%		
99) 4-bromofluorobenzene (s)	16.198	95	159756	51.31 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.62%		

Target Compounds					Qvalue
3) tertiary butyl alcohol	8.288	59	242438	250.48 ug/L	96
4) 1,4-dioxane	12.173	88	69058	1297.98 ug/L	98
6) chlorodifluoromethane	4.592	51	307746	46.77 ug/L	96
7) dichlorodifluoromethane	4.555	85	321975	49.93 ug/L	99
8) chloromethane	5.005	50	320909	41.05 ug/L	97
9) vinyl chloride	5.266	62	335267	53.49 ug/L	97
10) 1,3-butadiene	5.282	54	271680	59.98 ug/L	99
11) bromomethane	5.941	94	261625	59.67 ug/L	99
12) chloroethane	6.113	64	163607	42.87 ug/L	98
13) vinyl bromide	6.505	106	219063	55.37 ug/L	100
14) trichlorofluoromethane	6.636	101	307532	47.34 ug/L	99
15) ethyl ether	7.013	74	87297	51.71 ug/L	96
16) acrolein	7.264	56	49175	54.38 ug/L	95
17) freon 113	7.504	151	162576	56.74 ug/L	99
18) 1,1-dichloroethene	7.494	96	173657	43.97 ug/L	99
19) acetone	7.467	58	101774	192.19 ug/L	94
21) iodomethane	7.771	142	317537	55.60 ug/L	99
22) carbon disulfide	7.927	76	651377	51.23 ug/L	97
23) methylene chloride	8.231	84	200904	43.25 ug/L	99
24) methyl acetate	7.959	43	168385	47.29 ug/L	99
25) methyl tert butyl ether	8.602	73	1047668	94.98 ug/L	99
26) trans-1,2-dichloroethene	8.633	96	145643	46.78 ug/L	97
27) hexane	9.010	57	242504	51.04 ug/L	100
28) di-isopropyl ether	9.229	45	560153	46.62 ug/L	99
29) ethyl tert-butyl ether	9.710	59	541006	48.58 ug/L	98
30) 2-butanone	9.909	72	116691	209.59 ug/L	98
31) 1,1-dichloroethane	9.240	63	279845	49.04 ug/L	98
32) chloroprene	9.350	53	238051	51.23 ug/L	98
34) vinyl acetate	9.167	86	32253	46.91 ug/L #	91
35) ethyl acetate	9.925	45	33712	48.45 ug/L #	82
36) 2,2-dichloropropane	10.029	77	214214	40.16 ug/L	98
37) cis-1,2-dichloroethene	9.987	96	160563	45.80 ug/L	99
38) methyl acrylate	10.013	85	30432	51.43 ug/L #	94
39) propionitrile	9.987	54	405722	502.88 ug/L	99
40) bromochloromethane	10.291	128	78631	49.39 ug/L	99
41) tetrahydrofuran	10.311	42	80110	48.26 ug/L	99
42) chloroform	10.379	83	254392	46.46 ug/L	99
43) tert-butyl formate	10.421	59	131890	47.64 ug/L	98
45) methacrylonitrile	10.196	67	84182	49.97 ug/L	98
46) cyclohexane	10.782	84	303220	48.86 ug/L	99
47) 1,1,1-trichloroethane	10.656	97	249384	48.68 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251997.D
Acq On : 30 Jul 2019 12:04 am
Operator : edwardd
Sample : icv9755-50
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 30 12:22:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:20:13 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
48) iso-butyl alcohol	10.777	43	295405	495.24 ug/L	94
49) 1,1-dichloropropene	10.829	75	197060	48.56 ug/L	97
50) carbon tetrachloride	10.860	117	215587	49.73 ug/L	100
51) tert-amyl alcohol	10.949	73	125556	255.85 ug/L	98
54) benzene	11.085	78	590539	46.63 ug/L	99
55) iso-octane	11.185	57	674481	53.39 ug/L	98
56) tert-amyl methyl ether	11.164	73	531084	47.32 ug/L	99
57) heptane	11.341	71	136211	56.94 ug/L	98
58) isopropyl acetate	10.975	87	41180	48.31 ug/L	99
59) 1,2-dichloroethane	11.106	62	181856	45.08 ug/L	99
60) n-butyl alcohol	11.545	41	377855	2369.65 ug/L	98
61) ethyl acrylate	11.801	55	221026	50.79 ug/L	99
62) trichloroethene	11.828	95	141399	47.83 ug/L	99
63) 2-nitropropane	12.612	41	57698	51.24 ug/L	84
64) methylcyclohexane	12.146	83	312487	46.97 ug/L	99
65) 2-chloroethyl vinyl ether	12.643	63	323176	292.32 ug/L	98
66) methyl methacrylate	12.079	100	43989	50.92 ug/L #	68
67) 1,2-dichloropropane	12.131	63	156851	47.90 ug/L	99
68) dibromomethane	12.246	93	91950	49.27 ug/L	99
69) bromodichloromethane	12.403	83	184692	46.85 ug/L	99
70) epichlorohydrin	12.742	57	119646	257.36 ug/L	99
71) cis-1,3-dichloropropene	12.889	75	225777	49.19 ug/L	99
72) 4-methyl-2-pentanone	12.993	58	370480	203.82 ug/L	99
73) 3-methyl-1-butanol	12.993	55	366102	994.86 ug/L	98
76) toluene	13.307	92	317108	48.04 ug/L	96
77) trans-1,3-dichloropropene	13.501	75	186441	48.89 ug/L	100
78) ethyl methacrylate	13.480	69	189922	50.74 ug/L	97
79) 1,1,2-trichloroethane	13.741	83	100741	48.72 ug/L	96
80) 2-hexanone	13.914	58	302964	182.54 ug/L	97
82) 1,3-dichloropropane	13.945	76	193162	48.57 ug/L	100
83) butyl acetate	13.997	56	115704	46.63 ug/L	96
84) dibromochloromethane	14.217	129	127279	52.05 ug/L	97
85) 1,2-dibromoethane	14.389	107	129161	49.74 ug/L	99
86) n-butyl ether	14.865	57	603700	49.40 ug/L	100
87) chlorobenzene	14.928	112	315384	48.83 ug/L	99
88) 1,1,1,2-tetrachloroethane	14.996	131	149990	51.68 ug/L	99
89) ethylbenzene	14.991	91	559289	47.99 ug/L	99
90) m,p-xylene	15.121	106	422285	94.53 ug/L	95
91) o-xylene	15.576	106	234529	49.06 ug/L	97
92) styrene	15.587	104	334423	47.05 ug/L	97
93) butyl acrylate	15.367	55	293092	45.77 ug/L	99
94) n-amyl acetate	15.602	70	113783	43.25 ug/L	99
95) bromoform	15.853	173	87907	52.90 ug/L	99
96) isopropylbenzene	15.968	105	653382	49.03 ug/L	99
97) cis-1,4-dichloro-2-butene	16.005	75	70531	48.07 ug/L	99
100) bromobenzene	16.407	156	124142	48.21 ug/L	98
101) 1,1,2,2-tetrachloroethane	16.277	83	200434	50.20 ug/L	100
102) trans-1,4-dichloro-2-b...	16.313	53	44750	51.06 ug/L	91
103) 1,2,3-trichloropropane	16.376	110	49637	50.34 ug/L	95
104) n-propylbenzene	16.433	91	682280	50.05 ug/L	100
105) 2-chlorotoluene	16.590	126	137514	51.12 ug/L	96
106) 4-chlorotoluene	16.716	91	370229	48.32 ug/L	99
107) 1,3,5-trimethylbenzene	16.606	105	535528	51.84 ug/L	99
108) tert-butylbenzene	16.993	119	497985	53.68 ug/L	98
109) 1,2,4-trimethylbenzene	17.050	105	522333	50.69 ug/L	98
110) sec-butylbenzene	17.239	105	740540	53.08 ug/L	99
111) 1,3-dichlorobenzene	17.437	146	239003	47.83 ug/L	97
112) p-isopropyltoluene	17.380	119	594848	51.67 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251997.D
Acq On : 30 Jul 2019 12:04 am
Operator : edwardd
Sample : icv9755-50
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 30 12:22:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:20:13 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
113) 1,4-dichlorobenzene	17.542	146	239385	46.74 ug/L	98
114) 1,2-dichlorobenzene	17.960	146	258255	48.28 ug/L	98
115) n-butylbenzene	17.840	92	291202	48.50 ug/L	97
116) 1,2-dibromo-3-chloropr...	18.807	157	57232	49.28 ug/L	96
117) 1,3,5-trichlorobenzene	19.021	180	230580	48.01 ug/L	96
118) 2-ethylhexyl acrylate	19.743	70	34817	9.24 ug/L	98
119) 1,2,4-trichlorobenzene	19.769	180	215823	47.10 ug/L	98
120) hexachlorobutadiene	19.894	225	89007	46.89 ug/L	98
121) naphthalene	20.098	128	747484	48.29 ug/L	99
122) 1,2,3-trichlorobenzene	20.344	180	238825	47.86 ug/L	98
123) hexachloroethane	18.289	201	100623	55.02 ug/L	99
124) 2-methylnaphthalene	21.410	142	257101	27.49 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251997.D
Acq On : 30 Jul 2019 12:04 am
Operator : edwardd
Sample : icv9755-50
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 30 12:22:23 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:20:13 2019
Response via : Initial Calibration

Abundance
TIC: A251997.D\data.ms
Time-->
2-methylnaphthalene
2-hexanone
toluene-d8 (s),S
1,2-dibromo-3-chloropropane,M
1,3,5-trichlorobenzene,M
1,2,4-trichlorobenzene,M
naphthalene,M
1,2,3-trichlorobenzene,M
n-butylbenzene,M
hexachloroethane,M
1,2-dichlorobenzene,M
butyl acrylate
butyl acetate,M
n-amyl acetate
isopropylbenzene
n-propylbenzene,M
4-chlorotoluene,M
m,p-xylene,M
bromoform,M
1,2-dibromochloromethane,M
chloroprene,M
vinyl acetate,M
hexane
methyl tert-butyl ether,M
methacrylonitrile,M
ethyl acrylate
trichloroethene,M
heptane,M
2-chloroethyl vinyl ether,M
cis-1,3-dichloropropene,M
1,1,2-trichloroethane
epichlorohydrin
2-nitropropane,M
bromodichloromethane,M
dibromomethane,M
methyl methacrylate
methyl methacrylate
methyl tert-butyl ether
methyl tert-butyl ether
ethyl ether,M
acrolein,M
iodomethane,M
Tert Butyl Alcohol,M
tert-Amyl Methyl Ether,M
vinyl bromide
trichlorofluoromethane,M
bromomethane,M
chloroethane,M
chloromethane,M
dichlorodifluoromethane,M
methylene chloride,M
methyl tert-butyl ether,M
ethyl tert-butyl ether,M
tert-butyl alcohol
cyclohexane
tert-amyl alcohol
tert-butyl ether
tert-amyl methyl ether
1,2-dichloroethane,M
1,1,1-trichloroethane,M
carbon tetrachloride,M
benzene,M
1,2-dichloropropane,M
trichloroethene,M
methylcyclohexane
1,4-dioxane,M
2-chloroethyl vinyl ether,M
1,2-dichloroethane,M
1,1,2-trichloroethane
1,3-dichloropropane,M
1,4-dichlorobutane,M
1,2-dibromoethane,M
1,2-dibromochloromethane,M
1,2-dibromoethane,M
1,1,1,2-tetrachloroethane,M
1,1,2,2-tetrachloroethane,M
1,2-dichlorobenzene,M
1,2-dichlorobenzene,M
1,3-dichlorobenzene,M
1,4-dichlorobenzene,M
1,4-dichlorobenzene,M
1,4-dichlorobenzene-d4,I
1,2-dichlorobenzene-d4,I
1,2-dichlorobenzene,M
1,2-dichlorobenzene,M
1,2-dichlorobenzene,M

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251998.D
Acq On : 30 Jul 2019 12:33 am
Operator : edwardd
Sample : icv9755-50
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 30 12:22:57 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:20:13 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.151	65	457589	500.00 ug/L	0.00
5) pentafluorobenzene	10.535	168	236851	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.497	114	392348	50.00 ug/L	0.00
74) chlorobenzene-d5	14.890	117	305981	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.509	152	172684	50.00 ug/L	0.00
System Monitoring Compounds					
44) dibromofluoromethane (s)	10.571	113	130755	49.88 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.76%		
53) 1,2-dichloroethane-d4 (s)	11.005	65	147422	50.84 ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.68%		
75) toluene-d8 (s)	13.222	98	420742	48.68 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.36%		
99) 4-bromofluorobenzene (s)	16.197	95	157664	47.63 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.26%		
Target Compounds					Qvalue
20) acetonitrile	7.910	41	362191	491.78 ug/L	99
33) acrylonitrile	8.517	53	86089	48.22 ug/L	94
81) tetrachloroethene	13.912	166	123028	54.00 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.26

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9755\
Data File : A251998.D
Acq On : 30 Jul 2019 12:33 am
Operator : edwardd
Sample : icv9755-50
Misc : MS36311,VA9755,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 30 12:22:57 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Jul 30 12:20:13 2019
Response via : Initial Calibration

MA9755.M Wed Jul 31 07:56:36 2019 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9819\
Data File : A253361.D
Acq On : 19 Sep 2019 10:59 am
Operator : krizhkac
Sample : cc9755-20
Misc : MS37678,VA9819,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 13:41:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Tert Butyl Alcohol-d9	8.151	65	342926	500.00 ug/L	0.00
5) pentafluorobenzene	10.524	168	176359	50.00 ug/L	0.00
52) 1,4-difluorobenzene	11.486	114	266223	50.00 ug/L	-0.02
74) chlorobenzene-d5	14.884	117	233040	50.00 ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.504	152	134098	50.00 ug/L	0.00
System Monitoring Compounds					
44) dibromofluoromethane (s)	10.561	113	92006	47.14 ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.28%		
53) 1,2-dichloroethane-d4 (s)	11.000	65	102946	52.33 ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 104.66%		
75) toluene-d8 (s)	13.217	98	317059	48.16 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.32%		
99) 4-bromofluorobenzene (s)	16.191	95	113444	44.13 ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 88.26%		

Target Compounds					Qvalue
3) tertiary butyl alcohol	8.266	59	80940	111.13 ug/L	85
4) 1,4-dioxane	12.166	88	24316	607.37 ug/L	100
6) chlorodifluoromethane	4.570	51	115906	24.79 ug/L	95
7) dichlorodifluoromethane	4.543	85	127319	27.78 ug/L	94
8) chloromethane	4.983	50	160862	28.95 ug/L	95
9) vinyl chloride	5.239	62	137518	30.87 ug/L	96
10) 1,3-butadiene	5.260	54	74733	23.22 ug/L	97
11) bromomethane	5.913	94	66053	21.20 ug/L	97
12) chloroethane	6.096	64	53273	19.64 ug/L	94
13) vinyl bromide	6.467	106	55464	19.73 ug/L	100
14) trichlorofluoromethane	6.608	101	96817	20.97 ug/L	98
15) ethyl ether	7.001	74	23238	19.37 ug/L	96
16) acrolein	7.246	56	12758	19.85 ug/L	95
17) freon 113	7.508	151	42717	20.98 ug/L	95
18) 1,1-dichloroethene	7.461	96	40185	14.32 ug/L	98
19) acetone	7.455	58	34514	91.71 ug/L	100
20) acetonitrile	7.900	41	104397	190.37 ug/L	93
21) iodomethane	7.727	142	77825	19.18 ug/L	99
22) carbon disulfide	7.879	76	136784	15.14 ug/L	99
23) methylene chloride	8.208	84	47866	14.50 ug/L	93
24) methyl acetate	7.947	43	50872	20.10 ug/L	99
25) methyl tert butyl ether	8.590	73	164820	21.03 ug/L	97
26) trans-1,2-dichloroethene	8.626	96	40712	18.40 ug/L	90
27) hexane	9.003	57	52451	15.54 ug/L	98
28) di-isopropyl ether	9.212	45	156459	18.33 ug/L	97
29) ethyl tert-butyl ether	9.698	59	154068	19.47 ug/L	99
30) 2-butanone	9.892	72	30945	78.21 ug/L #	79
31) 1,1-dichloroethane	9.228	63	76950	18.98 ug/L	99
32) chloroprene	9.337	53	59028	17.88 ug/L	97
33) acrylonitrile	8.511	53	27358	20.58 ug/L	95
34) vinyl acetate	9.154	86	8724	17.86 ug/L #	71
35) ethyl acetate	9.907	45	9143	18.49 ug/L #	65
36) 2,2-dichloropropane	10.017	77	79388	20.95 ug/L	99
37) cis-1,2-dichloroethene	9.970	96	46203	18.54 ug/L	93
38) methyl acrylate	9.996	85	7376	17.54 ug/L #	88
39) propionitrile	9.975	54	104806	182.80 ug/L	94
40) bromochloromethane	10.284	128	23076	20.40 ug/L #	87
41) tetrahydrofuran	10.305	42	21659	18.36 ug/L	97
42) chloroform	10.367	83	72980	18.75 ug/L	99
43) tert-butyl formate	10.404	59	37798	19.21 ug/L	95
45) methacrylonitrile	10.174	67	22516	18.81 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9819\
Data File : A253361.D
Acq On : 19 Sep 2019 10:59 am
Operator : krizhkac
Sample : cc9755-20
Misc : MS37678,VA9819,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 13:41:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
46) cyclohexane	10.765	84	79807	18.09 ug/L	95
47) 1,1,1-trichloroethane	10.644	97	78653	21.61 ug/L	99
48) iso-butyl alcohol	10.765	43	78481	185.15 ug/L	94
49) 1,1-dichloropropene	10.817	75	49398	17.13 ug/L	97
50) carbon tetrachloride	10.854	117	65254	21.18 ug/L	98
51) tert-amyl alcohol	10.942	73	39910	114.44 ug/L	98
54) benzene	11.073	78	151409	19.25 ug/L	97
55) iso-octane	11.172	57	134230	17.11 ug/L	98
56) tert-amyl methyl ether	11.152	73	155931	22.37 ug/L	99
57) heptane	11.335	71	25796	17.36 ug/L	95
58) isopropyl acetate	10.963	87	12186	23.02 ug/L #	93
59) 1,2-dichloroethane	11.094	62	51761	20.66 ug/L	98
60) n-butyl alcohol	11.533	41	110912	1119.99 ug/L	96
61) ethyl acrylate	11.789	55	58589	21.68 ug/L	98
62) trichloroethene	11.816	95	34797	18.95 ug/L	95
63) 2-nitropropane	12.600	41	19692	28.16 ug/L	90
64) methylcyclohexane	12.140	83	77286	18.70 ug/L	99
65) 2-chloroethyl vinyl ether	12.636	63	110759	161.31 ug/L	96
66) methyl methacrylate	12.072	100	12168	22.68 ug/L #	86
67) 1,2-dichloropropane	12.124	63	38927	19.14 ug/L	100
68) dibromomethane	12.234	93	23425	20.21 ug/L	95
69) bromodichloromethane	12.391	83	49656	20.28 ug/L	98
70) epichlorohydrin	12.730	57	32541	112.71 ug/L	99
71) cis-1,3-dichloropropene	12.877	75	58708	20.60 ug/L	97
72) 4-methyl-2-pentanone	12.981	58	102329	90.65 ug/L	93
73) 3-methyl-1-butanol	12.981	55	111466	487.73 ug/L	100
76) toluene	13.295	92	83559	17.96 ug/L	94
77) trans-1,3-dichloropropene	13.489	75	52504	19.53 ug/L	97
78) ethyl methacrylate	13.473	69	55930	21.20 ug/L	98
79) 1,1,2-trichloroethane	13.734	83	27803	19.08 ug/L	95
80) 2-hexanone	13.907	58	97500	83.33 ug/L	99
81) tetrachloroethene	13.907	166	37425	21.57 ug/L	98
82) 1,3-dichloropropane	13.933	76	54477	19.43 ug/L	98
83) butyl acetate	13.990	56	34672	19.82 ug/L	95
84) dibromochloromethane	14.210	129	36176	20.99 ug/L	95
85) 1,2-dibromoethane	14.382	107	36706	20.05 ug/L	98
86) n-butyl ether	14.858	57	168147	19.52 ug/L	97
87) chlorobenzene	14.921	112	91435	20.08 ug/L	97
88) 1,1,1,2-tetrachloroethane	14.989	131	45367	22.17 ug/L	97
89) ethylbenzene	14.984	91	167039	20.33 ug/L	99
90) m,p-xylene	15.120	106	125624	39.89 ug/L	93
91) o-xylene	15.569	106	70063	20.79 ug/L	98
92) styrene	15.580	104	107242	21.40 ug/L	97
93) butyl acrylate	15.365	55	93613	20.74 ug/L	98
94) n-amyl acetate	15.595	70	40266	21.71 ug/L	93
95) bromoform	15.841	173	28154	24.03 ug/L	97
96) isopropylbenzene	15.961	105	190661	20.29 ug/L	96
97) cis-1,4-dichloro-2-butene	15.998	75	21761	21.04 ug/L	98
100) bromobenzene	16.400	156	42796	20.13 ug/L	96
101) 1,1,2,2-tetrachloroethane	16.270	83	64015	19.42 ug/L	98
102) trans-1,4-dichloro-2-b...	16.301	53	16442	22.72 ug/L	96
103) 1,2,3-trichloropropane	16.369	110	17728	21.77 ug/L	97
104) n-propylbenzene	16.427	91	212026	18.84 ug/L	98
105) 2-chlorotoluene	16.583	126	43435	19.56 ug/L	97
106) 4-chlorotoluene	16.709	91	117780	18.62 ug/L	99
107) 1,3,5-trimethylbenzene	16.599	105	164598	19.30 ug/L	100
108) tert-butylbenzene	16.986	119	133953	17.49 ug/L	100
109) 1,2,4-trimethylbenzene	17.044	105	161724	19.01 ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9819\
Data File : A253361.D
Acq On : 19 Sep 2019 10:59 am
Operator : krizhkac
Sample : cc9755-20
Misc : MS37678,VA9819,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 13:41:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) sec-butylbenzene	17.232	105	212236	18.42	ug/L	98
111) 1,3-dichlorobenzene	17.430	146	82209	19.93	ug/L	97
112) p-isopropyltoluene	17.378	119	182421	19.19	ug/L	99
113) 1,4-dichlorobenzene	17.535	146	83933	19.85	ug/L	96
114) 1,2-dichlorobenzene	17.953	146	89627	20.29	ug/L	98
115) n-butylbenzene	17.833	92	92391	18.64	ug/L	98
116) 1,2-dibromo-3-chloropr...	18.795	157	21574	22.50	ug/L	92
117) 1,3,5-trichlorobenzene	19.014	180	80264	20.24	ug/L	99
118) 2-ethylhexyl acrylate	19.736	70	8565	3.38	ug/L	92
119) 1,2,4-trichlorobenzene	19.762	180	81026	21.42	ug/L	99
120) hexachlorobutadiene	19.888	225	28575	18.23	ug/L	99
121) naphthalene	20.091	128	277068	21.68	ug/L	99
122) 1,2,3-trichlorobenzene	20.337	180	94455	22.93	ug/L	98
123) hexachloroethane	18.283	201	29724	19.68	ug/L	99
124) 2-methylnaphthalene	21.404	142	74048	9.59	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VA9819\
Data File : A253361.D
Acq On : 19 Sep 2019 10:59 am
Operator : krizhkac
Sample : cc9755-20
Misc : MS37678,VA9819,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 19 13:41:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\9-20-19\va9819\
Data File : a253383.d
Acq On : 19 Sep 2019 9:28 pm
Operator : krizhkac
Sample : ecc9755-50 Inst : MSA
Misc : MS37727,VA9819,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Results File: MA9755.RES
Quant Time: Sep 19 22:11:21 2019
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Tert Butyl Alcohol-d9	8.144	65	371849	500.00	ug/L	0.00
5) pentafluorobenzene	10.523	168	211385	50.00	ug/L	-0.01
52) 1,4-difluorobenzene	11.490	114	317085	50.00	ug/L	-0.01
74) chlorobenzene-d5	14.883	117	268870	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	17.502	152	143501	50.00	ug/L	0.00
System Monitoring Compounds						
44) dibromofluoromethane (s)	10.570	113	107701	46.03	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 92.06%			
53) 1,2-dichloroethane-d4 (s)	10.999	65	115486	49.28	ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.56%			
75) toluene-d8 (s)	13.215	98	356762	46.97	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.94%			
99) 4-bromofluorobenzene (s)	16.190	95	124336	45.20	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 90.40%			
Target Compounds						Qvalue
3) tertiary butyl alcohol	8.270	59	211283	267.53	ug/L	87
4) 1,4-dioxane	12.165	88	67848	1562.90	ug/L	98
6) chlorodifluoromethane	4.579	51	370865	66.17	ug/L	98
7) dichlorodifluoromethane	4.558	85	281658	51.27	ug/L	96
8) chloromethane	4.987	50	403451	60.58	ug/L	99
9) vinyl chloride	5.243	62	377624	70.73	ug/L	96
10) 1,3-butadiene	5.269	54	320171	82.98	ug/L	98
11) bromomethane	5.917	94	178097	47.68	ug/L	97
12) chloroethane	6.105	64	143427	44.12	ug/L	99
13) vinyl bromide	6.471	106	150661	44.71	ug/L	99
14) trichlorofluoromethane	6.612	101	243427	44.00	ug/L	99
15) ethyl ether	7.005	74	68685	47.76	ug/L	88
16) acrolein	7.245	56	29122	37.81	ug/L	96
17) freon 113	7.501	151	115060	47.15	ug/L	94
18) 1,1-dichloroethene	7.459	96	121166	36.02	ug/L	93
19) acetone	7.454	58	91338	202.49	ug/L	99
20) acetonitrile	7.904	41	271919	413.69	ug/L	98
21) iodomethane	7.731	142	232544	47.80	ug/L	98
22) carbon disulfide	7.888	76	421560	38.92	ug/L	98
23) methylene chloride	8.212	84	137188	34.67	ug/L	97
24) methyl acetate	7.951	43	138972	45.82	ug/L	98
25) methyl tert butyl ether	8.594	73	461618	49.13	ug/L	97
26) trans-1,2-dichloroethene	8.625	96	119276	44.98	ug/L	89
27) hexane	9.002	57	139104	34.37	ug/L	99
28) di-isopropyl ether	9.216	45	436242	42.63	ug/L	98
29) ethyl tert-butyl ether	9.697	59	437019	46.07	ug/L	100
30) 2-butanone	9.890	72	85536	180.36	ug/L	91
31) 1,1-dichloroethane	9.232	63	216662	44.58	ug/L	97
32) chloroprene	9.336	53	172639	43.62	ug/L	99
33) acrylonitrile	8.510	53	75915	47.65	ug/L	96
34) vinyl acetate	9.159	86	25265	43.14	ug/L #	80
35) ethyl acetate	9.911	45	24372	41.12	ug/L #	94
36) 2,2-dichloropropane	10.016	77	221893	48.84	ug/L	97
37) cis-1,2-dichloroethene	9.974	96	134643	45.09	ug/L	97
38) methyl acrylate	10.000	85	22510	44.66	ug/L	100
39) propionitrile	9.974	54	288685	420.08	ug/L	91
40) bromochloromethane	10.283	128	66846	49.30	ug/L #	84
41) tetrahydrofuran	10.298	42	61436	43.45	ug/L	99
42) chloroform	10.366	83	207389	44.46	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\9-20-19\va9819\
Data File : a253383.d
Acq On : 19 Sep 2019 9:28 pm
Operator : krizhkac
Sample : ecc9755-50 Inst : MSA
Misc : MS37727,VA9819,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Results File: MA9755.RES
Quant Time: Sep 19 22:11:21 2019
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	tert-butyl formate	10.408	59	133885	56.77	ug/L		97
45)	methacrylonitrile	10.183	67	62742	43.73	ug/L		91
46)	cyclohexane	10.769	84	207040	39.16	ug/L		97
47)	1,1,1-trichloroethane	10.649	97	220334	50.50	ug/L		99
48)	iso-butyl alcohol	10.764	43	214710	422.59	ug/L		98
49)	1,1-dichloropropene	10.816	75	144209	41.72	ug/L		96
50)	carbon tetrachloride	10.852	117	188980	51.18	ug/L		99
51)	tert-amyl alcohol	10.941	73	107849	258.01	ug/L		96
54)	benzene	11.072	78	443176	47.31	ug/L		99
55)	iso-octane	11.177	57	368884	39.47	ug/L		97
56)	tert-amyl methyl ether	11.150	73	436685	52.60	ug/L		98
57)	heptane	11.333	71	67272	38.02	ug/L		99
58)	isopropyl acetate	10.967	87	33595	53.28	ug/L		95
59)	1,2-dichloroethane	11.093	62	145095	48.62	ug/L		99
60)	n-butyl alcohol	11.532	41	296232	2511.51	ug/L		94
61)	ethyl acrylate	11.788	55	157769	49.01	ug/L		98
62)	trichloroethene	11.820	95	101566	46.45	ug/L		90
63)	2-nitropropane	12.604	41	51436	61.76	ug/L		88
64)	methylcyclohexane	12.138	83	208174	42.30	ug/L		97
65)	2-chloroethyl vinyl ether	12.635	63	305924	374.09	ug/L		99
66)	methyl methacrylate	12.065	100	34843	54.53	ug/L	#	88
67)	1,2-dichloropropane	12.118	63	112621	46.49	ug/L		97
68)	dibromomethane	12.233	93	66004	47.82	ug/L		98
69)	bromodichloromethane	12.395	83	140119	48.05	ug/L		96
70)	epichlorohydrin	12.734	57	86391	251.22	ug/L		100
71)	cis-1,3-dichloropropene	12.881	75	155984	45.95	ug/L		98
72)	4-methyl-2-pentanone	12.985	58	293300	218.14	ug/L		99
73)	3-methyl-1-butanol	12.980	55	305388	1121.90	ug/L		98
76)	toluene	13.294	92	242253	45.12	ug/L		98
77)	trans-1,3-dichloropropene	13.493	75	138103	44.52	ug/L		99
78)	ethyl methacrylate	13.472	69	156884	51.53	ug/L		98
79)	1,1,2-trichloroethane	13.733	83	76159	45.29	ug/L		97
80)	2-hexanone	13.906	58	251698	186.46	ug/L		95
81)	tetrachloroethene	13.906	166	107991	53.95	ug/L		97
82)	1,3-dichloropropane	13.932	76	146175	45.19	ug/L		98
83)	butyl acetate	13.989	56	90033	44.61	ug/L		97
84)	dibromochloromethane	14.209	129	100589	50.57	ug/L		96
85)	1,2-dibromoethane	14.381	107	101393	48.01	ug/L		98
86)	n-butyl ether	14.857	57	467982	47.09	ug/L		99
87)	chlorobenzene	14.920	112	257575	49.03	ug/L		98
88)	1,1,1,2-tetrachloroethane	14.988	131	133521	56.56	ug/L		96
89)	ethylbenzene	14.983	91	469890	49.58	ug/L		99
90)	m,p-xylene	15.118	106	358480	98.67	ug/L		98
91)	o-xylene	15.573	106	203195	52.27	ug/L		91
92)	styrene	15.579	104	286248	49.52	ug/L		95
93)	butyl acrylate	15.364	55	241841	46.44	ug/L		99
94)	n-amyl acetate	15.594	70	100421	46.93	ug/L		100
95)	bromoform	15.845	173	76146	56.34	ug/L		97
96)	isopropylbenzene	15.960	105	561362	51.79	ug/L		99
97)	cis-1,4-dichloro-2-butene	15.997	75	31916	26.74	ug/L		96
100)	bromobenzene	16.399	156	113309	49.80	ug/L		98
101)	1,1,2,2-tetrachloroethane	16.269	83	177113	50.21	ug/L		98
102)	trans-1,4-dichloro-2-b...	16.300	53	22637	29.23	ug/L		90
103)	1,2,3-trichloropropane	16.368	110	45767	52.53	ug/L		93
104)	n-propylbenzene	16.431	91	582857	48.39	ug/L		98
105)	2-chlorotoluene	16.582	126	124769	52.50	ug/L		91
106)	4-chlorotoluene	16.708	91	313340	46.28	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\9-20-19\va9819\
Data File : a253383.d
Acq On : 19 Sep 2019 9:28 pm
Operator : krizhkac
Sample : ecc9755-50 Inst : MSA
Misc : MS37727,VA9819,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Results File: MA9755.RES
Quant Time: Sep 19 22:11:21 2019
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
107) 1,3,5-trimethylbenzene	16.603	105	471459	51.65 ug/L	99
108) tert-butylbenzene	16.985	119	404316	49.33 ug/L	100
109) 1,2,4-trimethylbenzene	17.042	105	456947	50.19 ug/L	99
110) sec-butylbenzene	17.236	105	619455	50.25 ug/L	99
111) 1,3-dichlorobenzene	17.429	146	215241	48.75 ug/L	99
112) p-isopropyltoluene	17.377	119	516683	50.79 ug/L	99
113) 1,4-dichlorobenzene	17.534	146	218095	48.20 ug/L	99
114) 1,2-dichlorobenzene	17.952	146	238637	50.50 ug/L	98
115) n-butylbenzene	17.832	92	245398	46.26 ug/L	98
116) 1,2-dibromo-3-chloropr...	18.799	157	57680	56.21 ug/L	97
117) 1,3,5-trichlorobenzene	19.019	180	213928	50.41 ug/L	96
118) 2-ethylhexyl acrylate	19.740	70	34351	10.22 ug/L	99
119) 1,2,4-trichlorobenzene	19.761	180	216489	53.48 ug/L	99
120) hexachlorobutadiene	19.886	225	79300	47.29 ug/L	96
121) naphthalene	20.090	128	740698	54.16 ug/L	100
122) 1,2,3-trichlorobenzene	20.341	180	232938	52.84 ug/L	98
123) hexachloroethane	18.281	201	91303	56.50 ug/L	97
124) 2-methylnaphthalene	21.408	142	243537	29.47 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\9-20-19\va9819\
Data File : a253383.d
Acq On : 19 Sep 2019 9:28 pm
Operator : krizhkac
Sample : ecc9755-50 Inst : MSA
Misc : MS37727,VA9819,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\MA9755.M
Quant Results File: MA9755.RES
Quant Time: Sep 19 22:11:21 2019
Quant Title : SW-846 8260C/EPA 624 Rxi-624 60mx0.25mmx1.4um
QLast Update : Tue Aug 20 13:28:09 2019
Response via : Initial Calibration

GCMS Volatile Run Log

Standard / Reagents	Lot #					
Standards	ABK: V019-2659-149.29	EC: V019-2688-15.3	Acrolein: V019-2659-135.57		Column	Rxi-624(30mx0.25mmx1.4um)
Standard Concentration	100-10,000ppm	100ppm	100ppm		Method	V8260C
Expiration Date	10/10/2019	9/25/2019	9/29/2019		Init Calib Date	9/18/2019
Standards	EXT ABK: V019-2659-138.6	EXT EC: V019-2688-06.7	EXT Acrolein: V019-2659-139.4	EXT PA V019-2659-147.3		
Standard Concentration	100-10,000ppm	100ppm	100ppm	100ppm	Analysis Date	9/18/2019
Expiration Date	10/03/2019	9/19/2019	10/03/2019	10/06/2019	Sequence loaded by	Devin Gomez
Internal Surrogate	V019-2659-142				Data processed by	Robert Szot
Internal Surrogate Concentration	50/500ppm				Batch ID	V2V2531
Expiration Date	10/4/2019				Matrix	AQ
Initial Calibration Method	M2V2531				Approved By:	KANYAV
pH Paper Lot#	204518				Approved Date:	9/19/2019 2:26:16 PM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
2V	61589	IB		NA			5			2	ok	
2V	61590	BFB		NA			5			3	ok	5:11 pm
2V	61591	IC2531-0.2		NA		V8260 Initial Calib.	5			4	ok	1uL ABK, EC, Acrolein/500mL DI H2O
2V	61592	IC2531-0.5		NA		V8260 Initial Calib.	5			5	ok	1uL ABK, EC, Acrolein/200mL DI H2O
2V	61593	IC2531-1		NA		V8260 Initial Calib.	5			6	ok	1uL ABK, EC, Acrolein/100mL DI H2O
2V	61594	IC2531-2		NA		V8260 Initial Calib.	5			7	ok	1uL ABK, EC, Acrolein/50mL DI H2O
2V	61595	IC2531-4		NA		V8260 Initial Calib.	5			8	ok	2uL ABK, EC, Acrolein/50mL DI H2O
2V	61596	IC2531-8		NA		V8260 Initial Calib.	5			9	ok	4uL ABK, EC, Acrolein/50mL DI H2O
2V	61597	IC2531-20		NA		V8260 Initial Calib.	5			10	ok	10uL ABK, EC, Acrolein/50mL DI H2O
2V	61598	ICC2531-50		NA		V8260 Initial Calib.	5			11	ok	25uL ABK, EC, Acrolein/50mL DI H2O
2V	61599	IC2531-100		NA		V8260 Initial Calib.	5			12	ok	50uL ABK, EC, Acrolein/50mL DI H2O

OR048-01
Rev Date: 12/18/2017

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
2V	61600	IC2531-200		NA		V8260 Initial Calib.	5			13	ok	100uL ABK, EC, Acrolein/50mL DI H2O
2V	61601	IB		NA			5			14	ok	
2V	61602	IB		NA			5			15	ok	
2V	61603	ICV2531-50		NA		V8260 Initial Calib.	5			16	ok	25uL EXT ABK, EC, Acrolein/50mL DI H2O
2V	61604	ICV2531-50		NA		V8260 Initial Calib.	5			17	ok	25uL EXT PA/50mL DI H2O
2V	61605	IB		NA			5			18	ok	

GCMS Volatile Run Log

Standard / Reagents	Lot #					
Standards	ABK: V019-2659-149.29	EC: V019-2688-15.3	Acrolein: V019-2659-135		Column	Rxi-624(30mx0.25mmx1.4um)
Standard Concentration	100-10,000ppm	100ppm	100ppm		Method	V8260C
Expiration Date	10/10/2019	9/25/2019	9/29/2019		Init Calib Date	9/18/2019
					Analysis Date	9/19/2019
Rough Review Completed	Jessica Potts 9/20/19				Sequence loaded by	Jessica Potts
Internal Surrogate	V019-2659-142				Data processed by	kristelv
Internal Surrogate Concentration	50/500ppm				Batch ID	V2V2532
Expiration Date	10/03/2019				Matrix	AQ
Initial Calibration Method	V2V2531				Approved By:	MEI
pH Paper Lot#	204518				Approved Date:	9/20/2019 9:22:29 AM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
2V	61606	IB		NA			5			1	ok	
2V	61607	BFB/CC2531-20		NA			5			2	ok/ok	20uL ABK, EC, Acrolein/100mL (9:00 am)
2V	61608	BS		NA			5			3	ok	50uL ABK, EC, Acrolein/100mL
2V	61609	BSD		NA			5			4	ok	50uL ABK, EC, Acrolein/100mL # 104, 116 high
2V	61610	IB		NA			5			5	ok	
2V	61611	MB		NA			5			6	ok	
2V	61612	JC94575-3MS	1	NA	MS37480	V8260TCL20+	5		1	7	ok	20uL ABK, EC, Acrolein/40mL (V2V2520)
2V	61613	IB		NA			5			8	ok	
2V	61614	JC94991-2	2	NA	MS37606	V8260TCL42	5		1	9	ok	
2V	61615	JC94740-7	1	NA	MS37553	V8260TCL11	5		1	10	ok	
2V	61616	JC94740-9	1	NA	MS37553	V8260TCL11	5		1	11	ok	

OR048-01
Rev Date: 12/18/2017

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
2V	61617	JC94994-2	2	NA	MS37628	V8260BTX,VLS	5		1	12	ok	
2V	61618	JC94994-3	2	2X	MS37628	V8260BTX,VLS	25/50		1	13	ok	+2V61541
2V	61619	JC94991-5	9	500X	MS37606	V8260TCL42	0.1/50		1	14	ok	
2V	61620	JC94991-5	9	50X	MS37606	V8260TCL42	1/50		1	15	ok	+2V61619
2V	61621	JC94740-7MS	2	NA	MS37553	V8260TCL11	5		1	16	ok	20uL ABK, EC, Acrolein/40mL
2V	61622	JC94991-1	1	20X	MS37606	V8260TCL42	5		1	17	ok	+L315782
2V	61623	JC94740-9DUP	2	NA	MS37553	V8260TCL11	5		1	18	ok	
2V	61624	JC94613-1A	7	NA	MS37467	V8260SL	5		1	19	ok	report Everything but bromomethane, chloroethane combine with A CORE
2V	61625	JC94613-2A	6	NA	MS37467	V8260SL	5		1	20	ok	report Everything but bromomethane, chloroethane combine with A CORE
2V	61626	JC95039-3	2	NA	MS37676	V8260PPL+, 124 TB, 135 TMB, MTBE	5		1	21	ok/dL	RR 10X F/D
2V	61627	JC95039-4	2	NA	MS37676	V8260PPL+, 124 TB, 135 TMB, MTBE	5		1	22	ok	
2V	61628	JC95039-1	1	NA	MS37676	V8260PPL+, 124 TB, 135 TMB, MTBE	5		1	23	ok	
2V	61629	JC95039-2	1	NA	MS37676	V8260PPL+, 124 TB, 135 TMB, MTBE	5		1	24	ok	
2V	61630	ECC2531-50		NA			5			25	ok	50uL ABK, EC, Acrolein/100mL end check DOD (6:46pm)

GCMS Volatile Run Log

Standard / Reagents	Lot #					
Standards	ABK V019-2659-90.22	EC V019-2659-85.4	Acrolein V019-2659-67.6 5		Column	DB-624(60mx0.25mmx1.4um)
Standard Concentration	100ppm-10,000ppm	100ppm	100ppm		Method	V8260C
Internal Surrogate	V019-2659-61				Init Calib Date	7/29/2019
Internal Surrogate Concentration	50/500ppm					
Ext.Standards	Ext.ABK V019-2659-57.11	Ext.EC V019-2659-86.9	Ext.Acrolein V019-2659-4 7.10	Ext.PA V019-2659-48 10	Analysis Date	7/29/2019
Standard Concentration	100ppm-10,000ppm	100ppm	100ppm	100ppm-1000ppm	Sequence loaded by	Prashant B. Shukla
					Data processed by	Robert Szot
					Batch ID	VA9755
					Matrix	AQ
Initial Calibration Method	MA9755				Approved By:	KANYAV
					Approved Date:	7/31/2019 1:47:25 AM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
A	251984	BFB		NA			5			1	OK	5:24 PM
A	251985	IC9755-0.2		NA		8260 initial calibration	5			2	OK	1uL Std.ABK,EC,Acrolein in 500mL DI H2O
A	251986	IC9755-0.5		NA		8260 initial calibration	5			3	OK	1uL Std.ABK,EC,Acrolein in 200mL DI H2O
A	251987	IC9755-1		NA		8260 initial calibration	5			4	OK	1uL Std.ABK,EC,Acrolein in 100mL DI H2O
A	251988	IC9755-2		NA		8260 initial calibration	5			5	OK	2uL Std.ABK,EC,Acrolein in 100mL DI H2O
A	251989	IC9755-4		NA		8260 initial calibration	5			6	OK	4uL Std.ABK,EC,Acrolein in 100mL DI H2O
A	251990	IC9755-8		NA		8260 initial calibration	5			7	OK	8uL Std.ABK,EC,Acrolein in 100mL DI H2O
A	251991	IC9755-20		NA		8260 initial calibration	5			8	OK	20uL Std.ABK,EC,Acrolein in 100mL DI H2O
A	251992	ICC9755-50		NA		8260 initial calibration	5			9	OK	50uL Std.ABK,EC,Acrolein in 100mL DI H2O
A	251993	IC9755-100		NA		8260 initial calibration	5			10	OK	100uL Std.ABK,EC,Acrolein in 100mL DI H2O
A	251994	IC9755-200		NA		8260 initial calibration	5			11	OK	200uL Std.ABK,EC,Acrolein in 100mL DI H2O

OR048-01
Rev Date: 12/18/2017

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
A	251995	IB		NA			5			12	OK	
A	251996	IB		NA			5			13	OK	vial labeled as "BS"
A	251997	ICV9755-50		NA		8260 initial calibration	5			14	OK	50uL Ext.ABK,EC,Acrolein in 100mL DI H2O
A	251998	ICV9755-50		NA		8260 initial calibration	5			15	OK	50uL Ext. PA in 100mL DI H2O
A	251999	IB		NA			5			16	OK	

GCMS Volatile Run Log

Standard / Reagents	Lot #				Column	DB-624(60mx0.25mmx1.4um)
Standards	ABK: V019-2659-149.12	EC: V019-2688-15.6	Acrolein: V019-2659-135 44		Method	V8260C
Standard Concentration	100-10,000 ppm	100 ppm	100 ppm		Init Calib Date	6/26/19
Exp. Date	10/10/19	9/25/19	9/29/19			
Internal Surrogate	V019-2659-142					
Internal Surrogate Concentration	50/500 ppm				Analysis Date	9/19/2019
Exp. Date	10/4/19				Sequence loaded by	Krizhka Cuenta
					Data processed by	davem1
					Batch ID	VA9819
Rough Reviewed	Krizhka Cuenta 9/19, 9/20				Matrix	AQ
Initial Calibration Method	MA9755				Approved By:	MOHUI
pH Paper Lot#	217518				Approved Date:	9/20/2019 3:10:47 PM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
A	253357	IB		NA			5			1	ok	
A	253358	CC9755-20		NA			5			2	ok	20uL ABK, EC, Acrolein/100mL (too many compounds failed)
A	253359	IB		NA			5			1	ok	replaced int surr
A	253360	IB		NA			5			2	ok	
A	253361	BFB/CC9755-20		NA			5			3	ok/ok	20uL ABK, EC, Acrolein/100mL (10:59 am)
A	253362	CC9755-1		NA			5			4	ok	1uL ABK, EC, Acrolein/100mL
A	253363	BS		NA			5			5	ok	50uL ABK, EC, Acrolein/100mL
A	253364	IB		NA			5			6	ok	
A	253365	MB		NA			5			7	ok	
A	253366	JC94848-3	2	5X	MS37572	V8260BTX	10/50		1	8	ok/rr	l/d 1x
A	253367	JC94848-3	2	50X	MS37572	V8260BTX	1/50		1	9	not needed	

OR048-01
Rev Date: 12/18/2017

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
A	253368	JC94852-2	2	NA	MS37572	V8260PAUGTMB	5		1	10	ok	
A	253369	JC94852-3	2	NA	MS37572	V8260PAUGTMB	5		1	11	ok/dl	+4D96187
A	253370	JC94790-3	2	20X	MS37533	V8260CTAROM	2.5/50		1	12	ok	+2C170029
A	253371	JC94848-3	2	NA	MS37572	V8260BTX	5		1	13	ok	+A253366
A	253372	JC94790-3MS	2	20X	MS37533	V8260CTAROM	2.5/50		1	14	ok	50uL ABK, EC, Acrolein/100mL
A	253373	JC94790-3MSD	2	20X	MS37533	V8260CTAROM	2.5/50		1	15	ok	50uL ABK, EC, Acrolein/100mL
A	253374	IB		NA			5			16	ok	
A	253375	JC94613-1A	6	NA	MS37467	V8260SL	5		1	17	RR	Surr out on DoD; report bromomethane and chloroethane only, combine with 2V run
A	253376	JC94613-2A	3	NA	MS37467	V8260SL	5		1	18	ok	report bromomethane and chloroethane only, combine with 2V run
A	253377	JC95253-3	1	NA	MS37727	V8260BENZ	5		1	19	ok	
A	253378	JC95253-5	1	NA	MS37727	V8260BENZ	5		1	20	RR	Surr out
A	253379	JC95253-1	1	NA	MS37727	V8260BENZ	5		1	21	ok	
A	253380	JC95253-4	1	NA	MS37727	V8260BENZ	5		1	22	ok	
A	253381	JC95253-2	1	NA	MS37727	V8260BENZ	5		1	23	ok	
A	253382	IB		NA			5			24	ok	
A	253383	ECC9755-50		NA			5			25	ok	50uL ABK, EC, Acrolein/100mL, 9:28 pm

OR048-01
Rev Date: 12/18/2017

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA1804-MB	AA75442.D	1	09/18/19	TCH	n/a	n/a	GAA1804

The QC reported here applies to the following samples: **Method:** RSK-175

JC94613-1A, JC94613-2A

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	0.11	0.060	ug/l	
74-84-0	Ethane	ND	0.23	0.099	ug/l	

Laboratory Control Sample Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GAA1804-LCS	AA75437.D	1	09/18/19	TCH	n/a	n/a	GAA1804

The QC reported here applies to the following samples: **Method:** RSK-175

JC94613-1A, JC94613-2A

CAS No.	Compound	Spike ug/l	LCS ug/l	LCS %	Limits
74-82-8	Methane	11	10.8	98	59-134
74-84-0	Ethane	23	21.1	92	63-135

* = Outside of Control Limits.

Duplicate Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC94702-11DUP	AA75468.D	1	09/18/19	TCH	n/a	n/a	GAA1804
JC94702-11	AA75467.D	1	09/18/19	TCH	n/a	n/a	GAA1804

The QC reported here applies to the following samples: **Method:** RSK-175

JC94613-1A, JC94613-2A

CAS No.	Compound	JC94702-11 ug/l	Q	DUP ug/l	Q	RPD	Limits
74-82-8	Methane	11.2		11.4		2	20
74-84-0	Ethane	ND		ND		nc	20

8.3.1

8

* = Outside of Control Limits.

Initial Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: GAA611-ICC611
Lab FileID: AA44604.D

Response Factor Report GCAA

Method : C:\MSDCHEM\1\METHODS\MAA611.M (ChemStation Integrator)
Title : METHOD V8015 DG by GC-FID
Last Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration

Calibration Files
200 =AA44605.D 100 =AA44604.D 20 =AA44603.D 10 =AA44602.D
2 =AA44601.D 1 =AA44608.D 500 =AA44606.D 1000=AA44607.D
2000=AA38039.D = = =

Compound

	200	100	20	10	2	1	500	1000	2000	Avg	%RSD
1) Methane	3.495	2.972	2.227	3.034	2.500	1.220	2.833	2.689		2.621 E4	25.95
2) Ethane	6.678	5.691	4.213	4.974	4.212	2.201	5.484	5.197		4.831 E4	27.56
3) Ethene	6.666	5.675	4.188	4.964	4.177	2.494	5.473	5.191		4.853 E4	25.76
4) Propane	9.771	8.352	6.261	7.405	6.062	2.808	8.032	7.596		7.036 E4	29.46
5) Propylene										0.000	-1.00
6) Isobutane										0.000	-1.00
7) n-Butane	1.333	1.138	0.891	1.078	0.825	0.361	1.098	1.037		0.970 E5	29.93
8) Acetylene										0.000	-1.00
9) n-Pentane	1.628	1.355	1.158	1.454	1.011	0.481	1.331	1.258		1.210 E5	28.73
10) Hexane	1.898	1.462	1.503	1.959	1.335	0.900	1.542	1.454		1.506 E5	21.88

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

MAA611.M Wed Feb 04 14:15:12 2015 S

Initial Calibration Verification

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: GAA611-ICV611
Lab FileID: AA44609.D

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\
Data File : AA44609.D
Signal(s) : FID1A.ch
Acq On    :  4 Feb 2015  12:59 pm
Operator  : THOMASH
Sample    : ICV611-100
Misc      : GC45339,GAA611,,,,,1
ALS Vial  : 12   Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:15:20 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title  : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.  : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info  : 50m x 0.53 mm ID x 10um df


Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	26.211	28.583 E3	-9.0	96	0.00
2	Ethane	48.315	54.762 E3	-13.3	96	0.00
3	Ethene	48.534	54.783 E3	-12.9	97	0.00
4	Propane	70.357	80.260 E3	-14.1	96	0.00
7	n-Butane	97.009	107.063 E3	-10.4	94	0.00
9	n-Pentane	120.954	120.719 E3	0.2	89	-0.02
10	Hexane	150.637	131.911 E3	12.4	90	-0.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA611.M Wed Feb 04 14:16:18 2015 S

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: GAA1804-CC611
Lab FileID: AA75436.D

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\
Data File : AA75436.d
Signal(s) : FID1A.ch
Acq On    : 18 Sep 2019   6:35 am
Operator  : thomash
Sample    : cc611-100
Misc      : GC54991,GAA1804,,,,,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 09:51:38 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title  : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.  : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info  : 50m x 0.53 mm ID x 10um df


Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	26.211	28.014 E3	-6.9	94	0.02
2	Ethane	48.315	48.252 E3	0.1	85	0.00
3	Ethene	48.534	49.666 E3	-2.3	88	-0.03
4	Propane	70.357	65.547 E3	6.8	78	-0.04
5	n-Butane	97.009	78.306 E3	19.3#	69	-0.06
6	n-Pentane	120.954	104.316 E3	13.8	77	-0.06
7	Hexane	150.637	151.715 E3	-0.7	104	-0.09

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA611.M Thu Sep 19 11:33:51 2019

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: GAA1804-CC611
Lab FileID: AA75451.D

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\
Data File : AA75451.d
Signal(s) : FID1A.ch
Acq On    : 18 Sep 2019  11:57 am
Operator  : thomash
Sample    : cc611-100
Misc      : GC54998,GAA1804,,,,,1
ALS Vial  : 16   Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 10:09:14 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title  : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.  : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info  : 50m x 0.53 mm ID x 10um df


Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	26.211	27.005 E3	-3.0	91	0.03
2	Ethane	48.315	46.642 E3	3.5	82	0.00
3	Ethene	48.534	47.866 E3	1.4	84	-0.02
4	Propane	70.357	66.526 E3	5.4	80	-0.04
5	n-Butane	97.009	91.709 E3	5.5	81	-0.06
6	n-Pentane	120.954	134.007 E3	-10.8	99	-0.07
7	Hexane	150.637	197.275 E3	-31.0#	135	-0.12

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA611.M Thu Sep 19 11:37:31 2019

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: GAA1804-CC611
Lab FileID: AA75466.D

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\
Data File : AA75466.d
Signal(s) : FID1A.ch
Acq On    : 18 Sep 2019   4:48 pm
Operator  : thomash
Sample    : cc611-100
Misc      : GC54998,GAA1804,,,,,20
ALS Vial  : 31   Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 16:58:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title  : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.  : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info  : 50m x 0.53 mm ID x 10um df


Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	26.211	25.861 E3	1.3	87	0.00
2	Ethane	48.315	45.194 E3	6.5	79	0.00
3	Ethene	48.534	46.390 E3	4.4	82	-0.03
4	Propane	70.357	62.441 E3	11.3	75	-0.04
5	n-Butane	97.009	74.989 E3	22.7#	66	-0.06
6	n-Pentane	120.954	93.705 E3	22.5#	69	-0.08
7	Hexane	150.637	122.374 E3	18.8#	84	-0.12

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA611.M Thu Sep 19 11:38:01 2019

Continuing Calibration Summary

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Sample: GAA1804-ECC611
Lab FileID: AA75471.D

Evaluate Continuing Calibration Report

```
Data Path : C:\msdchem\1\DATA\
Data File : AA75471.d
Signal(s) : FID1A.ch
Acq On    : 18 Sep 2019   5:56 pm
Operator  : thomash
Sample    : ecc611-100
Misc      : GC54970,GAA1804,,,,,1
ALS Vial  : 36   Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 18:06:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title  : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.  : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info  : 50m x 0.53 mm ID x 10um df


Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  15%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	Methane	26.211	25.781 E3	1.6	87	0.01
2	Ethane	48.315	46.216 E3	4.3	81	0.00
3	Ethene	48.534	47.077 E3	3.0	83	-0.03
4	Propane	70.357	65.758 E3	6.5	79	-0.04
5	n-Butane	97.009	82.546 E3	14.9	73	-0.06
6	n-Pentane	120.954	103.784 E3	14.2	77	-0.08
7	Hexane	150.637	132.631 E3	12.0	91	-0.12

Evaluate Continuing Calibration Report - Not Founds

(#) = Out of Range SPCC's out = 0 CCC's out = 0

MAA611.M Thu Sep 19 11:38:38 2019

Run Sequence Report

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Run ID: GAA1804 **Method:** RSK-175 **Instrument ID:** GCAA

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
GAA1804-CC611	AA75436.D	09/18/19 06:35	n/a	Continuing cal 100
GAA1804-LCS	AA75437.D	09/18/19 07:32	n/a	Laboratory Control Sample
GAA1804-MB	AA75442.D	09/18/19 09:21	n/a	Method Blank
JC94613-1A	AA75443.D	09/18/19 09:45	n/a	EW-1
JC94613-1A	AA75445.D	09/18/19 10:21	n/a	EW-1
JC94613-2A	AA75446.D	09/18/19 10:42	n/a	EW-4
ZZZZZZ	AA75448.D	09/18/19 11:12	n/a	(unrelated sample)
GAA1804-CC611	AA75451.D	09/18/19 11:57	n/a	Continuing cal 100
ZZZZZZ	AA75452.D	09/18/19 12:13	n/a	(unrelated sample)
ZZZZZZ	AA75453.D	09/18/19 12:27	n/a	(unrelated sample)
TD44732-2	AA75455.D	09/18/19 13:00	n/a	(used for QC only; not part of job JC94613)
TD44732-2DUP	AA75456.D	09/18/19 13:14	n/a	Duplicate
TD44732-2	AA75457.D	09/18/19 14:02	n/a	(used for QC only; not part of job JC94613)
ZZZZZZ	AA75458.D	09/18/19 14:25	n/a	(unrelated sample)
ZZZZZZ	AA75459.D	09/18/19 14:53	n/a	(unrelated sample)
ZZZZZZ	AA75461.D	09/18/19 15:22	n/a	(unrelated sample)
ZZZZZZ	AA75462.D	09/18/19 15:35	n/a	(unrelated sample)
ZZZZZZ	AA75463.D	09/18/19 16:06	n/a	(unrelated sample)
ZZZZZZ	AA75464.D	09/18/19 16:22	n/a	(unrelated sample)
ZZZZZZ	AA75465.D	09/18/19 16:35	n/a	(unrelated sample)
GAA1804-CC611	AA75466.D	09/18/19 16:48	n/a	Continuing cal 100
JC94702-11	AA75467.D	09/18/19 17:02	n/a	(used for QC only; not part of job JC94613)
JC94702-11DUP	AA75468.D	09/18/19 17:15	n/a	Duplicate
ZZZZZZ	AA75469.D	09/18/19 17:29	n/a	(unrelated sample)
ZZZZZZ	AA75470.D	09/18/19 17:42	n/a	(unrelated sample)
GAA1804-ECC611	AA75471.D	09/18/19 17:56	n/a	Ending cal 100

Run Sequence Report

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Run ID: GAA611 **Method:** RSK-175 **Instrument ID:** GCAA

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
GAA611-IC611	AA44601.D	02/04/15 09:34	n/a	Initial cal 2.0
GAA611-IC611	AA44602.D	02/04/15 10:01	n/a	Initial cal 10
GAA611-IC611	AA44603.D	02/04/15 10:36	n/a	Initial cal 20
GAA611-ICC611	AA44604.D	02/04/15 11:15	n/a	Initial cal 100
GAA611-IC611	AA44605.D	02/04/15 11:29	n/a	Initial cal 200
GAA611-IC611	AA44606.D	02/04/15 11:48	n/a	Initial cal 500
GAA611-IC611	AA44607.D	02/04/15 12:08	n/a	Initial cal 1000
GAA611-IC611	AA44608.D	02/04/15 12:25	n/a	Initial cal 1.0
GAA611-ICV611	AA44609.D	02/04/15 12:59	n/a	Initial cal verification 100

GC Volatiles

Raw Data

Manual Integrations
APPROVED
(compounds with "m" flag)
Dana Tryon
09/19/19 16:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75443.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 9:45 am
Operator : thomash
Sample : jc94613-1a
Misc : GC54958,GAA1804,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 09:58:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.342	83388730	3181.380	PPMV
2) Ethane	1.761	21318	0.441	PPMV m

(f)=RT Delta > 1/2 Window (m)=manual int.

9.1.1
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75443.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 9:45 am
Operator : thomash
Sample : jc94613-1a
Misc : GC54958,GAA1804,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 09:58:07 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Manual Integration Approval Summary

Sample Number:	JC94613-1A	**Method:**	RSK-175
Lab FileID:	AA75443.D	**Analyst approved:**	09/19/19 14:35 Thomas Hilbig
Injection Time:	09/18/19 09:45	**Supervisor approved:**	09/19/19 16:51 Dana Tryon

Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethane	74-84-0	1	1.76	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA75443.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 9:45 am
Operator : thomash
Sample : jc94613-1
Misc : GC54958,GAA1804,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 09:55:08 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(2) Ethane

1.764min 0.000 PPMV

response 0

(+) = Expected Retention Time

MAA611.M Thu Sep 19 09:56:35 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA75443.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 9:45 am
Operator : thomash
Sample : jc94613-1
Misc : GC54958,GAA1804,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 09:55:08 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(2) Ethane

1.761min 0.441 PPMV m

response 21318

(+) = Expected Retention Time

MAA611.M Thu Sep 19 09:58:15 2019

Dissolved Gas Calculation Worksheet

Data File Name **AA75443.d**
Date Acquired 9/18/2019 9:45
Sample Name **jc94613-1a**
Sample Multiplier **1**
Temperature(C) **24**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	297	24.37	83388730	6376	3181.14	2088.63	274.82	40560	69.646	344.47	0.11	**344.47**
Ethane	30	22.4	55.5	297	24.37	21318.133	0	0.44	0.54	0.07	29420	0.025	0.096	0.23	**ND**
Ethene	28	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	11160	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	35857	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13981	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	61993	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	43947	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75445.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 10:21 am
Operator : thomash
Sample : jc94613-1a
Misc : GC54958,GAA1804,,,,,20
ALS Vial : 10 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Sep 18 10:31:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.349	24710850	18854.970	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75445.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 10:21 am
Operator : thomash
Sample : jc94613-1a
Misc : GC54958,GAA1804,,,,,20
ALS Vial : 10 Sample Multiplier: 20

Integration File: autoint1.e
Quant Time: Sep 18 10:31:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Dissolved Gas Calculation Worksheet

Data File Name **AA75445.d**
Date Acquired **9/18/2019 10:21**
Sample Name **jc94613-1a**
Sample Multiplier **20**
Temperature(C) **24**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	297	24.37	24710850	6376	18850.10	12376.33	1628.46	40560	412.695	2041.16	2.20	**2041.16**
Ethane	30	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	29420	#DIV/0!	#DIV/0!	4.60	**#DIV/0!**
Ethene	28	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	11160	#DIV/0!	#DIV/0!	6.20	**#DIV/0!**
Propane	44	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	35857	#DIV/0!	#DIV/0!	6.40	**#DIV/0!**
n-Butane	42	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13981	#DIV/0!	#DIV/0!	8.60	**#DIV/0!**
n-Pentane	58	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	61993	#DIV/0!	#DIV/0!	7.60	**#DIV/0!**
Hexane	58	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	43947	#DIV/0!	#DIV/0!	8.20	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Manual Integrations
APPROVED
(compounds with "m" flag)
Dana Tryon
09/19/19 16:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75446.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 10:42 am
Operator : thomash
Sample : jc94613-2a
Misc : GC54958,GAA1804,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 10:05:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.337	1183454	45.150	PPMV m

(f)=RT Delta > 1/2 Window (m)=manual int.

9.1.5

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75446.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 10:42 am
Operator : thomash
Sample : jc94613-2a
Misc : GC54958,GAA1804,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 10:05:18 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Manual Integration Approval Summary

Sample Number:	JC94613-2A	**Method:**	RSK-175
Lab FileID:	AA75446.D	**Analyst approved:**	09/19/19 14:35 Thomas Hilbig
Injection Time:	09/18/19 10:42	**Supervisor approved:**	09/19/19 16:51 Dana Tryon

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methane	74-82-8	1	1.34	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA75446.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 10:42 am
Operator : thomash
Sample : jc94613-2
Misc : GC54958,GAA1804,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 10:52:58 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(1) Methane

1.338min 45.903 PPMV

response 1203186

(+) = Expected Retention Time

MAA611.M Thu Sep 19 10:04:42 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA75446.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 10:42 am
Operator : thomash
Sample : jc94613-2
Misc : GC54958,GAA1804,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 10:52:58 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(1) Methane

1.337min 45.150 PPMV m

response 1183454

(+) = Expected Retention Time

MAA611.M Thu Sep 19 10:05:28 2019

Dissolved Gas Calculation Worksheet

Data File Name **AA75446.d**
Date Acquired 9/18/2019 10:42
Sample Name **jc94613-2a**
Sample Multiplier **1**
Temperature(C) **24**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	297	24.37	1183454.2	6376	44.91	29.48	3.88	40560	0.983	4.86	0.11	**4.86**
Ethane	30	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	29420	#DIV/0!	#DIV/0!	0.23	**#DIV/0!**
Ethene	28	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	11160	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	35857	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13981	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	61993	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	297	24.37	0	0	#DIV/0!	#DIV/0!	#DIV/0!	43947	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Manual Integrations
APPROVED
(compounds with "m" flag)
Dana Tryon
09/19/19 16:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75442.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 9:21 am
Operator : thomash
Sample : mb
Misc : GC54693,GAA1804,,,,,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 09:38:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc Units
Target Compounds			
1) Methane	1.344	8023	0.306 PPMV m

(f)=RT Delta > 1/2 Window (m)=manual int.

9.2.1
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75442.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 9:21 am
Operator : thomash
Sample : mb
Misc : GC54693,GAA1804,,,,,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 09:38:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Manual Integration Approval Summary

Sample Number:	GAA1804-MB	**Method:**	RSK-175
Lab FileID:	AA75442.D	**Analyst approved:**	09/19/19 14:35 Thomas Hilbig
Injection Time:	09/18/19 09:21	**Supervisor approved:**	09/19/19 16:51 Dana Tryon

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methane	74-82-8	1	1.34	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA75442.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 9:21 am
Operator :
Sample : mb
Misc : GC54693,GAA1804,,,,,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 09:31:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(1) Methane

1.327min 0.000 PPMV

response 0

(+) = Expected Retention Time

MAA611.M Wed Sep 18 09:37:52 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA75442.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 9:21 am
Operator : thomash
Sample : mb
Misc : GC54693,GAA1804,,,,,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 09:38:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(1) Methane

1.344min 0.306 PPMV m

response 8023

(+) = Expected Retention Time

MAA611.M Thu Sep 19 09:55:24 2019

Dissolved Gas Calculation Worksheet

Data File Name **AA75442.d**
Date Acquired 9/18/2019 9:21
Sample Name **mb**
Sample Multiplier **1**
Temperature(C) **23**
Headspace Vol. (cc) **5**
Sample Vol(cc) **37**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	296	24.29	8023.091	6376	0.06	0.04	0.01	39820	0.001	0.01	0.11	ND
Ethane	30	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	28640	#DIV/0!	#DIV/0!	0.23	#DIV/0!
Ethene	28	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	10920	#DIV/0!	#DIV/0!	0.31	#DIV/0!
Propane	44	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	34744	#DIV/0!	#DIV/0!	0.32	#DIV/0!
n-Butane	42	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	13451	#DIV/0!	#DIV/0!	0.43	#DIV/0!
n-Pentane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	60118	#DIV/0!	#DIV/0!	0.38	#DIV/0!
Hexane	58	22.4	55.5	296	24.29	0	0	#DIV/0!	#DIV/0!	#DIV/0!	42425	#DIV/0!	#DIV/0!	0.41	#DIV/0!

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	The volume of 1 mole of any gas at standard temperature and pressure(STP)
Water g/Moles	1 Liter of water is equal to 55.5g-moles
Temp-kelvin	Is defined as 273 + degress C
Corrected Gas Density	Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)
Headspace conc(ug/l)	Is equal to (ppmv reading) x (mw/corrected gas density)
Water Concentration(ug/l)	Is equal to headspace conc(ug/l) x headspace vol/sample vol
Saturation Concentration(ug/l)	Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75437.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 7:32 am
Operator : thomash
Sample : lcs
Misc : GC54991,GAA1804,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 07:43:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.347	2521794	96.209	PPMV
2)	Ethane	1.765	4493021	92.995	PPMV
3)	Ethene	2.456	4000728	82.431	PPMV
4)	Propane	2.898	6771974	96.252	PPMV
5)	n-Butane	4.123	8548683	88.122	PPMV
6)	n-Pentane	5.183	10773031	89.067	PPMV
7)	Hexane	6.374	12981202	86.175	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

9.3.1

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75437.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 7:32 am
Operator : thomash
Sample : lcs
Misc : GC54991,GAA1804,,,,,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 07:43:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

MAA611.M Thu Sep 19 11:24:24 2019 Page: 2

Dissolved Gas Calculation Worksheet

Data File Name **AA75437.d**
Date Acquired 9/18/2019 7:32
Sample Name **lcs**
Sample Multiplier **1**
Temperature(C) **22**
Headspace Vol. (cc) **5**
Sample Vol(cc) **37**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	295	24.21	2521793.7	0	96.21	63.60	8.59	39080	2.186	10.78	0.11	**10.78**
Ethane	30	22.4	55.5	295	24.21	4493021.3	0	93.00	115.26	15.58	27860	5.558	21.133	0.23	**21.133**
Ethene	28	22.4	55.5	295	24.21	4000728	0	82.43	95.35	12.89	10680	11.994	24.880	0.31	**24.880**
Propane	44	22.4	55.5	295	24.21	6771974	0	96.25	174.97	23.64	33643	6.99	30.63	0.32	**30.63**
n-Butane	42	22.4	55.5	295	24.21	8548683	0	88.12	152.91	20.66	12937	15.88	36.54	0.43	**36.54**
n-Pentane	58	22.4	55.5	295	24.21	10773031	0	89.07	213.42	28.84	58287	4.92	33.76	0.38	**33.76**
Hexane	58	22.4	55.5	295	24.21	12981202	0	86.18	206.49	27.90	40945	6.77	34.68	0.41	**34.68**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	The volume of 1 mole of any gas at standard temperature and pressure(STP)
Water g/Moles	1 Liter of water is equal to 55.5g-moles
Temp-kelvin	Is defined as 273 + degress C
Corrected Gas Density	Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)
Headspace conc(ug/l)	Is equal to (ppmv reading) x (mw/corrected gas density)
Water Concentration(ug/l)	Is equal to headspace conc(ug/l) x headspace vol/sample vol
Saturation Concentration(ug/l)	Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75468.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 5:15 pm
Operator : thomash
Sample : jc94702-11dup
Misc : GC54970,GAA1804,,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 11:20:56 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Compound	R.T.	Response	Conc	Units
Target Compounds				
1) Methane	1.338	2828504	107.911	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

9.4.1

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75468.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 5:15 pm
Operator : thomash
Sample : jc94702-11dup
Misc : GC54970,GAA1804,,,,,1
ALS Vial : 33 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 11:20:56 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Dissolved Gas Calculation Worksheet

Data File Name **AA75468.d**
Date Acquired 9/18/2019 17:15
Sample Name **jc94702-11dup**
Sample Multiplier **1**
Temperature(C) **27**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	300	24.62	2828504	6376	107.67	69.98	9.21	42740	2.237	11.45	0.11	**11.45**
Ethane	30	22.4	55.5	300	24.62	0	0	#DIV/0!	#DIV/0!	#DIV/0!	31800	#DIV/0!	#DIV/0!	0.23	**#DIV/0!**
Ethene	28	22.4	55.5	300	24.62	0	0	#DIV/0!	#DIV/0!	#DIV/0!	11920	#DIV/0!	#DIV/0!	0.31	**#DIV/0!**
Propane	44	22.4	55.5	300	24.62	0	0	#DIV/0!	#DIV/0!	#DIV/0!	39244	#DIV/0!	#DIV/0!	0.32	**#DIV/0!**
n-Butane	42	22.4	55.5	300	24.62	0	0	#DIV/0!	#DIV/0!	#DIV/0!	15677	#DIV/0!	#DIV/0!	0.43	**#DIV/0!**
n-Pentane	58	22.4	55.5	300	24.62	0	0	#DIV/0!	#DIV/0!	#DIV/0!	67892	#DIV/0!	#DIV/0!	0.38	**#DIV/0!**
Hexane	58	22.4	55.5	300	24.62	0	0	#DIV/0!	#DIV/0!	#DIV/0!	48782	#DIV/0!	#DIV/0!	0.41	**#DIV/0!**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	**The volume of 1 mole of any gas at standard temperature and pressure(STP)**
Water g/Moles	**1 Liter of water is equal to 55.5g-moles**
Temp-kelvin	**Is defined as 273 + degress C**
Corrected Gas Density	**Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)**
Headspace conc(ug/l)	**Is equal to (ppmv reading) x (mw/corrected gas density)**
Water Concentration(ug/l)	**Is equal to headspace conc(ug/l) x headspace vol/sample vol**
Saturation Concentration(ug/l)	**Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)**

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44601.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 9:34 am
Operator : THOMASH
Sample : IC611-2.0
Misc : GC45339,GAA611,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:17:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.327	50005	1.586	PPMV
2)	Ethane	1.763	84242	1.724	PPMV
3)	Ethene	2.485	83535	1.725	PPMV
4)	Propane	2.941	121231	1.698	PPMV
7)	n-Butane	4.181	165088	1.643	PPMV
9)	n-Pentane	5.233	202288	1.534	PPMV
10)	Hexane	6.454	266972	1.431	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44601.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 9:34 am
Operator : THOMASH
Sample : IC611-2.0
Misc : GC45339,GAA611,,,,,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:17:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44602.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 10:01 am
Operator : THOMASH
Sample : IC611-10
Misc : GC45339,GAA611,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:18:20 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.324	303369	9.624	PPMV
2)	Ethane	1.760	497423	10.178	PPMV
3)	Ethene	2.483	496402	10.249	PPMV
4)	Propane	2.940	740534	10.373	PPMV
7)	n-Butane	4.180	1077915	10.728	PPMV
9)	n-Pentane	5.225	1454474	11.028	PPMV
10)	Hexane	6.438	1958501	10.495	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.2

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44602.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 10:01 am
Operator : THOMASH
Sample : IC611-10
Misc : GC45339,GAA611,,,,,1
ALS Vial : 5 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:18:20 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

MAA611.M Wed Feb 04 14:17:32 2015 S

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44603.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 10:36 am
Operator : THOMASH
Sample : IC611-20
Misc : GC45339,GAA611,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:18:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.328	445428	14.131	PPMV
2)	Ethane	1.764	842679	17.243	PPMV
3)	Ethene	2.485	837503	17.292	PPMV
4)	Propane	2.941	1252123	17.539	PPMV
7)	n-Butane	4.180	1781233	17.727	PPMV
9)	n-Pentane	5.226	2315413	17.555	PPMV
10)	Hexane	6.442	3005302	16.104	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.3

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44603.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 10:36 am
Operator : THOMASH
Sample : IC611-20
Misc : GC45339,GAA611,,,,,1
ALS Vial : 6 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:18:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

MAA611.M Wed Feb 04 14:17:33 2015 S

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44604.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 11:15 am
Operator : THOMASH
Sample : ICC611-100
Misc : GC45339,GAA611,,,,,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:18:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.327	2971911	94.280	PPMV
2)	Ethane	1.764	5690884	116.449	PPMV
3)	Ethene	2.484	5674706	117.164	PPMV
4)	Propane	2.940	8351927	116.992	PPMV
7)	n-Butane	4.180	11376855	113.226	PPMV
9)	n-Pentane	5.239	13552151	102.750	PPMV
10)	Hexane	6.463	14619275	78.337	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.4

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44604.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 11:15 am
Operator : THOMASH
Sample : ICC611-100
Misc : GC45339,GAA611,,,,,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:18:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44605.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 11:29 am
Operator : THOMASH
Sample : IC611-200
Misc : GC45339,GAA611,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:19:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.324	6989667	221.738	PPMV
2)	Ethane	1.761	13356672	273.308	PPMV
3)	Ethene	2.481	13332372	275.271	PPMV
4)	Propane	2.938	19541599	273.734	PPMV
7)	n-Butane	4.176	26661382	265.341	PPMV
9)	n-Pentane	5.222	32551597	246.801	PPMV
10)	Hexane	6.437	37952228	203.366	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.5
6

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44605.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 11:29 am
Operator : THOMASH
Sample : IC611-200
Misc : GC45339,GAA611,,,,,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:19:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

MAA611.M Wed Feb 04 14:17:34 2015 S

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44606.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 11:48 am
Operator : THOMASH
Sample : IC611-500
Misc : GC45339,GAA611,,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:19:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.326	14163139	449.306	PPMV
2)	Ethane	1.762	27421684	561.110	PPMV
3)	Ethene	2.480	27365973	565.019	PPMV
4)	Propane	2.937	40157700	562.519	PPMV
7)	n-Butane	4.175	54894590	546.326	PPMV
9)	n-Pentane	5.222	66545758	504.540	PPMV
10)	Hexane	6.437	77080355	413.033	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.6

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44606.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 11:48 am
Operator : THOMASH
Sample : IC611-500
Misc : GC45339,GAA611,,,,,1
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:19:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44607.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 12:08 pm
Operator : THOMASH
Sample : IC611-1000
Misc : GC45339,GAA611,,,,,1
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:19:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.318	26887456	852.968	PPMV
2)	Ethane	1.756	51970289	1063.431	PPMV
3)	Ethene	2.474	51909519	1071.765	PPMV
4)	Propane	2.933	75960331	1064.033	PPMV
7)	n-Butane	4.171	103688279	1031.934	PPMV
9)	n-Pentane	5.221	125775805	953.614	PPMV
10)	Hexane	6.436	145357798	778.895	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.7

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44607.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 12:08 pm
Operator : THOMASH
Sample : IC611-1000
Misc : GC45339,GAA611,,,,,1
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:19:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Thu Jan 22 12:47:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

MAA611.M Wed Feb 04 14:17:35 2015 S

Page: 2

Manual Integrations
APPROVED
(compounds with "m" flag)
Jessica Reitan-Chu
02/04/15 18:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44608.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 12:25 pm
Operator : THOMASH
Sample : IC611-1.0
Misc : GC45339,GAA611,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:41:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:22:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	Methane	1.331	12200	0.425	PPMV	m
2)	Ethane	1.767	22014	0.463	PPMV	
3)	Ethene	2.487	24941	0.527	PPMV	m
4)	Propane	2.943	28076	0.401	PPMV	
7)	n-Butane	4.181	36123	0.369	PPMV	
9)	n-Pentane	5.230	48120	0.389	PPMV	
10)	Hexane	6.449	90023	0.571	PPMV	

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.8
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44608.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 12:25 pm
Operator : THOMASH
Sample : IC611-1.0
Misc : GC45339,GAA611,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:41:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:22:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

MAA611.M Wed Feb 04 14:17:36 2015 S

Page: 2

Manual Integration Approval Summary

Sample Number:	GAA611-IC611	**Method:**	RSK-175
Lab FileID:	AA44608.D	**Analyst approved:**	02/04/15 14:21 Thomas Hilbig
Injection Time:	02/04/15 12:25	**Supervisor approved:**	02/04/15 18:03 Jessica Reitan-Chu

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methane	74-82-8	1	1.33	Poor instrument integration
Ethene	74-85-1	1	2.49	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA44608.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 12:25 pm
Operator : THOMASH
Sample : IC611-1.0
Misc : GC45339,GAA611,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:35:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:22:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(1) Methane

1.331min 0.155 PPMV

response 4459

(+) = Expected Retention Time

MAA611.M Wed Feb 04 12:37:49 2015 S

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA44608.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 12:25 pm
Operator : THOMASH
Sample : IC611-1.0
Misc : GC45339,GAA611,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:39:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:22:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(3) Ethene

2.487min 0.468 PPMV

response 22118

(+) = Expected Retention Time

MAA611.M Wed Feb 04 12:41:32 2015 S

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA44608.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 12:25 pm
Operator : THOMASH
Sample : IC611-1.0
Misc : GC45339,GAA611,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:39:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:22:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(3) Ethene

2.487min 0.527 PPMV m

response 24941

(+) = Expected Retention Time

MAA611.M Wed Feb 04 12:41:42 2015 S

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA44608.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 12:25 pm
Operator : THOMASH
Sample : IC611-1.0
Misc : GC45339,GAA611,,,,,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 12:41:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:22:06 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(1) Methane

1.331min 0.425 PPMV m

response 12200

(+) = Expected Retention Time

MAA611.M Wed Feb 04 14:18:24 2015 S

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44609.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 12:59 pm
Operator : THOMASH
Sample : ICV611-100
Misc : GC45339,GAA611,,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:15:20 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.321	2858301	109.048	PPMV
2)	Ethane	1.758	5476159	113.344	PPMV
3)	Ethene	2.482	5478342	112.876	PPMV
4)	Propane	2.939	8025951	114.075	PPMV
7)	n-Butane	4.179	10706252	110.363	PPMV
9)	n-Pentane	5.223	12071885	99.806	PPMV
10)	Hexane	6.437	13191061	87.568	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA44609.D
Signal(s) : FID1A.ch
Acq On : 4 Feb 2015 12:59 pm
Operator : THOMASH
Sample : ICV611-100
Misc : GC45339,GAA611,,,,,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Feb 04 14:15:20 2015
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

MAA611.M Wed Feb 04 14:17:36 2015 S

Page: 2

Manual Integrations
APPROVED
(compounds with "m" flag)
Dana Tryon
09/19/19 16:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75436.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 6:35 am
Operator : thomash
Sample : cc611-100
Misc : GC54991,GAA1804,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 09:51:38 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	Methane	1.345	2801418	106.877	PPMV	m
2)	Ethane	1.764	4825242	99.871	PPMV	
3)	Ethene	2.455	4966609	102.332	PPMV	
4)	Propane	2.897	6554671	93.163	PPMV	
5)	n-Butane	4.123	7830642	80.721	PPMV	
6)	n-Pentane	5.183	10431604	86.245	PPMV	
7)	Hexane	6.375	15171504	100.716	PPMV	

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.10
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75436.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 6:35 am
Operator : thomash
Sample : cc611-100
Misc : GC54991,GAA1804,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 09:51:38 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

MAA611.M Thu Sep 19 11:24:21 2019 Page: 2

Manual Integration Approval Summary

Sample Number:	GAA1804-CC611	**Method:**	RSK-175
Lab FileID:	AA75436.D	**Analyst approved:**	09/19/19 14:35 Thomas Hilbig
Injection Time:	09/18/19 06:35	**Supervisor approved:**	09/19/19 16:51 Dana Tryon

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methane	74-82-8	1	1.34	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA75436.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 6:35 am
Operator : thomash
Sample : cc611-100
Misc : GC54991,GAA1804,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 06:45:46 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(1) Methane

1.345min 108.707 PPMV

response 2849367

(+) = Expected Retention Time

MAA611.M Thu Sep 19 09:49:54 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA75436.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 6:35 am
Operator : thomash
Sample : cc611-100
Misc : GC54991,GAA1804,,,,,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 06:45:46 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(1) Methane

1.345min 106.877 PPMV m

response 2801418

(+) = Expected Retention Time

MAA611.M Thu Sep 19 09:52:02 2019

Manual Integrations
APPROVED
(compounds with "m" flag)
Dana Tryon
09/19/19 16:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75451.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 11:57 am
Operator : thomash
Sample : cc611-100
Misc : GC54998,GAA1804,,,,,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 10:09:14 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1)	Methane	1.355	2700496	103.027	PPMV	m
2)	Ethane	1.774	4664159	96.537	PPMV	
3)	Ethene	2.463	4786590	98.623	PPMV	
4)	Propane	2.903	6652602	94.555	PPMV	
5)	n-Butane	4.125	9170905	94.537	PPMV	
6)	n-Pentane	5.168	13400703	110.792	PPMV	
7)	Hexane	6.345	19727538	130.961	PPMV	

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.11
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75451.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 11:57 am
Operator : thomash
Sample : cc611-100
Misc : GC54998,GAA1804,,,,,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 19 10:09:14 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

MAA611.M Thu Sep 19 11:24:52 2019 Page: 2

Manual Integration Approval Summary

Sample Number:	GAA1804-CC611	**Method:**	RSK-175
Lab FileID:	AA75451.D	**Analyst approved:**	09/19/19 14:35 Thomas Hilbig
Injection Time:	09/18/19 11:57	**Supervisor approved:**	09/19/19 16:51 Dana Tryon

Parameter	CAS	Sig#	R.T. (min.)	Reason
Methane	74-82-8	1	1.35	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA75451.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 11:57 am
Operator : thomash
Sample : cc611-100
Misc : GC54998,GAA1804,,,,,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 12:07:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(1) Methane

1.356min 103.977 PPMV

response 2725388

(+) = Expected Retention Time

MAA611.M Thu Sep 19 10:08:34 2019

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\
Data File : AA75451.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 11:57 am
Operator : thomash
Sample : cc611-100
Misc : GC54998,GAA1804,,,,,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 12:07:19 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

(1) Methane

1.355min 103.027 PPMV m

response 2700496

(+) = Expected Retention Time

MAA611.M Thu Sep 19 10:09:29 2019

Dissolved Gas Calculation Worksheet

Data File Name **AA75451.d**
Date Acquired 9/18/2019 11:57
Sample Name **cc611-100**
Sample Multiplier **1**
Temperature(C) **24**
Headspace Vol. (cc) **5**
Sample Vol(cc) **38**

Compound	MW	Molar Volume(L)	Water g-moles/L	Temp K	Corrected Gas dens.	Peak Area	Helium Blank	Headspace (ppmv)*	Headspace (ug/l)	Water (ug/l)	Henry's Constant	Saturation Conc.(ug/l)	Total (ug/L)	RL (ug/l)	Report (ug/l)
Methane	16	22.4	55.5	297	24.37	2700496.1	6376	102.78	67.48	8.88	40560	2.250	11.13	0.11	**11.13**
Ethane	30	22.4	55.5	297	24.37	4664158.6	0	96.54	118.84	15.64	29420	5.463	21.101	0.23	**21.101**
Ethene	28	22.4	55.5	297	24.37	4786590	0	98.62	113.32	14.91	11160	13.733	28.643	0.31	**28.643**
Propane	44	22.4	55.5	297	24.37	6652602	0	94.56	170.72	22.46	35857	6.44	28.90	0.32	**28.90**
n-Butane	42	22.4	55.5	297	24.37	9170905	0	94.54	162.93	21.44	13981	15.76	37.20	0.43	**37.20**
n-Pentane	58	22.4	55.5	297	24.37	13400703	0	110.79	263.69	34.70	61993	5.75	40.45	0.38	**40.45**
Hexane	58	22.4	55.5	297	24.37	19727538	0	130.96	311.69	41.01	43947	9.59	50.60	0.41	**50.60**

*** ppmv is corrected for helium blank background peak area**

Definitions,

Molar Volume	The volume of 1 mole of any gas at standard temperature and pressure(STP)
Water g/Moles	1 Liter of water is equal to 55.5g-moles
Temp-kelvin	Is defined as 273 + degress C
Corrected Gas Density	Gas density corrected for temperature is equal to (molar volume) x (temp-k/273)
Headspace conc(ug/l)	Is equal to (ppmv reading) x (mw/corrected gas density)
Water Concentration(ug/l)	Is equal to headspace conc(ug/l) x headspace vol/sample vol
Saturation Concentration(ug/l)	Gas which remains at equilibrium in the sample is equal to (headspace conc-ppm) x (mw) x (55.5)/(Henry's Constant)

Henry's Constants

temp-c	20	21	22	23	24	25	26	27	28	29	30
Methane	37600	38340	39080	39820	40560	41300	42020	42740	43460	44180	44900
Ethane	26300	27080	27860	28640	29420	30200	31000	31800	32600	33400	34200
Ethene	10200	10440	10680	10920	11160	11400	11660	11920	12180	12440	12700
Propane	31474	32552	33643	34744	35857	36978	38107	39244	40387	41535	42688
Proylene	11959	12440	12937	13451	13981	14529	15094	15677	16279	16899	17539
IsoButane	54757	56501	58287	60118	61993	63913	65879	67892	69953	72062	74220
n-Butane	38111	39507	40945	42425	43947	45514	47125	48782	50486	52238	52239
Oxygen	40100	40840	41580	42320	43060	43800	44540	45280	46020	46760	47500
CO	52600	53680	54760	55840	56920	58000	58800	59600	60400	61200	62000
CO2	14200	14640	15080	15520	15960	16400	16840	17280	17720	18160	18600
Nitrogen	80400	81620	82840	84060	85280	86500	87680	88860	90040	91220	92400
Hydrogen	68300	68780	69260	69740	70220	70700	71140	71580	72020	72460	72900

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75466.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 4:48 pm
Operator : thomash
Sample : cc611-100
Misc : GC54998,GAA1804,,,,,20
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 16:58:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.337	2586073	98.662	PPMV
2)	Ethane	1.759	4519421	93.541	PPMV
3)	Ethene	2.456	4638973	95.581	PPMV
4)	Propane	2.898	6244125	88.749	PPMV
5)	n-Butane	4.124	7498876	77.301	PPMV
6)	n-Pentane	5.163	9370463	77.472	PPMV
7)	Hexane	6.338	12237386	81.238	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.13

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75466.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 4:48 pm
Operator : thomash
Sample : cc611-100
Misc : GC54998,GAA1804,,,,,20
ALS Vial : 31 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 16:58:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

MAA611.M Thu Sep 19 11:25:22 2019 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75471.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 5:56 pm
Operator : thomash
Sample : ecc611-100
Misc : GC54970,GAA1804,,,,,1
ALS Vial : 36 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 18:06:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

	Compound	R.T.	Response	Conc	Units
Target Compounds					
1)	Methane	1.337	2578110	98.358	PPMV
2)	Ethane	1.759	4621588	95.656	PPMV
3)	Ethene	2.456	4707681	96.997	PPMV
4)	Propane	2.898	6575808	93.464	PPMV
5)	n-Butane	4.124	8254583	85.091	PPMV
6)	n-Pentane	5.163	10378383	85.805	PPMV
7)	Hexane	6.339	13263102	88.047	PPMV

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.14

9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\
Data File : AA75471.d
Signal(s) : FID1A.ch
Acq On : 18 Sep 2019 5:56 pm
Operator : thomash
Sample : ecc611-100
Misc : GC54970,GAA1804,,,,,1
ALS Vial : 36 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Sep 18 18:06:31 2019
Quant Method : C:\MSDCHEM\1\METHODS\MAA611.M
Quant Title : METHOD V8015 DG by GC-FID
QLast Update : Wed Feb 04 12:42:31 2015
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 0.5 ml
Signal Phase : Rt-Alumina BOND/Na2SO4
Signal Info : 50m x 0.53 mm ID x 10um df

MAA611.M Thu Sep 19 11:25:32 2019 Page: 2

DISSOLVED GASES by GC/FID/TCD
INSTRUMENT LOG

Batch ID: GAA1804
Date: 9/18/19
Analyst: [signature]

Columns: RT Alumina w/ Na_2SO_4
Method (Collect.) MAAG11M
Method (Quant) MAAG11M
Initial Cal: GAA611
Seq. file: AA190918.S

pH paper lot # 217518 exp 6/20
thermometer ID 19224 exp 7/11/20

Standard Data		Lot# A 58471 STD		Lot# A 58420 STD		Lot#		Lot#	
Components	MW	Conc. (ppmv)	Conc. (ug/l)	Conc. (ppmv)	Conc. (ug/l)	Conc. (ppmv)	Conc. (ug/l)	Conc. (ppmv)	Conc. (ug/l)
Methane	16	1000		1000					
Ethane	30	1000		1000					
Ethene	28	1000		1000					
Oxygen	32								
Nitrogen	28								
Hydrogen	2								
CO	28	1000		1000					
CO2	44	1000		1000					

ug/L = (ppmv) x (mw/24.45)

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with tl criteria of SGS SOP EQA044.

Supervisor Signature: [signature] Date: 9/23/19

R	Data File	Sample ID	Test	VIAL (CC)	Head-space (CC)	Final Sample (CC)	CC Inj.	Temp C	Dil Fact	Status (Data)	Comments	pH* <2
	AA75436	CC611-100					0.05	22		AK		
	AA75437	LCS		42	5	37	0.05	22		AK		
	AA75438	Helium blank					0.5	23		RR	CH_4 ↑	
	AA75439	Helium blank					0.5	23		RR	CH_4 ↑	
	~~AA75440~~ 9/18	Helium blank					0.5	23		AK	AA75440	
	AA75441	MB		42	5	37	0.5	23		RR		
	AA75442	MB		42	5	37	0.5	23		AK		
	AA75443	JC94613-1A	GC54993 CH_4 Ethane	43	5	38	0.5	24		AK/DL		1
	AA75444	JC94613-1A	✓	43	5	38	0.05	24	10	RR		1
	AA75445	JC94613-1A	✓	43	5	38	0.025	24	20	AK/DL		1
	AA75446	JC94613-3A	✓	43	5	38	0.5	24	1	AK		1
	AA75447	JC94613-3A	✓	43	5	38	0.5	24	1	RR		1
	AA75448	TD44732-1	GC54998 CH_4	43	5	38	0.5	24	1	AK		1
	AA75449	TD44732-2	✓	42	5	37	0.5	24	1	NG	bad injection	
	AA75450	TD44732-2	✓	42	5	37	0.5	24	1	RR	does not match low	

*If pH> 2, comment on sample result.
All strikeouts must be initialed, dated, and reason applied if not transcription error.

OR008-02 (dissolved gases)-DAYT-ORG-0048-03-FORM-Dissolved Gases Log.doc
1/25/18

89

DISSOLVED GASES by GC/FID/TCD
INSTRUMENT LOG

Batch ID: GAA1804
Date: 9/18/19
Analyst: TL

Standard Data		Lot# A 5847 STD		Lot# A5 8420 STD		Lot#		Lot#	
Components	MW	Conc. (ppmv)	Conc. (ug/l)	Conc. (ppmv)	Conc. (ug/l)	Conc. (ppmv)	Conc. (ug/l)	Conc. (ppmv)	Conc. (ug/l)
Methane	16	1000		1000					
Ethane	30	1000		1000					
Ethene	28	1000		1000					
Oxygen	32								
Nitrogen	28								
Hydrogen	2								
CO	28	1000		1000					
CO2	44	1000		1000					

Columns: RT Aluminum Nose
Method (Collect.) MAA611M
Method (Quant) MAA611M
Initial Cal: GAA611
Seq. file: AA180918.S
Air paper lot #: 217518 EXP. 4/24/21
thermometer ID: 18224 exp. 7/11/20

ug/L = (ppmv) x (mw/24.45)

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of SGS SOP EQA044.

Supervisor Signature: [signature] Date: 9/23/19

R	Data File	Sample ID	Test	VIAL (CC)	Head-space (CC)	Final Sample (CC)	CC Inj.	Temp C	Dil Fact	Status (Data)	Comments	pH* <2
	AA75451	CC611-100					0.05	24		AK		
	AA75452	TD44732-4	CHY LC54998	43	5	38	0.5	24	1	AK		✓
	AA75453	TD44732-5	✓	43	5	38	0.5	24	1	AK		✓
	AA75454	TD44732-7	✓	42	5	37	0.5	24	1	AK		✓
	AA75455	TD44732-2	✓	42	5	37	0.5	24	1	AK/DL	RR 20X	✓
	AA75456	TD44732-2DS	✓	42	5	37	0.5	24	1	AK		✓
	AA75457	TD44732-8	✓	42	5	37	0.025	25	20	AK/DL		✓
	AA75458	TD44732-9	✓	43	5	38	0.5	25	1	AK		✓
	AA75459	TD44732-12	✓	43	5	38	0.5	25	1	AK/DL		✓
	AA75460	TD44732-12	✓	43	5	38	0.025	25	20	RR		✓
	AA75461	TD44732-12	✓	43	5	38	0.01	25	50	AK/DL		✓
	AA75462	TD44732-16	✓	43	5	38	0.5	26	1	AK/DL		✓
	AA75463	TD44732-16	✓	43	5	38	0.025	26	20	AK/DL		✓
	AA75464	TD44732-19	✓	43	5	38	0.5	26	1	AK/DL		✓
	AA75465	TD44732-19	✓	43	5	38	0.025	26	20	AK/DL		✓

*If pH> 2, comment on sample result.
All strikeouts must be initialed, dated, and reason applied if not transcription error.

OR008-02 (dissolved gases)-DAYT-ORG-0048-03-FORM-Dissolved Gases Log.doc
1/25/18

91

DISSOLVED GASES by GC/FID/TCD
INSTRUMENT LOG

Batch ID: GAA1804
Date: 9/18/19
Analyst: TH

Columns: PT-Alumina w/Siliz Sep

Method (Collect.) MAA611.M

Method (Quant) MAA611.M

Initial Cal: GAA611

Seq. file: AA190918.S

pH paper lot #: 217518 exp. 6/20/21

thermometer ID: 18224 exp. 7/11/20

Standard Data		STD Lot# A58471		LCS Lot# A58420		Lot#		Lot#	
Components	MW	Conc. (ppmv)	Conc. (ug/l)	Conc. (ppmv)	Conc. (ug/l)	Conc. (ppmv)	Conc. (ug/l)	Conc. (ppmv)	Conc. (ug/l)
Methane	16	1000		1000					
Ethane	30	1000		1000					
Ethene	28	1000		1000					
Oxygen	32								
Nitrogen	28								
Hydrogen	2								
CO	28	1000		1000					
CO2	44	1000		4000					

ug/L = (ppmv) x (mw/24.45)

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of SGS SOP EQA044.

Supervisor Signature: [signature] Date: 9/23/19

R.	Data File	Sample ID	Test	VIAL (CC)	Head-space (CC)	Final Sample (CC)	CC Inj.	Temp C	Dil Fact	Status (Data)	Comments	pH* <2
	AA75466	CC611-100					0.05	26		ok		
	AA75467	JC94702-11	DOMEE CC54970	43	5	38	0.5	26	1	ok		✓
	AA75468	JC94702-11 DUP	✓	43	5	38	0.5	27	1	ok		✓
	AA75469	JC94702-12	✓	43	5	38	0.5	27	1	ok		✓
	AA75470	JC94702-13	✓	42	5	37	0.5	27	1	ok		✓
	AA75471	ECC611-100					0.05	27		ok		

TH 9/18/19

*If pH> 2, comment on sample result.
All strikeouts must be initialed, dated, and reason applied if not transcription error.

QR008-02 (dissolved gases)-DAYT-ORG-0048-03-FORM-Dissolved Gases Log.doc
1/25/18

93

ACCUTEST

DISSOLVED GASES by GC/FID/TCD
INSTRUMENT LOG

Batch ID: GAA611
Date: 2/4/15
Analyst : TH

Columns: RT Alumina w/NaSO4

Method (Collect.) MAA604.M MAA611.M

Method (Quant) MAA604.M MAA611.M

Initial Cal: GAA604 / GAA611

Seq. file: AA150204.S

pH paper LA #: 212713 exp. 5/1/16

thermometer ID: D-58 exp. 2/2/15

Standard Data

Components	MW	Lot# A36085 (std) Conc. (ppmv)	Conc. (ug/l)	Lot# A36339 (LCS) Conc. (ppmv)	Conc. (ug/l)	Lot# Conc. (ppmv)	Conc. (ug/l)	Lot# Conc. (ppmv)	Conc. (ug/l)
Methane	16	1000		1000					
Ethane	30								
Ethene	28								
Oxygen	32								
Nitrogen	28								
Hydrogen	2								
CO	28	1000		1000					
CO2	44			4000					

ug/L = (ppmv) x (mw/24.45)

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with criteria of Accutest SOP EQA044.

Supervisor Signature: YH **Date:** 2/6/15

R	Data File	Sample ID	Test	VIAL (CC)	Head-space (CC)	Final Sample (CC)	CC Inj.	Temp C	Dil Fact	Status (Data)	Comments	pH* <2
	AA44598	CC604-100					0.05	22		RR	MAA604.M	
	AA44599	CC604-100					0.05			NG		
	AA44600	IC611-1.0					0.5uL			RR	MAA611.M	
	AA44601	IC611-2.0					1uL			OK		
	AA44602	IC611-10					5uL			OK		
	AA44603	IC611-20					0.01			OK		
	AA44604	IC611-100					0.05			OK		
	AA44605	IC611-200					0.1			OK		
	AA44606	IC611-500					0.25			OK		
	AA44607	IC611-1000					0.5			OK		
	AA44608	IC611-1.0					0.5uL			OK		
	AA44609	ICV611-100					0.05			OK		
											TH 2/4/15	

*If pH> 2, comment on sample result.

Form: OR008.02
Rev. Date: 10/21/02

97

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: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
Analyst: GT Run ID: MA47429
Parameters: Fe,Mn

Time	Sample Description	Dilution Factor	PS Recov	Comments
08:56	MA47429-STD1	1		STDA
09:00	MA47429-STD2	1		STDB
09:06	ZZZZZZ	1		
09:11	ZZZZZZ	1		
09:16	MA47429-ICV1	1		
09:21	MA47429-ICB1	1		
09:26	MA47429-CCV1	1		
09:31	MA47429-CCB1	1		
09:36	MA47429-CRID1	1		
09:41	MA47429-CRI1	1		
09:46	MA47429-ICSA1	1		
09:52	MA47429-ICSAB1	1		
09:57	MA47429-HSTD1	1		
10:03	MA47429-HSTD2	1		
10:09	ZZZZZZ	1		
10:14	ZZZZZZ	1		
10:26	ZZZZZZ	1		
10:31	MA47429-CCV2	1		
10:36	MA47429-CCB2	1		
10:41	MP17228-MB1	1		
10:46	MP17228-B1	1		
10:51	MP17228-S1	1		
10:56	MP17228-S2	1		
11:01	JC94464-2	1		(sample used for QC only; not part of login JC94613)
11:06	MP17228-SD1	5		
11:11	ZZZZZZ	1		
11:16	MA47429-CCV3	1		
11:21	MA47429-CCB3	1		
11:26	ZZZZZZ	1		
11:31	ZZZZZZ	1		
11:37	MP17250-MB1	5		
11:42	MP17250-B1	5		
11:47	MP17250-S1	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
Analyst: GT Run ID: MA47429
Parameters: Fe,Mn

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:52	MP17250-S2	5		
11:57	JC94464-1A	5		(sample used for QC only; not part of login JC94613)
12:02	MP17250-SD1	25		
12:07	ZZZZZZ	5		
12:12	MA47429-CCV4	1		
12:17	MA47429-CCB4	1		
12:22	MP17250-PS1	5		
12:27	MP17228-PS1	1		
12:32	ZZZZZZ	1		
12:57	MP17232-MB1	1		
13:02	MP17232-B1	1		
13:07	MP17232-S1	1		
13:12	MP17232-S2	1		
13:18	JC94613-1A	1		
13:23	MP17232-SD1	5		
13:28	MA47429-CCV5	1		
13:33	MA47429-CCB5	1		
13:38	ZZZZZZ	1		
13:43	JC94613-2A	1		
13:48	MP17232-PS1	1		
13:53	MP17228-S1	5		Al and FE
13:58	MP17228-S2	5		Al and FE
14:03	JC94464-2	5		(sample used for QC only; not part of login JC94613)
14:08	MP17228-SD1	25		Not needed
14:13	MP17228-PS1	5		Al and Fe
14:18	MA47429-CCV6	1		
14:23	MA47429-CCB6	1		
14:28	MP17232-S1	5		Fe
14:32	MP17232-S2	5		Fe
14:37	JC94613-1A	5		Not needed
14:42	MP17232-SD1	25		Not needed
14:47	MP17232-PS1	5		
---------->	Last reportable sample/prep for job JC94613			
14:52	MA47429-CCV7	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
Analyst: GT Run ID: MA47429
Parameters: Fe,Mn

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:57	MA47429-CCB7	1		

----------> Last reportable CCB for job JC94613
Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
Analyst: GT Run ID: MA47429
Parameters: Fe,Mn

Time	Sample Description	Element: Dilution	Fe	Mn	
09:06	ZZZZZZ	1			
09:11	ZZZZZZ	1			
09:16	MA47429-ICV1	1	X	X	
09:21	MA47429-ICB1	1	X	X	
09:26	MA47429-CCV1	1	X	X	
09:31	MA47429-CCB1	1	X	X	
09:36	MA47429-CRID1	1	X	X	
09:41	MA47429-CRI1	1	X	X	
09:46	MA47429-ICSA1	1	X	X	
09:52	MA47429-ICSAB1	1	X	X	
09:57	MA47429-HSTD1	1		X	
10:03	MA47429-HSTD2	1	X		
10:09	ZZZZZZ	1			
10:14	ZZZZZZ	1			
10:26	ZZZZZZ	1			
10:31	MA47429-CCV2	1	X	X	
10:36	MA47429-CCB2	1	X	X	
10:41	MP17228-MB1	1	X	X	
10:46	MP17228-B1	1	X	X	
10:51	MP17228-S1	1		X	
10:56	MP17228-S2	1		X	
11:01	JC94464-2	1	X	X	(a)
11:06	MP17228-SD1	5	X	X	
11:11	ZZZZZZ	1			
11:16	MA47429-CCV3	1	X	X	
11:21	MA47429-CCB3	1	X	X	
11:26	ZZZZZZ	1			
11:31	ZZZZZZ	1			
11:37	MP17250-MB1	5			
11:42	MP17250-B1	5			
11:47	MP17250-S1	5			
11:52	MP17250-S2	5			
11:57	JC94464-1A	5			(a)
		Element:	Fe	Mn	

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
Analyst: GT Run ID: MA47429
Parameters: Fe,Mn

Time	Sample Description	Element: Dilution	Fe	Mn
12:02	MP17250-SD1	25		
12:07	ZZZZZZ	5		
12:12	MA47429-CCV4	1	X	X
12:17	MA47429-CCB4	1	X	X
12:22	MP17250-PS1	5		
12:27	MP17228-PS1	1		X
12:32	ZZZZZZ	1		
12:57	MP17232-MB1	1	X	X
13:02	MP17232-B1	1	X	X
13:07	MP17232-S1	1		X
13:12	MP17232-S2	1		X
13:18	JC94613-1A	1	X	X
13:23	MP17232-SD1	5	X	X
13:28	MA47429-CCV5	1	X	X
13:33	MA47429-CCB5	1	X	X
13:38	ZZZZZZ	1		
13:43	JC94613-2A	1	X	X
13:48	MP17232-PS1	1		X
13:53	MP17228-S1	5	X	
13:58	MP17228-S2	5	X	
14:03	JC94464-2	5	Not needed	
14:08	MP17228-SD1	25	Not needed	
14:13	MP17228-PS1	5	X	
14:18	MA47429-CCV6	1	X	X
14:23	MA47429-CCB6	1	X	X
14:28	MP17232-S1	5	X	
14:32	MP17232-S2	5	X	
14:37	JC94613-1A	5	Not needed	
14:42	MP17232-SD1	25	Not needed	
14:47	MP17232-PS1	5	X	
14:52	MA47429-CCV7	1	X	X
14:57	MA47429-CCB7	1	X	X

(a) Sample used for QC only; not part of login JC94613.

	Element:	Fe	Mn

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
Analyst: GT Run ID: MA47429
Parameters: Fe,Mn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
08:56	MA47429-STD1	9033 R	188840 R	35163 R	12919 R
09:00	MA47429-STD2	8634	180070	34012	11683
09:06	ZZZZZZ	8896	185630	35072	12065
09:11	ZZZZZZ	9269	193570	35157	13201
09:16	MA47429-ICV1	8890	185810	35345	12046
09:21	MA47429-ICB1	9248	195580	35871	13172
09:26	MA47429-CCV1	8902	185750	35110	12057
09:31	MA47429-CCB1	9298	197160	35669	13228
09:36	MA47429-CRID1	9207	195450	35545	13063
09:41	MA47429-CRI1	9172	194620	35693	12888
09:46	MA47429-ICSA1	8270	173110	34234	10881
09:52	MA47429-ICSAB1	8288	171340	34468	10937
09:57	MA47429-HSTD1	9024	194630	36126	12931
10:03	MA47429-HSTD2	8449	176060	34960	11056
10:09	ZZZZZZ	9256	196100	35986	13378
10:14	ZZZZZZ	9128	197900	36427	13227
10:26	ZZZZZZ	9355	196320	36667	13285
10:31	MA47429-CCV2	8957	188540	35391	12104
10:36	MA47429-CCB2	9321	196110	36003	13222
10:41	MP17228-MB1	9326	198090	36611	13216
10:46	MP17228-B1	9076	191830	35863	12397
10:51	MP17228-S1	9039	189960	36735	12101
10:56	MP17228-S2	9014	189530	35995	12052
11:01	JC94464-2	9372	197540	37168	12663
11:06	MP17228-SD1	9284	197650	36749	12920
11:11	ZZZZZZ	9194	200300	37250	12541
11:16	MA47429-CCV3	8866	187910	35303	11991
11:21	MA47429-CCB3	9197	192580	35358	13051
11:26	ZZZZZZ	8470	179750	35694	11279
11:31	ZZZZZZ	8361	180090	35614	11170
11:37	MP17250-MB1	8778	184180	35852	11725
11:42	MP17250-B1	8812	183960	35802	11649
11:47	MP17250-S1	8785	182760	35370	11609

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
Analyst: GT Run ID: MA47429
Parameters: Fe,Mn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
11:52	MP17250-S2	8784	183680	36105	11604
11:57	JC94464-1A	8761	185000	35379	11684
12:02	MP17250-SD1	9140	190900	36018	12569
12:07	ZZZZZZ	8899	184480	35663	11800
12:12	MA47429-CCV4	8824	187580	35478	11913
12:17	MA47429-CCB4	9276	199120	36130	13135
12:22	MP17250-PS1	8839	185100	35777	11700
12:27	MP17228-PS1	9194	196040	36696	12269
12:32	ZZZZZZ	9231	197010	35764	13088
12:57	MP17232-MB1	9285	197510	35760	13105
13:02	MP17232-B1	8993	193750	35938	12202
13:07	MP17232-S1	8879	187920	35847	12103
13:12	MP17232-S2	8868	188130	35115	12092
13:18	JC94613-1A	9104	194860	35849	12557
13:23	MP17232-SD1	9225	196660	35752	12904
13:28	MA47429-CCV5	8924	191100	35244	11984
13:33	MA47429-CCB5	9301	199730	35866	13104
13:38	ZZZZZZ	8980	193400	35855	12338
13:43	JC94613-2A	9124	194820	36000	12661
13:48	MP17232-PS1	8850	189520	35365	12048
13:53	MP17228-S1	9276	197360	36270	12671
13:58	MP17228-S2	9183	203410	36158	12558
14:03	JC94464-2	No results reported for the elements associated with this internal standard.			
14:08	MP17228-SD1	No results reported for the elements associated with this internal standard.			
14:13	MP17228-PS1	9235	196680	36359	12631
14:18	MA47429-CCV6	8809	186380	35258	11859
14:23	MA47429-CCB6	8945	193550	35362	12661
14:28	MP17232-S1	9093	194030	35676	12530
14:32	MP17232-S2	9029	190090	35547	12463
14:37	JC94613-1A	No results reported for the elements associated with this internal standard.			
14:42	MP17232-SD1	No results reported for the elements associated with this internal standard.			
14:47	MP17232-PS1	9149	195840	36473	12602
14:52	MA47429-CCV7	8740	182480	35114	11771

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
Analyst: GT Run ID: MA47429
Parameters: Fe,Mn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
14:57	MA47429-CCB7	9215	195910	35832	12998

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

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: result < 1/2 RL Run ID: MA47429 Units: ug/l

Time:				09:21		09:31		10:36	
Sample ID:				ICB1		CCB1		CCB2	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	200	14	100						
Antimony	6.0	1.4	5.0						
Arsenic	5.0	1.5	3.0						
Barium	200	.5	100						
Beryllium	2.0	.1	1.0						
Bismuth	20	1.8	10						
Boron	200	.8	100						
Cadmium	3.0	.3	2.0						
Calcium	5000	3.9	200						
Chromium	10	.3	5.0						
Cobalt	50	.3	10						
Copper	10	.6	8.0						
Iron	100	2.6	50	3.50	<100	4.50	<100	5.80	<100
Lead	5.0	1.6	3.0						
Lithium	50	2.1	20						
Magnesium	5000	16	500						
Manganese	15	.1	5.0	0.200	<15	0.200	<15	0.300	<15
Molybdenum	20	.4	8.0						
Nickel	10	.5	8.0						
Phosphorus	50	1.9	25						
Potassium	10000	79	500						
Selenium	10	3	8.0						
Silicon	200	1.2	150						
Silver	10	.5	4.0						
Sodium	10000	9.9	1000						
Strontium	10	.3	2.0						
Sulfur	100	3.5	50						
Thallium	10	1.3	5.0						
Tin	10	.7	8.0						
Titanium	10	.5	4.0						
Tungsten	100	1.7	50						
Vanadium	50	.5	4.0						
Zinc	20	.2	10						

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: result < 1/2 RL Run ID: MA47429 Units: ug/l

Time:				09:21		09:31		10:36	
Sample ID:				ICB1		CCB1		CCB2	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Zirconium	10	.3	5.0						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: result < 1/2 RL Run ID: MA47429 Units: ug/l

Time:				11:21		12:17		13:33	
Sample ID:				CCB3		CCB4		CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	200	14	100						
Antimony	6.0	1.4	5.0						
Arsenic	5.0	1.5	3.0						
Barium	200	.5	100						
Beryllium	2.0	.1	1.0						
Bismuth	20	1.8	10						
Boron	200	.8	100						
Cadmium	3.0	.3	2.0						
Calcium	5000	3.9	200						
Chromium	10	.3	5.0						
Cobalt	50	.3	10						
Copper	10	.6	8.0						
Iron	100	2.6	50	5.80	<100	5.70	<100	3.40	<100
Lead	5.0	1.6	3.0						
Lithium	50	2.1	20						
Magnesium	5000	16	500						
Manganese	15	.1	5.0	0.300	<15	0.300	<15	0.100	<15
Molybdenum	20	.4	8.0						
Nickel	10	.5	8.0						
Phosphorus	50	1.9	25						
Potassium	10000	79	500						
Selenium	10	3	8.0						
Silicon	200	1.2	150						
Silver	10	.5	4.0						
Sodium	10000	9.9	1000						
Strontium	10	.3	2.0						
Sulfur	100	3.5	50						
Thallium	10	1.3	5.0						
Tin	10	.7	8.0						
Titanium	10	.5	4.0						
Tungsten	100	1.7	50						
Vanadium	50	.5	4.0						
Zinc	20	.2	10						

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: result < 1/2 RL Run ID: MA47429 Units: ug/l

Time:				11:21		12:17		13:33	
Sample ID:				CCB3		CCB4		CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Zirconium	10	.3	5.0						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: result < 1/2 RL Run ID: MA47429 Units: ug/l

Time:				14:23		14:57	
Sample ID:				CCB6		CCB7	
Metal	RL	IDL	LOD	raw	final	raw	final
Aluminum	200	14	100				
Antimony	6.0	1.4	5.0				
Arsenic	5.0	1.5	3.0				
Barium	200	.5	100				
Beryllium	2.0	.1	1.0				
Bismuth	20	1.8	10				
Boron	200	.8	100				
Cadmium	3.0	.3	2.0				
Calcium	5000	3.9	200				
Chromium	10	.3	5.0				
Cobalt	50	.3	10				
Copper	10	.6	8.0				
Iron	100	2.6	50	4.20	<100	5.20	<100
Lead	5.0	1.6	3.0				
Lithium	50	2.1	20				
Magnesium	5000	16	500				
Manganese	15	.1	5.0	0.200	<15	0.200	<15
Molybdenum	20	.4	8.0				
Nickel	10	.5	8.0				
Phosphorus	50	1.9	25				
Potassium	10000	79	500				
Selenium	10	3	8.0				
Silicon	200	1.2	150				
Silver	10	.5	4.0				
Sodium	10000	9.9	1000				
Strontium	10	.3	2.0				
Sulfur	100	3.5	50				
Thallium	10	1.3	5.0				
Tin	10	.7	8.0				
Titanium	10	.5	4.0				
Tungsten	100	1.7	50				
Vanadium	50	.5	4.0				
Zinc	20	.2	10				

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: result < 1/2 RL Run ID: MA47429 Units: ug/l

Time:				14:23		14:57	
Sample ID:				CCB6		CCB7	
Metal	RL	IDL	LOD	raw	final	raw	final
Zirconium	10	.3	5.0				

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA47429 Units: ug/l

Time:		09:16			09:26			10:31	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	40000	39900	99.8	40000	40400	101.0	40000	40200	100.5
Lead	anr								
Lithium									
Magnesium	anr								
Manganese	2000	2030	101.5	2000	2060	103.0	2000	2020	101.0
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA47429 Units: ug/l

Time:		09:16			09:26			10:31	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA47429 Units: ug/l

Time:		11:16			12:12			13:28	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	40000	39500	98.8	40000	39600	99.0	40000	40000	100.0
Lead	anr								
Lithium									
Magnesium	anr								
Manganese	2000	1990	99.5	2000	2000	100.0	2000	2000	100.0
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								
Zinc	anr								

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA47429 Units: ug/l

Time:		11:16			12:12			13:28	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zirconium									

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA47429 Units: ug/l

Time:		14:18			14:52	
Sample ID:	CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Bismuth						
Boron						
Cadmium	anr					
Calcium	anr					
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	40000	40300	100.8	40000	40700	101.8
Lead	anr					
Lithium						
Magnesium	anr					
Manganese	2000	2040	102.0	2000	2070	103.5
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium	anr					
Selenium	anr					
Silicon						
Silver	anr					
Sodium	anr					
Strontium						
Sulfur						
Thallium	anr					
Tin						
Titanium						
Tungsten						
Vanadium	anr					
Zinc	anr					

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA47429 Units: ug/l

Time:		14:18			14:52	
Sample ID:	CCV	CCV6		CCV	CCV7	
Metal	True	Results	% Rec	True	Results	% Rec
Zirconium						

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

HIGH STANDARD CHECK SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA47429 Units: ug/l

Time:		09:57			10:03	
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Bismuth						
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron				200000	188000	94.0
Lead	anr					
Lithium						
Magnesium						
Manganese	8000	7980	99.8			
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Sulfur						
Thallium	anr					
Tin						
Titanium						
Tungsten						
Vanadium	anr					
Zinc	anr					

HIGH STANDARD CHECK SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA47429 Units: ug/l

Time:		09:57			10:03	
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Zirconium						

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

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA47429 Units: ug/l

Time:				09:36		09:41	
Sample ID:	CRI	CRIA	CRID	CRID1		CRI1	
Metal	True	True	True	Results	% Rec	Results	% Rec
Aluminum	200	500	100	anr			
Antimony	6.0	20	3.0	anr			
Arsenic	8.0	20	3.0	anr			
Barium	200		4.0	anr			
Beryllium	2.0		1.0	anr			
Bismuth	20						
Boron	100		10				
Cadmium	3.0		1.0	anr			
Calcium	5000	2000	1000	anr			
Chromium	10		2.0	anr			
Cobalt	50		3.0	anr			
Copper	10		2.0	anr			
Iron	100	500				106	106.0
Lead	3.0	20	2.5	anr			
Lithium	50						
Magnesium	5000	2000	100	anr			
Manganese	15		3.0	3.10	103.3	15.4	102.7
Molybdenum	20						
Nickel	10		4.0	anr			
Phosphorus	50						
Potassium	5000		2000	anr			
Selenium	10	20	5.0	anr			
Silicon	200						
Silver	5.0		2.0	anr			
Sodium	5000		1000	anr			
Strontium	10						
Sulfur	50						
Thallium	10		2.0	anr			
Tin	10						
Titanium	10						
Tungsten	50						
Vanadium	50		2.0	anr			
Zinc	20		10	anr			

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA47429 Units: ug/l

Time:				09:36		09:41	
Sample ID:	CRI	CRIA	CRID	CRID1		CRI1	
Metal	True	True	True	Results	% Rec	Results	% Rec
Zirconium	10						

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

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

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: 80 to 120 % Recovery Run ID: MA47429 Units: ug/l

Time:			09:46		09:52	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	502000	100.4	500000	100.0
Antimony		1000	1.20		1020	102.0
Arsenic		1000	0.900		1060	106.0
Barium		500	0.500		507	101.4
Beryllium		500	-0.200		495	99.0
Bismuth		500	1.30		521	104.2
Boron		500	-1.70		498	99.6
Cadmium		1000	1.10		1010	101.0
Calcium	400000	400000	386000	96.5	381000	95.3
Chromium		500	0.700		484	96.8
Cobalt		500	-0.200		493	98.6
Copper		500	-0.500		508	101.6
Iron	200000	200000	186000	93.0	188000	94.0
Lead		1000	-0.300		925	92.5
Lithium		500	-8.30		509	101.8
Magnesium	500000	500000	497000	99.4	497000	99.4
Manganese		500	0.100		505	101.0
Molybdenum		500	1.00		487	97.4
Nickel		1000	0.00		976	97.6
Phosphorus		500	-6.80		475	95.0
Potassium			154		93.6	
Selenium		1000	0.400		1010	101.0
Silicon		500	6.10		516	103.2
Silver		1000	-0.400		1020	102.0
Sodium			234		164	
Strontium		500	-2.40		501	100.2
Sulfur		500	6.00		501	100.2
Thallium		1000	0.500		985	98.5
Tin		500	-2.70		467	93.4
Titanium		500	-1.10		501	100.2
Tungsten		500	0.900		477	95.4
Vanadium		500	-0.900		491	98.2
Zinc		1000	3.60		955	95.5

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

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: SC091119M1L.ICP Date Analyzed: 09/11/19 Methods: EPA 200.7, SW846 6010D
QC Limits: 80 to 120 % Recovery Run ID: MA47429 Units: ug/l

Time:			09:46		09:52	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Zirconium		500	7.60*(a)		525	105.0

(*) Outside of QC limits
(anr) Analyte not requested
(a) No samples reported for this element in the area bracketed by this QC.

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:58	MA47431-STD1	1		See rerun, sample intro not stable.
10:03	MA47431-STD2	1		See rerun, sample intro not stable.
10:08	MA47431-STD3	1		STDA
10:13	MA47431-STD4	1		STDB
10:19	MA47431-STD5	1		STDC
10:24	MA47431-STD6	1		STDD
10:29	MA47431-STD7	1		STDE
10:34	MA47431-STD8	1		STDF
10:39	MA47431-STD9	1		STDG
10:45	MA47431-STD10	1		STDH
10:50	MA47431-STD11	1		STDI
10:55	MA47431-STD12	1		STDJ
11:00	ZZZZZZ	1		
11:10	MA47431-ICVA1	1		
11:15	MA47431-ICV1	1		60ppb Al.
11:26	MA47431-ICB1	1		
11:31	MA47431-CCVA1	1		
11:36	MA47431-CCB1	1		
11:41	MA47431-CRI1	1		
11:47	MA47431-ICSA1	1		
11:51	MA47431-ICSAB1	1		
11:56	ZZZZZZ	1		
12:01	MA47431-CCVA2	1		
12:06	MA47431-CCB2	1		
12:11	MP17220-MB1	2		
12:16	MP17220-B1	2		
12:23	ZZZZZZ	2		
12:27	ZZZZZZ	2		
12:32	ZZZZZZ	2		
12:37	ZZZZZZ	2		
12:42	ZZZZZZ	2		
12:47	ZZZZZZ	2		
12:52	MA47431-CCVA3	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:57	MA47431-CCB3	1		
13:02	ZZZZZZ	2		
13:07	ZZZZZZ	2		
13:12	ZZZZZZ	2		
13:17	ZZZZZZ	10		
13:22	ZZZZZZ	2		
13:27	ZZZZZZ	2		
13:32	ZZZZZZ	2		
13:37	ZZZZZZ	2		
13:42	MA47431-CCVA4	1		
13:47	MA47431-CCB4	1		
13:52	ZZZZZZ	2		
13:57	ZZZZZZ	2		
14:02	MA47431-CCVA5	1		Sb and Ba high RSD
14:07	MA47431-CCB5	1		
14:12	MP17220-S1	2		
14:17	MP17220-S2	2		
14:22	JC94229-1	2		(sample used for QC only; not part of login JC94613)
14:27	MP17220-SD1	10		
14:32	ZZZZZZ	2		
14:37	ZZZZZZ	2		
14:42	ZZZZZZ	2		
14:47	ZZZZZZ	2		
14:52	MA47431-CCVA6	1		
14:57	MA47431-CCB6	1		
15:02	ZZZZZZ	2		
15:07	ZZZZZZ	2		
15:12	ZZZZZZ	2		
15:17	ZZZZZZ	2		
15:22	ZZZZZZ	2		
15:27	ZZZZZZ	2		
15:32	ZZZZZZ	1		
15:37	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:42	MA47431-CCVA7	1		
15:47	MA47431-CCB7	1		
15:52	ZZZZZZ	50		
15:57	ZZZZZZ	1		
16:02	ZZZZZZ	2		
16:07	ZZZZZZ	2		
16:12	MP17203-S1	5		
16:17	MP17203-S2	5		
16:22	ZZZZZZ	5		
16:27	ZZZZZZ	5		
16:32	MA47431-CCVA8	1		
16:37	MA47431-CCB8	1		
16:42	ZZZZZZ	5		
16:47	ZZZZZZ	5		
16:52	ZZZZZZ	5		
16:57	ZZZZZZ	5		
17:02	ZZZZZZ	5		
17:07	ZZZZZZ	2		
17:12	ZZZZZZ	1		
17:17	ZZZZZZ	1		
17:22	MA47431-CCVA9	1		
17:27	MA47431-CCB9	1		
17:32	MP17187-S1	2		
17:37	MP17187-S2	2		
17:42	JC94351-5	2		(sample used for QC only; not part of login JC94613)
17:47	MP17229-MB1	5		
17:52	MP17229-B1	5		
17:57	MP17229-S1	5		Need PS for Sb. Ba and Pb overrange
18:02	MP17229-S2	5		Need PS for Sb. Ba and Pb overrange
18:07	JC94207-16AR	5		(sample used for QC only; not part of login JC94613)
18:12	MA47431-CCVA10	1		
18:17	MA47431-CCB10	1		
18:22	MP17229-SD1	25		See rerun, analytical problems

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	18:27	ZZZZZZ	5		
	18:32	ZZZZZZ	5		
	18:37	ZZZZZZ	5		
	18:42	ZZZZZZ	5		
	18:47	ZZZZZZ	5		
	18:52	ZZZZZZ	5		
	18:57	ZZZZZZ	5		
	19:02	MP17229-SD1	25		
	19:07	ZZZZZZ	1		
	19:12	MA47431-CCVA11	1		
	19:17	MA47431-CCB11	1		
	19:22	ZZZZZZ	5		
	19:27	ZZZZZZ	5		
	19:32	MP17232A-MB1	2		
	19:37	MP17232A-B2	2		
---------->	Last reportable sample/prep for job JC94613				
	19:42	MP17232A-S3	2		Overrange
	19:47	MP17232A-S4	2		Overrange
	19:52	JC94613-1	2		Overrange
	19:57	MP17232A-SD1	10		Overrange
	20:02	MP17232A-PS1	2		Overrange
	20:07	MA47431-CCVA12	1		
	20:12	MA47431-CCB12	1		
---------->	Last reportable CCB for job JC94613				
	20:17	ZZZZZZ	2		
	20:22	JC94613-2	2		Overrange
	20:27	MP17239-MB1	2		As>1/2 of RL. Batch to reanalysis.
	20:32	ZZZZZZ	2		
	20:37	ZZZZZZ	2		
	20:42	ZZZZZZ	2		
	20:47	ZZZZZZ	2		
	20:52	MP17239-B1	2		CCV high RSD
	20:57	MA47431-CCVA13	1		High RSD.
	21:02	MA47431-CCB13	1		
	21:07	MP17239-S1	2		To reanalysis on higher dilution. Na>6000ppm

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
21:12	MP17239-S2	2		To reanalysis on higher dilution. Na>6000ppm
21:17	JC94499-17	2		(sample used for QC only; not part of login JC94613)
21:22	MP17239-SD1	10		To reanalysis on higher dilution. Na>6000ppm
21:27	ZZZZZZ	2		
21:32	ZZZZZZ	2		
21:37	ZZZZZZ	2		
21:42	ZZZZZZ	2		
21:47	MA47431-CCVA14	1		Li and Sc out
21:52	MA47431-CCB14	1		
21:57	ZZZZZZ	2		
22:02	ZZZZZZ	2		
22:07	ZZZZZZ	2		
22:12	ZZZZZZ	2		
22:17	ZZZZZZ	2		
22:22	ZZZZZZ	2		
22:27	MA47431-CCVA15	1		Li and Sc out
22:32	MA47431-CCB15	1		
22:37	ZZZZZZ	2		
22:42	ZZZZZZ	2		
22:47	ZZZZZZ	2		
22:52	ZZZZZZ	1		
22:57	ZZZZZZ	1		
23:02	ZZZZZZ	1		
23:07	MA47431-CCVA16	1		Hgih RSD. Ag,Sb,Ba, Pb and Tl out
23:12	MA47431-CCB16	1		
23:17	ZZZZZZ	1		
23:22	ZZZZZZ	1		
23:27	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Element: Dilution	As
11:00	ZZZZZZ	1	
11:10	MA47431-ICVA1	1	X
11:15	MA47431-ICV1	1	
11:26	MA47431-ICB1	1	X
11:31	MA47431-CCVA1	1	X
11:36	MA47431-CCB1	1	X
11:41	MA47431-CRI1	1	X
11:47	MA47431-ICSA1	1	X
11:51	MA47431-ICSAB1	1	X
11:56	ZZZZZZ	1	
12:01	MA47431-CCVA2	1	X
12:06	MA47431-CCB2	1	X
12:11	MP17220-MB1	2	X
12:16	MP17220-B1	2	X
12:23	ZZZZZZ	2	
12:27	ZZZZZZ	2	
12:32	ZZZZZZ	2	
12:37	ZZZZZZ	2	
12:42	ZZZZZZ	2	
12:47	ZZZZZZ	2	
12:52	MA47431-CCVA3	1	X
12:57	MA47431-CCB3	1	X
13:02	ZZZZZZ	2	
13:07	ZZZZZZ	2	
13:12	ZZZZZZ	2	
13:17	ZZZZZZ	10	
13:22	ZZZZZZ	2	
13:27	ZZZZZZ	2	
13:32	ZZZZZZ	2	
13:37	ZZZZZZ	2	
13:42	MA47431-CCVA4	1	X
13:47	MA47431-CCB4	1	X
13:52	ZZZZZZ	2	
		Element:	As

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Element: Dilution	As	
13:57	ZZZZZZ	2		
14:02	MA47431-CCVA5	1	X	
14:07	MA47431-CCB5	1	X	
14:12	MP17220-S1	2	X	
14:17	MP17220-S2	2	X	
14:22	JC94229-1	2	X	(a)
14:27	MP17220-SD1	10	X	
14:32	ZZZZZZ	2		
14:37	ZZZZZZ	2		
14:42	ZZZZZZ	2		
14:47	ZZZZZZ	2		
14:52	MA47431-CCVA6	1	X	
14:57	MA47431-CCB6	1	X	
15:02	ZZZZZZ	2		
15:07	ZZZZZZ	2		
15:12	ZZZZZZ	2		
15:17	ZZZZZZ	2		
15:22	ZZZZZZ	2		
15:27	ZZZZZZ	2		
15:32	ZZZZZZ	1		
15:37	ZZZZZZ	1		
15:42	MA47431-CCVA7	1	X	
15:47	MA47431-CCB7	1	X	
15:52	ZZZZZZ	50		
15:57	ZZZZZZ	1		
16:02	ZZZZZZ	2		
16:07	ZZZZZZ	2		
16:12	MP17203-S1	5		
16:17	MP17203-S2	5		
16:22	ZZZZZZ	5		
16:27	ZZZZZZ	5		
16:32	MA47431-CCVA8	1	X	
16:37	MA47431-CCB8	1	X	
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Element: Dilution	As	
16:42	ZZZZZZ	5		
16:47	ZZZZZZ	5		
16:52	ZZZZZZ	5		
16:57	ZZZZZZ	5		
17:02	ZZZZZZ	5		
17:07	ZZZZZZ	2		
17:12	ZZZZZZ	1		
17:17	ZZZZZZ	1		
17:22	MA47431-CCVA9	1	X	
17:27	MA47431-CCB9	1	X	
17:32	MP17187-S1	2		
17:37	MP17187-S2	2		
17:42	JC94351-5	2		(a)
17:47	MP17229-MB1	5	X	
17:52	MP17229-B1	5	X	
17:57	MP17229-S1	5	X	
18:02	MP17229-S2	5	X	
18:07	JC94207-16AR	5		(a)
18:12	MA47431-CCVA10	1	X	
18:17	MA47431-CCB10	1	X	
18:22	MP17229-SD1	25	See rerun, analytical problems	
18:27	ZZZZZZ	5		
18:32	ZZZZZZ	5		
18:37	ZZZZZZ	5		
18:42	ZZZZZZ	5		
18:47	ZZZZZZ	5		
18:52	ZZZZZZ	5		
18:57	ZZZZZZ	5		
19:02	MP17229-SD1	25	X	
19:07	ZZZZZZ	1		
19:12	MA47431-CCVA11	1	X	
19:17	MA47431-CCB11	1	X	
19:22	ZZZZZZ	5		
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Element: Dilution	As
19:27	ZZZZZZ	5	
19:32	MP17232A-MB1	2	X
19:37	MP17232A-B2	2	X
19:42	MP17232A-S3	2	Overrange
19:47	MP17232A-S4	2	Overrange
19:52	JC94613-1	2	Overrange
19:57	MP17232A-SD1	10	Overrange
20:02	MP17232A-PS1	2	Overrange
20:07	MA47431-CCVA12	1	X
20:12	MA47431-CCB12	1	X
20:17	ZZZZZZ	2	
20:22	JC94613-2	2	Overrange
20:27	MP17239-MB1	2	
20:32	ZZZZZZ	2	
20:37	ZZZZZZ	2	
20:42	ZZZZZZ	2	
20:47	ZZZZZZ	2	
20:52	MP17239-B1	2	
20:57	MA47431-CCVA13	1	X
21:02	MA47431-CCB13	1	X
21:07	MP17239-S1	2	To reanalysis on higher dilution. Na>6000ppm
21:12	MP17239-S2	2	To reanalysis on higher dilution. Na>6000ppm
21:17	JC94499-17	2	To reanalysis on higher dilution. Na>6000ppm
21:22	MP17239-SD1	10	To reanalysis on higher dilution. Na>6000ppm
21:27	ZZZZZZ	2	
21:32	ZZZZZZ	2	
21:37	ZZZZZZ	2	
21:42	ZZZZZZ	2	
21:47	MA47431-CCVA14	1	X
21:52	MA47431-CCB14	1	X
21:57	ZZZZZZ	2	
22:02	ZZZZZZ	2	
22:07	ZZZZZZ	2	
		Element:	As

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Element: Dilution	As
22:12	ZZZZZZ	2	
22:17	ZZZZZZ	2	
22:22	ZZZZZZ	2	
22:27	MA47431-CCVA15	1	X
22:32	MA47431-CCB15	1	X
22:37	ZZZZZZ	2	
22:42	ZZZZZZ	2	
22:47	ZZZZZZ	2	
22:52	ZZZZZZ	1	
22:57	ZZZZZZ	1	
23:02	ZZZZZZ	1	
23:07	MA47431-CCVA16	1	X
23:12	MA47431-CCB16	1	X
23:17	ZZZZZZ	1	
23:22	ZZZZZZ	1	
23:27	ZZZZZZ	1	

(a) Sample used for QC only; not part of login JC94613.

Element: As

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
09:58	MA47431-STD1	No results reported for the elements associated with this internal standard.							
10:03	MA47431-STD2	No results reported for the elements associated with this internal standard.							
10:08	MA47431-STD3	100	100	100	100	100	100	100	100
10:13	MA47431-STD4	102.798	101.892	102.022	107.641	100.578	101.488	105.712	101.029
10:19	MA47431-STD5	102.267	101.265	102.738	101.587	99.911	101.831	100.433	100.193
10:24	MA47431-STD6	103.672	101.168	102.205	100.745	100.359	101.175	100.08	101.25
10:29	MA47431-STD7	102.663	100.023	101.907	99.787	100.518	100.902	99.272	100.249
10:34	MA47431-STD8	101.071	98.244	100.09	88.646	97.779	97.95	87.439	97.57
10:39	MA47431-STD9	100.53	97.951	100.443	108.141	97.457	100.499	104.646	97.962
10:45	MA47431-STD10	103.143	100.159	102.83	99.68	99.016	101.965	99.26	100.98
10:50	MA47431-STD11	101.675	99.265	101.079	97.831	98.786	99.525	97.319	98.219
10:55	MA47431-STD12	99.867	97.183	101.352	98.308	96.572	98.215	96.499	96.033
11:00	ZZZZZZ	99.772	95.458	98.31	96.856	95.981	97.463	96.824	96.913
11:10	MA47431-ICVA1	99.865	96.611	100.763	96.192	97.603	99.244	95.758	97.645
11:15	MA47431-ICV1	99.352	95.498	98.721	95.755	95.366	99.582	95.564	95.481
11:26	MA47431-ICB1	95.538	97.44	105.065	101.224	98.379	104.086	100.117	98.623
11:31	MA47431-CCVA1	101.304	98.514	103.941	99.955	98.768	102.262	97.89	99.046
11:36	MA47431-CCB1	97.945	95.151	97.945	96.056	95.573	98.675	96.078	95.389
11:41	MA47431-CRI1	100.502	97.254	100.292	97.125	97.83	99.728	96.969	97.316
11:47	MA47431-ICSA1	92.804	93.414	98.021	95.105	92.388	94.398	92.929	89.584
11:51	MA47431-ICSAB1	87.798	90.029	96.375	95.302	90.521	93.461	92.927	87.595
11:56	ZZZZZZ	84.388	86.335	90.29	94.826	89.86	91.955	95.623	90.352
12:01	MA47431-CCVA2	89.351	93.836	91.077	96.185	95.178	91.245	95.95	95.471
12:06	MA47431-CCB2	88.778	90.769	94.714	94.984	92.738	95.479	96.134	93.054
12:11	MP17220-MB1	87.206	89.042	92.203	97.337	94.027	97.051	98.723	94.306
12:16	MP17220-B1	87.384	90.287	92.012	102.834	97.53	99.004	103.063	97.983
12:23	ZZZZZZ	89.483	94.303	97.514	102.486	100.897	103.116	100.792	100.569
12:27	ZZZZZZ	92.515	97.706	99.767	104.113	105.319	105.126	102.492	103.23
12:32	ZZZZZZ	93.405	98.666	99.666	101.581	104.133	102.858	98.57	102.061
12:37	ZZZZZZ	88.804	93.443	94.677	102.463	98.872	100.268	101.209	98.765
12:42	ZZZZZZ	91.09	97.386	100.474	106.36	102.399	104.225	103.401	101.805
12:47	ZZZZZZ	96.565	99.323	100.586	105.439	108.276	109.167	107.11	108.319
12:52	MA47431-CCVA3	100.698	102.982	104.717	105.418	103.686	104.49	104.381	104.504

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
12:57	MA47431-CCB3	102.464	102.298	104.516	107.108	103.607	104.96	106.798	103.592
13:02	ZZZZZZ	91.867	96.636	99.662	103.759	100.695	101.733	98.939	101.628
13:07	ZZZZZZ	89.572	92.8	97.001	101.468	98.243	99.096	97.833	97.983
13:12	ZZZZZZ	90.047	93.851	97.092	101.539	98.67	99.773	98.526	98.107
13:17	ZZZZZZ	104.307	101.897	103.604	101.33	102.017	102.55	99.903	101.803
13:22	ZZZZZZ	90.099	90.709	93.516	97.7	95.979	97.559	97.027	95.955
13:27	ZZZZZZ	90.482	92.063	93.639	99.446	98.483	99.58	100.132	97.695
13:32	ZZZZZZ	89.505	90.423	92.533	100.214	98.66	99.849	100.664	97.798
13:37	ZZZZZZ	87.763	92.075	94.753	99.596	94.106	95.73	95.003	93.13
13:42	MA47431-CCVA4	101.209	98.07	94.741	99.54	98.079	93.331	96.892	99.241
13:47	MA47431-CCB4	101.39	95.81	98.177	97.21	96.965	97.989	97.102	96.303
13:52	ZZZZZZ	92.997	92.209	93.092	95.91	94.885	95.14	91.792	94.176
13:57	ZZZZZZ	90.925	89.363	92.131	94.774	94.501	95.518	93.647	94.951
14:02	MA47431-CCVA5	96.474	88.035	95.453	95.262	90.68	94.92	94.365	91.125
14:07	MA47431-CCB5	101.037	94.406	97.374	94.819	95.252	98.512	95.411	96.025
14:12	MP17220-S1	91.256	88.136	91.98	93.95	93.903	94.933	89.777	94.222
14:17	MP17220-S2	89.551	87.336	89.655	93.435	92.596	93.612	89.582	92.433
14:22	JC94229-1	91.071	89.824	88.366	93.951	95.045	92.305	90.383	94.164
14:27	MP17220-SD1	103.267	95.141	97.856	95.327	95.056	96.933	93.479	95.934
14:32	ZZZZZZ	91.283	86.065	88.617	90.697	91.567	93.179	90.652	91.102
14:37	ZZZZZZ	92.13	87.077	88.685	92.908	94.569	94.064	93.243	93.333
14:42	ZZZZZZ	90.728	85.651	86.572	90.414	94.472	94.041	91.837	93.694
14:47	ZZZZZZ	87.71	87.525	89.042	91.195	89.633	89.704	87.557	88.746
14:52	MA47431-CCVA6	95.785	89.837	93.12	90.83	90.987	91.726	90.396	91.15
14:57	MA47431-CCB6	98.037	90.986	94.519	90.67	91.865	93.759	90.989	92.235
15:02	ZZZZZZ	90.02	86.898	91.553	91.92	89.188	90.755	88.02	88.562
15:07	ZZZZZZ	88.873	84.445	88.293	87.475	89.599	90.365	86.206	89.662
15:12	ZZZZZZ	88.292	84.626	88.125	88.806	89.582	91.147	87.912	89.565
15:17	ZZZZZZ	92.121	85.612	92.269	87.65	96.415	99.297	89.455	95.39
15:22	ZZZZZZ	85.943	83.301	85.991	86.184	86.093	87.007	82.875	85.881
15:27	ZZZZZZ	87.359	84.02	90.913	88.8	89.395	93.025	87.099	88.935
15:32	ZZZZZZ	101.91	92.651	95.229	91.776	93.624	95.047	90.946	93.322
15:37	ZZZZZZ	99.382	90.478	93.348	88.699	91.678	93.281	88.606	91.289

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:42	MA47431-CCVA7	94.791	86.357	90.142	85.738	86.182	88.316	84.694	87.478
15:47	MA47431-CCB7	98.13	88.858	91.625	86.712	89.186	91.921	85.92	89.153
15:52	ZZZZZZ	99.588	90.09	92.421	87.198	91	91.74	87.854	91.565
15:57	ZZZZZZ	100.209	91.423	96.392	86.193	90.859	93.917	86	90.779
16:02	ZZZZZZ	91.942	83.479	87.851	86.699	91.732	94.12	87.314	90.963
16:07	ZZZZZZ	90.914	82.184	85.537	87.062	88.396	89.705	86.408	88.749
16:12	MP17203-S1	91.876	84.856	86.264	85.721	87.72	88.571	85.525	86.855
16:17	MP17203-S2	90.824	83.995	87.572	85.093	87.088	88.604	84.271	86.334
16:22	ZZZZZZ	92.288	85.945	88.854	83.352	83.413	85.049	78.379	82.805
16:27	ZZZZZZ	91.553	85.82	89.704	81.786	83.419	86.05	77.093	83.038
16:32	MA47431-CCVA8	93.848	84.256	87.776	83.284	83.95	87.581	82.76	85.26
16:37	MA47431-CCB8	95.865	86.08	89.871	85.253	86.882	88.585	84.306	87.052
16:42	ZZZZZZ	89.398	81.672	86.362	83.632	82.731	86.037	81.371	82.097
16:47	ZZZZZZ	90.934	86.454	84.695	86.546	84.649	80.758	82.363	84.739
16:52	ZZZZZZ	93.421	86.062	90.064	85.865	86.628	89.082	84.782	87.724
16:57	ZZZZZZ	92.097	86.69	89.956	85.751	87.258	88.224	82.715	86.322
17:02	ZZZZZZ	92.116	86.278	90.387	86.556	85.713	88.242	83.055	86.267
17:07	ZZZZZZ	86.076	80.044	84.443	83.177	87.916	90.992	82.171	87.914
17:12	ZZZZZZ	101.89	89.342	94.064	85.891	90.116	93.365	85.498	90.253
17:17	ZZZZZZ	96.591	85.837	89.632	82.69	85.896	89.007	81.425	86.632
17:22	MA47431-CCVA9	94.256	84.284	88.686	82.504	84.357	86.323	81.003	84.816
17:27	MA47431-CCB9	95.365	85.299	89.041	82.643	85.208	88.603	82.103	85.48
17:32	MP17187-S1	87.574	84.548	88.854	80.361	81.265	85.739	77.35	81.649
17:37	MP17187-S2	86.418	81.454	86.057	78.876	79.377	83.108	75.127	79.804
17:42	JC94351-5	85.094	79.731	83.125	72.452	77.72	80.931	71.219	78.001
17:47	MP17229-MB1	89.782	81.417	88.56	79.514	82.261	88.366	79.02	82.988
17:52	MP17229-B1	90.686	81.688	85.19	78.347	82.515	84.434	78.292	82.418
17:57	MP17229-S1	88.006	85.701	90.29	84.492	82.538	86.271	80.247	81.851
18:02	MP17229-S2	88.754	84.34	87.5	84.023	82.051	84.805	79.163	81.797
18:07	JC94207-16AR	88.603	85.385	85.536	84.181	81.976	83.841	80.556	81.82
18:12	MA47431-CCVA10	87.289	78.864	84.57	80.889	80.306	84.214	79.742	80.988
18:17	MA47431-CCB10	87.764	78.804	83.689	81.363	80.54	84.035	80.641	80.94
18:22	MP17229-SD1	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:27	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:32	ZZZZZZ	89.945	89.321	91.77	89.337	85.853	87.551	83.857	84.478
18:37	ZZZZZZ	90.706	90.835	94.393	89.29	86.365	89.121	83.759	86.138
18:42	ZZZZZZ	90.96	91.997	96.235	92.549	87.567	90.73	86.491	87.084
18:47	ZZZZZZ	92.903	90.311	94.793	90.967	87.926	90.31	85.851	87.172
18:52	ZZZZZZ	91.258	91.797	96.561	92.561	87.543	91.535	86.999	86.787
18:57	ZZZZZZ	91.187	90.503	94.587	91.712	87.058	91.515	85.655	86.213
19:02	MP17229-SD1	99.267	92.077	96.757	92.196	92.203	96.151	90.807	92.278
19:07	ZZZZZZ	95.259	86.489	91.481	81.458	87.624	91.922	82.595	87.584
19:12	MA47431-CCVA11	95.627	88.14	92.271	88.705	88.968	91.467	86.669	88.795
19:17	MA47431-CCB11	94.592	86.422	89.895	86.422	87.84	90.489	86.184	87.785
19:22	ZZZZZZ	95.123	95.51	99.486	94.655	90.484	94.104	88.225	89.549
19:27	ZZZZZZ	88.465	88.458	93.618	92.516	82.391	85.746	83.818	80.865
19:32	MP17232A-MB1	83.422	75.549	79.517	84.084	83.207	86.553	84.407	83.254
19:37	MP17232A-B2	86.652	79.146	82.644	86.618	86.636	88.156	85.002	86.483
19:42	MP17232A-S3	No results reported for the elements associated with this internal standard.							
19:47	MP17232A-S4	No results reported for the elements associated with this internal standard.							
19:52	JC94613-1	No results reported for the elements associated with this internal standard.							
19:57	MP17232A-SD1	No results reported for the elements associated with this internal standard.							
20:02	MP17232A-PS1	No results reported for the elements associated with this internal standard.							
20:07	MA47431-CCVA12	98.205	90.323	93.232	91.096	89.838	91.797	88.605	90.449
20:12	MA47431-CCB12	99.387	90.119	96.594	90.274	90.765	94.357	88.453	90.668
20:17	ZZZZZZ	88.283	82.038	85.131	86.14	88.622	89.518	85.708	88.064
20:22	JC94613-2	No results reported for the elements associated with this internal standard.							
20:27	MP17239-MB1	88.074	81.493	84.02	86.069	89.277	90.263	85.892	89.395
20:32	ZZZZZZ	87.07	79.797	82.917	84.471	87.347	89.635	85.264	87.239
20:37	ZZZZZZ	87.481	79.714	82.961	84.565	86.62	88.864	84.294	86.247
20:42	ZZZZZZ	88.525	79.834	81.977	82.528	86.871	89.004	83.484	86.352
20:47	ZZZZZZ	87.681	79.737	81.627	81.846	86.738	87.781	82.853	86.014
20:52	MP17239-B1	90.168	81.251	83.413	83.813	86.3	87.642	83.318	86.195
20:57	MA47431-CCVA13	97.847	89.077	88.235	83.379	87.552	86.34	81.646	87.618
21:02	MA47431-CCB13	91.99	81.633	84.171	79.061	81.49	82.507	78.321	81.443
21:07	MP17239-S1	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JC94613
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File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
21:12	MP17239-S2	No results reported for the elements associated with this internal standard.							
21:17	JC94499-17	No results reported for the elements associated with this internal standard.							
21:22	MP17239-SD1	No results reported for the elements associated with this internal standard.							
21:27	ZZZZZZ	149.655	!a131.383	!a131.596	!a110.847	128.001	129.753	105.117	125.766
21:32	ZZZZZZ	88.809	100.584	118.615	93.945	89.678	102.859	78.459	88.922
21:37	ZZZZZZ	85.541	109.471	129.462	100.104	95.246	110.271	83.281	94.209
21:42	ZZZZZZ	83.248	111.274	134.762	!a101.178	97.602	113.515	85.728	95.728
21:47	MA47431-CCVA14	146.229 !	129.919	134.478 !	114.274	114.081	119.172	103.805	113.662
21:52	MA47431-CCB14	134.798 !	117.921	123.867	103.679	105.324	112.572	96.96	105.15
21:57	ZZZZZZ	86.36	105.558	124.704	97.169	92.561	106.749	83.017	91.429
22:02	ZZZZZZ	84.477	113.325	136.91	!a 102.445	100.164	116.623	87.644	99.103
22:07	ZZZZZZ	81.849	114.284	140.811	!a104.629	102.87	124.987	90.367	101.623
22:12	ZZZZZZ	84.664	119.129	143.07	!a 101.973	110.633	128.554	89.688	109.094
22:17	ZZZZZZ	84.19	117.422	142.169	!a108.349	100.83	118.325	93.079	99.272
22:22	ZZZZZZ	84.521	120.64	145.742	!a109.403	105.083	122.423	92.735	103.988
22:27	MA47431-CCVA15	151.281	!a142.044	!a147.691	!a125.791	122.819	128.48	112.399	122.951
22:32	MA47431-CCB15	145.052 !	134.93 !	135.674 !	117.751	119.566	121.614	107.299	118.054
22:37	ZZZZZZ	85.813	112.41	132.295	!a100.379	95.628	113.171	94.369	94.737
22:42	ZZZZZZ	151.637	!a146.242	!a148.549	!a126.838	137.58 !a	141.609	!a125.776	133.745 !a
22:47	ZZZZZZ	124.68	123.987	129.378	113.391	110.17	115.962	102.25	108.65
22:52	ZZZZZZ	133.922 !	122.652	123.22	109.581	111.704	113.27	101.576	110.734
22:57	ZZZZZZ	123.091	111.429	113.898	103.062	102.523	106.377	97.236	102.295
23:02	ZZZZZZ	118.932	106.024	108.501	97.694	99.578	101.893	93.506	98.609
23:07	MA47431-CCVA16	110.622	97.842	107.008	92.064	92.38	99.789	87.401	92.291
23:12	MA47431-CCB16	111.233	99.044	101.171	92.518	94.374	96.353	88.115	94.074
23:17	ZZZZZZ	107.002	95.82	97.969	89.758	92.234	95.251	87.022	91.539
23:22	ZZZZZZ	106.299	93.363	100.204	86.556	91.388	96.989	84.693	90.609
23:27	ZZZZZZ	103.168	91.695	94.536	87.228	89.578	92.053	84.543	88.92

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Lithium	60-125 %
Istd#2	Scandium (45-1)	60-125 %
Istd#3	Scandium (45-2)	60-125 %
Istd#4	Scandium (45-3)	60-125 %
Istd#5	Germanium (72-1)	60-125 %
Istd#6	Germanium (72-2)	60-125 %
Istd#7	Germanium (72-3)	60-125 %

INTERNAL STANDARD SUMMARY

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Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8

Istd#8 Germanium (74-1) 60-125 %

(a) No samples reported for the elements associated with this internal standard.

10.2.2

10

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
09:58	MA47431-STD1	No results reported for the elements associated with this internal standard.							
10:03	MA47431-STD2	No results reported for the elements associated with this internal standard.							
10:08	MA47431-STD3	100	100	100	100	100	100	100	100
10:13	MA47431-STD4	101.34	105.378	100.7	101.081	106.885	100.921	101.252	102.337
10:19	MA47431-STD5	100.85	100.099	100.157	101.002	100.622	99.851	101.762	100.473
10:24	MA47431-STD6	101.676	100.197	100.629	101.073	100.74	100.022	101.337	101.918
10:29	MA47431-STD7	101.205	100.283	99.132	100.143	99.796	98.866	101.053	99.959
10:34	MA47431-STD8	98.271	88.328	97.749	97.579	87.732	97.886	98.556	99.333
10:39	MA47431-STD9	99.763	105.779	97.601	99.23	108.075	98.586	100.446	100.121
10:45	MA47431-STD10	101.511	100.291	99.692	99.921	98.65	99.397	101.36	101.107
10:50	MA47431-STD11	100.092	97.207	96.634	97.26	96.085	98.029	99.116	101.856
10:55	MA47431-STD12	97.584	96.452	95.048	95.757	93.935	95.999	97.909	99.751
11:00	ZZZZZZ	98.155	97.032	97.069	97.229	97.748	97.629	98.227	99.214
11:10	MA47431-ICVA1	99.641	96.483	95.767	96.265	93.712	96.42	98.34	98.896
11:15	MA47431-ICV1	98.535	95.885	96.988	97.743	95.448	96.998	99.205	99.037
11:26	MA47431-ICB1	103.859	100.056	98.683	100.917	96.51	98.342	103.962	100.4
11:31	MA47431-CCVA1	102.323	98.274	97.486	98.438	95.638	98.389	101.373	101.391
11:36	MA47431-CCB1	97.966	96.176	95.888	97.321	96.309	97.232	98.934	98.643
11:41	MA47431-CRI1	100.022	96.891	97.781	98.453	97.383	97.836	100.35	100.292
11:47	MA47431-ICSA1	92.372	89.145	85.189	85.89	84.805	89.711	91.047	96.073
11:51	MA47431-ICSAB1	91.326	90.131	84.633	85.508	84.528	89.055	90.141	96.497
11:56	ZZZZZZ	92.637	95.523	93.886	94.804	96.433	96.235	96.229	100.703
12:01	MA47431-CCVA2	91.937	96.825	97.892	91.308	95.221	100.222	93.263	105.961
12:06	MA47431-CCB2	96.11	97.427	96.281	96.648	97.761	97.644	98.023	101.628
12:11	MP17220-MB1	96.346	99.625	95.973	96.426	100.153	97.324	96.185	101.844
12:16	MP17220-B1	99.403	103.716	95.068	95.494	102.987	97.587	95.133	102.922
12:23	ZZZZZZ	102.384	101.061	91.924	92.816	95.027	96.388	95.545	104.575
12:27	ZZZZZZ	104.543	102.43	94.334	95.215	96.297	98.264	96.858	107.586
12:32	ZZZZZZ	103.152	98.761	92.421	92.186	91.762	97.757	94.602	105.461
12:37	ZZZZZZ	99.455	101.413	92.201	92.734	96.581	95.973	93.312	105.865
12:42	ZZZZZZ	102.996	103.156	93.424	95.165	97.331	98.839	97.385	107.787
12:47	ZZZZZZ	109.029	107.167	104.564	104.213	106.702	106.338	102.334	112.114
12:52	MA47431-CCVA3	105.125	104.707	103.771	103.031	102.911	106.02	102.571	111.287

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
12:57	MA47431-CCB3	104.95	106.513	105.332	105.455	107.19	105.932	104.59	110.28
13:02	ZZZZZZ	102.265	99.898	93.342	93.033	93.252	98.119	95.853	107.034
13:07	ZZZZZZ	99.352	98.019	90.185	90.979	92.273	95.493	93.44	106.272
13:12	ZZZZZZ	99.343	98.244	91.372	90.787	92.926	96.696	94.237	106.631
13:17	ZZZZZZ	102.39	100.213	100.825	100.134	98.832	103.86	101.853	108.796
13:22	ZZZZZZ	97.17	97.686	90.595	91.488	94.659	95.929	92.641	105.169
13:27	ZZZZZZ	99.772	100.411	94.911	95.577	99.34	98.498	95.644	105.996
13:32	ZZZZZZ	99.753	100.406	94.976	95.173	99.584	98.029	94.631	106.391
13:37	ZZZZZZ	95.422	94.748	87.909	88.277	89.933	93.814	90.948	103.757
13:42	MA47431-CCVA4	94.403	97.672	100.779	92.782	95.914	103.976	93.381	108.362
13:47	MA47431-CCB4	98.174	97.522	98.49	98.79	97.257	100.236	98.29	105.431
13:52	ZZZZZZ	95.262	91.548	88.407	87.997	88.021	93.821	91.704	102.734
13:57	ZZZZZZ	95.77	93.318	89.633	88.568	90.521	94.163	90.908	103.198
14:02	MA47431-CCVA5	95.133	94.677	89.89	94.227	93.145	92.602	94.962	97.504
14:07	MA47431-CCB5	97.921	95.493	97.621	97.85	95.654	99.03	97.677	103.144
14:12	MP17220-S1	93.808	90.792	86.132	85.414	86.07	91.61	88.829	101.398
14:17	MP17220-S2	93.152	90.047	84.92	84.385	85.163	90.201	87.627	100.947
14:22	JC94229-1	91.828	91.156	87.771	82.217	85.977	93.152	86.886	104.329
14:27	MP17220-SD1	96.813	94.22	95.614	94.409	91.384	98.048	97.535	103.78
14:32	ZZZZZZ	93.119	91.03	86.304	87.257	88.343	90.763	89.162	97.93
14:37	ZZZZZZ	94.017	93.291	90.994	90.323	92.925	94.287	90.942	102.459
14:42	ZZZZZZ	92.924	91.807	89.877	89.245	91.996	92.803	89.344	101.871
14:47	ZZZZZZ	89.148	87.941	83.836	82.598	83.091	89.162	86.588	100.455
14:52	MA47431-CCVA6	92.129	90.802	91.002	91.245	88.584	94.268	92.295	102.275
14:57	MA47431-CCB6	93.923	91.229	94.549	93.8	91.115	96.473	94.955	101.273
15:02	ZZZZZZ	91.213	88.133	84.039	84.768	83.838	89.657	89.319	95.31
15:07	ZZZZZZ	89.829	86.232	84.663	84.176	82.477	88.504	87.392	95.469
15:12	ZZZZZZ	90.876	88.492	85.229	84.148	83.566	89.491	88.496	95.885
15:17	ZZZZZZ	99.871	89.701	91.457	94.811	87.253	93.74	95.239	98.661
15:22	ZZZZZZ	86.447	82.745	80.12	79.234	78.321	85.427	83.272	91.92
15:27	ZZZZZZ	93.647	87.236	81.971	84.905	81.474	86.854	89.231	92.221
15:32	ZZZZZZ	95.263	91.009	95.142	94.096	90.93	95.874	95.742	99.471
15:37	ZZZZZZ	92.283	88.745	92.767	92.137	87.909	94.537	93.977	94.305

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:42	MA47431-CCVA7	88.845	84.971	87.35	86.977	83.547	89.63	89.595	91.81
15:47	MA47431-CCB7	91.385	86.473	91.2	91.157	86.97	91.975	92.24	92.164
15:52	ZZZZZZ	91.531	87.211	91.658	90.709	86.829	93.223	92.851	92.915
15:57	ZZZZZZ	94.091	85.376	88.222	87.797	81.733	90.932	93.24	93.336
16:02	ZZZZZZ	94.078	87.137	87.086	87.425	86.352	88.975	89.313	90.214
16:07	ZZZZZZ	89.333	86.177	85.804	85.743	86.155	87.335	86.76	91.393
16:12	MP17203-S1	88.611	84.607	83.703	82.228	80.99	87.391	85.91	91.437
16:17	MP17203-S2	87.957	83.805	83.635	82.927	80.392	87.773	86.932	91.719
16:22	ZZZZZZ	84.521	78.568	77.756	76.705	73.506	82.389	82.393	86.986
16:27	ZZZZZZ	86.043	77.508	77.215	77.663	72.74	81.31	83.395	86.564
16:32	MA47431-CCVA8	86.784	83.063	85.052	85.102	81.525	87.231	87.87	88.811
16:37	MA47431-CCB8	89.321	84.886	88.385	88.164	85.438	89.372	90.372	89.576
16:42	ZZZZZZ	85.529	81.222	80.93	80.778	78.335	84.16	84.635	87.69
16:47	ZZZZZZ	80.529	82.091	80.162	73.825	77.663	84.045	79.668	87.978
16:52	ZZZZZZ	89.801	84.555	84.103	83.984	81.096	87.06	87.52	89.874
16:57	ZZZZZZ	88.027	82.626	83.159	81.281	78.493	86.291	86.924	89.542
17:02	ZZZZZZ	88.126	82.875	81.724	82.141	79.403	85.376	87.21	88.369
17:07	ZZZZZZ	91.573	81.991	78.937	79.277	77.269	82.007	83.098	86.481
17:12	ZZZZZZ	93.073	85.501	91.758	91.036	85.239	92.436	93.592	91.029
17:17	ZZZZZZ	88.294	81.931	86.354	85.952	81.444	88.233	88.945	88.748
17:22	MA47431-CCVA9	86.525	81.201	84.728	84.396	79.795	86.366	87.717	88.058
17:27	MA47431-CCB9	88.454	82.531	87.559	87.65	83.108	88.295	89.706	87.747
17:32	MP17187-S1	84.964	76.916	78.317	78.142	72.07	82.576	84.832	85.825
17:37	MP17187-S2	82.161	75.856	76.756	76.363	71.374	80.895	82.813	84.63
17:42	JC94351-5	80.365	71.087	75.569	75.116	66.106	79.867	81.592	83.74
17:47	MP17229-MB1	87.607	79.796	84.891	87.889	79.923	86.169	90.725	85.685
17:52	MP17229-B1	84.141	77.613	83.404	82.772	78.011	84.682	85.688	85.596
17:57	MP17229-S1	84.941	78.297	81.969	81.701	76.795	84.155	85.652	86.527
18:02	MP17229-S2	83.575	78.496	82.015	80.993	76.678	85.009	84.852	87.342
18:07	JC94207-16AR	81.954	78.677	83.178	79.819	77.899	86.043	83.289	90.408
18:12	MA47431-CCVA10	84.227	79.73	81.642	82.402	78.495	83.686	85.155	86.039
18:17	MA47431-CCB10	84.054	81.017	83.855	84.098	80.7	84.84	86.357	86.319
18:22	MP17229-SD1	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:27	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:32	ZZZZZZ	86.142	82.676	84.36	83.237	80.543	86.616	86.376	89.082
18:37	ZZZZZZ	88.109	83.426	85.427	85.166	80.647	87.02	88.629	89.528
18:42	ZZZZZZ	89.021	84.681	86.315	85.655	81.282	88.827	89.424	90.874
18:47	ZZZZZZ	89.375	84.654	87.246	85.928	82.66	89.157	89.265	90.612
18:52	ZZZZZZ	90.193	85.299	86.258	86.802	82.639	88.643	90.24	90.12
18:57	ZZZZZZ	89.284	84.992	86.393	86.381	82.556	89.407	90.396	90.372
19:02	MP17229-SD1	94.55	90.74	92.951	92.405	88.426	94.083	95.615	100.109
19:07	ZZZZZZ	91.107	82.622	89.982	90.493	80.845	91.121	92.303	90.249
19:12	MA47431-CCVA11	91.812	86.872	88.759	88.57	84.724	90.289	91.191	91.106
19:17	MA47431-CCB11	90.584	86.835	89.69	88.921	86.469	90.072	91.244	89.961
19:22	ZZZZZZ	92.201	86.305	88.568	87.836	84.038	90.852	91.721	95.037
19:27	ZZZZZZ	83.065	81.29	80.261	80.564	78.781	84.685	85.187	88.186
19:32	MP17232A-MB1	86.448	84.676	81.75	82.643	84.409	83.575	83.476	86.207
19:37	MP17232A-B2	88.093	85.702	83.971	83.384	84.452	85.89	84.814	88.658
19:42	MP17232A-S3	No results reported for the elements associated with this internal standard.							
19:47	MP17232A-S4	No results reported for the elements associated with this internal standard.							
19:52	JC94613-1	No results reported for the elements associated with this internal standard.							
19:57	MP17232A-SD1	No results reported for the elements associated with this internal standard.							
20:02	MP17232A-PS1	No results reported for the elements associated with this internal standard.							
20:07	MA47431-CCVA12	91.878	88.34	90.228	88.301	86.966	90.795	91.155	91.434
20:12	MA47431-CCB12	93.619	88.347	91.54	93.002	88.277	91.851	94.763	90.394
20:17	ZZZZZZ	90.418	85.565	82.922	82.952	82.591	86.055	85.631	86.766
20:22	JC94613-2	No results reported for the elements associated with this internal standard.							
20:27	MP17239-MB1	90.321	85.926	85.272	84.865	85.179	86.18	85.041	86.378
20:32	ZZZZZZ	88.618	84.906	83.238	82.94	83.45	84.322	83.67	85.014
20:37	ZZZZZZ	88.651	84.059	82.897	83.11	83.776	83.569	83.367	84.191
20:42	ZZZZZZ	88.692	83.461	83.495	82.68	82.888	83.666	83.115	83.889
20:47	ZZZZZZ	87.928	82.686	82.825	82.443	82.879	83.495	82.833	83.943
20:52	MP17239-B1	87.157	83.738	83.061	82.519	83.45	84.071	82.784	85.16
20:57	MA47431-CCVA13	87.192	82.214	90.071	83.03	80.393	91.261	85.851	90.787
21:02	MA47431-CCB13	82.757	78.315	81.577	81.386	79.067	81.938	82.982	80.003
21:07	MP17239-S1	No results reported for the elements associated with this internal standard.							

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
21:12	MP17239-S2	No results reported for the elements associated with this internal standard.							
21:17	JC94499-17	No results reported for the elements associated with this internal standard.							
21:22	MP17239-SD1	No results reported for the elements associated with this internal standard.							
21:27	ZZZZZZ	128.172	104.371	104.882	103.68	94.682	101.339	106.195	96.976
21:32	ZZZZZZ	101.748	78.036	66.133 !a	67.405 !a	59.077 !a	68.778 !a	79.049	67.171 !a
21:37	ZZZZZZ	108.327	82.825	69.711 !a	70.612	61.151 !a	72.162	82.959	68.704 !a
21:42	ZZZZZZ	111.305	84.662	70.471	72.164	61.575 !a	72.562	85.209	68.692 !a
21:47	MA47431-CCVA14	118.822	104.64	101.518	101.562	92.753	98.457	105.343	92.711
21:52	MA47431-CCB14	111.79	96.255	98.075	99.113	88.381	94.92	101.698	86.098
21:57	ZZZZZZ	105.329	81.974	68.38 !a	69.54 !a	59.376 !a	71.258	81.612	69.477 !a
22:02	ZZZZZZ	115.247	86.703	70.945	72.554	60.661 !a	73.523	85.964	70.187
22:07	ZZZZZZ	123.332	88.919	71.279	73.995	61.589 !a	74.333	87.82	70.29
22:12	ZZZZZZ	125.521	88.698	73.309	74.272	59.585 !a	75.805	88.422	71.393
22:17	ZZZZZZ	115.426	92.161	73.06	74.417	62.839 !a	75.893	87.586	70.985
22:22	ZZZZZZ	120.86	92.112	74.515	74.362	62.795 !a	77.077	88.129	71.844
22:27	MA47431-CCVA15	127.408	112.338	108.25	107.478	98.086	105.48	110.888	103.008
22:32	MA47431-CCB15	120.069	107.373	107.522	104.288	96.379	104.578	106.645	98.976
22:37	ZZZZZZ	112.132	92.629	71.689	71.793	59.912 !a	74.939	83.764	72.167
22:42	ZZZZZZ	140.023 !a	125.351	113.195	112.045	101.873	108.359	114.336	104.783
22:47	ZZZZZZ	113.609	101.231	90.347	90.141	82.247	92.547	96.731	95.072
22:52	ZZZZZZ	113.28	101.221	103.284	101.618	94.08	100.708	103.323	98.005
22:57	ZZZZZZ	105.941	97.355	97.29	96.576	89.799	95.553	97.77	91.49
23:02	ZZZZZZ	101.767	92.674	94.098	93.195	86.735	93.257	94.249	89.369
23:07	MA47431-CCVA16	99.85	87.966	85.502	90.502	80.256	88.903	93.331	85.627
23:12	MA47431-CCB16	97.18	88.075	90.568	89.905	84.719	89.304	90.881	84.61
23:17	ZZZZZZ	93.406	86.525	88.602	88.017	82.858	88.383	89.608	83.544
23:22	ZZZZZZ	96.023	85.249	88.331	90.067	81.577	88.033	92.288	86.485
23:27	ZZZZZZ	91.53	84.636	87.046	86.555	81.954	86.358	87.855	83.408

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#9	Germanium (74-2)	60-125 %
Istd#10	Germanium (74-3)	60-125 %
Istd#11	Rhodium (103-1)	60-125 %
Istd#12	Rhodium (103-2)	60-125 %
Istd#13	Rhodium (103-3)	60-125 %
Istd#14	Indium (115-1)	60-125 %
Istd#15	Indium (115-2)	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JC94613
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File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16

Istd#16 Terbium (159-1) 60-125 %

(a) No samples reported for the elements associated with this internal standard.

10.2.2

10

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
09:58	MA47431-STD1	No results reported for the elements associated with this internal standard.					
10:03	MA47431-STD2	No results reported for the elements associated with this internal standard.					
10:08	MA47431-STD3	100	100	100	100	100	100
10:13	MA47431-STD4	100.15	107.189	101.141	100.147	101.036	99.62
10:19	MA47431-STD5	101.198	100.318	99.915	100.799	99.881	100.206
10:24	MA47431-STD6	100.175	100.682	100.291	100.109	100.043	100.216
10:29	MA47431-STD7	101.181	100.567	98.905	100.77	99.931	100.638
10:34	MA47431-STD8	98.316	88.47	98.429	98.301	99.451	98.653
10:39	MA47431-STD9	99.462	108.83	97.881	99.486	98.523	99.018
10:45	MA47431-STD10	100.206	100.406	100.801	100.635	99.048	99.199
10:50	MA47431-STD11	99	98.667	99.892	99.762	97.582	96.852
10:55	MA47431-STD12	98.865	98.226	98.275	98.949	94.82	95.013
11:00	ZZZZZZ	98.006	98.694	97.877	97.577	98.508	98.421
11:10	MA47431-ICVA1	98.941	96.564	97.854	98.914	96.496	96.577
11:15	MA47431-ICV1	97.888	95.911	97.381	97.927	98.643	98.595
11:26	MA47431-ICB1	101.21	97.362	99.026	100.509	100.27	101.381
11:31	MA47431-CCVA1	100.427	98.015	100.049	100.859	97.931	97.99
11:36	MA47431-CCB1	97.508	96.941	97.353	96.764	98.273	97.584
11:41	MA47431-CRI1	98.996	97.831	98.118	98.65	99.457	98.512
11:47	MA47431-ICSA1	95.38	93.824	94.931	95.771	88.284	87.501
11:51	MA47431-ICSAB1	95.499	93.559	95.878	96.095	87.971	87.448
11:56	ZZZZZZ	96.506	97.106	97.963	97.28	99.668	98.356
12:01	MA47431-CCVA2	94.671	97.958	103.587	95.029	102.892	93.886
12:06	MA47431-CCB2	98.047	97.728	99.356	98.316	101.176	98.869
12:11	MP17220-MB1	97.605	100.75	100.3	97.785	105.777	101.988
12:16	MP17220-B1	98.818	105.165	101.017	98.981	104.291	100.322
12:23	ZZZZZZ	99.269	100.959	102.984	99.709	96.346	93.106
12:27	ZZZZZZ	101.183	103.098	106.549	101.676	97.707	94.681
12:32	ZZZZZZ	99.226	99.794	103.324	100.44	93.852	90.051
12:37	ZZZZZZ	99.523	103.858	104.254	100.175	96.941	92.936
12:42	ZZZZZZ	101.708	104.821	105.874	102.739	96.851	93.597
12:47	ZZZZZZ	104.774	107.376	109.159	104.591	110.007	105.286
12:52	MA47431-CCVA3	104.528	104.777	108.616	104.838	106.09	102.807

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
12:57	MA47431-CCB3	103.561	106.27	106.563	103.366	107.759	103.859
13:02	ZZZZZZ	100.983	101.524	104.713	101.548	97.928	93.029
13:07	ZZZZZZ	99.196	100.885	103.135	99.515	95.649	91.662
13:12	ZZZZZZ	99.877	100.968	104.446	100.135	95.99	91.487
13:17	ZZZZZZ	101.751	101.691	105.183	102.455	104.137	99.83
13:22	ZZZZZZ	97.258	101.235	102.359	98.632	98.785	94.284
13:27	ZZZZZZ	98.995	103.051	104.37	99.72	103.128	98.649
13:32	ZZZZZZ	98.876	103.7	103.33	99.81	104.028	98.991
13:37	ZZZZZZ	96.483	98.282	102.286	98.128	94.091	89.79
13:42	MA47431-CCVA4	94.917	99.015	106.525	95.537	105.112	93.532
13:47	MA47431-CCB4	97.676	97.531	101.974	97.932	102.758	98.989
13:52	ZZZZZZ	96.261	96.554	99.941	96.445	94.473	89.295
13:57	ZZZZZZ	95.02	96.89	100.097	95.578	95.131	90.704
14:02	MA47431-CCVA5	96.443	96.313	95.414	96.619	95.129	95.021
14:07	MA47431-CCB5	97.297	95.65	99.711	97.498	100.6	98.03
14:12	MP17220-S1	93.399	94.972	97.571	94.704	91.294	87.464
14:17	MP17220-S2	92.756	94.279	97.851	93.576	90.674	86.19
14:22	JC94229-1	90.99	94.587	100.103	91.209	93.185	84.132
14:27	MP17220-SD1	97.515	95.201	100.336	96.909	97.832	94.67
14:32	ZZZZZZ	92.999	95.625	97.714	94.453	93.91	90.23
14:37	ZZZZZZ	93.782	96.981	98.869	94.872	98.727	93.857
14:42	ZZZZZZ	93.027	96.113	98.716	94.293	98.001	93.101
14:47	ZZZZZZ	91.458	91.891	97.838	93.255	90.414	84.808
14:52	MA47431-CCVA6	93.329	92.5	98.11	93.028	95.706	91.65
14:57	MA47431-CCB6	94.463	90.859	96.962	93.399	97.6	94.312
15:02	ZZZZZZ	91.993	91.815	96.295	92.798	88.905	85.886
15:07	ZZZZZZ	90.606	89.369	94.738	91.294	88.748	86.173
15:12	ZZZZZZ	91.428	90.453	94.453	91.532	89.259	86.063
15:17	ZZZZZZ	96.186	89.51	96.031	96.439	96.882	95.851
15:22	ZZZZZZ	87.309	87.07	92.402	87.845	83.636	80.327
15:27	ZZZZZZ	91.226	88.805	91.598	92.488	84.295	84.887
15:32	ZZZZZZ	93.375	91.106	95.201	93.353	95.522	93.176
15:37	ZZZZZZ	91.551	88.898	93.215	91.814	93.769	92.073

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:42	MA47431-CCVA7	89.365	87.536	91.649	89.437	89.768	87.39
15:47	MA47431-CCB7	90.558	87.54	91.992	90.469	92.408	90.651
15:52	ZZZZZZ	90.36	87.39	92.227	90.661	92.565	91
15:57	ZZZZZZ	91.705	86.687	92.106	92.311	88.667	87.916
16:02	ZZZZZZ	88.711	88.644	89.891	89.02	93.125	90.28
16:07	ZZZZZZ	88.474	90.111	91.499	88.441	89.813	87.923
16:12	MP17203-S1	87.606	87.625	94.179	91.971	86.596	83.259
16:17	MP17203-S2	88.108	87.496	94.563	92.298	86.295	84.274
16:22	ZZZZZZ	83.712	81.666	87.011	84.262	76.969	74.977
16:27	ZZZZZZ	85.659	80.404	86.085	86.038	76.546	75.859
16:32	MA47431-CCVA8	87.706	85.862	88.25	88.056	86.374	85.812
16:37	MA47431-CCB8	88.857	87.101	89.26	88.863	89.242	88.872
16:42	ZZZZZZ	86.547	85.477	86.989	86.191	82.765	81.838
16:47	ZZZZZZ	80.091	85.237	87.984	80.628	79.338	72.519
16:52	ZZZZZZ	88.577	87.327	89.858	88.849	83.993	83.347
16:57	ZZZZZZ	87.512	85.291	88.895	87.491	81.988	79.85
17:02	ZZZZZZ	88.346	86.142	88.573	88.173	80.878	80.727
17:07	ZZZZZZ	85.579	84.633	85.972	86.126	80.327	79.609
17:12	ZZZZZZ	90.606	86.23	90.91	90.093	91.446	90.751
17:17	ZZZZZZ	88.047	83.868	87.89	87.484	87.294	86.104
17:22	MA47431-CCVA9	86.62	83.627	87.225	87.158	85.43	84.559
17:27	MA47431-CCB9	86.898	84.003	86.891	87.233	87.045	87.475
17:32	MP17187-S1	85.739	79.766	85.872	86.48	79.436	79.237
17:37	MP17187-S2	83.491	79.512	84.88	84.301	77.977	77.796
17:42	JC94351-5	82.373	73.633	83.418	83.071	77.158	76.837
17:47	MP17229-MB1	88.396	81.031	85.478	87.815	86.992	88.857
17:52	MP17229-B1	84.543	80.94	85.31	84.843	83.943	83.664
17:57	MP17229-S1	86.051	81.645	93.04	92.413	83.072	83.133
18:02	MP17229-S2	85.156	81.81	93.064	90.495	84.477	82.745
18:07	JC94207-16AR	84.041	82.532	95.396	91.727	85.732	81.911
18:12	MA47431-CCVA10	85.382	82.094	85.547	85.825	83.752	83.137
18:17	MA47431-CCB10	85.238	82.225	85.868	85.214	85.976	84.822
18:22	MP17229-SD1	No results reported for the elements associated with this internal standard.					

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
18:27	ZZZZZZ	No results reported for the elements associated with this internal standard.					
18:32	ZZZZZZ	86.636	84.912	94.602	92.694	86.448	84.778
18:37	ZZZZZZ	88.392	84.442	94.484	93.883	87.095	85.755
18:42	ZZZZZZ	88.769	85.382	96.691	94.792	87.738	86.823
18:47	ZZZZZZ	89.306	87.333	94.474	93.138	87.262	86.387
18:52	ZZZZZZ	89.176	86.455	95.515	94.866	86.932	86.922
18:57	ZZZZZZ	89.212	87.124	95.603	94.459	88.533	88.278
19:02	MP17229-SD1	92.739	89.25	93.476	94.119	92.22	91.457
19:07	ZZZZZZ	89.051	80.898	88.564	89.007	88.714	88.366
19:12	MA47431-CCVA11	89.499	87.461	90.097	89.221	87.275	86.135
19:17	MA47431-CCB11	88.321	87.113	89.041	87.864	88.602	87.728
19:22	ZZZZZZ	90.5	87.834	98.237	96.665	89.367	88.363
19:27	ZZZZZZ	86.517	85.673	93.029	91.482	82.761	81.628
19:32	MP17232A-MB1	83.855	86.785	85.211	84.383	87.959	85.194
19:37	MP17232A-B2	84.886	88.152	88.618	85.595	86.053	84.014
19:42	MP17232A-S3	No results reported for the elements associated with this internal standard.					
19:47	MP17232A-S4	No results reported for the elements associated with this internal standard.					
19:52	JC94613-1	No results reported for the elements associated with this internal standard.					
19:57	MP17232A-SD1	No results reported for the elements associated with this internal standard.					
20:02	MP17232A-PS1	No results reported for the elements associated with this internal standard.					
20:07	MA47431-CCVA12	89.114	89.386	90.18	88.804	86.008	85.365
20:12	MA47431-CCB12	91.114	87.749	89.441	90.554	87.7	89.155
20:17	ZZZZZZ	85.075	87.209	87.197	84.948	83.385	81.916
20:22	JC94613-2	No results reported for the elements associated with this internal standard.					
20:27	MP17239-MB1	84.389	87.061	85.832	84.467	85.281	82.896
20:32	ZZZZZZ	82.875	84.761	84.719	83.001	83.463	81.45
20:37	ZZZZZZ	82.418	84.976	84.004	82.404	82.712	81.133
20:42	ZZZZZZ	82.197	83.914	83.638	81.878	82.151	80.847
20:47	ZZZZZZ	81.577	84.572	83.309	81.4	81.982	80.523
20:52	MP17239-B1	82.307	86.477	84.463	82.538	81.818	79.816
20:57	MA47431-CCVA13	83.969	83.262	86.863	83.266	82.96	79.931
21:02	MA47431-CCB13	79.315	79.679	79.134	78.988	77.347	77.744
21:07	MP17239-S1	No results reported for the elements associated with this internal standard.					

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
21:12	MP17239-S2	No results reported for the elements associated with this internal standard.					
21:17	JC94499-17	No results reported for the elements associated with this internal standard.					
21:22	MP17239-SD1	No results reported for the elements associated with this internal standard.					
21:27	ZZZZZZ	92.141	88.443	89.417	91.007	84.923	85.123
21:32	ZZZZZZ	69.584 !a	61.729 !a	66.913 !a	68.964 !a	49.699 !a	49.984 !a
21:37	ZZZZZZ	70.394	63.08 !a	67.221 !a	69.813 !a	49.021 !a	49.701 !a
21:42	ZZZZZZ	71.08	62.97 !a	67.494 !a	70.526	48.925 !a	50.04 !a
21:47	MA47431-CCVA14	91.68	87.169	87.897	91.527	80.738	82.606
21:52	MA47431-CCB14	88.388	81.121	84.846	87.157	81.075	83.41
21:57	ZZZZZZ	70.908	61.801 !a	68.377 !a	70.353	51.021 !a	50.997 !a
22:02	ZZZZZZ	71.836	62.102 !a	69.178 !a	71.335	49.932 !a	50.272 !a
22:07	ZZZZZZ	72.991	62.902 !a	69.854 !a	71.89	48.938 !a	50.307 !a
22:12	ZZZZZZ	72.843	60.436 !a	70.485	72.066	49.768 !a	50.37 !a
22:17	ZZZZZZ	72.123	63.425 !a	69.965 !a	71.004	49.266 !a	49.867 !a
22:22	ZZZZZZ	72.168	62.955 !a	70.826	71.483	49.515 !a	49.169 !a
22:27	MA47431-CCVA15	95.418	89.844	92.431	94.538	83.12	83.58
22:32	MA47431-CCB15	90.397	86.764	90.999	89.027	85.313	83.534
22:37	ZZZZZZ	71.609	61.066 !a	71.009	70.745	51.706 !a	50.723 !a
22:42	ZZZZZZ	97.033	91.483	94.274	95.808	87.04	87.774
22:47	ZZZZZZ	88.482	83.44	88.465	88.909	72.938	72.282
22:52	ZZZZZZ	90.746	86.969	90.058	89.912	86.214	84.503
22:57	ZZZZZZ	87.449	83.623	86.728	86.9	83.813	82.802
23:02	ZZZZZZ	85.181	81.226	85.382	84.512	81.865	81.522
23:07	MA47431-CCVA16	87.325	78.386	81.532	86.897	76.486	80.397
23:12	MA47431-CCB16	83.636	80.525	83.525	83.381	81.052	80.194
23:17	ZZZZZZ	82.169	79.22	82.656	82.673	80.263	80.031
23:22	ZZZZZZ	85.336	78.017	82.778	85.058	79.761	82.258
23:27	ZZZZZZ	82.03	79.699	82.152	81.741	79.766	79.243

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#17	Terbium (159-2)	60-125 %
Istd#18	Terbium (159-3)	60-125 %
Istd#19	Holmium (165-1)	60-125 %
Istd#20	Holmium (165-2)	60-125 %
Istd#21	Bismuth (209-1)	60-125 %
Istd#22	Bismuth (209-2)	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47431
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22

(a) No samples reported for the elements associated with this internal standard.

10.2.2 10

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47431 Units: ug/l

Time:				11:26		11:36		12:06	
Sample ID:				ICB1		CCB1		CCB2	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28	20						
Antimony	2.0	.094	1.5						
Arsenic	0.50	.013	1.0	-0.00453	<1.5	0.0150	<1.5	0.00815	<1.5
Barium	1.0	.008	0.50						
Beryllium	0.50	.004	0.25						
Boron	25	.65	20						
Cadmium	0.50	.004	2.0						
Calcium	250	6.1	50						
Chromium	1.0	.014	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.021	4.0						
Iron	25	.43	13						
Lead	0.50	.009	1.0						
Magnesium	250	.15	130						
Manganese	1.0	.007	1.0						
Molybdenum	1.0	.015	0.50						
Nickel	1.0	.017	3.0						
Potassium	250	.71	50						
Selenium	0.50	.072	0.50						
Silver	0.50	.004	0.50						
Sodium	250	1	100						
Strontium	5.0	.003	5.0						
Thallium	0.50	.004	0.50						
Tin	5.0	.071	2.5						
Titanium	1.0	.035	1.0						
Vanadium	1.0	.009	1.0						
Zinc	5.0	.029	7.5						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47431 Units: ug/l

Time:				12:57		13:47		14:07	
Sample ID:				CCB3		CCB4		CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28	20						
Antimony	2.0	.094	1.5						
Arsenic	0.50	.013	1.0	0.0127	<0.50	0.0103	<0.50	0.00846	<0.50
Barium	1.0	.008	0.50						
Beryllium	0.50	.004	0.25						
Boron	25	.65	20						
Cadmium	0.50	.004	2.0						
Calcium	250	6.1	50						
Chromium	1.0	.014	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.021	4.0						
Iron	25	.43	13						
Lead	0.50	.009	1.0						
Magnesium	250	.15	130						
Manganese	1.0	.007	1.0						
Molybdenum	1.0	.015	0.50						
Nickel	1.0	.017	3.0						
Potassium	250	.71	50						
Selenium	0.50	.072	0.50						
Silver	0.50	.004	0.50						
Sodium	250	1	100						
Strontium	5.0	.003	5.0						
Thallium	0.50	.004	0.50						
Tin	5.0	.071	2.5						
Titanium	1.0	.035	1.0						
Vanadium	1.0	.009	1.0						
Zinc	5.0	.029	7.5						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47431 Units: ug/l

Time:				14:57		15:47		16:37	
Sample ID:				CCB6		CCB7		CCB8	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28	20						
Antimony	2.0	.094	1.5						
Arsenic	0.50	.013	1.0	0.000771	<0.50	0.0189	<0.50	0.0101	<0.50
Barium	1.0	.008	0.50						
Beryllium	0.50	.004	0.25						
Boron	25	.65	20						
Cadmium	0.50	.004	2.0						
Calcium	250	6.1	50						
Chromium	1.0	.014	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.021	4.0						
Iron	25	.43	13						
Lead	0.50	.009	1.0						
Magnesium	250	.15	130						
Manganese	1.0	.007	1.0						
Molybdenum	1.0	.015	0.50						
Nickel	1.0	.017	3.0						
Potassium	250	.71	50						
Selenium	0.50	.072	0.50						
Silver	0.50	.004	0.50						
Sodium	250	1	100						
Strontium	5.0	.003	5.0						
Thallium	0.50	.004	0.50						
Tin	5.0	.071	2.5						
Titanium	1.0	.035	1.0						
Vanadium	1.0	.009	1.0						
Zinc	5.0	.029	7.5						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47431 Units: ug/l

Time:				17:27		18:17		19:17	
Sample ID:				CCB9		CCB10		CCB11	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28	20						
Antimony	2.0	.094	1.5						
Arsenic	0.50	.013	1.0	0.0145	<0.50	0.0178	<0.50	0.00777	<0.50
Barium	1.0	.008	0.50						
Beryllium	0.50	.004	0.25						
Boron	25	.65	20						
Cadmium	0.50	.004	2.0						
Calcium	250	6.1	50						
Chromium	1.0	.014	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.021	4.0						
Iron	25	.43	13						
Lead	0.50	.009	1.0						
Magnesium	250	.15	130						
Manganese	1.0	.007	1.0						
Molybdenum	1.0	.015	0.50						
Nickel	1.0	.017	3.0						
Potassium	250	.71	50						
Selenium	0.50	.072	0.50						
Silver	0.50	.004	0.50						
Sodium	250	1	100						
Strontium	5.0	.003	5.0						
Thallium	0.50	.004	0.50						
Tin	5.0	.071	2.5						
Titanium	1.0	.035	1.0						
Vanadium	1.0	.009	1.0						
Zinc	5.0	.029	7.5						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47431 Units: ug/l

Time:				20:12	
Sample ID:				CCB12	
Metal	RL	IDL	LOD	raw	final
Aluminum	25	.28	20		
Antimony	2.0	.094	1.5		
Arsenic	0.50	.013	1.0	0.0671	<1.5
Barium	1.0	.008	0.50		
Beryllium	0.50	.004	0.25		
Boron	25	.65	20		
Cadmium	0.50	.004	2.0		
Calcium	250	6.1	50		
Chromium	1.0	.014	3.0		
Cobalt	0.50	.002	0.25		
Copper	2.0	.021	4.0		
Iron	25	.43	13		
Lead	0.50	.009	1.0		
Magnesium	250	.15	130		
Manganese	1.0	.007	1.0		
Molybdenum	1.0	.015	0.50		
Nickel	1.0	.017	3.0		
Potassium	250	.71	50		
Selenium	0.50	.072	0.50		
Silver	0.50	.004	0.50		
Sodium	250	1	100		
Strontium	5.0	.003	5.0		
Thallium	0.50	.004	0.50		
Tin	5.0	.071	2.5		
Titanium	1.0	.035	1.0		
Vanadium	1.0	.009	1.0		
Zinc	5.0	.029	7.5		

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47431 Units: ug/l

Time:		11:10			11:15			11:31	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	60	62.4	104.0				50	49.7	99.4
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47431 Units: ug/l

Time:		12:01			12:52			13:42	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	50	52.4	104.8	50	50.2	100.4	50	52.2	104.4
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47431 Units: ug/l

Time:		14:02			14:52			15:42	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	50	50.2	100.4	50	49.9	99.8	50	49.5	99.0
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47431 Units: ug/l

Time:		16:32			17:22			18:12	
Sample ID:	CCVA	CCVA8		CCVA	CCVA9		CCVA	CCVA10	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	50	49.8	99.6	50	49.5	99.0	50	49.9	99.8
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47431 Units: ug/l

Time:		19:12			20:07	
Sample ID:	CCVA	CCVA11		CCVA	CCVA12	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony	anr					
Arsenic	50	50.0	100.0	50	50.1	100.2
Barium	anr					
Beryllium						
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper						
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum						
Nickel	anr					
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

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

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA47431 Units: ug/l

Time:			11:41	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25		
Antimony	2.0	0.25	anr	
Arsenic	0.50	0.50	0.496	99.2
Barium	1.0	0.50	anr	
Beryllium	0.50	0.25		
Boron	25	2.5		
Cadmium	0.50	0.25	anr	
Calcium	250	125		
Chromium	1.0	2.0	anr	
Cobalt	0.50	0.25		
Copper	2.0	2.0		
Iron	25	25		
Lead	0.50	0.25	anr	
Magnesium	250	125		
Manganese	1.0	0.25		
Molybdenum	1.0	0.50		
Nickel	1.0	2.0		
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		
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: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091119M1L.CSV Date Analyzed: 09/11/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA47431 Units: ug/l

Time:			11:47		11:51	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	95000	95.0	93300	93.3
Antimony			0.188		0.187	
Arsenic		20	0.0645		20.6	103.0
Barium			0.254		0.218	
Beryllium			-0.00124		0.00158	
Boron		50	3.49		52.7	105.4
Cadmium		20	-0.309		19.6	98.0
Calcium	100000	100000	94300	94.3	93900	93.9
Chromium		20	0.225		20.8	104.0
Cobalt		20	0.177		20.2	101.0
Copper		20	1.58		18.3	91.5
Iron	100000	100000	90300	90.3	90600	90.6
Lead			0.0939		0.0877	
Magnesium	100000	100000	92500	92.5	90500	90.5
Manganese		20	0.545		21.2	106.0
Molybdenum	2000	2000	2070	103.5	2040	102.0
Nickel		20	0.487		20.1	100.5
Potassium	100000	100000	96000	96.0	95300	95.3
Selenium		20	0.124		20.1	100.5
Silver		20	0.0190		19.9	99.5
Sodium	100000	100000	92700	92.7	90500	90.5
Strontium	2000	2000	1940	97.0	1950	97.5
Thallium			0.00438		0.00492	
Tin	2000	2000	1830	91.5	1890	94.5
Titanium	2000	2000	1820	91.0	1800	90.0
Vanadium		20	-0.00752		20.2	101.0
Zinc		20	-0.0714		17.8	89.0

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

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:24	MA47439-STD1	1		See rerun, sample intro not stable.
10:29	MA47439-STD2	1		See rerun, sample intro not stable.
10:37	MA47439-STD3	1		STDA
10:42	MA47439-STD4	1		STDB
10:47	MA47439-STD5	1		STDC
10:52	MA47439-STD6	1		STDD
10:57	MA47439-STD7	1		STDE
11:02	MA47439-STD8	1		STDF
11:07	MA47439-STD9	1		STDG
11:12	MA47439-STD10	1		STDH
11:17	MA47439-STD11	1		STDI
11:22	MA47439-STD12	1		STDJ
11:27	ZZZZZZ	1		
11:32	ZZZZZZ	1		
11:37	MA47439-ICVA1	1		
11:42	MA47439-ICV1	1		60ppb Al.
11:47	MA47439-ICB1	1		
11:52	MA47439-CCVA1	1		
11:57	MA47439-CCB1	1		
12:02	MA47439-CRI1	1		
12:07	MA47439-ICSA1	1		
12:12	MA47439-ICSAB1	1		
12:17	ZZZZZZ	1		
12:22	MA47439-CCVA2	1		
12:27	MA47439-CCB2	1		
12:32	ZZZZZZ	25		
12:37	ZZZZZZ	2		
12:42	ZZZZZZ	2		
12:47	MP17220-S1	10		
12:52	MP17220-S2	10		
12:57	JC94229-1	10		(sample used for QC only; not part of login JC94613)
13:02	MP17220-SD1	50		
13:07	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:12	MA47439-CCVA3	1		
13:17	MA47439-CCB3	1		
13:22	ZZZZZZ	2		
13:27	ZZZZZZ	5		
13:32	ZZZZZZ	5		
13:37	ZZZZZZ	5		
13:42	ZZZZZZ	5		
13:47	MP17229-S1	25		
13:52	MP17229-S2	25		
13:57	JC94207-16AR	25		(sample used for QC only; not part of login JC94613)
14:02	MP17229-SD1	125		
14:06	MA47439-CCVA4	1		
14:11	MA47439-CCB4	1		
14:17	ZZZZZZ	25		
14:21	ZZZZZZ	25		
14:27	ZZZZZZ	10		
14:31	ZZZZZZ	10		
14:37	ZZZZZZ	10		
14:41	ZZZZZZ	10		
14:46	ZZZZZZ	25		
14:51	ZZZZZZ	50		
14:56	MA47439-CCVA5	1		
15:01	MA47439-CCB5	1		
15:06	ZZZZZZ	50		
15:11	MP17229-PS1	5		
15:16	ZZZZZZ	2		
15:21	ZZZZZZ	2		
15:26	MP17232A-S3	25		
15:31	MP17232A-S4	25		
15:36	JC94613-1	25		
15:41	MP17232A-SD1	125		
15:46	MA47439-CCVA6	1		
15:51	MA47439-CCB6	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	15:56	MP17232A-PS1	25		Not needed. Sample high
	16:01	JC94613-2	50		High RSD
---------->	Last reportable sample/prep for job JC94613				
	16:06	MP17244-MB1	1		
	16:11	MP17244-B1	1		
	16:16	MP17244-S1	1		
	16:21	MP17244-S1	5		
	16:26	MP17244-S2	1		
	16:31	MP17244-S2	5		
	16:36	MA47439-CCVA7	1		
	16:41	MA47439-CCB7	1		
---------->	Last reportable CCB for job JC94613				
	16:46	JC94442-1	1		(sample used for QC only; not part of login JC94613)
	16:51	JC94442-1	5		(sample used for QC only; not part of login JC94613)
	16:56	ZZZZZZ	1		
	17:01	ZZZZZZ	1		
	17:06	ZZZZZZ	1		
	17:11	ZZZZZZ	1		
	17:16	ZZZZZZ	1		
	17:21	ZZZZZZ	1		
	17:26	MA47439-CCVA8	1		Sc-2 out for EPA method.
	17:31	MA47439-CCB8	1		
	17:36	ZZZZZZ	5		
	17:41	MP17239-MB1	2		
	17:46	ZZZZZZ	2		
	17:51	ZZZZZZ	2		
	17:56	ZZZZZZ	2		
	18:01	ZZZZZZ	2		
	18:06	MP17239-B1	2		
	18:11	MP17239-S1	25		To reanalysis for Cd and Ag due to Indium problems.
	18:16	MA47439-CCVA9	1		
	18:21	MA47439-CCB9	1		
	18:26	MP17239-S2	25		To reanalysis for Cd and Ag due to Indium problems.
	18:31	JC94499-17	25		(sample used for QC only; not part of login JC94613)
	18:36	MP17239-SD1	125		To reanalysis for Cd and Ag due to Indium problems.

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:41	ZZZZZZ	25		
18:46	JC94499-17	25		(sample used for QC only; not part of login JC94613)
18:51	ZZZZZZ	25		
18:56	ZZZZZZ	25		
19:01	ZZZZZZ	25		
19:06	ZZZZZZ	25		
19:11	MA47439-CCVA10	1		
19:16	MA47439-CCB10	1		
19:21	ZZZZZZ	25		
19:26	ZZZZZZ	25		
19:31	ZZZZZZ	25		
19:36	ZZZZZZ	25		
19:41	ZZZZZZ	25		
19:46	ZZZZZZ	25		
19:51	ZZZZZZ	25		
19:56	ZZZZZZ	1		
20:01	MA47439-CCVA11	1		Se high RSD
20:06	MA47439-CCB11	1		
20:11	ZZZZZZ	2		
20:16	ZZZZZZ	5		
20:21	ZZZZZZ	1		
20:26	ZZZZZZ	1		
20:31	MA47439-CCVA12	1		
20:36	MA47439-CCB12	1		
20:41	ZZZZZZ	1		
20:46	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Element: Dilution	As	
11:27	ZZZZZZ	1		
11:32	ZZZZZZ	1		
11:37	MA47439-ICVA1	1	X	
11:42	MA47439-ICV1	1		
11:47	MA47439-ICB1	1	X	
11:52	MA47439-CCVA1	1	X	
11:57	MA47439-CCB1	1	X	
12:02	MA47439-CRI1	1	X	
12:07	MA47439-ICSA1	1	X	
12:12	MA47439-ICSAB1	1	X	
12:17	ZZZZZZ	1		
12:22	MA47439-CCVA2	1	X	
12:27	MA47439-CCB2	1	X	
12:32	ZZZZZZ	25		
12:37	ZZZZZZ	2		
12:42	ZZZZZZ	2		
12:47	MP17220-S1	10		
12:52	MP17220-S2	10		
12:57	JC94229-1	10		(a)
13:02	MP17220-SD1	50		
13:07	ZZZZZZ	2		
13:12	MA47439-CCVA3	1	X	
13:17	MA47439-CCB3	1	X	
13:22	ZZZZZZ	2		
13:27	ZZZZZZ	5		
13:32	ZZZZZZ	5		
13:37	ZZZZZZ	5		
13:42	ZZZZZZ	5		
13:47	MP17229-S1	25		
13:52	MP17229-S2	25		
13:57	JC94207-16AR	25		(a)
14:02	MP17229-SD1	125		
14:06	MA47439-CCVA4	1	X	
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Element: Dilution	As
14:11	MA47439-CCB4	1	X
14:17	ZZZZZZ	25	
14:21	ZZZZZZ	25	
14:27	ZZZZZZ	10	
14:31	ZZZZZZ	10	
14:37	ZZZZZZ	10	
14:41	ZZZZZZ	10	
14:46	ZZZZZZ	25	
14:51	ZZZZZZ	50	
14:56	MA47439-CCVA5	1	X
15:01	MA47439-CCB5	1	X
15:06	ZZZZZZ	50	
15:11	MP17229-PS1	5	
15:16	ZZZZZZ	2	
15:21	ZZZZZZ	2	
15:26	MP17232A-S3	25	X
15:31	MP17232A-S4	25	X
15:36	JC94613-1	25	X
15:41	MP17232A-SD1	125	X
15:46	MA47439-CCVA6	1	X
15:51	MA47439-CCB6	1	X
15:56	MP17232A-PS1	25	
16:01	JC94613-2	50	
16:06	MP17244-MB1	1	
16:11	MP17244-B1	1	
16:16	MP17244-S1	1	X
16:21	MP17244-S1	5	
16:26	MP17244-S2	1	X
16:31	MP17244-S2	5	
16:36	MA47439-CCVA7	1	X
16:41	MA47439-CCB7	1	X
16:46	JC94442-1	1	CCV8 out on Sc-2
16:51	JC94442-1	5	CCV8 out on Sc-2
		Element:	As

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Element: Dilution	As
16:56	ZZZZZZ	1	
17:01	ZZZZZZ	1	
17:06	ZZZZZZ	1	
17:11	ZZZZZZ	1	
17:16	ZZZZZZ	1	
17:21	ZZZZZZ	1	
17:26	MA47439-CCVA8	1	X
17:31	MA47439-CCB8	1	X
17:36	ZZZZZZ	5	
17:41	MP17239-MB1	2	X
17:46	ZZZZZZ	2	
17:51	ZZZZZZ	2	
17:56	ZZZZZZ	2	
18:01	ZZZZZZ	2	
18:06	MP17239-B1	2	X
18:11	MP17239-S1	25	X
18:16	MA47439-CCVA9	1	X
18:21	MA47439-CCB9	1	X
18:26	MP17239-S2	25	X
18:31	JC94499-17	25	X (a)
18:36	MP17239-SD1	125	X
18:41	ZZZZZZ	25	
18:46	JC94499-17	25	confirmation
18:51	ZZZZZZ	25	
18:56	ZZZZZZ	25	
19:01	ZZZZZZ	25	
19:06	ZZZZZZ	25	
19:11	MA47439-CCVA10	1	X
19:16	MA47439-CCB10	1	X
19:21	ZZZZZZ	25	
19:26	ZZZZZZ	25	
19:31	ZZZZZZ	25	
19:36	ZZZZZZ	25	
		Element:	As

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Element: Dilution	As
19:41	ZZZZZZ	25	
19:46	ZZZZZZ	25	
19:51	ZZZZZZ	25	
19:56	ZZZZZZ	1	
20:01	MA47439-CCVA11	1	X
20:06	MA47439-CCB11	1	X
20:11	ZZZZZZ	2	
20:16	ZZZZZZ	5	
20:21	ZZZZZZ	1	
20:26	ZZZZZZ	1	
20:31	MA47439-CCVA12	1	X
20:36	MA47439-CCB12	1	X
20:41	ZZZZZZ	1	
20:46	ZZZZZZ	1	

(a) Sample used for QC only; not part of login JC94613.

Element: As

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:24	MA47439-STD1	No results reported for the elements associated with this internal standard.							
10:29	MA47439-STD2	No results reported for the elements associated with this internal standard.							
10:37	MA47439-STD3	100	100	100	100	100	100	100	100
10:42	MA47439-STD4	101.905	101.06	105.722	98.386	101.63	103.963	99.87	101.01
10:47	MA47439-STD5	100.412	98.531	102.538	98.033	98.686	103.487	99.288	99.051
10:52	MA47439-STD6	102.374	100.318	104.383	97.897	100.723	103.441	98.586	99.661
10:57	MA47439-STD7	102.042	99.41	103.335	97.648	100.754	103.036	97.934	99.996
11:02	MA47439-STD8	101.092	98.623	102.546	96.885	99.832	101.151	98.076	99.259
11:07	MA47439-STD9	101.095	99.034	103.386	97.331	100.17	101.948	99.148	99.814
11:12	MA47439-STD10	102.311	100.687	103.78	99.305	100.791	104.008	100.294	101.385
11:17	MA47439-STD11	101.088	99.073	104.082	98.996	99.606	103.86	99.419	99.515
11:22	MA47439-STD12	102.579	101.69	105.558	99.464	101.813	104.008	100.319	100.89
11:27	ZZZZZZ	103.192	100.204	104.405	97.452	100.85	101.86	99.238	100.746
11:32	ZZZZZZ	106.494	105.039	104.75	97.662	103.716	104.464	99.78	104.776
11:37	MA47439-ICVA1	102.486	101.502	105.195	90.043	101.207	103.374	93.44	102.457
11:42	MA47439-ICV1	100.648	99.006	99.105	96.551	100.002	98.999	98.408	99.077
11:47	MA47439-ICB1	103.666	99.802	103.204	96.682	101.678	103.386	98.429	100.211
11:52	MA47439-CCVA1	105.492	103.684	107.168	98.681	103.187	105.635	98.392	103.568
11:57	MA47439-CCB1	103.252	101.012	106.063	98.726	101.391	103.827	100.445	100.939
12:02	MA47439-CRI1	103.647	103.094	107.28	100.093	103.768	106.907	100.793	103.248
12:07	MA47439-ICSA1	100.304	101.305	107.887	103.171	100.614	104.618	100.371	97.476
12:12	MA47439-ICSAB1	94.837	97.726	103.711	101.934	98.304	100.057	98.776	95.152
12:17	ZZZZZZ	87.398	90.796	98.026	94.517	94.641	98.552	98.182	94.824
12:22	MA47439-CCVA2	89.124	93.694	99.883	98.795	97.354	100.096	98.706	97.796
12:27	MA47439-CCB2	90.995	93.728	99.993	96.579	97.109	100.73	97.275	97.831
12:32	ZZZZZZ	97.427	104.433	114.519	104.127	103.446	109.088	100.835	103.645
12:37	ZZZZZZ	94.929	99.263	104.311	103.011	105.378	107.87	105.701	105.005
12:42	ZZZZZZ	87.136	91.75	97.26	102.429	101.642	105.306	104.992	102.002
12:47	MP17220-S1	93.772	98.18	105.481	105.106	101.191	105.63	103.159	101.306
12:52	MP17220-S2	96.042	98.764	104.503	102.593	102.283	103.738	101.729	101.821
12:57	JC94229-1	97.246	99.156	106.318	105.062	103.488	106.078	103.117	102.814
13:02	MP17220-SD1	98.228	99.116	105.488	110.489	102.57	106.385	108.621	102.789
13:07	ZZZZZZ	89.993	93.141	98.404	102.135	105.689	108.908	105.898	104.895

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
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File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:12	MA47439-CCVA3	94.046	96.81	102.549	100.815	99.993	102.597	99.976	100.101
13:17	MA47439-CCB3	96.494	96.559	102.487	100.545	100.673	103.428	101.286	100.503
13:22	ZZZZZZ	89.105	91.349	97.724	101.474	100.872	104.195	103.784	101.036
13:27	ZZZZZZ	91.658	97.667	103.052	98.687	95.625	98.587	93.807	96.464
13:32	ZZZZZZ	96.467	96.841	102.897	100.44	101.102	104.827	101.582	101.554
13:37	ZZZZZZ	92.48	94.198	98.597	99.112	98.703	101.202	98.507	98.773
13:42	ZZZZZZ	90.153	92.533	98.001	98.767	97.32	100.461	99.871	97.528
13:47	MP17229-S1	94.173	96.254	100.519	100.458	99.578	102.154	99.647	98.767
13:52	MP17229-S2	93.883	96.611	100.512	99.257	100.002	101.522	99.601	99.399
13:57	JC94207-16AR	93.328	96.967	102.801	100.55	100.038	102.923	99.548	99.228
14:02	MP17229-SD1	96.197	97.707	102.16	100.436	100.741	103.745	100.994	100.964
14:06	MA47439-CCVA4	96.416	98.086	104.567	101.412	100.934	103.9	99.742	101.323
14:11	MA47439-CCB4	95.544	98.042	103.309	101.036	100.838	104.163	100.419	100.885
14:17	ZZZZZZ	95.758	99.977	105.781	102.366	101.633	106.095	99.028	101.931
14:21	ZZZZZZ	97.735	103.105	105.531	111.472	105.125	107.226	107.607	104.137
14:27	ZZZZZZ	95.684	103.889	109.582	108.069	104.807	108.031	104.416	103.716
14:31	ZZZZZZ	96.868	104.784	110.364	107.321	105.378	107.929	104.113	104.565
14:37	ZZZZZZ	98.456	104.696	108.142	107.028	105.919	108.701	104.025	104.748
14:41	ZZZZZZ	97.824	105.853	109.25	108.268	107.418	108.721	105.664	106.598
14:46	ZZZZZZ	98.802	103.725	108.811	106.113	105.957	108.947	104.503	105.175
14:51	ZZZZZZ	100.692	103.529	107.751	104.821	106.612	108.649	104.377	106.716
14:56	MA47439-CCVA5	101.21	103.518	107.218	103.269	105.848	107.609	102.625	106.009
15:01	MA47439-CCB5	100.3	101.512	105.016	101.987	104.994	107.092	102.968	104.207
15:06	ZZZZZZ	96.822	99.293	100.909	98.961	102.028	101.781	98.819	100.997
15:11	MP17229-PS1	98.406	106.935	109.427	106.529	105.821	106.52	103.213	104.525
15:16	ZZZZZZ	86.045	86.844	90.546	95.338	101.434	103.657	100.183	101.926
15:21	ZZZZZZ	86.611	87.898	91.576	97.52	99.518	102.846	99.967	100.489
15:26	MP17232A-S3	94.135	94.215	97.957	96.89	98.79	99.508	97.647	98.06
15:31	MP17232A-S4	93.391	94.52	99.096	97.723	98.394	100.089	97.052	97.559
15:36	JC94613-1	94.044	94.245	98.99	99.445	98.554	100.105	99.296	98.037
15:41	MP17232A-SD1	94.762	95.793	100.18	96.926	99.523	101.373	97.893	98.959
15:46	MA47439-CCVA6	97.595	99.066	104.041	99.844	100.59	104.266	98.54	102.027
15:51	MA47439-CCB6	98.421	97.101	102.099	97.264	99.96	102.61	97.698	99.23

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:56	MP17232A-PS1	96.192	97.101	101.691	98.7	100.962	103.033	97.695	100.017
16:01	JC94613-2	95.187	95.993	102.467	97.71	100.499	103.617	98.046	98.933
16:06	MP17244-MB1	98.212	97.815	103.015	98.46	100.281	102.015	98.996	100.019
16:11	MP17244-B1	99.762	100.273	106.077	101.23	102.587	105.386	99.903	102.078
16:16	MP17244-S1	93.998	99.131	105.63	99.312	96.203	99.44	92.861	96.005
16:21	MP17244-S1	94.832	95.204	100.686	95.461	96.422	99.757	93.778	96.865
16:26	MP17244-S2	90.67	95.672	101.858	95.827	92.181	95.765	90.391	92.279
16:31	MP17244-S2	89.964	91.366	96.961	87.241	93.956	96.13	88.326	94.484
16:36	MA47439-CCVA7	87.155	89.423	95.049	92.831	90.564	95.092	92.193	90.517
16:41	MA47439-CCB7	91.999	92.603	97.975	95.372	95.795	99.569	94.879	95.207
16:46	JC94442-1	No results reported for the elements associated with this internal standard.							
16:51	JC94442-1	No results reported for the elements associated with this internal standard.							
16:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:01	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:11	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:16	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:21	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:26	MA47439-CCVA8	123.708	122.161	127.022	!a116.801	116.524	118.849	111.932	116.367
17:31	MA47439-CCB8	100.179	101.044	108.582	104.23	103.179	107.66	102.724	102.397
17:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:41	MP17239-MB1	85.427	89.896	96.372	98.651	105.395	110.985	100.636	104.421
17:46	ZZZZZZ	87.599	90.341	95.31	90.64	103.736	106.292	96.171	102.946
17:51	ZZZZZZ	87.794	90.136	96.024	97.983	102.653	105.956	104.885	102.828
17:56	ZZZZZZ	88.479	90.965	96.675	98.96	104.08	106.727	102.223	103.87
18:01	ZZZZZZ	89.568	91.478	97.833	98.881	105.362	106.901	101.362	103.736
18:06	MP17239-B1	86.416	88.979	94.458	95.556	100.101	102.353	97.474	100.53
18:11	MP17239-S1	97.313	102.301	109.389	99.867	100.672	103.511	93.93	100.69
18:16	MA47439-CCVA9	93.097	93.32	93.85	95.441	95.927	92.31	92.999	96.073
18:21	MA47439-CCB9	94.687	96.285	102.659	96.236	98.736	101.7	95.642	98.333
18:26	MP17239-S2	100.1	104.307	111.004	100.724	102.026	104.907	94.354	101.403
18:31	JC94499-17	102.382	106.234	112.913	101.444	103.852	105.959	95.745	103.588
18:36	MP17239-SD1	105.54	104.884	109.649	99.836	105.559	107.303	97.246	105.601

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
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File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:41	ZZZZZZ	100.732	99.961	104.07	96.964	101.896	102.878	95.167	101.329
18:46	JC94499-17	No results reported for the elements associated with this internal standard.							
18:51	ZZZZZZ	102.915	105.871	108.311	101.596	102.556	103.444	95.072	102.242
18:56	ZZZZZZ	105.018	106.99	113.049	102.146	103.213	107.428	94.575	103.143
19:01	ZZZZZZ	106.613	110.283	112.918	102.825	106.001	106.13	96.802	104.409
19:06	ZZZZZZ	106.63	108.461	117.624	101.836	105.68	109.322	96.413	104.473
19:11	MA47439-CCVA10	94.545	94.994	99.537	85.388	96.707	97.804	84.713	96.778
19:16	MA47439-CCB10	97.067	95.88	101.319	93.606	98.615	102.139	93.367	97.531
19:21	ZZZZZZ	103.647	106.935	114.082	101.893	103.834	108.034	95.33	103.261
19:26	ZZZZZZ	106.989	109.421	115.857	103.411	105.269	107.823	97.655	104.843
19:31	ZZZZZZ	108.019	110.392	115.94	103.314	106.139	108.076	97.233	104.802
19:36	ZZZZZZ	107.756	109.006	115.318	102.769	105.543	107.765	96.719	104.666
19:41	ZZZZZZ	105.112	106.888	113.875	100.557	103.091	106.251	94.611	101.65
19:46	ZZZZZZ	104.501	108.427	116.606	105.987	104.14	108.171	98.521	103.249
19:51	ZZZZZZ	104.399	104.152	108.094	98.322	105.959	106.128	95.904	105.141
19:56	ZZZZZZ	103.408	100.961	108.744	97.987	102.407	106.619	96.517	101.736
20:01	MA47439-CCVA11	95.596	94.959	99.723	84.89	96.777	98.206	82.559	95.808
20:06	MA47439-CCB11	96.576	95.831	101.711	94.491	97.129	100.916	94.199	97.874
20:11	ZZZZZZ	86.76	89.611	95.032	91.007	100.388	101.39	88.851	99.73
20:16	ZZZZZZ	90.915	94.173	100.307	94.189	96.436	98.936	90.271	95.697
20:21	ZZZZZZ	99.52	101.766	103.92	92.59	103.266	104.462	89.788	103.232
20:26	ZZZZZZ	100.93	100.724	105.086	95.498	103.254	104.874	94.412	102.592
20:31	MA47439-CCVA12	95.29	94.052	100.414	92.052	95.896	99.569	91.34	96.597
20:36	MA47439-CCB12	97.544	98.172	103.263	93.764	99.799	103.051	94.176	98.879
20:41	ZZZZZZ	97.938	98.71	103.384	93.792	100.148	101.766	92.698	100.451
20:46	ZZZZZZ	97.436	96.205	100.235	92.505	97.841	100.394	91.391	97.294

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (72-3)	60-125 %	60-125 %
Istd#8	Germanium (74-1)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
10:24	MA47439-STD1	No results reported for the elements associated with this internal standard.							
10:29	MA47439-STD2	No results reported for the elements associated with this internal standard.							
10:37	MA47439-STD3	100	100	100	100	100	100	100	100
10:42	MA47439-STD4	102.549	99.938	101.236	104.833	100.453	102.318	104.366	101.239
10:47	MA47439-STD5	101.305	99.593	98.178	102.746	100.666	98.689	103.16	98.665
10:52	MA47439-STD6	102.954	100.538	100.169	103.291	100.961	100.796	103.168	100.543
10:57	MA47439-STD7	101.518	99.122	99.759	102.807	100.534	100.487	102.819	100.464
11:02	MA47439-STD8	100.284	98.484	99.373	102.224	99.658	100.064	102.625	100.333
11:07	MA47439-STD9	101.091	99.994	99.62	102.357	100.883	100.333	103.342	100.267
11:12	MA47439-STD10	102.766	102.399	99.83	103.362	102.793	101.478	104.574	101.453
11:17	MA47439-STD11	102.043	99.72	98.005	102.677	100.05	99.564	103.309	100.406
11:22	MA47439-STD12	103.214	99.499	98.761	101.961	99.757	100.36	103.157	101.399
11:27	ZZZZZZ	102.44	100.062	100.8	104.054	101.891	100.991	103.208	100.193
11:32	ZZZZZZ	103.379	99.738	103.494	102.147	99.644	105.151	103.283	106.776
11:37	MA47439-ICVA1	103.292	94.791	99.815	102.328	92.159	101.955	103.504	102.32
11:42	MA47439-ICV1	97.17	98.241	99.42	99.041	100.545	100.695	98.644	99.58
11:47	MA47439-ICB1	102.386	99.496	100.945	102.86	102.256	101.182	103.396	100.626
11:52	MA47439-CCVA1	105.205	100.18	101.628	103.671	99.924	103.234	104.462	103.208
11:57	MA47439-CCB1	103.495	100.482	102.097	105.089	102.425	101.918	105.569	99.694
12:02	MA47439-CRI1	105.862	102.109	103.244	106.074	102.955	103.794	107.12	103.027
12:07	MA47439-ICSA1	99.693	97.094	92.04	95.248	92.144	97.204	98.989	100.357
12:12	MA47439-ICSAB1	98.252	95.429	91.487	93.994	91.923	96.612	96.982	100.672
12:17	ZZZZZZ	97.044	98.134	98.12	102.608	99.63	101.454	102.85	101.981
12:22	MA47439-CCVA2	99.937	99.842	98.902	101.095	99.755	101.776	102.185	103.826
12:27	MA47439-CCB2	100.193	98.341	100.816	103.56	100.614	102.445	103.872	103.669
12:32	ZZZZZZ	108.504	100.975	99.759	103.365	95.715	104.797	108.37	107.685
12:37	ZZZZZZ	107.517	106.381	106.669	108.368	106.118	108.349	108.239	109.657
12:42	ZZZZZZ	103.481	106.421	98.901	102.952	103.664	103.62	103.119	107.769
12:47	MP17220-S1	104.752	103.824	102.257	105.062	102.831	107.03	107.192	110.762
12:52	MP17220-S2	103.12	103.476	101.886	104.16	103.115	107.475	106.394	110.887
12:57	JC94229-1	104.67	103.715	102.808	105.678	103.203	108.02	107.91	110.503
13:02	MP17220-SD1	106.123	110.011	104.826	108.349	112.8	108.524	108.324	110.777
13:07	ZZZZZZ	107.179	106.98	102.311	105.228	106.364	105.47	103.952	110.833

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:12	MA47439-CCVA3	101.257	101.9	101.828	103.73	101.839	105.81	104.008	110.409
13:17	MA47439-CCB3	102.889	102.066	103.499	106.431	105.306	106.647	106.261	108.777
13:22	ZZZZZZ	103.577	104.332	99.404	102.078	104.042	103.274	102.183	108.532
13:27	ZZZZZZ	97.4	95.73	92.839	94.274	91.007	99.86	98.778	106.257
13:32	ZZZZZZ	103.907	102.421	104.047	108.156	105.403	106.698	107.612	109.46
13:37	ZZZZZZ	100.057	100.268	100.176	102.286	101.434	103.559	101.964	106.796
13:42	ZZZZZZ	99.38	99.82	95.61	99.087	98.875	101.015	100.809	106.103
13:47	MP17229-S1	100.592	99.643	101.662	103.105	102.814	103.905	102.448	108.111
13:52	MP17229-S2	101.373	99.837	101.452	104.131	101.899	104.709	103.494	108.252
13:57	JC94207-16AR	102.021	100.668	102.351	106.171	102.685	105.562	105.965	108.596
14:02	MP17229-SD1	103.016	101.209	103.678	106.04	103.369	106.203	105.766	108.671
14:06	MA47439-CCVA4	103.629	100.745	101.283	105.11	100.681	105.382	105.373	109.022
14:11	MA47439-CCB4	104.446	100.36	104.509	107.074	103.778	106.96	107.482	108.533
14:17	ZZZZZZ	105.213	101.209	103.774	105.953	102.473	106.609	106.967	109.077
14:21	ZZZZZZ	106.095	108.724	106.609	106.121	111.217	109.725	106.477	113.15
14:27	ZZZZZZ	106.812	104.009	103.654	106.888	103.542	107.576	108.223	110.212
14:31	ZZZZZZ	106.345	103.834	105.384	106.155	103.821	108.115	107.011	110.868
14:37	ZZZZZZ	106.679	104.246	105.344	107.869	104.59	108.282	107.925	111.053
14:41	ZZZZZZ	106.506	106.077	106.67	105.932	105.02	110.183	106.922	112.323
14:46	ZZZZZZ	106.888	104.159	107.529	108.756	107.048	110.562	109.218	113.781
14:51	ZZZZZZ	106.989	104.395	107.833	109.692	107.439	110.307	108.518	112.223
14:56	MA47439-CCVA5	107.398	103.132	104.864	107.197	104.32	108.708	107.318	111.511
15:01	MA47439-CCB5	105.996	102.775	106.172	108.515	106.725	108.23	107.759	109.451
15:06	ZZZZZZ	100.466	98.307	103.04	103.202	101.251	105.849	102.761	107.677
15:11	MP17229-PS1	104.227	101.221	103.13	103.478	102.202	107.179	104.492	109.521
15:16	ZZZZZZ	102.352	101.314	95.57	98.705	102.877	99.909	97.143	105.056
15:21	ZZZZZZ	102.041	101.137	95.822	98.136	101.831	100.595	97.109	106.572
15:26	MP17232A-S3	99.094	98.921	100.2	101.256	101.754	103.028	101.505	106.918
15:31	MP17232A-S4	99.737	98.166	99.484	101.875	101.589	103.132	101.58	105.792
15:36	JC94613-1	99.046	99.792	98.895	101.594	103.277	102.708	101.252	104.961
15:41	MP17232A-SD1	100.35	98.201	100.413	102.549	100.736	103.712	103.291	106.31
15:46	MA47439-CCVA6	103.186	99.681	101.628	102.994	100.616	104.081	103.735	106.071
15:51	MA47439-CCB6	102.191	98.406	101.989	104.359	102.553	103.16	104.397	105.227

INTERNAL STANDARD SUMMARY

Login Number: JC94613
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Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:56	MP17232A-PS1	100.973	99.011	101.733	102.682	100.938	103.888	103.598	105.153
16:01	JC94613-2	102.246	98.665	101.065	103.068	101.131	104.099	104.947	104.466
16:06	MP17244-MB1	101.8	99.013	102.384	103.719	102.126	104.972	104.456	104.901
16:11	MP17244-B1	104.341	100.47	102.283	104.391	101.578	104.51	105.256	105.67
16:16	MP17244-S1	98.169	94.3	90.365	92.976	88.786	97.472	99.717	103.138
16:21	MP17244-S1	99.171	94.562	95.753	97.211	93.091	100.419	100.338	102.683
16:26	MP17244-S2	95.444	91.54	88.503	90.593	86.618	95.639	97.063	101.095
16:31	MP17244-S2	96.18	88.444	92.768	94.333	86.445	98.131	97.843	101.286
16:36	MA47439-CCVA7	94.892	93.104	92.892	95.331	94.265	96.976	97.366	101.081
16:41	MA47439-CCB7	99.457	95.964	98.565	100.466	98.92	101.062	101.302	101.72
16:46	JC94442-1	No results reported for the elements associated with this internal standard.							
16:51	JC94442-1	No results reported for the elements associated with this internal standard.							
16:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:01	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:11	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:16	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:21	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:26	MA47439-CCVA8	119.116	112.124	111.684	114.272	108.113	113.951	115.524	114.918
17:31	MA47439-CCB8	106.969	103.267	103.876	108.66	105.071	106.547	109.336	105.237
17:36	ZZZZZZ	No results reported for the elements associated with this internal standard.							
17:41	MP17239-MB1	109.86	102.379	99.383	101.883	101.032	102.755	102.301	105.4
17:46	ZZZZZZ	105.15	96.67	99.384	101.094	93.543	102.93	100.526	106.312
17:51	ZZZZZZ	105.365	104.562	99.22	101.696	101.351	103.432	101.094	105.413
17:56	ZZZZZZ	106.496	103.366	100.096	101.762	101.353	103.553	101.776	106.509
18:01	ZZZZZZ	106.379	101.87	100.176	102.442	101.035	103.922	101.899	109.221
18:06	MP17239-B1	101.507	99.391	96.025	98.064	98.003	100.585	98.613	104.664
18:11	MP17239-S1	102.468	95.303	95.512	97.804	91.259	1519.14 !a	1550.734 !a	104.382
18:16	MA47439-CCVA9	91.599	94.621	95.401	91.626	94.268	99.466	93.728	101.093
18:21	MA47439-CCB9	101.207	96.349	100.767	102.107	97.934	103.116	103.62	102.519
18:26	MP17239-S2	104.169	95.324	95.948	96.644	90.573	1525.046 !a	1595.83 !a	102.547
18:31	JC94499-17	105.403	95.526	97.014	97.914	90.934	1523.303 !a	1597.763 !a	104.474
18:36	MP17239-SD1	105.335	98.005	101.283	102.441	96.136	417.381 !a	395.491 !a	104.034

INTERNAL STANDARD SUMMARY

Login Number: JC94613
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File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:41	ZZZZZZ	102.024	96.422	102.511	103.562	99.153	1569.118	!a1608.092	!a102.46
18:46	JC94499-17	No results reported for the elements associated with this internal standard.							
18:51	ZZZZZZ	101.916	95.938	96.202	93.409	90.288	1509.523	!a1591.164	!a101.205
18:56	ZZZZZZ	105.942	96.053	96.48	98.272	90.202	1543.509	!a1595.509	!a101.582
19:01	ZZZZZZ	104.498	95.987	98.656	97.705	90.477	1553.734	!a1593.484	!a103.034
19:06	ZZZZZZ	109.103	96.147	97.082	101.575	91.161	2852.341	!a2934.284	!a102.776
19:11	MA47439-CCVA10	98.414	86.06	95.214	96.79	84.424	99.054	99.141	99.162
19:16	MA47439-CCB10	100.19	93.782	99.308	101.482	96.119	101.658	102.663	100.288
19:21	ZZZZZZ	106.235	95.53	97.149	98.431	90.935	2827.205	!a2936.346	!a102.588
19:26	ZZZZZZ	106.194	97.34	97.828	98.702	92.143	2879.079	!a2963.62	!a102.943
19:31	ZZZZZZ	107.093	96.975	98.27	98.937	91.563	2866.98	!a2995.853	!a103.141
19:36	ZZZZZZ	106.16	96.244	96.888	97.988	90.572	2841.81	!a2948.565	!a101.962
19:41	ZZZZZZ	104.843	95.801	96.149	97.595	89.595	2836.765	!a2940.275	!a100.237
19:46	ZZZZZZ	106.167	99.175	96.482	98.335	93.228	2845.314	!a2943.029	!a100.427
19:51	ZZZZZZ	105.272	96.931	105.006	105.857	98.554	2976.633	!a3045.259	!a103.146
19:56	ZZZZZZ	105.25	97.021	103.366	107.41	99.732	106.157	108.76	102.577
20:01	MA47439-CCVA11	96.864	83.185	95.821	97.457	83.493	100.108	99.113	100.132
20:06	MA47439-CCB11	100.206	94.219	98.906	101.43	96.6	102.458	102.61	100.721
20:11	ZZZZZZ	100.094	89.138	82.958	84.038	80.221	90.28	89.605	94.427
20:16	ZZZZZZ	97.411	91.049	90.14	91.415	86.913	96.16	96.927	98.009
20:21	ZZZZZZ	103.362	90.635	103.981	103.145	93.099	105.379	103.484	102.751
20:26	ZZZZZZ	103.667	93.779	104.182	104.475	96.901	105.007	105.622	102.469
20:31	MA47439-CCVA12	97.764	91.606	96.358	97.22	90.89	99.035	98.694	98.85
20:36	MA47439-CCB12	101.536	94.036	100.499	102.889	96.358	102.969	103.865	101.575
20:41	ZZZZZZ	101.013	94.127	102.578	101.794	95.847	103.313	101.984	102.273
20:46	ZZZZZZ	98.643	91.924	99.761	100.223	93.757	101.928	101.104	101.278

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	60-125 %	60-125 %
Istd#10	Germanium (74-3)	60-125 %	60-125 %
Istd#11	Rhodium (103-1)	60-125 %	60-125 %
Istd#12	Rhodium (103-2)	60-125 %	60-125 %
Istd#13	Rhodium (103-3)	60-125 %	60-125 %
Istd#14	Indium (115-1)	60-125 %	60-125 %
Istd#15	Indium (115-2)	60-125 %	60-125 %
Istd#16	Terbium (159-1)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
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File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
10:24	MA47439-STD1	No results reported for the elements associated with this internal standard.					
10:29	MA47439-STD2	No results reported for the elements associated with this internal standard.					
10:37	MA47439-STD3	100	100	100	100	100	100
10:42	MA47439-STD4	104.734	100.63	101.87	105.151	100.919	103.426
10:47	MA47439-STD5	103.32	100.833	98.482	103.267	99.079	102.401
10:52	MA47439-STD6	103.979	101.537	100.084	104.789	100.593	103.405
10:57	MA47439-STD7	103.827	101.313	100.327	104.833	100.624	102.888
11:02	MA47439-STD8	103.798	101.205	100.39	104.108	100.033	103.464
11:07	MA47439-STD9	104.153	101.695	100.66	104.189	100.996	102.734
11:12	MA47439-STD10	105.518	104.586	102.383	106.014	101.712	103.397
11:17	MA47439-STD11	104.525	103.168	100.284	105.165	98.347	101.633
11:22	MA47439-STD12	105.797	102.583	101.602	105.618	98.014	100.202
11:27	ZZZZZZ	103.932	101.875	100.29	104.207	100.596	103.068
11:32	ZZZZZZ	104.553	102.228	106.027	104.33	102.698	101.258
11:37	MA47439-ICVA1	104.665	94.69	101.509	104.755	99.815	101.755
11:42	MA47439-ICV1	99.309	100.84	99.252	98.96	99.849	97.91
11:47	MA47439-ICB1	103.106	101.858	101.287	103.614	101.012	102.429
11:52	MA47439-CCVA1	105.606	102.516	103.384	106.035	100.854	102.284
11:57	MA47439-CCB1	105.175	102.173	100.78	105.112	100.835	104.124
12:02	MA47439-CRI1	106.422	102.809	102.045	106.088	102.809	104.92
12:07	MA47439-ICSA1	103.077	99.311	100.414	103.947	93.748	94.881
12:12	MA47439-ICSAB1	101.826	99.709	100.934	102.4	94.003	93.431
12:17	ZZZZZZ	104.814	100.002	102.35	105.284	102.844	104.517
12:22	MA47439-CCVA2	105.339	102.798	104.207	105.219	102.756	102.82
12:27	MA47439-CCB2	105.5	100.358	104.223	106.096	104.162	105.832
12:32	ZZZZZZ	110.508	100.693	108.006	111.416	98.406	99.485
12:37	ZZZZZZ	111.097	107.192	110.793	112.064	113.676	112.719
12:42	ZZZZZZ	108.433	107.519	109.229	109.811	109.2	109.804
12:47	MP17220-S1	110.762	106.793	111.096	111.496	108.17	107.154
12:52	MP17220-S2	110.608	107.646	111.457	110.804	108.222	106.232
12:57	JC94229-1	111.398	107.153	110.307	112.095	109.194	107.798
13:02	MP17220-SD1	111.193	113.706	110.353	111.525	109.763	110.386
13:07	ZZZZZZ	109.426	108.353	111.159	110.064	113.794	111.198

INTERNAL STANDARD SUMMARY

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Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
13:12	MA47439-CCVA3	108.562	105.205	110.209	109.673	108.613	106.722
13:17	MA47439-CCB3	108.141	105.233	107.698	108.481	109.492	109.279
13:22	ZZZZZZ	107.914	107.437	109.001	108.584	109.883	107.419
13:27	ZZZZZZ	105.223	100.169	106.804	106.459	98.335	96.448
13:32	ZZZZZZ	109.55	105.156	109.383	110.195	112.298	111.13
13:37	ZZZZZZ	105.932	104.321	107.212	107.433	107.537	106.472
13:42	ZZZZZZ	106.498	103.892	106.997	106.606	104.362	102.43
13:47	MP17229-S1	107.086	105.242	109.488	109.6	109.326	107.425
13:52	MP17229-S2	107.409	104.214	109.827	109.449	108.989	108.238
13:57	JC94207-16AR	109.801	104.382	110.491	111.909	109.742	109.922
14:02	MP17229-SD1	108.822	104.286	109.713	109.498	110.682	110.05
14:06	MA47439-CCVA4	108.59	103.722	108.559	109.048	106.866	105.763
14:11	MA47439-CCB4	108.363	103.654	109.434	108.937	109.841	108.955
14:17	ZZZZZZ	109.49	103.884	110.794	111.592	109.734	109.129
14:21	ZZZZZZ	109.932	112.834	113.779	112.453	112.457	109.36
14:27	ZZZZZZ	111.175	106.113	115.302	114.309	110.482	109.195
14:31	ZZZZZZ	110.292	105.626	115.071	114.673	110.632	108.996
14:37	ZZZZZZ	111.029	106.325	115.041	114.118	110.717	108.945
14:41	ZZZZZZ	109.842	107.249	116.074	113.339	111.256	107.966
14:46	ZZZZZZ	111.364	106.839	114.396	112.954	112.544	111.277
14:51	ZZZZZZ	110.476	106.898	112.833	111.824	112.887	111.081
14:56	MA47439-CCVA5	110.276	106.073	110.832	110.674	108.172	106.908
15:01	MA47439-CCB5	108.96	106.034	109.989	109.295	110.26	109.089
15:06	ZZZZZZ	106.262	104.214	108.573	107.386	108.051	105.895
15:11	MP17229-PS1	108.342	106.385	118.885	117.354	107.78	104.933
15:16	ZZZZZZ	103.213	105.622	105.636	104.601	109.591	106.373
15:21	ZZZZZZ	104.063	106.064	107.252	105.06	107.342	103.288
15:26	MP17232A-S3	105.551	103.736	106.933	106.057	107.194	105.509
15:31	MP17232A-S4	105.061	103.326	106.236	105.621	106.212	105.404
15:36	JC94613-1	104.9	106.384	104.502	105.031	106.486	105.467
15:41	MP17232A-SD1	104.672	102.022	105.77	105.409	106.744	105.308
15:46	MA47439-CCVA6	106.999	103.097	106.099	107.86	104.499	104.338
15:51	MA47439-CCB6	105.195	101.773	104.946	105.103	105.898	104.905

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:56	MP17232A-PS1	105.718	102.126	105.716	105.733	105.667	105.147
16:01	JC94613-2	106.185	102.027	104.203	106.617	105.774	105.813
16:06	MP17244-MB1	105.354	102.118	105.517	105.771	107.163	106.432
16:11	MP17244-B1	107.446	102.77	105.756	107.333	104.752	104.668
16:16	MP17244-S1	104.332	96.92	103.273	104.707	93.64	93.115
16:21	MP17244-S1	103.104	97.836	102.947	104.531	99.976	99.8
16:26	MP17244-S2	101.586	95.783	101.607	102.393	92.068	91.882
16:31	MP17244-S2	101.801	91.79	102.048	102.536	98.733	98.667
16:36	MA47439-CCVA7	100.798	97.859	99.727	102.156	97.362	98.465
16:41	MA47439-CCB7	102.816	99.419	101.641	102.711	102.932	102.906
16:46	JC94442-1	No results reported for the elements associated with this internal standard.					
16:51	JC94442-1	No results reported for the elements associated with this internal standard.					
16:56	ZZZZZZ	No results reported for the elements associated with this internal standard.					
17:01	ZZZZZZ	No results reported for the elements associated with this internal standard.					
17:06	ZZZZZZ	No results reported for the elements associated with this internal standard.					
17:11	ZZZZZZ	No results reported for the elements associated with this internal standard.					
17:16	ZZZZZZ	No results reported for the elements associated with this internal standard.					
17:21	ZZZZZZ	No results reported for the elements associated with this internal standard.					
17:26	MA47439-CCVA8	113.359	107.504	112.862	113.433	109.411	108.176
17:31	MA47439-CCB8	108.983	103.489	105.432	108.905	105.851	107.844
17:36	ZZZZZZ	No results reported for the elements associated with this internal standard.					
17:41	MP17239-MB1	105.428	102.541	105.726	106.441	109.061	107.586
17:46	ZZZZZZ	104.822	95.435	106.789	105.335	106.686	105.151
17:51	ZZZZZZ	105.523	103.098	106.406	105.637	106.051	105.757
17:56	ZZZZZZ	105.429	102.834	106.614	106.626	105.917	105.624
18:01	ZZZZZZ	106.136	103.023	106.876	106.966	107.335	105.391
18:06	MP17239-B1	102.836	101.562	105.841	104.21	103.561	101.99
18:11	MP17239-S1	104.471	96.476	104.925	104.999	94.146	92.834
18:16	MA47439-CCVA9	95.653	97.389	101.269	96.012	98.619	92.855
18:21	MA47439-CCB9	103.705	98.124	102.761	103.452	102.026	102.82
18:26	MP17239-S2	103.48	95.796	102.158	103.815	92.595	92.225
18:31	JC94499-17	103.473	95.517	102.396	104.302	92.654	92.654
18:36	MP17239-SD1	105.348	98.407	102.831	105.241	98.742	99.044

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47439
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
18:41	ZZZZZZ	103.051	98.738	102.617	103.52	101.709	101.843
18:46	JC94499-17	No results reported for the elements associated with this internal standard.					
18:51	ZZZZZZ	98.551	94.309	102.054	98.698	91.016	87.532
18:56	ZZZZZZ	103.276	94.401	102.301	103.169	90.871	91.113
19:01	ZZZZZZ	101.731	94.484	102.794	102.397	92.674	90.11
19:06	ZZZZZZ	106.422	95.532	102.167	106.722	91.764	93.957
19:11	MA47439-CCVA10	99.624	86.915	99.624	100.501	96.021	96.353
19:16	MA47439-CCB10	101.46	95.643	100.212	102.355	99.816	100.642
19:21	ZZZZZZ	103.935	95.255	102.436	104.397	91.635	91.739
19:26	ZZZZZZ	103.773	96.468	103.393	104.386	92.176	91.517
19:31	ZZZZZZ	103.827	95.925	103.413	104.67	91.494	91.443
19:36	ZZZZZZ	102.671	94.742	101.538	102.913	90.683	90.433
19:41	ZZZZZZ	101.74	93.435	100.282	102.132	88.8	89.619
19:46	ZZZZZZ	102.001	96.692	100.416	103.28	89.456	90.303
19:51	ZZZZZZ	104.2	97.292	103.832	105.282	101.877	102.139
19:56	ZZZZZZ	106.447	99.046	102.33	106.183	101.034	104.497
20:01	MA47439-CCVA11	99.979	85.9	100.134	100.372	96.828	96.626
20:06	MA47439-CCB11	101.369	95.915	100.774	101.633	99.867	100.614
20:11	ZZZZZZ	93.659	88.805	95.433	94.903	85.229	84.299
20:16	ZZZZZZ	98.483	93.249	98.547	99.042	90.169	90.073
20:21	ZZZZZZ	101.6	92.289	103.081	101.054	101.103	99.784
20:26	ZZZZZZ	103.485	95.545	102.994	103.379	101.291	102.469
20:31	MA47439-CCVA12	99.541	93.722	98.491	99.876	96.155	96.38
20:36	MA47439-CCB12	102.63	95.379	100.764	103.089	100.189	101.496
20:41	ZZZZZZ	101.517	94.948	101.956	101.721	101.537	100.664
20:46	ZZZZZZ	101	93.227	101.431	101.258	100.611	100.606

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	60-125 %	60-125 %
Istd#18	Terbium (159-3)	60-125 %	60-125 %
Istd#19	Holmium (165-1)	60-125 %	60-125 %
Istd#20	Holmium (165-2)	60-125 %	60-125 %
Istd#21	Bismuth (209-1)	60-125 %	60-125 %
Istd#22	Bismuth (209-2)	60-125 %	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47439 Units: ug/l

Time:				11:47		11:57		12:27	
Sample ID:				ICB1		CCB1		CCB2	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28	20						
Antimony	2.0	.094	1.5						
Arsenic	0.50	.013	1.0	0.0129	<1.5	0.00657	<1.5	0.0134	<1.5
Barium	1.0	.008	0.50						
Beryllium	0.50	.004	0.25						
Boron	25	.65	20						
Cadmium	0.50	.004	2.0						
Calcium	250	6.1	50						
Chromium	1.0	.014	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.021	4.0						
Iron	25	.43	13						
Lead	0.50	.009	1.0						
Magnesium	250	.15	130						
Manganese	1.0	.007	1.0						
Molybdenum	1.0	.015	0.50						
Nickel	1.0	.017	3.0						
Potassium	250	.71	50						
Selenium	0.50	.072	0.50						
Silver	0.50	.004	0.50						
Sodium	250	1	100						
Strontium	5.0	.003	5.0						
Thallium	0.50	.004	0.50						
Tin	5.0	.071	2.5						
Titanium	1.0	.035	1.0						
Vanadium	1.0	.009	1.0						
Zinc	5.0	.029	7.5						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47439 Units: ug/l

Time:				13:17		14:11		15:01	
Sample ID:				CCB3		CCB4		CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28	20						
Antimony	2.0	.094	1.5						
Arsenic	0.50	.013	1.0	0.00908	<0.50	0.00626	<0.50	0.0143	<0.50
Barium	1.0	.008	0.50						
Beryllium	0.50	.004	0.25						
Boron	25	.65	20						
Cadmium	0.50	.004	2.0						
Calcium	250	6.1	50						
Chromium	1.0	.014	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.021	4.0						
Iron	25	.43	13						
Lead	0.50	.009	1.0						
Magnesium	250	.15	130						
Manganese	1.0	.007	1.0						
Molybdenum	1.0	.015	0.50						
Nickel	1.0	.017	3.0						
Potassium	250	.71	50						
Selenium	0.50	.072	0.50						
Silver	0.50	.004	0.50						
Sodium	250	1	100						
Strontium	5.0	.003	5.0						
Thallium	0.50	.004	0.50						
Tin	5.0	.071	2.5						
Titanium	1.0	.035	1.0						
Vanadium	1.0	.009	1.0						
Zinc	5.0	.029	7.5						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47439 Units: ug/l

Time:				15:51		16:41	
Sample ID:				CCB6		CCB7	
Metal	RL	IDL	LOD	raw	final	raw	final
Aluminum	25	.28	20				
Antimony	2.0	.094	1.5				
Arsenic	0.50	.013	1.0	0.0128	<1.5	0.0104	<1.0
Barium	1.0	.008	0.50				
Beryllium	0.50	.004	0.25				
Boron	25	.65	20				
Cadmium	0.50	.004	2.0				
Calcium	250	6.1	50				
Chromium	1.0	.014	3.0				
Cobalt	0.50	.002	0.25				
Copper	2.0	.021	4.0				
Iron	25	.43	13				
Lead	0.50	.009	1.0				
Magnesium	250	.15	130				
Manganese	1.0	.007	1.0				
Molybdenum	1.0	.015	0.50				
Nickel	1.0	.017	3.0				
Potassium	250	.71	50				
Selenium	0.50	.072	0.50				
Silver	0.50	.004	0.50				
Sodium	250	1	100				
Strontium	5.0	.003	5.0				
Thallium	0.50	.004	0.50				
Tin	5.0	.071	2.5				
Titanium	1.0	.035	1.0				
Vanadium	1.0	.009	1.0				
Zinc	5.0	.029	7.5				

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47439 Units: ug/l

Time:		11:37			11:42			11:52	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	60	61.9	103.2				50	49.8	99.6
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47439 Units: ug/l

Time:		12:22			13:12			14:06	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	50	50.9	101.8	50	50.7	101.4	50	50.9	101.8
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47439 Units: ug/l

Time:		14:56			15:46			16:36	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony	anr								
Arsenic	50	51.1	102.2	50	50.3	100.6	50	50.6	101.2
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

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

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA47439 Units: ug/l

Time:			12:02	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Aluminum	25	25		
Antimony	2.0	0.25	anr	
Arsenic	0.50	0.50	0.523	104.6
Barium	1.0	0.50	anr	
Beryllium	0.50	0.25		
Boron	25	2.5		
Cadmium	0.50	0.25	anr	
Calcium	250	125		
Chromium	1.0	2.0	anr	
Cobalt	0.50	0.25		
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		
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		
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: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091219M1L.CSV Date Analyzed: 09/12/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA47439 Units: ug/l

Time:			12:07		12:12	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	97900	97.9	96500	96.5
Antimony			0.218		0.189	
Arsenic		20	0.0727		20.9	104.5
Barium			0.233		0.225	
Beryllium			0.000541		0.00160	
Boron		50	3.14		52.6	105.2
Cadmium		20	-0.304		19.9	99.5
Calcium	100000	100000	95200	95.2	95300	95.3
Chromium		20	0.278		21.2	106.0
Cobalt		20	0.180		20.4	102.0
Copper		20	1.96		19.0	95.0
Iron	100000	100000	91700	91.7	90800	90.8
Lead			0.114		0.0894	
Magnesium	100000	100000	92900	92.9	91700	91.7
Manganese		20	0.529		21.3	106.5
Molybdenum	2000	2000	2090	104.5	2060	103.0
Nickel		20	0.511		20.4	102.0
Potassium	100000	100000	98800	98.8	96800	96.8
Selenium		20	0.112		20.3	101.5
Silver		20	0.0300		20.1	100.5
Sodium	100000	100000	94000	94.0	92000	92.0
Strontium	2000	2000	1970	98.5	1960	98.0
Thallium			0.00593		0.00359	
Tin	2000	2000	1870	93.5	1880	94.0
Titanium	2000	2000	1870	93.5	1830	91.5
Vanadium		20	-0.0129		20.5	102.5
Zinc		20	0.172		18.0	90.0

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

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:47	MA47448-STD1	1		STDA
09:52	MA47448-STD2	1		STDA
09:57	MA47448-STD3	1		STDA
10:03	MA47448-STD4	1		STDB
10:08	MA47448-STD5	1		STDC
10:13	MA47448-STD6	1		STDD
10:18	MA47448-STD7	1		STDE
10:23	MA47448-STD8	1		STDF
10:28	MA47448-STD9	1		STDG
10:33	MA47448-STD10	1		STDH
10:38	MA47448-STD11	1		STDI
10:43	MA47448-STD12	1		STDJ
10:48	ZZZZZZ	1		
10:53	MA47448-ICVA1	1		
10:58	MA47448-ICV1	1		60ppb Al.
11:03	MA47448-ICB1	1		
11:08	MA47448-CCVA1	1		
11:13	MA47448-CCB1	1		
11:18	MA47448-CRI1	1		
11:25	MA47448-ICSA1	1		
11:30	MA47448-ICSAB1	1		
11:35	ZZZZZZ	1		
11:40	MA47448-CCVA2	1		
11:45	MA47448-CCB2	1		
11:50	ZZZZZZ	2		
11:55	ZZZZZZ	2		
12:00	ZZZZZZ	25		
12:05	ZZZZZZ	25		
12:10	ZZZZZZ	1		
12:15	MP17239-S1	25		
12:20	MA47448-CCVA3	1		
12:25	MA47448-CCB3	1		
12:30	MP17239-S2	25		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	12:35	JC94499-17	25		(sample used for QC only; not part of login JC94613)
	12:40	MP17239-SD1	125		
	12:46	ZZZZZZ	25		
	12:51	ZZZZZZ	25		
	12:56	ZZZZZZ	25		
	13:01	ZZZZZZ	25		
	13:06	ZZZZZZ	25		
	13:11	MA47448-CCVA4	1		
	13:16	MA47448-CCB4	1		
	13:21	ZZZZZZ	25		
	13:26	ZZZZZZ	2		
	13:31	ZZZZZZ	2		
	13:36	JC94613-2	50		
---------->	Last reportable sample/prep for job JC94613				
	13:41	MP17277-MB1	1		
	13:46	MP17277-B1	1		
	13:51	MP17277-S1	1		overrange
	13:56	MP17277-S2	1		overrange
	14:01	MA47448-CCVA5	1		
	14:06	MA47448-CCB5	1		
---------->	Last reportable CCB for job JC94613				
	14:11	JC94557-1	1		(sample used for QC only; not part of login JC94613)
	14:16	ZZZZZZ	1		
	14:21	ZZZZZZ	1		
	14:26	ZZZZZZ	1		
	14:31	ZZZZZZ	1		
	14:36	ZZZZZZ	1		
	14:41	ZZZZZZ	1		
	14:46	ZZZZZZ	1		
	14:51	MA47448-CCVA6	1		
	14:56	MA47448-CCB6	1		
	15:01	ZZZZZZ	1		
	15:06	ZZZZZZ	1		
	15:11	MP17272-MB1	2		
	15:16	MP17272-B1	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:21	MP17272-S1	2		
15:26	MP17272-S2	2		
15:31	JC94747-1A	2		(sample used for QC only; not part of login JC94613)
15:36	MP17272-SD1	10		
15:41	MA47448-CCVA7	1		
15:46	MA47448-CCB7	1		
15:51	ZZZZZZ	2		
15:56	ZZZZZZ	5		
16:01	ZZZZZZ	2		
16:07	ZZZZZZ	5		
16:12	ZZZZZZ	2		
16:17	ZZZZZZ	2		
16:22	ZZZZZZ	5		
16:27	ZZZZZZ	2		
16:31	MA47448-CCVA8	1		
16:37	MA47448-CCB8	1		
16:42	ZZZZZZ	10		
16:47	ZZZZZZ	2		
16:52	ZZZZZZ	25		
16:56	ZZZZZZ	2		
17:02	ZZZZZZ	2		
17:07	ZZZZZZ	2		
17:12	MA47448-CCVA9	1		
17:17	MA47448-CCB9	1		
17:22	MP17264A-MB1	2		
17:27	MP17264A-B2	2		
17:32	MP17264A-S3	2		
17:37	MP17264A-S4	2		
17:42	JC94634-1	2		(sample used for QC only; not part of login JC94613)
17:47	MP17264A-SD1	10		
17:52	ZZZZZZ	2		
17:57	ZZZZZZ	2		
18:02	MA47448-CCVA10	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:07	MA47448-CCB10	1		
18:12	ZZZZZZ	2		
18:17	ZZZZZZ	2		
18:22	ZZZZZZ	2		
18:27	ZZZZZZ	1		
18:32	ZZZZZZ	1		
18:37	ZZZZZZ	1		
18:42	MA47448-CCVA11	1		
18:47	MA47448-CCB11	1		
18:52	ZZZZZZ	1		
18:57	ZZZZZZ	1		
19:02	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Element: Dilution	As	
10:48	ZZZZZZ	1		
10:53	MA47448-ICVA1	1	X	
10:58	MA47448-ICV1	1		
11:03	MA47448-ICB1	1	X	
11:08	MA47448-CCVA1	1	X	
11:13	MA47448-CCB1	1	X	
11:18	MA47448-CRI1	1	X	
11:25	MA47448-ICSA1	1	X	
11:30	MA47448-ICSAB1	1	X	
11:35	ZZZZZZ	1		
11:40	MA47448-CCVA2	1	X	
11:45	MA47448-CCB2	1	X	
11:50	ZZZZZZ	2		
11:55	ZZZZZZ	2		
12:00	ZZZZZZ	25		
12:05	ZZZZZZ	25		
12:10	ZZZZZZ	1		
12:15	MP17239-S1	25		
12:20	MA47448-CCVA3	1	X	
12:25	MA47448-CCB3	1	X	
12:30	MP17239-S2	25		
12:35	JC94499-17	25		(a)
12:40	MP17239-SD1	125		
12:46	ZZZZZZ	25		
12:51	ZZZZZZ	25		
12:56	ZZZZZZ	25		
13:01	ZZZZZZ	25		
13:06	ZZZZZZ	25		
13:11	MA47448-CCVA4	1	X	
13:16	MA47448-CCB4	1	X	
13:21	ZZZZZZ	25		
13:26	ZZZZZZ	2		
13:31	ZZZZZZ	2		
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
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File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Element: Dilution	As	
13:36	JC94613-2	50	X	
13:41	MP17277-MB1	1	X	
13:46	MP17277-B1	1	X	
13:51	MP17277-S1	1	X	
13:56	MP17277-S2	1	X	
14:01	MA47448-CCVA5	1	X	
14:06	MA47448-CCB5	1	X	
14:11	JC94557-1	1		(a)
14:16	ZZZZZZ	1		
14:21	ZZZZZZ	1		
14:26	ZZZZZZ	1		
14:31	ZZZZZZ	1		
14:36	ZZZZZZ	1		
14:41	ZZZZZZ	1		
14:46	ZZZZZZ	1		
14:51	MA47448-CCVA6	1	X	
14:56	MA47448-CCB6	1	X	
15:01	ZZZZZZ	1		
15:06	ZZZZZZ	1		
15:11	MP17272-MB1	2		
15:16	MP17272-B1	2		
15:21	MP17272-S1	2		
15:26	MP17272-S2	2		
15:31	JC94747-1A	2		(a)
15:36	MP17272-SD1	10		
15:41	MA47448-CCVA7	1	X	
15:46	MA47448-CCB7	1	X	
15:51	ZZZZZZ	2		
15:56	ZZZZZZ	5		
16:01	ZZZZZZ	2		
16:07	ZZZZZZ	5		
16:12	ZZZZZZ	2		
16:17	ZZZZZZ	2		
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC94613
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File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Element: Dilution	As	
16:22	ZZZZZZ	5		
16:27	ZZZZZZ	2		
16:31	MA47448-CCVA8	1	X	
16:37	MA47448-CCB8	1	X	
16:42	ZZZZZZ	10		
16:47	ZZZZZZ	2		
16:52	ZZZZZZ	25		
16:56	ZZZZZZ	2		
17:02	ZZZZZZ	2		
17:07	ZZZZZZ	2		
17:12	MA47448-CCVA9	1	X	
17:17	MA47448-CCB9	1	X	
17:22	MP17264A-MB1	2	X	
17:27	MP17264A-B2	2	X	
17:32	MP17264A-S3	2	X	
17:37	MP17264A-S4	2	X	
17:42	JC94634-1	2	X	(a)
17:47	MP17264A-SD1	10	X	
17:52	ZZZZZZ	2		
17:57	ZZZZZZ	2		
18:02	MA47448-CCVA10	1	X	
18:07	MA47448-CCB10	1	X	
18:12	ZZZZZZ	2		
18:17	ZZZZZZ	2		
18:22	ZZZZZZ	2		
18:27	ZZZZZZ	1		
18:32	ZZZZZZ	1		
18:37	ZZZZZZ	1		
18:42	MA47448-CCVA11	1	X	
18:47	MA47448-CCB11	1	X	
18:52	ZZZZZZ	1		
18:57	ZZZZZZ	1		
19:02	ZZZZZZ	1		
		Element:	As	

REPORTED ELEMENTS SUMMARY

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File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Element: Dilution	As

(a) Sample used for QC only; not part of login JC94613.

Element: As

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
09:47	MA47448-STD1	100	100	100	100	100	100	100	100
09:52	MA47448-STD2	100	100	100	100	100	100	100	100
09:57	MA47448-STD3	100	100	100	100	100	100	100	100
10:03	MA47448-STD4	99.507	101.092	100.68	100.801	101.011	99.79	99.578	99.597
10:08	MA47448-STD5	99.839	100.426	101.884	101.26	99.527	100.628	100.62	100.771
10:13	MA47448-STD6	100.053	98.182	101.562	100.836	98.855	99.715	100.199	99.062
10:18	MA47448-STD7	100.113	99.423	101.281	99.831	100.062	99.67	98.6	99.825
10:23	MA47448-STD8	98.697	98.383	101.594	97.888	98.839	99.634	97.811	98.893
10:28	MA47448-STD9	98.992	99.086	101.191	100.5	98.266	100.038	99.463	99.328
10:33	MA47448-STD10	100.047	100.245	101.129	101.118	99	100.455	99.767	100.715
10:38	MA47448-STD11	99.278	99.131	101.315	100.842	98.45	100.546	100.098	98.828
10:43	MA47448-STD12	100.159	100.293	104.642	102.804	99.593	101.906	101.564	99.091
10:48	ZZZZZZ	102.14	100.857	103.037	102.802	101.362	102.253	101.653	101.171
10:53	MA47448-ICVA1	100.462	101.547	103.035	100.898	100.94	101.751	99.123	102.683
10:58	MA47448-ICV1	100.296	99.649	103.306	106.885	99.621	101.653	105.357	99.963
11:03	MA47448-ICB1	100.103	101.395	104.116	101.545	100.218	102.732	102.428	101.121
11:08	MA47448-CCVA1	101.43	102.101	105.609	102.759	100.63	103.134	100.972	102.665
11:13	MA47448-CCB1	101.27	101.357	104.064	101.569	101.376	102.759	101.34	101.353
11:18	MA47448-CRI1	102.326	103.347	104.909	102.825	103.09	103.953	102.756	102.428
11:25	MA47448-ICSA1	86.69	96.135	100.426	102.326	96.456	97.522	97.772	93.115
11:30	MA47448-ICSAB1	79.169	90.996	94.098	99.495	92.851	91.816	94.581	89.031
11:35	ZZZZZZ	80.796	85.765	89.887	96.728	89.991	91.098	96.242	90.23
11:40	MA47448-CCVA2	82.864	89.449	93.076	98.363	92.381	93.984	97.85	92.859
11:45	MA47448-CCB2	84.606	90.449	93.825	98.12	92.54	95.115	98.169	93.702
11:50	ZZZZZZ	77.583	84.574	88.133	97.952	97.489	98.896	103.436	96.7
11:55	ZZZZZZ	76.338	85.749	89.331	101.723	96.168	97.542	102.88	97.006
12:00	ZZZZZZ	82.247	100.794	108.092	110.57	100.111	104.94	103.743	100.516
12:05	ZZZZZZ	85.699	105.39	111.087	111.63	103.387	106.853	104.911	104.862
12:10	ZZZZZZ	91.598	101.55	104.36	108.648	103.927	106.937	106.924	105.244
12:15	MP17239-S1	86.287	106.543	113.079	113.576	104.904	108.669	105.872	105.173
12:20	MA47448-CCVA3	87.053	94.849	101.05	104.587	97.784	100.564	102.281	99.092
12:25	MA47448-CCB3	87.819	95.62	100.619	105.639	100.35	101.854	103.6	100.129
12:30	MP17239-S2	86.943	108.254	113.888	113.537	106.705	108.604	106.112	106.516

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
12:35	JC94499-17	87.941	109.207	116.637	115.85	106.788	111.966	108.877	107.53
12:40	MP17239-SD1	94.789	110.763	116.103	114.998	111.699	114.236	110.682	111.323
12:46	ZZZZZZ	93.691	104.673	108.73	110.397	108.459	109.31	108.992	108.371
12:51	ZZZZZZ	88.252	110.731	118.31	117.182	107.896	112.746	109.638	108.105
12:56	ZZZZZZ	90.903	112.88	118.588	115.145	110.322	112.733	106.551	110.247
13:01	ZZZZZZ	92.452	113.202	119.12	115.672	109.04	112.864	107.712	109.755
13:06	ZZZZZZ	91.061	113.673	119.804	115.535	109.853	112.933	107.482	109.894
13:11	MA47448-CCVA4	90.375	98.634	103.445	105.15	100.225	103.484	103.561	101.391
13:16	MA47448-CCB4	91.191	99.007	103.429	104.719	101.585	104.148	104.168	102.144
13:21	ZZZZZZ	91.302	100.128	105.547	107.875	103.455	105.956	105.808	102.586
13:26	ZZZZZZ	84.812	93.612	98.299	104.454	105.425	104.686	109.578	104.616
13:31	ZZZZZZ	81.073	91.547	96.761	103.822	103.055	103.977	104.618	102.908
13:36	JC94613-2	89.87	99.496	103.203	105.553	103.619	104.843	105.039	103.361
13:41	MP17277-MB1	93.74	102.23	106.096	106.67	104.623	106.625	105.017	104.087
13:46	MP17277-B1	93.197	100.053	105.898	106.98	102.523	105.797	103.815	103.03
13:51	MP17277-S1	90.186	98.378	102.882	103.017	98.365	99.701	98.129	99.487
13:56	MP17277-S2	89.603	98.237	100.526	102.669	98.008	99.151	97.673	98.459
14:01	MA47448-CCVA5	91.784	97.95	101.929	100.854	98.788	101.861	98.838	100.409
14:06	MA47448-CCB5	91.541	98.064	103.454	104.92	100.48	104.51	103.119	100.416
14:11	JC94557-1	90.727	98.703	104.397	103.716	98.577	102.349	99.215	98.9
14:16	ZZZZZZ	89.785	97.993	101.718	103.164	97.849	100.4	99.04	97.609
14:21	ZZZZZZ	89.019	97.712	100.604	101.042	97.388	98.566	97.429	97.459
14:26	ZZZZZZ	87.402	96.707	101.948	102.989	96.257	98.765	97.2	96.24
14:31	ZZZZZZ	88.029	98.13	100.983	101.489	96.617	97.796	96.103	96.315
14:36	ZZZZZZ	86.65	95.243	100.064	102.378	95.928	98.004	98.193	96.761
14:41	ZZZZZZ	88.261	95.654	103.059	102.519	96.655	99.58	98.475	96.45
14:46	ZZZZZZ	89.226	97.306	101.953	102.764	98.664	99.553	98.338	98.576
14:51	MA47448-CCVA6	88.075	94.718	99.812	101.798	96.735	98.675	99.313	97.596
14:56	MA47448-CCB6	90.31	96.062	100.809	101.951	99.653	101.588	99.48	100.723
15:01	ZZZZZZ	86.811	95.82	100.389	101.631	96.071	99.429	98.005	96.532
15:06	ZZZZZZ	75.291	94.682	97.515	97.671	88.548	90.844	88.657	89.128
15:11	MP17272-MB1	78.327	85.046	89.819	98.535	100.268	100.871	99.677	98.13
15:16	MP17272-B1	75.187	84.507	89.207	98.377	96.912	97.427	97.253	96.388

INTERNAL STANDARD SUMMARY

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File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:21	MP17272-S1	72.549	82.33	87.496	95.061	95.67	96.318	96.038	95.721
15:26	MP17272-S2	71.762	80.948	85.124	98.832	94.165	93.536	99.208	93.801
15:31	JC94747-1A	71.548	80.7	85.441	96.014	94.804	95.058	96.024	95.273
15:36	MP17272-SD1	82.867	89.323	94.78	96.918	94.544	96.346	95.863	94.865
15:41	MA47448-CCVA7	81.182	87.005	91.837	94.97	90.895	92.487	92.205	92.568
15:46	MA47448-CCB7	83.222	89.505	95.117	96.276	93.792	96.412	95.173	93.554
15:51	ZZZZZZ	70.616	85.739	89.373	92.399	90.829	91.918	87.73	90.124
15:56	ZZZZZZ	78.485	89.448	93.952	95.704	90.514	91.978	89.365	90.553
16:01	ZZZZZZ	69.967 !a	84.725	89.186	92.732	89.637	91.4	89.101	89.829
16:07	ZZZZZZ	79.365	89.443	94.902	98.871	91.286	92.351	91.607	91.441
16:12	ZZZZZZ	76.707	85.15	88.594	98.725	95.262	95.426	97.846	94.857
16:17	ZZZZZZ	68.19 !a	85.49	89.178	95.48	88.989	90.238	89.346	89.472
16:22	ZZZZZZ	78.777	90.136	94.846	95.895	90.936	91.947	88.464	90.286
16:27	ZZZZZZ	74.197	84.388	88.473	93.525	91.837	95.002	92.188	92.107
16:31	MA47448-CCVA8	88.121	92.702	96.048	98.95	93.879	96.091	95.473	95.147
16:37	MA47448-CCB8	90.024	94.295	98.474	99.811	96.649	98.38	96.477	96.3
16:42	ZZZZZZ	85.24	92.824	95.669	97.367	95.461	96.411	94.97	95.736
16:47	ZZZZZZ	70.38	86.659	89.058	90.958	91.452	90.831	87.119	91.474
16:52	ZZZZZZ	86.279	92.872	95.331	98.03	94.89	95.703	93.81	94.981
16:56	ZZZZZZ	79.953	84.835	88.347	94.428	98.278	98.358	97.311	98.37
17:02	ZZZZZZ	75.086	81.668	84.721	91.592	93.512	93.722	96.139	93.936
17:07	ZZZZZZ	77.331	83.474	87.316	95.107	97.209	96.242	98.493	96.682
17:12	MA47448-CCVA9	85.572	89.099	93.164	95.31	92.77	92.367	92.327	93
17:17	MA47448-CCB9	88.352	92.634	96.067	97.819	96.029	96.636	95.252	96.43
17:22	MP17264A-MB1	80.422	88.099	90.841	97.915	100.543	99.794	100.658	100.695
17:27	MP17264A-B2	76.864	84.877	87.719	95.651	95.665	94.58	99.053	96.446
17:32	MP17264A-S3	70.355	81.59	82.929	91.219	92.158	91.269	94.908	90.7
17:37	MP17264A-S4	68.097 !a	78.514	80.708	89.836	88.017	87.594	92.818	87.449
17:42	JC94634-1	64.817 !a	77.371	80.781	90.663	85.861	87.335	91.343	85.131
17:47	MP17264A-SD1	77.223	84.59	88.91	94.251	90.999	91.94	92.316	91.197
17:52	ZZZZZZ	70.904	83.706	85.715	91.681	94.694	92.881	92.367	93.441
17:57	ZZZZZZ	72.077	82.291	84.706	95.954	92.914	92.756	95.446	93.45
18:02	MA47448-CCVA10	78.253	87.241	90.121	93.844	92.411	91.735	91.685	93.287

INTERNAL STANDARD SUMMARY

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File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:07	MA47448-CCB10	81.641	89.851	92.259	95.063	94.287	94.75	92.617	95.079
18:12	ZZZZZZ	73.951	82.685	86.229	93.805	96.594	95.18	95.376	96.662
18:17	ZZZZZZ	67.662 !a	81.021	83.662	89.145	86.276	86.316	86.926	86.514
18:22	ZZZZZZ	70.732	80.043	83.86	92.883	90.238	89.871	94.858	90.435
18:27	ZZZZZZ	80.709	90.502	92.732	97.142	95.082	94.19	94.286	96.257
18:32	ZZZZZZ	81.102	87.401	91.675	95.077	92.37	93.022	92.88	92.557
18:37	ZZZZZZ	81.999	87.893	92.049	90.646	92.289	93.953	89.436	92.734
18:42	MA47448-CCVA11	80.257	84.517	88.29	91.779	88.327	88.912	88.438	89.192
18:47	MA47448-CCB11	81.901	85.569	89.107	92.883	90.048	90.942	90.01	90.031
18:52	ZZZZZZ	82.538	88.088	89.582	92.975	92.228	91.269	91.342	92.817
18:57	ZZZZZZ	77.043	80.216	91.223	90.857	84.934	92.252	89.227	84.914
19:02	ZZZZZZ	83.956	87.817	90.533	91.072	92.008	91.644	89.425	92.25

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#1	Lithium	60-125 %	60-125 %
Istd#2	Scandium (45-1)	60-125 %	60-125 %
Istd#3	Scandium (45-2)	60-125 %	60-125 %
Istd#4	Scandium (45-3)	60-125 %	60-125 %
Istd#5	Germanium (72-1)	60-125 %	60-125 %
Istd#6	Germanium (72-2)	60-125 %	60-125 %
Istd#7	Germanium (72-3)	60-125 %	60-125 %
Istd#8	Germanium (74-1)	60-125 %	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
09:47	MA47448-STD1	100	100	100	100	100	100	100	100
09:52	MA47448-STD2	100	100	100	100	100	100	100	100
09:57	MA47448-STD3	100	100	100	100	100	100	100	100
10:03	MA47448-STD4	99.791	101.305	100.296	100.376	99.2	101.089	101.022	100.499
10:08	MA47448-STD5	99.98	101.132	99.655	100.146	99.961	100.493	101.336	100.21
10:13	MA47448-STD6	100.442	100.174	97.298	100.264	99.286	98.633	101.322	97.97
10:18	MA47448-STD7	100.735	100.378	98.448	99.438	98.562	99.87	100.372	99.724
10:23	MA47448-STD8	100.065	98.226	98.239	99.434	96.129	99.347	100.353	99.566
10:28	MA47448-STD9	100.197	100.255	97.769	99.265	98.773	98.707	100.775	99.533
10:33	MA47448-STD10	101.715	101.345	98.796	99.469	98.791	99.92	101.963	98.93
10:38	MA47448-STD11	101.125	99.928	96.854	98.29	96.77	98.398	100.838	99.394
10:43	MA47448-STD12	101.665	100.983	96.952	98.801	96.793	99.033	101.476	100.333
10:48	ZZZZZZ	102.478	101.651	100.471	101.662	100.989	100.495	102.934	100.494
10:53	MA47448-ICVA1	102.297	101.056	97.491	98.659	96.854	99.939	101.075	99.361
10:58	MA47448-ICV1	101.718	105.405	99.326	100.779	105.679	100.245	102.153	99.418
11:03	MA47448-ICB1	103.373	101.236	100.725	102.42	100.879	101.122	103.757	100.104
11:08	MA47448-CCVA1	103.479	101.256	98.62	100.164	97.672	100.293	103.094	100.1
11:13	MA47448-CCB1	102.862	101.505	99.899	101.516	100.55	100.956	103.122	99.235
11:18	MA47448-CRI1	103.38	103.619	101.223	102.471	101.342	102.087	105.123	100.695
11:25	MA47448-ICSA1	94.572	94.688	87.876	89.95	88.414	93.066	94.043	96.936
11:30	MA47448-ICSAB1	90.348	92.419	85.918	85.865	86.01	91.136	90.517	96.677
11:35	ZZZZZZ	91.122	96.91	94.166	94.4	96.903	97.125	96.174	97.86
11:40	MA47448-CCVA2	94.722	97.537	93.234	94.618	95.142	97.162	97.007	100.16
11:45	MA47448-CCB2	95.657	99.3	96.467	97.32	98.778	98.488	98.697	99.925
11:50	ZZZZZZ	99.072	103.828	93.696	94.475	98.722	97.24	95.378	99.712
11:55	ZZZZZZ	98.347	103.934	93.74	94.106	99.109	98.352	95.581	102.554
12:00	ZZZZZZ	104.24	104.287	96.274	98.905	95.914	1530.258	!1589.114	!105.441
12:05	ZZZZZZ	107.702	105.206	99.105	100.22	96.64	1570.174	!1608.11 !	107.463
12:10	ZZZZZZ	106.277	108.659	106.703	106.591	106.512	108.714	107.563	107.959
12:15	MP17239-S1	109.364	106.729	99.588	101.735	97.749	106.54	108.669	107.244
12:20	MA47448-CCVA3	100.735	103.178	99.173	100.617	99.829	103.315	103.055	105.184
12:25	MA47448-CCB3	102.307	103.729	102.72	104.058	103.704	105.531	105.182	106.331
12:30	MP17239-S2	109.398	106.508	101.404	102.817	98.043	107.199	109.156	108.87

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
12:35	JC94499-17	111.763	109.229	101.969	104.417	99.509	106.837	111.453	108.348
12:40	MP17239-SD1	113.29	111.511	108.862	110.172	104.547	113.197	114.852	111.102
12:46	ZZZZZZ	109.905	107.816	110.096	110.354	106.217	112.798	112.323	110.967
12:51	ZZZZZZ	111.637	109.971	101.96	104.827	99.292	108.43	111.77	108.047
12:56	ZZZZZZ	112.423	107.03	103.537	105.313	98.427	110.186	111.437	109.118
13:01	ZZZZZZ	113.217	109.018	103.336	104.404	99.226	108.75	111.239	108.508
13:06	ZZZZZZ	113.375	107.182	103.292	105.794	98.477	108.313	111.448	108.109
13:11	MA47448-CCVA4	102.09	104.14	100.191	102.531	100.181	103.949	103.422	105.379
13:16	MA47448-CCB4	104.137	104.031	103.788	106.655	103.542	106.177	107.15	106.674
13:21	ZZZZZZ	105.312	105.51	105.696	107.275	105.079	109.199	109.705	108.336
13:26	ZZZZZZ	105.421	108.092	101.905	103.359	102.884	104.719	102.901	107.126
13:31	ZZZZZZ	104.031	106.391	99.233	101.128	101.223	104.378	101.144	107.287
13:36	JC94613-2	104.156	105.549	105.219	106.228	103.835	108.859	107.424	109.558
13:41	MP17277-MB1	106.53	105.935	106.559	107.959	104.413	109.321	109.469	109.352
13:46	MP17277-B1	105.618	105.108	103.546	105.046	102.172	107.237	106.63	108.09
13:51	MP17277-S1	100.408	99.167	97.138	97.903	94.306	102.521	101.759	104.983
13:56	MP17277-S2	98.324	98.879	96.62	95.647	93.934	101.621	99.37	104.836
14:01	MA47448-CCVA5	102.102	99.778	100.005	101.04	96.595	103.796	103.483	104.28
14:06	MA47448-CCB5	103.464	103.226	103.011	105.265	102.242	105.527	106.807	105.932
14:11	JC94557-1	101.475	100.333	97.241	99.123	95.088	101.875	104.073	105.019
14:16	ZZZZZZ	100.921	100.179	95.996	97.221	93.19	101.721	102.79	105.153
14:21	ZZZZZZ	99.376	98.143	95.354	95.687	92.548	101.093	100.664	103.952
14:26	ZZZZZZ	98.138	98.414	94.18	95.278	92.976	100.05	100.856	103.088
14:31	ZZZZZZ	97.774	97.297	93.202	94.209	91.448	99.863	99.961	103.911
14:36	ZZZZZZ	98.067	99.075	95.286	96.438	93.887	100.47	100.968	103.284
14:41	ZZZZZZ	99.397	99.125	94.986	97.488	93.946	100.869	102.044	103.479
14:46	ZZZZZZ	99.786	99.768	96.879	97.129	93.89	101.878	101.955	103.956
14:51	MA47448-CCVA6	98.391	100.328	98.119	99.248	96.523	101.952	102.309	103.643
14:56	MA47448-CCB6	100.481	100.282	102.414	102.987	98.72	105.555	104.449	105.723
15:01	ZZZZZZ	99.128	98.255	94.799	96.081	92.644	101.189	101.597	103.926
15:06	ZZZZZZ	91.497	89.037	84.377	84.871	80.937	92.701	92.724	98.035
15:11	MP17272-MB1	101.299	101.106	94.849	96.457	96.355	97.348	97.114	99.732
15:16	MP17272-B1	97.913	98.512	93.135	94.598	95.465	98.034	94.922	101.937

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:21	MP17272-S1	96.301	96.975	89.587	90.57	90.174	95.98	92.81	100.524
15:26	MP17272-S2	94.835	99.832	88.72	89.315	94.894	95.442	91.701	100.872
15:31	JC94747-1A	95.856	96.37	90.1	90.088	91.252	96.036	93.118	100.961
15:36	MP17272-SD1	96.743	96.143	96.363	97.909	94.617	100.896	99.036	101.972
15:41	MA47448-CCVA7	92.877	93.512	92.654	93.035	90.809	96.709	95.044	99.403
15:46	MA47448-CCB7	96.739	95.162	96.622	98.269	94.599	99.596	99.303	100.256
15:51	ZZZZZZ	92.245	88.076	79.465	79.867	76.904	86.722	85.581	92.728
15:56	ZZZZZZ	92.643	89.327	85.494	86.739	83.721	92.399	91.447	95.516
16:01	ZZZZZZ	90.602	89.034	78.495	79.077	77.601	85.567	84.21	90.785
16:07	ZZZZZZ	93.426	92.173	86.56	87.115	85.685	92.43	91.623	94.911
16:12	ZZZZZZ	95.703	98.081	87.091	87.557	90.316	92.695	90.655	96.301
16:17	ZZZZZZ	90.234	90.508	77.781	77.646	77.891	84.201	83.396	90.147
16:22	ZZZZZZ	91.579	88.957	85.07	85.845	82.428	90.818	90.406	94.185
16:27	ZZZZZZ	95.001	92.467	81.814	83.065	81.904	88.639	87.426	92.548
16:31	MA47448-CCVA8	96.234	95.763	94.536	95.393	92.924	97.832	97.535	98.309
16:37	MA47448-CCB8	98.448	96.92	98.261	99.641	96.768	100.385	100.503	98.618
16:42	ZZZZZZ	96.124	94.729	92.827	93.218	90.99	97.356	96.613	98.371
16:47	ZZZZZZ	89.712	87.706	78.852	77.137	75.757	86.231	83.016	91.466
16:52	ZZZZZZ	95.557	94.307	92.939	92.488	90.434	98.073	96.326	97.351
16:56	ZZZZZZ	97.425	98.416	93.308	93.72	93.869	96.382	94.061	97.573
17:02	ZZZZZZ	93.521	96.323	87.695	87.549	88.836	93.895	89.666	97.772
17:07	ZZZZZZ	97.038	97.583	93.077	93.502	95.524	96.487	92.912	99.398
17:12	MA47448-CCVA9	92.942	93.992	93.933	93.726	91.869	97.6	94.747	98.7
17:17	MA47448-CCB9	96.871	96.003	97.913	98.308	96.585	100.575	98.442	99.503
17:22	MP17264A-MB1	99.736	101.352	95.651	95.754	96.524	99.433	95.761	100.932
17:27	MP17264A-B2	95.792	99.978	92.823	92.471	93.46	96.728	92.799	99.524
17:32	MP17264A-S3	90.884	92.791	84.531	84.15	84.531	91.108	87.384	97.732
17:37	MP17264A-S4	86.849	92.122	82.891	82.319	83.424	90.148	85.338	96.541
17:42	JC94634-1	86.074	91.007	82.666	82.808	83.7	90.111	85.856	96.357
17:47	MP17264A-SD1	92.26	92.43	93.263	92.587	91.059	98.59	94.478	100.334
17:52	ZZZZZZ	92.252	92.297	87.963	87.66	84.833	94.757	90.682	99.698
17:57	ZZZZZZ	92.741	95.993	90.578	89.453	91.675	96.624	90.932	100.427
18:02	MA47448-CCVA10	92.072	93.008	94.157	93.368	91.047	98.7	94.343	100.136

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:07	MA47448-CCB10	93.549	93.533	97.772	97.46	94.962	99.986	97.541	99.906
18:12	ZZZZZZ	95.116	95.915	94.459	93.835	94.112	97.373	92.794	100.178
18:17	ZZZZZZ	86.563	87.144	80.393	80.072	78.808	87.858	84.612	92.536
18:22	ZZZZZZ	91.569	95.412	87.211	87.545	87.299	93.462	89.696	98.123
18:27	ZZZZZZ	94.474	94.306	98.443	97.851	94.813	101.924	98.197	101.468
18:32	ZZZZZZ	92.938	93.055	95.606	95.425	93.373	99.071	96.699	98.65
18:37	ZZZZZZ	92.683	90.32	95.889	95.106	89.268	98.529	96.198	99.077
18:42	MA47448-CCVA11	89.955	89.91	90.59	89.756	87.535	95.254	92.417	96.702
18:47	MA47448-CCB11	90.504	90.362	92.868	92.493	91.157	95.985	93.481	96.22
18:52	ZZZZZZ	91.08	91.492	95.169	92.161	91.652	98.178	93.622	97.61
18:57	ZZZZZZ	92.251	89.438	86.263	94.139	89.982	88.264	95.655	90.035
19:02	ZZZZZZ	91.804	90.218	94.213	94.165	90.89	97.198	94.792	97.573

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#9	Germanium (74-2)	60-125 %	60-125 %
Istd#10	Germanium (74-3)	60-125 %	60-125 %
Istd#11	Rhodium (103-1)	60-125 %	60-125 %
Istd#12	Rhodium (103-2)	60-125 %	60-125 %
Istd#13	Rhodium (103-3)	60-125 %	60-125 %
Istd#14	Indium (115-1)	60-125 %	60-125 %
Istd#15	Indium (115-2)	60-125 %	60-125 %
Istd#16	Terbium (159-1)	60-125 %	60-125 %

INTERNAL STANDARD SUMMARY

Login Number: JC94613
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Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
09:47	MA47448-STD1	100	100	100	100	100	100
09:52	MA47448-STD2	100	100	100	100	100	100
09:57	MA47448-STD3	100	100	100	100	100	100
10:03	MA47448-STD4	99.804	100.333	99.751	99.725	100.037	99.756
10:08	MA47448-STD5	100.68	100.465	99.363	100.7	100.66	100.846
10:13	MA47448-STD6	100.827	99.998	97.622	100.945	99.47	100.876
10:18	MA47448-STD7	99.784	99.605	99.501	99.514	100.021	100.405
10:23	MA47448-STD8	100.971	97.217	99.201	100.555	99.993	101.009
10:28	MA47448-STD9	100.508	100.379	98.901	99.542	99.437	99.949
10:33	MA47448-STD10	100.904	100.417	99.976	100.462	99.874	100.661
10:38	MA47448-STD11	101.136	100.394	99.125	100.837	98.3	98.806
10:43	MA47448-STD12	101.623	100.121	100.277	101.655	97.051	97.9
10:48	ZZZZZZ	101.174	101.153	100.434	101.075	100.364	101.817
10:53	MA47448-ICVA1	101.236	100.219	98.222	101.273	98.097	99.3627
10:58	MA47448-ICV1	101.297	105.779	98.42	100.656	100.183	101.066
11:03	MA47448-ICB1	101.687	100.867	99.799	100.871	100.321	101.489
11:08	MA47448-CCVA1	102.467	100.21	99.982	101.975	99.318	100.426
11:13	MA47448-CCB1	101.731	100.875	99.534	101.236	99.81	102.067
11:18	MA47448-CRI1	102.288	101.454	99.743	101.877	100.15	101.911
11:25	MA47448-ICSA1	97.135	96.457	96.441	97.069	90.755	89.891
11:30	MA47448-ICSAB1	95.099	95.4	96.638	94.584	90.755	87.599
11:35	ZZZZZZ	98.081	98.682	97.506	98.04	99.118	99.611
11:40	MA47448-CCVA2	99.115	99.593	100.397	99.308	98.796	97.971
11:45	MA47448-CCB2	99.512	100.138	99.456	99.362	101.048	101.169
11:50	ZZZZZZ	98.48	101.76	100.519	99.065	107.753	105.074
11:55	ZZZZZZ	99.965	104.165	102.077	100.605	102.96	101.577
12:00	ZZZZZZ	106.212	101.809	105.862	105.951	96.875	96.968
12:05	ZZZZZZ	106.641	102.103	106.859	106.48	97.933	96.619
12:10	ZZZZZZ	105.908	105.724	107.042	105.576	107.534	106.816
12:15	MP17239-S1	108.308	103.415	107.372	108.326	97.608	97.695
12:20	MA47448-CCVA3	105.373	103.299	105.118	105.721	103.662	103.824
12:25	MA47448-CCB3	106.164	104.345	106.042	105.947	107.119	107.453
12:30	MP17239-S2	109.093	103.003	108.396	108.705	98.566	98.068

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
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File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
12:35	JC94499-17	110.09	104.087	107.533	109.966	97.651	98.496
12:40	MP17239-SD1	112.385	105.634	111.374	111.378	105.946	106.634
12:46	ZZZZZZ	109.554	106.64	109.567	108.751	109.951	110.208
12:51	ZZZZZZ	109.853	103.51	108.523	109.993	97.143	98.638
12:56	ZZZZZZ	109.905	102.37	109.108	109.624	98.409	98.065
13:01	ZZZZZZ	109.355	102.535	108.831	108.631	97.536	97.356
13:06	ZZZZZZ	109.952	102.749	107.334	109.353	96.697	97.226
13:11	MA47448-CCVA4	105.5	103.497	105.016	105.722	102.885	103.962
13:16	MA47448-CCB4	106.992	103.585	106.536	106.619	106.405	107.47
13:21	ZZZZZZ	108.122	105.748	107.601	108.279	108.568	109.536
13:26	ZZZZZZ	106.599	105.762	106.763	106.843	109.788	109.302
13:31	ZZZZZZ	106.344	105.18	107.063	105.729	106.784	106.526
13:36	JC94613-2	108.64	105.68	109.236	108.561	109.565	109.255
13:41	MP17277-MB1	108.96	104.479	108.312	109.171	110.931	110.812
13:46	MP17277-B1	108.274	104.082	107.536	107.276	106.823	106.668
13:51	MP17277-S1	104.829	101.016	105.514	104.853	99.479	99.653
13:56	MP17277-S2	102.684	100.371	104.54	102.983	98.767	97.579
14:01	MA47448-CCVA5	104.628	100.439	103.953	104.369	103.395	103.553
14:06	MA47448-CCB5	106.094	102.556	105.506	105.811	106.164	106.89
14:11	JC94557-1	105.643	101.45	104.473	105.835	100.226	100.562
14:16	ZZZZZZ	104.697	100.172	104.028	104.432	99.588	99.909
14:21	ZZZZZZ	103.256	99.79	104.168	103.937	98.674	99.072
14:26	ZZZZZZ	103.852	100.82	103.313	104.268	97.065	97.743
14:31	ZZZZZZ	102.66	99.373	103.837	103.101	96.979	96.203
14:36	ZZZZZZ	103.604	100.942	102.625	103.12	98.527	98.613
14:41	ZZZZZZ	104.131	100.237	103.85	104.314	97.312	99.035
14:46	ZZZZZZ	103.698	100.047	104.35	102.828	98.965	98.612
14:51	MA47448-CCVA6	103.267	101.049	103.495	103.802	101.875	102.721
14:56	MA47448-CCB6	104.484	99.399	105.394	103.702	105.363	104.899
15:01	ZZZZZZ	103.968	99.554	104.03	103.626	98.666	98.451
15:06	ZZZZZZ	96.855	91.117	97.691	97.184	87.109	86.168
15:11	MP17272-MB1	99.209	99.238	99.291	99.879	102.936	102.741
15:16	MP17272-B1	99.228	99.14	101.921	99.5	101.904	101.18

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
15:21	MP17272-S1	98.359	97.06	100.718	99.16	97.49	96.66
15:26	MP17272-S2	97.474	102.29	101.111	98.644	97.462	95.749
15:31	JC94747-1A	98.167	98.024	101.353	97.866	99.16	96.824
15:36	MP17272-SD1	100.024	96.945	102.125	100.813	103.762	104.032
15:41	MA47448-CCVA7	97.882	95.116	98.768	97.519	97.407	97.584
15:46	MA47448-CCB7	100.125	95.599	100.702	99.816	100.571	100.849
15:51	ZZZZZZ	91.059	86.118	92.762	91.07	82.309	79.992
15:56	ZZZZZZ	94.964	91.534	96.078	94.835	86.581	86.854
16:01	ZZZZZZ	89.731	87.478	91.199	90.012	79.053	78.646
16:07	ZZZZZZ	95.688	94.097	94.885	95.561	85.8	87.002
16:12	ZZZZZZ	96.455	97.885	96.579	97.165	90.526	90.212
16:17	ZZZZZZ	88.009	88.147	90.416	88.601	78.284	76.586
16:22	ZZZZZZ	94.392	90.765	94.235	94.795	84.494	84.992
16:27	ZZZZZZ	92.738	91.021	93.23	92.504	83.428	84.27
16:31	MA47448-CCVA8	98.193	96.507	98.662	98.396	95.145	96.445
16:37	MA47448-CCB8	99.446	97.105	98.772	98.792	98.136	99.832
16:42	ZZZZZZ	99.027	95.598	98.197	98.724	93.053	94.018
16:47	ZZZZZZ	87.872	86.136	91.324	88.708	78.55	76.521
16:52	ZZZZZZ	97.593	95.641	97.17	97.671	92.941	93.273
16:56	ZZZZZZ	97.24	97.011	96.966	96.936	96.687	97.617
17:02	ZZZZZZ	94.976	95.786	97.716	95.233	93.681	92.845
17:07	ZZZZZZ	97.075	98.378	99.65	97.21	98.528	97.646
17:12	MA47448-CCVA9	97.535	95.66	98.375	97.633	96.732	95.723
17:17	MA47448-CCB9	98.616	97.44	99.306	98.515	97.742	99.344
17:22	MP17264A-MB1	98.589	99.232	100.272	99.012	100.136	99.494
17:27	MP17264A-B2	96.322	97.64	99.801	96.794	97.627	96.467
17:32	MP17264A-S3	94.801	94.329	109.534	106.086	91.241	88.88
17:37	MP17264A-S4	93.154	93.447	108.86	105.402	90.548	88.295
17:42	JC94634-1	93.117	92.705	107.306	104.614	89.533	88.236
17:47	MP17264A-SD1	97.531	94.45	102.595	99.714	99.132	97.841
17:52	ZZZZZZ	96.008	92.392	99.71	96.325	92.554	90.534
17:57	ZZZZZZ	96.423	98.069	100.068	96.175	95.548	93.797
18:02	MA47448-CCVA10	97.044	94.669	99.73	97.676	96.896	95.956

INTERNAL STANDARD SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
Analyst: SN Run ID: MA47448
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
18:07	MA47448-CCB10	98.072	95.061	99.098	97.933	98.344	98.729
18:12	ZZZZZZ	96.695	95.458	99.78	97.219	99.329	97.678
18:17	ZZZZZZ	90.525	87.959	93.645	90.767	82.809	81.812
18:22	ZZZZZZ	95.829	94.629	98.248	95.903	93.366	92.174
18:27	ZZZZZZ	98.324	94.99	100.252	98.131	100.302	98.931
18:32	ZZZZZZ	97.337	94.079	98.399	96.932	97.839	97.608
18:37	ZZZZZZ	96.64	89.971	98.338	96.37	98.239	97.297
18:42	MA47448-CCVA11	93.43	91.467	96.395	94.015	94.25	92.989
18:47	MA47448-CCB11	94.538	92.517	96.216	93.827	96.491	95.33
18:52	ZZZZZZ	93.611	92.324	97.097	93.261	96.757	94.653
18:57	ZZZZZZ	96.118	91.064	87.755	95.69	88.147	96.106
19:02	ZZZZZZ	95.307	91.952	96.798	95.662	96.408	96.434

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits	CCV/CCB Limits
Istd#17	Terbium (159-2)	60-125 %	60-125 %
Istd#18	Terbium (159-3)	60-125 %	60-125 %
Istd#19	Holmium (165-1)	60-125 %	60-125 %
Istd#20	Holmium (165-2)	60-125 %	60-125 %
Istd#21	Bismuth (209-1)	60-125 %	60-125 %
Istd#22	Bismuth (209-2)	60-125 %	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47448 Units: ug/l

Time:				11:03		11:13		11:45	
Sample ID:				ICB1		CCB1		CCB2	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28							
Antimony	2.0	.094							
Arsenic	0.50	.013		-0.00671	<0.50	0.0190	<0.50	0.0000481	<0.50
Barium	1.0	.008							
Beryllium	0.50	.004							
Boron	25	.65							
Cadmium	0.50	.004							
Calcium	250	6.1							
Chromium	1.0	.014							
Cobalt	0.50	.002							
Copper	2.0	.021							
Iron	25	.43							
Lead	0.50	.009							
Magnesium	250	.15							
Manganese	1.0	.007							
Molybdenum	1.0	.015							
Nickel	1.0	.017							
Potassium	250	.71							
Selenium	0.50	.072							
Silver	0.50	.004							
Sodium	250	1							
Strontium	5.0	.003							
Thallium	0.50	.004							
Tin	5.0	.071							
Titanium	1.0	.035							
Vanadium	1.0	.009							
Zinc	5.0	.029							

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47448 Units: ug/l

Time:				12:25		13:16		14:06	
Sample ID:				CCB3		CCB4		CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28							
Antimony	2.0	.094							
Arsenic	0.50	.013		0.00995	<0.50	0.0125	<0.50	0.0110	<1.0
Barium	1.0	.008							
Beryllium	0.50	.004							
Boron	25	.65							
Cadmium	0.50	.004							
Calcium	250	6.1							
Chromium	1.0	.014							
Cobalt	0.50	.002							
Copper	2.0	.021							
Iron	25	.43							
Lead	0.50	.009							
Magnesium	250	.15							
Manganese	1.0	.007							
Molybdenum	1.0	.015							
Nickel	1.0	.017							
Potassium	250	.71							
Selenium	0.50	.072							
Silver	0.50	.004							
Sodium	250	1							
Strontium	5.0	.003							
Thallium	0.50	.004							
Tin	5.0	.071							
Titanium	1.0	.035							
Vanadium	1.0	.009							
Zinc	5.0	.029							

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47448 Units: ug/l

Time:		10:53			10:58			11:08	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	60	63.0	105.0				50	50.5	101.0
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47448 Units: ug/l

Time:		11:40			12:20			13:11	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	50	51.8	103.6	50	50.5	101.0	50	50.6	101.2
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	anr								
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	anr								
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium	anr								
Thallium	anr								
Tin	anr								
Titanium	anr								
Vanadium	anr								
Zinc	anr								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47448 Units: ug/l

Time:		14:01	
Sample ID:	CCVA	CCVA5	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	50	50.8	101.6
Barium	anr		
Beryllium	anr		
Boron			
Cadmium	anr		
Calcium	anr		
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	anr		
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium	anr		
Thallium	anr		
Tin	anr		
Titanium	anr		
Vanadium	anr		
Zinc	anr		

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

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA47448 Units: ug/l

Time:			11:18	
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	0.522	104.4
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	anr	
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	anr	
Manganese	1.0	0.25	anr	
Molybdenum	1.0	0.50	anr	
Nickel	1.0	2.0	anr	
Potassium	250	125	anr	
Selenium	0.50	0.50	anr	
Silver	0.50	1.0	anr	
Sodium	250	125	anr	
Strontium	5.0	0.50	anr	
Thallium	0.50	0.25	anr	
Tin	5.0	0.50	anr	
Titanium	1.0	0.50	anr	
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: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA091319M1L.CSV Date Analyzed: 09/13/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA47448 Units: ug/l

Time:			11:25		11:30	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	95800	95.8	93700	93.7
Antimony			0.220		0.174	
Arsenic		20	0.0672		21.0	105.0
Barium			0.245		0.214	
Beryllium			0.00542		0.000252	
Boron		50	3.55		54.9	109.8
Cadmium		20	-0.256*a		19.9	99.5
Calcium	100000	100000	94500	94.5	92500	92.5
Chromium		20	0.282		21.2	106.0
Cobalt		20	0.165		20.7	103.5
Copper		20	1.94*(a)		19.2	96.0
Iron	100000	100000	91800	91.8	92000	92.0
Lead			0.0922		0.0784	
Magnesium	100000	100000	93700	93.7	92700	92.7
Manganese		20	0.623*(a		21.6	108.0
Molybdenum	2000	2000	2030	101.5	2010	100.5
Nickel		20	0.496		20.6	103.0
Potassium	100000	100000	96100	96.1	95800	95.8
Selenium		20	0.130		19.9	99.5
Silver		20	0.0228		19.9	99.5
Sodium	100000	100000	93400	93.4	92200	92.2
Strontium	2000	2000	1940	97.0	1930	96.5
Thallium			0.00426		0.00337	
Tin	2000	2000	1850	92.5	1880	94.0
Titanium	2000	2000	1860	93.0	1840	92.0
Vanadium		20	-0.0135		20.6	103.0
Zinc		20	0.0735		18.6	93.0

(*) Outside of QC limits
(anr) Analyte not requested
(a) No DOD samples reported for this element in the area bracketed by this QC.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/10/19

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	46		
Antimony	6.0	1.4	4.7		
Arsenic	5.0	1.5	2.8		
Barium	200	.5	13		
Beryllium	2.0	.1	.5		
Bismuth	20	1.8	4		
Boron	200	.8	63		
Cadmium	3.0	.3	1		
Calcium	5000	3.9	99		
Chromium	10	.3	2		
Cobalt	50	.3	2.6		
Copper	10	.6	5.9		
Iron	100	2.6	32	3.1	<100
Lead	5.0	1.6	1.8		
Lithium	50	2.1	7.3		
Magnesium	5000	16	140		
Manganese	15	.1	1.4	0.0	<15
Molybdenum	20	.4	3.6		
Nickel	10	.5	1.7		
Phosphorus	50	1.9	18		
Potassium	10000	79	200		
Selenium	10	3	4.9		
Silicon	200	1.2	100		
Silver	10	.5	1.9		
Sodium	10000	9.9	570		
Strontium	10	.3	1		
Sulfur	100	3.5	45		
Thallium	10	1.3	1.8		
Tin	10	.7	3.7		
Titanium	10	.5	2.5		
Tungsten	100	1.7	40		
Vanadium	50	.5	1.8		
Zinc	20	.2	6.9		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/10/19

Metal	RL	IDL	MDL	MB raw	final
Zirconium	10	.3	4.1		

Associated samples MP17232: JC94613-1A, JC94613-2A

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: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/10/19

Metal	JC94613-1A Original MS		Spikelot MPSPK2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium	anr				
Beryllium					
Bismuth					
Boron					
Cadmium	anr				
Calcium					
Chromium	anr				
Cobalt					
Copper	anr				
Iron	65300	93700	25000	113.6	75-125
Lead	anr				
Lithium					
Magnesium	anr				
Manganese	2090	4040	2000	97.5	75-125
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium	anr				
Silicon					
Silver	anr				
Sodium					
Strontium					
Sulfur					
Thallium					
Tin					
Titanium					
Tungsten					
Vanadium					
Zinc					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232 Methods: SW846 6010D
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/10/19

Metal	JC94613-1A Original MS	Spikelot MPSPK2	% Rec	QC Limits
Zirconium				

Associated samples MP17232: JC94613-1A, JC94613-2A

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: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/10/19

Metal	JC94613-1A Original	MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium	anr					
Beryllium						
Bismuth						
Boron						
Cadmium	anr					
Calcium						
Chromium	anr					
Cobalt						
Copper	anr					
Iron	65300	91700	25000	105.6	2.2	20
Lead	anr					
Lithium						
Magnesium	anr					
Manganese	2090	4080	2000	99.5	1.0	20
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Sulfur						
Thallium						
Tin						
Titanium						
Tungsten						
Vanadium						
Zinc						

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232 Methods: SW846 6010D
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 09/10/19

Metal	JC94613-1A Original MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Zirconium					

Associated samples MP17232: JC94613-1A, JC94613-2A

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: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/10/19

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium	anr			
Beryllium				
Bismuth				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	24700	25000	98.8	80-120
Lead	anr			
Lithium				
Magnesium	anr			
Manganese	2000	2000	100.0	80-120
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/10/19

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Zirconium				

Associated samples MP17232: JC94613-1A, JC94613-2A

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/10/19

Metal	JC94613-1A Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium	anr			
Beryllium				
Bismuth				
Boron				
Cadmium	anr			
Calcium				
Chromium	anr			
Cobalt				
Copper	anr			
Iron	65300	70100	7.4	0-10
Lead	anr			
Lithium				
Magnesium	anr			
Manganese	2090	2280	8.6	0-10
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium	anr			
Silicon				
Silver	anr			
Sodium				
Strontium				
Sulfur				
Thallium				
Tin				
Titanium				
Tungsten				
Vanadium				
Zinc				

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/10/19

Metal	JC94613-1A Original SDL 1:5	%DIF	QC Limits
Zirconium			

Associated samples MP17232: JC94613-1A, JC94613-2A

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

POST DIGESTATE SPIKE SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/10/19

Metal	Sample ml	Final ml	JC94613-1A Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Bismuth										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	19.25	20	65280	62832	88700	0.1	5000	25000	103.5	80-120
Lead										
Lithium										
Magnesium										
Manganese	19.25	20	2094	2015.475	3991	0.2	200	2000	98.8	80-120
Molybdenum										
Nickel										
Phosphorus										
Potassium										
Selenium										
Silicon										
Silver										
Sodium										
Strontium										
Sulfur										
Thallium										
Tin										
Titanium										
Tungsten										
Vanadium										
Zinc										

POST DIGESTATE SPIKE SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 09/10/19

Metal	Sample ml	Final ml	JC94613-1A Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Zirconium										

Associated samples MP17232: JC94613-1A, JC94613-2A

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232A
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 09/10/19

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.55	32		
Antimony	4.0	.19	1.7		
Arsenic	3.0	.026	.94	0.088	<3.0
Barium	2.0	.016	.73		
Beryllium	1.0	.008	.15		
Boron	50	1.3	14		
Cadmium	6.0	.008	.17		
Calcium	500	12	64		
Chromium	8.0	.028	.62		
Cobalt	1.0	.004	.17		
Copper	10	.042	1.9		
Iron	50	.86	19		
Lead	3.0	.018	.52		
Magnesium	500	.3	46		
Manganese	4.0	.014	.63		
Molybdenum	2.0	.03	.45		
Nickel	8.0	.034	.95		
Potassium	500	1.4	68		
Selenium	2.0	.14	.55		
Silver	2.0	.008	.16		
Sodium	500	2.1	140		
Strontium	20	.006	2.4		
Thallium	2.0	.008	.17		
Tin	10	.14	2.6		
Titanium	4.0	.07	1.6		
Vanadium	3.0	.018	1.8		
Zinc	20	.058	5.4		

Associated samples MP17232A: JC94613-1, JC94613-2

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: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232A
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 09/10/19

Metal	JC94613-1 Original	MS	Spikelot MP6020AQ	3% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	1630	1710	80	100.0	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 MP17232A: JC94613-1, JC94613-2

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: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232A
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 09/10/19

Metal	JC94613-1 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	1630	1770	80	175.0(a)	3.4	20
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 MP17232A: JC94613-1, JC94613-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232A
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 09/10/19

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum				
Antimony				
Arsenic	69.3	80	86.6	80-120
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 MP17232A: JC94613-1, JC94613-2

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC94613
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17232A
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 09/10/19

Metal	JC94613-1 Original	SDL 25:125%	DIF	QC Limits
Aluminum				
Antimony				
Arsenic	1630	1510	7.6	0-10
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 MP17232A: JC94613-1, JC94613-2

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

Instrument Detection Limits

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: AGICPMS1 **Effective Date:** 01/31/19

Analyte	IDL ug/l
Aluminum	.045
Aluminum	.276
Antimony	.094
Arsenic	.12
Arsenic	.013
Barium	.008
Beryllium	.004
Boron	.648
Cadmium	.007
Cadmium	.004
Calcium	6.11
Chromium	.036
Chromium	.014
Cobalt	.0041
Cobalt	.002
Copper	.1044
Copper	.021
Iron	1.21
Iron	.432
Lead	.009
Magnesium	.033
Magnesium	.152
Manganese	.006
Manganese	.007
Molybdenum	.015
Nickel	.046
Nickel	.017
Potassium	.506
Potassium	.707
Selenium	.503
Selenium	.072
Silver	.004
Sodium	.357
Sodium	1.037
Strontium	.003
Thallium	.004
Tin	.025
Tin	.071
Titanium	.035
Titanium	.035
Vanadium	.112
Vanadium	.009
Zinc	.041
Zinc	.029

Instrument Detection Limits

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: AGICPMS1 **Effective Date:** 01/31/19

Analyte	IDL ug/l

The above applies to the following instrument runs:
MA47431,MA47439,MA47448

Instrument Detection Limits

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: SSTRACE3 **Effective Date:** 02/18/19

Analyte	IDL ug/l
Aluminum	14.3
Antimony	1.4
Arsenic	1.5
Barium	.5
Beryllium	.1
Bismuth	1.8
Boron	.8
Cadmium	.3
Calcium	3.9
Chromium	.3
Cobalt	.3
Copper	.6
Iron	2.6
Lead	1.6
Lithium	2.1
Magnesium	16.3
Manganese	.1
Molybdenum	.4
Nickel	.5
Phosphorus	1.9
Potassium	79
Selenium	3
Silicon	1.2
Silver	.5
Sodium	9.9
Sulfur	3.5
Strontium	.3
Thallium	1.3
Tin	.7
Titanium	.5
Tungsten	1.7
Vanadium	.5
Yttrium	5
Zinc	.2
Zirconium	.3

The above applies to the following instrument runs:
MA47429

Instrument Linear Ranges

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

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: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: AGICPMS1 **Effective Date:** 09/10/18

Analyte	Linear Range ug/l
Zinc	100

The above applies to the following instrument runs:
MA47431,MA47439,MA47448

Instrument Linear Ranges

Job Number: JC94613
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: SSTRACE3 **Effective Date:** 08/22/19

Analyte	Linear Range ug/l
Aluminum	300000
Antimony	8000
Arsenic	8000
Barium	8000
Beryllium	8000
Bismuth	8000
Boron	8000
Cadmium	8000
Calcium	200000
Cerium	8000
Chromium	8000
Cobalt	8000
Copper	8000
Iron	200000
Lead	8000
Lithium	8000
Magnesium	300000
Manganese	8000
Molybdenum	8000
Nickel	8000
Palladium	8000
Phosphorus	8000
Potassium	200000
Selenium	8000
Silicon	25000
Silver	625
Sodium	200000
Sulfur	100000
Strontium	8000
Thallium	8000
Tin	8000
Titanium	8000
Tungsten	8000
Vanadium	8000
Zinc	8000
Zirconium	8000

The above applies to the following instrument runs:
MA47429

Metals Analysis

Raw Data

Zoom In ▶
Zoom Out

Sample Name: STDA Acquired: 9/11/2019 8:56:00 Type: Cal
Method: SGS 3 NO Valve(v193) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0094**	**-.0012**	**.0002**	**.0001**	**-.0000**	**.0031**	**.0004**	**-.0002**	**-.0003**
Stddev	.0002	.0000	.0001	.0000	.0000	.0001	.0000	.0001	.0000
%RSD	1.707	2.197	51.60	29.42	86.67	3.252	2.590	27.31	11.13
#1	.0092	-.0012	.0001	.0001	-.0001	.0030	.0004	-.0001	-.0002
#2	.0096	-.0012	.0003	.0001	-.0000	.0031	.0004	-.0002	-.0002
#3	.0094	-.0012	.0003	.0001	-.0000	.0032	.0004	-.0002	-.0003

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0004**	**.0003**	**-.0001**	**-.0001**	**.0002**	**-.0001**	**.0001**	**.0006**	**.0050**
Stddev	.0000	.0001	.0000	.0001	.0002	.0000	.0001	.0003	.0002
%RSD	6.951	37.90	15.66	71.50	70.66	51.84	81.17	53.12	3.572
#1	.0004	.0003	-.0001	-.0001	.0001	-.0001	.0000	.0007	.0049
#2	.0005	.0002	-.0001	-.0000	.0004	-.0001	.0002	.0009	.0053
#3	.0004	.0003	-.0001	-.0002	.0002	-.0000	.0001	.0002	.0050

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0002**	**-.0000**	**.0019**	**.0398**	**.0002**	**-.0004**	**.0012**	**.0002**	**-.0001**
Stddev	.0001	.0001	.0002	.0006	.0001	.0001	.0000	.0001	.0000
%RSD	43.71	259.0	12.62	1.612	26.69	22.10	1.947	46.13	39.28
#1	.0001	.0001	.0017	.0393	.0002	-.0003	.0012	.0002	-.0001
#2	.0001	-.0001	.0018	.0406	.0003	-.0004	.0012	.0002	-.0001
#3	.0002	-.0001	.0022	.0396	.0002	-.0005	.0012	.0001	-.0001

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0000**	**.0015**	**-.0005**	**-.0018**	**.0002**	**.0018**	**-.0050**	**.0006**
Stddev	.0000	.0002	.0001	.0001	.0001	.0009	.0001	.0000
%RSD	623.2	14.19	17.15	6.917	66.11	48.50	1.996	4.904
#1	.0000	.0015	-.0004	-.0019	.0003	.0027	-.0051	.0006
#2	-.0000	.0016	-.0006	-.0017	.0001	.0010	-.0049	.0007
#3	.0000	.0012	-.0006	-.0017	.0003	.0016	-.0049	.0006

◀ Zoom In ▶
Zoom Out

Sample Name: STDA Acquired: 9/11/2019 8:56:00 Type: Cal
Method: SGS 3 NO Valve(v193) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**188840.**	**35163.**	**9032.7**	**12919.**
Stddev	1894.	141.	24.0	23.
%RSD	1.0027	.40052	.26551	.17754
#1	190790.	35174.	9023.2	12926.
#2	188720.	35018.	9060.0	12938.
#3	187010.	35299.	9015.0	12894.

◀ Zoom In ▶
Zoom Out

Sample Name: STDb Acquired: 9/11/2019 9:00:59 Type: Cal
Method: SGS 3 NO Valve(v193) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6.820**	**13.03**	**4.121**	**2.681**	**.6528**	**1.056**	**2.966**	**2.193**	**.0771**
Stddev	.046	.12	.013	.007	.0019	.002	.015	.006	.0001
%RSD	.6731	.8827	.3240	.2494	.2855	.1754	.5102	.2726	.1874
#1	6.799	12.96	4.106	2.673	.6540	1.058	2.949	2.186	.0770
#2	6.872	13.16	4.129	2.686	.6537	1.056	2.976	2.197	.0772
#3	6.788	12.98	4.129	2.683	.6507	1.054	2.974	2.195	.0769

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.8916**	**5.877**	**.4461**	**.3441**	**1.016**	**.3477**	**.5720**	**3.309**	**8.623**
Stddev	.0028	.020	.0015	.0006	.003	.0012	.0017	.018	.058
%RSD	.3183	.3428	.3368	.1877	.2455	.3326	.2933	.5337	.6682
#1	.8931	5.853	.4443	.3434	1.013	.3466	.5705	3.325	8.649
#2	.8933	5.889	.4469	.3447	1.017	.3477	.5738	3.313	8.557
#3	.8883	5.887	.4470	.3443	1.017	.3489	.5718	3.290	8.663

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.363**	**.9577**	**1.607**	**4.893**	**.8899**	**2.921**	**1.956**	**.9093**	**11.95**
Stddev	.025	.0054	.010	.032	.0026	.010	.005	.0035	.10
%RSD	.4602	.5675	.6123	.6539	.2867	.3441	.2619	.3851	.8447
#1	5.387	.9636	1.614	4.917	.8869	2.909	1.950	.9053	12.03
#2	5.364	.9564	1.612	4.905	.8912	2.928	1.959	.9112	11.99
#3	5.338	.9530	1.596	4.857	.8914	2.925	1.959	.9114	11.84

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.7046**	**1.409**	**2.076**	**.2332**	**.6080**	**1.980**	**.5153**	**.1545**
Stddev	.0024	.004	.016	.0009	.0020	.011	.0021	.0005
%RSD	.3460	.2964	.7560	.3787	.3210	.5562	.3990	.3307
#1	.7072	1.404	2.068	.2321	.6058	1.989	.5130	.1550
#2	.7043	1.411	2.094	.2336	.6092	1.982	.5164	.1544
#3	.7023	1.411	2.066	.2337	.6092	1.968	.5166	.1540

◀ Zoom In ▶
Zoom Out

Sample Name: STDb Acquired: 9/11/2019 9:00:59 Type: Cal
Method: SGS 3 NO Valve(v193) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**180070.**	**34012.**	**8634.4**	**11683.**
Stddev	524.	272.	26.8	29.
%RSD	.29078	.79989	.30988	.25104
#1	180150.	33701.	8664.3	11716.
#2	179510.	34131.	8612.6	11658.
#3	180550.	34205.	8626.4	11676.

Zoom In Zoom Out

Sample Name: CCVCONF Acquired: 9/11/2019 9:06:38 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.997**	**2.013**	**2.009**	**2.039**	**2.012**	**1.992**	**2.026**	**2.042**	**.2477**
Stddev	.008	.007	.015	.016	.034	.035	.026	.015	.0042
%RSD	.3913	.3662	.7388	.7965	1.708	1.778	1.303	.7401	1.679
#1	1.994	2.011	2.026	2.058	2.009	1.991	2.032	2.060	.2468
#2	2.006	2.021	2.002	2.029	1.979	1.957	1.998	2.034	.2440
#3	1.992	2.007	1.999	2.030	2.048	2.028	2.049	2.034	.2522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.008**	**2.040**	**1.994**	**2.079**	**2.031**	**2.019**	**1.998**	**39.19**	**39.75**
Stddev	.035	.014	.013	.014	.015	.012	.019	.16	.17
%RSD	1.746	.6910	.6438	.6498	.7296	.5875	.9331	.4165	.4336
#1	2.004	2.056	2.009	2.095	2.048	2.033	2.019	39.16	39.73
#2	1.975	2.036	1.986	2.069	2.025	2.011	1.984	39.36	39.94
#3	2.045	2.029	1.987	2.075	2.020	2.014	1.990	39.03	39.59
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**39.70**	**39.51**	**39.24**	**39.39**	**2.031**	**2.011**	**5.193**	**2.037**	**1.981**
Stddev	.12	.14	.18	.18	.016	.014	.036	.017	.005
%RSD	.2904	.3431	.4576	.4632	.7632	.6929	.7023	.8214	.2694
#1	39.69	39.57	39.26	39.36	2.049	2.027	5.235	2.055	1.979
#2	39.82	39.60	39.41	39.58	2.021	2.005	5.173	2.033	1.987
#3	39.59	39.35	39.05	39.22	2.023	2.001	5.171	2.023	1.976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCVCONF Acquired: 9/11/2019 9:06:38 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.985**	**1.970**	**2.026**	**1.989**	**2.019**	**1.949**	**2.008**	**1.991**
Stddev	.033	.014	.035	.016	.013	.004	.015	.036
%RSD	1.673	.6996	1.712	.7830	.6255	.2215	.7547	1.799
#1	1.986	1.986	2.024	2.007	2.033	1.947	2.026	1.989
#2	1.951	1.964	1.993	1.980	2.008	1.954	1.999	1.956
#3	2.017	1.960	2.062	1.980	2.016	1.947	2.000	2.028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**185630.**	**35072.**	**8895.8**	**12065.**
Stddev	2736.	359.	53.0	70.
%RSD	1.4739	1.0225	.59564	.57706
#1	186450.	34885.	8839.5	11990.
#2	187860.	34845.	8903.3	12079.
#3	182580.	35485.	8944.7	12127.

Zoom In Zoom Out

Sample Name: CCBCONF Acquired: 9/11/2019 9:11:36 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0001**	**.0001**	**.0000**	**.0001**	**-.0002**	**.0001**	**.0002**	**-.0002**
Stddev	.0001	.0001	.0001	.0001	.0002	.0002	.0000	.0001	.0001
%RSD	37.81	120.9	217.1	447.1	134.2	95.66	52.81	39.81	29.44
#1	.0002	.0001	.0000	.0002	-.0000	.0000	.0001	.0002	-.0001
#2	.0001	.0001	-.0001	-.0000	.0003	-.0004	.0000	.0003	-.0002
#3	.0001	-.0000	.0002	-.0001	.0001	-.0003	.0001	.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0001**	**-.0004**	**.0008**	**.0002**	**.0010**	**.0003**	**-.0043**	**-.0012**
Stddev	.0000	.0000	.0007	.0009	.0003	.0018	.0008	.0019	.0016
%RSD	30.29	77.31	155.5	108.0	170.5	170.5	318.2	44.09	132.9
#1	-.0001	-.0000	-.0007	.0018	.0006	.0024	.0012	-.0063	-.0022
#2	-.0001	-.0001	.0003	.0003	.0001	-.0010	-.0005	-.0025	-.0019
#3	-.0001	-.0001	-.0010	.0003	-.0001	.0017	.0000	-.0041	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**-.0034**	**-.0571**	**-.1874**	**.0030**	**.0006**	**.0004**	**.0000**	**.0000**
Stddev	.0016	.0115	.0197	.0093	.0003	.0001	.0006	.0002	.0001
%RSD	165.0	342.1	34.46	4.986	8.746	12.51	169.9	485.1	2028.
#1	.0028	-.0152	-.0672	-.1905	.0027	.0005	.0011	-.0001	-.0001
#2	.0003	.0078	-.0344	-.1948	.0030	.0007	-.0002	.0002	.0001
#3	-.0002	-.0027	-.0696	-.1769	.0032	.0005	.0003	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCBCONF Acquired: 9/11/2019 9:11:36 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0003**	**.0001**	**-.0009**	**.0002**	**.0020**	**.0008**	**.0008**
Stddev	.0001	.0004	.0001	.0023	.0017	.0012	.0003	.0014
%RSD	72.10	154.1	83.53	265.1	922.5	61.32	37.60	171.8
#1	.0002	-.0006	.0000	-.0035	.0003	.0027	.0005	-.0007
#2	.0000	.0002	.0003	-.0002	-.0016	.0027	.0008	.0011
#3	.0003	-.0004	.0002	.0010	.0018	.0006	.0012	.0021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**193570.**	**35157.**	**9268.6**	**13201.**
Stddev	1564.	513.	65.8	83.
%RSD	.80783	1.4588	.71000	.63186
#1	192000.	34586.	9242.5	13162.
#2	195130.	35578.	9219.9	13145.
#3	193590.	35307.	9343.5	13297.

Zoom In Zoom Out

Sample Name: ICV 5 Acquired: 9/11/2019 9:16:39 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.024**	**2.036**	**1.999**	**2.030**	**1.989**	**2.009**	**2.034**	**2.009**
Stddev	.009	.017	.012	.012	.012	.012	.017	.012
%RSD	.4710	.8096	.5877	.6081	.5828	.5719	.8274	.6026
#1	2.034	2.018	1.995	2.026	2.002	2.021	2.045	2.006
#2	2.024	2.050	2.012	2.044	1.982	1.998	2.042	2.022
#3	2.015	2.039	1.990	2.020	1.982	2.009	2.014	1.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2444**	**2.014**	**2.011**	**2.027**	**2.027**	**1.995**	**1.993**	**2.010**
Stddev	.0015	.012	.013	.012	.010	.012	.009	.014
%RSD	.6113	.6125	.6224	.6042	.4912	.5879	.4705	.6732
#1	.2460	2.028	2.008	2.024	2.021	1.990	1.992	2.005
#2	.2430	2.004	2.025	2.041	2.039	2.008	2.003	2.025
#3	.2442	2.011	2.001	2.017	2.022	1.986	1.984	1.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.29**	**39.68**	**39.93**	**39.73**	**39.80**	**40.30**	**2.036**	**1.985**
Stddev	.21	.16	.15	.13	.16	.22	.012	.011
%RSD	.5138	.3906	.3744	.3179	.4083	.5515	.5797	.5748
#1	40.49	39.83	40.07	39.84	39.94	40.50	2.032	1.981
#2	40.30	39.69	39.94	39.76	39.83	40.35	2.049	1.998
#3	40.07	39.52	39.77	39.60	39.62	40.06	2.027	1.976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Zoom In Zoom Out

Sample Name: ICV 5 Acquired: 9/11/2019 9:16:39 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.025**	**2.004**	**1.975**	**1.976**	**1.971**	**2.010**	**1.995**	**1.992**
Stddev	.025	.009	.007	.012	.012	.012	.009	.009
%RSD	.4943	.4573	.3524	.6172	.6258	.6099	.4350	.4356
#1	5.016	2.000	1.983	1.990	1.961	2.022	1.996	1.989
#2	5.053	2.014	1.975	1.970	1.985	1.997	2.003	2.001
#3	5.006	1.997	1.969	1.968	1.967	2.009	1.986	1.985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**1.974**	**1.975**	F **-.0689**
Stddev	.010	.011	.0005
%RSD	.5259	.5536	.7105
#1	1.984	1.969	-.0695
#2	1.974	1.987	-.0687
#3	1.963	1.968	-.0686
Check ?	Chk Pass	Chk Pass	Chk Fail
Value			2.000
Range			-5.000%

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**185810.**	**35345.**	**8890.1**	**12046.**
Stddev	733.	187.	46.1	57.
%RSD	.39423	.52795	.51893	.47381
#1	185100.	35249.	8903.9	12065.
#2	185780.	35226.	8838.6	11982.
#3	186560.	35560.	8927.7	12092.

Zoom In Zoom Out

Sample Name: ICB Acquired: 9/11/2019 9:21:40 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0001**	**.0001**	**.0000**	**.0003**	**-.0003**	**.0002**	**.0001**	**-.0003**
Stddev	.0001	.0000	.0001	.0002	.0002	.0003	.0000	.0003	.0001
%RSD	38.59	24.69	79.55	5139.	77.06	96.20	14.15	195.1	40.65
#1	.0002	.0002	.0002	-.0000	.0005	-.0002	.0002	-.0002	-.0003
#2	.0004	.0001	.0000	.0002	.0003	-.0005	.0002	.0002	-.0003
#3	.0002	.0002	.0002	-.0001	.0001	-.0000	.0002	.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0001**	**-.0002**	**.0005**	**-.0004**	**.0022**	**.0004**	**-.0014**	**.0019**
Stddev	.0001	.0001	.0008	.0005	.0004	.0008	.0002	.0051	.0016
%RSD	96.13	125.1	480.1	110.0	102.5	36.10	54.16	356.1	84.40
#1	.0000	.0001	-.0004	-.0000	-.0002	.0021	.0006	-.0072	.0036
#2	-.0002	-.0000	.0007	.0011	-.0008	.0030	.0004	.0025	.0014
#3	-.0002	.0001	-.0009	.0004	-.0001	.0014	.0002	.0004	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0035**	**.0097**	**-.0819**	**-.2379**	**.0024**	**.0010**	**.0001**	**-.0002**	**.0001**
Stddev	.0009	.0092	.0151	.0030	.0002	.0001	.0008	.0002	.0001
%RSD	25.48	94.80	18.47	1.259	9.627	12.74	567.4	84.47	53.54
#1	.0045	.0161	-.0911	-.2352	.0026	.0011	.0002	-.0001	.0001
#2	.0032	-.0008	-.0644	-.2411	.0023	.0010	.0009	-.0001	.0000
#3	.0028	.0138	-.0900	-.2373	.0022	.0009	-.0007	-.0004	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICB Acquired: 9/11/2019 9:21:40 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	F **.0156**	F **.0012**	**-.0029**	**-.0001**	**.0000**	**.0014**	**.0002**
Stddev	.0003	.0023	.0002	.0014	.0014	.0009	.0001	.0032
%RSD	101.2	14.68	15.54	49.18	2336.	4632.	8.166	1662.
#1	.0003	.0177	.0011	-.0025	-.0017	-.0010	.0013	-.0032
#2	.0000	.0160	.0014	-.0045	.0011	.0006	.0015	.0031
#3	.0007	.0132	.0010	-.0017	.0004	.0004	.0014	.0007
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0050	.0010					
Low Limit		-.0050	-.0010					

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**195580.**	**35871.**	**9248.0**	**13172.**
Stddev	1124.	134.	45.0	55.
%RSD	.57444	.37452	.48624	.41404
#1	196380.	35900.	9248.7	13193.
#2	196070.	35724.	9202.8	13110.
#3	194300.	35988.	9292.7	13213.

Zoom In Zoom Out

Sample Name: CCV Acquired: 9/11/2019 9:26:46 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.036**	**2.039**	**2.015**	**2.045**	**2.016**	**2.000**	**2.064**	**2.048**	**.2488**
Stddev	.012	.021	.015	.012	.015	.014	.016	.012	.0015
%RSD	.6093	1.056	.7229	.6007	.7252	.6879	.7579	.5598	.6157
#1	2.049	2.061	2.032	2.059	2.000	1.984	2.053	2.061	.2471
#2	2.035	2.019	2.009	2.039	2.029	2.011	2.058	2.044	.2502
#3	2.024	2.038	2.005	2.036	2.019	2.004	2.082	2.039	.2490
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.015**	**2.043**	**1.997**	**2.087**	**2.037**	**2.027**	**2.009**	**39.87**	**40.46**
Stddev	.013	.016	.015	.007	.012	.014	.011	.23	.22
%RSD	.6190	.7711	.7605	.3315	.5854	.6957	.5543	.5825	.5530
#1	2.002	2.061	2.014	2.095	2.051	2.043	2.021	40.11	40.69
#2	2.027	2.035	1.989	2.082	2.030	2.017	2.006	39.86	40.44
#3	2.015	2.032	1.987	2.084	2.030	2.022	1.999	39.64	40.25
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.35**	**40.12**	**39.79**	**39.99**	**2.033**	**2.014**	**5.204**	**2.042**	**2.014**
Stddev	.20	.21	.26	.27	.014	.016	.041	.014	.009
%RSD	.5008	.5192	.6548	.6733	.6828	.7962	.7829	.7008	.4498
#1	40.55	40.31	40.05	40.26	2.049	2.032	5.251	2.058	2.023
#2	40.35	40.15	39.78	39.99	2.026	2.005	5.184	2.034	2.012
#3	40.14	39.89	39.53	39.73	2.024	2.003	5.177	2.033	2.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 9/11/2019 9:26:46 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.992**	**1.983**	**2.035**	**2.001**	**2.022**	**1.982**	**2.013**	**2.002**
Stddev	.019	.015	.012	.014	.014	.013	.015	.014
%RSD	.9501	.7391	.5871	.7009	.6732	.6614	.7421	.6937
#1	1.971	2.000	2.022	2.017	2.037	1.995	2.030	1.986
#2	2.009	1.973	2.046	1.990	2.018	1.983	2.007	2.012
#3	1.996	1.976	2.036	1.996	2.011	1.969	2.002	2.007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**185750.**	**35110.**	**8901.7**	**12057.**
Stddev	1042.	269.	55.6	54.
%RSD	.56098	.76631	.62446	.44462
#1	186930.	34895.	8837.5	11995.
#2	184960.	35024.	8935.8	12087.
#3	185350.	35412.	8931.7	12089.

Zoom In Zoom Out

Sample Name: CCB Acquired: 9/11/2019 9:31:47 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0001**	**.0002**	**.0001**	**.0002**	**-.0005**	**.0002**	**.0002**	**-.0002**
Stddev	.0001	.0000	.0001	.0002	.0002	.0002	.0000	.0001	.0003
%RSD	49.80	16.75	33.94	284.8	109.4	54.54	20.65	23.63	191.4
#1	.0001	.0001	.0002	.0000	.0000	-.0007	.0002	.0003	.0001
#2	.0002	.0001	.0001	.0003	.0003	-.0005	.0002	.0002	-.0005
#3	.0003	.0002	.0003	-.0001	.0001	-.0002	.0002	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0000**	**.0001**	**.0009**	**-.0008**	**-.0000**	**.0013**	**.0021**	**.0035**
Stddev	.0002	.0000	.0006	.0003	.0003	.0012	.0007	.0023	.0007
%RSD	83.05	68.79	420.3	40.36	30.76	6324.	51.50	109.8	19.85
#1	-.0000	.0000	.0008	.0012	-.0010	.0013	.0020	.0047	.0041
#2	-.0004	.0001	-.0004	.0009	-.0005	-.0008	.0009	.0001	.0028
#3	-.0003	.0000	.0001	.0005	-.0009	-.0005	.0008	.0016	.0038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0045**	**.0022**	**-.0763**	**-.2525**	**.0028**	**.0007**	**.0004**	**.0001**	**.0002**
Stddev	.0001	.0011	.0049	.0170	.0006	.0001	.0009	.0005	.0001
%RSD	1.655	50.40	6.408	6.743	21.75	14.95	220.3	524.4	41.73
#1	.0045	.0017	-.0715	-.2373	.0030	.0007	-.0006	.0005	.0001
#2	.0044	.0035	-.0813	-.2709	.0033	.0007	.0012	.0002	.0002
#3	.0044	.0015	-.0762	-.2493	.0021	.0005	.0007	-.0005	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 9/11/2019 9:31:47 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0030**	**.0005**	**-.0010**	**.0002**	**.0013**	**.0008**	**.0009**
Stddev	.0002	.0005	.0000	.0002	.0012	.0015	.0005	.0003
%RSD	89.02	15.04	3.902	20.70	627.8	113.9	66.57	38.25
#1	.0002	.0026	.0005	-.0012	-.0006	.0013	.0002	.0010
#2	.0000	.0031	.0005	-.0008	-.0004	.0027	.0010	.0012
#3	.0004	.0035	.0004	-.0009	.0015	-.0002	.0012	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**197160.**	**35669.**	**9297.5**	**13228.**
Stddev	1980.	293.	30.8	39.
%RSD	1.0044	.82175	.33122	.29801
#1	196330.	35578.	9316.5	13254.
#2	199420.	35433.	9262.0	13183.
#3	195730.	35997.	9314.0	13248.

Zoom In Zoom Out

Sample Name: CRID Acquired: 9/11/2019 9:36:51 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0043**	**.0010**	**.0010**	**.0030**	**.0021**	F **-.0006**	**.0031**	**.0043**
Stddev	.0001	.0000	.0001	.0000	.0001	.0003	.0001	.0001
%RSD	3.437	2.349	5.222	.7535	2.987	60.05	1.603	2.469
#1	.0044	.0010	.0011	.0030	.0021	-.0007	.0032	.0043
#2	.0042	.0010	.0010	.0031	.0020	-.0002	.0032	.0042
#3	.0045	.0010	.0011	.0030	.0020	-.0008	.0031	.0044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value						.0020		
Range						-20.00%		

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **-.0002**	F **.0014**	**.0107**	**.0028**	F **.0032**	F **-.0001**	F **.0069**	F **.0012**
Stddev	.0004	.0000	.0000	.0004	.0003	.0007	.0017	.0003
%RSD	206.6	1.001	.1658	13.88	8.213	1410.	24.36	23.57
#1	-.0001	.0014	.0107	.0032	.0029	.0005	.0061	.0009
#2	.0002	.0013	.0106	.0028	.0033	.0003	.0058	.0015
#3	-.0007	.0014	.0107	.0024	.0033	-.0009	.0088	.0013
Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.0020	.0020			.0020	.0025	.0050	.0030
Range	-20.00%	-20.00%			20.00%	-20.00%	20.00%	-20.00%

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1013**	**1.047**	**.0049**	**.1072**	**1.908**	F **.7724**	**.0018**	**.0002**
Stddev	.0073	.006	.0010	.0072	.025	.0094	.0002	.0001
%RSD	7.174	.5412	21.62	6.687	1.283	1.215	8.748	58.50
#1	.1002	1.047	.0036	.0999	1.936	.7728	.0019	.0002
#2	.0946	1.042	.0055	.1076	1.893	.7628	.0019	.0001
#3	.1090	1.053	.0054	.1142	1.895	.7815	.0016	.0003
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None	None
Value						1.000		
Range						-20.00%		

Zoom In Zoom Out

Sample Name: CRID Acquired: 9/11/2019 9:36:51 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021**	**.0080**	**-.0001**	**-.0001**	**.0013**	**.0004**	**.0017**	**.0004**
Stddev	.0003	.0001	.0001	.0004	.0003	.0000	.0010	.0001
%RSD	15.61	1.011	89.48	288.6	20.15	4.592	58.98	21.16
#1	.0024	.0079	-.0001	-.0004	.0015	.0004	.0029	.0004
#2	.0018	.0081	-.0000	-.0004	.0012	.0004	.0011	.0004
#3	.0021	.0080	-.0001	.0003	.0010	.0004	.0012	.0006
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**.0004**	**.0014**	**.0012**
Stddev	.0010	.0004	.0014
%RSD	240.6	26.90	115.3
#1	-.0003	.0011	-.0004
#2	-.0000	.0013	.0021
#3	.0015	.0018	.0019
Check ?	None	None	None
Value			
Range			

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**195450.**	**35545.**	**9207.1**	**13063.**
Stddev	2463.	171.	22.6	31.
%RSD	1.2601	.48160	.24566	.23571
#1	193540.	35472.	9211.1	13073.
#2	194570.	35741.	9182.7	13028.
#3	198230.	35423.	9227.4	13087.

Zoom In Zoom Out

Sample Name: CRI Acquired: 9/11/2019 9:41:54 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1981**	**.0020**	**.0031**	**.0511**	**.0103**	**.0093**	**.0154**	**.0103**	**.0043**
Stddev	.0005	.0001	.0002	.0003	.0002	.0001	.0001	.0001	.0003
%RSD	.2348	3.213	5.385	.4915	1.975	1.027	.7038	.8314	6.677
#1	.1987	.0019	.0030	.0511	.0101	.0093	.0153	.0104	.0040
#2	.1978	.0020	.0033	.0508	.0104	.0094	.0155	.0103	.0044
#3	.1980	.0019	.0032	.0513	.0104	.0092	.0155	.0102	.0046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0496**	**.0220**	**.0076**	**.0114**	**.0026**	**.0117**	**.0066**	**.1937**	**5.031**
Stddev	.0004	.0001	.0007	.0002	.0010	.0014	.0005	.0033	.010
%RSD	.7975	.6739	9.121	1.726	38.94	11.68	7.033	1.724	.2037
#1	.0491	.0222	.0074	.0113	.0033	.0104	.0064	.1976	5.041
#2	.0497	.0220	.0070	.0117	.0014	.0131	.0063	.1913	5.032
#3	.0499	.0219	.0083	.0113	.0031	.0115	.0072	.1924	5.021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1057**	**5.121**	**4.832**	**4.741**	**.1052**	**.0208**	F **.2968**	**.0113**	**.0097**
Stddev	.0014	.018	.024	.021	.0004	.0002	.0010	.0002	.0001
%RSD	1.370	.3490	.5049	.4511	.3941	.8483	.3372	2.110	1.453
#1	.1056	5.133	4.859	4.766	.1054	.0210	.2979	.0114	.0099
#2	.1072	5.100	4.811	4.733	.1055	.0206	.2963	.0115	.0097
#3	.1044	5.129	4.827	4.725	.1048	.0209	.2961	.0111	.0096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value							.2000		
Range							20.00%		

Zoom In Zoom Out

Sample Name: CRI Acquired: 9/11/2019 9:41:54 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0100**	**.0505**	F **.0122**	**.0596**	**.0237**	**.0548**	**.0505**	**.0005**
Stddev	.0002	.0005	.0000	.0011	.0005	.0009	.0002	.0021
%RSD	2.285	.9950	.1646	1.863	2.135	1.641	.4647	394.9
#1	.0102	.0510	.0122	.0608	.0241	.0559	.0504	-.0019
#2	.0097	.0505	.0122	.0586	.0239	.0543	.0508	.0019
#3	.0100	.0500	.0122	.0594	.0231	.0544	.0504	.0015
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value			.0100					
Range			20.00%					

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**194620.**	**35693.**	**9171.7**	**12888.**
Stddev	689.	142.	28.0	33.
%RSD	.35392	.39657	.30568	.25949
#1	195380.	35547.	9141.3	12854.
#2	194040.	35830.	9177.5	12888.
#3	194440.	35702.	9196.4	12921.

Zoom In Zoom Out

Sample Name: ICSA Acquired: 9/11/2019 9:46:51 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	-.0002	.0011	-.0002	.0007	-.0005	.0001	.0000	-.0004
Stddev	.0000	.0001	.0001	.0002	.0003	.0011	.0000	.0002	.0006
%RSD	7.839	37.88	8.356	109.3	40.39	218.0	75.95	551.1	161.8
#1	.0005	-.0002	.0011	.0001	.0006	-.0015	.0001	.0003	-.0010
#2	.0005	-.0002	.0011	-.0004	.0010	.0006	.0001	-.0001	.0002
#3	.0005	-.0001	.0010	-.0004	.0004	-.0006	.0000	-.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0036	.0009	.0005	-.0003	.0004	.0012	501.5	385.7
Stddev	.0002	.0001	.0012	.0004	.0010	.0046	.0030	5.1	5.5
%RSD	24.71	3.986	140.8	87.30	337.4	1266.	246.5	1.019	1.417
#1	-.0012	.0037	.0002	.0002	-.0015	-.0044	-.0022	503.3	388.4
#2	-.0008	.0034	.0023	.0009	.0004	.0048	.0023	495.7	389.2
#3	-.0008	.0037	.0001	.0002	.0002	.0008	.0035	505.5	379.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	185.9	496.5	.1535	.2337	-.0017	.0010	.0061	-.0027	-.0024
Stddev	2.4	1.1	.0255	.0230	.0010	.0002	.0007	.0010	.0001
%RSD	1.271	.2148	16.62	9.858	56.03	24.29	12.00	37.96	5.649
#1	183.2	495.7	.1561	.2071	-.0028	.0009	.0057	-.0038	-.0025
#2	187.7	497.7	.1776	.2485	-.0012	.0008	.0070	-.0019	-.0025
#3	186.7	496.1	.1268	.2455	-.0011	.0013	.0057	-.0024	-.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ICSA Acquired: 9/11/2019 9:46:51 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.0009	.0076	.0060	.0013	-.0083	-.0068	.0129
Stddev	.0005	.0006	.0003	.0017	.0012	.0007	.0009	.0047
%RSD	41.76	68.83	4.080	28.82	92.23	8.147	13.24	36.08
#1	-.0014	.0003	.0072	.0072	.0005	-.0091	-.0078	.0174
#2	-.0015	.0009	.0077	.0067	.0026	-.0081	-.0065	.0081
#3	-.0006	.0016	.0078	.0040	.0007	-.0079	-.0060	.0134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit								
Low Limit								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	173110.	34234.	8270.1	10881.
Stddev	508.	131.	31.7	31.
%RSD	.29342	.38306	.38375	.28929
#1	172590.	34383.	8233.5	10845.
#2	173610.	34139.	8289.6	10901.
#3	173130.	34179.	8287.2	10898.

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 9/11/2019 9:52:10 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5070	.4952	1.013	.4927	.4842	.5080	.5049	.9761	1.020
Stddev	.0029	.0028	.001	.0008	.0035	.0043	.0033	.0015	.009
%RSD	.5643	.5664	.1036	.1636	.7325	.8480	.6444	.1517	.9234
#1	.5046	.4931	1.012	.4924	.4804	.5035	.5015	.9756	1.011
#2	.5102	.4984	1.014	.4922	.4875	.5121	.5080	.9748	1.030
#3	.5063	.4942	1.013	.4937	.4847	.5084	.5052	.9777	1.021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4910	.9554	1.064	.9848	.9245	1.008	1.024	499.5	381.4
Stddev	.0041	.0010	.002	.0024	.0045	.003	.002	2.4	1.1
%RSD	.8422	.1067	.1839	.2469	.4833	.2469	.1922	.4733	.2934
#1	.4871	.9542	1.064	.9820	.9203	1.005	1.022	499.8	381.8
#2	.4953	.9561	1.062	.9864	.9239	1.010	1.024	501.6	380.2
#3	.4905	.9558	1.066	.9859	.9292	1.008	1.026	496.9	382.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	187.5	497.0	.0936	.1641	.4979	.4868	.5164	.4669	.5009
Stddev	2.2	2.9	.0308	.0116	.0014	.0008	.0007	.0016	.0033
%RSD	1.159	.5858	32.92	7.097	.2767	.1679	.1264	.3327	.6621
#1	185.0	494.2	.0673	.1534	.4972	.4861	.5157	.4652	.4976
#2	188.9	500.0	.0861	.1765	.4995	.4866	.5168	.4682	.5042
#3	188.7	496.7	.1275	.1623	.4971	.4877	.5168	.4673	.5010
Check ?	Chk Pass	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 9/11/2019 9:52:10 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5007	.4772	.5246	.5014	.5206	.5094	.4753	-.0047
Stddev	.0030	.0024	.0047	.0033	.0020	.0022	.0020	.0015
%RSD	.6021	.5118	.8941	.6674	.3837	.4341	.4194	32.69
#1	.4977	.4745	.5199	.5024	.5191	.5080	.4732	-.0052
#2	.5037	.4779	.5292	.4977	.5199	.5119	.4756	-.0058
#3	.5007	.4792	.5247	.5043	.5229	.5082	.4771	-.0029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value								
Range								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	171340.	34468.	8287.5	10937.
Stddev	1484.	170.	12.4	10.
%RSD	.86609	.49343	.14949	.09559
#1	173030.	34500.	8291.8	10942.
#2	170240.	34284.	8273.5	10925.
#3	170740.	34619.	8297.2	10944.

Zoom In
Zoom Out

Sample Name: HSTD Acquired: 9/11/2019 9:57:25 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.101**	**8.027**	**8.101**	**8.086**	**8.083**	**8.003**	**7.975**	**8.120**	**.5779**
Stddev	.170	.109	.101	.094	.143	.110	.096	.097	.0064
%RSD	2.096	1.361	1.251	1.163	1.775	1.377	1.202	1.199	1.104
#1	8.279	8.152	8.214	8.191	8.016	7.976	7.936	8.229	.5744
#2	8.082	7.978	8.073	8.057	7.986	7.909	7.904	8.091	.5741
#3	7.941	7.951	8.017	8.010	8.248	8.124	8.084	8.040	.5853
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.904**	**8.322**	**7.956**	**8.337**	**8.025**	**8.186**	**8.114**	**.0860**	**-.0231**
Stddev	.127	.123	.099	.086	.097	.100	.098	.0049	.0011
%RSD	1.605	1.473	1.247	1.035	1.210	1.227	1.204	5.718	4.897
#1	7.770	8.459	8.067	8.434	8.133	8.297	8.223	.0804	-.0218
#2	7.918	8.285	7.927	8.306	7.999	8.158	8.082	.0898	-.0237
#3	8.023	8.223	7.875	8.270	7.944	8.102	8.035	.0876	-.0239
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0186**	**-.0350**	**.3356**	**-.2174**	**8.189**	**8.103**	**25.27**	**8.352**	**8.017**
Stddev	.0013	.0073	.0212	.0023	.103	.106	.29	.103	.072
%RSD	6.912	20.82	6.322	1.050	1.253	1.310	1.164	1.229	.9013
#1	-.0200	-.0267	.3470	-.2195	8.303	8.221	25.59	8.465	8.100
#2	-.0175	-.0380	.3111	-.2150	8.161	8.074	25.18	8.327	7.967
#3	-.0182	-.0403	.3486	-.2178	8.103	8.015	25.02	8.264	7.985
Check ?	None	None	None	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In
Zoom Out

Sample Name: HSTD Acquired: 9/11/2019 9:57:25 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.783**	**8.295**	**7.850**	**96.27**	**8.233**	**7.764**	**8.111**	**-.3003**
Stddev	.130	.111	.140	1.17	.081	.009	.094	.0046
%RSD	1.664	1.343	1.779	1.218	.9879	.1197	1.153	1.531
#1	7.686	8.418	7.790	97.57	8.325	7.774	8.215	-.2977
#2	7.734	8.263	7.751	95.97	8.204	7.756	8.084	-.2977
#3	7.930	8.203	8.010	95.28	8.170	7.762	8.033	-.3056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value								
Range								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**194630.**	**36126.**	**9024.4**	**12931.**
Stddev	2731.	163.	122.2	160.
%RSD	1.4034	.44997	1.3539	1.2394
#1	195840.	35953.	8886.9	12749.
#2	196550.	36149.	9065.9	12992.
#3	191500.	36276.	9120.5	13052.

Zoom In
Zoom Out

Sample Name: HSTD Acquired: 9/11/2019 10:03:32 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0004**	**.0009**	**.0000**	**.0004**	**.0001**	**.0007**	**.0006**	**.0006**
Stddev	.0003	.0000	.0001	.0001	.0002	.0010	.0001	.0001	.0014
%RSD	55.39	4.979	8.878	181.7	40.40	1012.	11.38	16.53	246.5
#1	.0009	.0004	.0009	.0001	.0002	-.0010	.0008	.0005	-.0010
#2	.0007	.0003	.0010	-.0000	.0004	.0010	.0007	.0005	.0014
#3	.0002	.0004	.0008	.0000	.0005	.0003	.0007	.0007	.0013
Check ?	None	None	None	None	None	None	None	None	None
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0035**	**.0010**	**.0034**	**-.0006**	**.0026**	**.0014**	**293.9**	**188.5**
Stddev	.0003	.0001	.0009	.0019	.0003	.0010	.0026	6.0	1.6
%RSD	169.8	3.968	86.96	54.64	47.79	37.30	188.5	2.051	.8591
#1	-.0004	.0037	.0010	.0036	-.0007	.0032	.0008	293.3	186.7
#2	.0002	.0034	.0002	.0052	-.0008	.0015	-.0009	300.2	189.5
#3	-.0003	.0035	.0019	.0015	-.0003	.0031	.0043	288.2	189.4
Check ?	None	None	None	None	None	None	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**187.9**	**289.3**	**197.2**	**196.0**	**.0039**	**.0024**	**.0158**	**-.0025**	**-.0009**
Stddev	3.8	3.6	2.3	1.6	.0006	.0001	.0017	.0004	.0001
%RSD	2.001	1.234	1.173	.8088	14.43	5.681	10.91	15.93	8.974
#1	186.2	288.9	196.6	197.8	.0041	.0023	.0162	-.0028	-.0010
#2	192.2	293.1	199.7	195.4	.0032	.0026	.0172	-.0027	-.0008
#3	185.3	286.0	195.2	194.9	.0043	.0023	.0139	-.0021	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	None	None	None
Value									
Range									

Zoom In
Zoom Out

Sample Name: HSTD Acquired: 9/11/2019 10:03:32 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0020**	**.0083**	**-.0013**	**.0038**	**-.0114**	**-.0012**	**.0126**
Stddev	.0001	.0010	.0003	.0010	.0006	.0006	.0006	.0034
%RSD	22.46	48.60	3.124	77.68	14.44	5.603	49.81	27.21
#1	-.0007	.0012	.0080	-.0004	.0045	-.0107	-.0019	.0165
#2	-.0005	.0031	.0085	-.0011	.0035	-.0118	-.0008	.0101
#3	-.0004	.0016	.0083	-.0023	.0035	-.0116	-.0010	.0112
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**176060.**	**34960.**	**8449.1**	**11056.**
Stddev	3929.	423.	36.7	29.
%RSD	2.2318	1.2112	.43460	.25821
#1	172680.	34973.	8409.4	11028.
#2	175140.	34531.	8481.8	11085.
#3	180370.	35377.	8456.1	11056.

Zoom In Zoom Out

Sample Name: FECONF Acquired: 9/11/2019 10:09:01 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**.0002**	**.0007**	**.0002**	**.0001**	**-.0017**	**-.0004**	**-.0000**	**.0018**
Stddev	.0001	.0001	.0001	.0002	.0002	.0007	.0001	.0002	.0004
%RSD	408.8	23.77	16.96	112.5	357.9	41.29	23.11	998.5	23.96
#1	-.0001	.0003	.0006	.0002	-.0002	-.0017	-.0005	.0002	.0020
#2	.0001	.0002	.0009	-.0000	.0003	-.0010	-.0003	-.0003	.0022
#3	-.0001	.0002	.0007	.0005	.0001	-.0024	-.0003	.0000	.0013

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**-.0008**	**.0007**	**.0029**	**-.0010**	**-.0005**	**.0005**	**-.0095**	**.0045**
Stddev	.0001	.0000	.0002	.0013	.0003	.0014	.0006	.0037	.0005
%RSD	20.99	5.012	31.72	44.72	27.39	298.3	118.0	39.08	11.80
#1	.0005	-.0008	.0004	.0043	-.0012	.0011	.0002	-.0060	.0046
#2	.0007	-.0009	.0008	.0019	-.0007	-.0010	.0011	-.0133	.0039
#3	.0005	-.0008	.0008	.0023	-.0012	-.0016	.0001	-.0091	.0050

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**198.9**	**-.0251**	**-.0529**	**-.2943**	**.0016**	**.0012**	**.0062**	**.0009**	**-.0000**
Stddev	2.4	.0072	.0411	.0073	.0002	.0001	.0012	.0004	.0001
%RSD	1.230	28.51	77.80	2.498	13.03	5.691	20.21	48.49	148.0
#1	199.4	-.0248	-.0057	-.2995	.0019	.0012	.0073	.0010	-.0000
#2	201.1	-.0324	-.0812	-.2859	.0015	.0012	.0063	.0012	.0000
#3	196.3	-.0181	-.0718	-.2974	.0015	.0011	.0048	.0004	-.0001

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0006**	**.0082**	**-.0272**	**.0074**	**-.0168**	**.0033**	**.0107**
Stddev	.0003	.0004	.0000	.0008	.0012	.0006	.0004	.0030
%RSD	388.3	58.92	.4780	2.804	16.05	3.604	13.42	28.10
#1	.0003	-.0003	.0082	-.0279	.0061	-.0174	.0038	.0087
#2	-.0004	-.0010	.0083	-.0273	.0083	-.0166	.0029	.0093
#3	-.0001	-.0006	.0082	-.0264	.0078	-.0163	.0033	.0142

Zoom In Zoom Out

Sample Name: FECONF Acquired: 9/11/2019 10:09:01 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**196100.**	**35986.**	**9255.7**	**13378.**
Stddev	777.	176.	36.7	51.
%RSD	.39602	.48896	.39691	.38135
#1	196990.	36133.	9213.4	13321.
#2	195570.	35791.	9274.8	13395.
#3	195750.	36035.	9279.0	13418.

Zoom In Zoom Out

Sample Name: CRCONF Acquired: 9/11/2019 10:14:10 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0000**	**.0000**	**-.0007**	F **10.18**	**.0011**	**.0002**	**.0002**
Stddev	.0001	.0000	.0000	.0002	.16	.0003	.0000	.0001
%RSD	94.72	121.2	121.7	21.89	1.586	24.63	20.90	35.54
#1	.0001	.0001	.0000	-.0009	10.15	.0009	.0002	.0003
#2	.0000	-.0000	.0001	-.0006	10.36	.0015	.0003	.0001
#3	.0003	.0001	-.0000	-.0006	10.04	.0010	.0002	.0003

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**.0012**	**.0390**	**-.0017**	**.0010**	**-.0009**	**.0004**	F **-.0038**
Stddev	.0001	.0003	.0006	.0007	.0003	.0003	.0011	.0027
%RSD	11.09	22.26	1.424	41.15	30.28	31.94	260.7	70.29
#1	-.0006	.0010	.0389	-.0013	.0007	-.0008	-.0004	-.0030
#2	-.0007	.0015	.0396	-.0024	.0009	-.0012	.0000	-.0069
#3	-.0008	.0011	.0385	-.0012	.0013	-.0006	.0016	-.0016

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0135**	**.1439**	**.0218**	**.0133**	**-.1185**	**-.3504**	**.0029**	**.0018**
Stddev	.0052	.0017	.0006	.0115	.0227	.0067	.0005	.0000
%RSD	38.41	1.168	2.816	86.22	19.15	1.925	17.06	2.475
#1	.0100	.1454	.0224	.0235	-.0986	-.3427	.0028	.0018
#2	.0111	.1442	.0212	.0009	-.1432	-.3531	.0034	.0018
#3	.0194	.1421	.0218	.0157	-.1137	-.3553	.0024	.0018

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0111**	**-.0002**	**.0002**	**-.0012**	**.0040**	**.0036**	**.0073**	**.0002**
Stddev	.0004	.0002	.0000	.0002	.0005	.0002	.0007	.0002
%RSD	3.225	112.5	7.551	18.82	11.47	5.809	9.034	76.45
#1	.0114	.0000	.0003	-.0014	.0045	.0035	.0074	.0002
#2	.0107	-.0002	.0002	-.0012	.0039	.0038	.0079	.0001
#3	.0113	-.0004	.0002	-.0010	.0036	.0034	.0066	.0004

Zoom In Zoom Out

Sample Name: CRCONF Acquired: 9/11/2019 10:14:10 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**-.0003**	**.0023**	**.0009**
Stddev	.0018	.0002	.0007
%RSD	615.5	10.20	81.83
#1	-.0021	.0025	.0009
#2	-.0002	.0025	.0001
#3	.0015	.0020	.0016

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**197900.**	**36427.**	**9127.5**	**13227.**
Stddev	2124.	210.	51.2	60.
%RSD	1.0733	.57560	.56064	.45059
#1	198960.	36187.	9175.4	13284.
#2	195450.	36514.	9073.6	13165.
#3	199280.	36579.	9133.6	13230.

Zoom In Zoom Out

Sample Name: ASCONF Acquired: 9/11/2019 10:26:03 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0000**	**.0001**	**.0001**	**-.0000**	**-.0003**	**.0000**	**.0004**	**-.0002**
Stddev	.0002	.0001	.0003	.0001	.0002	.0003	.0000	.0001	.0002
%RSD	238.3	2413.	200.1	190.1	1036.	93.50	123.5	35.83	88.51
#1	-.0003	-.0001	.0001	.0002	.0000	-.0002	-.0000	.0002	-.0002
#2	.0001	.0000	-.0001	-.0000	.0001	-.0001	.0000	.0005	-.0000
#3	-.0001	.0000	.0004	.0000	-.0002	-.0006	.0000	.0004	-.0004

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0001**	**5.063**	**-.0005**	**-.0002**	**.0010**	**.0010**	**.0010**	**-.0421**
Stddev	.0002	.0000	.053	.0006	.0003	.0007	.0016	.0095	.0012
%RSD	72.92	35.26	1.050	115.1	171.3	71.41	167.9	943.8	2.888
#1	-.0002	.0002	5.003	-.0004	-.0005	.0008	.0002	.0060	-.0408
#2	-.0001	.0001	5.079	-.0011	-.0000	.0004	-.0002	.0069	-.0432
#3	-.0004	.0001	5.106	.0000	.0000	.0017	.0028	-.0099	-.0423

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0027**	**.0038**	**-.1774**	**-.4188**	**.0018**	**.0001**	**.0025**	**-.0005**	**.0000**
Stddev	.0015	.0042	.0576	.0025	.0006	.0000	.0004	.0002	.0001
%RSD	57.66	111.0	32.48	.5938	31.70	32.46	14.25	37.91	400.6
#1	.0036	.0084	-.1922	-.4211	.0024	.0001	.0023	-.0007	.0001
#2	.0009	.0029	-.1138	-.4192	.0017	.0000	.0023	-.0003	.0000
#3	.0035	.0001	-.2261	-.4162	.0012	.0000	.0029	-.0005	-.0000

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0013**	**.0001**	**.0032**	**-.0002**	**.0002**	**.0010**	**-.0007**
Stddev	.0001	.0004	.0001	.0014	.0008	.0016	.0004	.0010
%RSD	45.85	31.16	93.58	45.67	394.0	828.7	43.55	147.9
#1	.0002	-.0009	.0003	.0037	-.0009	-.0012	.0005	-.0018
#2	.0004	-.0017	.0001	.0015	-.0004	.0019	.0013	-.0004
#3	.0002	-.0014	.0000	.0043	.0007	-.0001	.0011	.0001

Zoom In Zoom Out

Sample Name: ASCONF Acquired: 9/11/2019 10:26:03 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**196320.**	**36667.**	**9355.2**	**13285.**
Stddev	1259.	17.	71.8	97.
%RSD	.64130	.04745	.76794	.72773
#1	194890.	36679.	9437.7	13396.
#2	197250.	36647.	9306.9	13230.
#3	196830.	36674.	9320.9	13228.

Zoom In Zoom Out

Sample Name: CCV Acquired: 9/11/2019 10:31:06 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.028**	**2.039**	**1.990**	**2.024**	**1.984**	**1.972**	**2.019**	**2.031**	**.2452**
Stddev	.005	.011	.006	.007	.015	.020	.007	.009	.0022
%RSD	.2662	.5192	.3144	.3529	.7317	1.022	.3673	.4418	.8997
#1	2.031	2.041	1.997	2.032	2.001	1.993	2.013	2.041	.2478
#2	2.031	2.048	1.989	2.019	1.974	1.954	2.027	2.024	.2439
#3	2.022	2.027	1.985	2.020	1.978	1.968	2.017	2.027	.2439
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.975**	**2.017**	**1.981**	**2.064**	**2.019**	**2.005**	**1.985**	**39.57**	**40.15**
Stddev	.016	.009	.006	.012	.007	.008	.004	.11	.08
%RSD	.7914	.4498	.3048	.5640	.3723	.3931	.1935	.2812	.1876
#1	1.993	2.028	1.988	2.076	2.027	2.014	1.987	39.63	40.16
#2	1.965	2.013	1.977	2.053	2.015	2.002	1.987	39.64	40.22
#3	1.967	2.011	1.978	2.065	2.014	2.000	1.981	39.44	40.07
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.20**	**39.79**	**39.48**	**39.51**	**2.017**	**1.988**	**5.152**	**2.011**	**2.002**
Stddev	.11	.10	.11	.09	.006	.008	.015	.009	.005
%RSD	.2624	.2532	.2833	.2292	.3170	.3933	.2988	.4532	.2478
#1	40.23	39.80	39.52	39.51	2.024	1.997	5.170	2.020	2.005
#2	40.28	39.88	39.57	39.59	2.012	1.983	5.145	2.010	2.005
#3	40.08	39.68	39.35	39.41	2.014	1.983	5.141	2.002	1.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 9/11/2019 10:31:06 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.963**	**1.956**	**1.996**	**1.973**	**2.008**	**1.959**	**1.984**	**1.972**
Stddev	.015	.007	.017	.006	.005	.006	.010	.013
%RSD	.7445	.3692	.8516	.3253	.2567	.2883	.5093	.6604
#1	1.979	1.964	2.016	1.980	2.013	1.960	1.995	1.987
#2	1.950	1.954	1.985	1.967	2.003	1.964	1.978	1.962
#3	1.961	1.950	1.988	1.974	2.008	1.953	1.977	1.968
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**188540.**	**35391.**	**8957.3**	**12104.**
Stddev	996.	96.	19.4	30.
%RSD	.52815	.26993	.21694	.24774
#1	187440.	35406.	8936.3	12075.
#2	188800.	35289.	8974.7	12135.
#3	189380.	35478.	8960.9	12101.

Zoom In Zoom Out

Sample Name: CCB Acquired: 9/11/2019 10:36:11 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0002**	**.0003**	**.0002**	**.0003**	**-.0003**	**.0003**	**.0004**	**-.0004**
Stddev	.0001	.0001	.0002	.0001	.0002	.0003	.0000	.0002	.0001
%RSD	19.74	24.22	58.88	39.42	66.32	84.22	8.720	36.80	28.13
#1	.0004	.0002	.0003	.0001	.0004	-.0002	.0003	.0005	-.0003
#2	.0004	.0003	.0001	.0002	.0001	-.0007	.0003	.0005	-.0004
#3	.0005	.0002	.0005	.0003	.0003	-.0002	.0003	.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**-.0000**	**-.0006**	**.0011**	**-.0001**	**.0016**	**.0005**	**.0050**	**.0030**
Stddev	.0003	.0000	.0002	.0004	.0003	.0022	.0017	.0044	.0003
%RSD	153.4	84.25	37.63	40.13	482.2	132.8	319.0	88.10	10.68
#1	-.0000	-.0000	-.0008	.0010	.0001	-.0002	.0016	.0001	.0028
#2	-.0005	-.0000	-.0003	.0016	-.0005	.0040	.0014	.0084	.0034
#3	-.0000	-.0000	-.0006	.0007	.0001	.0011	-.0014	.0064	.0030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0058**	**.0043**	**-.1607**	**-.4405**	**.0028**	**.0004**	**.0009**	**.0005**	**.0001**
Stddev	.0006	.0048	.0305	.0220	.0001	.0001	.0001	.0002	.0000
%RSD	10.29	110.9	18.96	4.996	2.240	27.22	11.71	36.69	30.63
#1	.0063	.0097	-.1439	-.4561	.0028	.0006	.0007	.0004	.0002
#2	.0051	.0005	-.1958	-.4153	.0029	.0005	.0009	.0004	.0001
#3	.0058	.0027	-.1423	-.4501	.0027	.0003	.0009	.0007	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 9/11/2019 10:36:11 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**-.0008**	**.0005**	**-.0011**	**-.0006**	**-.0008**	**.0026**	**.0012**
Stddev	.0001	.0003	.0003	.0017	.0013	.0008	.0005	.0002
%RSD	10.76	39.78	54.27	151.7	234.6	95.27	18.87	19.02
#1	.0006	-.0005	.0006	.0008	.0001	-.0017	.0032	.0011
#2	.0005	-.0008	.0002	-.0017	.0003	-.0002	.0025	.0015
#3	.0005	-.0011	.0006	-.0025	-.0021	-.0006	.0022	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**196110.**	**36003.**	**9320.9**	**13222.**
Stddev	1526.	86.	35.5	50.
%RSD	.77805	.23994	.38077	.38098
#1	197290.	35907.	9280.2	13163.
#2	196650.	36027.	9337.6	13251.
#3	194380.	36075.	9345.0	13251.

Zoom In Zoom Out

Sample Name: mp17228-mb1 5 Acquired: 9/11/2019 10:41:14 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0001**	**.0002**	**.0001**	**.0008**	**.0005**	**.0003**	**.0006**	**-.0005**
Stddev	.0003	.0000	.0001	.0001	.0002	.0003	.0000	.0001	.0002
%RSD	75.07	39.28	48.38	70.41	22.70	69.72	11.36	17.57	37.26
#1	.0001	.0001	.0001	.0001	.0010	.0001	.0003	.0005	-.0003
#2	.0004	.0001	.0002	.0000	.0008	.0007	.0003	.0007	-.0005
#3	.0006	.0001	.0002	.0002	.0007	.0007	.0004	.0008	-.0007

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0087**	**-.0002**	**.0009**	**-.0001**	**.0012**	**.0001**	**.0088**	**.0634**
Stddev	.0003	.0002	.0007	.0008	.0000	.0007	.0009	.0087	.0005
%RSD	53.94	1.799	308.3	89.95	10.84	56.75	1537.	99.43	.8503
#1	-.0002	.0086	-.0011	.0008	-.0001	.0020	-.0006	.0189	.0640
#2	-.0005	.0087	.0003	.0018	-.0001	.0007	-.0003	.0038	.0630
#3	-.0007	.0089	.0001	.0002	-.0001	.0010	.0011	.0037	.0632

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0210**	**.0196**	**-.1378**	**-.4114**	**.0033**	**.0005**	**.0103**	**.0151**	**.0003**
Stddev	.0004	.0029	.0182	.0118	.0003	.0001	.0006	.0003	.0001
%RSD	1.787	15.03	13.23	2.869	8.598	23.06	5.654	1.725	25.61
#1	.0214	.0178	-.1581	-.4039	.0030	.0007	.0107	.0149	.0003
#2	.0208	.0230	-.1326	-.4250	.0036	.0005	.0096	.0154	.0002
#3	.0208	.0179	-.1228	-.4053	.0033	.0004	.0105	.0150	.0004

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**-.0017**	**.0010**	**.0136**	**-.0011**	**-.0019**	**.0178**	**.0015**
Stddev	.0002	.0007	.0001	.0010	.0004	.0013	.0009	.0033
%RSD	25.47	41.48	6.446	7.247	34.28	72.51	4.890	220.2
#1	.0006	-.0017	.0010	.0129	-.0013	-.0031	.0177	.0052
#2	.0009	-.0010	.0010	.0147	-.0007	-.0004	.0169	-.0010
#3	.0007	-.0023	.0009	.0131	-.0013	-.0020	.0187	.0002

Zoom In Zoom Out

Sample Name: mp17228-mb1 5 Acquired: 9/11/2019 10:41:14 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**198090.**	**36611.**	**9325.8**	**13216.**
Stddev	1367.	306.	56.6	71.
%RSD	.69012	.83704	.60672	.53631
#1	196550.	36334.	9389.4	13293.
#2	198550.	36560.	9307.0	13202.
#3	199170.	36940.	9281.0	13153.

Zoom In Zoom Out

Sample Name: mp17228-b1 Acquired: 9/11/2019 10:46:15 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.007**	**2.008**	**1.961**	**1.986**	**1.954**	**1.964**	**1.982**	**1.993**
Stddev	.007	.018	.009	.010	.021	.020	.024	.009
%RSD	.3281	.8879	.4631	.4874	1.059	1.022	1.188	.4715
#1	2.014	2.025	1.968	1.994	1.971	1.981	2.005	2.001
#2	2.005	1.989	1.965	1.989	1.958	1.970	1.982	1.994
#3	2.001	2.009	1.951	1.975	1.931	1.942	1.958	1.982

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2364**	**1.936**	**1.983**	**1.971**	**2.060**	**2.004**	**1.969**	**1.991**
Stddev	.0026	.019	.013	.008	.012	.010	.011	.011
%RSD	1.116	1.000	.6358	.4076	.5654	.4788	.5661	.5608
#1	.2386	1.955	1.992	1.976	2.069	2.013	1.980	2.002
#2	.2370	1.937	1.988	1.974	2.064	2.006	1.970	1.993
#3	.2335	1.916	1.968	1.961	2.047	1.994	1.958	1.979

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.28**	**24.72**	**24.76**	**24.42**	**24.17**	**24.18**	**1.944**	**1.971**
Stddev	.07	.07	.07	.06	.07	.09	.009	.009
%RSD	.2840	.2730	.2652	.2369	.2748	.3701	.4663	.4605
#1	24.35	24.79	24.83	24.48	24.24	24.27	1.950	1.978
#2	24.28	24.72	24.75	24.41	24.16	24.18	1.949	1.975
#3	24.22	24.66	24.70	24.37	24.11	24.09	1.934	1.961

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0020**	**2.046**	**1.979**	**1.969**	**1.289**	**2.001**	**.0054**	**.0492**
Stddev	.0010	.010	.006	.024	.011	.020	.0015	.0014
%RSD	51.53	.5064	.3134	1.194	.8458	.9881	28.90	2.808
#1	.0027	2.052	1.985	1.988	1.276	2.021	.0056	.0499
#2	.0008	2.051	1.978	1.975	1.295	2.002	.0037	.0500
#3	.0025	2.034	1.973	1.943	1.296	1.981	.0068	.0476

Zoom In Zoom Out

Sample Name: mp17228-b1 Acquired: 9/11/2019 10:46:15 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**-.0013**	**1.940**	W **-.0744**
Stddev	.0001	.010	.0013
%RSD	11.01	.5383	1.723
#1	-.0012	1.948	-.0750
#2	-.0012	1.945	-.0754
#3	-.0014	1.928	-.0730

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**191830.**	**35863.**	**9075.9**	**12397.**
Stddev	2105.	141.	53.0	62.
%RSD	1.0971	.39299	.58365	.50368
#1	190160.	35750.	9044.6	12351.
#2	191130.	35819.	9046.0	12371.
#3	194190.	36021.	9137.1	12468.

Zoom In Zoom Out

Sample Name: mp17228-s1 Acquired: 9/11/2019 10:51:16 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.184**	**1.952**	**1.945**	**1.985**	**2.073**	**2.097**	**2.980**	**2.024**	**.2397**
Stddev	.013	.012	.002	.004	.008	.006	.035	.002	.0005
%RSD	.5851	.6221	.0963	.1860	.3709	.2756	1.190	.0834	.2018
#1	2.172	1.940	1.944	1.981	2.082	2.104	3.019	2.022	.2402
#2	2.182	1.950	1.947	1.988	2.068	2.094	2.949	2.025	.2396
#3	2.197	1.964	1.944	1.987	2.071	2.094	2.974	2.024	.2392

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.052**	**2.474**	**1.959**	**2.001**	**2.144**	**1.919**	**1.401**	**103.2**	**41.37**
Stddev	.006	.002	.004	.000	.001	.002	.002	.5	.20
%RSD	.3074	.0659	.1990	.0127	.0651	.1155	.1219	.5247	.4898
#1	2.059	2.473	1.955	2.001	2.142	1.917	1.403	102.6	41.20
#2	2.049	2.476	1.963	2.001	2.145	1.921	1.400	103.1	41.33
#3	2.047	2.473	1.960	2.002	2.144	1.918	1.401	103.7	41.59

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**107.4**	**34.00**	**29.29**	**24.74**	**1.923**	**1.892**	**3.072**	**1.924**	**2.032**
Stddev	.7	.14	.14	.14	.002	.003	.018	.004	.007
%RSD	.6357	.3971	.4841	.5661	.1171	.1756	.5751	.1812	.3363
#1	108.0	33.88	29.15	24.61	1.921	1.888	3.057	1.920	2.025
#2	107.4	33.98	29.29	24.72	1.924	1.894	3.092	1.926	2.032
#3	106.6	34.15	29.43	24.89	1.925	1.893	3.068	1.925	2.038

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.177**	**1.032**	**1.655**	**.8925**	**.1493**	**.0434**	**3.568**	**.1611**
Stddev	.013	.003	.004	.0017	.0015	.0011	.002	.0006
%RSD	.2988	.2456	.2578	.1866	1.019	2.629	.0580	.3874
#1	4.191	1.032	1.660	.8939	.1495	.0426	3.570	.1618
#2	4.167	1.035	1.654	.8907	.1507	.0447	3.569	.1606
#3	4.172	1.030	1.652	.8931	.1477	.0430	3.566	.1609

Zoom In Zoom Out

Sample Name: mp17228-s1 Acquired: 9/11/2019 10:51:16 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**189960.**	**36735.**	**9038.9**	**12101.**
Stddev	586.	168.	3.4	4.
%RSD	.30850	.45864	.03778	.03588
#1	189620.	36901.	9036.2	12097.
#2	190640.	36740.	9037.7	12101.
#3	189620.	36564.	9042.7	12105.

Zoom In Zoom Out

Sample Name: mp17228-s2 Acquired: 9/11/2019 10:56:19 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.192**	**1.935**	**1.947**	**1.992**	**2.087**	**2.150**	**3.155**	**2.037**	**.2408**
Stddev	.006	.023	.003	.004	.026	.022	.021	.004	.0025
%RSD	.2575	1.192	.1434	.1802	1.244	1.011	.6697	.1813	1.050
#1	2.197	1.952	1.944	1.988	2.089	2.151	3.153	2.033	.2413
#2	2.193	1.909	1.950	1.994	2.061	2.128	3.134	2.038	.2381
#3	2.186	1.945	1.947	1.993	2.113	2.171	3.176	2.040	.2430

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.067**	**2.566**	**1.966**	**2.012**	**2.153**	**1.924**	**1.372**	**110.7**	**42.20**
Stddev	.025	.003	.002	.004	.002	.002	.002	.3	.15
%RSD	1.229	.1025	.0782	.1960	.0808	.0802	.1549	.2816	.3671
#1	2.066	2.565	1.964	2.007	2.152	1.922	1.372	111.1	42.37
#2	2.042	2.569	1.967	2.015	2.155	1.925	1.375	110.6	42.15
#3	2.093	2.564	1.966	2.012	2.153	1.923	1.371	110.5	42.07

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**120.7**	**34.80**	**29.83**	**24.81**	**1.910**	**1.890**	**3.278**	**1.928**	**2.032**
Stddev	1.3	.11	.12	.10	.001	.002	.037	.004	.005
%RSD	1.054	.3056	.4068	.4091	.0541	.0943	1.135	.1911	.2456
#1	121.9	34.92	29.96	24.92	1.909	1.888	3.304	1.928	2.037
#2	119.4	34.72	29.73	24.80	1.911	1.891	3.236	1.932	2.031
#3	120.8	34.76	29.80	24.72	1.911	1.890	3.295	1.925	2.027

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.194**	**1.017**	**1.670**	**.9767**	**.1505**	**.0457**	**3.720**	**.1818**
Stddev	.051	.001	.020	.0028	.0050	.0012	.006	.0026
%RSD	1.226	.0899	1.190	.2872	3.307	2.529	.1551	1.423
#1	4.201	1.017	1.670	.9743	.1516	.0452	3.714	.1842
#2	4.139	1.018	1.650	.9798	.1451	.0470	3.725	.1790
#3	4.241	1.017	1.690	.9760	.1549	.0449	3.721	.1821

Zoom In Zoom Out

Sample Name: mp17228-s2 Acquired: 9/11/2019 10:56:19 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**189530.**	**35995.**	**9013.5**	**12052.**
Stddev	2672.	238.	11.1	9.
%RSD	1.4096	.66241	.12306	.07261
#1	189270.	35734.	9010.1	12051.
#2	192330.	36201.	9004.5	12044.
#3	187000.	36051.	9025.9	12062.

Zoom In Zoom Out

Sample Name: jc94464-2 Acquired: 9/11/2019 11:01:25 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1855**	**.0021**	**.0113**	**.0276**	**.1465**	**.1593**	**1.119**	**.0585**	**.0066**
Stddev	.0004	.0000	.0001	.0000	.0006	.0008	.005	.0002	.0001
%RSD	.2370	.3710	.7008	.1503	.3971	.5201	.4786	.3009	2.202
#1	.1858	.0021	.0113	.0277	.1459	.1584	1.113	.0587	.0067
#2	.1856	.0021	.0114	.0276	.1466	.1594	1.122	.0585	.0065
#3	.1850	.0021	.0112	.0276	.1471	.1600	1.122	.0584	.0067

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1280**	**.4934**	**.0329**	**.0025**	**.1583**	**.0025**	**.0025**	**58.66**	**19.74**
Stddev	.0009	.0017	.0006	.0003	.0009	.0010	.0003	.24	.09
%RSD	.7209	.3501	1.878	11.67	.5862	40.88	13.72	.4061	.4375
#1	.1271	.4946	.0327	.0023	.1593	.0018	.0022	58.85	19.81
#2	.1280	.4942	.0324	.0028	.1580	.0037	.0024	58.73	19.76
#3	.1290	.4914	.0336	.0025	.1575	.0020	.0029	58.39	19.65

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**74.62**	**9.119**	**3.268**	**.3339**	**.0311**	**.0056**	**2.479**	**.0263**	**.1029**
Stddev	.37	.052	.020	.0051	.0005	.0002	.040	.0003	.0004
%RSD	.4908	.5676	.6216	1.525	1.635	3.804	1.612	1.029	.3533
#1	74.93	9.165	3.290	.3396	.0316	.0058	2.507	.0262	.1033
#2	74.72	9.129	3.266	.3298	.0310	.0055	2.433	.0260	.1028
#3	74.21	9.063	3.249	.3324	.0305	.0054	2.496	.0266	.1026

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.713**	**.0107**	**.0115**	**.9400**	**.0703**	**.0364**	**1.739**	**.2097**
Stddev	.007	.0007	.0004	.0041	.0010	.0006	.005	.0004
%RSD	.3924	6.085	3.317	.4350	1.358	1.619	.3043	.2068
#1	1.705	.0113	.0119	.9438	.0711	.0366	1.743	.2095
#2	1.718	.0109	.0114	.9406	.0706	.0369	1.742	.2094
#3	1.715	.0100	.0112	.9356	.0692	.0358	1.733	.2102

Zoom In Zoom Out

Sample Name: jc94464-2 Acquired: 9/11/2019 11:01:25 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**197540.**	**37168.**	**9371.7**	**12663.**
Stddev	748.	370.	28.6	45.
%RSD	.37887	.99652	.30532	.35646
#1	198330.	37018.	9343.1	12613.
#2	197470.	36896.	9371.7	12677.
#3	196840.	37590.	9400.3	12700.

Zoom In Zoom Out

Sample Name: mp17228-sd1 Acquired: 9/11/2019 11:06:19 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1832**	**.0020**	**.0110**	**.0267**	**.1472**	**.1538**	**1.119**	**.0573**	**.0033**
Stddev	.0004	.0001	.0006	.0006	.0010	.0012	.006	.0003	.0019
%RSD	.2348	3.255	5.852	2.358	.6974	.7956	.5203	.5015	58.65
#1	.1834	.0019	.0107	.0260	.1483	.1541	1.125	.0572	.0019
#2	.1835	.0019	.0105	.0273	.1462	.1549	1.116	.0571	.0055
#3	.1827	.0020	.0117	.0267	.1471	.1525	1.114	.0576	.0025

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1271**	**.4969**	**.0334**	**.0070**	**.1531**	**.0056**	**.0023**	**57.95**	**19.73**
Stddev	.0024	.0011	.0057	.0024	.0063	.0008	.0026	.19	.06
%RSD	1.857	.2122	16.95	33.76	4.117	14.71	111.8	.3298	.2858
#1	.1282	.4976	.0279	.0046	.1593	.0061	.0017	58.10	19.77
#2	.1288	.4973	.0392	.0073	.1467	.0061	.0051	57.74	19.66
#3	.1244	.4957	.0331	.0093	.1533	.0047	.0001	58.03	19.74

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**74.58**	**9.176**	**2.421**	**-1.727**	**.0412**	**.0072**	**2.612**	**.0265**	**.1026**
Stddev	.17	.042	.084	.034	.0028	.0000	.061	.0016	.0005
%RSD	.2321	.4604	3.486	1.951	6.709	.2867	2.338	5.868	.4923
#1	74.73	9.130	2.516	-1.746	.0382	.0072	2.680	.0283	.1031
#2	74.39	9.185	2.355	-1.688	.0437	.0072	2.595	.0256	.1021
#3	74.60	9.213	2.393	-1.746	.0416	.0072	2.562	.0257	.1024

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.677**	**.0436**	**.0118**	**.9287**	**.0632**	**.0325**	**1.721**	**.2065**
Stddev	.006	.0032	.0005	.0060	.0019	.0058	.003	.0044
%RSD	.3419	7.305	4.102	.6489	2.967	18.00	.1764	2.148
#1	1.683	.0472	.0123	.9246	.0621	.0317	1.719	.2033
#2	1.677	.0425	.0113	.9356	.0621	.0270	1.720	.2116
#3	1.672	.0412	.0118	.9257	.0654	.0386	1.725	.2046

Zoom In Zoom Out

Sample Name: mp17228-sd1 Acquired: 9/11/2019 11:06:19 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**197650.**	**36749.**	**9284.0**	**12920.**
Stddev	1383.	199.	14.9	12.
%RSD	.69994	.54115	.16030	.08926
#1	196060.	36657.	9295.1	12926.
#2	198310.	36978.	9267.1	12907.
#3	198570.	36614.	9289.8	12928.

Zoom In Zoom Out

Sample Name: jc94464-1 Acquired: 9/11/2019 11:11:17 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1949**	**.0023**	**.0128**	**.0223**	**.1850**	**.2897**	**1.020**	**.0561**	**.0421**
Stddev	.0002	.0001	.0000	.0003	.0021	.0032	.012	.0006	.0003
%RSD	.0836	3.900	.3191	1.134	1.129	1.108	1.202	1.096	.8068
#1	.1949	.0024	.0129	.0224	.1866	.2918	1.029	.0562	.0424
#2	.1951	.0023	.0128	.0220	.1827	.2860	1.006	.0554	.0417
#3	.1947	.0022	.0128	.0224	.1859	.2914	1.024	.0566	.0422

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1241**	**.3584**	**.0564**	**.0024**	**.2005**	**.0037**	**.0019**	**57.92**	**14.48**
Stddev	.0017	.0014	.0004	.0003	.0027	.0010	.0016	.04	.02
%RSD	1.360	.3954	.6303	12.09	1.333	26.71	85.41	.0762	.1107
#1	.1255	.3594	.0563	.0022	.2024	.0048	.0038	57.93	14.50
#2	.1222	.3568	.0562	.0021	.1974	.0035	.0011	57.95	14.48
#3	.1246	.3591	.0568	.0027	.2016	.0029	.0008	57.87	14.47

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**74.92**	**7.195**	**2.922**	**.0724**	**.0161**	**.0052**	**1.905**	**.0325**	**.0844**
Stddev	.07	.016	.048	.0035	.0003	.0002	.017	.0001	.0001
%RSD	.0970	.2239	1.629	4.806	2.061	3.352	.9088	.3219	.1579
#1	74.98	7.177	2.933	.0745	.0163	.0052	1.885	.0324	.0843
#2	74.94	7.204	2.963	.0744	.0163	.0050	1.911	.0325	.0846
#3	74.84	7.205	2.870	.0684	.0157	.0053	1.918	.0325	.0843

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.642**	**.0055**	**.0079**	**1.019**	**.0672**	**.0367**	**2.105**	**.1840**
Stddev	.020	.0006	.0001	.005	.0013	.0006	.006	.0020
%RSD	1.196	10.45	1.880	.4476	1.885	1.513	.2952	1.060
#1	1.656	.0060	.0080	1.014	.0681	.0364	2.103	.1850
#2	1.620	.0049	.0078	1.024	.0658	.0374	2.099	.1817
#3	1.651	.0055	.0078	1.019	.0678	.0364	2.111	.1852

Zoom In Zoom Out

Sample Name: jc94464-1 Acquired: 9/11/2019 11:11:17 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**200300.**	**37250.**	**9194.2**	**12541.**
Stddev	2689.	181.	228.6	247.
%RSD	1.3426	.48692	2.4863	1.9694
#1	198050.	37329.	9353.7	12722.
#2	203280.	37379.	8932.3	12260.
#3	199580.	37043.	9296.7	12642.

Zoom In Zoom Out

Sample Name: ccv Acquired: 9/11/2019 11:16:13 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.994**	**1.980**	**1.998**	**2.022**	**1.960**	**1.950**	**1.992**	**2.031**	**.2422**
Stddev	.005	.031	.014	.010	.015	.015	.017	.008	.0014
%RSD	.2339	1.549	.6971	.4781	.7411	.7707	.8357	.3968	.5714
#1	1.990	1.944	1.982	2.011	1.976	1.967	1.987	2.022	.2435
#2	2.000	2.001	2.002	2.026	1.948	1.939	1.979	2.034	.2408
#3	1.993	1.994	2.009	2.029	1.956	1.945	2.011	2.037	.2423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.949**	**2.021**	**1.981**	**2.068**	**2.020**	**2.016**	**1.988**	**38.89**	**39.38**
Stddev	.013	.014	.011	.007	.011	.011	.013	.08	.09
%RSD	.6800	.6692	.5472	.3412	.5557	.5572	.6467	.2004	.2349
#1	1.964	2.005	1.970	2.061	2.007	2.003	1.975	38.83	39.34
#2	1.939	2.026	1.982	2.070	2.024	2.020	1.988	38.98	39.49
#3	1.945	2.031	1.992	2.074	2.028	2.024	2.000	38.87	39.31
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**39.52**	**39.01**	**38.83**	**38.75**	**2.023**	**1.987**	**5.159**	**2.018**	**1.961**
Stddev	.07	.11	.10	.09	.013	.012	.033	.017	.005
%RSD	.1764	.2914	.2643	.2328	.6410	.6194	.6483	.8531	.2650
#1	39.47	38.95	38.71	38.69	2.009	1.973	5.123	1.999	1.959
#2	39.60	39.14	38.91	38.85	2.026	1.991	5.167	2.021	1.967
#3	39.50	38.94	38.85	38.70	2.035	1.997	5.188	2.033	1.957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 9/11/2019 11:16:13 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.937**	**1.975**	**1.975**	**1.982**	**2.013**	**1.923**	**1.985**	**1.945**
Stddev	.017	.013	.013	.015	.011	.003	.011	.016
%RSD	.8673	.6373	.6394	.7652	.5485	.1481	.5517	.8127
#1	1.956	1.961	1.989	1.965	2.001	1.923	1.973	1.961
#2	1.923	1.978	1.965	1.990	2.016	1.925	1.987	1.930
#3	1.933	1.986	1.971	1.992	2.022	1.920	1.994	1.943
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**187910.**	**35303.**	**8865.6**	**11991.**
Stddev	1512.	39.	54.5	51.
%RSD	.80435	.10928	.61485	.42694
#1	186960.	35331.	8928.6	12050.
#2	189660.	35259.	8833.9	11955.
#3	187130.	35319.	8834.4	11968.

Zoom In Zoom Out

Sample Name: ccb Acquired: 9/11/2019 11:21:14 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0002**	**.0003**	**.0002**	**.0003**	**-.0003**	**.0003**	**.0002**	**-.0002**
Stddev	.0001	.0000	.0001	.0002	.0001	.0002	.0000	.0000	.0000
%RSD	21.10	8.181	18.18	81.22	29.49	52.08	13.43	26.12	10.96
#1	.0006	.0002	.0003	.0002	.0003	-.0001	.0003	.0001	-.0002
#2	.0009	.0003	.0003	.0000	.0002	-.0003	.0003	.0001	-.0001
#3	.0006	.0002	.0002	.0003	.0003	-.0005	.0002	.0002	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0000**	**.0004**	**.0016**	**-.0008**	**.0020**	**.0005**	**.0016**	**.0025**
Stddev	.0001	.0001	.0011	.0002	.0003	.0011	.0003	.0063	.0017
%RSD	382.2	336.6	296.8	13.68	42.07	52.60	51.38	387.6	68.73
#1	.0000	.0000	.0008	.0015	-.0004	.0023	.0006	-.0020	.0044
#2	.0002	-.0001	.0013	.0014	-.0011	.0009	.0008	-.0020	.0012
#3	-.0001	.0001	-.0009	.0018	-.0008	.0030	.0002	.0088	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0058**	**.0105**	**-.1881**	**-.4985**	**.0036**	**.0008**	**.0017**	**.0001**	**.0002**
Stddev	.0005	.0084	.0377	.0143	.0005	.0002	.0001	.0002	.0001
%RSD	9.433	79.80	20.04	2.860	12.53	20.24	7.950	401.9	33.67
#1	.0064	.0039	-.1942	-.4820	.0040	.0010	.0016	.0001	.0001
#2	.0056	.0200	-.2224	-.5061	.0037	.0008	.0018	.0002	.0003
#3	.0053	.0077	-.1478	-.5073	.0031	.0007	.0016	-.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 9/11/2019 11:21:14 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**F .0054**	**.0005**	**-.0030**	**-.0008**	**-.0008**	**.0026**	**.0002**
Stddev	.0003	.0005	.0002	.0016	.0012	.0012	.0008	.0030
%RSD	69.71	9.096	38.90	55.20	162.5	150.8	31.23	1292.
#1	.0007	.0055	.0005	-.0026	.0000	.0005	.0016	-.0021
#2	.0001	.0049	.0007	-.0047	-.0022	-.0010	.0029	-.0008
#3	.0006	.0059	.0003	-.0015	-.0001	-.0019	.0031	.0036
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0050						
Low Limit		-.0050						

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**192580.**	**35358.**	**9196.8**	**13051.**
Stddev	1342.	239.	67.7	81.
%RSD	.69664	.67591	.73587	.62000
#1	191540.	35467.	9170.0	13027.
#2	194090.	35084.	9146.5	12984.
#3	192100.	35523.	9273.7	13141.

Zoom In Zoom Out

Sample Name: jc94443-2fund Acquired: 9/11/2019 11:26:17 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7239**	F **-.0023**	**.0002**	**.0001**	**.0212**	**.0014**	**.2655**	**.0033**
Stddev	.0014	.0000	.0000	.0001	.0003	.0002	.0026	.0003
%RSD	.1981	2.083	23.31	89.32	1.209	15.24	.9622	9.751
#1	.7224	-.0024	.0002	.0002	.0215	.0013	.2667	.0036
#2	.7242	-.0023	.0002	.0000	.0212	.0016	.2672	.0030
#3	.7252	-.0024	.0002	.0001	.0210	.0012	.2626	.0034

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0009**	**.0015**	**.1855**	**.0030**	**.0017**	F **-.0032**	**-.0007**	**.0006**
Stddev	.0003	.0002	.0011	.0007	.0006	.0004	.0009	.0007
%RSD	37.22	16.56	.6122	22.53	35.38	13.69	139.5	125.6
#1	-.0012	.0013	.1862	.0022	.0013	-.0028	-.0003	.0003
#2	-.0010	.0014	.1861	.0033	.0015	-.0037	-.0017	.0001
#3	-.0005	.0017	.1842	.0034	.0024	-.0031	.0000	.0013

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0101**	F **321.9**	**.0177**	**8.247**	**33.67**	**188.0**	**.1367**	**.0011**
Stddev	.0128	2.1	.0012	.006	.07	.3	.0007	.0001
%RSD	126.6	.6518	6.834	.0778	.2214	.1616	.4920	10.80
#1	.0086	321.6	.0171	8.243	33.59	188.1	.1362	.0010
#2	-.0019	320.0	.0170	8.254	33.72	188.3	.1375	.0012
#3	.0236	324.2	.0191	8.244	33.71	187.7	.1365	.0012

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.45**	**-.0019**	**2.896**	**-.0018**	**.0041**	**-.0008**	**2.727**	**.0005**
Stddev	.06	.0003	.018	.0002	.0003	.0002	.012	.0009
%RSD	.5008	15.70	.6297	10.17	6.444	21.69	.4226	189.0
#1	11.46	-.0019	2.899	-.0018	.0038	-.0008	2.730	.0015
#2	11.51	-.0017	2.912	-.0017	.0043	-.0010	2.736	.0002
#3	11.39	-.0023	2.876	-.0020	.0043	-.0007	2.714	-.0002

Zoom In Zoom Out

Sample Name: jc94443-2fund Acquired: 9/11/2019 11:26:17 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**.0097**	**.0353**	**.0028**
Stddev	.0004	.0008	.0012
%RSD	3.895	2.137	44.94
#1	.0100	.0353	.0041
#2	.0093	.0360	.0016
#3	.0098	.0345	.0026

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**179750.**	**35694.**	**8470.3**	**11279.**
Stddev	1449.	92.	36.0	40.
%RSD	.80590	.25780	.42484	.35721
#1	178670.	35649.	8459.9	11266.
#2	179170.	35632.	8440.6	11248.
#3	181390.	35799.	8510.3	11325.

Zoom In Zoom Out

Sample Name: jc94443-3fund Acquired: 9/11/2019 11:31:38 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7226**	F **-.0023**	**.0003**	**-.0002**	**.0211**	**.0014**	**.2604**	**.0031**
Stddev	.0008	.0001	.0003	.0002	.0002	.0002	.0022	.0002
%RSD	.1143	2.540	88.02	62.62	.8331	16.39	.8545	7.282
#1	.7217	-.0023	.0001	-.0003	.0212	.0014	.2629	.0030
#2	.7233	-.0024	.0006	-.0004	.0209	.0011	.2596	.0033
#3	.7228	-.0024	.0002	-.0001	.0213	.0016	.2586	.0029

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0011**	**.0013**	**.1877**	**.0027**	**.0012**	F **-.0039**	**-.0008**	**.0014**
Stddev	.0003	.0002	.0054	.0005	.0010	.0005	.0006	.0009
%RSD	28.44	16.87	2.877	18.91	90.00	12.93	82.71	63.59
#1	-.0012	.0015	.1845	.0021	.0023	-.0044	-.0004	.0023
#2	-.0013	.0011	.1939	.0027	.0007	-.0034	-.0015	.0005
#3	-.0007	.0012	.1846	.0032	.0004	-.0040	-.0004	.0014

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019**	F **318.0**	**.0176**	**8.189**	**33.65**	**184.4**	**.1379**	**.0006**
Stddev	.0084	2.9	.0016	.028	.10	1.5	.0047	.0000
%RSD	433.4	.9204	9.207	.3362	.2863	.8379	3.403	6.421
#1	.0116	315.7	.0157	8.166	33.54	186.1	.1347	.0006
#2	-.0040	316.9	.0184	8.220	33.70	183.1	.1433	.0006
#3	-.0018	321.3	.0187	8.181	33.71	184.0	.1358	.0005

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.55**	**-.0019**	**2.911**	**-.0020**	**.0029**	**-.0009**	**2.746**	**.0011**
Stddev	.37	.0002	.028	.0000	.0002	.0001	.089	.0016
%RSD	3.245	10.75	.9711	1.226	7.146	17.02	3.238	152.0
#1	11.28	-.0020	2.890	-.0020	.0027	-.0010	2.679	.0005
#2	11.98	-.0016	2.900	-.0020	.0030	-.0009	2.847	.0029
#3	11.39	-.0020	2.943	-.0020	.0031	-.0007	2.712	-.0002

Zoom In Zoom Out

Sample Name: jc94443-3fund Acquired: 9/11/2019 11:31:38 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**.0107**	**.0363**	**.0016**
Stddev	.0007	.0008	.0020
%RSD	6.564	2.116	121.3
#1	.0114	.0355	.0003
#2	.0100	.0370	.0039
#3	.0107	.0364	.0007

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**180090.**	**35614.**	**8360.8**	**11170.**
Stddev	1524.	276.	226.8	246.
%RSD	.84645	.77360	2.7131	2.1981
#1	178350.	35905.	8503.8	11333.
#2	180760.	35357.	8099.3	10887.
#3	181170.	35580.	8479.4	11288.

Zoom In Zoom Out

Sample Name: mp17250-mb1 5 Acquired: 9/11/2019 11:37:01 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0023**	**.0002**	**.0004**	**.0001**	**.0012**	**.0058**	**.0009**	**.0034**	**-.0025**
Stddev	.0003	.0001	.0008	.0004	.0005	.0011	.0003	.0005	.0012
%RSD	11.35	97.03	175.6	318.1	38.90	19.29	27.93	16.00	47.23
#1	.0020	.0002	.0007	-.0003	.0015	.0063	.0007	.0028	-.0025
#2	.0024	-.0000	-.0004	.0003	.0014	.0045	.0012	.0035	-.0036
#3	.0025	.0002	.0010	.0004	.0006	.0067	.0008	.0039	-.0013

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**.0306**	**.0009**	**.0012**	**-.0023**	**.0088**	**-.0024**	**.0148**	**.2635**
Stddev	.0014	.0007	.0021	.0066	.0024	.0050	.0041	.0012	.0054
%RSD	166.1	2.152	234.3	551.3	101.7	56.57	173.4	7.819	2.051
#1	-.0010	.0298	-.0012	.0088	-.0007	.0034	.0018	.0135	.2672
#2	-.0022	.0307	.0010	-.0031	-.0050	.0133	-.0065	.0157	.2573
#3	.0006	.0311	.0030	-.0022	-.0012	.0099	-.0025	.0151	.2660

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0269**	**.0534**	**-.0059**	F **1302.**	**.0125**	**.0003**	**.0861**	**.0020**	**.0014**
Stddev	.0030	.0448	.0999	23.	.0032	.0007	.0067	.0010	.0006
%RSD	11.02	84.01	1689.	1.745	25.32	255.5	7.799	51.48	42.17
#1	.0270	.0597	-.0983	1295.	.0127	.0011	.0854	.0016	.0010
#2	.0298	.0948	.1001	1327.	.0155	-.0000	.0798	.0012	.0011
#3	.0239	.0057	-.0196	1283.	.0092	-.0002	.0931	.0031	.0021

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0166**	**.0013**	**.0130**	**.0019**	**.0102**	**.0219**	**.0040**
Stddev	.0008	.0045	.0009	.0137	.0109	.0060	.0017	.0069
%RSD	95.67	27.44	63.19	105.6	581.8	58.88	7.835	172.9
#1	.0012	.0218	.0009	.0111	.0139	.0033	.0203	.0102
#2	-.0001	.0146	.0009	.0003	-.0012	.0131	.0218	-.0034
#3	.0013	.0133	.0023	.0276	-.0071	.0142	.0237	.0052

Zoom In Zoom Out

Sample Name: mp17250-mb1 5 Acquired: 9/11/2019 11:37:01 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**184180.**	**35852.**	**8777.7**	**11725.**
Stddev	2638.	237.	14.4	19.
%RSD	1.4321	.66218	.16360	.16052
#1	184440.	35935.	8774.7	11715.
#2	186670.	35584.	8765.1	11713.
#3	181420.	36036.	8793.3	11746.

Zoom In Zoom Out

Sample Name: mp17250-b1 Acquired: 9/11/2019 11:42:12 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.988**	**2.011**	**1.993**	**2.056**	**1.997**	**1.903**	**2.041**	**2.080**	**.2448**
Stddev	.018	.016	.004	.006	.023	.027	.028	.008	.0044
%RSD	.9051	.7928	.2063	.2800	1.150	1.406	1.391	.3843	1.812
#1	2.009	2.029	1.996	2.061	2.023	1.934	2.073	2.088	.2497
#2	1.977	1.999	1.995	2.057	1.991	1.891	2.030	2.079	.2413
#3	1.979	2.005	1.988	2.050	1.978	1.884	2.020	2.072	.2433

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.986**	**2.090**	**2.039**	**2.055**	**2.060**	**2.055**	**2.025**	**24.19**	**24.76**
Stddev	.026	.012	.013	.014	.008	.007	.013	.14	.19
%RSD	1.304	.5540	.6403	.6975	.4059	.3524	.6300	.5905	.7612
#1	2.014	2.101	2.050	2.065	2.069	2.054	2.037	24.35	24.97
#2	1.983	2.091	2.043	2.060	2.057	2.063	2.027	24.09	24.61
#3	1.962	2.078	2.025	2.038	2.053	2.049	2.012	24.12	24.69

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.91**	**24.30**	**24.72**	F **1296.**	**2.013**	**2.024**	**.1046**	**2.044**	**1.952**
Stddev	.16	.13	.16	21.	.010	.008	.0037	.010	.010
%RSD	.6380	.5468	.6557	1.586	.4786	.3900	3.506	.5013	.4977
#1	25.09	24.41	24.89	1273.	2.023	2.031	.1080	2.052	1.963
#2	24.80	24.15	24.57	1302.	2.013	2.027	.1050	2.049	1.948
#3	24.82	24.33	24.70	1313.	2.004	2.016	.1007	2.033	1.945

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.995**	**1.931**	**2.026**	**.0007**	**.0284**	**.0118**	**2.017**	**-.0749**
Stddev	.024	.010	.024	.0023	.0035	.0064	.010	.0079
%RSD	1.188	.5099	1.192	309.1	12.43	54.71	.4900	10.52
#1	2.022	1.942	2.053	.0032	.0324	.0179	2.028	-.0669
#2	1.988	1.923	2.019	.0005	.0256	.0050	2.013	-.0826
#3	1.976	1.929	2.006	-.0014	.0273	.0124	2.010	-.0751

Zoom In Zoom Out

Sample Name: mp17250-b1 Acquired: 9/11/2019 11:42:12 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**183960.**	**35802.**	**8811.8**	**11649.**
Stddev	2115.	19.	17.4	14.
%RSD	1.1498	.05202	.19724	.12147
#1	181580.	35811.	8814.3	11651.
#2	184720.	35813.	8793.3	11633.
#3	185600.	35780.	8827.8	11661.

Zoom In Zoom Out

Sample Name: mp17250-s1 Acquired: 9/11/2019 11:47:10 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.124**	**1.973**	**1.962**	**1.988**	**1.945**	**1.869**	**2.266**	**2.017**	**.2387**
Stddev	.036	.033	.012	.008	.009	.009	.013	.007	.0019
%RSD	1.706	1.679	.6218	.4206	.4686	.4611	.5788	.3658	.8032
#1	2.103	1.953	1.972	1.993	1.941	1.872	2.260	2.021	.2400
#2	2.166	2.011	1.966	1.993	1.955	1.875	2.282	2.021	.2397
#3	2.103	1.955	1.948	1.979	1.938	1.859	2.258	2.008	.2365

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.939**	**2.127**	**2.001**	**1.994**	**2.012**	**2.003**	**1.987**	**24.44**	**105.7**
Stddev	.006	.009	.008	.015	.011	.009	.016	.39	1.8
%RSD	.3341	.4399	.4066	.7376	.5629	.4615	.7925	1.611	1.730
#1	1.938	2.133	2.007	2.000	2.015	2.008	2.000	24.19	104.5
#2	1.946	2.132	2.005	2.005	2.021	2.010	1.990	24.90	107.8
#3	1.934	2.116	1.992	1.977	1.999	1.993	1.969	24.24	104.9

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.65**	**42.46**	**33.49**	F **1320.**	**2.014**	**1.989**	**4.326**	**1.997**	**2.119**
Stddev	.42	.78	.44	38.	.011	.009	.023	.012	.036
%RSD	1.718	1.841	1.300	2.880	.5659	.4624	.5293	.6077	1.703
#1	24.38	41.87	33.21	1289.	2.023	1.995	4.347	2.006	2.094
#2	25.14	43.34	33.99	1363.	2.017	1.993	4.329	2.001	2.160
#3	24.43	42.15	33.27	1309.	2.001	1.978	4.302	1.983	2.103

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.967**	**1.913**	**1.995**	**1.052**	**.0396**	**.0130**	**2.046**	**-.0568**
Stddev	.013	.019	.009	.012	.0020	.0007	.012	.0164
%RSD	.6834	.9729	.4618	1.172	5.015	5.415	.5686	28.95
#1	1.965	1.918	1.998	1.060	.0373	.0134	2.052	-.0725
#2	1.981	1.928	2.002	1.058	.0406	.0121	2.053	-.0581
#3	1.954	1.892	1.985	1.038	.0409	.0133	2.032	-.0397

Zoom In Zoom Out

Sample Name: mp17250-s1 Acquired: 9/11/2019 11:47:10 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**182760.**	**35370.**	**8785.0**	**11609.**
Stddev	1037.	703.	28.2	37.
%RSD	.56764	1.9870	.32115	.32300
#1	183950.	36115.	8783.8	11624.
#2	182020.	34718.	8757.5	11567.
#3	182320.	35277.	8813.8	11637.

Zoom In Zoom Out

Sample Name: mp17250-s2 Acquired: 9/11/2019 11:52:08 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.158**	**2.005**	**2.003**	**2.029**	**1.985**	**1.908**	**2.317**	**2.055**	**.2425**
Stddev	.012	.012	.008	.012	.002	.004	.004	.009	.0016
%RSD	.5649	.5790	.4057	.6054	.0989	.1818	.1643	.4392	.6702
#1	2.171	2.018	2.009	2.042	1.987	1.912	2.314	2.065	.2432
#2	2.156	2.003	2.005	2.027	1.983	1.905	2.315	2.055	.2406
#3	2.147	1.995	1.993	2.017	1.983	1.906	2.321	2.047	.2436

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.976**	**2.159**	**2.028**	**2.036**	**2.052**	**2.052**	**2.002**	**24.61**	**105.3**
Stddev	.002	.013	.002	.011	.010	.006	.014	.18	.6
%RSD	.0815	.6058	.1144	.5350	.5039	.2725	.7092	.7442	.5858
#1	1.977	2.173	2.031	2.045	2.064	2.055	2.013	24.82	106.0
#2	1.974	2.159	2.027	2.038	2.049	2.045	2.007	24.54	105.2
#3	1.977	2.146	2.027	2.024	2.044	2.055	1.986	24.47	104.8

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.82**	**42.41**	**33.74**	F **1322.**	**2.052**	**2.015**	**4.301**	**2.020**	**2.152**
Stddev	.13	.23	.28	6.	.006	.007	.015	.004	.013
%RSD	.5249	.5409	.8264	.4896	.2980	.3576	.3365	.1999	.6171
#1	24.95	42.67	34.04	1326.	2.058	2.024	4.311	2.025	2.165
#2	24.81	42.33	33.70	1326.	2.051	2.011	4.308	2.019	2.152
#3	24.69	42.23	33.49	1315.	2.045	2.011	4.285	2.017	2.138

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.996**	**1.938**	**2.015**	**1.058**	**.0338**	**.0097**	**2.079**	**-.0696**
Stddev	.004	.003	.002	.008	.0040	.0016	.009	.0044
%RSD	.1790	.1760	.1104	.7946	11.76	16.32	.4075	6.314
#1	1.992	1.941	2.018	1.068	.0366	.0079	2.088	-.0650
#2	1.998	1.937	2.014	1.055	.0292	.0109	2.075	-.0737
#3	1.997	1.935	2.014	1.052	.0356	.0103	2.073	-.0701

Zoom In Zoom Out

Sample Name: mp17250-s2 Acquired: 9/11/2019 11:52:08 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**183680.**	**36105.**	**8784.1**	**11604.**
Stddev	502.	78.	6.6	14.
%RSD	.27348	.21574	.07465	.11997
#1	184100.	36094.	8776.7	11589.
#2	183820.	36187.	8786.1	11609.
#3	183120.	36032.	8789.4	11615.

Zoom In Zoom Out

Sample Name: jc94464-1a Acquired: 9/11/2019 11:57:06 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1921**	**-.0002**	**.0193**	**.0070**	**.0047**	**.0096**	**.5598**	**.0070**	**-.0024**
Stddev	.0017	.0002	.0002	.0003	.0008	.0017	.0054	.0009	.0013
%RSD	.8647	113.9	1.201	4.274	16.59	18.09	.9633	13.46	55.38
#1	.1916	-.0001	.0191	.0071	.0039	.0099	.5660	.0061	-.0031
#2	.1940	-.0004	.0193	.0072	.0055	.0113	.5573	.0070	-.0009
#3	.1908	-.0001	.0195	.0067	.0048	.0078	.5562	.0079	-.0034

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.5174**	**.0029**	**.0024**	**.0324**	**.0090**	**.0019**	**.6319**	**64.23**
Stddev	.0006	.0101	.0020	.0013	.0037	.0076	.0057	.0184	.29
%RSD	76.56	1.959	68.82	51.54	11.39	84.15	295.5	2.911	.4583
#1	.0012	.5073	.0030	.0036	.0356	.0030	.0059	.6243	64.47
#2	.0001	.5172	.0009	.0026	.0333	.0175	-.0046	.6528	64.32
#3	.0012	.5276	.0049	.0011	.0283	.0065	.0045	.6185	63.90

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1227**	**9.149**	**7.176**	**F 1133.**	**.0460**	**.0011**	**4.970**	**.0001**	**.2369**
Stddev	.0089	.086	.091	7.	.0009	.0002	.025	.0012	.0013
%RSD	7.243	.9392	1.262	.6285	1.967	18.60	.5009	1576.	.5436
#1	.1125	9.237	7.281	1137.	.0464	.0011	4.994	.0012	.2372
#2	.1277	9.145	7.123	1138.	.0467	.0014	4.973	-.0012	.2379
#3	.1280	9.065	7.124	1125.	.0450	.0009	4.944	.0002	.2354

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033**	**.0159**	**.0052**	**1.022**	**-.0056**	**.0111**	**.0706**	**.0098**
Stddev	.0016	.0020	.0007	.001	.0089	.0080	.0021	.0141
%RSD	48.52	12.31	12.76	.0710	160.3	72.17	2.938	144.9
#1	.0016	.0148	.0050	1.021	.0023	.0203	.0683	-.0042
#2	.0036	.0148	.0060	1.022	-.0152	.0056	.0711	.0241
#3	.0047	.0182	.0047	1.021	-.0038	.0074	.0723	.0094

Zoom In Zoom Out

Sample Name: jc94464-1a Acquired: 9/11/2019 11:57:06 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**185000.**	**35379.**	**8761.0**	**11684.**
Stddev	1488.	179.	21.5	24.
%RSD	.80457	.50665	.24536	.20136
#1	183290.	35282.	8762.8	11686.
#2	185680.	35268.	8738.7	11659.
#3	186020.	35586.	8781.6	11706.

Zoom In Zoom Out

Sample Name: mp17250-sd1 Acquired: 9/11/2019 12:02:14 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 25.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1812**	**-.0011**	**.0183**	**.0091**	**.0028**	**.0048**	**.5402**	**.0139**	**-.0209**
Stddev	.0092	.0013	.0038	.0044	.0031	.0051	.0037	.0066	.0059
%RSD	5.054	110.3	20.88	48.36	107.9	107.2	.6853	47.36	28.07
#1	.1852	.0002	.0213	.0127	.0062	-.0003	.5380	.0197	-.0275
#2	.1707	-.0023	.0196	.0104	.0001	.0100	.5445	.0068	-.0191
#3	.1877	-.0014	.0140	.0042	.0023	.0046	.5381	.0152	-.0162

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0099**	**.5127**	**.0027**	**.0157**	**.0351**	**.0169**	**.0195**	**.5671**	**61.73**
Stddev	.0095	.0024	.0164	.0037	.0247	.0191	.0089	.1329	.13
%RSD	95.59	.4773	616.7	23.57	70.31	113.6	45.58	23.43	.2120
#1	-.0100	.5135	.0209	.0150	.0283	.0377	.0297	.6887	61.59
#2	-.0004	.5099	-.0019	.0197	.0626	.0001	.0133	.4253	61.73
#3	-.0193	.5146	-.0110	.0124	.0146	.0127	.0156	.5873	61.85

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1756**	**8.907**	**4.338**	**1104.**	**.0648**	**.0020**	**4.935**	**-.0015**	**.2248**
Stddev	.0436	.216	.806	2.	.0134	.0024	.079	.0134	.0018
%RSD	24.81	2.427	18.57	.2186	20.61	121.1	1.608	899.3	.8074
#1	.1818	9.144	5.261	1104.	.0578	.0048	4.890	.0138	.2228
#2	.1293	8.720	3.775	1101.	.0803	.0012	4.889	-.0071	.2264
#3	.2157	8.857	3.978	1105.	.0564	.0001	5.027	-.0112	.2252

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0113**	**.0636**	**.0084**	**.9461**	**-.0374**	**.0178**	**.1406**	**-.0111**
Stddev	.0034	.0041	.0042	.0265	.0319	.0124	.0072	.0718
%RSD	30.17	6.514	50.33	2.805	85.12	69.63	5.109	648.0
#1	.0119	.0661	.0081	.9260	-.0038	.0050	.1374	.0224
#2	.0076	.0659	.0043	.9360	-.0671	.0185	.1356	-.0935
#3	.0143	.0589	.0127	.9761	-.0415	.0297	.1488	.0378

Zoom In Zoom Out

Sample Name: mp17250-sd1 Acquired: 9/11/2019 12:02:14 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 25.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**190900.**	**36018.**	**9139.5**	**12569.**
Stddev	1686.	96.	9.5	9.
%RSD	.88316	.26665	.10399	.07211
#1	190000.	35946.	9132.5	12568.
#2	189850.	36127.	9135.7	12560.
#3	192840.	35982.	9150.3	12578.

Zoom In Zoom Out

Sample Name: jc94464-2a Acquired: 9/11/2019 12:07:13 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6129	.0005	.0011	.0078	.0018	.0056	4.989	.0237	-.0019
Stddev	.0014	.0002	.0003	.0004	.0009	.0007	.054	.0009	.0008
%RSD	.2356	34.71	28.74	4.748	48.30	13.05	1.075	3.614	43.30
#1	.6120	.0004	.0007	.0079	.0008	.0047	4.955	.0229	-.0015
#2	.6145	.0004	.0013	.0080	.0020	.0059	5.050	.0246	-.0014
#3	.6121	.0007	.0013	.0074	.0025	.0060	4.960	.0235	-.0028

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0094	.1132	.0053	.0036	.0051	.0023	.0089	.9320	101.3
Stddev	.0001	.0024	.0042	.0025	.0063	.0053	.0066	.0323	.2
%RSD	.9621	2.163	80.43	69.59	123.1	230.8	73.94	3.462	.1688
#1	.0093	.1149	.0041	.0027	.0103	-.0009	.0013	.9019	101.4
#2	.0094	.1143	.0100	.0017	.0069	-.0007	.0131	.9280	101.4
#3	.0095	.1104	.0017	.0065	-.0019	.0085	.0123	.9661	101.1

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4783	13.11	8.448	F 1230.	.0414	.0002	7.701	-.0024	.3390
Stddev	.0052	.05	.115	21.	.0031	.0001	.118	.0009	.0008
%RSD	1.091	.3663	1.367	1.728	7.448	42.55	1.535	38.42	.2501
#1	.4839	13.17	8.517	1238.	.0422	.0002	7.774	-.0034	.3393
#2	.4736	13.08	8.512	1206.	.0380	.0004	7.763	-.0020	.3397
#3	.4774	13.09	8.315	1247.	.0439	.0002	7.564	-.0017	.3380

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0226	.0074	.0033	2.564	-.0042	.0131	.0963	.0189
Stddev	.0010	.0035	.0008	.037	.0027	.0092	.0030	.0029
%RSD	4.227	46.71	25.31	1.463	64.38	70.07	3.132	15.31
#1	.0215	.0106	.0024	2.594	-.0054	.0129	.0973	.0223
#2	.0228	.0079	.0041	2.574	-.0011	.0040	.0929	.0171
#3	.0234	.0037	.0033	2.522	-.0061	.0223	.0987	.0174

Zoom In Zoom Out

Sample Name: jc94464-2a Acquired: 9/11/2019 12:07:13 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	184480.	35663.	8898.7	11800.
Stddev	1589.	132.	98.3	111.
%RSD	.86140	.37002	1.1045	.94408
#1	185870.	35522.	8847.4	11733.
#2	182750.	35783.	8836.6	11738.
#3	184830.	35686.	9012.0	11929.

Zoom In Zoom Out

Sample Name: ccv Acquired: 9/11/2019 12:12:21 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.997	1.997	2.014	2.045	1.978	1.970	1.998	2.057	.2442
Stddev	.003	.005	.022	.020	.017	.015	.010	.022	.0017
%RSD	.1468	.2480	1.099	.9797	.8584	.7807	.4908	1.082	.6975
#1	1.999	2.000	2.040	2.068	1.962	1.953	1.990	2.082	.2424
#2	1.997	2.000	1.998	2.030	1.977	1.972	1.995	2.039	.2445
#3	1.993	1.991	2.005	2.038	1.996	1.984	2.009	2.050	.2457
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.967	2.039	2.006	2.092	2.043	2.035	2.012	38.94	39.35
Stddev	.015	.022	.024	.021	.019	.025	.023	.05	.06
%RSD	.7614	1.096	1.199	1.009	.9214	1.253	1.130	.1244	.1507
#1	1.952	2.064	2.034	2.116	2.064	2.064	2.038	38.99	39.41
#2	1.967	2.021	1.988	2.074	2.028	2.015	1.995	38.95	39.36
#3	1.982	2.033	1.997	2.087	2.036	2.027	2.002	38.90	39.29
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	39.59	39.03	38.92	38.66	2.045	2.004	5.215	2.030	1.959
Stddev	.06	.03	.10	.03	.019	.022	.057	.019	.003
%RSD	.1549	.0680	.2569	.0877	.9488	1.125	1.100	.9573	.1436
#1	39.64	39.06	38.97	38.67	2.067	2.030	5.281	2.053	1.961
#2	39.60	39.01	38.97	38.69	2.032	1.988	5.176	2.018	1.960
#3	39.52	39.03	38.80	38.62	2.036	1.995	5.189	2.020	1.956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 9/11/2019 12:12:21 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.958	1.988	1.993	1.993	2.041	1.922	2.000	1.959
Stddev	.019	.024	.014	.025	.019	.003	.022	.018
%RSD	.9610	1.191	.6900	1.237	.9138	.1300	1.102	.8949
#1	1.939	2.015	1.979	2.021	2.061	1.925	2.026	1.941
#2	1.959	1.970	1.995	1.979	2.025	1.922	1.988	1.960
#3	1.977	1.980	2.006	1.979	2.036	1.920	1.988	1.976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	187580.	35478.	8823.5	11913.
Stddev	1720.	117.	76.8	93.
%RSD	.91678	.32849	.87052	.78072
#1	188600.	35344.	8737.3	11810.
#2	188540.	35537.	8884.5	11992.
#3	185590.	35554.	8848.9	11936.

Zoom In Zoom Out

Sample Name: ccb Acquired: 9/11/2019 12:17:19 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0002**	**.0002**	**.0004**	**.0002**	**-.0004**	**.0003**	**.0003**	**-.0003**
Stddev	.0003	.0000	.0001	.0002	.0002	.0001	.0000	.0001	.0003
%RSD	75.63	5.595	55.44	43.66	90.72	14.86	16.63	20.20	90.12
#1	.0007	.0002	.0002	.0003	.0003	-.0004	.0003	.0004	-.0006
#2	.0004	.0002	.0001	.0002	.0002	-.0004	.0003	.0004	.0000
#3	.0001	.0002	.0003	.0005	.0000	-.0003	.0002	.0002	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0000**	**-.0001**	**.0008**	**.0001**	**.0012**	**.0010**	**.0106**	**.0026**
Stddev	.0001	.0000	.0006	.0010	.0004	.0023	.0006	.0056	.0002
%RSD	32.48	140.8	504.9	123.6	580.5	183.1	63.98	52.47	7.269
#1	-.0005	-.0000	-.0007	.0017	.0002	.0006	.0014	.0052	.0025
#2	-.0003	.0000	.0004	-.0003	-.0004	.0037	.0013	.0104	.0024
#3	-.0002	.0001	-.0001	.0010	.0004	-.0006	.0003	.0163	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0057**	**.0094**	**-.1489**	**-.3785**	**.0021**	**.0007**	**.0006**	**.0002**	**.0002**
Stddev	.0003	.0061	.0315	.0046	.0002	.0001	.0006	.0000	.0000
%RSD	4.668	64.55	21.14	1.206	10.27	19.52	90.48	10.24	13.06
#1	.0055	.0114	-.1583	-.3836	.0023	.0005	-.0000	.0002	.0002
#2	.0060	.0143	-.1747	-.3747	.0021	.0007	.0009	.0002	.0002
#3	.0055	.0026	-.1138	-.3773	.0019	.0008	.0010	.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 9/11/2019 12:17:19 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0011**	**.0007**	**-.0023**	**-.0012**	**-.0009**	**.0032**	**.0006**
Stddev	.0003	.0003	.0001	.0012	.0012	.0012	.0003	.0014
%RSD	76.52	30.37	11.50	51.93	99.60	142.1	8.705	224.0
#1	.0002	.0010	.0007	-.0036	-.0008	-.0002	.0034	.0005
#2	.0002	.0008	.0008	-.0013	-.0003	-.0023	.0032	.0020
#3	.0007	.0015	.0006	-.0020	-.0026	-.0001	.0029	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**199120.**	**36130.**	**9275.6**	**13135.**
Stddev	265.	188.	77.8	96.
%RSD	.13293	.51911	.83930	.72741
#1	198840.	36290.	9254.2	13103.
#2	199360.	35923.	9210.7	13060.
#3	199160.	36176.	9361.9	13243.

Zoom In Zoom Out

Sample Name: mp17250-ps1 Acquired: 9/11/2019 12:22:23 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.248**	**2.098**	**2.142**	**2.193**	**2.106**	**2.006**	**2.690**	**2.214**	**.2653**
Stddev	.007	.006	.009	.006	.024	.025	.035	.005	.0045
%RSD	.3179	.2689	.3978	.2932	1.115	1.260	1.299	.2091	1.703
#1	2.249	2.102	2.146	2.192	2.080	1.977	2.652	2.209	.2602
#2	2.255	2.100	2.148	2.200	2.113	2.013	2.699	2.219	.2686
#3	2.240	2.091	2.133	2.187	2.125	2.026	2.720	2.214	.2672

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.082**	**2.664**	**2.279**	**2.196**	**2.356**	**2.177**	**2.217**	**26.23**	**87.28**
Stddev	.022	.013	.008	.008	.007	.014	.009	.07	.11
%RSD	1.058	.4841	.3424	.3767	.3111	.6248	.3985	.2502	.1312
#1	2.057	2.666	2.283	2.193	2.349	2.171	2.224	26.30	87.33
#2	2.089	2.675	2.285	2.205	2.364	2.192	2.220	26.21	87.35
#3	2.099	2.650	2.270	2.190	2.355	2.166	2.207	26.18	87.14

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.27**	**34.42**	**32.27**	F **1105.**	**2.184**	**2.211**	**4.894**	**2.242**	**2.253**
Stddev	.04	.06	.09	4.	.010	.010	.016	.009	.002
%RSD	.1343	.1819	.2750	.3682	.4514	.4338	.3208	.3827	.0980
#1	26.27	34.47	32.33	1106.	2.181	2.205	4.886	2.238	2.251
#2	26.30	34.45	32.31	1109.	2.195	2.222	4.913	2.252	2.255
#3	26.23	34.35	32.17	1101.	2.176	2.206	4.885	2.236	2.252

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.189**	**2.071**	**2.201**	**.9889**	**.0432**	**.0082**	**2.187**	**-.0707**
Stddev	.030	.011	.026	.0029	.0043	.0044	.005	.0061
%RSD	1.367	.5134	1.179	.2908	9.987	53.64	.2498	8.641
#1	2.156	2.062	2.172	.9884	.0385	.0052	2.191	-.0665
#2	2.198	2.083	2.210	.9920	.0470	.0061	2.190	-.0777
#3	2.214	2.068	2.222	.9863	.0441	.0133	2.181	-.0679

Zoom In Zoom Out

Sample Name: mp17250-ps1 Acquired: 9/11/2019 12:22:23 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**185100.**	**35777.**	**8839.4**	**11700.**
Stddev	1454.	112.	50.2	56.
%RSD	.78567	.31398	.56807	.48240
#1	186660.	35688.	8842.2	11699.
#2	184860.	35741.	8787.8	11645.
#3	183780.	35903.	8888.2	11758.

Zoom In Zoom Out

Sample Name: mp17228-ps1 Acquired: 9/11/2019 12:27:19 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.200**	**2.016**	**2.025**	**2.073**	**2.099**	**2.159**	**2.967**	**2.114**	**.2624**
Stddev	.013	.010	.007	.005	.028	.029	.062	.005	.0032
%RSD	.6032	.4749	.3574	.2455	1.348	1.343	2.096	.2567	1.213
#1	2.203	2.017	2.028	2.075	2.092	2.153	2.930	2.116	.2617
#2	2.186	2.007	2.029	2.076	2.075	2.134	2.932	2.118	.2597
#3	2.212	2.026	2.016	2.067	2.130	2.191	3.038	2.108	.2659

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.058**	**2.469**	**2.174**	**2.103**	**2.335**	**2.037**	**2.128**	**80.78**	**43.64**
Stddev	.026	.011	.008	.004	.007	.005	.009	.39	.21
%RSD	1.273	.4346	.3707	.1658	.3121	.2252	.4188	.4877	.4842
#1	2.051	2.476	2.178	2.103	2.336	2.034	2.131	80.90	43.69
#2	2.036	2.475	2.179	2.106	2.342	2.042	2.135	80.34	43.41
#3	2.087	2.457	2.164	2.100	2.328	2.034	2.118	81.09	43.82

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**94.99**	**33.24**	**28.18**	**25.39**	**2.070**	**2.064**	**2.448**	**2.145**	**2.075**
Stddev	.83	.10	.12	.17	.007	.008	.053	.007	.011
%RSD	.8773	.2972	.4343	.6664	.3304	.3989	2.171	.3204	.5172
#1	94.12	33.20	28.23	25.50	2.073	2.067	2.494	2.150	2.067
#2	95.05	33.17	28.04	25.19	2.074	2.070	2.460	2.147	2.070
#3	95.79	33.35	28.27	25.47	2.062	2.054	2.390	2.137	2.087

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.677**	**1.920**	**2.111**	**.8878**	**.1093**	**.0345**	**3.604**	**.1176**
Stddev	.048	.002	.028	.0038	.0029	.0013	.012	.0026
%RSD	1.314	.1033	1.344	.4329	2.660	3.812	.3404	2.184
#1	3.661	1.919	2.101	.8900	.1074	.0359	3.612	.1168
#2	3.639	1.922	2.089	.8901	.1079	.0332	3.611	.1155
#3	3.731	1.919	2.143	.8834	.1127	.0345	3.590	.1204

Zoom In Zoom Out

Sample Name: mp17228-ps1 Acquired: 9/11/2019 12:27:19 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**196040.**	**36696.**	**9194.1**	**12269.**
Stddev	2476.	28.	42.0	39.
%RSD	1.2629	.07683	.45703	.32066
#1	196680.	36694.	9173.0	12254.
#2	198140.	36669.	9166.7	12239.
#3	193310.	36726.	9242.5	12313.

Zoom In Zoom Out

Sample Name: 13aconf Acquired: 9/11/2019 12:32:23 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.992**	**1.962**	**1.947**	**1.963**	**1.965**	**1.962**	**2.014**	**1.983**	**.0008**
Stddev	.008	.017	.009	.007	.027	.027	.032	.006	.0001
%RSD	.4083	.8838	.4545	.3782	1.356	1.363	1.602	.3091	14.42
#1	2.000	1.977	1.957	1.972	1.950	1.945	1.982	1.990	.0007
#2	1.984	1.943	1.944	1.961	1.949	1.948	2.014	1.981	.0009
#3	1.992	1.965	1.941	1.958	1.996	1.993	2.047	1.978	.0007

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.926**	**2.002**	**-.0002**	**2.088**	**2.016**	**1.926**	**-.0009**	**.0025**	**.0222**
Stddev	.028	.008	.0006	.008	.009	.009	.0015	.0066	.0002
%RSD	1.434	.3958	250.0	.3680	.4273	.4467	170.8	266.5	.7896
#1	1.909	2.011	-.0009	2.096	2.026	1.935	.0002	.0085	.0224
#2	1.912	2.000	.0003	2.083	2.011	1.925	-.0002	.0034	.0222
#3	1.958	1.996	-.0002	2.083	2.011	1.918	-.0025	-.0046	.0220

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0012**	**.0057**	**-.0645**	**-.4111**	**1.959**	**.0033**	**-.0150**	**-.0006**	**1.950**
Stddev	.0013	.0012	.0188	.0075	.011	.0006	.0002	.0002	.007
%RSD	107.9	21.67	29.15	1.814	.5762	17.27	1.411	38.92	.3832
#1	-.0021	.0044	-.0726	-.4037	1.972	.0039	-.0147	-.0003	1.957
#2	.0003	.0069	-.0779	-.4111	1.954	.0033	-.0152	-.0007	1.942
#3	-.0020	.0057	-.0430	-.4186	1.951	.0027	-.0150	-.0008	1.952

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0279**	**.0018**	**.0010**	**-.0046**	**.0003**	**1.877**	**.0022**
Stddev	.0001	.0018	.0001	.0002	.0007	.0010	.008	.0002
%RSD	70.43	6.452	3.074	25.38	14.27	307.7	.4173	10.33
#1	-.0001	.0295	.0018	.0011	-.0043	-.0008	1.884	.0020
#2	-.0001	.0283	.0017	.0011	-.0042	.0008	1.879	.0025
#3	-.0002	.0259	.0018	.0007	-.0054	.0009	1.869	.0023

Zoom In Zoom Out

Sample Name: 13aconf Acquired: 9/11/2019 12:32:23 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**197010.**	**35764.**	**9231.0**	**13088.**
Stddev	2583.	41.	28.4	33.
%RSD	1.3112	.11572	.30814	.25244
#1	198860.	35733.	9202.1	13051.
#2	198120.	35811.	9232.0	13097.
#3	194060.	35748.	9258.9	13116.

Zoom In Zoom Out

Sample Name: mp17232-mb1 Acquired: 9/11/2019 12:57:35 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**-.0000**	**.0000**	**-.0001**	**.0004**	**-.0003**	**-.0000**	**-.0002**	**-.0007**
Stddev	.0002	.0000	.0001	.0001	.0001	.0003	.0001	.0001	.0004
%RSD	816.8	30.73	194.6	135.8	37.09	90.08	334.4	31.67	61.30
#1	-.0001	-.0000	-.0000	-.0001	.0005	-.0001	.0001	-.0003	-.0009
#2	-.0001	-.0000	.0001	-.0002	.0004	-.0003	-.0001	-.0002	-.0009
#3	.0002	-.0000	.0000	.0001	.0002	-.0007	-.0001	-.0001	-.0002

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0039**	**-.0002**	**.0003**	**-.0002**	**.0017**	**.0010**	**-.0018**	**.0065**
Stddev	.0002	.0001	.0008	.0006	.0002	.0004	.0007	.0040	.0008
%RSD	159.4	3.672	496.7	179.9	62.61	26.00	69.13	217.9	12.55
#1	.0001	.0038	-.0010	.0010	-.0003	.0021	.0017	-.0046	.0058
#2	-.0001	.0039	.0003	.0001	-.0004	.0012	.0005	-.0036	.0063
#3	-.0003	.0040	.0002	-.0001	-.0001	.0017	.0007	.0027	.0074

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**.0044**	**-.1395**	**-.4558**	**.0011**	**.0005**	**.0081**	**-.0001**	**.0000**
Stddev	.0003	.0020	.0276	.0083	.0004	.0001	.0003	.0002	.0001
%RSD	8.718	44.94	19.75	1.816	37.13	18.65	3.501	272.6	157.5
#1	.0028	.0041	-.1336	-.4556	.0015	.0005	.0079	-.0002	.0001
#2	.0032	.0065	-.1695	-.4641	.0007	.0006	.0084	.0001	.0000
#3	.0032	.0026	-.1154	-.4476	.0011	.0004	.0080	-.0002	-.0000

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0024**	**.0005**	**.0029**	**-.0016**	**.0003**	**.0041**	**.0006**
Stddev	.0003	.0008	.0001	.0002	.0002	.0002	.0003	.0015
%RSD	185.3	34.87	21.27	8.280	14.86	72.62	8.175	264.0
#1	.0001	.0029	.0006	.0031	-.0014	.0006	.0039	.0004
#2	.0005	.0029	.0004	.0029	-.0019	.0001	.0045	.0022
#3	-.0001	.0014	.0006	.0026	-.0016	.0003	.0039	-.0009

Zoom In Zoom Out

Sample Name: mp17232-mb1 Acquired: 9/11/2019 12:57:35 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**197510.**	**35760.**	**9284.6**	**13105.**
Stddev	3356.	689.	22.7	31.
%RSD	1.6990	1.9272	.24469	.23295
#1	193640.	35013.	9258.8	13078.
#2	199180.	36372.	9293.4	13098.
#3	199700.	35895.	9301.5	13138.

Zoom In Zoom Out

Sample Name: mp17232-b1 Acquired: 9/11/2019 13:02:37 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.017**	**2.010**	**1.991**	**2.026**	**1.955**	**1.968**	**2.000**	**2.044**
Stddev	.001	.046	.008	.007	.004	.007	.007	.007
%RSD	.0364	2.276	.3922	.3539	.1876	.3581	.3640	.3600
#1	2.018	2.019	1.982	2.018	1.954	1.965	2.008	2.036
#2	2.017	2.050	1.996	2.032	1.952	1.962	1.997	2.050
#3	2.018	1.960	1.994	2.026	1.959	1.976	1.994	2.046

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2380**	**1.932**	**2.027**	**2.011**	**2.099**	**2.046**	**2.017**	**2.028**
Stddev	.0006	.006	.007	.007	.009	.005	.007	.011
%RSD	.2646	.2964	.3707	.3508	.4325	.2327	.3545	.5549
#1	.2376	1.932	2.019	2.003	2.088	2.041	2.010	2.015
#2	.2376	1.926	2.034	2.017	2.104	2.050	2.024	2.032
#3	.2387	1.937	2.026	2.012	2.104	2.046	2.019	2.036

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.30**	**24.49**	**24.71**	**24.19**	**24.18**	**24.04**	**2.033**	**2.017**
Stddev	.03	.03	.04	.09	.01	.02	.010	.010
%RSD	.1264	.1352	.1622	.3599	.0357	.0647	.4805	.4840
#1	24.29	24.50	24.70	24.18	24.18	24.03	2.022	2.006
#2	24.34	24.52	24.75	24.29	24.17	24.03	2.040	2.024
#3	24.29	24.45	24.67	24.11	24.19	24.06	2.037	2.021

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0503**	**2.045**	**1.958**	**1.978**	**1.937**	**1.982**	**-.0027**	**.0364**
Stddev	.0005	.010	.005	.003	.014	.007	.0014	.0021
%RSD	1.040	.4920	.2677	.1729	.7111	.3646	52.61	5.776
#1	.0506	2.034	1.962	1.978	1.921	1.981	-.0029	.0387
#2	.0497	2.054	1.960	1.974	1.944	1.975	-.0040	.0355
#3	.0507	2.046	1.952	1.981	1.945	1.990	-.0012	.0348

Zoom In Zoom Out

Sample Name: mp17232-b1 Acquired: 9/11/2019 13:02:37 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**-.0014**	**1.951**	W **-.0715**
Stddev	.0002	.007	.0006
%RSD	17.43	.3829	.8733
#1	-.0017	1.943	-.0710
#2	-.0013	1.957	-.0722
#3	-.0013	1.953	-.0714

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**193750.**	**35938.**	**8993.1**	**12202.**
Stddev	227.	211.	28.0	28.
%RSD	.11723	.58609	.31081	.23189
#1	194000.	35888.	9023.4	12231.
#2	193550.	35757.	8968.4	12175.
#3	193690.	36170.	8987.5	12201.

Zoom In Zoom Out

Sample Name: mp17232-s1 Acquired: 9/11/2019 13:07:40 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.044**	**1.994**	**1.980**	**1.995**	**1.968**	**2.000**	**4.042**	**2.002**
Stddev	.024	.022	.004	.005	.037	.034	.096	.004
%RSD	1.160	1.096	.1860	.2359	1.865	1.716	2.385	.2208
#1	2.061	2.008	1.984	1.999	1.968	1.998	4.030	2.006
#2	2.053	2.005	1.978	1.995	2.005	2.035	4.144	2.001
#3	2.017	1.968	1.977	1.990	1.932	1.966	3.953	1.998

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2439**	**1.959**	**1.989**	**3.611**	**2.025**	**1.985**	**2.004**	**2.022**
Stddev	.0038	.034	.002	.011	.007	.005	.007	.006
%RSD	1.564	1.736	.0891	.2976	.3698	.2612	.3342	.2850
#1	.2431	1.960	1.991	3.621	2.031	1.988	2.008	2.027
#2	.2480	1.992	1.988	3.614	2.027	1.987	2.007	2.016
#3	.2406	1.924	1.987	3.600	2.017	1.979	1.996	2.021

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.13**	**72.45**	**88.39**	**30.39**	**32.84**	**36.67**	**2.157**	**2.001**
Stddev	.26	.88	.79	.21	.29	.40	.006	.005
%RSD	1.073	1.210	.8968	.6806	.8816	1.088	.2871	.2537
#1	24.30	72.14	88.89	30.49	33.00	36.94	2.164	2.006
#2	24.26	71.76	88.80	30.52	33.00	36.86	2.155	1.999
#3	23.83	73.43	87.47	30.15	32.50	36.22	2.153	1.997

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.439**	**2.008**	**2.273**	**2.004**	**2.002**	**2.011**	**1.649**	**.0399**
Stddev	.025	.003	.015	.040	.007	.034	.003	.0025
%RSD	.2663	.1374	.6426	1.974	.3445	1.698	.1581	6.160
#1	9.468	2.010	2.264	2.003	2.010	2.012	1.652	.0401
#2	9.428	2.009	2.264	2.044	1.998	2.045	1.647	.0422
#3	9.421	2.005	2.289	1.964	1.999	1.977	1.648	.0373

Zoom In Zoom Out

Sample Name: mp17232-s1 Acquired: 9/11/2019 13:07:40 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**-.0046**	**2.016**	W **-.0680**
Stddev	.0005	.004	.0004
%RSD	9.811	.1750	.6056
#1	-.0041	2.018	-.0684
#2	-.0049	2.018	-.0676
#3	-.0048	2.012	-.0681

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**187920.**	**35847.**	**8878.5**	**12103.**
Stddev	3439.	103.	11.9	14.
%RSD	1.8298	.28717	.13362	.11182
#1	188070.	35917.	8868.8	12087.
#2	184400.	35729.	8891.7	12111.
#3	191270.	35895.	8875.0	12110.

Zoom In Zoom Out

Sample Name: mp17232-s2 Acquired: 9/11/2019 13:12:53 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.108**	**2.048**	**1.990**	**2.003**	**1.969**	**1.999**	**4.080**	**2.008**
Stddev	.015	.028	.008	.008	.057	.055	.103	.007
%RSD	.6957	1.366	.4021	.4045	2.871	2.750	2.514	.3404
#1	2.113	2.061	1.984	1.997	2.026	2.055	4.188	2.002
#2	2.091	2.015	1.988	2.001	1.913	1.945	3.984	2.007
#3	2.119	2.066	1.999	2.012	1.967	1.998	4.067	2.016

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2446**	**1.959**	**1.993**	**3.637**	**2.035**	**1.991**	**2.012**	**2.031**
Stddev	.0060	.056	.010	.015	.003	.008	.006	.011
%RSD	2.469	2.835	.5069	.4048	.1599	.4083	.3104	.5467
#1	.2506	2.017	1.982	3.627	2.032	1.983	2.007	2.024
#2	.2385	1.907	1.995	3.630	2.034	1.993	2.010	2.026
#3	.2447	1.953	2.002	3.654	2.038	1.999	2.019	2.044

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.88**	**73.38**	**91.42**	**31.34**	**33.87**	**37.95**	**2.169**	**2.013**
Stddev	.17	1.23	.73	.24	.18	.27	.010	.008
%RSD	.6747	1.669	.7987	.7579	.5323	.7179	.4595	.3775
#1	24.97	74.49	91.83	31.51	33.96	38.02	2.162	2.006
#2	24.68	72.07	90.57	31.07	33.66	37.65	2.165	2.010
#3	24.98	73.57	91.85	31.44	33.98	38.18	2.180	2.021

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.538**	**2.016**	**2.376**	**2.004**	**2.003**	**2.011**	**1.663**	**.0391**
Stddev	.046	.008	.016	.058	.006	.055	.006	.0052
%RSD	.4849	.4092	.6814	2.901	.3085	2.736	.3691	13.39
#1	9.506	2.009	2.365	2.062	1.997	2.068	1.658	.0447
#2	9.517	2.013	2.395	1.946	2.002	1.959	1.661	.0344
#3	9.591	2.025	2.370	2.005	2.009	2.005	1.670	.0381

Zoom In Zoom Out

Sample Name: mp17232-s2 Acquired: 9/11/2019 13:12:53 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**-.0045**	**2.025**	W **-.0686**
Stddev	.0003	.009	.0019
%RSD	6.941	.4179	2.713
#1	-.0044	2.021	-.0678
#2	-.0048	2.020	-.0673
#3	-.0042	2.035	-.0707

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**188130.**	**35115.**	**8867.5**	**12092.**
Stddev	4882.	183.	44.8	58.
%RSD	2.5951	.52008	.50491	.47589
#1	183100.	35013.	8919.1	12158.
#2	192850.	35326.	8838.2	12052.
#3	188460.	35006.	8845.3	12066.

Zoom In Zoom Out

Sample Name: jc94613-1a Acquired: 9/11/2019 13:18:09 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0511**	**-.0003**	W **-.0010**	**.0177**	**.0007**	**.0001**	**2.094**	**.0062**
Stddev	.0002	.0000	.0001	.0002	.0001	.0003	.021	.0001
%RSD	.3486	11.84	10.11	1.092	10.37	352.7	1.025	2.380
#1	.0513	-.0003	-.0010	.0177	.0007	.0005	2.112	.0064
#2	.0510	-.0003	-.0010	.0178	.0008	-.0001	2.098	.0063
#3	.0510	-.0003	-.0012	.0175	.0007	-.0001	2.070	.0061

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0037**	**.0065**	**1.595**	**.0019**	**-.0016**	**.0003**	**.0021**
Stddev	.0004	.0001	.0002	.001	.0009	.0001	.0005	.0011
%RSD	72.45	2.960	2.537	.0853	45.68	4.121	137.3	54.89
#1	.0004	.0038	.0063	1.595	.0029	-.0015	.0004	.0022
#2	.0003	.0037	.0065	1.597	.0012	-.0016	.0008	.0009
#3	.0011	.0036	.0066	1.594	.0018	-.0015	-.0001	.0031

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**48.05**	**65.28**	**6.801**	**8.559**	**12.58**	**.1476**	**.0024**
Stddev	.0056	.38	.52	.050	.085	.09	.0003	.0002
%RSD	180.7	.7926	.8039	.7371	.9895	.7394	.2043	8.147
#1	.0087	48.46	65.84	6.852	8.643	12.68	.1478	.0026
#2	-.0025	47.96	65.21	6.798	8.560	12.59	.1478	.0022
#3	.0032	47.72	64.79	6.752	8.474	12.49	.1472	.0024

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.370**	**-.0016**	**.3667**	**-.0003**	**.0042**	**.0036**	**1.632**	**.0003**
Stddev	.018	.0001	.0029	.0002	.0006	.0002	.005	.0008
%RSD	.1932	8.986	.7840	57.00	14.15	5.123	.3370	285.0
#1	9.360	-.0015	.3699	-.0004	.0043	.0038	1.629	-.0004
#2	9.390	-.0017	.3660	-.0001	.0048	.0035	1.639	.0001
#3	9.358	-.0015	.3643	-.0004	.0036	.0035	1.629	.0012

Zoom In Zoom Out

Sample Name: jc94613-1a Acquired: 9/11/2019 13:18:09 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**-.0039**	**.0729**	**.0044**
Stddev	.0009	.0007	.0025
%RSD	23.16	.9185	56.91
#1	-.0044	.0730	.0048
#2	-.0043	.0735	.0017
#3	-.0028	.0721	.0066

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**194860.**	**35849.**	**9104.0**	**12557.**
Stddev	1696.	234.	18.6	35.
%RSD	.87039	.65323	.20437	.27687
#1	193350.	35766.	9089.1	12532.
#2	194550.	35668.	9098.1	12541.
#3	196700.	36114.	9124.9	12596.

Zoom In Zoom Out

Sample Name: mp17232-sd1 Acquired: 9/11/2019 13:23:12 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0564**	**-.0004**	**-.0002**	**.0181**	**.0010**	**-.0029**	**2.275**	**.0071**	**-.0021**
Stddev	.0012	.0002	.0005	.0003	.0018	.0011	.017	.0010	.0009
%RSD	2.204	45.68	277.2	1.618	192.3	38.71	.7640	14.39	41.58
#1	.0565	-.0003	.0001	.0182	.0024	-.0038	2.292	.0076	-.0016
#2	.0576	-.0003	.0001	.0184	-.0011	-.0033	2.275	.0077	-.0031
#3	.0551	-.0006	-.0007	.0178	.0015	-.0016	2.258	.0059	-.0016

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0042**	**.0176**	**1.610**	**.0038**	**-.0039**	**.0036**	**.0053**	**-.0083**	**51.53**
Stddev	.0005	.0002	.030	.0009	.0022	.0017	.0053	.0451	.17
%RSD	10.70	1.108	1.841	22.43	57.47	47.92	100.9	541.6	.3397
#1	.0039	.0174	1.639	.0035	-.0064	.0051	-.0008	.0369	51.70
#2	.0040	.0178	1.610	.0048	-.0022	.0040	.0090	-.0086	51.35
#3	.0047	.0176	1.580	.0031	-.0031	.0017	.0076	-.0533	51.54

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**70.14**	**7.405**	**8.545**	**11.52**	**.1585**	**.0036**	**9.531**	**-.0014**	**.3915**
Stddev	.27	.047	.303	.03	.0029	.0006	.179	.0017	.0010
%RSD	.3910	.6370	3.545	.2698	1.834	17.48	1.884	118.2	.2675
#1	70.41	7.451	8.839	11.48	.1607	.0043	9.718	.0002	.3925
#2	69.86	7.407	8.234	11.54	.1597	.0031	9.515	-.0032	.3904
#3	70.14	7.357	8.562	11.53	.1552	.0033	9.360	-.0012	.3916

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0103**	**.0039**	**1.637**	**-.0093**	**-.0076**	**.0918**	**-.0017**
Stddev	.0007	.0035	.0010	.027	.0063	.0046	.0020	.0084
%RSD	182.2	33.53	26.35	1.676	67.20	60.34	2.134	503.9
#1	-.0011	.0137	.0040	1.663	-.0043	-.0123	.0936	.0080
#2	-.0002	.0105	.0028	1.639	-.0074	-.0031	.0920	-.0061
#3	.0002	.0068	.0048	1.608	-.0164	-.0074	.0897	-.0069

Zoom In Zoom Out

Sample Name: mp17232-sd1 Acquired: 9/11/2019 13:23:12 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**196660.**	**35752.**	**9224.9**	**12904.**
Stddev	800.	212.	26.2	36.
%RSD	.40692	.59274	.28447	.28260
#1	197500.	35537.	9194.6	12862.
#2	195910.	35960.	9239.2	12928.
#3	196570.	35759.	9240.9	12922.

Zoom In Zoom Out

Sample Name: ccv Acquired: 9/11/2019 13:28:11 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.024**	**1.993**	**1.989**	**2.024**	**1.953**	**1.949**	**1.996**	**2.046**	**.2412**
Stddev	.010	.024	.024	.021	.019	.021	.013	.022	.0027
%RSD	.4939	1.182	1.199	1.037	.9639	1.072	.6626	1.056	1.131
#1	2.013	1.976	1.961	2.001	1.971	1.970	2.010	2.022	.2442
#2	2.027	2.020	2.000	2.031	1.934	1.928	1.985	2.054	.2388
#3	2.032	1.984	2.005	2.041	1.954	1.949	1.992	2.062	.2407
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.925**	**2.015**	**1.996**	**2.070**	**2.028**	**2.022**	**1.991**	**39.40**	**39.54**
Stddev	.021	.021	.023	.022	.022	.024	.028	.18	.15
%RSD	1.083	1.058	1.155	1.042	1.100	1.194	1.390	.4552	.3755
#1	1.946	1.991	1.971	2.046	2.003	1.994	1.959	39.20	39.37
#2	1.904	2.026	2.003	2.075	2.034	2.030	2.001	39.45	39.60
#3	1.925	2.030	2.015	2.088	2.046	2.040	2.012	39.55	39.64
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**39.97**	**39.13**	**39.35**	**38.98**	**2.036**	**1.972**	**5.169**	**1.993**	**1.964**
Stddev	.20	.18	.16	.19	.022	.022	.067	.024	.009
%RSD	.4909	.4593	.4042	.4842	1.087	1.131	1.301	1.209	.4539
#1	39.75	38.94	39.17	38.76	2.011	1.947	5.093	1.965	1.954
#2	40.03	39.16	39.40	39.08	2.046	1.981	5.193	2.002	1.966
#3	40.13	39.29	39.48	39.10	2.051	1.989	5.220	2.010	1.971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 9/11/2019 13:28:11 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.946**	**1.977**	**1.953**	**1.971**	**2.029**	**1.933**	**1.970**	**1.944**
Stddev	.019	.023	.022	.021	.025	.009	.021	.018
%RSD	.9652	1.151	1.135	1.063	1.215	.4388	1.084	.9223
#1	1.961	1.951	1.976	1.948	2.001	1.924	1.946	1.957
#2	1.925	1.987	1.932	1.976	2.038	1.938	1.978	1.923
#3	1.951	1.993	1.952	1.989	2.048	1.939	1.987	1.950
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**191100.**	**35244.**	**8923.8**	**11984.**
Stddev	1612.	33.	82.1	92.
%RSD	.84356	.09500	.92032	.76881
#1	189560.	35272.	9018.6	12089.
#2	192780.	35254.	8878.4	11939.
#3	190950.	35207.	8874.4	11922.

Zoom In Zoom Out

Sample Name: ccb Acquired: 9/11/2019 13:33:16 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0001**	**.0002**	**.0001**	**-.0000**	**-.0008**	**.0001**	**.0003**	**-.0008**
Stddev	.0004	.0001	.0001	.0002	.0004	.0003	.0000	.0001	.0002
%RSD	255.8	60.90	44.02	106.2	1080.	42.11	24.59	50.50	27.37
#1	-.0003	.0002	.0002	-.0000	-.0005	-.0004	.0002	.0001	-.0008
#2	.0004	.0001	.0001	.0002	.0004	-.0011	.0001	.0004	-.0011
#3	.0004	.0001	.0003	.0003	-.0001	-.0010	.0001	.0003	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0002**	**-.0006**	**-.0000**	**-.0003**	**.0019**	**.0007**	**.0031**	**.0010**
Stddev	.0001	.0001	.0002	.0002	.0004	.0011	.0013	.0058	.0008
%RSD	79.27	36.71	35.01	366.6	101.1	58.96	169.6	189.2	83.43
#1	-.0001	.0001	-.0008	.0001	-.0007	.0006	.0021	-.0035	.0005
#2	-.0001	.0002	-.0004	-.0000	-.0004	.0022	.0004	.0076	.0020
#3	-.0003	.0001	-.0005	-.0002	.0000	.0028	-.0003	.0052	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0034**	**.0034**	**-.1754**	**-.5208**	**.0029**	**.0006**	**.0011**	**.0002**	**.0001**
Stddev	.0011	.0148	.0058	.0026	.0003	.0001	.0006	.0001	.0000
%RSD	33.24	438.1	3.301	.4941	10.90	14.36	60.76	43.89	39.09
#1	.0021	-.0129	-.1687	-.5192	.0032	.0007	.0016	.0001	.0001
#2	.0041	.0161	-.1790	-.5195	.0027	.0006	.0003	.0003	.0001
#3	.0041	.0070	-.1785	-.5238	.0027	.0006	.0012	.0003	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 9/11/2019 13:33:16 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0023**	**.0003**	**-.0016**	**-.0008**	**-.0006**	**.0040**	**.0024**
Stddev	.0002	.0002	.0001	.0011	.0006	.0014	.0003	.0025
%RSD	58.54	8.975	15.89	68.19	78.02	211.2	8.728	103.2
#1	.0005	.0024	.0003	-.0019	-.0016	.0009	.0043	.0005
#2	.0001	.0021	.0004	-.0026	-.0006	-.0013	.0036	.0014
#3	.0003	.0025	.0004	-.0004	-.0003	-.0016	.0040	.0052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**199730.**	**35866.**	**9300.7**	**13104.**
Stddev	906.	224.	28.0	39.
%RSD	.45336	.62398	.30156	.30085
#1	199070.	35728.	9269.4	13059.
#2	199370.	36124.	9323.6	13122.
#3	200760.	35745.	9309.0	13132.

Zoom In Zoom Out

Sample Name: jc94537-1a Acquired: 9/11/2019 13:38:20 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0154**	**-.0003**	**.0000**	**.0003**	**.0005**	**.0027**	**.0259**	**.0055**	**-.0003**
Stddev	.0004	.0001	.0001	.0000	.0003	.0002	.0001	.0000	.0002
%RSD	2.909	16.02	973.3	12.83	62.82	8.462	.3160	.7087	47.11
#1	.0157	-.0004	-.0000	.0003	.0003	.0029	.0260	.0055	-.0002
#2	.0149	-.0003	.0001	.0003	.0003	.0024	.0258	.0055	-.0003
#3	.0156	-.0003	-.0001	.0003	.0008	.0027	.0259	.0055	-.0005

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0078**	**.0262**	**.0005**	**-.0014**	**.0007**	**.0020**	**-.0014**	**38.94**
Stddev	.0002	.0001	.0012	.0003	.0003	.0003	.0010	.0069	.15
%RSD	305.1	1.401	4.506	58.31	23.99	44.20	51.10	481.0	.3797
#1	-.0000	.0077	.0275	.0003	-.0018	.0010	.0017	.0065	39.11
#2	.0001	.0078	.0254	.0003	-.0012	.0007	.0012	-.0060	38.88
#3	-.0003	.0079	.0256	.0008	-.0012	.0004	.0032	-.0048	38.83

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6620**	**5.396**	**7.123**	**21.98**	**.1120**	**.0005**	**8.143**	**-.0015**	**.2795**
Stddev	.0013	.023	.040	.11	.0004	.0000	.013	.0001	.0006
%RSD	.2017	.4309	.5634	.5112	.3905	5.232	.1576	8.902	.2226
#1	.6634	5.422	7.159	22.11	.1124	.0005	8.135	-.0015	.2802
#2	.6617	5.378	7.131	21.89	.1115	.0005	8.135	-.0014	.2791
#3	.6608	5.387	7.080	21.95	.1120	.0005	8.158	-.0017	.2792

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0011**	**.0002**	**1.710**	**-.0019**	**.0021**	**.0200**	**.0018**
Stddev	.0001	.0004	.0001	.004	.0014	.0007	.0005	.0017
%RSD	14.27	33.00	56.57	.2035	72.06	34.89	2.580	99.89
#1	-.0004	.0013	.0001	1.707	-.0035	.0020	.0206	.0027
#2	-.0005	.0007	.0003	1.709	-.0009	.0014	.0196	-.0003
#3	-.0004	.0013	.0002	1.714	-.0014	.0028	.0199	.0028

Zoom In Zoom Out

Sample Name: jc94537-1a Acquired: 9/11/2019 13:38:20 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**193400.**	**35855.**	**8980.2**	**12338.**
Stddev	913.	210.	25.2	22.
%RSD	.47219	.58514	.28056	.17901
#1	192420.	35620.	8961.2	12324.
#2	194220.	36024.	9008.8	12363.
#3	193570.	35920.	8970.6	12325.

Zoom In Zoom Out

Sample Name: jc94613-2a Acquired: 9/11/2019 13:43:16 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0152**	**-.0002**	W **-.0024**	**.0136**	**.0005**	**-.0002**	**2.294**	**.0060**
Stddev	.0001	.0001	.0001	.0001	.0003	.0002	.027	.0002
%RSD	.8166	33.31	4.649	.4887	65.33	106.6	1.181	3.894
#1	.0153	-.0002	-.0023	.0135	.0005	-.0003	2.323	.0063
#2	.0151	-.0001	-.0025	.0136	.0002	-.0001	2.269	.0058
#3	.0151	-.0001	-.0024	.0136	.0008	-.0000	2.290	.0060

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0035**	**.0067**	**3.146**	**.0006**	**-.0008**	**.0003**	**.0024**
Stddev	.0003	.0001	.0000	.007	.0005	.0001	.0009	.0007
%RSD	326.1	3.810	.5923	.2383	82.14	19.19	305.5	31.36
#1	-.0000	.0034	.0068	3.155	.0009	-.0007	.0001	.0017
#2	.0005	.0037	.0067	3.142	.0010	-.0009	-.0005	.0032
#3	-.0001	.0034	.0067	3.142	.0000	-.0007	.0012	.0023

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0047**	**25.57**	**40.08**	**2.948**	**3.505**	**5.763**	**.0468**	**.0024**
Stddev	.0051	.04	.06	.005	.009	.018	.0009	.0002
%RSD	108.8	.1507	.1519	.1868	.2418	.3088	1.821	6.271
#1	.0014	25.59	40.14	2.954	3.512	5.780	.0478	.0026
#2	.0021	25.59	40.07	2.943	3.506	5.763	.0462	.0023
#3	.0106	25.52	40.02	2.949	3.495	5.745	.0465	.0025

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.936**	**-.0017**	**.1736**	**-.0003**	**.0001**	**.0015**	**1.707**	**-.0007**
Stddev	.028	.0004	.0001	.0001	.0002	.0001	.005	.0013
%RSD	.3506	20.55	.0408	38.31	178.0	6.186	.3131	187.0
#1	7.965	-.0014	.1736	-.0004	.0004	.0016	1.713	-.0022
#2	7.934	-.0016	.1736	-.0003	.0001	.0014	1.703	.0004
#3	7.910	-.0021	.1737	-.0002	-.0001	.0014	1.706	-.0003

Zoom In Zoom Out

Sample Name: jc94613-2a Acquired: 9/11/2019 13:43:16 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**-.0027**	**.0572**	**.0035**
Stddev	.0010	.0010	.0032
%RSD	35.63	1.669	92.81
#1	-.0035	.0561	.0070
#2	-.0016	.0579	.0006
#3	-.0031	.0577	.0029

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**194820.**	**36000.**	**9123.9**	**12661.**
Stddev	937.	209.	23.2	23.
%RSD	.48072	.57970	.25398	.18302
#1	193750.	36173.	9097.1	12635.
#2	195470.	35768.	9136.7	12667.
#3	195250.	36060.	9137.8	12681.

Zoom In Zoom Out

Sample Name: mp17232-ps1 Acquired: 9/11/2019 13:48:20 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.110**	**2.044**	**2.023**	**2.038**	**1.986**	**2.019**	**3.991**	**2.045**
Stddev	.004	.029	.008	.006	.033	.033	.091	.008
%RSD	.1826	1.404	.4051	.2934	1.640	1.632	2.287	.3697
#1	2.108	2.067	2.027	2.042	2.021	2.053	4.091	2.048
#2	2.114	2.053	2.013	2.032	1.982	2.016	3.970	2.036
#3	2.107	2.012	2.028	2.042	1.956	1.987	3.912	2.050

Elem	Ag3280	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2560**	**1.961**	**2.021**	**3.731**	**2.069**	**2.151**	**2.045**	**2.161**
Stddev	.0040	.032	.008	.015	.006	.005	.009	.007
%RSD	1.568	1.642	.3813	.4007	.3152	.2345	.4574	.3042
#1	.2599	1.995	2.026	3.737	2.072	2.154	2.049	2.162
#2	.2563	1.958	2.012	3.715	2.061	2.146	2.034	2.154
#3	.2519	1.931	2.025	3.743	2.073	2.154	2.052	2.167

Elem	Al3961	Ca3179	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.16**	**71.50**	**87.79**	**31.25**	**33.62**	**37.39**	**2.201**	**2.108**
Stddev	.05	.41	.15	.02	.02	.07	.009	.008
%RSD	.2028	.5797	.1731	.0608	.0711	.1899	.4129	.3960
#1	25.10	71.79	87.65	31.23	33.61	37.39	2.206	2.107
#2	25.21	71.02	87.95	31.27	33.65	37.46	2.191	2.100
#3	25.17	71.68	87.78	31.24	33.61	37.32	2.207	2.117

Elem	Si2124	Sn1899	Sr4077	Ti3349	W_2079	Zr3391	S_1820	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.152**	**2.139**	**2.307**	**2.130**	**2.033**	**2.122**	**1.595**	**.0452**
Stddev	.035	.006	.037	.034	.016	.034	.006	.0024
%RSD	.3835	.2987	1.612	1.593	.8052	1.609	.3522	5.379
#1	9.169	2.140	2.303	2.166	2.020	2.157	1.596	.0475
#2	9.111	2.132	2.346	2.128	2.027	2.118	1.589	.0453
#3	9.174	2.145	2.272	2.098	2.051	2.089	1.600	.0427

Zoom In Zoom Out

Sample Name: mp17232-ps1 Acquired: 9/11/2019 13:48:20 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm
Avg	**-.0049**	**2.048**	W **-.0725**
Stddev	.0012	.007	.0006
%RSD	25.53	.3459	.8842
#1	-.0054	2.049	-.0729
#2	-.0034	2.040	-.0727
#3	-.0057	2.054	-.0717

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**189520.**	**35365.**	**8849.9**	**12048.**
Stddev	2837.	116.	29.6	34.
%RSD	1.4969	.32867	.33397	.28280
#1	186490.	35454.	8824.2	12017.
#2	189960.	35234.	8882.2	12084.
#3	192110.	35408.	8843.4	12043.

Zoom In Zoom Out

Sample Name: mp17228-s1 Acquired: 9/11/2019 13:53:37 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.217**	**1.935**	**1.949**	**2.001**	**2.092**	**2.013**	**3.070**	**2.068**	**.2319**
Stddev	.002	.004	.007	.006	.021	.022	.030	.006	.0031
%RSD	.1043	.2145	.3700	.2934	.9876	1.082	.9934	.2835	1.341
#1	2.216	1.931	1.950	2.003	2.077	1.998	3.049	2.071	.2323
#2	2.216	1.936	1.955	2.006	2.116	2.038	3.105	2.071	.2349
#3	2.220	1.939	1.941	1.994	2.083	2.002	3.056	2.061	.2287

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.039**	**2.555**	**1.973**	**2.079**	**2.192**	**1.934**	**1.411**	**103.1**	**41.26**
Stddev	.025	.009	.012	.005	.009	.020	.006	.1	.08
%RSD	1.208	.3516	.5812	.2472	.4242	1.016	.3935	.1292	.1909
#1	2.020	2.557	1.985	2.076	2.188	1.945	1.417	102.9	41.17
#2	2.066	2.563	1.972	2.085	2.202	1.947	1.410	103.1	41.31
#3	2.029	2.546	1.962	2.076	2.184	1.912	1.406	103.2	41.30

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**110.5**	**34.52**	**28.65**	**22.59**	**1.970**	**1.958**	**3.777**	**1.976**	**2.005**
Stddev	.3	.06	.10	.04	.010	.009	.034	.010	.004
%RSD	.2784	.1803	.3468	.1900	.5122	.4626	.9036	.4839	.1768
#1	110.1	34.45	28.75	22.54	1.976	1.965	3.796	1.978	2.002
#2	110.5	34.58	28.56	22.62	1.976	1.961	3.737	1.984	2.004
#3	110.8	34.51	28.63	22.61	1.959	1.948	3.797	1.966	2.009

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.203**	**1.220**	**1.622**	**.8798**	**.1443**	**.0436**	**3.557**	**.1710**
Stddev	.037	.021	.019	.0049	.0020	.0062	.020	.0019
%RSD	.8885	1.759	1.155	.5518	1.411	14.33	.5696	1.092
#1	4.174	1.243	1.608	.8759	.1458	.0389	3.562	.1694
#2	4.245	1.217	1.643	.8852	.1451	.0507	3.574	.1706
#3	4.189	1.201	1.614	.8782	.1420	.0411	3.535	.1731

Zoom In Zoom Out

Sample Name: mp17228-s1 Acquired: 9/11/2019 13:53:37 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**197360.**	**36270.**	**9276.4**	**12671.**
Stddev	1984.	210.	47.3	66.
%RSD	1.0052	.57946	.50935	.52126
#1	198170.	36048.	9244.0	12623.
#2	195100.	36295.	9254.6	12644.
#3	198810.	36466.	9330.6	12746.

Zoom In Zoom Out

Sample Name: mp17228-s2 Acquired: 9/11/2019 13:58:25 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.157**	**1.889**	**1.967**	**2.018**	**1.996**	**1.952**	**3.100**	**2.084**	**.2212**
Stddev	.010	.008	.026	.025	.111	.106	.172	.026	.0094
%RSD	.4671	.4038	1.317	1.218	5.534	5.435	5.536	1.241	4.238
#1	2.148	1.882	1.947	1.999	2.026	1.980	3.147	2.062	.2219
#2	2.168	1.897	1.958	2.010	1.874	1.835	2.909	2.077	.2115
#3	2.156	1.888	1.997	2.046	2.089	2.042	3.243	2.113	.2302

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.938**	**2.669**	**1.986**	**2.087**	**2.223**	**1.954**	**1.389**	**108.0**	**41.21**
Stddev	.105	.037	.029	.025	.023	.027	.017	.4	.17
%RSD	5.432	1.396	1.456	1.202	1.033	1.361	1.221	.4059	.4162
#1	1.962	2.636	1.962	2.069	2.203	1.928	1.374	107.5	41.03
#2	1.823	2.661	1.978	2.076	2.217	1.952	1.386	108.4	41.37
#3	2.029	2.709	2.018	2.115	2.248	1.982	1.408	108.0	41.24

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**120.4**	**34.38**	**28.41**	**22.13**	**1.963**	**1.947**	**3.634**	**1.990**	**1.963**
Stddev	.3	.14	.09	.14	.030	.027	.078	.030	.008
%RSD	.2776	.4014	.3171	.6422	1.523	1.397	2.144	1.498	.4205
#1	120.0	34.26	28.32	21.97	1.942	1.923	3.555	1.966	1.953
#2	120.6	34.34	28.40	22.23	1.949	1.942	3.638	1.980	1.969
#3	120.5	34.53	28.50	22.20	1.997	1.977	3.710	2.023	1.965

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.987**	**1.115**	**1.552**	**.9625**	**.1327**	**.0374**	**3.724**	**.1739**
Stddev	.220	.012	.082	.0186	.0184	.0003	.049	.0121
%RSD	5.510	1.064	5.269	1.931	13.84	.9030	1.324	6.944
#1	4.049	1.109	1.569	.9532	.1476	.0378	3.687	.1754
#2	3.743	1.108	1.463	.9503	.1122	.0372	3.705	.1612
#3	4.169	1.129	1.624	.9839	.1383	.0373	3.780	.1852

Zoom In Zoom Out

Sample Name: mp17228-s2 Acquired: 9/11/2019 13:58:25 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**203410.**	**36158.**	**9182.6**	**12558.**
Stddev	11926.	80.	73.4	80.
%RSD	5.8631	.22056	.79945	.63927
#1	197630.	36250.	9232.9	12615.
#2	217120.	36108.	9216.5	12593.
#3	195460.	36115.	9098.4	12466.

Zoom In Zoom Out

Sample Name: jc94464-2 Acquired: 9/11/2019 14:03:13 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1965**	**.0022**	**.0113**	**.0275**	**.1535**	**.1576**	**1.172**	**.0586**	**.0039**
Stddev	.0018	.0001	.0006	.0011	.0015	.0030	.010	.0013	.0000
%RSD	.9353	3.017	5.498	3.852	1.004	1.931	.8906	2.159	.6619
#1	.1950	.0023	.0108	.0273	.1549	.1589	1.183	.0572	.0039
#2	.1960	.0022	.0120	.0265	.1538	.1598	1.170	.0588	.0039
#3	.1986	.0022	.0112	.0286	.1519	.1541	1.163	.0597	.0039

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1315**	**.5283**	**.0362**	**.0057**	**.1580**	**.0060**	**.0062**	**61.04**	**20.71**
Stddev	.0033	.0027	.0008	.0055	.0029	.0058	.0032	.19	.07
%RSD	2.541	.5134	2.170	97.84	1.843	96.68	50.88	.3171	.3530
#1	.1351	.5312	.0354	.0064	.1611	-.0004	.0055	60.84	20.64
#2	.1308	.5258	.0363	.0108	.1575	.0076	.0034	61.04	20.71
#3	.1285	.5278	.0370	-.0002	.1553	.0109	.0096	61.23	20.78

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**78.53**	**9.448**	**2.762**	**-1.831**	**.0399**	**.0150**	**2.065**	**.0261**	**.1066**
Stddev	.25	.083	.113	.062	.0017	.0006	.010	.0016	.0006
%RSD	.3158	.8732	4.097	3.393	4.355	4.236	.4689	6.195	.6043
#1	78.32	9.373	2.639	-1.829	.0412	.0154	2.070	.0265	.1058
#2	78.48	9.434	2.861	-1.770	.0405	.0142	2.054	.0275	.1070
#3	78.80	9.536	2.787	-1.894	.0379	.0152	2.072	.0243	.1069

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.755**	**.0514**	**.0197**	**.9274**	**.0689**	**.0306**	**1.741**	**.2211**
Stddev	.015	.0028	.0020	.0133	.0037	.0030	.014	.0128
%RSD	.8325	5.523	10.20	1.437	5.331	9.698	.8118	5.801
#1	1.766	.0520	.0216	.9426	.0731	.0272	1.756	.2192
#2	1.760	.0539	.0197	.9176	.0664	.0326	1.728	.2347
#3	1.739	.0483	.0176	.9222	.0672	.0320	1.740	.2093

Zoom In Zoom Out

Sample Name: jc94464-2 Acquired: 9/11/2019 14:03:13 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**194490.**	**35813.**	**9285.4**	**12828.**
Stddev	1858.	153.	40.7	52.
%RSD	.95554	.42712	.43853	.40224
#1	192350.	35920.	9242.9	12781.
#2	195550.	35881.	9324.0	12883.
#3	195580.	35638.	9289.4	12820.

Zoom In Zoom Out

Sample Name: mp17228-sd1 Acquired: 9/11/2019 14:08:10 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 25.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1979**	**.0013**	**.0120**	**.0271**	**.1487**	**.1357**	**1.134**	**.0577**	**-.0066**
Stddev	.0087	.0006	.0014	.0065	.0013	.0123	.016	.0082	.0028
%RSD	4.383	44.25	11.21	23.88	.8982	9.091	1.367	14.16	43.09
#1	.2027	.0015	.0120	.0237	.1473	.1470	1.141	.0670	-.0092
#2	.1879	.0018	.0134	.0346	.1488	.1225	1.116	.0545	-.0068
#3	.2030	.0007	.0107	.0231	.1500	.1374	1.144	.0516	-.0036

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1229**	**.5630**	**.0394**	**.0271**	**.1632**	**.0202**	**.0035**	**60.29**	**20.79**
Stddev	.0023	.0013	.0117	.0148	.0121	.0124	.0228	.16	.05
%RSD	1.908	.2320	29.55	54.66	7.442	61.21	642.1	.2628	.2226
#1	.1252	.5643	.0327	.0101	.1539	.0238	-.0226	60.43	20.76
#2	.1229	.5630	.0529	.0340	.1770	.0064	.0145	60.12	20.85
#3	.1205	.5617	.0328	.0372	.1588	.0303	.0188	60.31	20.77

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**78.07**	**9.585**	**-.6852**	**-12.14**	**.0612**	**.0541**	**2.246**	**.0471**	**.1058**
Stddev	.10	.123	.7542	.11	.0040	.0010	.025	.0061	.0019
%RSD	.1308	1.285	110.1	.9106	6.559	1.859	1.098	12.88	1.836
#1	78.18	9.456	-.9509	-12.10	.0600	.0541	2.250	.0402	.1079
#2	78.05	9.702	.1660	-12.27	.0579	.0551	2.220	.0518	.1056
#3	77.97	9.598	-1.271	-12.05	.0657	.0530	2.268	.0491	.1041

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.724**	**.3093**	**.0372**	**.9233**	**.0602**	**.0293**	**1.871**	**.2526**
Stddev	.028	.0168	.0015	.0088	.0357	.0101	.014	.0140
%RSD	1.650	5.433	4.086	.9516	59.40	34.50	.7616	5.532
#1	1.739	.3281	.0378	.9334	.0241	.0391	1.867	.2674
#2	1.692	.3040	.0354	.9174	.0608	.0300	1.886	.2397
#3	1.743	.2958	.0382	.9192	.0956	.0189	1.858	.2507

Zoom In Zoom Out

Sample Name: mp17228-sd1 Acquired: 9/11/2019 14:08:10 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 25.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**199700.**	**36137.**	**9214.5**	**12929.**
Stddev	3070.	151.	22.7	17.
%RSD	1.5373	.41870	.24615	.13034
#1	196690.	35998.	9198.1	12919.
#2	202820.	36298.	9240.4	12949.
#3	199600.	36116.	9205.0	12920.

Zoom In Zoom Out

Sample Name: mp17228-ps1 Acquired: 9/11/2019 14:13:10 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.246**	**2.041**	**2.055**	**2.103**	**2.172**	**2.135**	**3.184**	**2.158**	**.2627**
Stddev	.006	.006	.007	.007	.016	.014	.017	.009	.0027
%RSD	.2532	.3126	.3348	.3148	.7375	.6501	.5168	.3916	1.014
#1	2.250	2.047	2.047	2.096	2.178	2.135	3.189	2.148	.2646
#2	2.248	2.041	2.059	2.109	2.154	2.121	3.165	2.164	.2596
#3	2.240	2.035	2.059	2.106	2.185	2.148	3.197	2.162	.2638

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.091**	**2.571**	**2.192**	**2.194**	**2.397**	**2.060**	**2.170**	**81.72**	**44.54**
Stddev	.014	.012	.004	.007	.008	.013	.005	.12	.13
%RSD	.6710	.4665	.1772	.3240	.3420	.6515	.2244	.1476	.2913
#1	2.086	2.557	2.194	2.189	2.387	2.045	2.174	81.85	44.67
#2	2.080	2.577	2.188	2.202	2.403	2.068	2.170	81.63	44.54
#3	2.106	2.579	2.195	2.190	2.400	2.068	2.165	81.66	44.41

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**98.53**	**34.27**	**27.78**	**23.62**	**2.120**	**2.127**	**2.651**	**2.235**	**2.100**
Stddev	.12	.07	.16	.10	.007	.010	.135	.010	.004
%RSD	.1251	.2103	.5583	.4032	.3363	.4596	5.072	.4576	.1675
#1	98.63	34.25	27.76	23.73	2.112	2.118	2.768	2.223	2.102
#2	98.58	34.35	27.94	23.59	2.124	2.125	2.504	2.243	2.103
#3	98.40	34.21	27.64	23.54	2.125	2.138	2.681	2.239	2.097

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.783**	**1.939**	**2.128**	**.8757**	**.1177**	**.0262**	**3.622**	**.1303**
Stddev	.022	.007	.013	.0025	.0053	.0004	.007	.0146
%RSD	.5796	.3884	.6257	.2818	4.483	1.392	.2036	11.21
#1	3.789	1.930	2.130	.8755	.1237	.0262	3.614	.1470
#2	3.758	1.941	2.114	.8782	.1153	.0266	3.627	.1232
#3	3.801	1.945	2.140	.8733	.1140	.0259	3.627	.1205

Zoom In Zoom Out

Sample Name: mp17228-ps1 Acquired: 9/11/2019 14:13:10 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**196680.**	**36359.**	**9235.1**	**12631.**
Stddev	386.	81.	48.2	62.
%RSD	.19639	.22222	.52182	.48876
#1	196360.	36450.	9290.7	12699.
#2	197110.	36328.	9204.5	12579.
#3	196580.	36297.	9210.3	12614.

Zoom In Zoom Out

Sample Name: ccv Acquired: 9/11/2019 14:18:00 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.044**	**2.008**	**2.025**	**2.046**	**2.010**	**2.012**	**2.037**	**2.070**	**.2488**
Stddev	.018	.018	.005	.004	.014	.012	.036	.003	.0017
%RSD	.8621	.8704	.2677	.2212	.7095	.5839	1.752	.1340	.6671
#1	2.037	2.021	2.029	2.048	2.015	2.016	2.022	2.072	.2497
#2	2.030	2.014	2.019	2.040	2.021	2.021	2.078	2.067	.2498
#3	2.064	1.988	2.026	2.048	1.994	1.998	2.012	2.072	.2469
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.982**	**2.045**	**2.027**	**2.103**	**2.059**	**2.068**	**2.023**	**39.59**	**39.84**
Stddev	.012	.006	.006	.003	.001	.009	.002	.37	.31
%RSD	.6239	.2793	.3174	.1318	.0525	.4401	.0840	.9330	.7849
#1	1.987	2.051	2.033	2.106	2.060	2.076	2.022	39.45	39.76
#2	1.992	2.041	2.020	2.100	2.058	2.058	2.025	39.31	39.58
#3	1.968	2.043	2.028	2.104	2.059	2.069	2.022	40.01	40.19
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.34**	**39.33**	**39.67**	**39.17**	**2.069**	**1.999**	**5.251**	**2.030**	**1.983**
Stddev	.32	.31	.32	.29	.005	.007	.018	.005	.016
%RSD	.7984	.7902	.7975	.7450	.2618	.3394	.3415	.2385	.8165
#1	40.22	39.25	39.62	39.06	2.071	2.006	5.267	2.035	1.978
#2	40.09	39.07	39.38	38.94	2.063	1.993	5.231	2.026	1.971
#3	40.70	39.68	40.01	39.50	2.073	1.999	5.254	2.028	2.002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 9/11/2019 14:18:00 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.002**	**2.020**	**2.020**	**2.016**	**2.066**	**1.943**	**1.998**	**1.998**
Stddev	.016	.006	.012	.005	.003	.015	.006	.014
%RSD	.8174	.2944	.6088	.2334	.1633	.7440	.3059	.6832
#1	2.007	2.025	2.026	2.019	2.069	1.940	2.003	2.007
#2	2.016	2.014	2.029	2.011	2.062	1.931	1.991	2.006
#3	1.984	2.021	2.006	2.018	2.066	1.959	2.000	1.983
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**186380.**	**35258.**	**8808.6**	**11859.**
Stddev	1509.	274.	21.2	9.
%RSD	.80940	.77816	.24028	.07789
#1	186190.	35269.	8787.3	11854.
#2	184970.	35526.	8808.9	11853.
#3	187970.	34978.	8829.6	11870.

Zoom In Zoom Out

Sample Name: ccb Acquired: 9/11/2019 14:23:01 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0001**	**.0003**	**.0001**	**-.0000**	**-.0004**	**.0002**	**.0001**	**-.0007**
Stddev	.0003	.0000	.0000	.0001	.0002	.0000	.0000	.0002	.0003
%RSD	45.82	21.41	.9009	120.5	443.1	8.707	13.95	179.3	44.53
#1	.0006	.0001	.0003	.0000	-.0003	-.0004	.0002	.0002	-.0004
#2	.0008	.0001	.0003	.0000	.0001	-.0004	.0002	.0003	-.0010
#3	.0003	.0002	.0003	.0002	.0001	-.0005	.0002	-.0001	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0001**	**.0003**	**.0006**	**-.0006**	**.0021**	**.0009**	**.0023**	**.0038**
Stddev	.0001	.0000	.0001	.0002	.0002	.0005	.0014	.0039	.0011
%RSD	325.1	32.45	43.20	38.10	31.63	22.85	153.3	165.0	29.03
#1	.0000	.0001	.0001	.0008	-.0005	.0026	.0021	-.0004	.0027
#2	.0001	.0001	.0003	.0007	-.0004	.0019	-.0006	.0006	.0039
#3	-.0000	.0001	.0004	.0004	-.0008	.0017	.0012	.0068	.0048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0042**	**.0022**	**-.2089**	**-.5156**	**.0033**	**.0018**	**.0015**	**.0003**	**.0001**
Stddev	.0008	.0080	.0233	.0059	.0003	.0002	.0008	.0003	.0001
%RSD	18.93	359.6	11.13	1.144	10.32	9.815	53.87	99.28	68.55
#1	.0044	.0067	-.1961	-.5088	.0037	.0016	.0011	.0001	.0002
#2	.0033	.0069	-.2357	-.5183	.0032	.0020	.0024	.0006	.0000
#3	.0049	-.0070	-.1949	-.5196	.0031	.0017	.0009	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 9/11/2019 14:23:01 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	F **.0062**	**.0005**	**-.0020**	**-.0010**	**-.0023**	**.0045**	**.0009**
Stddev	.0000	.0003	.0000	.0012	.0007	.0003	.0006	.0033
%RSD	12.51	4.732	9.056	59.62	68.40	12.78	12.24	349.9
#1	.0003	.0065	.0005	-.0006	-.0002	-.0021	.0051	.0038
#2	.0003	.0059	.0005	-.0028	-.0015	-.0026	.0041	.0018
#3	.0003	.0061	.0006	-.0026	-.0012	-.0021	.0044	-.0027
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0050						
Low Limit		-.0050						

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**193550.**	**35362.**	**8945.4**	**12661.**
Stddev	1310.	108.	14.5	19.
%RSD	.67668	.30658	.16262	.15062
#1	193040.	35358.	8929.3	12648.
#2	195040.	35255.	8957.6	12683.
#3	192570.	35472.	8949.4	12652.

Zoom In Zoom Out

Sample Name: mp17232-s1 Acquired: 9/11/2019 14:28:05 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.128**	**2.063**	**2.035**	**2.075**	**2.038**	**1.990**	**4.325**	**2.090**	**.2459**
Stddev	.007	.005	.008	.011	.022	.020	.045	.015	.0017
%RSD	.3346	.2510	.3788	.5078	1.058	1.021	1.050	.7144	.6765
#1	2.125	2.060	2.028	2.067	2.022	1.980	4.299	2.080	.2470
#2	2.123	2.059	2.043	2.087	2.029	1.976	4.298	2.108	.2440
#3	2.136	2.068	2.033	2.073	2.062	2.013	4.377	2.084	.2467

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.006**	**2.095**	**3.666**	**2.168**	**2.100**	**2.051**	**2.074**	**25.26**	**75.57**
Stddev	.020	.008	.013	.011	.009	.022	.014	.09	.19
%RSD	.9841	.3664	.3591	.5064	.4381	1.065	.6767	.3641	.2457
#1	1.995	2.091	3.651	2.159	2.091	2.026	2.060	25.16	75.45
#2	1.995	2.104	3.676	2.180	2.109	2.066	2.088	25.27	75.48
#3	2.029	2.090	3.671	2.164	2.101	2.059	2.075	25.34	75.79

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**93.67**	**32.51**	**33.36**	**36.34**	**2.228**	**2.075**	**9.702**	**2.122**	**2.402**
Stddev	.38	.17	.25	.07	.012	.011	.046	.012	.009
%RSD	.4062	.5179	.7391	.1949	.5293	.5040	.4772	.5749	.3730
#1	93.46	32.37	33.38	36.36	2.220	2.065	9.668	2.113	2.394
#2	93.45	32.46	33.10	36.26	2.242	2.086	9.755	2.136	2.400
#3	94.11	32.70	33.59	36.39	2.223	2.075	9.684	2.117	2.412

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.040**	**2.072**	**2.056**	**1.705**	**.0338**	**-.0122**	**2.064**	**-.0714**
Stddev	.022	.013	.019	.021	.0021	.0026	.006	.0078
%RSD	1.096	.6145	.9040	1.229	6.281	21.22	.3092	10.96
#1	2.027	2.061	2.045	1.683	.0322	-.0127	2.058	-.0783
#2	2.027	2.086	2.046	1.725	.0329	-.0094	2.070	-.0731
#3	2.066	2.071	2.078	1.707	.0362	-.0145	2.065	-.0629

Zoom In Zoom Out

Sample Name: mp17232-s1 Acquired: 9/11/2019 14:28:05 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**194030.**	**35676.**	**9093.1**	**12530.**
Stddev	2356.	64.	23.1	42.
%RSD	1.2144	.17946	.25401	.33318
#1	196250.	35738.	9109.1	12567.
#2	194280.	35681.	9066.6	12485.
#3	191560.	35611.	9103.5	12537.

Zoom In Zoom Out

Sample Name: mp17232-s2 Acquired: 9/11/2019 14:32:55 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.078**	**2.013**	**1.992**	**2.024**	**2.008**	**1.951**	**4.274**	**2.037**	**.2432**
Stddev	.022	.022	.008	.007	.015	.013	.035	.007	.0023
%RSD	1.046	1.083	.4166	.3543	.7487	.6631	.8087	.3643	.9544
#1	2.053	1.988	1.998	2.027	2.025	1.966	4.314	2.042	.2459
#2	2.091	2.021	1.995	2.029	1.997	1.942	4.249	2.039	.2419
#3	2.091	2.029	1.982	2.016	2.001	1.946	4.261	2.028	.2418

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.970**	**2.043**	**3.598**	**2.113**	**2.049**	**2.003**	**2.021**	**24.69**	**73.85**
Stddev	.016	.004	.011	.005	.010	.008	.011	.28	.73
%RSD	.8275	.1883	.2935	.2369	.4744	.3995	.5294	1.143	.9823
#1	1.989	2.044	3.603	2.117	2.060	2.007	2.030	24.37	73.01
#2	1.961	2.047	3.606	2.116	2.045	2.007	2.025	24.78	74.20
#3	1.960	2.039	3.586	2.108	2.042	1.993	2.009	24.91	74.32

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**91.68**	**31.74**	**32.52**	**35.53**	**2.182**	**2.035**	**9.561**	**2.070**	**2.342**
Stddev	.85	.36	.24	.34	.006	.009	.035	.007	.021
%RSD	.9276	1.126	.7303	.9612	.2549	.4249	.3626	.3452	.8980
#1	90.70	31.34	32.25	35.14	2.184	2.041	9.595	2.068	2.318
#2	92.12	31.89	32.64	35.70	2.187	2.040	9.562	2.078	2.355
#3	92.23	32.01	32.68	35.76	2.176	2.025	9.526	2.064	2.354

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.007**	**2.018**	**2.020**	**1.635**	**.0361**	**-.0123**	**2.019**	**-.0611**
Stddev	.016	.010	.014	.003	.0046	.0035	.007	.0037
%RSD	.7790	.5117	.6808	.1941	12.67	28.45	.3589	6.093
#1	2.025	2.023	2.036	1.633	.0318	-.0158	2.027	-.0569
#2	1.995	2.025	2.012	1.639	.0409	-.0123	2.017	-.0639
#3	2.003	2.007	2.012	1.634	.0356	-.0088	2.013	-.0625

Zoom In Zoom Out

Sample Name: mp17232-s2 Acquired: 9/11/2019 14:32:55 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**190090.**	**35547.**	**9028.5**	**12463.**
Stddev	582.	357.	32.9	45.
%RSD	.30593	1.0046	.36480	.36388
#1	189560.	35932.	9013.7	12433.
#2	190010.	35482.	9005.7	12441.
#3	190710.	35227.	9066.3	12515.

Zoom In Zoom Out

Sample Name: jc94613-1a Acquired: 9/11/2019 14:37:44 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0520	-.0005	-.0003	.0176	.0005	.0000	2.097	.0069	-.0012
Stddev	.0012	.0000	.0009	.0012	.0006	.0005	.031	.0009	.0008
%RSD	2.286	7.518	267.0	6.874	131.2	14380.	1.493	13.42	60.40
#1	.0534	-.0005	.0000	.0189	.0007	.0004	2.124	.0079	-.0012
#2	.0515	-.0005	.0003	.0164	.0010	.0002	2.105	.0065	-.0005
#3	.0512	-.0005	-.0013	.0176	-.0002	-.0006	2.062	.0062	-.0020

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0032	.0664	1.552	.0004	-.0017	.0040	.0096	.0818	49.17
Stddev	.0002	.0023	.006	.0007	.0021	.0015	.0044	.0152	.06
%RSD	6.796	3.507	.3784	154.2	120.8	38.21	45.39	18.55	.1189
#1	.0035	.0686	1.551	-.0003	-.0014	.0032	.0128	.0664	49.19
#2	.0031	.0665	1.558	.0005	.0002	.0030	.0114	.0821	49.22
#3	.0031	.0640	1.546	.0011	-.0039	.0057	.0047	.0968	49.11

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	65.11	6.933	7.829	10.36	.1489	.0045	9.209	-.0001	.3646
Stddev	.05	.013	.224	.12	.0014	.0007	.034	.0007	.0006
%RSD	.0757	.1921	2.860	1.176	.9137	14.88	.3666	449.1	.1720
#1	65.16	6.921	7.590	10.41	.1504	.0053	9.236	.0006	.3651
#2	65.06	6.930	8.034	10.44	.1477	.0041	9.219	-.0004	.3648
#3	65.12	6.948	7.862	10.22	.1486	.0042	9.171	-.0006	.3639

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.0134	.0074	1.607	-.0036	-.0036	.0930	.0061
Stddev	.0012	.0010	.0003	.011	.0014	.0055	.0030	.0072
%RSD	378.3	7.128	4.241	.6961	38.12	153.5	3.229	117.9
#1	-.0017	.0133	.0076	1.600	-.0048	-.0099	.0928	.0073
#2	-.0000	.0125	.0076	1.620	-.0021	-.0009	.0902	-.0016
#3	.0007	.0144	.0071	1.602	-.0039	.0001	.0962	.0127

Zoom In Zoom Out

Sample Name: jc94613-1a Acquired: 9/11/2019 14:37:44 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	200250.	35956.	9184.2	12850.
Stddev	2862.	160.	22.8	28.
%RSD	1.4294	.44548	.24787	.21689
#1	198090.	35946.	9161.0	12818.
#2	199150.	36121.	9185.1	12866.
#3	203500.	35801.	9206.6	12866.

Zoom In Zoom Out

Sample Name: mp17232-sd1 Acquired: 9/11/2019 14:42:40 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 25.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0510	-.0008	-.0004	.0193	-.0021	-.0099	2.082	.0093	-.0165
Stddev	.0062	.0008	.0019	.0033	.0013	.0085	.016	.0066	.0062
%RSD	12.05	105.0	458.3	16.93	58.95	86.03	.7583	71.53	37.62
#1	.0480	-.0016	-.0023	.0224	-.0036	-.0046	2.075	.0086	-.0138
#2	.0470	-.0007	.0015	.0159	-.0014	-.0054	2.100	.0162	-.0236
#3	.0581	-.0000	-.0004	.0196	-.0014	-.0198	2.071	.0030	-.0121

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0066	.0937	1.542	.0040	-.0199	.0516	.0325	.3489	47.89
Stddev	.0051	.0013	.025	.0145	.0102	.0188	.0284	.1226	.09
%RSD	77.02	1.387	1.588	360.3	51.25	36.47	87.29	35.13	.1837
#1	-.0018	.0952	1.550	.0134	-.0282	.0399	.0056	.2452	47.91
#2	-.0120	.0934	1.514	.0114	-.0085	.0416	.0297	.4842	47.96
#3	-.0061	.0926	1.561	-.0127	-.0231	.0734	.0622	.3173	47.79

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	64.35	6.902	4.601	-.6394	.1787	.0154	9.180	-.0014	.3590
Stddev	.16	.254	.732	.4312	.0033	.0060	.020	.0058	.0008
%RSD	.2540	3.687	15.91	67.44	1.870	38.85	.2180	420.3	.2278
#1	64.29	7.085	4.360	-.1626	.1817	.0109	9.196	.0051	.3596
#2	64.54	7.010	5.423	-.7533	.1793	.0222	9.185	-.0061	.3592
#3	64.23	6.611	4.019	-1.002	.1751	.0132	9.157	-.0031	.3580

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0506	.0127	1.572	-.0181	-.0294	.1660	-.0074
Stddev	.0013	.0174	.0042	.012	.0478	.0206	.0093	.1271
%RSD	135.5	34.46	33.23	.7314	263.6	70.01	5.591	1725.
#1	-.0019	.0523	.0098	1.584	-.0297	-.0506	.1717	-.0680
#2	.0005	.0324	.0108	1.561	.0344	-.0280	.1553	-.0928
#3	-.0014	.0671	.0176	1.571	-.0591	-.0095	.1710	.1387

Zoom In Zoom Out

Sample Name: mp17232-sd1 Acquired: 9/11/2019 14:42:40 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 25.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	196990.	36065.	9198.7	12950.
Stddev	1784.	11.	14.2	21.
%RSD	.90537	.02973	.15453	.16200
#1	198570.	36073.	9183.5	12929.
#2	195050.	36069.	9201.1	12951.
#3	197360.	36053.	9211.6	12971.

Zoom In Zoom Out

Sample Name: mp17232-ps1 Acquired: 9/11/2019 14:47:40 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.097**	**2.031**	**2.041**	**2.080**	**2.026**	**1.965**	**4.169**	**2.092**	**.2570**
Stddev	.026	.024	.006	.003	.021	.017	.037	.001	.0025
%RSD	1.221	1.190	.2842	.1539	1.026	.8811	.8847	.0229	.9745
#1	2.068	2.004	2.034	2.076	2.050	1.985	4.212	2.092	.2597
#2	2.112	2.043	2.045	2.082	2.017	1.956	4.147	2.093	.2568
#3	2.113	2.048	2.043	2.082	2.011	1.955	4.149	2.092	.2547

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.963**	**2.096**	**3.723**	**2.170**	**2.229**	**2.052**	**2.171**	**25.16**	**71.88**
Stddev	.015	.005	.004	.007	.005	.011	.004	.28	.85
%RSD	.7560	.2313	.1207	.3048	.2341	.5491	.1834	1.093	1.178
#1	1.980	2.091	3.718	2.167	2.224	2.042	2.171	24.85	70.90
#2	1.958	2.100	3.723	2.177	2.229	2.049	2.176	25.26	72.37
#3	1.953	2.097	3.727	2.166	2.234	2.064	2.168	25.37	72.36

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**88.70**	**31.80**	**32.60**	**35.29**	**2.228**	**2.084**	**9.189**	**2.219**	**2.342**
Stddev	1.00	.43	.33	.40	.005	.008	.013	.006	.026
%RSD	1.130	1.345	1.004	1.138	.2298	.3691	.1434	.2600	1.124
#1	87.55	31.31	32.22	34.83	2.222	2.075	9.174	2.213	2.312
#2	89.13	31.98	32.77	35.57	2.230	2.090	9.199	2.224	2.354
#3	89.41	32.11	32.80	35.48	2.232	2.086	9.194	2.219	2.361

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.124**	**1.662**	**2.128**	**1.589**	**.0464**	**-.0111**	**2.055**	**-.0764**
Stddev	.019	.011	.017	.004	.0042	.0037	.005	.0002
%RSD	.9077	.6791	.7949	.2646	9.111	33.06	.2491	.2323
#1	2.146	1.650	2.148	1.593	.0504	-.0142	2.050	-.0763
#2	2.111	1.668	2.118	1.584	.0420	-.0121	2.055	-.0765
#3	2.115	1.670	2.119	1.590	.0470	-.0070	2.061	-.0762

Zoom In Zoom Out

Sample Name: mp17232-ps1 Acquired: 9/11/2019 14:47:40 Type: Unk
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**195840.**	**36473.**	**9148.9**	**12602.**
Stddev	1715.	319.	19.4	14.
%RSD	.87588	.87461	.21154	.11335
#1	193880.	36840.	9168.9	12617.
#2	196540.	36320.	9130.2	12589.
#3	197090.	36260.	9147.5	12599.

Zoom In Zoom Out

Sample Name: ccv Acquired: 9/11/2019 14:52:30 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.061**	**2.027**	**2.036**	**2.058**	**2.059**	**2.068**	**2.072**	**2.081**	**.2553**
Stddev	.013	.043	.008	.009	.084	.086	.091	.009	.0096
%RSD	.6350	2.146	.3926	.4403	4.066	4.180	4.374	.4533	3.773
#1	2.050	1.978	2.045	2.069	2.035	2.043	2.027	2.091	.2525
#2	2.075	2.061	2.033	2.053	2.152	2.164	2.177	2.079	.2660
#3	2.057	2.043	2.030	2.054	1.990	1.996	2.013	2.073	.2473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.036**	**2.055**	**2.035**	**2.116**	**2.070**	**2.074**	**2.036**	**39.94**	**40.22**
Stddev	.082	.010	.010	.008	.009	.009	.011	.23	.23
%RSD	4.004	.4690	.4818	.3702	.4508	.4321	.5254	.5841	.5829
#1	2.010	2.064	2.045	2.120	2.080	2.083	2.049	39.71	39.98
#2	2.128	2.058	2.034	2.121	2.066	2.074	2.030	40.18	40.45
#3	1.972	2.045	2.026	2.107	2.063	2.065	2.030	39.94	40.23
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.72**	**39.69**	**39.91**	**39.46**	**2.077**	**2.012**	**5.274**	**2.042**	**2.003**
Stddev	.23	.26	.27	.30	.009	.009	.022	.008	.009
%RSD	.5549	.6663	.6766	.7600	.4306	.4430	.4139	.3798	.4321
#1	40.48	39.38	39.70	39.22	2.085	2.022	5.299	2.051	1.994
#2	40.92	39.88	40.21	39.80	2.077	2.010	5.266	2.041	2.011
#3	40.77	39.80	39.81	39.37	2.067	2.005	5.257	2.035	2.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 9/11/2019 14:52:30 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.050**	**2.030**	**2.075**	**2.019**	**2.081**	**1.959**	**2.011**	**2.049**
Stddev	.086	.008	.085	.009	.009	.013	.009	.086
%RSD	4.170	.4002	4.083	.4191	.4286	.6537	.4353	4.212
#1	2.024	2.039	2.049	2.028	2.084	1.948	2.016	2.022
#2	2.146	2.028	2.170	2.017	2.088	1.973	2.017	2.146
#3	1.981	2.023	2.007	2.012	2.070	1.957	2.001	1.980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**182480.**	**35114.**	**8740.3**	**11771.**
Stddev	6935.	303.	34.5	40.
%RSD	3.8005	.86184	.39446	.33580
#1	184900.	35447.	8728.0	11749.
#2	174660.	35040.	8713.7	11748.
#3	187870.	34855.	8779.3	11817.

Zoom In Zoom Out

Sample Name: ccb Acquired: 9/11/2019 14:57:32 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ba4554	Be3130	Cd2288	Co2286	Cr2677	Cu3247	Mn2576	Ni2316	Ag3280
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0001**	**.0003**	**.0001**	**.0001**	**-.0004**	**.0002**	**.0002**	**-.0007**
Stddev	.0001	.0001	.0001	.0000	.0002	.0003	.0000	.0002	.0003
%RSD	59.08	45.17	41.57	28.88	276.1	83.43	13.90	156.7	42.03
#1	.0002	.0002	.0005	.0002	.0001	-.0004	.0002	-.0001	-.0005
#2	.0004	.0001	.0003	.0001	.0003	-.0000	.0002	.0003	-.0007
#3	.0001	.0001	.0002	.0001	-.0002	-.0006	.0002	.0003	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	V_2924	Zn2062	As1890	Tl1908	Pb2203	Se1960	Sb2068	Al3961	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0002**	**-.0004**	**.0008**	**.0000**	**-.0002**	**.0003**	**.0040**	**.0042**
Stddev	.0002	.0001	.0005	.0005	.0011	.0002	.0015	.0079	.0006
%RSD	66.15	37.26	128.0	65.18	5761.	123.6	452.4	197.7	14.56
#1	-.0003	.0001	.0000	.0009	-.0002	.0001	-.0008	-.0046	.0036
#2	-.0001	.0002	-.0002	.0002	-.0010	-.0004	.0021	.0055	.0044
#3	-.0004	.0002	-.0009	.0013	.0012	-.0002	-.0003	.0111	.0048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Fe2599	Mg2790	K_7664	Na5895	B_2089	Mo2020	Si2124	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0052**	**.0043**	**-.2008**	**-.5261**	**.0035**	**.0016**	**.0008**	**.0002**	**.0002**
Stddev	.0013	.0071	.0058	.0035	.0003	.0001	.0005	.0007	.0001
%RSD	25.11	163.0	2.897	.6655	9.667	8.402	58.88	352.4	46.79
#1	.0048	-.0038	-.2017	-.5296	.0039	.0017	.0012	.0004	.0001
#2	.0066	.0077	-.1946	-.5226	.0035	.0016	.0003	-.0005	.0003
#3	.0041	.0091	-.2062	-.5262	.0032	.0015	.0010	.0007	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 9/11/2019 14:57:32 Type: QC
Method: SGS 3 NO Valve(v193) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ti3349	W_2079	Zr3391	S_1820	Bi2230	Li6707	P_1774	Ce4040
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	F **.0056**	**.0006**	**-.0028**	**-.0013**	**-.0010**	**.0043**	**.0002**
Stddev	.0001	.0008	.0001	.0011	.0008	.0021	.0004	.0007
%RSD	167.8	14.05	18.08	39.74	57.17	200.9	10.50	471.6
#1	-.0001	.0065	.0005	-.0027	-.0015	-.0034	.0040	-.0002
#2	.0001	.0052	.0007	-.0039	-.0005	-.0004	.0048	.0010
#3	.0002	.0051	.0006	-.0017	-.0020	.0007	.0040	-.0003
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0050						
Low Limit		-.0050						

Int. Std.	Y_3600	Y_3710	Y_2243	In2306
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**195910.**	**35832.**	**9215.3**	**12998.**
Stddev	1461.	76.	5.3	10.
%RSD	.74583	.21074	.05733	.07839
#1	196080.	35900.	9221.4	13010.
#2	194380.	35751.	9212.2	12996.
#3	197280.	35846.	9212.2	12989.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ba 455.403 { 74}	☒	1	Zr	0.001245	0.000000	No
Be 313.042 {108}	☒	10	V	0.000910	0.000000	No
			Mo	-0.000047	0.000000	No
			Ti	-0.000271	0.000000	No
			Mn	0.000010	0.000000	No
			Cu	0.000014	0.000000	No
			Bi	0.000060	0.000000	No
			Fe	-0.000001	0.000000	No
			Al	-0.000001	0.000000	No
			Mg	-0.000004	0.000000	No
			Ca	0.000008	0.000000	No
Cd 228.802 {448}	☒	11	As	0.009200	0.000000	No
			Ni	-0.000478	0.000000	No
			Fe	-0.000003	0.000000	No
			V	0.000091	0.000000	No
			Ba	0.000064	0.000000	No
			Co	-0.001100	0.000000	No
			Sr	-0.000020	0.000000	No
			Mn	0.000050	0.000000	No
			Cu	-0.000026	0.000000	No
			Zn	-0.000018	0.000000	No
			W	-0.000482	0.000000	No
Co 228.616 {448}	☒	7	Fe	0.000029	0.000000	No
			Mo	-0.000810	0.000000	No
			Ni	0.000091	0.000000	No
			Ti	0.001890	0.000000	No
			Ba	0.000140	0.000000	No
			W	0.000327	0.000000	No
			Cd	-0.000510	0.000000	No
Cr 267.716 {126}	☒	9	Mn	0.000458	0.000000	No
			V	-0.000010	0.000000	No
			Mo	-0.000082	0.000000	No
			Fe	-0.000010	0.000000	No
			Ti	0.000060	0.000000	No
			Ba	0.000045	0.000000	No
			Cu	0.000100	0.000000	No
			Sr	-0.000100	0.000000	No
			W	0.000404	0.000000	No
Cu 324.754 {104}2	☒	14	Cr	-0.000099	0.000000	No
			V	-0.000306	0.000000	No
			Mo	0.000544	0.000000	No
			Ti	-0.000208	0.000000	No
			Fe	-0.000229	0.000000	No
			Zn	-0.000041	0.000000	No
			Co	-0.000860	0.000000	No
			Si	0.000016	0.000000	No
			Mn	0.000003	0.000000	No
			Se	0.000050	0.000000	No
			Sb	0.000069	0.000000	No
			W	0.000000	0.000000	No
			Al	0.000002	0.000000	No
			Zr	-0.002300	0.000000	No
Mn 257.610 {131}	☒	5	Fe	0.000005	0.000000	No
			Si	0.000010	0.000000	No
			Ba	0.000004	0.000000	No
			Ni	0.000028	0.000000	No
			Al	0.000006	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ni 231.604 {446}	☒	8	Fe	0.000033	0.000000	No
			Zn	-0.000013	0.000000	No
			Be	0.000213	0.000000	No
			Co	-0.000220	0.000000	No
			Tl	0.000209	0.000000	No
			Mo	0.000026	0.000000	No
			Cu	0.000050	0.000000	No
			Se	0.000100	0.000000	No
Ag 328.068 {103}	☒	15	Mn	0.000052	0.000000	No
			Mo	0.000012	-0.000003	No
			Ti	-0.000190	0.000000	No
			Fe	-0.000265	0.000000	No
			Zn	-0.000120	0.000000	No
			Ca	0.000001	0.000000	No
			Zr	0.006915	0.000000	No
			Sr	-0.000020	0.000000	No
			Mg	0.000000	0.000000	No
			Ba	0.000071	0.000000	No
			Cr	0.000022	0.000000	No
			V	-0.003480	0.000000	No
			Al	-0.000002	0.000000	No
			W	0.000000	0.000000	No
			Ce	-0.001100	0.000000	No
V 292.402 {115}	☒	7	Ti	0.000689	0.000000	No
			Mo	-0.000100	0.000000	No
			Fe	0.000014	0.000000	No
			Sr	-0.000100	0.000000	No
			Cr	-0.006400	0.000000	No
			Mn	-0.004150	0.000000	No
			Al	0.000004	0.000000	No
Zn 206.200 {464}	☒	9	Cr	-0.004225	0.000000	No
			Fe	0.000011	0.000000	No
			Si	0.000015	0.000000	No
			Mn	-0.000045	0.000000	No
			Ba	-0.000060	0.000000	No
			Sn	-0.000023	0.000000	No
			Cu	0.000148	0.000000	No
			As	0.000055	0.000000	No
			Be	0.000058	0.000000	No
As 189.042 {478}	☒	20	Al	-0.000004	0.000000	No
			Fe	-0.000027	0.000000	No
			Ca	-0.000005	0.000000	No
			Mo	0.002730	0.000000	No
			Cr	-0.005410	0.000000	No
			Ba	-0.000114	0.000000	No
			Sn	-0.000130	0.000000	No
			Cd	-0.000328	0.000000	No
			Si	0.000024	0.000000	No
			Zn	-0.000082	0.000000	No
			Sr	-0.000045	0.000000	No
			W	0.001546	0.000000	No
			Cu	-0.000058	0.000000	No
			Co	-0.000545	0.000000	No
			Zr	0.000036	0.000000	No
			Mn	-0.000158	0.000000	No
			S	-0.000008	0.000000	No
			Ti	0.000100	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Mg	0.000006	0.000000	No
			Ce	-0.000600	0.000000	No
Tl 190.856 {477}	☒	25	Cr	0.000182	0.000000	No
			Mo	-0.008400	0.000000	No
			Al	-0.000001	0.000000	No
			Fe	-0.000055	0.000000	No
			V	-0.027800	0.000000	No
			Mn	0.001941	0.000000	No
			Si	-0.000018	0.000000	No
			Ca	0.000000	0.000000	No
			Ti	-0.002190	0.000000	No
			Mg	0.000000	0.000000	No
			Co	0.005280	0.000000	No
			Sr	0.000010	0.000000	No
			B	-0.000003	0.000000	No
			Ba	0.000034	0.000000	No
			Zn	-0.000053	0.000000	No
			As	0.000068	0.000000	No
			W	-0.025182	0.000000	No
			Cu	0.000142	0.000000	No
			Pb	-0.000020	0.000000	No
			S	0.000010	0.000000	No
			Sn	-0.000086	0.000000	No
			Li	0.000000	0.000000	No
			K	0.000000	0.000000	No
			Zr	0.000000	0.000000	No
			Ce	-0.000600	0.000000	No
Pb 220.353 {453}	☒	21	Al	-0.000160	0.000000	No
			Fe	0.000038	0.000000	No
			Ca	0.000008	0.000000	No
			Mn	0.000024	0.000000	No
			Mo	-0.000590	0.000000	No
			Cu	0.000145	0.000000	No
			Co	0.000064	0.000000	No
			Ti	-0.000200	0.000000	No
			Si	0.000133	0.000000	No
			Ba	-0.000022	0.000000	No
			Sb	-0.000084	0.000000	No
			Sr	-0.000033	0.000000	No
			W	0.000000	0.000000	No
			Mg	0.000003	0.000000	No
			Cd	0.000012	0.000000	No
			Cr	-0.000031	0.000000	No
			Zr	-0.000281	0.000000	No
			Ni	0.000371	0.000000	No
			S	0.000010	0.000000	No
			Zn	-0.000106	0.000000	No
			Ce	0.000300	0.000000	No
Se 196.090 {472}	☒	24	Al	-0.000008	0.000000	No
			Ca	0.000003	0.000000	No
			Mn	0.000924	0.000000	No
			Mo	0.000100	0.000000	No
			Fe	-0.000154	0.000000	No
			Co	0.000127	0.000000	No
			Sr	-0.000011	0.000000	No
			Cu	-0.000087	0.000000	No
			W	0.000000	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Si	0.000054	0.000000	No
			Be	-0.000347	0.000000	No
			Zn	0.000050	0.000000	No
			B	0.000028	0.000000	No
			Ti	-0.000020	0.000000	No
			Cd	0.000090	0.000000	No
			Zr	-0.000297	0.000000	No
			Ba	-0.000046	0.000000	No
			Mg	-0.000000	0.000000	No
			Pb	-0.000078	0.000000	No
			Ni	-0.000100	0.000000	No
			Cr	-0.000024	0.000000	No
			S	-0.000014	0.000000	No
			V	0.000188	0.000000	No
			Ce	-0.001400	0.000000	No
Sb 206.833 {463}	☒	18	Fe	0.000041	0.000000	No
			Al	-0.000001	0.000000	No
			Ca	0.000001	0.000000	No
			Ni	-0.000716	0.000000	No
			Cr	0.020700	0.000000	No
			V	-0.003758	0.000000	No
			Zn	-0.000115	0.000000	No
			Mo	0.000796	0.000000	No
			Ti	0.000530	0.000000	No
			Sn	-0.010820	0.000000	No
			Mg	0.000001	0.000000	No
			Zr	-0.000463	0.000000	No
			Sr	0.000031	0.000000	No
			B	-0.000100	0.000000	No
			Co	-0.000142	0.000000	No
			W	0.000000	0.000000	No
			Si	-0.000170	0.000000	No
			Ce	-0.001300	0.000000	No
Al 396.152 { 85}	☒	5	Si	0.000652	0.000000	No
			Ca	0.000018	0.000000	No
			Mo	0.043916	0.000000	No
			Zr	0.005268	0.000000	No
			Ti	-0.000583	0.000000	No
Ca 317.933 {106}	☒	14	Fe	0.000012	0.000000	No
			W	0.003960	0.000000	No
			Tl	-0.000152	0.000000	No
			Be	0.001840	0.000000	No
			Ba	-0.001224	0.000000	No
			Cu	-0.000822	0.000000	No
			Cd	-0.007593	0.000000	No
			Ni	0.000667	0.000000	No
			B	-0.000210	0.000000	No
			Se	0.000923	0.000000	No
			Co	-0.000408	0.000000	No
			Cr	0.000640	0.000000	No
			Al	-0.000000	0.000000	No
			As	0.010000	0.000000	No
Fe 259.940 {130}	☒	10	Si	0.000819	0.000000	No
			Tl	-0.000051	0.000000	No
			Cr	0.000310	0.000000	No
			Mn	-0.000196	0.000000	No
			V	-0.000064	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Cu	-0.000015	0.000000	No
			Zn	0.000046	0.000000	No
			Ti	-0.000631	0.000000	No
			Ca	0.000020	0.000000	No
			Ba	0.001000	0.000000	No
Mg 279.079 {121}	☒	3	Mo	-0.013702	0.000000	No
			W	-0.006578	0.000000	No
			Mn	-0.002445	0.000000	No
K 766.490 { 44}	☒	11	Fe	-0.000440	0.000000	No
			Al	0.000077	0.000000	No
			Ca	-0.000121	0.000000	No
			Mn	-0.007074	0.000000	No
			Si	-0.003000	0.000000	No
			V	-0.002000	0.000000	No
			Sn	-0.004700	0.000000	No
			Ba	-0.010574	0.000000	No
			Mo	-0.000850	0.000000	No
			Cu	-0.011483	0.000000	No
			Ni	-0.010000	0.000000	No
Na 589.592 { 57}	☒	4	K	-0.000560	0.000000	No
			Ba	0.000900	0.000000	No
			Ca	0.000180	0.000000	No
			V	-0.005000	0.000000	No
B 208.959 {462}	☒	1	Mo	0.045137	0.000000	No
Mo 202.030 {467}	☒	2	Al	-0.000004	0.000000	No
			Fe	-0.000010	0.000000	No
Si 212.412 {459}	☒	12	Sr	0.000366	0.000000	No
			Ni	0.002092	0.000000	No
			Mo	0.034932	0.000000	No
			V	0.002950	0.000000	No
			Ti	0.004593	0.000000	No
			Al	-0.000010	0.000000	No
			Cd	0.001043	0.000000	No
			Ba	0.001987	0.000000	No
			Sn	0.007500	0.000000	No
			Zn	0.000385	0.000000	No
			Be	-0.000048	0.000000	No
			W	0.000000	0.000000	No
Sn 189.989 {478}	☒	4	Ti	-0.002964	0.000000	No
			Fe	0.000004	0.000000	No
			Si	0.000131	0.000000	No
			Zr	0.000908	0.000000	No
Sr 407.771 { 83}	☒	2	Ca	0.000018	0.000000	No
			Si	0.000033	0.000000	No
Ti 334.904 {101}	☒	3	Cr	0.000189	0.000000	No
			Mo	0.001351	0.000000	No
			Si	0.000035	0.000000	No
Y 360.073 { 94}*	☒	None				
Y 371.030 { 91}*	☒	None				
Y 224.306 {451}*	☒	None				
In 230.606 {446}*	☒	None				
W 207.911 {462}	☒	20	Si	0.000105	0.000000	No
			As	0.000100	0.000000	No
			Mn	0.000066	0.000000	No
			Mo	-0.000300	0.000000	No
			Ti	0.000080	0.000000	No
			Sr	-0.000850	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			V	-0.000140	0.000000	No
			Cd	-0.000650	0.000000	No
			Cr	-0.000390	0.000000	No
			Zn	0.013026	0.000000	No
			Sn	0.001300	0.000000	No
			Zr	0.000061	0.000000	No
			B	0.000009	0.000000	No
			Sb	-0.000300	0.000000	No
			Co	-0.001000	0.000000	No
			Ni	-0.003000	0.000000	No
			Be	-0.000185	0.000000	No
			Se	-0.000105	0.000000	No
			Cu	-0.000138	0.000000	No
			Tl	-0.000220	0.000000	No
Zr 339.198 { 99}	☒	6	Mo	0.001069	0.000000	No
			Ti	0.000203	0.000000	No
			Fe	-0.000075	0.000000	No
			Si	0.000074	0.000000	No
			S	-0.000002	0.000000	No
			Cr	-0.000700	0.000000	No
S 182.034 {485}	☒	7	Mo	0.001779	0.000000	No
			Al	-0.000033	0.000000	No
			Fe	0.000117	0.000000	No
			Mn	0.004620	0.000000	No
			W	-0.032564	0.000000	No
			Ca	-0.000218	0.000000	No
			Mg	0.000005	0.000000	No
Bi 223.061 {451}	☒	10	Ti	-0.072020	0.000000	No
			V	-0.000704	0.000000	No
			Co	-0.002380	0.000000	No
			Ca	-0.000002	0.000000	No
			Mg	-0.000000	0.000000	No
			Fe	0.000187	0.000000	No
			Cr	0.001595	0.000000	No
			Cu	-0.001148	0.000000	No
			W	0.020000	0.000000	No
			Ce	-0.007100	0.000000	No
Li 670.784 { 50}	☒	2	Ca	0.000023	0.000000	No
			Fe	0.000081	0.000000	No
P 177.495 {490}	☒	9	Mn	-0.006184	0.000000	No
			Al	0.000040	0.000000	No
			V	-0.001953	0.000000	No
			Si	-0.001622	0.000000	No
			Ti	0.000000	-0.001185	No
			Mo	-0.001880	0.000000	No
			S	-0.000189	0.000000	No
			Co	-0.002198	0.000000	No
			Cu	-0.023500	0.000000	No
Ce 404.076 { 83}	☒	2	Mn	-0.005600	0.000000	No
			Fe	0.000250	0.000000	No

	Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
	Ba 455.403 { 74}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.009397	1.700500	0.000000	1.000000
	Be 313.042 {108}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.001204	3.256067	0.000000	1.000000
	Cd 228.802 {448}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000240	1.022919	0.000000	1.000000
	Co 228.616 {448}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000085	0.669047	0.000000	1.000000
	Cr 267.716 {126}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.000034	0.163104	0.000000	1.000000
	Cu 324.754 {104}2	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.003092	0.265234	0.000000	1.000000
	Mn 257.610 {131}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000364	0.741281	0.000000	1.000000
	Ni 231.604 {446}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.000202	0.547638	0.000000	1.000000
	Ag 328.068 {103}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.000258	0.158665	0.000000	1.000000
	V 292.402 {115}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000443	0.224964	0.000000	1.000000
	Zn 206.200 {464}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000262	1.474724	0.000000	1.000000
	As 189.042 {478}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.000133	0.111949	0.000000	1.000000
	Tl 190.856 {477}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.000102	0.091339	0.000000	1.000000
	Pb 220.353 {453}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000213	0.254513	0.000000	1.000000
	Se 196.090 {472}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.000086	0.087293	0.000000	1.000000
	Sb 206.833 {463}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000117	0.142255	0.000000	1.000000
	Al 396.152 { 85}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000602	0.041251	0.000000	1.000000
	Ca 317.933 {106}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.005050	0.107681	0.000000	1.000000
	Fe 259.940 {130}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000157	0.067028	0.000000	1.000000
	Mg 279.079 {121}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.000026	0.011985	0.000000	1.000000
	K 766.490 { 44}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.001910	0.020133	0.000000	1.000000
	Na 589.592 { 57}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.039833	0.060701	0.000000	1.000000
	B 208.959 {462}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000206	0.212807	0.000000	1.000000
	Mo 202.030 {467}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.000403	0.730511	0.000000	1.000000
	Si 212.412 {459}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.001228	0.191216	0.000000	1.000000
	Sn 189.989 {478}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000157	0.227659	0.000000	1.000000
	Sr 407.771 { 83}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.000104	2.986754	0.000000	1.000000
	Ti 334.904 {101}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000006	0.175865	0.000000	1.000000
	Y 360.073 { 94}*	9/11/2019 15:30:07	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 371.030 { 91}*	9/11/2019 15:30:07	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	Y 224.306 {451}*	9/11/2019 15:30:07	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	In 230.606 {446}*	9/11/2019 15:30:07	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
	W 207.911 {462}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.001474	0.349174	0.000000	1.000000
	Zr 339.198 { 99}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.000540	0.519563	0.000000	1.000000
	S 182.034 {485}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	-0.001783	0.060473	0.000000	1.000000
	Bi 223.061 {451}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.000213	0.161320	0.000000	1.000000
	Li 670.784 { 50}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	None	0.001766	0.493434	0.000000	1.000000
	P 177.495 {490}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	1/Conc	-0.005002	0.136054	0.000000	1.000000
	Ce 404.076 { 83}	9/11/2019 15:30:07	9/11/2019 9:06:32	Linear	1/Conc	0.000639	0.038481	0.000000	1.000000

Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
						Slope	Y-int	Slope factor	Offset
Ba 455.403 { 74}	1.000000	0.000000	0.000232	0.000775	OK.	1.000000	0.000000	1	0
Be 313.042 {108}	1.000000	0.000000	0.000048	0.000162	OK.	1.000000	0.000000	1	0
Cd 228.802 {448}	1.000000	0.000000	0.000159	0.000529	OK.	1.000000	0.000000	1	0
Co 228.616 {448}	1.000000	0.000000	0.000199	0.000662	OK.	1.000000	0.000000	1	0
Cr 267.716 {126}	1.000000	0.000000	0.000238	0.000794	OK.	1.000000	0.000000	1	0
Cu 324.754 {104}2	1.000000	0.000000	0.000332	0.001106	OK.	1.000000	0.000000	1	0
Mn 257.610 {131}	1.000000	0.000000	0.000052	0.000175	OK.	1.000000	0.000000	1	0
Ni 231.604 {446}	1.000000	0.000000	0.000278	0.000925	OK.	1.000000	0.000000	1	0
Ag 328.068 {103}	1.000000	0.000000	0.000363	0.001209	OK.	1.000000	0.000000	1	0
V 292.402 {115}	1.000000	0.000000	0.000285	0.000948	OK.	1.000000	0.000000	1	0
Zn 206.200 {464}	1.000000	0.000000	0.000092	0.000307	OK.	1.000000	0.000000	1	0
As 189.042 {478}	1.000000	0.000000	0.000912	0.003040	OK.	1.000000	0.000000	1	0
Tl 190.856 {477}	1.000000	0.000000	0.000946	0.003152	OK.	1.000000	0.000000	1	0
Pb 220.353 {453}	1.000000	0.000000	0.000841	0.002804	OK.	1.000000	0.000000	1	0
Se 196.090 {472}	1.000000	0.000000	0.001624	0.005413	OK.	1.000000	0.000000	1	0
Sb 206.833 {463}	1.000000	0.000000	0.001244	0.004148	OK.	1.000000	0.000000	1	0
Al 396.152 { 85}	1.000000	0.000000	0.008089	0.026962	OK.	1.000000	0.000000	1	0
Ca 317.933 {106}	1.000000	0.000000	0.001805	0.006017	OK.	1.000000	0.000000	1	0
Fe 259.940 {130}	1.000000	0.000000	0.001493	0.004978	OK.	1.000000	0.000000	1	0
Mg 279.079 {121}	1.000000	0.000000	0.010380	0.034601	OK.	1.000000	0.000000	1	0
K 766.490 { 44}	1.000000	0.000000	0.029791	0.099304	OK.	1.000000	0.000000	1	0
Na 589.592 { 57}	1.000000	0.000000	0.009977	0.033256	OK.	1.000000	0.000000	1	0
B 208.959 {462}	1.000000	0.000000	0.000579	0.001930	OK.	1.000000	0.000000	1	0
Mo 202.030 {467}	1.000000	0.000000	0.000213	0.000711	OK.	1.000000	0.000000	1	0
Si 212.412 {459}	1.000000	0.000000	0.000917	0.003055	OK.	1.000000	0.000000	1	0
Sn 189.989 {478}	1.000000	0.000000	0.000455	0.001517	OK.	1.000000	0.000000	1	0
Sr 407.771 { 83}	1.000000	0.000000	0.000090	0.000301	OK.	1.000000	0.000000	1	0
Ti 334.904 {101}	1.000000	0.000000	0.000287	0.000956	OK.	1.000000	0.000000	1	0
Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
Y 224.306 {451}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
W 207.911 {462}	1.000000	0.000000	0.000867	0.002891	OK.	1.000000	0.000000	1	0
Zr 339.198 { 99}	1.000000	0.000000	0.000139	0.000463	OK.	1.000000	0.000000	1	0
S 182.034 {485}	1.000000	0.000000	0.001835	0.006116	OK.	1.000000	0.000000	1	0
Bi 223.061 {451}	1.000000	0.000000	0.001455	0.004850	OK.	1.000000	0.000000	1	0
Li 670.784 { 50}	1.000000	0.000000	0.001297	0.004322	OK.	1.000000	0.000000	1	0
P 177.495 {490}	1.000000	0.000000	0.000798	0.002659	OK.	1.000000	0.000000	1	0
Ce 404.076 { 83}	1.000000	0.000000	0.002463	0.008212	OK.	1.000000	0.000000	1	0

Quantitation Report

File Name	001CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 9:58
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	9/11/2019 11:44
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	43.79	40.00	3.096E-05	Pulse	0.25	3
B			1	0.424	ug/l	8.23	9,267.23	7.164E-03	Pulse	0.15	3
Ca			1	-0.338	ug/l	-111.82	12,338.37	4.200E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	-1011.20	396.69	9.945E-05	Pulse	0.10	3
Mo			1	0.004	ug/l	108.64	213.34	5.350E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	159.00	36.67	8.896E-06	Pulse	0.10	3
Sn			1	0.046	ug/l	39.44	3,957.30	9.594E-04	Pulse	0.10	3
Sb			1	0.000	ug/l	1012.36	366.69	6.328E-05	Pulse	0.10	3
Ba			1	-0.006	ug/l	-26.75	46.67	8.064E-06	Pulse	0.10	3
Tl			1	0.001	ug/l	106.19	286.68	8.354E-05	Pulse	0.10	3
Pb			1	0.003	ug/l	148.01	346.68	1.013E-04	Pulse	0.10	3
Pb			1	-0.001	ug/l	-835.14	253.35	7.395E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-522.25	1,266.74	3.696E-04	Pulse	0.10	3
Na			2	0.186	ug/l	87.07	12,321.23	7.542E-02	Pulse	0.30	3
Mg			2	-0.008	ug/l	-1765.50	326.67	1.994E-03	Pulse	0.30	3
Al			2	-0.887	ug/l	-14.43	512.24	3.133E-03	Pulse	0.30	3
K			2	0.378	ug/l	227.89	14,250.63	8.723E-02	Pulse	0.30	3
Ca			2	0.828	ug/l	36.79	136.67	8.360E-04	Pulse	0.30	3
Ti			2	-0.006	ug/l	-171.41	1.11	6.860E-06	Pulse	0.30	3
V			2	-0.001	ug/l	-843.82	296.67	1.819E-03	Pulse	0.30	3
Cr			2	0.006	ug/l	83.06	1,033.38	6.327E-03	Pulse	0.30	3
Mn			2	0.003	ug/l	273.96	164.45	1.006E-03	Pulse	0.30	3
Fe			2	-0.046	ug/l	-19.83	6,053.42	3.705E-02	Pulse	0.30	3
Co			2	-0.001	ug/l	-79.08	36.65	2.236E-04	Pulse	0.30	3
Ni			2	-0.005	ug/l	-116.29	156.67	9.585E-04	Pulse	0.30	3
Cu			2	0.105	ug/l	8.67	9,269.37	5.673E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.857	ug/l	2.96	2,741.37	1.678E-02	Pulse	0.30	3
As			2	0.005	ug/l	165.37	26.67	1.630E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	-8327.64	13.32	1.340E-05	Pulse	0.30	3
Sn			2	0.034	ug/l	22.47	1,307.85	1.324E-03	Pulse	0.30	3
Se			3	0.003	ug/l	231.42	4.67	2.235E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,293,477.86	0.85	100.0	Pulse	0.10	3
1	Sc		2,937,628.29	0.96	100.0	Pulse	0.10	3
1	Ge		590,365.82	0.61	100.0	Pulse	0.10	3
1	Ge		823,440.98	0.20	100.0	Pulse	0.10	3
1	Rh		3,988,223.28	0.14	100.0	Pulse	0.10	3
1	In		4,124,450.35	0.25	100.0	Pulse	0.10	3
1	Tb		5,792,625.12	0.61	100.0	Analog	0.10	3
1	Ho		565,945.28	0.49	100.0	Pulse	0.10	3
1	Bi		3,428,745.78	1.25	100.0	Pulse	0.10	3
2	Sc		163,393.50	1.39	100.0	Pulse	0.30	3
2	Ge		101,541.64	2.19	100.0	Pulse	0.30	3
2	Ge		152,600.55	1.45	100.0	Pulse	0.30	3
2	Rh		2,484,648.86	1.39	100.0	Pulse	0.30	3
2	In		987,770.27	1.73	100.0	Pulse	0.30	3
2	Tb		3,320,080.42	1.95	100.0	Pulse	0.30	3
2	Ho		337,708.41	2.10	100.0	Pulse	0.30	3
2	Bi		2,269,619.70	1.98	100.0	Pulse	0.30	3
3	Sc		215,719.06	8.25	100.0	Pulse	0.30	3
3	Ge		140,000.67	5.43	100.0	Pulse	0.30	3
3	Ge		210,795.79	5.76	100.0	Pulse	0.30	3
3	Rh		2,134,340.05	7.69	100.0	Pulse	0.30	3
3	Tb		3,555,459.16	8.04	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 10:03
Sample Name	STDA
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	9/11/2019 11:44
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	33.08	181.34	1.400E-04	Pulse	0.25	3
B			1	0.205	ug/l	24.04	8,208.84	6.337E-03	Pulse	0.15	3
Ca			1	11.534	ug/l	2.36	23,757.80	8.229E-03	Pulse	0.10	3
Sr			1	0.020	ug/l	6.53	1,463.45	3.735E-04	Pulse	0.10	3
Mo			1	0.020	ug/l	58.35	363.35	9.283E-05	Pulse	0.10	3
Ag			1	0.001	ug/l	78.97	60.00	1.482E-05	Pulse	0.10	3
Sn			1	0.065	ug/l	20.94	4,184.05	1.034E-03	Pulse	0.10	3
Sb			1	0.015	ug/l	24.88	620.04	1.096E-04	Pulse	0.10	3
Ba			1	0.024	ug/l	16.90	270.01	4.775E-05	Pulse	0.10	3
Tl			1	0.007	ug/l	16.14	586.70	1.738E-04	Pulse	0.10	3
Pb			1	0.026	ug/l	13.88	690.04	2.043E-04	Pulse	0.10	3
Pb			1	0.025	ug/l	52.81	603.38	1.787E-04	Pulse	0.10	3
Pb			1	0.025	ug/l	6.63	2,830.23	8.383E-04	Pulse	0.10	3
Na			2	2.689	ug/l	4.44	15,864.23	9.698E-02	Pulse	0.30	3
Mg			2	1.249	ug/l	5.16	1,146.72	7.009E-03	Pulse	0.30	3
Al			2	14.548	ug/l	5.13	3,942.73	2.410E-02	Pulse	0.30	3
K			2	0.564	ug/l	134.10	14,371.85	8.785E-02	Pulse	0.30	3
Ca			2	13.734	ug/l	13.98	487.79	2.982E-03	Pulse	0.30	3
Ti			2	0.060	ug/l	56.89	14.45	8.828E-05	Pulse	0.30	3
V			2	0.008	ug/l	132.10	357.79	2.187E-03	Pulse	0.30	3
Cr			2	0.021	ug/l	53.70	1,158.95	7.085E-03	Pulse	0.30	3
Mn			2	0.050	ug/l	15.32	373.34	2.282E-03	Pulse	0.30	3
Fe			2	1.049	ug/l	4.93	13,179.82	8.056E-02	Pulse	0.30	3
Co			2	0.012	ug/l	8.72	207.75	1.270E-03	Pulse	0.30	3
Ni			2	0.073	ug/l	5.24	425.57	2.601E-03	Pulse	0.30	3
Cu			2	0.391	ug/l	9.39	11,970.03	7.317E-02	Pulse	0.30	3
Zn			2	1.856	ug/l	7.61	4,165.03	2.546E-02	Pulse	0.30	3
As			2	0.014	ug/l	26.31	34.33	2.099E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.018	ug/l	8.31	54.42	5.544E-05	Pulse	0.30	3
Sn			2	0.031	ug/l	74.96	1,284.52	1.310E-03	Pulse	0.30	3
Se			3	0.013	ug/l	38.10	7.00	3.284E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,295,644.08	0.70	100.0	Pulse	0.10	3
1	Sc		2,887,277.14	0.54	100.0	Pulse	0.10	3
1	Ge		586,242.66	1.28	100.0	Pulse	0.10	3
1	Ge		806,304.05	0.32	100.0	Pulse	0.10	3
1	Rh		3,918,940.36	0.64	100.0	Pulse	0.10	3
1	In		4,047,374.06	0.30	100.0	Pulse	0.10	3
1	Tb		5,655,954.29	0.24	100.0	Analog	0.10	3
1	Ho		556,204.65	1.09	100.0	Pulse	0.10	3
1	Bi		3,376,045.68	0.84	100.0	Pulse	0.10	3
2	Sc		163,587.77	0.28	100.0	Pulse	0.30	3
2	Ge		100,593.61	1.71	100.0	Pulse	0.30	3
2	Ge		151,689.25	1.06	100.0	Pulse	0.30	3
2	Rh		2,461,342.82	0.69	100.0	Pulse	0.30	3
2	In		981,287.04	1.10	100.0	Pulse	0.30	3
2	Tb		3,296,503.69	0.74	100.0	Pulse	0.30	3
2	Ho		335,281.59	0.64	100.0	Pulse	0.30	3
2	Bi		2,243,924.84	0.44	100.0	Pulse	0.30	3
3	Sc		218,251.14	1.34	100.0	Pulse	0.30	3
3	Ge		140,795.80	1.14	100.0	Pulse	0.30	3
3	Ge		213,122.41	0.69	100.0	Pulse	0.30	3
3	Rh		2,202,525.95	0.96	100.0	Pulse	0.30	3
3	Tb		3,695,392.77	0.86	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 10:08
Sample Name	STDA
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	9/11/2019 11:44
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	---	22.67	1.820E-05	Pulse	0.25	3
B			1	0.000	ug/l	---	6,941.58	5.559E-03	Pulse	0.15	3
Ca			1	0.000	ug/l	---	12,138.23	4.315E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	2126.64	396.69	1.032E-04	Pulse	0.10	3
Mo			1	0.001	ug/l	555.06	183.34	4.745E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	260.34	30.00	7.547E-06	Pulse	0.10	3
Sn			1	0.040	ug/l	62.10	3,737.27	9.385E-04	Pulse	0.10	3
Sb			1	-0.001	ug/l	-185.52	333.35	6.016E-05	Pulse	0.10	3
Ba			1	0.000	ug/l	-432.90	83.33	1.506E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	1045.57	253.34	7.574E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	292.49	306.68	9.185E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	216.34	273.35	8.197E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	1965.96	1,263.40	3.785E-04	Pulse	0.10	3
Na			2	0.000	ug/l	---	11,862.02	7.382E-02	Pulse	0.30	3
Mg			2	0.000	ug/l	---	325.56	2.026E-03	Pulse	0.30	3
Al			2	-0.923	ug/l	-38.28	495.57	3.084E-03	Pulse	0.30	3
K			2	-0.422	ug/l	-149.91	13,594.55	8.460E-02	Pulse	0.30	3
Ca			2	-0.292	ug/l	-210.31	104.45	6.499E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	2.22	1.379E-05	Pulse	0.30	3
V			2	0.000	ug/l	---	301.12	1.874E-03	Pulse	0.30	3
Cr			2	0.000	ug/l	---	967.82	6.023E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	---	146.67	9.127E-04	Pulse	0.30	3
Fe			2	-0.093	ug/l	-10.00	5,654.36	3.519E-02	Pulse	0.30	3
Co			2	0.000	ug/l	---	54.42	3.386E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	---	171.11	1.065E-03	Pulse	0.30	3
Cu			2	0.007	ug/l	523.59	8,215.46	5.113E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.286	ug/l	-19.65	1,100.05	6.844E-03	Pulse	0.30	3
As			2	0.000	ug/l	---	22.33	1.389E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	3531.27	13.31	1.371E-05	Pulse	0.30	3
Sn			2	0.000	ug/l	---	1,122.28	1.155E-03	Pulse	0.30	3
Se			3	0.000	ug/l	-971.74	4.00	1.893E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,248,868.01	0.62	100.0	Pulse	0.10	3
1	Sc		2,813,136.00	0.22	100.0	Pulse	0.10	3
1	Ge		570,411.27	0.61	100.0	Pulse	0.10	3
1	Ge		793,801.99	0.62	100.0	Pulse	0.10	3
1	Rh		3,849,629.11	1.47	100.0	Pulse	0.10	3
1	In		3,985,265.40	1.24	100.0	Pulse	0.10	3
1	Tb		5,537,504.50	1.15	100.0	Mix	0.10	3
1	Ho		550,088.72	0.88	100.0	Pulse	0.10	3
1	Bi		3,338,570.37	1.32	100.0	Pulse	0.10	3
2	Sc		160,699.22	0.30	100.0	Pulse	0.30	3
2	Ge		99,514.85	0.52	100.0	Pulse	0.30	3
2	Ge		149,961.52	0.92	100.0	Pulse	0.30	3
2	Rh		2,434,141.85	0.90	100.0	Pulse	0.30	3
2	In		971,836.64	0.35	100.0	Pulse	0.30	3
2	Tb		3,274,262.37	0.49	100.0	Pulse	0.30	3
2	Ho		334,271.48	0.69	100.0	Pulse	0.30	3
2	Bi		2,238,867.83	0.34	100.0	Pulse	0.30	3
3	Sc		216,651.46	0.92	100.0	Pulse	0.30	3
3	Ge		140,268.91	1.28	100.0	Pulse	0.30	3
3	Ge		211,535.46	0.99	100.0	Pulse	0.30	3
3	Rh		2,181,319.50	1.47	100.0	Pulse	0.30	3
3	Tb		3,663,227.08	1.50	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 10:13
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	9/11/2019 11:44
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	0.498	ug/l	2.37	3,465.73	2.699E-03	Pulse	0.25	3
B			1	24.295	ug/l	2.81	125,168.79	9.752E-02	Pulse	0.15	3
Ca			1	259.241	ug/l	1.42	264,492.05	9.228E-02	Pulse	0.10	3
Sr			1	4.894	ug/l	1.12	252,914.07	6.524E-02	Pulse	0.10	3
Mo			1	0.949	ug/l	2.75	9,309.68	2.401E-03	Pulse	0.10	3
Ag			1	0.473	ug/l	1.14	11,474.58	2.853E-03	Pulse	0.10	3
Sn			1	4.899	ug/l	0.78	79,447.57	1.975E-02	Pulse	0.10	3
Sb			1	2.090	ug/l	3.54	38,214.18	6.745E-03	Pulse	0.10	3
Ba			1	1.020	ug/l	4.03	7,868.94	1.389E-03	Pulse	0.10	3
Tl			1	0.492	ug/l	1.86	22,380.92	6.635E-03	Pulse	0.10	3
Pb			1	0.485	ug/l	2.85	7,819.06	2.318E-03	Pulse	0.10	3
Pb			1	0.471	ug/l	2.81	6,688.40	1.983E-03	Pulse	0.10	3
Pb			1	0.486	ug/l	2.73	31,734.91	9.408E-03	Pulse	0.10	3
Na			2	256.551	ug/l	0.63	374,412.91	2.284E+00	Pulse	0.30	3
Mg			2	261.341	ug/l	0.12	171,359.74	1.045E+00	Pulse	0.30	3
Al			2	25.062	ug/l	2.19	6,293.46	3.839E-02	Pulse	0.30	3
K			2	254.964	ug/l	1.07	151,851.02	9.262E-01	Pulse	0.30	3
Ca			2	284.252	ug/l	3.05	7,861.96	4.796E-02	Pulse	0.30	3
Ti			2	1.070	ug/l	11.63	218.89	1.335E-03	Pulse	0.30	3
V			2	1.014	ug/l	1.71	6,965.99	4.249E-02	Pulse	0.30	3
Cr			2	0.989	ug/l	0.46	9,218.23	5.623E-02	Pulse	0.30	3
Mn			2	1.008	ug/l	1.52	4,646.28	2.834E-02	Pulse	0.30	3
Fe			2	25.750	ug/l	1.00	174,102.73	1.062E+00	Pulse	0.30	3
Co			2	0.511	ug/l	0.70	6,753.22	4.119E-02	Pulse	0.30	3
Ni			2	0.962	ug/l	0.78	3,508.19	2.140E-02	Pulse	0.30	3
Cu			2	1.960	ug/l	2.40	26,766.31	1.633E-01	Pulse	0.30	3
Zn			2	5.276	ug/l	5.48	9,048.15	5.519E-02	Pulse	0.30	3
As			2	0.481	ug/l	1.15	416.68	2.542E-03	Pulse	1.00	3
Cd			2	0.492	ug/l	5.97	1,113.75	1.132E-03	Pulse	0.30	3
Sn			2	4.933	ug/l	0.95	25,295.94	2.571E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.485	ug/l	14.50	112.73	5.095E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,283,805.80	1.29	102.8	Pulse	0.10	3
1	Sc		2,866,362.67	1.04	101.9	Pulse	0.10	3
1	Ge		573,710.60	0.58	100.6	Pulse	0.10	3
1	Ge		801,967.59	0.81	101.0	Pulse	0.10	3
1	Rh		3,876,561.09	1.01	100.7	Pulse	0.10	3
1	In		4,021,952.43	1.07	100.9	Pulse	0.10	3
1	Tb		5,666,935.96	1.08	102.3	Analog	0.10	3
1	Ho		556,365.48	1.17	101.1	Pulse	0.10	3
1	Bi		3,373,150.89	0.36	101.0	Pulse	0.10	3
2	Sc		163,948.36	0.36	102.0	Pulse	0.30	3
2	Ge		100,996.07	0.94	101.5	Pulse	0.30	3
2	Ge		151,970.69	1.46	101.3	Pulse	0.30	3
2	Rh		2,460,445.46	0.96	101.1	Pulse	0.30	3
2	In		984,003.50	0.62	101.3	Pulse	0.30	3
2	Tb		3,279,182.37	0.45	100.2	Pulse	0.30	3
2	Ho		334,761.97	0.33	100.1	Pulse	0.30	3
2	Bi		2,230,355.67	0.80	99.6	Pulse	0.30	3
3	Sc		233,206.63	10.92	107.6	Pulse	0.30	3
3	Ge		148,281.48	8.78	105.7	Pulse	0.30	3
3	Ge		222,911.74	7.88	105.4	Pulse	0.30	3
3	Rh		2,331,510.39	10.28	106.9	Pulse	0.30	3
3	Tb		3,926,569.01	11.22	107.2	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 10:19
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	9/11/2019 11:44
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	5.095	ug/l	1.09	35,040.03	2.744E-02	Pulse	0.25	3
B			1	5.729	ug/l	3.25	34,791.56	2.724E-02	Pulse	0.15	3
Ca			1	9.148	ug/l	2.99	21,134.17	7.419E-03	Pulse	0.10	3
Sr			1	5.011	ug/l	1.60	257,515.31	6.679E-02	Pulse	0.10	3
Mo			1	4.946	ug/l	1.58	47,554.68	1.233E-02	Pulse	0.10	3
Ag			1	5.026	ug/l	0.52	120,431.32	3.026E-02	Pulse	0.10	3
Sn			1	5.012	ug/l	1.03	80,349.14	2.019E-02	Pulse	0.10	3
Sb			1	4.984	ug/l	3.61	88,995.63	1.600E-02	Pulse	0.10	3
Ba			1	5.200	ug/l	1.78	39,043.57	7.017E-03	Pulse	0.10	3
Tl			1	4.973	ug/l	0.77	221,222.54	6.634E-02	Pulse	0.10	3
Pb			1	4.924	ug/l	1.77	75,844.90	2.275E-02	Pulse	0.10	3
Pb			1	5.031	ug/l	0.96	68,187.79	2.045E-02	Pulse	0.10	3
Pb			1	4.984	ug/l	1.09	310,357.68	9.308E-02	Pulse	0.10	3
Na			2	6.193	ug/l	1.80	20,994.24	1.272E-01	Pulse	0.30	3
Mg			2	5.253	ug/l	5.06	3,796.02	2.300E-02	Pulse	0.30	3
Al			2	4.150	ug/l	17.32	1,646.77	9.975E-03	Pulse	0.30	3
K			2	5.363	ug/l	9.64	17,114.44	1.037E-01	Pulse	0.30	3
Ca			2	26.118	ug/l	6.83	832.26	5.041E-03	Pulse	0.30	3
Ti			2	4.860	ug/l	9.62	993.38	6.018E-03	Pulse	0.30	3
V			2	5.047	ug/l	0.69	33,673.07	2.040E-01	Pulse	0.30	3
Cr			2	4.978	ug/l	1.94	42,724.97	2.588E-01	Pulse	0.30	3
Mn			2	5.098	ug/l	1.21	23,047.32	1.396E-01	Pulse	0.30	3
Fe			2	6.116	ug/l	1.81	46,532.12	2.819E-01	Pulse	0.30	3
Co			2	5.093	ug/l	1.42	67,337.87	4.079E-01	Pulse	0.30	3
Ni			2	5.115	ug/l	0.49	18,025.57	1.092E-01	Pulse	0.30	3
Cu			2	5.004	ug/l	0.31	55,807.55	3.380E-01	Pulse	0.30	3
Zn			2	4.595	ug/l	2.51	8,133.22	4.926E-02	Pulse	0.30	3
As			2	5.138	ug/l	0.98	4,257.90	2.579E-02	Pulse	1.00	3
Cd			2	4.995	ug/l	1.07	11,234.80	1.136E-02	Pulse	0.30	3
Sn			2	4.937	ug/l	1.34	25,445.10	2.573E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	5.225	ug/l	2.76	1,122.71	5.302E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,277,183.65	0.79	102.3	Pulse	0.10	3
1	Sc		2,848,726.62	0.33	101.3	Pulse	0.10	3
1	Ge		569,902.71	0.33	99.9	Pulse	0.10	3
1	Ge		795,330.95	0.38	100.2	Pulse	0.10	3
1	Rh		3,855,678.59	0.69	100.2	Pulse	0.10	3
1	In		3,979,319.72	0.17	99.9	Pulse	0.10	3
1	Tb		5,563,722.00	0.98	100.5	Analog	0.10	3
1	Ho		549,623.88	0.90	99.9	Pulse	0.10	3
1	Bi		3,334,587.66	0.89	99.9	Pulse	0.10	3
2	Sc		165,099.87	0.49	102.7	Pulse	0.30	3
2	Ge		101,337.38	0.32	101.8	Pulse	0.30	3
2	Ge		151,236.24	0.77	100.9	Pulse	0.30	3
2	Rh		2,458,531.64	0.58	101.0	Pulse	0.30	3
2	In		988,964.02	0.58	101.8	Pulse	0.30	3
2	Tb		3,313,487.37	0.47	101.2	Pulse	0.30	3
2	Ho		336,942.11	0.69	100.8	Pulse	0.30	3
2	Bi		2,243,477.69	0.82	100.2	Pulse	0.30	3
3	Sc		220,089.47	0.91	101.6	Pulse	0.30	3
3	Ge		140,876.66	1.08	100.4	Pulse	0.30	3
3	Ge		211,744.81	0.45	100.1	Pulse	0.30	3
3	Rh		2,194,894.36	0.48	100.6	Pulse	0.30	3
3	Tb		3,674,867.91	0.79	100.3	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 10:24
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	9/11/2019 11:44
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	25.007	ug/l	0.50	174,274.82	1.346E-01	Pulse	0.25	3
B			1	24.107	ug/l	1.05	125,335.55	9.680E-02	Pulse	0.15	3
Ca			1	37.884	ug/l	1.99	48,862.45	1.717E-02	Pulse	0.10	3
Sr			1	24.952	ug/l	0.85	1,286,767.25	3.322E-01	Pulse	0.10	3
Mo			1	24.773	ug/l	1.22	238,609.13	6.159E-02	Pulse	0.10	3
Ag			1	25.076	ug/l	1.06	601,728.75	1.510E-01	Pulse	0.10	3
Sn			1	25.089	ug/l	1.28	390,381.15	9.794E-02	Pulse	0.10	3
Sb			1	25.045	ug/l	1.17	452,271.39	8.014E-02	Pulse	0.10	3
Ba			1	24.500	ug/l	1.23	186,271.78	3.301E-02	Pulse	0.10	3
Tl			1	24.960	ug/l	0.50	1,111,091.13	3.327E-01	Pulse	0.10	3
Pb			1	24.954	ug/l	1.26	383,825.99	1.149E-01	Pulse	0.10	3
Pb			1	25.006	ug/l	0.48	338,490.88	1.013E-01	Pulse	0.10	3
Pb			1	25.003	ug/l	0.23	1,554,495.59	4.654E-01	Pulse	0.10	3
Na			2	26.803	ug/l	2.32	50,041.30	3.047E-01	Pulse	0.30	3
Mg			2	25.763	ug/l	1.04	17,222.21	1.049E-01	Pulse	0.30	3
Al			2	27.018	ug/l	2.28	6,740.31	4.104E-02	Pulse	0.30	3
K			2	26.364	ug/l	4.48	28,393.13	1.729E-01	Pulse	0.30	3
Ca			2	119.280	ug/l	2.27	3,371.50	2.053E-02	Pulse	0.30	3
Ti			2	25.042	ug/l	1.76	5,083.04	3.095E-02	Pulse	0.30	3
V			2	24.993	ug/l	1.91	164,656.05	1.003E+00	Pulse	0.30	3
Cr			2	24.986	ug/l	1.72	209,330.36	1.275E+00	Pulse	0.30	3
Mn			2	24.962	ug/l	2.49	111,665.83	6.800E-01	Pulse	0.30	3
Fe			2	26.510	ug/l	1.69	179,356.94	1.092E+00	Pulse	0.30	3
Co			2	25.134	ug/l	0.90	330,364.29	2.012E+00	Pulse	0.30	3
Ni			2	25.103	ug/l	1.87	87,313.85	5.317E-01	Pulse	0.30	3
Cu			2	25.078	ug/l	2.17	244,782.76	1.491E+00	Pulse	0.30	3
Zn			2	25.351	ug/l	1.61	37,715.56	2.297E-01	Pulse	0.30	3
As			2	25.435	ug/l	1.51	20,879.32	1.271E-01	Pulse	1.00	3
Cd			2	25.037	ug/l	1.35	56,021.56	5.689E-02	Pulse	0.30	3
Sn			2	24.739	ug/l	0.63	122,410.03	1.243E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	25.693	ug/l	0.95	5,510.13	2.600E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,294,727.62	0.08	103.7	Pulse	0.10	3
1	Sc		2,845,984.65	1.25	101.2	Pulse	0.10	3
1	Ge		572,459.26	1.10	100.4	Pulse	0.10	3
1	Ge		803,720.74	0.75	101.2	Pulse	0.10	3
1	Rh		3,873,837.23	0.38	100.6	Pulse	0.10	3
1	In		3,986,134.72	1.42	100.0	Pulse	0.10	3
1	Tb		5,643,704.50	0.58	101.9	Analog	0.10	3
1	Ho		551,690.04	0.65	100.3	Pulse	0.10	3
1	Bi		3,339,992.87	0.27	100.0	Pulse	0.10	3
2	Sc		164,243.21	0.83	102.2	Pulse	0.30	3
2	Ge		100,684.29	0.68	101.2	Pulse	0.30	3
2	Ge		152,474.53	0.74	101.7	Pulse	0.30	3
2	Rh		2,460,269.84	0.45	101.1	Pulse	0.30	3
2	In		984,831.92	0.72	101.3	Pulse	0.30	3
2	Tb		3,280,000.29	0.65	100.2	Pulse	0.30	3
2	Ho		334,635.94	0.62	100.1	Pulse	0.30	3
2	Bi		2,243,702.90	0.49	100.2	Pulse	0.30	3
3	Sc		218,264.99	1.20	100.7	Pulse	0.30	3
3	Ge		140,380.99	1.26	100.1	Pulse	0.30	3
3	Ge		211,952.72	0.86	100.2	Pulse	0.30	3
3	Rh		2,197,465.26	0.59	100.7	Pulse	0.30	3
3	Tb		3,688,193.05	0.67	100.7	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 10:29
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	9/11/2019 11:44
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	50.292	ug/l	1.09	347,028.81	2.707E-01	Pulse	0.25	3
B			1	48.663	ug/l	0.82	243,268.05	1.897E-01	Pulse	0.15	3
Ca			1	66.733	ug/l	1.47	75,853.41	2.696E-02	Pulse	0.10	3
Sr			1	50.463	ug/l	1.12	2,562,999.65	6.717E-01	Pulse	0.10	3
Mo			1	49.902	ug/l	1.68	473,294.03	1.240E-01	Pulse	0.10	3
Ag			1	50.036	ug/l	1.83	1,186,747.88	3.012E-01	Pulse	0.10	3
Sn			1	50.183	ug/l	1.05	768,781.58	1.951E-01	Pulse	0.10	3
Sb			1	50.375	ug/l	0.70	891,870.79	1.611E-01	Pulse	0.10	3
Ba			1	50.342	ug/l	1.46	375,282.42	6.780E-02	Pulse	0.10	3
Tl			1	49.962	ug/l	1.67	2,221,127.31	6.658E-01	Pulse	0.10	3
Pb			1	50.058	ug/l	2.38	768,698.16	2.304E-01	Pulse	0.10	3
Pb			1	49.788	ug/l	1.52	672,907.13	2.017E-01	Pulse	0.10	3
Pb			1	49.849	ug/l	1.61	3,094,242.71	9.275E-01	Pulse	0.10	3
Na			2	51.998	ug/l	1.97	85,425.74	5.217E-01	Pulse	0.30	3
Mg			2	50.552	ug/l	1.14	33,379.65	2.038E-01	Pulse	0.30	3
Al			2	51.972	ug/l	1.89	12,271.25	7.494E-02	Pulse	0.30	3
K			2	50.604	ug/l	1.49	41,388.82	2.528E-01	Pulse	0.30	3
Ca			2	233.221	ug/l	3.35	6,462.44	3.947E-02	Pulse	0.30	3
Ti			2	51.573	ug/l	2.99	10,436.72	6.373E-02	Pulse	0.30	3
V			2	50.115	ug/l	0.31	328,906.50	2.008E+00	Pulse	0.30	3
Cr			2	50.181	ug/l	0.52	418,203.48	2.554E+00	Pulse	0.30	3
Mn			2	49.840	ug/l	1.63	222,163.23	1.357E+00	Pulse	0.30	3
Fe			2	51.080	ug/l	0.86	338,692.75	2.068E+00	Pulse	0.30	3
Co			2	49.946	ug/l	0.75	654,528.89	3.997E+00	Pulse	0.30	3
Ni			2	50.361	ug/l	1.77	174,479.97	1.066E+00	Pulse	0.30	3
Cu			2	50.241	ug/l	1.46	480,628.56	2.935E+00	Pulse	0.30	3
Zn			2	49.521	ug/l	0.47	72,005.81	4.397E-01	Pulse	0.30	3
As			2	50.297	ug/l	1.70	41,142.52	2.513E-01	Pulse	1.00	3
Cd			2	49.840	ug/l	0.71	111,197.53	1.132E-01	Pulse	0.30	3
Sn			2	49.486	ug/l	0.22	243,043.07	2.475E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	51.138	ug/l	0.69	10,972.67	5.173E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,282,121.26	0.92	102.7	Pulse	0.10	3
1	Sc		2,813,774.33	0.68	100.0	Pulse	0.10	3
1	Ge		573,367.08	0.11	100.5	Pulse	0.10	3
1	Ge		795,777.41	0.59	100.2	Pulse	0.10	3
1	Rh		3,816,200.36	1.14	99.1	Pulse	0.10	3
1	In		3,940,076.45	0.79	98.9	Pulse	0.10	3
1	Tb		5,535,236.58	0.76	100.0	Mix	0.10	3
1	Ho		544,065.93	1.03	98.9	Pulse	0.10	3
1	Bi		3,336,258.39	0.83	99.9	Pulse	0.10	3
2	Sc		163,763.89	1.34	101.9	Pulse	0.30	3
2	Ge		100,412.38	1.03	100.9	Pulse	0.30	3
2	Ge		151,768.74	0.76	101.2	Pulse	0.30	3
2	Rh		2,437,623.24	0.35	100.1	Pulse	0.30	3
2	In		982,070.81	0.21	101.1	Pulse	0.30	3
2	Tb		3,312,946.53	0.25	101.2	Pulse	0.30	3
2	Ho		336,844.92	0.91	100.8	Pulse	0.30	3
2	Bi		2,253,148.73	1.40	100.6	Pulse	0.30	3
3	Sc		216,190.33	0.35	99.8	Pulse	0.30	3
3	Ge		139,247.97	0.21	99.3	Pulse	0.30	3
3	Ge		212,134.32	0.29	100.3	Pulse	0.30	3
3	Rh		2,176,871.79	1.05	99.8	Pulse	0.30	3
3	Tb		3,684,001.38	0.56	100.6	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 10:34
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	9/11/2019 11:44
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	99.847	ug/l	0.28	678,304.64	5.374E-01	Pulse	0.25	3
B			1	97.279	ug/l	1.70	471,766.72	3.738E-01	Pulse	0.15	3
Ca			1	129.079	ug/l	1.39	132,978.56	4.811E-02	Pulse	0.10	3
Sr			1	100.598	ug/l	0.67	5,038,105.65	1.339E+00	Pulse	0.10	3
Mo			1	100.436	ug/l	0.36	939,162.17	2.496E-01	Pulse	0.10	3
Ag			1	100.453	ug/l	0.42	2,359,144.70	6.047E-01	Pulse	0.10	3
Sn			1	100.335	ug/l	0.34	1,518,893.26	3.894E-01	Pulse	0.10	3
Sb			1	99.517	ug/l	0.11	1,750,591.48	3.183E-01	Pulse	0.10	3
Ba			1	99.959	ug/l	0.84	740,434.68	1.346E-01	Pulse	0.10	3
Tl			1	100.112	ug/l	0.73	4,429,175.98	1.334E+00	Pulse	0.10	3
Pb			1	100.564	ug/l	0.75	1,536,706.33	4.629E-01	Pulse	0.10	3
Pb			1	100.801	ug/l	1.71	1,355,530.19	4.083E-01	Pulse	0.10	3
Pb			1	100.439	ug/l	0.87	6,203,450.95	1.868E+00	Pulse	0.10	3
Na			2	102.097	ug/l	0.68	153,323.38	9.533E-01	Pulse	0.30	3
Mg			2	101.608	ug/l	0.68	65,560.56	4.076E-01	Pulse	0.30	3
Al			2	103.573	ug/l	0.82	23,329.58	1.450E-01	Pulse	0.30	3
K			2	100.619	ug/l	1.39	67,162.71	4.176E-01	Pulse	0.30	3
Ca			2	447.467	ug/l	0.98	12,077.86	7.509E-02	Pulse	0.30	3
Ti			2	99.209	ug/l	0.77	19,716.26	1.226E-01	Pulse	0.30	3
V			2	99.942	ug/l	0.70	643,940.43	4.004E+00	Pulse	0.30	3
Cr			2	99.914	ug/l	0.60	816,891.03	5.079E+00	Pulse	0.30	3
Mn			2	100.085	ug/l	0.73	438,073.64	2.724E+00	Pulse	0.30	3
Fe			2	101.748	ug/l	0.44	656,445.70	4.081E+00	Pulse	0.30	3
Co			2	99.989	ug/l	0.43	1,286,964.04	8.001E+00	Pulse	0.30	3
Ni			2	99.789	ug/l	0.29	339,434.91	2.110E+00	Pulse	0.30	3
Cu			2	99.711	ug/l	0.16	928,946.28	5.775E+00	Pulse	0.30	3
Zn			2	100.138	ug/l	0.45	141,476.08	8.796E-01	Pulse	0.30	3
As			2	99.736	ug/l	0.56	80,116.99	4.981E-01	Pulse	1.00	3
Cd			2	100.983	ug/l	1.18	219,722.79	2.294E-01	Pulse	0.30	3
Sn			2	100.326	ug/l	0.34	479,424.27	5.005E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	114.352	ug/l	10.76	21,420.31	1.156E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,262,241.87	0.48	101.1	Pulse	0.10	3
1	Sc		2,763,731.94	0.36	98.2	Pulse	0.10	3
1	Ge		557,744.48	0.59	97.8	Pulse	0.10	3
1	Ge		774,514.34	0.83	97.6	Pulse	0.10	3
1	Rh		3,762,966.30	0.58	97.7	Pulse	0.10	3
1	In		3,901,035.51	0.34	97.9	Pulse	0.10	3
1	Tb		5,500,545.13	0.56	99.3	Mix	0.10	3
1	Ho		541,448.66	1.48	98.4	Pulse	0.10	3
1	Bi		3,320,250.68	0.99	99.5	Pulse	0.10	3
2	Sc		160,844.33	0.42	100.1	Pulse	0.30	3
2	Ge		97,474.78	0.59	97.9	Pulse	0.30	3
2	Ge		147,369.29	1.82	98.3	Pulse	0.30	3
2	Rh		2,375,213.31	0.30	97.6	Pulse	0.30	3
2	In		957,801.19	0.08	98.6	Pulse	0.30	3
2	Tb		3,219,127.09	0.47	98.3	Pulse	0.30	3
2	Ho		328,593.63	1.12	98.3	Pulse	0.30	3
2	Bi		2,208,706.16	0.71	98.7	Pulse	0.30	3
3	Sc		192,053.75	10.15	88.6	Pulse	0.30	3
3	Ge		122,649.90	12.99	87.4	Pulse	0.30	3
3	Ge		186,845.67	12.04	88.3	Pulse	0.30	3
3	Rh		1,913,720.06	11.29	87.7	Pulse	0.30	3
3	Tb		3,240,862.23	11.24	88.5	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 10:39
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	9/11/2019 11:44
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	4.47	149.33	1.189E-04	Pulse	0.25	3
B			1	201.876	ug/l	0.07	966,291.70	7.697E-01	Pulse	0.15	3
Ca			1	506.656	ug/l	0.52	485,632.01	1.762E-01	Pulse	0.10	3
Sr			1	0.024	ug/l	12.43	1,593.47	4.243E-04	Pulse	0.10	3
Mo			1	0.140	ug/l	8.12	1,476.79	3.929E-04	Pulse	0.10	3
Ag			1	0.019	ug/l	17.35	473.36	1.205E-04	Pulse	0.10	3
Sn			1	0.181	ug/l	8.43	5,831.31	1.484E-03	Pulse	0.10	3
Sb			1	0.874	ug/l	6.86	15,851.89	2.858E-03	Pulse	0.10	3
Ba			1	0.024	ug/l	47.91	270.01	4.859E-05	Pulse	0.10	3
Tl			1	0.037	ug/l	11.91	1,850.19	5.629E-04	Pulse	0.10	3
Pb			1	0.038	ug/l	23.65	863.40	2.625E-04	Pulse	0.10	3
Pb			1	0.032	ug/l	5.30	683.38	2.078E-04	Pulse	0.10	3
Pb			1	0.036	ug/l	2.88	3,430.33	1.043E-03	Pulse	0.10	3
Na			2	512.047	ug/l	0.65	723,823.11	4.484E+00	Pulse	0.30	3
Mg			2	505.364	ug/l	1.41	325,904.96	2.019E+00	Pulse	0.30	3
Al			2	501.297	ug/l	0.34	110,622.94	6.853E-01	Pulse	0.30	3
K			2	502.927	ug/l	1.05	281,382.65	1.743E+00	Pulse	0.30	3
Ca			2	513.036	ug/l	1.82	13,879.25	8.599E-02	Pulse	0.30	3
Ti			2	0.050	ug/l	68.53	12.22	7.557E-05	Pulse	0.30	3
V			2	-0.003	ug/l	-175.17	283.34	1.755E-03	Pulse	0.30	3
Cr			2	-0.024	ug/l	-40.93	777.81	4.819E-03	Pulse	0.30	3
Mn			2	0.024	ug/l	19.23	253.34	1.570E-03	Pulse	0.30	3
Fe			2	508.884	ug/l	0.42	3,269,579.31	2.026E+01	Pulse	0.30	3
Co			2	0.031	ug/l	14.50	451.18	2.795E-03	Pulse	0.30	3
Ni			2	0.028	ug/l	66.33	266.67	1.654E-03	Pulse	0.30	3
Cu			2	-0.035	ug/l	-92.94	7,861.97	4.870E-02	Pulse	0.30	3
Zn			2	0.009	ug/l	399.31	1,518.98	9.412E-03	Pulse	0.30	3
As			2	0.024	ug/l	28.89	42.00	2.603E-04	Pulse	1.00	3
Cd			2	0.015	ug/l	53.03	45.41	4.652E-05	Pulse	0.30	3
Sn			2	0.225	ug/l	22.99	2,221.30	2.275E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	188.337	ug/l	11.13	42,259.82	1.904E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,255,490.95	0.49	100.5	Pulse	0.10	3
1	Sc		2,755,499.33	1.06	98.0	Pulse	0.10	3
1	Ge		555,905.81	1.04	97.5	Pulse	0.10	3
1	Ge		777,622.57	1.20	98.0	Pulse	0.10	3
1	Rh		3,757,260.99	0.86	97.6	Pulse	0.10	3
1	In		3,928,896.18	0.51	98.6	Pulse	0.10	3
1	Tb		5,544,179.08	1.18	100.1	Mix	0.10	3
1	Ho		538,433.14	0.81	97.9	Pulse	0.10	3
1	Bi		3,289,274.43	1.12	98.5	Pulse	0.10	3
2	Sc		161,411.79	0.87	100.4	Pulse	0.30	3
2	Ge		100,011.41	0.92	100.5	Pulse	0.30	3
2	Ge		149,605.62	0.95	99.8	Pulse	0.30	3
2	Rh		2,415,402.06	0.33	99.2	Pulse	0.30	3
2	In		976,173.32	0.08	100.4	Pulse	0.30	3
2	Tb		3,256,656.26	0.31	99.5	Pulse	0.30	3
2	Ho		332,553.89	0.38	99.5	Pulse	0.30	3
2	Bi		2,216,871.23	0.27	99.0	Pulse	0.30	3
3	Sc		234,288.25	14.68	108.1	Pulse	0.30	3
3	Ge		146,785.54	11.12	104.6	Pulse	0.30	3
3	Ge		223,760.14	11.22	105.8	Pulse	0.30	3
3	Rh		2,357,459.21	13.75	108.1	Pulse	0.30	3
3	Tb		3,986,689.28	14.09	108.8	Mix	0.30	3

Quantitation Report

File Name	010CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 10:45
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	9/11/2019 11:44
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	90.25	45.33	3.519E-05	Pulse	0.25	3
B			1	9.436	ug/l	2.16	53,169.71	4.127E-02	Pulse	0.15	3
Ca			1	1010.572	ug/l	0.69	978,359.54	3.472E-01	Pulse	0.10	3
Sr			1	0.019	ug/l	13.62	1,370.12	3.572E-04	Pulse	0.10	3
Mo			1	0.031	ug/l	24.49	466.69	1.215E-04	Pulse	0.10	3
Ag			1	0.005	ug/l	21.48	150.01	3.788E-05	Pulse	0.10	3
Sn			1	0.045	ug/l	40.31	3,783.92	9.549E-04	Pulse	0.10	3
Sb			1	0.305	ug/l	4.88	5,821.30	1.040E-03	Pulse	0.10	3
Ba			1	0.028	ug/l	48.96	296.68	5.305E-05	Pulse	0.10	3
Tl			1	0.008	ug/l	41.04	590.03	1.785E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	13.91	583.37	1.764E-04	Pulse	0.10	3
Pb			1	0.016	ug/l	24.27	470.03	1.422E-04	Pulse	0.10	3
Pb			1	0.017	ug/l	16.19	2,323.50	7.027E-04	Pulse	0.10	3
Na			2	994.432	ug/l	0.93	1,427,598.38	8.640E+00	Pulse	0.30	3
Mg			2	993.058	ug/l	0.75	655,332.26	3.966E+00	Pulse	0.30	3
Al			2	987.904	ug/l	0.89	222,480.89	1.346E+00	Pulse	0.30	3
K			2	989.793	ug/l	1.02	553,182.20	3.348E+00	Pulse	0.30	3
Ca			2	1020.719	ug/l	1.05	28,156.05	1.704E-01	Pulse	0.30	3
Ti			2	-0.006	ug/l	-167.93	1.11	6.789E-06	Pulse	0.30	3
V			2	-0.004	ug/l	-105.25	283.34	1.716E-03	Pulse	0.30	3
Cr			2	-0.040	ug/l	-34.93	660.02	3.991E-03	Pulse	0.30	3
Mn			2	0.025	ug/l	32.74	263.34	1.593E-03	Pulse	0.30	3
Fe			2	1017.490	ug/l	0.89	6,686,291.82	4.046E+01	Analog	0.30	3
Co			2	0.046	ug/l	8.35	659.75	3.991E-03	Pulse	0.30	3
Ni			2	0.044	ug/l	10.64	330.01	1.997E-03	Pulse	0.30	3
Cu			2	-0.141	ug/l	-7.79	7,042.70	4.262E-02	Pulse	0.30	3
Zn			2	-0.164	ug/l	-8.42	1,306.74	7.908E-03	Pulse	0.30	3
As			2	0.010	ug/l	25.44	31.33	1.896E-04	Pulse	1.00	3
Cd			2	-0.002	ug/l	-264.41	9.95	1.012E-05	Pulse	0.30	3
Sn			2	0.031	ug/l	48.88	1,288.96	1.308E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	389.879	ug/l	0.58	83,632.44	3.942E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,288,120.03	0.57	103.1	Pulse	0.10	3
1	Sc		2,817,611.52	0.63	100.2	Pulse	0.10	3
1	Ge		564,797.56	0.44	99.0	Pulse	0.10	3
1	Ge		801,581.03	0.19	101.0	Pulse	0.10	3
1	Rh		3,837,773.90	0.81	99.7	Pulse	0.10	3
1	In		3,961,250.85	0.70	99.4	Pulse	0.10	3
1	Tb		5,598,818.88	0.55	101.1	Analog	0.10	3
1	Ho		554,497.00	1.03	100.8	Pulse	0.10	3
1	Bi		3,306,773.49	0.24	99.0	Pulse	0.10	3
2	Sc		165,247.48	0.93	102.8	Pulse	0.30	3
2	Ge		101,470.17	0.58	102.0	Pulse	0.30	3
2	Ge		152,228.05	0.71	101.5	Pulse	0.30	3
2	Rh		2,432,223.79	0.29	99.9	Pulse	0.30	3
2	In		985,056.52	0.75	101.4	Pulse	0.30	3
2	Tb		3,281,022.79	1.15	100.2	Pulse	0.30	3
2	Ho		336,394.91	0.73	100.6	Pulse	0.30	3
2	Bi		2,220,940.88	0.65	99.2	Pulse	0.30	3
3	Sc		215,957.16	0.76	99.7	Pulse	0.30	3
3	Ge		139,231.14	0.80	99.3	Pulse	0.30	3
3	Ge		212,149.97	0.85	100.3	Pulse	0.30	3
3	Rh		2,151,871.23	0.48	98.6	Pulse	0.30	3
3	Tb		3,678,111.24	0.20	100.4	Pulse	0.30	3

Quantitation Report

File Name	011CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 10:50
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	9/11/2019 11:44
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	63.58	56.00	4.402E-05	Pulse	0.25	3
B			1	5.235	ug/l	1.09	32,217.45	2.537E-02	Pulse	0.15	3
Ca			1	5078.495	ug/l	1.01	4,824,125.76	1.728E+00	Pulse	0.10	3
Sr			1	0.046	ug/l	5.06	2,657.00	7.141E-04	Pulse	0.10	3
Mo			1	0.010	ug/l	75.37	256.68	6.894E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	25.66	106.67	2.730E-05	Pulse	0.10	3
Sn			1	0.024	ug/l	41.07	3,417.19	8.746E-04	Pulse	0.10	3
Sb			1	0.188	ug/l	13.85	3,743.94	6.634E-04	Pulse	0.10	3
Ba			1	0.018	ug/l	61.91	223.35	3.952E-05	Pulse	0.10	3
Tl			1	0.005	ug/l	42.20	460.03	1.411E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	64.55	506.70	1.553E-04	Pulse	0.10	3
Pb			1	0.016	ug/l	15.54	463.36	1.422E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	25.63	2,006.81	6.158E-04	Pulse	0.10	3
Na			2	5184.943	ug/l	1.04	7,266,515.54	4.474E+01	Analog	0.30	3
Mg			2	5012.719	ug/l	0.97	3,250,406.61	2.001E+01	Pulse	0.30	3
Al			2	4994.390	ug/l	1.07	1,102,778.64	6.789E+00	Pulse	0.30	3
K			2	4981.555	ug/l	0.56	2,680,528.64	1.650E+01	Pulse	0.30	3
Ca			2	5039.042	ug/l	0.53	136,193.80	8.385E-01	Pulse	0.30	3
Ti			2	0.000	ug/l	-23707.56	2.22	1.369E-05	Pulse	0.30	3
V			2	0.004	ug/l	19.87	332.23	2.045E-03	Pulse	0.30	3
Cr			2	-0.025	ug/l	-33.03	771.14	4.748E-03	Pulse	0.30	3
Mn			2	0.070	ug/l	9.27	455.57	2.805E-03	Pulse	0.30	3
Fe			2	5075.772	ug/l	1.30	32,762,700.92	2.017E+02	Analog	0.30	3
Co			2	0.215	ug/l	1.71	2,849.61	1.754E-02	Pulse	0.30	3
Ni			2	0.184	ug/l	7.73	805.59	4.960E-03	Pulse	0.30	3
Cu			2	-0.194	ug/l	-10.95	6,422.44	3.954E-02	Pulse	0.30	3
Zn			2	-0.033	ug/l	-135.83	1,468.97	9.043E-03	Pulse	0.30	3
As			2	0.027	ug/l	38.84	44.33	2.730E-04	Pulse	1.00	3
Cd			2	0.007	ug/l	90.75	27.75	2.873E-05	Pulse	0.30	3
Sn			2	0.007	ug/l	148.43	1,146.72	1.191E-03	Pulse	0.30	3
Se			3	0.166	ug/l	13.24	38.53	1.874E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,269,791.88	0.72	101.7	Pulse	0.10	3
1	Sc		2,792,449.13	0.52	99.3	Pulse	0.10	3
1	Ge		563,487.98	1.19	98.8	Pulse	0.10	3

Quantitation Report

1	Ge		779,661.60	0.44	98.2	Pulse	0.10	3
1	Rh		3,720,066.19	0.75	96.6	Pulse	0.10	3
1	In		3,906,726.94	0.30	98.0	Pulse	0.10	3
1	Tb		5,640,294.50	0.89	101.9	Analog	0.10	3
1	Ho		549,493.30	1.09	99.9	Pulse	0.10	3
1	Bi		3,257,837.66	0.75	97.6	Pulse	0.10	3
2	Sc		162,433.27	0.17	101.1	Pulse	0.30	3
2	Ge		99,042.21	0.67	99.5	Pulse	0.30	3
2	Ge		150,100.17	0.94	100.1	Pulse	0.30	3
2	Rh		2,367,457.34	0.63	97.3	Pulse	0.30	3
2	In		963,244.71	0.84	99.1	Pulse	0.30	3
2	Tb		3,241,503.83	0.74	99.0	Pulse	0.30	3
2	Ho		333,476.56	0.62	99.8	Pulse	0.30	3
2	Bi		2,168,390.68	0.36	96.9	Pulse	0.30	3
3	Sc		211,951.85	0.24	97.8	Pulse	0.30	3
3	Ge		136,508.49	0.35	97.3	Pulse	0.30	3
3	Ge		205,627.70	0.16	97.2	Pulse	0.30	3
3	Rh		2,095,929.22	0.14	96.1	Pulse	0.30	3
3	Tb		3,614,379.72	0.04	98.7	Pulse	0.30	3

Quantitation Report

File Name	012CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 10:55
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	9/11/2019 11:44
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	110.10	42.67	3.420E-05	Pulse	0.25	3
B			1	3.156	ug/l	4.85	21,827.79	1.750E-02	Pulse	0.15	3
Ca			1	9959.132	ug/l	0.09	9,250,621.95	3.384E+00	Analog	0.10	3
Sr			1	0.082	ug/l	5.39	4,364.11	1.193E-03	Pulse	0.10	3
Mo			1	0.021	ug/l	48.78	356.69	9.749E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	23.91	86.67	2.264E-05	Pulse	0.10	3
Sn			1	0.458	ug/l	2.70	9,783.36	2.557E-03	Pulse	0.10	3
Sb			1	0.118	ug/l	5.71	2,433.62	4.406E-04	Pulse	0.10	3
Ba			1	0.025	ug/l	37.90	273.35	4.948E-05	Pulse	0.10	3
Tl			1	0.003	ug/l	69.83	370.02	1.168E-04	Pulse	0.10	3
Pb			1	0.031	ug/l	4.66	723.38	2.285E-04	Pulse	0.10	3
Pb			1	0.032	ug/l	21.25	650.04	2.053E-04	Pulse	0.10	3
Pb			1	0.028	ug/l	22.63	2,843.57	8.978E-04	Pulse	0.10	3
Na			2	9907.319	ug/l	0.39	13,911,469.45	8.541E+01	Analog	0.30	3
Mg			2	9993.783	ug/l	0.86	6,497,609.33	3.989E+01	Analog	0.30	3
Al			2	9752.055	ug/l	0.63	2,158,439.98	1.325E+01	Pulse	0.30	3
K			2	10020.891	ug/l	0.19	5,392,580.34	3.311E+01	Analog	0.30	3
Ca			2	9934.345	ug/l	0.32	269,120.62	1.652E+00	Pulse	0.30	3
Ti			2	0.005	ug/l	530.58	3.33	2.048E-05	Pulse	0.30	3
V			2	-0.001	ug/l	-566.97	300.01	1.842E-03	Pulse	0.30	3
Cr			2	0.016	ug/l	71.95	1,114.50	6.843E-03	Pulse	0.30	3
Mn			2	0.153	ug/l	13.16	824.48	5.063E-03	Pulse	0.30	3
Fe			2	9897.107	ug/l	1.27	64,047,641.90	3.932E+02	Analog	0.30	3
Co			2	0.433	ug/l	1.95	5,698.19	3.499E-02	Pulse	0.30	3
Ni			2	0.384	ug/l	4.58	1,494.53	9.176E-03	Pulse	0.30	3
Cu			2	-0.117	ug/l	-20.43	7,160.53	4.396E-02	Pulse	0.30	3
Zn			2	0.284	ug/l	58.27	1,921.25	1.180E-02	Pulse	0.30	3
As			2	0.047	ug/l	36.59	60.67	3.726E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	234.93	19.97	2.099E-05	Pulse	0.30	3
Sn			2	0.421	ug/l	2.65	3,093.67	3.251E-03	Pulse	0.30	3
Se			3	0.052	ug/l	6.37	14.73	7.221E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,247,208.47	0.75	99.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,733,890.48	0.60	97.2	Pulse	0.10	3
1	Ge		550,859.38	0.16	96.6	Pulse	0.10	3
1	Ge		762,312.28	0.49	96.0	Pulse	0.10	3
1	Rh		3,658,978.59	0.29	95.0	Pulse	0.10	3
1	In		3,825,825.11	0.74	96.0	Pulse	0.10	3
1	Tb		5,523,737.00	0.13	99.8	Analog	0.10	3
1	Ho		540,599.05	0.63	98.3	Pulse	0.10	3
1	Bi		3,165,625.79	0.57	94.8	Pulse	0.10	3
2	Sc		162,872.48	0.24	101.4	Pulse	0.30	3
2	Ge		97,738.67	0.51	98.2	Pulse	0.30	3
2	Ge		146,337.83	0.67	97.6	Pulse	0.30	3
2	Rh		2,330,872.61	0.92	95.8	Pulse	0.30	3
2	In		951,513.69	0.20	97.9	Pulse	0.30	3
2	Tb		3,237,094.10	0.61	98.9	Pulse	0.30	3
2	Ho		330,757.96	0.33	98.9	Pulse	0.30	3
2	Bi		2,127,210.61	0.34	95.0	Pulse	0.30	3
3	Sc		212,985.16	0.10	98.3	Pulse	0.30	3
3	Ge		135,358.25	0.06	96.5	Pulse	0.30	3
3	Ge		204,029.96	0.34	96.5	Pulse	0.30	3
3	Rh		2,049,013.74	0.70	93.9	Pulse	0.30	3
3	Tb		3,598,244.86	0.27	98.2	Pulse	0.30	3

Quantitation Report

File Name	013SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 11:00
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	9/11/2019 11:44
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	-108.86	13.33	1.073E-05	Pulse	0.25	3
B			1	2.609	ug/l	0.73	19,233.37	1.544E-02	Pulse	0.15	3
Ca			1	0.461	ug/l	161.97	12,008.17	4.471E-03	Pulse	0.10	3
Sr			1	-0.001	ug/l	-17.31	313.35	8.386E-05	Pulse	0.10	3
Mo			1	0.007	ug/l	107.98	226.68	6.068E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	311.02	36.67	9.471E-06	Pulse	0.10	3
Sn			1	0.057	ug/l	2.80	3,907.29	1.004E-03	Pulse	0.10	3
Sb			1	0.062	ug/l	16.64	1,436.80	2.612E-04	Pulse	0.10	3
Ba			1	-0.006	ug/l	-20.72	40.00	7.268E-06	Pulse	0.10	3
Tl			1	0.002	ug/l	97.84	320.02	9.727E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	131.42	340.02	1.035E-04	Pulse	0.10	3
Pb			1	0.003	ug/l	173.89	296.68	9.016E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	142.33	1,346.75	4.095E-04	Pulse	0.10	3
Na			2	0.863	ug/l	29.68	12,834.98	8.125E-02	Pulse	0.30	3
Mg			2	0.685	ug/l	29.45	752.25	4.760E-03	Pulse	0.30	3
Al			2	-0.020	ug/l	-1085.38	681.13	4.311E-03	Pulse	0.30	3
K			2	-0.337	ug/l	-177.22	13,408.81	8.488E-02	Pulse	0.30	3
Ca			2	1.126	ug/l	90.46	140.00	8.857E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	6779.75	2.22	1.415E-05	Pulse	0.30	3
V			2	-0.002	ug/l	-69.41	281.12	1.779E-03	Pulse	0.30	3
Cr			2	0.001	ug/l	54.11	963.37	6.098E-03	Pulse	0.30	3
Mn			2	-0.002	ug/l	-160.42	134.45	8.511E-04	Pulse	0.30	3
Fe			2	1.181	ug/l	7.39	13,557.93	8.581E-02	Pulse	0.30	3
Co			2	-0.001	ug/l	-44.36	39.97	2.531E-04	Pulse	0.30	3
Ni			2	-0.003	ug/l	-147.60	156.67	9.916E-04	Pulse	0.30	3
Cu			2	-0.161	ug/l	-12.48	6,548.05	4.145E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.562	ug/l	-5.03	702.24	4.445E-03	Pulse	0.30	3
As			2	-0.005	ug/l	-84.18	17.67	1.119E-04	Pulse	1.00	3
Cd			2	-0.003	ug/l	-52.44	6.65	6.954E-06	Pulse	0.30	3
Sn			2	0.047	ug/l	39.43	1,324.52	1.387E-03	Pulse	0.30	3
Se			3	0.028	ug/l	39.44	9.87	4.802E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,246,019.86	0.49	99.8	Pulse	0.10	3
1	Sc		2,685,356.31	0.53	95.5	Pulse	0.10	3
1	Ge		547,488.30	0.61	96.0	Pulse	0.10	3
1	Ge		769,295.56	0.71	96.9	Pulse	0.10	3
1	Rh		3,736,804.32	0.35	97.1	Pulse	0.10	3
1	In		3,890,788.91	0.86	97.6	Pulse	0.10	3
1	Tb		5,493,955.54	1.67	99.2	Mix	0.10	3
1	Ho		538,410.32	0.24	97.9	Pulse	0.10	3
1	Bi		3,288,769.01	0.43	98.5	Pulse	0.10	3
2	Sc		157,983.10	0.50	98.3	Pulse	0.30	3
2	Ge		96,989.85	0.85	97.5	Pulse	0.30	3
2	Ge		147,195.19	1.28	98.2	Pulse	0.30	3
2	Rh		2,366,693.03	0.64	97.2	Pulse	0.30	3
2	In		954,601.27	0.71	98.2	Pulse	0.30	3
2	Tb		3,208,964.87	0.47	98.0	Pulse	0.30	3
2	Ho		326,173.25	0.23	97.6	Pulse	0.30	3
2	Bi		2,203,506.37	0.30	98.4	Pulse	0.30	3
3	Sc		209,839.26	0.22	96.9	Pulse	0.30	3
3	Ge		135,813.93	0.55	96.8	Pulse	0.30	3
3	Ge		205,256.94	0.77	97.0	Pulse	0.30	3
3	Rh		2,132,190.96	0.34	97.7	Pulse	0.30	3
3	Tb		3,615,388.05	0.21	98.7	Pulse	0.30	3

Quantitation Report

File Name	014_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 11:10
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	9/11/2019 11:44
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	59.166	ug/l	1.83	397,081.67	3.184E-01	Pulse	0.25	3
B			1	119.587	ug/l	2.51	571,308.88	4.582E-01	Pulse	0.15	3
Ca			1	5547.485	ug/l	0.18	5,127,665.65	1.887E+00	Analog	0.10	3
Sr			1	61.048	ug/l	1.38	2,995,475.37	8.125E-01	Pulse	0.10	3
Mo			1	59.685	ug/l	1.29	546,840.07	1.483E-01	Pulse	0.10	3
Ag			1	59.771	ug/l	1.26	1,382,582.11	3.598E-01	Pulse	0.10	3
Sn			1	60.271	ug/l	0.83	899,973.76	2.342E-01	Pulse	0.10	3
Sb			1	64.254	ug/l	0.55	1,125,429.51	2.055E-01	Pulse	0.10	3
Ba			1	61.343	ug/l	0.63	452,446.82	8.262E-02	Pulse	0.10	3
Tl			1	63.956	ug/l	1.06	2,745,681.73	8.523E-01	Pulse	0.10	3
Pb			1	62.467	ug/l	1.14	926,328.82	2.875E-01	Pulse	0.10	3
Pb			1	59.318	ug/l	0.25	774,171.84	2.403E-01	Pulse	0.10	3
Pb			1	60.948	ug/l	0.38	3,653,120.10	1.134E+00	Pulse	0.10	3
Na			2	5570.971	ug/l	0.82	7,781,700.53	4.806E+01	Analog	0.30	3
Mg			2	5447.227	ug/l	0.85	3,521,059.30	2.175E+01	Pulse	0.30	3
Al			2	5508.458	ug/l	1.09	1,212,377.17	7.488E+00	Pulse	0.30	3
K			2	5468.799	ug/l	0.62	2,932,069.74	1.811E+01	Pulse	0.30	3
Ca			2	5738.120	ug/l	1.15	154,581.14	9.547E-01	Pulse	0.30	3
Ti			2	58.777	ug/l	1.97	11,758.73	7.263E-02	Pulse	0.30	3
V			2	60.956	ug/l	0.13	395,513.79	2.443E+00	Pulse	0.30	3
Cr			2	59.315	ug/l	0.47	488,593.09	3.018E+00	Pulse	0.30	3
Mn			2	60.247	ug/l	1.26	265,507.10	1.640E+00	Pulse	0.30	3
Fe			2	5546.135	ug/l	1.47	35,681,794.14	2.204E+02	Analog	0.30	3
Co			2	59.350	ug/l	0.83	769,011.73	4.750E+00	Pulse	0.30	3
Ni			2	58.658	ug/l	1.24	200,919.74	1.241E+00	Pulse	0.30	3
Cu			2	58.328	ug/l	0.50	550,451.30	3.400E+00	Pulse	0.30	3
Zn			2	58.788	ug/l	1.71	84,225.72	5.202E-01	Pulse	0.30	3
As			2	62.401	ug/l	0.33	50,473.49	3.117E-01	Pulse	1.00	3
Cd			2	59.856	ug/l	0.86	129,949.00	1.360E-01	Pulse	0.30	3
Sn			2	59.910	ug/l	0.68	286,099.06	2.994E-01	Pulse	0.30	3
Se			3	269.976	ug/l	1.55	55,709.29	2.730E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,247,177.32	1.49	99.9	Pulse	0.10	3
1	Sc		2,717,799.96	0.69	96.6	Pulse	0.10	3
1	Ge		556,738.46	1.32	97.6	Pulse	0.10	3

Quantitation Report

1	Ge		775,108.79	1.32	97.6	Pulse	0.10	3
1	Rh		3,686,683.38	0.48	95.8	Pulse	0.10	3
1	In		3,842,577.63	1.06	96.4	Pulse	0.10	3
1	Tb		5,476,374.71	0.62	98.9	Mix	0.10	3
1	Ho		538,281.48	1.97	97.9	Pulse	0.10	3
1	Bi		3,221,587.77	0.18	96.5	Pulse	0.10	3
2	Sc		161,925.43	1.43	100.8	Pulse	0.30	3
2	Ge		98,762.61	0.31	99.2	Pulse	0.30	3
2	Ge		149,422.93	1.49	99.6	Pulse	0.30	3
2	Rh		2,343,233.17	1.05	96.3	Pulse	0.30	3
2	In		955,702.37	0.96	98.3	Pulse	0.30	3
2	Tb		3,239,585.70	1.92	98.9	Pulse	0.30	3
2	Ho		330,642.11	1.06	98.9	Pulse	0.30	3
2	Bi		2,162,236.37	2.14	96.6	Pulse	0.30	3
3	Sc		208,400.88	1.11	96.2	Pulse	0.30	3
3	Ge		134,319.09	1.84	95.8	Pulse	0.30	3
3	Ge		204,095.94	1.25	96.5	Pulse	0.30	3
3	Rh		2,044,154.92	2.43	93.7	Pulse	0.30	3
3	Tb		3,537,344.37	2.10	96.6	Pulse	0.30	3

Quantitation Report

File Name	015_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 11:15
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	9/11/2019 11:44
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	0.011	ug/l	73.00	96.00	7.725E-05	Pulse	0.25	3
B			1	4.597	ug/l	3.09	28,482.09	2.296E-02	Pulse	0.15	3
Ca			1	2.311	ug/l	29.37	13,696.06	5.099E-03	Pulse	0.10	3
Sr			1	0.014	ug/l	15.29	1,090.09	2.920E-04	Pulse	0.10	3
Mo			1	0.078	ug/l	9.17	890.06	2.384E-04	Pulse	0.10	3
Ag			1	0.066	ug/l	10.54	1,560.14	4.038E-04	Pulse	0.10	3
Sn			1	0.105	ug/l	3.05	4,597.50	1.189E-03	Pulse	0.10	3
Sb			1	0.137	ug/l	9.80	2,740.34	4.999E-04	Pulse	0.10	3
Ba			1	0.021	ug/l	53.82	243.35	4.440E-05	Pulse	0.10	3
Tl			1	0.028	ug/l	7.06	1,483.46	4.504E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	14.29	580.04	1.761E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	42.19	506.70	1.538E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	13.61	2,350.18	7.137E-04	Pulse	0.10	3
Na			2	1.011	ug/l	2.67	13,091.82	8.252E-02	Pulse	0.30	3
Mg			2	0.655	ug/l	14.45	736.69	4.640E-03	Pulse	0.30	3
Al			2	63.613	ug/l	4.21	14,395.13	9.076E-02	Pulse	0.30	3
K			2	0.399	ug/l	122.72	13,848.08	8.730E-02	Pulse	0.30	3
Ca			2	2.650	ug/l	69.32	181.12	1.139E-03	Pulse	0.30	3
Ti			2	0.023	ug/l	73.92	6.67	4.203E-05	Pulse	0.30	3
V			2	-0.006	ug/l	-38.00	257.78	1.626E-03	Pulse	0.30	3
Cr			2	0.001	ug/l	538.20	962.26	6.068E-03	Pulse	0.30	3
Mn			2	0.018	ug/l	62.25	224.45	1.414E-03	Pulse	0.30	3
Fe			2	1.522	ug/l	3.14	15,758.74	9.935E-02	Pulse	0.30	3
Co			2	0.005	ug/l	29.65	121.07	7.630E-04	Pulse	0.30	3
Ni			2	0.019	ug/l	29.62	233.34	1.471E-03	Pulse	0.30	3
Cu			2	-0.223	ug/l	-6.62	6,011.16	3.790E-02	Pulse	0.30	3
Zn			2	-0.277	ug/l	-10.45	1,097.83	6.922E-03	Pulse	0.30	3
As			2	0.011	ug/l	40.05	30.67	1.935E-04	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	75.55	22.13	2.293E-05	Pulse	0.30	3
Sn			2	0.121	ug/l	17.42	1,692.34	1.756E-03	Pulse	0.30	3
Se			3	0.124	ug/l	13.92	29.47	1.452E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,240,777.72	0.80	99.4	Pulse	0.10	3
1	Sc		2,686,501.84	0.79	95.5	Pulse	0.10	3
1	Ge		543,979.65	0.26	95.4	Pulse	0.10	3
1	Ge		757,928.74	0.50	95.5	Pulse	0.10	3
1	Rh		3,733,671.51	0.41	97.0	Pulse	0.10	3
1	In		3,865,609.67	0.70	97.0	Pulse	0.10	3
1	Tb		5,484,180.12	0.81	99.0	Mix	0.10	3
1	Ho		535,684.00	0.45	97.4	Pulse	0.10	3
1	Bi		3,293,281.51	0.53	98.6	Pulse	0.10	3
2	Sc		158,643.66	1.33	98.7	Pulse	0.30	3
2	Ge		99,099.05	0.55	99.6	Pulse	0.30	3
2	Ge		147,764.59	0.37	98.5	Pulse	0.30	3
2	Rh		2,379,214.63	0.44	97.7	Pulse	0.30	3
2	In		964,111.62	0.72	99.2	Pulse	0.30	3
2	Tb		3,205,110.64	0.31	97.9	Pulse	0.30	3
2	Ho		327,343.26	0.25	97.9	Pulse	0.30	3
2	Bi		2,207,417.27	0.46	98.6	Pulse	0.30	3
3	Sc		207,455.41	1.09	95.8	Pulse	0.30	3
3	Ge		134,047.25	0.51	95.6	Pulse	0.30	3
3	Ge		202,830.52	0.70	95.9	Pulse	0.30	3
3	Rh		2,082,020.20	1.28	95.4	Pulse	0.30	3
3	Tb		3,513,439.65	0.95	95.9	Pulse	0.30	3

Quantitation Report

File Name	016_ICB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 11:26
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	9/11/2019 11:44
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	405.03	26.67	2.226E-05	Pulse	0.25	3
B			1	2.336	ug/l	4.55	17,184.61	1.440E-02	Pulse	0.15	3
Ca			1	-0.523	ug/l	-99.72	11,340.93	4.138E-03	Pulse	0.10	3
Sr			1	0.002	ug/l	134.21	470.03	1.236E-04	Pulse	0.10	3
Mo			1	0.008	ug/l	47.83	246.68	6.493E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	84.17	73.34	1.868E-05	Pulse	0.10	3
Sn			1	0.069	ug/l	28.52	4,117.36	1.050E-03	Pulse	0.10	3
Sb			1	0.024	ug/l	24.77	773.39	1.391E-04	Pulse	0.10	3
Ba			1	-0.006	ug/l	-26.37	43.33	7.797E-06	Pulse	0.10	3
Tl			1	0.002	ug/l	15.36	353.35	1.056E-04	Pulse	0.10	3
Pb			1	0.005	ug/l	48.93	356.69	1.065E-04	Pulse	0.10	3
Pb			1	0.004	ug/l	25.32	313.35	9.360E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	87.11	1,303.41	3.894E-04	Pulse	0.10	3
Na			2	-0.246	ug/l	-54.62	12,106.66	7.170E-02	Pulse	0.30	3
Mg			2	0.099	ug/l	31.48	408.90	2.422E-03	Pulse	0.30	3
Al			2	-1.090	ug/l	-15.70	482.23	2.857E-03	Pulse	0.30	3
K			2	1.071	ug/l	36.52	15,113.62	8.952E-02	Pulse	0.30	3
Ca			2	0.313	ug/l	204.95	126.67	7.505E-04	Pulse	0.30	3
Ti			2	0.005	ug/l	336.19	3.33	1.963E-05	Pulse	0.30	3
V			2	-0.003	ug/l	-172.01	298.90	1.770E-03	Pulse	0.30	3
Cr			2	-0.006	ug/l	-109.06	965.60	5.719E-03	Pulse	0.30	3
Mn			2	-0.006	ug/l	-131.53	125.56	7.441E-04	Pulse	0.30	3
Fe			2	-0.001	ug/l	-3595.61	6,558.04	3.885E-02	Pulse	0.30	3
Co			2	-0.001	ug/l	-115.11	46.65	2.764E-04	Pulse	0.30	3
Ni			2	0.002	ug/l	475.90	187.78	1.114E-03	Pulse	0.30	3
Cu			2	-0.192	ug/l	-9.89	6,702.55	3.970E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.572	ug/l	-7.94	736.69	4.362E-03	Pulse	0.30	3
As			2	-0.005	ug/l	-145.62	19.67	1.163E-04	Pulse	1.00	3
Cd			2	-0.002	ug/l	-144.29	8.87	8.776E-06	Pulse	0.30	3
Sn			2	0.018	ug/l	44.52	1,255.62	1.243E-03	Pulse	0.30	3
Se			3	0.031	ug/l	34.97	10.67	5.039E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,193,144.21	0.83	95.5	Pulse	0.10	3
1	Sc		2,741,116.83	0.26	97.4	Pulse	0.10	3
1	Ge		561,166.17	0.76	98.4	Pulse	0.10	3
1	Ge		782,867.43	1.67	98.6	Pulse	0.10	3
1	Rh		3,798,946.61	0.68	98.7	Pulse	0.10	3
1	In		3,919,174.64	0.53	98.3	Pulse	0.10	3
1	Tb		5,559,645.54	0.17	100.4	Mix	0.10	3
1	Ho		544,733.47	1.25	99.0	Pulse	0.10	3
1	Bi		3,347,597.87	0.27	100.3	Pulse	0.10	3
2	Sc		168,838.82	0.95	105.1	Pulse	0.30	3
2	Ge		103,580.88	0.65	104.1	Pulse	0.30	3
2	Ge		155,747.97	0.58	103.9	Pulse	0.30	3
2	Rh		2,456,469.76	0.45	100.9	Pulse	0.30	3
2	In		1,010,342.29	0.38	104.0	Pulse	0.30	3
2	Tb		3,313,872.02	0.67	101.2	Pulse	0.30	3
2	Ho		335,972.03	0.37	100.5	Pulse	0.30	3
2	Bi		2,269,791.58	0.27	101.4	Pulse	0.30	3
3	Sc		219,302.77	0.46	101.2	Pulse	0.30	3
3	Ge		140,432.64	1.22	100.1	Pulse	0.30	3
3	Ge		211,654.14	0.28	100.1	Pulse	0.30	3
3	Rh		2,105,197.90	0.11	96.5	Pulse	0.30	3
3	Tb		3,566,585.55	0.35	97.4	Pulse	0.30	3

Quantitation Report

File Name	017_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 11:31
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	9/11/2019 11:44
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	50.200	ug/l	1.03	341,826.00	2.702E-01	Pulse	0.25	3
B			1	97.330	ug/l	1.13	473,096.28	3.740E-01	Pulse	0.15	3
Ca			1	5040.734	ug/l	0.72	4,752,019.93	1.715E+00	Pulse	0.10	3
Sr			1	51.340	ug/l	0.58	2,564,463.14	6.833E-01	Pulse	0.10	3
Mo			1	50.615	ug/l	0.50	472,107.56	1.258E-01	Pulse	0.10	3
Ag			1	49.712	ug/l	0.77	1,173,433.99	2.993E-01	Pulse	0.10	3
Sn			1	49.440	ug/l	0.35	753,813.32	1.922E-01	Pulse	0.10	3
Sb			1	51.989	ug/l	0.28	933,646.08	1.663E-01	Pulse	0.10	3
Ba			1	49.658	ug/l	1.46	375,480.98	6.688E-02	Pulse	0.10	3
Tl			1	50.697	ug/l	0.41	2,208,869.76	6.756E-01	Pulse	0.10	3
Pb			1	50.309	ug/l	0.24	757,194.31	2.316E-01	Pulse	0.10	3
Pb			1	50.429	ug/l	0.69	667,963.17	2.043E-01	Pulse	0.10	3
Pb			1	50.344	ug/l	0.25	3,062,645.32	9.367E-01	Pulse	0.10	3
Na			2	5030.739	ug/l	0.97	7,250,137.49	4.341E+01	Analog	0.30	3
Mg			2	4935.276	ug/l	0.29	3,290,869.38	1.970E+01	Pulse	0.30	3
Al			2	4975.449	ug/l	0.33	1,129,710.30	6.763E+00	Pulse	0.30	3
K			2	5006.050	ug/l	0.64	2,769,973.36	1.658E+01	Pulse	0.30	3
Ca			2	5191.084	ug/l	1.13	144,266.40	8.637E-01	Pulse	0.30	3
Ti			2	49.205	ug/l	2.60	10,155.43	6.080E-02	Pulse	0.30	3
V			2	50.029	ug/l	0.97	334,909.53	2.005E+00	Pulse	0.30	3
Cr			2	49.195	ug/l	1.41	418,220.79	2.504E+00	Pulse	0.30	3
Mn			2	49.861	ug/l	1.46	226,726.27	1.357E+00	Pulse	0.30	3
Fe			2	4977.689	ug/l	0.82	33,039,994.24	1.978E+02	Analog	0.30	3
Co			2	49.037	ug/l	0.80	655,482.78	3.924E+00	Pulse	0.30	3
Ni			2	48.602	ug/l	0.48	171,768.45	1.028E+00	Pulse	0.30	3
Cu			2	48.021	ug/l	0.32	468,991.02	2.808E+00	Pulse	0.30	3
Zn			2	48.361	ug/l	0.15	71,760.34	4.296E-01	Pulse	0.30	3
As			2	49.750	ug/l	0.75	41,512.38	2.485E-01	Pulse	1.00	3
Cd			2	49.199	ug/l	0.66	110,120.48	1.118E-01	Pulse	0.30	3
Sn			2	49.276	ug/l	0.40	242,783.33	2.464E-01	Pulse	0.30	3
Se			3	197.153	ug/l	1.07	41,440.38	1.994E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,265,155.66	0.28	101.3	Pulse	0.10	3
1	Sc		2,771,339.34	0.81	98.5	Pulse	0.10	3
1	Ge		563,386.65	1.12	98.8	Pulse	0.10	3

Quantitation Report

1	Ge		786,229.05	0.53	99.0	Pulse	0.10	3
1	Rh		3,752,861.61	0.41	97.5	Pulse	0.10	3
1	In		3,921,076.25	0.74	98.4	Pulse	0.10	3
1	Tb		5,614,550.12	0.97	101.4	Analog	0.10	3
1	Ho		550,359.28	1.04	100.0	Pulse	0.10	3
1	Bi		3,269,485.06	0.38	97.9	Pulse	0.10	3
2	Sc		167,031.69	0.68	103.9	Pulse	0.30	3
2	Ge		101,766.31	1.00	102.3	Pulse	0.30	3
2	Ge		153,445.59	0.97	102.3	Pulse	0.30	3
2	Rh		2,396,129.42	1.35	98.4	Pulse	0.30	3
2	In		985,176.17	1.00	101.4	Pulse	0.30	3
2	Tb		3,288,239.66	0.33	100.4	Pulse	0.30	3
2	Ho		337,144.28	0.17	100.9	Pulse	0.30	3
2	Bi		2,193,863.04	0.67	98.0	Pulse	0.30	3
3	Sc		216,554.46	1.34	100.0	Pulse	0.30	3
3	Ge		137,309.23	1.05	97.9	Pulse	0.30	3
3	Ge		207,885.13	1.51	98.3	Pulse	0.30	3
3	Rh		2,086,171.10	0.69	95.6	Pulse	0.30	3
3	Tb		3,590,504.02	0.37	98.0	Pulse	0.30	3

Quantitation Report

File Name	018_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 11:36
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	9/11/2019 11:44
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	0.011	ug/l	53.94	96.00	7.855E-05	Pulse	0.25	3
B			1	4.180	ug/l	1.42	26,149.43	2.138E-02	Pulse	0.15	3
Ca			1	-0.527	ug/l	-80.52	11,070.70	4.136E-03	Pulse	0.10	3
Sr			1	0.008	ug/l	33.74	790.05	2.141E-04	Pulse	0.10	3
Mo			1	0.084	ug/l	18.98	930.07	2.518E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	24.58	300.01	7.749E-05	Pulse	0.10	3
Sn			1	0.144	ug/l	4.93	5,187.74	1.339E-03	Pulse	0.10	3
Sb			1	0.062	ug/l	15.27	1,420.12	2.599E-04	Pulse	0.10	3
Ba			1	0.009	ug/l	50.10	153.34	2.812E-05	Pulse	0.10	3
Tl			1	0.024	ug/l	2.07	1,280.10	3.901E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	50.18	476.70	1.454E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	70.51	453.36	1.383E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	33.50	1,990.14	6.069E-04	Pulse	0.10	3
Na			2	0.308	ug/l	40.73	12,035.50	7.647E-02	Pulse	0.30	3
Mg			2	0.407	ug/l	33.81	574.46	3.650E-03	Pulse	0.30	3
Al			2	-0.470	ug/l	-29.28	582.24	3.699E-03	Pulse	0.30	3
K			2	-0.084	ug/l	-373.16	13,491.08	8.571E-02	Pulse	0.30	3
Ca			2	0.343	ug/l	449.86	118.89	7.555E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	4047.08	2.22	1.409E-05	Pulse	0.30	3
V			2	0.003	ug/l	100.06	315.56	2.005E-03	Pulse	0.30	3
Cr			2	0.007	ug/l	113.72	1,006.71	6.396E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	870.23	144.45	9.177E-04	Pulse	0.30	3
Fe			2	0.685	ug/l	14.98	10,403.39	6.610E-02	Pulse	0.30	3
Co			2	0.003	ug/l	26.16	85.53	5.434E-04	Pulse	0.30	3
Ni			2	0.008	ug/l	97.41	195.56	1.243E-03	Pulse	0.30	3
Cu			2	-0.226	ug/l	-8.17	5,940.03	3.774E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.482	ug/l	-11.42	810.03	5.146E-03	Pulse	0.30	3
As			2	0.015	ug/l	56.07	33.67	2.139E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	-1089.96	12.13	1.262E-05	Pulse	0.30	3
Sn			2	0.162	ug/l	8.11	1,883.47	1.959E-03	Pulse	0.30	3
Se			3	0.127	ug/l	11.51	30.00	1.475E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,223,202.16	0.52	97.9	Pulse	0.10	3
1	Sc		2,676,740.69	0.37	95.2	Pulse	0.10	3
1	Ge		545,161.14	0.54	95.6	Pulse	0.10	3
1	Ge		757,200.49	1.61	95.4	Pulse	0.10	3
1	Rh		3,691,317.97	0.79	95.9	Pulse	0.10	3
1	In		3,874,958.48	0.63	97.2	Pulse	0.10	3
1	Tb		5,462,372.63	1.64	98.6	Mix	0.10	3
1	Ho		535,528.82	0.68	97.4	Pulse	0.10	3
1	Bi		3,280,915.89	0.72	98.3	Pulse	0.10	3
2	Sc		157,396.59	0.15	97.9	Pulse	0.30	3
2	Ge		98,195.97	0.60	98.7	Pulse	0.30	3
2	Ge		146,910.96	1.04	98.0	Pulse	0.30	3
2	Rh		2,368,920.95	0.41	97.3	Pulse	0.30	3
2	In		961,475.85	0.54	98.9	Pulse	0.30	3
2	Tb		3,192,662.23	0.39	97.5	Pulse	0.30	3
2	Ho		323,454.93	0.83	96.8	Pulse	0.30	3
2	Bi		2,184,781.93	1.06	97.6	Pulse	0.30	3
3	Sc		208,107.14	0.51	96.1	Pulse	0.30	3
3	Ge		134,768.26	0.46	96.1	Pulse	0.30	3
3	Ge		203,446.52	0.63	96.2	Pulse	0.30	3
3	Rh		2,100,798.60	0.35	96.3	Pulse	0.30	3
3	Tb		3,551,176.11	0.31	96.9	Pulse	0.30	3

Quantitation Report

File Name	019LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 11:41
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	9/11/2019 11:44
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	0.478	ug/l	1.96	3,249.70	2.589E-03	Pulse	0.25	3
B			1	24.660	ug/l	1.40	124,123.02	9.889E-02	Pulse	0.15	3
Ca			1	262.590	ug/l	0.36	255,579.38	9.342E-02	Pulse	0.10	3
Sr			1	4.903	ug/l	1.29	246,011.02	6.535E-02	Pulse	0.10	3
Mo			1	0.997	ug/l	1.46	9,486.50	2.520E-03	Pulse	0.10	3
Ag			1	0.462	ug/l	1.95	10,874.10	2.789E-03	Pulse	0.10	3
Sn			1	4.917	ug/l	1.16	77,297.46	1.983E-02	Pulse	0.10	3
Sb			1	2.116	ug/l	0.92	37,926.52	6.829E-03	Pulse	0.10	3
Ba			1	1.006	ug/l	1.32	7,608.84	1.370E-03	Pulse	0.10	3
Tl			1	0.492	ug/l	4.47	22,017.14	6.632E-03	Pulse	0.10	3
Pb			1	0.487	ug/l	10.41	7,718.99	2.325E-03	Pulse	0.10	3
Pb			1	0.487	ug/l	1.46	6,808.53	2.051E-03	Pulse	0.10	3
Pb			1	0.487	ug/l	3.35	31,300.98	9.427E-03	Pulse	0.10	3
Na			2	255.548	ug/l	1.06	366,644.54	2.275E+00	Pulse	0.30	3
Mg			2	258.378	ug/l	1.42	166,535.01	1.033E+00	Pulse	0.30	3
Al			2	23.809	ug/l	3.23	5,912.21	3.668E-02	Pulse	0.30	3
K			2	254.963	ug/l	1.58	149,262.97	9.262E-01	Pulse	0.30	3
Ca			2	280.900	ug/l	2.80	7,639.62	4.740E-02	Pulse	0.30	3
Ti			2	1.149	ug/l	2.79	231.12	1.434E-03	Pulse	0.30	3
V			2	0.968	ug/l	3.06	6,545.79	4.062E-02	Pulse	0.30	3
Cr			2	0.971	ug/l	1.00	8,914.73	5.531E-02	Pulse	0.30	3
Mn			2	1.007	ug/l	3.19	4,560.68	2.830E-02	Pulse	0.30	3
Fe			2	25.874	ug/l	1.22	171,930.09	1.067E+00	Pulse	0.30	3
Co			2	0.496	ug/l	2.96	6,453.10	4.004E-02	Pulse	0.30	3
Ni			2	1.013	ug/l	3.93	3,621.55	2.248E-02	Pulse	0.30	3
Cu			2	1.711	ug/l	1.18	24,005.41	1.490E-01	Pulse	0.30	3
Zn			2	5.029	ug/l	2.15	8,547.88	5.303E-02	Pulse	0.30	3
As			2	0.496	ug/l	1.10	421.34	2.614E-03	Pulse	1.00	3
Cd			2	0.478	ug/l	5.93	1,071.51	1.099E-03	Pulse	0.30	3
Sn			2	4.866	ug/l	1.25	24,747.26	2.538E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.562	ug/l	2.67	120.47	5.879E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,255,140.25	0.80	100.5	Pulse	0.10	3
1	Sc		2,735,875.69	0.35	97.3	Pulse	0.10	3
1	Ge		558,034.57	0.90	97.8	Pulse	0.10	3
1	Ge		772,499.96	1.32	97.3	Pulse	0.10	3
1	Rh		3,764,215.88	0.99	97.8	Pulse	0.10	3
1	In		3,899,010.29	0.62	97.8	Pulse	0.10	3
1	Tb		5,553,678.04	1.05	100.3	Analog	0.10	3
1	Ho		539,736.43	0.58	98.1	Pulse	0.10	3
1	Bi		3,320,439.22	0.43	99.5	Pulse	0.10	3
2	Sc		161,168.29	0.88	100.3	Pulse	0.30	3
2	Ge		99,244.18	0.83	99.7	Pulse	0.30	3
2	Ge		149,994.60	0.81	100.0	Pulse	0.30	3
2	Rh		2,396,485.81	0.92	98.5	Pulse	0.30	3
2	In		975,236.50	0.21	100.3	Pulse	0.30	3
2	Tb		3,241,380.15	1.01	99.0	Pulse	0.30	3
2	Ho		329,758.34	0.96	98.6	Pulse	0.30	3
2	Bi		2,205,545.75	0.44	98.5	Pulse	0.30	3
3	Sc		210,422.16	1.03	97.1	Pulse	0.30	3
3	Ge		136,016.98	0.75	97.0	Pulse	0.30	3
3	Ge		204,958.72	1.57	96.9	Pulse	0.30	3
3	Rh		2,124,242.76	0.28	97.4	Pulse	0.30	3
3	Tb		3,583,763.33	0.45	97.8	Pulse	0.30	3

Quantitation Report

File Name	020ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 11:47
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	9/11/2019 11:44
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	-60.16	13.33	1.152E-05	Pulse	0.25	3
B			1	3.487	ug/l	0.26	21,740.95	1.876E-02	Pulse	0.15	3
Ca			1	94348.485	ug/l	0.54	84,141,570.41	3.202E+01	Analog	0.10	3
Sr			1	1942.106	ug/l	1.20	84,752,725.41	2.585E+01	Analog	0.10	3
Mo			1	2065.742	ug/l	0.61	16,831,907.25	5.132E+00	Analog	0.10	3
Ag			1	0.019	ug/l	8.77	433.36	1.212E-04	Pulse	0.10	3
Sn			1	1815.361	ug/l	0.41	25,137,982.12	7.031E+00	Analog	0.10	3
Sb			1	0.188	ug/l	6.78	3,530.52	6.637E-04	Pulse	0.10	3
Ba			1	0.254	ug/l	8.64	1,903.53	3.579E-04	Pulse	0.10	3
Tl			1	0.004	ug/l	56.28	390.02	1.324E-04	Pulse	0.10	3
Pb			1	0.095	ug/l	5.32	1,543.47	5.236E-04	Pulse	0.10	3
Pb			1	0.089	ug/l	2.87	1,290.11	4.377E-04	Pulse	0.10	3
Pb			1	0.094	ug/l	3.19	6,264.13	2.125E-03	Pulse	0.10	3
Na			2	92653.721	ug/l	1.02	125,716,706.12	7.982E+02	Analog	0.30	3
Mg			2	92469.791	ug/l	0.24	58,140,542.14	3.691E+02	Analog	0.30	3
Al			2	95029.204	ug/l	0.41	20,336,514.19	1.291E+02	Analog	0.30	3
K			2	95998.385	ug/l	1.27	49,840,736.91	3.164E+02	Analog	0.30	3
Ca			2	101146.563	ug/l	0.83	2,648,802.53	1.682E+01	Pulse	0.30	3
Ti			2	1823.953	ug/l	0.63	354,940.86	2.253E+00	Pulse	0.30	3
V			2	-0.008	ug/l	-23.11	247.78	1.573E-03	Pulse	0.30	3
Cr			2	0.225	ug/l	2.45	2,750.26	1.746E-02	Pulse	0.30	3
Mn			2	0.545	ug/l	3.60	2,481.33	1.575E-02	Pulse	0.30	3
Fe			2	90294.928	ug/l	1.08	565,050,964.21	3.587E+03	Analog	0.30	3
Co			2	0.177	ug/l	9.81	2,287.07	1.453E-02	Pulse	0.30	3
Ni			2	0.487	ug/l	4.74	1,787.90	1.135E-02	Pulse	0.30	3
Cu			2	1.576	ug/l	2.83	22,235.15	1.412E-01	Pulse	0.30	3
Zn			2	-0.071	ug/l	-59.05	1,372.30	8.711E-03	Pulse	0.30	3
As			2	0.065	ug/l	11.24	72.67	4.610E-04	Pulse	1.00	3
Cd			2	-0.309	ug/l	-13.56	-608.79	-6.879E-04	Pulse	0.30	3
Sn			2	1832.881	ug/l	0.50	8,073,741.62	9.125E+00	Analog	0.30	3
Se			3	0.124	ug/l	16.25	27.27	1.445E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,159,000.87	0.72	92.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,627,875.27	0.56	93.4	Pulse	0.10	3
1	Ge		526,989.70	0.60	92.4	Pulse	0.10	3
1	Ge		711,121.92	0.90	89.6	Pulse	0.10	3
1	Rh		3,279,450.06	1.13	85.2	Pulse	0.10	3
1	In		3,575,223.18	0.63	89.7	Pulse	0.10	3
1	Tb		5,320,066.59	0.65	96.1	Mix	0.10	3
1	Ho		522,206.26	0.60	94.9	Pulse	0.10	3
1	Bi		2,947,428.50	0.43	88.3	Pulse	0.10	3
2	Sc		157,519.59	1.34	98.0	Pulse	0.30	3
2	Ge		93,940.01	0.68	94.4	Pulse	0.30	3
2	Ge		138,522.80	1.10	92.4	Pulse	0.30	3
2	Rh		2,090,680.68	0.42	85.9	Pulse	0.30	3
2	In		884,832.56	0.34	91.0	Pulse	0.30	3
2	Tb		3,122,989.04	0.37	95.4	Pulse	0.30	3
2	Ho		320,134.95	0.52	95.8	Pulse	0.30	3
2	Bi		1,959,039.58	0.39	87.5	Pulse	0.30	3
3	Sc		206,047.36	0.59	95.1	Pulse	0.30	3
3	Ge		130,349.97	1.04	92.9	Pulse	0.30	3
3	Ge		188,574.15	0.55	89.1	Pulse	0.30	3
3	Rh		1,849,873.60	0.09	84.8	Pulse	0.30	3
3	Tb		3,436,996.95	0.71	93.8	Pulse	0.30	3

Quantitation Report

File Name	021ICSB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 11:51
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	9/11/2019 11:44
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	202.12	29.33	2.670E-05	Pulse	0.25	3
B			1	52.666	ug/l	0.72	224,661.69	2.049E-01	Pulse	0.15	3
Ca			1	93893.578	ug/l	1.03	80,700,247.13	3.186E+01	Analog	0.10	3
Sr			1	1947.755	ug/l	0.73	84,454,863.74	2.592E+01	Analog	0.10	3
Mo			1	2043.163	ug/l	0.36	16,539,223.09	5.076E+00	Analog	0.10	3
Ag			1	19.893	ug/l	0.49	425,064.37	1.198E-01	Pulse	0.10	3
Sn			1	1822.796	ug/l	0.76	25,056,698.79	7.060E+00	Analog	0.10	3
Sb			1	0.187	ug/l	6.14	3,527.20	6.600E-04	Pulse	0.10	3
Ba			1	0.218	ug/l	13.14	1,650.16	3.088E-04	Pulse	0.10	3
Tl			1	0.005	ug/l	35.87	410.02	1.396E-04	Pulse	0.10	3
Pb			1	0.098	ug/l	11.64	1,576.84	5.371E-04	Pulse	0.10	3
Pb			1	0.082	ug/l	14.17	1,200.10	4.083E-04	Pulse	0.10	3
Pb			1	0.088	ug/l	1.37	5,900.73	2.009E-03	Pulse	0.10	3
Na			2	90473.109	ug/l	0.44	120,706,012.98	7.794E+02	Analog	0.30	3
Mg			2	90534.726	ug/l	0.66	55,968,828.89	3.614E+02	Analog	0.30	3
Al			2	93322.158	ug/l	0.05	19,635,218.66	1.268E+02	Analog	0.30	3
K			2	95295.118	ug/l	1.54	48,650,402.51	3.141E+02	Analog	0.30	3
Ca			2	99958.538	ug/l	0.60	2,573,866.36	1.662E+01	Pulse	0.30	3
Ti			2	1798.925	ug/l	0.24	344,197.17	2.222E+00	Pulse	0.30	3
V			2	20.174	ug/l	0.64	125,388.76	8.096E-01	Pulse	0.30	3
Cr			2	20.789	ug/l	1.19	164,403.83	1.062E+00	Pulse	0.30	3
Mn			2	21.152	ug/l	0.85	89,258.88	5.763E-01	Pulse	0.30	3
Fe			2	90562.461	ug/l	0.31	557,238,786.75	3.598E+03	Analog	0.30	3
Co			2	20.165	ug/l	0.53	249,951.52	1.614E+00	Pulse	0.30	3
Ni			2	20.090	ug/l	0.28	65,931.14	4.257E-01	Pulse	0.30	3
Cu			2	18.299	ug/l	0.03	170,560.62	1.101E+00	Pulse	0.30	3
Zn			2	17.807	ug/l	0.54	25,413.14	1.641E-01	Pulse	0.30	3
As			2	20.553	ug/l	0.54	15,914.74	1.028E-01	Pulse	1.00	3
Cd			2	19.636	ug/l	1.24	39,084.82	4.462E-02	Pulse	0.30	3
Sn			2	1890.377	ug/l	0.97	8,244,332.17	9.411E+00	Analog	0.30	3
Se			3	20.103	ug/l	1.15	3,879.19	2.035E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,096,486.22	0.57	87.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,532,631.52	0.23	90.0	Pulse	0.10	3
1	Ge		516,343.54	0.74	90.5	Pulse	0.10	3
1	Ge		695,334.81	0.71	87.6	Pulse	0.10	3
1	Rh		3,258,055.26	0.62	84.6	Pulse	0.10	3
1	In		3,549,076.38	0.57	89.1	Pulse	0.10	3
1	Tb		5,343,551.17	0.48	96.5	Pulse	0.10	3
1	Ho		527,414.24	1.52	95.9	Pulse	0.10	3
1	Bi		2,936,982.25	1.07	88.0	Pulse	0.10	3
2	Sc		154,873.68	0.30	96.4	Pulse	0.30	3
2	Ge		93,008.02	0.54	93.5	Pulse	0.30	3
2	Ge		136,954.04	0.51	91.3	Pulse	0.30	3
2	Rh		2,081,379.71	0.20	85.5	Pulse	0.30	3
2	In		876,024.69	0.29	90.1	Pulse	0.30	3
2	Tb		3,126,895.22	0.56	95.5	Pulse	0.30	3
2	Ho		321,217.86	0.67	96.1	Pulse	0.30	3
2	Bi		1,957,842.35	0.42	87.4	Pulse	0.30	3
3	Sc		206,474.12	0.53	95.3	Pulse	0.30	3
3	Ge		130,347.83	0.76	92.9	Pulse	0.30	3
3	Ge		190,659.21	0.32	90.1	Pulse	0.30	3
3	Rh		1,843,822.15	0.31	84.5	Pulse	0.30	3
3	Tb		3,427,290.00	0.37	93.6	Pulse	0.30	3

Quantitation Report

File Name	022SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 11:56
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	9/11/2019 11:44
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	0.020	ug/l	38.29	132.00	1.254E-04	Pulse	0.25	3
B			1	1.360	ug/l	10.97	11,279.52	1.071E-02	Pulse	0.15	3
Ca			1	23.332	ug/l	5.29	29,704.06	1.223E-02	Pulse	0.10	3
Sr			1	0.283	ug/l	7.76	13,966.65	3.865E-03	Pulse	0.10	3
Mo			1	0.902	ug/l	7.82	8,255.78	2.285E-03	Pulse	0.10	3
Ag			1	0.010	ug/l	31.49	250.01	6.522E-05	Pulse	0.10	3
Sn			1	0.507	ug/l	2.02	10,523.96	2.744E-03	Pulse	0.10	3
Sb			1	0.026	ug/l	22.17	810.05	1.452E-04	Pulse	0.10	3
Ba			1	0.025	ug/l	49.02	273.35	4.897E-05	Pulse	0.10	3
Tl			1	0.006	ug/l	10.95	513.36	1.543E-04	Pulse	0.10	3
Pb			1	0.026	ug/l	27.74	676.71	2.033E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	22.96	553.36	1.662E-04	Pulse	0.10	3
Pb			1	0.021	ug/l	10.65	2,533.51	7.613E-04	Pulse	0.10	3
Na			2	14.541	ug/l	8.07	28,880.31	1.991E-01	Pulse	0.30	3
Mg			2	9.682	ug/l	13.39	5,899.99	4.067E-02	Pulse	0.30	3
Al			2	21.839	ug/l	1.15	4,934.10	3.401E-02	Pulse	0.30	3
K			2	8.475	ug/l	10.99	16,528.30	1.139E-01	Pulse	0.30	3
Ca			2	20.216	ug/l	20.42	588.91	4.059E-03	Pulse	0.30	3
Ti			2	0.348	ug/l	23.77	64.44	4.439E-04	Pulse	0.30	3
V			2	0.000	ug/l	468.83	273.34	1.884E-03	Pulse	0.30	3
Cr			2	0.005	ug/l	59.37	911.15	6.280E-03	Pulse	0.30	3
Mn			2	0.050	ug/l	22.43	328.90	2.266E-03	Pulse	0.30	3
Fe			2	12.023	ug/l	9.06	74,933.77	5.165E-01	Pulse	0.30	3
Co			2	0.013	ug/l	6.82	196.47	1.354E-03	Pulse	0.30	3
Ni			2	0.078	ug/l	5.80	394.45	2.718E-03	Pulse	0.30	3
Cu			2	-0.108	ug/l	-17.07	6,454.68	4.449E-02	Pulse	0.30	3
Zn			2	1.092	ug/l	1.48	2,731.38	1.882E-02	Pulse	0.30	3
As			2	0.012	ug/l	70.93	28.67	1.975E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.018	ug/l	13.05	51.47	5.504E-05	Pulse	0.30	3
Sn			2	0.399	ug/l	12.58	2,936.98	3.141E-03	Pulse	0.30	3
Se			3	0.021	ug/l	81.88	8.27	4.089E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,053,891.55	0.73	84.4	Pulse	0.10	3
1	Sc		2,428,733.71	0.73	86.3	Pulse	0.10	3
1	Ge		512,574.34	0.43	89.9	Pulse	0.10	3
1	Ge		717,213.40	0.81	90.4	Pulse	0.10	3
1	Rh		3,614,273.49	0.41	93.9	Pulse	0.10	3
1	In		3,835,206.16	0.49	96.2	Pulse	0.10	3
1	Tb		5,576,428.88	0.46	100.7	Analog	0.10	3
1	Ho		538,884.29	0.66	98.0	Pulse	0.10	3
1	Bi		3,327,495.27	0.79	99.7	Pulse	0.10	3
2	Sc		145,094.90	0.36	90.3	Pulse	0.30	3
2	Ge		91,508.75	1.39	92.0	Pulse	0.30	3
2	Ge		138,920.10	0.53	92.6	Pulse	0.30	3
2	Rh		2,307,662.41	0.44	94.8	Pulse	0.30	3
2	In		935,190.61	0.08	96.2	Pulse	0.30	3
2	Tb		3,159,859.04	1.11	96.5	Pulse	0.30	3
2	Ho		325,178.84	0.58	97.3	Pulse	0.30	3
2	Bi		2,202,049.70	0.19	98.4	Pulse	0.30	3
3	Sc		205,441.46	0.71	94.8	Pulse	0.30	3
3	Ge		134,129.22	0.40	95.6	Pulse	0.30	3
3	Ge		202,065.02	0.18	95.5	Pulse	0.30	3
3	Rh		2,103,505.68	0.72	96.4	Pulse	0.30	3
3	Tb		3,557,230.69	0.16	97.1	Pulse	0.30	3

Quantitation Report

File Name	023_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:01
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	9/11/2019 11:44
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	47.509	ug/l	7.31	284,511.80	2.557E-01	Pulse	0.25	3
B			1	93.031	ug/l	6.05	398,191.78	3.577E-01	Pulse	0.15	3
Ca			1	4790.182	ug/l	8.17	4,284,730.98	1.630E+00	Pulse	0.10	3
Sr			1	48.807	ug/l	8.05	2,438,428.19	6.496E-01	Pulse	0.10	3
Mo			1	48.384	ug/l	8.08	451,387.56	1.203E-01	Pulse	0.10	3
Ag			1	47.104	ug/l	7.80	1,128,324.23	2.836E-01	Pulse	0.10	3
Sn			1	48.085	ug/l	8.28	743,901.97	1.870E-01	Pulse	0.10	3
Sb			1	48.848	ug/l	7.52	913,504.65	1.563E-01	Pulse	0.10	3
Ba			1	46.624	ug/l	8.19	367,020.79	6.280E-02	Pulse	0.10	3
Tl			1	48.613	ug/l	7.62	2,218,354.45	6.478E-01	Pulse	0.10	3
Pb			1	48.264	ug/l	8.00	760,686.19	2.222E-01	Pulse	0.10	3
Pb			1	48.227	ug/l	7.76	669,025.25	1.954E-01	Pulse	0.10	3
Pb			1	48.216	ug/l	7.22	3,072,640.37	8.972E-01	Pulse	0.10	3
Na			2	5146.571	ug/l	3.98	6,493,750.85	4.441E+01	Analog	0.30	3
Mg			2	4969.381	ug/l	3.18	2,901,541.13	1.984E+01	Pulse	0.30	3
Al			2	4957.091	ug/l	3.57	985,508.26	6.739E+00	Pulse	0.30	3
K			2	5073.295	ug/l	3.38	2,457,801.71	1.680E+01	Pulse	0.30	3
Ca			2	5321.921	ug/l	3.81	129,497.08	8.855E-01	Pulse	0.30	3
Ti			2	51.558	ug/l	1.68	9,321.58	6.371E-02	Pulse	0.30	3
V			2	52.050	ug/l	3.50	305,077.47	2.086E+00	Pulse	0.30	3
Cr			2	51.609	ug/l	2.75	384,164.83	2.626E+00	Pulse	0.30	3
Mn			2	51.985	ug/l	2.59	207,006.27	1.415E+00	Pulse	0.30	3
Fe			2	5282.303	ug/l	2.26	30,707,039.89	2.099E+02	Analog	0.30	3
Co			2	51.618	ug/l	3.03	604,203.05	4.131E+00	Pulse	0.30	3
Ni			2	51.357	ug/l	3.66	158,915.85	1.087E+00	Pulse	0.30	3
Cu			2	51.327	ug/l	3.18	438,435.00	2.998E+00	Pulse	0.30	3
Zn			2	51.585	ug/l	2.97	66,939.07	4.576E-01	Pulse	0.30	3
As			2	52.375	ug/l	2.98	38,270.23	2.616E-01	Pulse	1.00	3
Cd			2	51.316	ug/l	2.51	105,598.48	1.166E-01	Pulse	0.30	3
Sn			2	51.745	ug/l	4.17	234,258.14	2.587E-01	Pulse	0.30	3
Se			3	194.442	ug/l	0.80	40,271.55	1.966E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,115,881.72	5.96	89.4	Pulse	0.10	3
1	Sc		2,639,746.16	7.43	93.8	Pulse	0.10	3
1	Ge		542,905.71	5.44	95.2	Pulse	0.10	3

Quantitation Report

1	Ge		757,849.67	5.86	95.5	Pulse	0.10	3
1	Rh		3,768,489.11	7.39	97.9	Pulse	0.10	3
1	In		3,994,128.09	7.36	100.2	Pulse	0.10	3
1	Tb		5,867,611.16	7.22	106.0	Analog	0.10	3
1	Ho		569,820.37	6.52	103.6	Pulse	0.10	3
1	Bi		3,435,128.70	6.21	102.9	Pulse	0.10	3
2	Sc		146,360.26	3.17	91.1	Pulse	0.30	3
2	Ge		90,802.06	4.32	91.2	Pulse	0.30	3
2	Ge		137,870.87	2.73	91.9	Pulse	0.30	3
2	Rh		2,222,571.92	3.49	91.3	Pulse	0.30	3
2	In		906,360.37	3.69	93.3	Pulse	0.30	3
2	Tb		3,099,786.06	4.12	94.7	Pulse	0.30	3
2	Ho		317,655.41	3.56	95.0	Pulse	0.30	3
2	Bi		2,101,984.78	3.90	93.9	Pulse	0.30	3
3	Sc		208,386.74	0.70	96.2	Pulse	0.30	3
3	Ge		134,588.52	0.94	96.0	Pulse	0.30	3
3	Ge		204,819.12	0.11	96.8	Pulse	0.30	3
3	Rh		2,077,069.22	0.45	95.2	Pulse	0.30	3
3	Tb		3,588,420.27	0.89	98.0	Pulse	0.30	3

Quantitation Report

File Name	024_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:06
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	9/11/2019 11:44
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	40.54	81.33	7.353E-05	Pulse	0.25	3
B			1	3.793	ug/l	1.31	22,079.06	1.992E-02	Pulse	0.15	3
Ca			1	0.153	ug/l	379.55	11,147.47	4.367E-03	Pulse	0.10	3
Sr			1	0.029	ug/l	5.36	1,830.18	4.938E-04	Pulse	0.10	3
Mo			1	0.138	ug/l	12.95	1,433.45	3.866E-04	Pulse	0.10	3
Ag			1	0.013	ug/l	13.83	336.69	8.658E-05	Pulse	0.10	3
Sn			1	0.318	ug/l	69.41	7,846.89	2.012E-03	Pulse	0.10	3
Sb			1	0.060	ug/l	15.21	1,430.12	2.543E-04	Pulse	0.10	3
Ba			1	0.002	ug/l	322.75	106.67	1.891E-05	Pulse	0.10	3
Tl			1	0.020	ug/l	11.13	1,146.76	3.395E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	46.77	483.36	1.431E-04	Pulse	0.10	3
Pb			1	0.016	ug/l	58.62	480.03	1.421E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	46.16	1,923.45	5.695E-04	Pulse	0.10	3
Na			2	3.123	ug/l	7.22	15,329.28	1.007E-01	Pulse	0.30	3
Mg			2	1.464	ug/l	4.71	1,197.84	7.870E-03	Pulse	0.30	3
Al			2	0.444	ug/l	113.95	752.25	4.941E-03	Pulse	0.30	3
K			2	0.658	ug/l	46.95	13,418.84	8.816E-02	Pulse	0.30	3
Ca			2	2.255	ug/l	56.80	163.33	1.073E-03	Pulse	0.30	3
Ti			2	0.042	ug/l	72.52	10.00	6.562E-05	Pulse	0.30	3
V			2	-0.007	ug/l	-106.17	245.56	1.613E-03	Pulse	0.30	3
Cr			2	0.010	ug/l	148.62	997.82	6.554E-03	Pulse	0.30	3
Mn			2	-0.002	ug/l	-144.27	131.11	8.613E-04	Pulse	0.30	3
Fe			2	1.927	ug/l	1.76	17,571.70	1.154E-01	Pulse	0.30	3
Co			2	0.003	ug/l	39.20	87.73	5.766E-04	Pulse	0.30	3
Ni			2	0.011	ug/l	143.21	196.67	1.292E-03	Pulse	0.30	3
Cu			2	-0.444	ug/l	-5.44	3,832.72	2.518E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.499	ug/l	-9.04	760.03	4.993E-03	Pulse	0.30	3
As			2	0.008	ug/l	68.81	27.33	1.796E-04	Pulse	1.00	3
Cd			2	0.001	ug/l	338.11	15.38	1.615E-05	Pulse	0.30	3
Sn			2	0.210	ug/l	8.17	2,095.72	2.200E-03	Pulse	0.30	3
Se			3	0.103	ug/l	8.10	25.47	1.236E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,108,718.97	1.35	88.8	Pulse	0.10	3
1	Sc		2,553,457.46	1.07	90.8	Pulse	0.10	3
1	Ge		528,987.30	0.33	92.7	Pulse	0.10	3
1	Ge		738,661.08	0.15	93.1	Pulse	0.10	3
1	Rh		3,706,463.38	0.40	96.3	Pulse	0.10	3
1	In		3,891,381.46	0.85	97.6	Pulse	0.10	3
1	Tb		5,627,658.46	0.96	101.6	Analog	0.10	3
1	Ho		546,546.63	1.13	99.4	Pulse	0.10	3
1	Bi		3,377,844.43	0.18	101.2	Pulse	0.10	3
2	Sc		152,205.26	0.41	94.7	Pulse	0.30	3
2	Ge		95,016.05	0.35	95.5	Pulse	0.30	3
2	Ge		144,127.38	0.24	96.1	Pulse	0.30	3
2	Rh		2,352,555.81	0.45	96.6	Pulse	0.30	3
2	In		952,624.67	0.04	98.0	Pulse	0.30	3
2	Tb		3,210,321.54	0.05	98.0	Pulse	0.30	3
2	Ho		328,643.01	0.32	98.3	Pulse	0.30	3
2	Bi		2,213,553.18	0.23	98.9	Pulse	0.30	3
3	Sc		205,784.24	0.49	95.0	Pulse	0.30	3
3	Ge		134,846.35	0.93	96.1	Pulse	0.30	3
3	Ge		206,093.04	0.41	97.4	Pulse	0.30	3
3	Rh		2,132,472.83	0.45	97.8	Pulse	0.30	3
3	Tb		3,580,010.00	0.61	97.7	Pulse	0.30	3

Quantitation Report

File Name	025SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:11
Sample Name	mp17220-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	9/11/2019 11:44
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	0.011	ug/l	86.49	50.67	4.657E-05	Pulse	0.25	3
B			1	5.511	ug/l	2.67	17,411.48	1.599E-02	Pulse	0.15	3
Ca			1	8.778	ug/l	18.92	14,530.19	5.804E-03	Pulse	0.10	3
Sr			1	0.120	ug/l	4.83	3,317.14	8.976E-04	Pulse	0.10	3
Mo			1	0.280	ug/l	6.80	1,446.79	3.914E-04	Pulse	0.10	3
Ag			1	0.018	ug/l	13.83	230.01	5.934E-05	Pulse	0.10	3
Sn			1	0.711	ug/l	9.53	8,369.26	2.158E-03	Pulse	0.10	3
Sb			1	0.142	ug/l	15.22	1,636.82	2.904E-04	Pulse	0.10	3
Ba			1	0.041	ug/l	33.65	243.35	4.321E-05	Pulse	0.10	3
Tl			1	0.017	ug/l	26.77	666.71	1.886E-04	Pulse	0.10	3
Pb			1	0.036	ug/l	30.11	593.37	1.682E-04	Pulse	0.10	3
Pb			1	0.046	ug/l	15.32	596.71	1.690E-04	Pulse	0.10	3
Pb			1	0.035	ug/l	24.30	2,493.53	7.067E-04	Pulse	0.10	3
Na			2	15.924	ug/l	2.33	21,099.92	1.424E-01	Pulse	0.30	3
Mg			2	5.582	ug/l	5.26	1,951.25	1.317E-02	Pulse	0.30	3
Al			2	5.456	ug/l	17.16	1,192.28	8.044E-03	Pulse	0.30	3
K			2	3.472	ug/l	39.39	13,587.88	9.171E-02	Pulse	0.30	3
Ca			2	10.457	ug/l	9.61	232.23	1.568E-03	Pulse	0.30	3
Ti			2	0.390	ug/l	32.02	37.78	2.547E-04	Pulse	0.30	3
V			2	0.107	ug/l	14.24	595.58	4.019E-03	Pulse	0.30	3
Cr			2	0.221	ug/l	6.98	1,721.78	1.162E-02	Pulse	0.30	3
Mn			2	0.095	ug/l	44.53	326.68	2.207E-03	Pulse	0.30	3
Fe			2	7.773	ug/l	2.45	28,637.14	1.933E-01	Pulse	0.30	3
Co			2	0.016	ug/l	31.86	142.15	9.604E-04	Pulse	0.30	3
Ni			2	0.013	ug/l	170.26	177.78	1.200E-03	Pulse	0.30	3
Cu			2	0.829	ug/l	5.70	11,037.12	7.450E-02	Pulse	0.30	3
Zn			2	0.232	ug/l	51.12	1,532.31	1.034E-02	Pulse	0.30	3
As			2	0.039	ug/l	22.54	35.00	2.363E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.005	ug/l	78.24	17.62	1.885E-05	Pulse	0.30	3
Sn			2	0.656	ug/l	7.76	2,604.69	2.787E-03	Pulse	0.30	3
Se			3	0.092	ug/l	18.28	13.87	6.580E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,089,090.98	0.81	87.2	Pulse	0.10	3
1	Sc		2,504,879.23	1.83	89.0	Pulse	0.10	3
1	Ge		536,339.15	1.36	94.0	Pulse	0.10	3
1	Ge		748,604.83	1.66	94.3	Pulse	0.10	3
1	Rh		3,694,611.09	1.43	96.0	Pulse	0.10	3
1	In		3,878,601.08	0.94	97.3	Pulse	0.10	3
1	Tb		5,639,636.58	1.17	101.8	Analog	0.10	3
1	Ho		551,737.56	1.03	100.3	Pulse	0.10	3
1	Bi		3,531,433.70	1.17	105.8	Pulse	0.10	3
2	Sc		148,169.16	0.78	92.2	Pulse	0.30	3
2	Ge		96,579.73	1.01	97.1	Pulse	0.30	3
2	Ge		144,482.18	0.20	96.3	Pulse	0.30	3
2	Rh		2,347,146.64	0.47	96.4	Pulse	0.30	3
2	In		934,765.46	0.60	96.2	Pulse	0.30	3
2	Tb		3,195,847.44	0.69	97.6	Pulse	0.30	3
2	Ho		326,866.65	0.73	97.8	Pulse	0.30	3
2	Bi		2,283,378.10	0.69	102.0	Pulse	0.30	3
3	Sc		210,881.02	0.47	97.3	Pulse	0.30	3
3	Ge		138,478.15	0.96	98.7	Pulse	0.30	3
3	Ge		210,741.59	0.74	99.6	Pulse	0.30	3
3	Rh		2,184,663.04	0.64	100.2	Pulse	0.30	3
3	Tb		3,690,700.13	0.54	100.7	Pulse	0.30	3

Quantitation Report

File Name	026SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:16
Sample Name	mp17220-b1
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	9/11/2019 11:44
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	74.521	ug/l	0.61	218,858.50	2.005E-01	Pulse	0.25	3
B			1	82.326	ug/l	0.96	176,088.90	1.614E-01	Pulse	0.15	3
Ca			1	4072.621	ug/l	0.29	1,765,953.10	6.953E-01	Pulse	0.10	3
Sr			1	78.084	ug/l	1.26	1,901,813.05	5.197E-01	Pulse	0.10	3
Mo			1	77.191	ug/l	1.05	351,091.23	9.594E-02	Pulse	0.10	3
Ag			1	76.274	ug/l	0.62	892,912.75	2.296E-01	Pulse	0.10	3
Sn			1	78.273	ug/l	1.03	592,496.61	1.523E-01	Pulse	0.10	3
Sb			1	77.153	ug/l	0.42	703,321.42	1.234E-01	Pulse	0.10	3
Ba			1	74.668	ug/l	1.84	286,585.06	5.029E-02	Pulse	0.10	3
Tl			1	75.162	ug/l	0.64	1,743,750.24	5.008E-01	Pulse	0.10	3
Pb			1	77.338	ug/l	0.57	619,852.73	1.780E-01	Pulse	0.10	3
Pb			1	77.657	ug/l	0.66	547,787.95	1.573E-01	Pulse	0.10	3
Pb			1	77.310	ug/l	0.40	2,504,530.97	7.193E-01	Pulse	0.10	3
Na			2	3954.006	ug/l	2.08	2,528,061.15	1.710E+01	Pulse	0.30	3
Mg			2	3896.113	ug/l	2.11	1,149,659.68	7.778E+00	Pulse	0.30	3
Al			2	3808.006	ug/l	2.35	382,951.49	2.591E+00	Pulse	0.30	3
K			2	3943.448	ug/l	2.77	973,037.11	6.584E+00	Pulse	0.30	3
Ca			2	4269.990	ug/l	2.87	52,562.63	3.557E-01	Pulse	0.30	3
Ti			2	75.376	ug/l	2.68	6,883.72	4.657E-02	Pulse	0.30	3
V			2	79.357	ug/l	2.57	235,092.99	1.591E+00	Pulse	0.30	3
Cr			2	78.769	ug/l	3.17	296,404.24	2.006E+00	Pulse	0.30	3
Mn			2	78.398	ug/l	3.44	157,721.67	1.067E+00	Pulse	0.30	3
Fe			2	4214.697	ug/l	2.32	12,380,705.90	8.376E+01	Analog	0.30	3
Co			2	79.106	ug/l	2.19	467,868.38	3.165E+00	Pulse	0.30	3
Ni			2	78.345	ug/l	2.28	122,544.09	8.291E-01	Pulse	0.30	3
Cu			2	80.503	ug/l	2.77	349,047.43	2.362E+00	Pulse	0.30	3
Zn			2	73.106	ug/l	3.87	48,320.92	3.270E-01	Pulse	0.30	3
As			2	74.838	ug/l	1.73	27,637.63	1.870E-01	Pulse	1.00	3
Cd			2	74.231	ug/l	1.79	77,947.92	8.432E-02	Pulse	0.30	3
Sn			2	79.183	ug/l	1.54	183,245.77	1.982E-01	Pulse	0.30	3
Se			3	333.009	ug/l	2.33	36,926.70	1.684E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,091,315.73	0.70	87.4	Pulse	0.10	3
1	Sc		2,539,903.87	0.28	90.3	Pulse	0.10	3
1	Ge		556,323.91	0.31	97.5	Pulse	0.10	3

Quantitation Report

1	Ge		777,793.22	1.03	98.0	Pulse	0.10	3
1	Rh		3,659,765.05	0.62	95.1	Pulse	0.10	3
1	In		3,889,090.70	0.32	97.6	Pulse	0.10	3
1	Tb		5,699,290.75	0.61	102.9	Analog	0.10	3
1	Ho		555,685.75	0.41	101.0	Pulse	0.10	3
1	Bi		3,481,824.64	0.67	104.3	Pulse	0.10	3
2	Sc		147,862.46	2.51	92.0	Pulse	0.30	3
2	Ge		98,523.51	0.62	99.0	Pulse	0.30	3
2	Ge		149,065.69	1.28	99.4	Pulse	0.30	3
2	Rh		2,324,464.70	1.79	95.5	Pulse	0.30	3
2	In		924,533.97	1.33	95.1	Pulse	0.30	3
2	Tb		3,235,562.16	1.45	98.8	Pulse	0.30	3
2	Ho		330,863.89	2.02	99.0	Pulse	0.30	3
2	Bi		2,246,081.51	1.84	100.3	Pulse	0.30	3
3	Sc		222,791.60	2.62	102.8	Pulse	0.30	3
3	Ge		144,565.36	3.02	103.1	Pulse	0.30	3
3	Ge		219,395.59	2.37	103.7	Pulse	0.30	3
3	Rh		2,246,467.69	2.02	103.0	Pulse	0.30	3
3	Tb		3,852,430.68	1.93	105.2	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:23
Sample Name	jc94583-1f
Sample Type	Sample
Comment	due
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	9/11/2019 11:44
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	10.21	96.00	8.589E-05	Pulse	0.25	3
B			1	142.599	ug/l	0.44	307,791.89	2.754E-01	Pulse	0.15	3
Ca			1	95314.497	ug/l	1.41	42,914,449.36	1.618E+01	Analog	0.10	3
Sr			1	409.996	ug/l	0.59	9,654,460.48	2.728E+00	Analog	0.10	3
Mo			1	2.282	ug/l	2.30	10,186.92	2.879E-03	Pulse	0.10	3
Ag			1	0.027	ug/l	21.97	340.02	8.847E-05	Pulse	0.10	3
Sn			1	0.592	ug/l	8.91	7,405.35	1.928E-03	Pulse	0.10	3
Sb			1	0.323	ug/l	2.05	3,350.49	5.786E-04	Pulse	0.10	3
Ba			1	145.206	ug/l	0.74	566,253.29	9.778E-02	Pulse	0.10	3
Tl			1	0.088	ug/l	7.39	2,116.91	6.580E-04	Pulse	0.10	3
Pb			1	0.138	ug/l	11.88	1,296.78	4.033E-04	Pulse	0.10	3
Pb			1	0.135	ug/l	25.98	1,126.75	3.502E-04	Pulse	0.10	3
Pb			1	0.132	ug/l	8.81	5,177.24	1.609E-03	Pulse	0.10	3
Na			2	121683.677	ug/l	0.65	82,133,605.63	5.242E+02	Analog	0.30	3
Mg			2	96009.363	ug/l	0.84	30,025,987.70	1.916E+02	Analog	0.30	3
Al			2	82.294	ug/l	5.62	9,436.41	6.024E-02	Pulse	0.30	3
K			2	22567.300	ug/l	0.38	5,840,394.91	3.727E+01	Analog	0.30	3
Ca			2	96860.597	ug/l	0.61	1,261,822.97	8.052E+00	Pulse	0.30	3
Ti			2	1.514	ug/l	17.50	148.89	9.492E-04	Pulse	0.30	3
V			2	1.547	ug/l	3.66	5,146.42	3.284E-02	Pulse	0.30	3
Cr			2	0.527	ug/l	4.77	3,041.43	1.941E-02	Pulse	0.30	3
Mn			2	531.321	ug/l	0.99	1,132,593.08	7.228E+00	Pulse	0.30	3
Fe			2	135.806	ug/l	1.64	428,805.57	2.737E+00	Pulse	0.30	3
Co			2	3.751	ug/l	1.84	23,568.04	1.504E-01	Pulse	0.30	3
Ni			2	2.535	ug/l	1.77	4,365.08	2.786E-02	Pulse	0.30	3
Cu			2	1.944	ug/l	2.50	16,689.69	1.065E-01	Pulse	0.30	3
Zn			2	1.580	ug/l	9.24	2,538.01	1.620E-02	Pulse	0.30	3
As			2	0.674	ug/l	12.47	285.33	1.822E-03	Pulse	1.00	3
Cd			2	0.162	ug/l	16.05	183.66	1.977E-04	Pulse	0.30	3
Sn			2	0.557	ug/l	12.86	2,359.10	2.540E-03	Pulse	0.30	3
Se			3	8.780	ug/l	1.12	953.03	4.458E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,117,529.28	0.29	89.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,652,883.09	0.72	94.3	Pulse	0.10	3
1	Ge		575,528.56	1.17	100.9	Pulse	0.10	3
1	Ge		798,314.96	1.19	100.6	Pulse	0.10	3
1	Rh		3,538,735.68	0.41	91.9	Pulse	0.10	3
1	In		3,841,310.02	1.00	96.4	Pulse	0.10	3
1	Tb		5,790,870.12	1.12	104.6	Analog	0.10	3
1	Ho		566,501.44	0.60	103.0	Pulse	0.10	3
1	Bi		3,216,587.35	0.55	96.3	Pulse	0.10	3
2	Sc		156,704.03	0.92	97.5	Pulse	0.30	3
2	Ge		102,616.14	0.37	103.1	Pulse	0.30	3
2	Ge		153,536.41	0.60	102.4	Pulse	0.30	3
2	Rh		2,259,275.67	0.40	92.8	Pulse	0.30	3
2	In		928,542.10	0.43	95.5	Pulse	0.30	3
2	Tb		3,250,335.49	0.67	99.3	Pulse	0.30	3
2	Ho		333,298.38	0.47	99.7	Pulse	0.30	3
2	Bi		2,084,528.32	0.23	93.1	Pulse	0.30	3
3	Sc		222,037.82	0.49	102.5	Pulse	0.30	3
3	Ge		141,380.07	0.50	100.8	Pulse	0.30	3
3	Ge		213,780.21	0.47	101.1	Pulse	0.30	3
3	Rh		2,072,851.66	0.32	95.0	Pulse	0.30	3
3	Tb		3,698,366.52	0.47	101.0	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:27
Sample Name	jc94583-2f
Sample Type	Sample
Comment	due
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	9/11/2019 11:44
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	35.75	104.00	8.991E-05	Pulse	0.25	3
B			1	142.200	ug/l	0.15	317,352.93	2.747E-01	Pulse	0.15	3
Ca			1	93999.662	ug/l	0.35	43,847,611.01	1.595E+01	Analog	0.10	3
Sr			1	402.519	ug/l	1.03	9,726,450.90	2.678E+00	Analog	0.10	3
Mo			1	2.203	ug/l	4.55	10,096.90	2.781E-03	Pulse	0.10	3
Ag			1	0.019	ug/l	34.94	253.35	6.465E-05	Pulse	0.10	3
Sn			1	0.481	ug/l	10.05	6,708.34	1.713E-03	Pulse	0.10	3
Sb			1	0.328	ug/l	3.54	3,493.86	5.864E-04	Pulse	0.10	3
Ba			1	140.777	ug/l	1.36	564,737.50	9.480E-02	Pulse	0.10	3
Tl			1	0.077	ug/l	9.51	1,910.19	5.859E-04	Pulse	0.10	3
Pb			1	0.123	ug/l	4.94	1,200.10	3.679E-04	Pulse	0.10	3
Pb			1	0.113	ug/l	18.58	993.41	3.047E-04	Pulse	0.10	3
Pb			1	0.116	ug/l	7.73	4,747.18	1.456E-03	Pulse	0.10	3
Na			2	121679.011	ug/l	0.70	84,030,016.66	5.241E+02	Analog	0.30	3
Mg			2	94694.743	ug/l	0.55	30,300,167.69	1.890E+02	Analog	0.30	3
Al			2	73.133	ug/l	9.04	8,657.93	5.401E-02	Pulse	0.30	3
K			2	22139.179	ug/l	0.92	5,862,181.99	3.657E+01	Analog	0.30	3
Ca			2	95916.259	ug/l	0.16	1,278,428.73	7.974E+00	Pulse	0.30	3
Ti			2	1.122	ug/l	5.31	113.34	7.070E-04	Pulse	0.30	3
V			2	1.625	ug/l	3.38	5,515.42	3.440E-02	Pulse	0.30	3
Cr			2	0.515	ug/l	4.15	3,062.55	1.910E-02	Pulse	0.30	3
Mn			2	521.334	ug/l	0.47	1,137,035.06	7.092E+00	Pulse	0.30	3
Fe			2	125.800	ug/l	0.95	406,881.90	2.538E+00	Pulse	0.30	3
Co			2	3.743	ug/l	1.53	24,062.14	1.501E-01	Pulse	0.30	3
Ni			2	2.612	ug/l	7.61	4,596.25	2.867E-02	Pulse	0.30	3
Cu			2	32.521	ug/l	0.54	157,804.31	9.843E-01	Pulse	0.30	3
Zn			2	19.376	ug/l	1.13	14,994.77	9.353E-02	Pulse	0.30	3
As			2	0.712	ug/l	7.24	307.33	1.917E-03	Pulse	1.00	3
Cd			2	0.165	ug/l	10.42	189.21	2.010E-04	Pulse	0.30	3
Sn			2	0.460	ug/l	10.45	2,165.73	2.301E-03	Pulse	0.30	3
Se			3	8.509	ug/l	1.86	936.30	4.321E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,155,390.31	0.75	92.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,748,608.71	0.75	97.7	Pulse	0.10	3
1	Ge		600,752.84	0.46	105.3	Pulse	0.10	3
1	Ge		819,444.39	0.52	103.2	Pulse	0.10	3
1	Rh		3,631,495.05	1.02	94.3	Pulse	0.10	3
1	In		3,916,099.36	0.30	98.3	Pulse	0.10	3
1	Tb		5,957,583.87	0.49	107.6	Analog	0.10	3
1	Ho		586,115.59	0.33	106.5	Pulse	0.10	3
1	Bi		3,262,029.64	0.93	97.7	Pulse	0.10	3
2	Sc		160,324.64	0.39	99.8	Pulse	0.30	3
2	Ge		104,615.93	0.62	105.1	Pulse	0.30	3
2	Ge		156,774.92	0.19	104.5	Pulse	0.30	3
2	Rh		2,317,679.84	0.75	95.2	Pulse	0.30	3
2	In		941,298.43	0.39	96.9	Pulse	0.30	3
2	Tb		3,312,994.10	0.71	101.2	Pulse	0.30	3
2	Ho		339,873.03	0.49	101.7	Pulse	0.30	3
2	Bi		2,119,775.61	0.57	94.7	Pulse	0.30	3
3	Sc		225,561.86	0.34	104.1	Pulse	0.30	3
3	Ge		143,764.49	1.48	102.5	Pulse	0.30	3
3	Ge		216,675.04	0.58	102.4	Pulse	0.30	3
3	Rh		2,100,535.06	0.18	96.3	Pulse	0.30	3
3	Tb		3,776,704.57	0.55	103.1	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:32
Sample Name	jc94583-3f
Sample Type	Sample
Comment	due
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	9/11/2019 11:44
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	57.87	46.67	3.994E-05	Pulse	0.25	3
B			1	124.994	ug/l	0.25	282,420.37	2.421E-01	Pulse	0.15	3
Ca			1	117509.782	ug/l	0.52	55,349,732.51	1.994E+01	Analog	0.10	3
Sr			1	787.690	ug/l	0.63	18,647,588.89	5.241E+00	Analog	0.10	3
Mo			1	2.941	ug/l	1.42	13,152.54	3.697E-03	Pulse	0.10	3
Ag			1	0.012	ug/l	38.98	170.01	4.369E-05	Pulse	0.10	3
Sn			1	0.421	ug/l	10.61	6,228.14	1.598E-03	Pulse	0.10	3
Sb			1	0.255	ug/l	8.28	2,743.68	4.701E-04	Pulse	0.10	3
Ba			1	265.272	ug/l	0.31	1,043,069.33	1.786E-01	Pulse	0.10	3
Tl			1	0.076	ug/l	10.88	1,813.52	5.786E-04	Pulse	0.10	3
Pb			1	0.126	ug/l	8.47	1,176.76	3.755E-04	Pulse	0.10	3
Pb			1	0.113	ug/l	15.31	953.40	3.044E-04	Pulse	0.10	3
Pb			1	0.111	ug/l	3.21	4,413.75	1.409E-03	Pulse	0.10	3
Na			2	379353.440	ug/l	0.50	261,685,465.16	1.634E+03	Analog	0.30	3
Mg			2	86621.027	ug/l	0.55	27,688,460.01	1.729E+02	Analog	0.30	3
Al			2	24.758	ug/l	1.97	3,388.17	2.115E-02	Pulse	0.30	3
K			2	26608.770	ug/l	1.20	7,035,623.06	4.393E+01	Analog	0.30	3
Ca			2	121081.228	ug/l	0.50	1,612,158.69	1.007E+01	Pulse	0.30	3
Ti			2	0.606	ug/l	21.92	62.22	3.883E-04	Pulse	0.30	3
V			2	1.710	ug/l	4.07	5,781.07	3.610E-02	Pulse	0.30	3
Cr			2	0.551	ug/l	3.13	3,207.02	2.002E-02	Pulse	0.30	3
Mn			2	1923.723	ug/l	0.43	4,190,994.28	2.617E+01	Pulse	0.30	3
Fe			2	36.114	ug/l	0.80	121,121.64	7.563E-01	Pulse	0.30	3
Co			2	2.832	ug/l	0.16	18,199.81	1.136E-01	Pulse	0.30	3
Ni			2	1.706	ug/l	6.27	3,057.00	1.909E-02	Pulse	0.30	3
Cu			2	0.941	ug/l	6.76	12,447.02	7.772E-02	Pulse	0.30	3
Zn			2	2.959	ug/l	4.86	3,553.76	2.219E-02	Pulse	0.30	3
As			2	0.632	ug/l	5.34	275.00	1.717E-03	Pulse	1.00	3
Cd			2	0.444	ug/l	9.07	475.68	5.175E-04	Pulse	0.30	3
Sn			2	0.388	ug/l	24.63	1,947.92	2.120E-03	Pulse	0.30	3
Se			3	9.208	ug/l	2.57	976.23	4.674E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,166,501.32	1.01	93.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,775,614.02	1.07	98.7	Pulse	0.10	3
1	Ge		593,986.57	0.73	104.1	Pulse	0.10	3
1	Ge		810,162.91	0.65	102.1	Pulse	0.10	3
1	Rh		3,557,849.74	1.11	92.4	Pulse	0.10	3
1	In		3,895,881.93	1.07	97.8	Pulse	0.10	3
1	Tb		5,839,906.37	1.50	105.5	Analog	0.10	3
1	Ho		568,374.24	0.71	103.3	Pulse	0.10	3
1	Bi		3,133,302.04	0.61	93.9	Pulse	0.10	3
2	Sc		160,163.01	0.78	99.7	Pulse	0.30	3
2	Ge		102,358.79	0.41	102.9	Pulse	0.30	3
2	Ge		154,687.99	0.81	103.2	Pulse	0.30	3
2	Rh		2,243,929.08	0.36	92.2	Pulse	0.30	3
2	In		919,380.80	0.58	94.6	Pulse	0.30	3
2	Tb		3,248,925.64	0.16	99.2	Pulse	0.30	3
2	Ho		335,742.87	0.87	100.4	Pulse	0.30	3
2	Bi		2,016,130.48	0.83	90.1	Pulse	0.30	3
3	Sc		220,076.93	2.16	101.6	Pulse	0.30	3
3	Ge		138,263.55	2.65	98.6	Pulse	0.30	3
3	Ge		208,914.16	2.63	98.8	Pulse	0.30	3
3	Rh		2,001,631.93	2.34	91.8	Pulse	0.30	3
3	Tb		3,655,683.74	2.45	99.8	Pulse	0.30	3

Quantitation Report

File Name	030SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:37
Sample Name	jc94583-4f
Sample Type	Sample
Comment	due
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	9/11/2019 11:44
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	47.41	37.33	3.363E-05	Pulse	0.25	3
B			1	154.333	ug/l	1.38	330,054.01	2.976E-01	Pulse	0.15	3
Ca			1	104538.008	ug/l	1.10	46,631,172.64	1.774E+01	Analog	0.10	3
Sr			1	779.725	ug/l	0.78	18,415,893.06	5.188E+00	Analog	0.10	3
Mo			1	3.190	ug/l	3.13	14,223.62	4.007E-03	Pulse	0.10	3
Ag			1	0.013	ug/l	40.71	180.01	4.710E-05	Pulse	0.10	3
Sn			1	0.542	ug/l	2.07	7,005.15	1.832E-03	Pulse	0.10	3
Sb			1	0.175	ug/l	6.95	2,003.56	3.419E-04	Pulse	0.10	3
Ba			1	170.614	ug/l	0.53	673,485.64	1.149E-01	Pulse	0.10	3
Tl			1	0.134	ug/l	6.94	3,123.78	9.652E-04	Pulse	0.10	3
Pb			1	0.265	ug/l	3.80	2,253.60	6.963E-04	Pulse	0.10	3
Pb			1	0.264	ug/l	12.83	1,976.89	6.111E-04	Pulse	0.10	3
Pb			1	0.243	ug/l	4.71	8,544.64	2.641E-03	Pulse	0.10	3
Na			2	142613.669	ug/l	0.89	93,456,582.95	6.143E+02	Analog	0.30	3
Mg			2	52245.197	ug/l	0.43	15,864,644.92	1.043E+02	Analog	0.30	3
Al			2	71.846	ug/l	2.42	8,084.35	5.314E-02	Pulse	0.30	3
K			2	23648.683	ug/l	0.97	5,941,422.26	3.905E+01	Analog	0.30	3
Ca			2	106208.831	ug/l	1.11	1,343,318.59	8.830E+00	Pulse	0.30	3
Ti			2	2.319	ug/l	6.85	220.00	1.446E-03	Pulse	0.30	3
V			2	0.984	ug/l	6.75	3,280.37	2.157E-02	Pulse	0.30	3
Cr			2	0.772	ug/l	2.79	3,899.39	2.563E-02	Pulse	0.30	3
Mn			2	1763.285	ug/l	0.86	3,649,059.58	2.399E+01	Pulse	0.30	3
Fe			2	27234.241	ug/l	0.50	82,315,423.40	5.410E+02	Analog	0.30	3
Co			2	0.158	ug/l	6.78	1,011.14	6.645E-03	Pulse	0.30	3
Ni			2	0.442	ug/l	2.28	872.26	5.733E-03	Pulse	0.30	3
Cu			2	0.387	ug/l	8.83	9,403.89	6.181E-02	Pulse	0.30	3
Zn			2	3.463	ug/l	6.97	3,708.25	2.438E-02	Pulse	0.30	3
As			2	20.442	ug/l	2.12	7,786.55	5.117E-02	Pulse	1.00	3
Cd			2	-0.003	ug/l	-160.63	8.95	9.768E-06	Pulse	0.30	3
Sn			2	0.511	ug/l	13.56	2,196.85	2.425E-03	Pulse	0.30	3
Se			3	0.259	ug/l	12.47	32.27	1.504E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,109,044.30	1.11	88.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,628,686.94	0.93	93.4	Pulse	0.10	3
1	Ge		563,976.41	0.95	98.9	Pulse	0.10	3
1	Ge		783,998.35	1.05	98.8	Pulse	0.10	3
1	Rh		3,549,395.05	0.15	92.2	Pulse	0.10	3
1	In		3,824,768.07	0.32	96.0	Pulse	0.10	3
1	Tb		5,862,266.58	0.63	105.9	Analog	0.10	3
1	Ho		573,488.74	0.39	104.3	Pulse	0.10	3
1	Bi		3,236,437.24	0.59	96.9	Pulse	0.10	3
2	Sc		152,145.29	1.02	94.7	Pulse	0.30	3
2	Ge		99,781.32	1.89	100.3	Pulse	0.30	3
2	Ge		149,144.05	2.21	99.5	Pulse	0.30	3
2	Rh		2,257,284.35	1.87	92.7	Pulse	0.30	3
2	In		906,837.48	2.50	93.3	Pulse	0.30	3
2	Tb		3,258,659.04	2.00	99.5	Pulse	0.30	3
2	Ho		334,857.02	2.15	100.2	Pulse	0.30	3
2	Bi		2,080,704.57	1.50	92.9	Pulse	0.30	3
3	Sc		221,987.59	1.42	102.5	Pulse	0.30	3
3	Ge		141,965.13	0.90	101.2	Pulse	0.30	3
3	Ge		214,525.48	1.59	101.4	Pulse	0.30	3
3	Rh		2,106,735.75	1.49	96.6	Pulse	0.30	3
3	Tb		3,804,553.46	0.98	103.9	Pulse	0.30	3

Quantitation Report

File Name	031SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:42
Sample Name	jc94583-5f
Sample Type	Sample
Comment	due
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	9/11/2019 11:44
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	0.015	ug/l	40.56	66.67	5.870E-05	Pulse	0.25	3
B			1	140.552	ug/l	1.44	308,902.64	2.716E-01	Pulse	0.15	3
Ca			1	124528.989	ug/l	1.74	57,885,257.47	2.113E+01	Analog	0.10	3
Sr			1	1239.714	ug/l	0.90	29,667,986.22	8.249E+00	Analog	0.10	3
Mo			1	1.591	ug/l	7.75	7,261.94	2.021E-03	Pulse	0.10	3
Ag			1	0.010	ug/l	46.41	140.01	3.564E-05	Pulse	0.10	3
Sn			1	0.475	ug/l	4.92	6,701.72	1.702E-03	Pulse	0.10	3
Sb			1	0.113	ug/l	2.27	1,456.79	2.440E-04	Pulse	0.10	3
Ba			1	123.946	ug/l	1.23	498,109.56	8.346E-02	Pulse	0.10	3
Tl			1	0.001	ug/l	107.09	260.01	8.045E-05	Pulse	0.10	3
Pb			1	0.201	ug/l	11.92	1,773.51	5.486E-04	Pulse	0.10	3
Pb			1	0.177	ug/l	6.56	1,403.46	4.340E-04	Pulse	0.10	3
Pb			1	0.189	ug/l	5.08	6,910.92	2.136E-03	Pulse	0.10	3
Na			2	218819.594	ug/l	0.26	152,177,376.18	9.425E+02	Analog	0.30	3
Mg			2	56671.255	ug/l	0.02	18,262,450.39	1.131E+02	Analog	0.30	3
Al			2	45.719	ug/l	1.06	5,714.41	3.539E-02	Pulse	0.30	3
K			2	19892.184	ug/l	1.34	5,305,860.48	3.286E+01	Analog	0.30	3
Ca			2	126393.356	ug/l	1.06	1,696,514.45	1.051E+01	Pulse	0.30	3
Ti			2	1.448	ug/l	12.98	146.67	9.085E-04	Pulse	0.30	3
V			2	1.136	ug/l	6.55	3,973.86	2.462E-02	Pulse	0.30	3
Cr			2	0.595	ug/l	2.54	3,411.51	2.113E-02	Pulse	0.30	3
Mn			2	1703.545	ug/l	0.68	3,741,456.94	2.317E+01	Pulse	0.30	3
Fe			2	4752.030	ug/l	0.77	15,247,741.06	9.444E+01	Analog	0.30	3
Co			2	0.126	ug/l	9.20	870.54	5.392E-03	Pulse	0.30	3
Ni			2	0.377	ug/l	5.30	814.48	5.045E-03	Pulse	0.30	3
Cu			2	0.593	ug/l	12.31	10,934.84	6.773E-02	Pulse	0.30	3
Zn			2	0.406	ug/l	51.83	1,791.24	1.110E-02	Pulse	0.30	3
As			2	1.420	ug/l	2.34	594.68	3.683E-03	Pulse	1.00	3
Cd			2	0.003	ug/l	267.18	16.12	1.705E-05	Pulse	0.30	3
Sn			2	0.444	ug/l	10.22	2,139.07	2.261E-03	Pulse	0.30	3
Se			3	0.147	ug/l	14.38	20.47	9.380E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,137,595.50	1.06	91.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,739,599.13	1.31	97.4	Pulse	0.10	3
1	Ge		584,092.84	1.42	102.4	Pulse	0.10	3
1	Ge		808,130.92	1.64	101.8	Pulse	0.10	3
1	Rh		3,596,490.26	1.53	93.4	Pulse	0.10	3
1	In		3,938,979.57	1.12	98.8	Pulse	0.10	3
1	Tb		5,968,708.25	1.76	107.8	Analog	0.10	3
1	Ho		582,398.25	1.32	105.9	Pulse	0.10	3
1	Bi		3,233,442.77	1.76	96.9	Pulse	0.10	3
2	Sc		161,461.10	0.44	100.5	Pulse	0.30	3
2	Ge		103,719.58	0.06	104.2	Pulse	0.30	3
2	Ge		154,454.34	0.35	103.0	Pulse	0.30	3
2	Rh		2,316,446.78	0.41	95.2	Pulse	0.30	3
2	In		946,420.80	0.62	97.4	Pulse	0.30	3
2	Tb		3,330,199.03	0.58	101.7	Pulse	0.30	3
2	Ho		343,426.29	0.52	102.7	Pulse	0.30	3
2	Bi		2,095,504.85	0.74	93.6	Pulse	0.30	3
3	Sc		230,429.91	0.88	106.4	Pulse	0.30	3
3	Ge		145,039.92	0.76	103.4	Pulse	0.30	3
3	Ge		218,210.87	0.45	103.2	Pulse	0.30	3
3	Rh		2,123,098.74	1.07	97.3	Pulse	0.30	3
3	Tb		3,839,822.63	0.83	104.8	Pulse	0.30	3

Quantitation Report

File Name	032SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:47
Sample Name	jc94583-6f
Sample Type	Sample
Comment	due
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	9/11/2019 11:44
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	0.013	ug/l	39.28	65.33	5.423E-05	Pulse	0.25	3
B			1	8.703	ug/l	1.08	26,565.62	2.203E-02	Pulse	0.15	3
Ca			1	97.346	ug/l	3.16	58,189.54	2.083E-02	Pulse	0.10	3
Sr			1	1.063	ug/l	0.55	28,873.31	7.173E-03	Pulse	0.10	3
Mo			1	0.176	ug/l	5.51	1,056.75	2.625E-04	Pulse	0.10	3
Ag			1	0.010	ug/l	26.50	160.01	3.772E-05	Pulse	0.10	3
Sn			1	0.443	ug/l	20.78	6,955.19	1.641E-03	Pulse	0.10	3
Sb			1	0.126	ug/l	14.12	1,643.49	2.647E-04	Pulse	0.10	3
Ba			1	0.883	ug/l	2.94	3,787.28	6.100E-04	Pulse	0.10	3
Tl			1	0.002	ug/l	120.25	333.35	9.061E-05	Pulse	0.10	3
Pb			1	0.125	ug/l	14.55	1,373.46	3.743E-04	Pulse	0.10	3
Pb			1	0.108	ug/l	13.88	1,086.75	2.960E-04	Pulse	0.10	3
Pb			1	0.118	ug/l	12.72	5,423.95	1.478E-03	Pulse	0.10	3
Na			2	281.279	ug/l	2.34	207,718.44	1.285E+00	Pulse	0.30	3
Mg			2	17.321	ug/l	2.68	5,914.45	3.660E-02	Pulse	0.30	3
Al			2	2.770	ug/l	13.77	1,005.60	6.220E-03	Pulse	0.30	3
K			2	34.427	ug/l	8.03	23,062.71	1.427E-01	Pulse	0.30	3
Ca			2	94.370	ug/l	6.33	1,381.18	8.543E-03	Pulse	0.30	3
Ti			2	0.122	ug/l	42.10	14.44	8.939E-05	Pulse	0.30	3
V			2	0.383	ug/l	6.72	1,543.43	9.550E-03	Pulse	0.30	3
Cr			2	0.631	ug/l	4.94	3,561.59	2.204E-02	Pulse	0.30	3
Mn			2	0.445	ug/l	6.89	1,125.61	6.966E-03	Pulse	0.30	3
Fe			2	9.660	ug/l	2.15	37,297.73	2.308E-01	Pulse	0.30	3
Co			2	0.040	ug/l	8.86	315.46	1.952E-03	Pulse	0.30	3
Ni			2	0.655	ug/l	10.21	1,290.07	7.983E-03	Pulse	0.30	3
Cu			2	5.033	ug/l	0.60	31,546.96	1.952E-01	Pulse	0.30	3
Zn			2	3.267	ug/l	5.27	3,803.82	2.353E-02	Pulse	0.30	3
As			2	0.170	ug/l	6.64	91.00	5.628E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	93.69	15.48	1.556E-05	Pulse	0.30	3
Sn			2	0.399	ug/l	2.69	2,136.83	2.149E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.043	ug/l	39.20	9.20	4.088E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,205,969.07	0.62	96.6	Pulse	0.10	3
1	Sc		2,794,100.90	1.86	99.3	Pulse	0.10	3
1	Ge		617,620.22	0.67	108.3	Pulse	0.10	3
1	Ge		859,840.01	1.90	108.3	Pulse	0.10	3
1	Rh		4,025,323.27	0.83	104.6	Pulse	0.10	3
1	In		4,237,870.37	1.40	106.3	Pulse	0.10	3
1	Tb		6,208,344.28	0.82	112.1	Analog	0.10	3
1	Ho		600,470.19	0.51	109.2	Pulse	0.10	3
1	Bi		3,672,647.96	1.32	110.0	Pulse	0.10	3
2	Sc		161,640.80	1.27	100.6	Pulse	0.30	3
2	Ge		108,637.75	0.83	109.2	Pulse	0.30	3
2	Ge		163,501.52	0.63	109.0	Pulse	0.30	3
2	Rh		2,536,702.67	1.19	104.2	Pulse	0.30	3
2	In		994,521.59	0.80	102.3	Pulse	0.30	3
2	Tb		3,430,580.83	1.19	104.8	Pulse	0.30	3
2	Ho		349,617.60	1.02	104.6	Pulse	0.30	3
2	Bi		2,357,223.24	0.82	105.3	Pulse	0.30	3
3	Sc		228,434.19	9.29	105.4	Pulse	0.30	3
3	Ge		150,241.66	7.68	107.1	Pulse	0.30	3
3	Ge		226,696.88	7.53	107.2	Pulse	0.30	3
3	Rh		2,327,508.87	9.05	106.7	Pulse	0.30	3
3	Tb		3,933,441.65	9.44	107.4	Pulse	0.30	3

Quantitation Report

File Name	033_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:52
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	9/11/2019 11:44
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	49.543	ug/l	1.05	335,332.02	2.666E-01	Pulse	0.25	3
B			1	99.200	ug/l	1.10	479,164.48	3.810E-01	Pulse	0.15	3
Ca			1	5009.644	ug/l	0.82	4,936,973.99	1.704E+00	Pulse	0.10	3
Sr			1	51.247	ug/l	0.95	2,724,749.13	6.821E-01	Pulse	0.10	3
Mo			1	50.744	ug/l	1.18	503,804.20	1.261E-01	Pulse	0.10	3
Ag			1	49.252	ug/l	1.15	1,252,769.51	2.965E-01	Pulse	0.10	3
Sn			1	49.516	ug/l	0.93	813,530.04	1.925E-01	Pulse	0.10	3
Sb			1	51.105	ug/l	0.66	1,007,306.37	1.635E-01	Pulse	0.10	3
Ba			1	48.630	ug/l	0.51	403,630.11	6.550E-02	Pulse	0.10	3
Tl			1	50.832	ug/l	0.81	2,399,184.13	6.774E-01	Pulse	0.10	3
Pb			1	50.693	ug/l	0.60	826,513.22	2.334E-01	Pulse	0.10	3
Pb			1	50.706	ug/l	0.44	727,601.03	2.054E-01	Pulse	0.10	3
Pb			1	50.698	ug/l	0.63	3,341,064.01	9.433E-01	Pulse	0.10	3
Na			2	5047.782	ug/l	1.30	7,328,754.15	4.355E+01	Analog	0.30	3
Mg			2	4854.774	ug/l	1.16	3,261,094.66	1.938E+01	Pulse	0.30	3
Al			2	4729.151	ug/l	0.80	1,081,793.12	6.429E+00	Pulse	0.30	3
K			2	4883.066	ug/l	0.54	2,722,304.75	1.618E+01	Pulse	0.30	3
Ca			2	5052.430	ug/l	1.12	141,460.12	8.407E-01	Pulse	0.30	3
Ti			2	49.431	ug/l	2.44	10,277.73	6.108E-02	Pulse	0.30	3
V			2	50.716	ug/l	0.59	342,037.60	2.033E+00	Pulse	0.30	3
Cr			2	50.322	ug/l	1.25	430,915.96	2.561E+00	Pulse	0.30	3
Mn			2	49.850	ug/l	0.48	228,357.75	1.357E+00	Pulse	0.30	3
Fe			2	5069.744	ug/l	0.94	33,900,480.88	2.015E+02	Analog	0.30	3
Co			2	50.223	ug/l	1.10	676,304.85	4.019E+00	Pulse	0.30	3
Ni			2	49.821	ug/l	1.44	177,385.34	1.054E+00	Pulse	0.30	3
Cu			2	49.567	ug/l	1.01	487,391.37	2.896E+00	Pulse	0.30	3
Zn			2	49.672	ug/l	0.42	74,212.18	4.410E-01	Pulse	0.30	3
As			2	50.219	ug/l	0.97	42,215.52	2.509E-01	Pulse	1.00	3
Cd			2	49.918	ug/l	0.72	113,039.70	1.134E-01	Pulse	0.30	3
Sn			2	49.794	ug/l	1.29	248,204.79	2.490E-01	Pulse	0.30	3
Se			3	197.051	ug/l	0.36	44,132.84	1.993E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,257,580.95	0.32	100.7	Pulse	0.10	3
1	Sc		2,897,025.69	0.72	103.0	Pulse	0.10	3
1	Ge		591,433.78	0.95	103.7	Pulse	0.10	3

Quantitation Report

1	Ge		829,557.93	0.45	104.5	Pulse	0.10	3
1	Rh		3,994,806.92	0.62	103.8	Pulse	0.10	3
1	In		4,225,184.38	0.26	106.0	Pulse	0.10	3
1	Tb		6,162,495.53	1.00	111.3	Analog	0.10	3
1	Ho		597,484.86	0.26	108.6	Pulse	0.10	3
1	Bi		3,541,879.11	0.53	106.1	Pulse	0.10	3
2	Sc		168,279.65	1.07	104.7	Pulse	0.30	3
2	Ge		103,983.50	0.89	104.5	Pulse	0.30	3
2	Ge		157,647.14	0.66	105.1	Pulse	0.30	3
2	Rh		2,507,930.53	0.33	103.0	Pulse	0.30	3
2	In		996,821.15	0.98	102.6	Pulse	0.30	3
2	Tb		3,422,527.16	0.33	104.5	Pulse	0.30	3
2	Ho		350,442.53	0.35	104.8	Pulse	0.30	3
2	Bi		2,301,704.35	0.74	102.8	Pulse	0.30	3
3	Sc		228,389.08	0.66	105.4	Pulse	0.30	3
3	Ge		146,414.59	1.00	104.4	Pulse	0.30	3
3	Ge		221,492.62	1.19	104.7	Pulse	0.30	3
3	Rh		2,244,828.04	0.35	102.9	Pulse	0.30	3
3	Tb		3,838,213.88	0.78	104.8	Pulse	0.30	3

Quantitation Report

File Name	034_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 12:57
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	9/11/2019 11:44
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	0.011	ug/l	46.74	97.33	7.616E-05	Pulse	0.25	3
B			1	4.593	ug/l	7.43	29,350.19	2.294E-02	Pulse	0.15	3
Ca			1	0.151	ug/l	208.79	12,565.30	4.366E-03	Pulse	0.10	3
Sr			1	0.020	ug/l	20.13	1,476.78	3.646E-04	Pulse	0.10	3
Mo			1	0.077	ug/l	5.02	953.41	2.351E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	36.21	323.35	7.682E-05	Pulse	0.10	3
Sn			1	0.150	ug/l	10.94	5,751.27	1.362E-03	Pulse	0.10	3
Sb			1	0.050	ug/l	9.24	1,350.11	2.211E-04	Pulse	0.10	3
Ba			1	0.000	ug/l	230.66	100.00	1.637E-05	Pulse	0.10	3
Tl			1	0.019	ug/l	8.75	1,166.76	3.244E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	36.81	550.03	1.528E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	51.10	460.03	1.277E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	8.19	2,113.49	5.874E-04	Pulse	0.10	3
Na			2	5.143	ug/l	4.47	19,838.37	1.181E-01	Pulse	0.30	3
Mg			2	1.317	ug/l	9.90	1,223.39	7.284E-03	Pulse	0.30	3
Al			2	-0.602	ug/l	-25.06	591.13	3.520E-03	Pulse	0.30	3
K			2	-0.415	ug/l	-102.74	14,212.84	8.462E-02	Pulse	0.30	3
Ca			2	1.810	ug/l	105.67	167.78	9.993E-04	Pulse	0.30	3
Ti			2	0.016	ug/l	214.41	5.55	3.309E-05	Pulse	0.30	3
V			2	0.009	ug/l	38.10	376.68	2.243E-03	Pulse	0.30	3
Cr			2	0.001	ug/l	150.48	1,021.15	6.080E-03	Pulse	0.30	3
Mn			2	0.018	ug/l	75.23	235.56	1.403E-03	Pulse	0.30	3
Fe			2	0.973	ug/l	7.60	13,023.07	7.754E-02	Pulse	0.30	3
Co			2	0.003	ug/l	59.15	102.19	6.082E-04	Pulse	0.30	3
Ni			2	0.008	ug/l	112.12	208.89	1.244E-03	Pulse	0.30	3
Cu			2	-0.433	ug/l	-4.45	4,336.18	2.582E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.534	ug/l	-3.02	787.81	4.691E-03	Pulse	0.30	3
As			2	0.013	ug/l	56.59	34.00	2.025E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	198.12	17.67	1.740E-05	Pulse	0.30	3
Sn			2	0.160	ug/l	14.00	1,983.48	1.951E-03	Pulse	0.30	3
Se			3	0.098	ug/l	14.66	26.47	1.184E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,279,642.59	0.75	102.5	Pulse	0.10	3
1	Sc		2,877,783.81	1.08	102.3	Pulse	0.10	3
1	Ge		590,984.90	0.72	103.6	Pulse	0.10	3
1	Ge		822,312.70	0.73	103.6	Pulse	0.10	3
1	Rh		4,054,888.80	1.13	105.3	Pulse	0.10	3
1	In		4,221,681.64	1.48	105.9	Pulse	0.10	3
1	Tb		6,106,747.62	1.04	110.3	Analog	0.10	3
1	Ho		586,190.21	0.54	106.6	Pulse	0.10	3
1	Bi		3,597,621.93	0.80	107.8	Pulse	0.10	3
2	Sc		167,956.01	0.18	104.5	Pulse	0.30	3
2	Ge		104,450.95	0.89	105.0	Pulse	0.30	3
2	Ge		157,384.71	0.91	105.0	Pulse	0.30	3
2	Rh		2,566,919.07	0.27	105.5	Pulse	0.30	3
2	In		1,016,446.59	0.30	104.6	Pulse	0.30	3
2	Tb		3,390,851.19	0.74	103.6	Pulse	0.30	3
2	Ho		345,521.92	0.68	103.4	Pulse	0.30	3
2	Bi		2,325,271.79	0.86	103.9	Pulse	0.30	3
3	Sc		232,051.05	17.82	107.1	Pulse	0.30	3
3	Ge		149,804.91	13.24	106.8	Pulse	0.30	3
3	Ge		225,313.24	13.18	106.5	Pulse	0.30	3
3	Rh		2,338,152.48	16.94	107.2	Pulse	0.30	3
3	Tb		3,892,924.64	17.95	106.3	Mix	0.30	3

Quantitation Report

File Name	035SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:02
Sample Name	sampleconf
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	9/11/2019 11:44
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	73.217	ug/l	0.23	226,064.73	1.970E-01	Pulse	0.25	3
B			1	90.236	ug/l	0.53	202,301.66	1.763E-01	Pulse	0.15	3
Ca			1	373477.360	ug/l	0.99	172,272,757.43	6.337E+01	Analog	0.10	3
Sr			1	191.210	ug/l	0.53	4,572,173.47	1.272E+00	Pulse	0.10	3
Mo			1	112.448	ug/l	0.85	502,089.00	1.397E-01	Pulse	0.10	3
Ag			1	71.385	ug/l	1.21	840,156.78	2.149E-01	Pulse	0.10	3
Sn			1	77.843	ug/l	1.48	592,400.93	1.515E-01	Pulse	0.10	3
Sb			1	73.057	ug/l	0.58	692,602.59	1.169E-01	Pulse	0.10	3
Ba			1	747.222	ug/l	0.55	2,981,846.94	5.031E-01	Pulse	0.10	3
Tl			1	77.730	ug/l	0.43	1,693,332.42	5.179E-01	Pulse	0.10	3
Pb			1	80.232	ug/l	0.56	603,827.41	1.847E-01	Pulse	0.10	3
Pb			1	80.601	ug/l	1.11	533,879.64	1.633E-01	Pulse	0.10	3
Pb			1	80.260	ug/l	0.48	2,441,533.93	7.468E-01	Pulse	0.10	3
Na			2	104292.865	ug/l	1.01	71,948,452.70	4.493E+02	Analog	0.30	3
Mg			2	18083.865	ug/l	0.40	5,780,840.19	3.609E+01	Analog	0.30	3
Al			2	3866.374	ug/l	0.49	421,289.16	2.631E+00	Pulse	0.30	3
K			2	6710.757	ug/l	1.40	1,784,547.64	1.114E+01	Pulse	0.30	3
Ca			2	377319.018	ug/l	1.50	5,023,297.44	3.137E+01	Mix	0.30	3
Ti			2	78.091	ug/l	4.80	7,726.33	4.825E-02	Pulse	0.30	3
V			2	77.570	ug/l	0.46	249,023.18	1.555E+00	Pulse	0.30	3
Cr			2	82.393	ug/l	0.18	335,948.20	2.098E+00	Pulse	0.30	3
Mn			2	77.244	ug/l	0.86	168,409.86	1.052E+00	Pulse	0.30	3
Fe			2	3932.809	ug/l	0.78	12,517,731.17	7.816E+01	Analog	0.30	3
Co			2	73.443	ug/l	0.06	470,660.30	2.939E+00	Pulse	0.30	3
Ni			2	70.758	ug/l	0.55	119,936.52	7.489E-01	Pulse	0.30	3
Cu			2	73.989	ug/l	0.67	348,276.47	2.175E+00	Pulse	0.30	3
Zn			2	64.780	ug/l	0.10	46,576.97	2.908E-01	Pulse	0.30	3
As			2	70.408	ug/l	1.22	28,171.52	1.759E-01	Pulse	1.00	3
Cd			2	70.122	ug/l	1.05	74,205.98	7.966E-02	Pulse	0.30	3
Sn			2	78.052	ug/l	1.21	182,021.76	1.954E-01	Pulse	0.30	3
Se			3	333.173	ug/l	0.70	35,596.71	1.685E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,147,295.17	0.40	91.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,718,505.90	0.38	96.6	Pulse	0.10	3
1	Ge		574,375.29	0.42	100.7	Pulse	0.10	3
1	Ge		806,723.92	1.26	101.6	Pulse	0.10	3
1	Rh		3,593,328.59	0.85	93.3	Pulse	0.10	3
1	In		3,910,307.64	1.17	98.1	Pulse	0.10	3
1	Tb		5,927,006.37	0.76	107.0	Analog	0.10	3
1	Ho		576,016.81	0.31	104.7	Pulse	0.10	3
1	Bi		3,269,399.64	0.63	97.9	Pulse	0.10	3
2	Sc		160,156.49	0.95	99.7	Pulse	0.30	3
2	Ge		101,239.77	0.79	101.7	Pulse	0.30	3
2	Ge		153,357.91	0.24	102.3	Pulse	0.30	3
2	Rh		2,264,562.34	0.66	93.0	Pulse	0.30	3
2	In		931,530.17	1.00	95.9	Pulse	0.30	3
2	Tb		3,306,461.68	0.68	101.0	Pulse	0.30	3
2	Ho		339,446.04	0.73	101.5	Pulse	0.30	3
2	Bi		2,082,799.15	1.28	93.0	Pulse	0.30	3
3	Sc		224,795.64	0.88	103.8	Pulse	0.30	3
3	Ge		138,781.06	0.63	98.9	Pulse	0.30	3
3	Ge		211,319.24	0.77	99.9	Pulse	0.30	3
3	Rh		2,034,125.61	0.15	93.3	Pulse	0.30	3
3	Tb		3,719,060.41	0.47	101.5	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:07
Sample Name	sampleconf
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	9/11/2019 11:44
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	73.642	ug/l	0.42	221,692.09	1.982E-01	Pulse	0.25	3
B			1	91.092	ug/l	0.39	199,062.80	1.779E-01	Pulse	0.15	3
Ca			1	377254.759	ug/l	0.26	167,104,974.18	6.401E+01	Analog	0.10	3
Sr			1	191.211	ug/l	0.88	4,417,422.85	1.272E+00	Pulse	0.10	3
Mo			1	114.205	ug/l	1.04	492,685.46	1.419E-01	Pulse	0.10	3
Ag			1	71.549	ug/l	0.13	819,623.27	2.154E-01	Pulse	0.10	3
Sn			1	78.910	ug/l	0.56	584,457.51	1.536E-01	Pulse	0.10	3
Sb			1	73.209	ug/l	1.34	689,086.79	1.171E-01	Pulse	0.10	3
Ba			1	743.723	ug/l	0.22	2,946,759.64	5.007E-01	Pulse	0.10	3
Tl			1	79.311	ug/l	0.40	1,687,602.11	5.285E-01	Pulse	0.10	3
Pb			1	81.468	ug/l	1.48	598,809.35	1.875E-01	Pulse	0.10	3
Pb			1	82.156	ug/l	0.99	531,518.17	1.664E-01	Pulse	0.10	3
Pb			1	81.507	ug/l	0.22	2,421,652.97	7.584E-01	Pulse	0.10	3
Na			2	103371.357	ug/l	1.03	69,411,292.80	4.453E+02	Analog	0.30	3
Mg			2	18271.822	ug/l	0.70	5,684,860.47	3.647E+01	Analog	0.30	3
Al			2	3817.274	ug/l	0.77	404,854.30	2.597E+00	Pulse	0.30	3
K			2	6662.134	ug/l	0.38	1,724,549.58	1.106E+01	Pulse	0.30	3
Ca			2	372845.581	ug/l	0.69	4,831,395.78	3.099E+01	Pulse	0.30	3
Ti			2	76.698	ug/l	2.40	7,387.29	4.739E-02	Pulse	0.30	3
V			2	78.450	ug/l	0.10	245,114.40	1.572E+00	Pulse	0.30	3
Cr			2	83.185	ug/l	0.22	330,114.74	2.118E+00	Pulse	0.30	3
Mn			2	77.274	ug/l	0.67	163,984.88	1.052E+00	Pulse	0.30	3
Fe			2	3948.407	ug/l	0.98	12,232,268.68	7.847E+01	Analog	0.30	3
Co			2	73.469	ug/l	0.92	458,255.62	2.940E+00	Pulse	0.30	3
Ni			2	71.383	ug/l	0.96	117,766.22	7.555E-01	Pulse	0.30	3
Cu			2	74.359	ug/l	1.06	340,643.00	2.185E+00	Pulse	0.30	3
Zn			2	62.801	ug/l	1.45	43,992.21	2.822E-01	Pulse	0.30	3
As			2	71.546	ug/l	0.24	27,863.67	1.788E-01	Pulse	1.00	3
Cd			2	71.026	ug/l	0.53	73,264.30	8.068E-02	Pulse	0.30	3
Sn			2	78.980	ug/l	0.32	179,545.92	1.977E-01	Pulse	0.30	3
Se			3	334.693	ug/l	0.48	35,086.67	1.692E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,118,637.00	0.50	89.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,610,592.77	0.52	92.8	Pulse	0.10	3
1	Ge		560,387.79	0.45	98.2	Pulse	0.10	3
1	Ge		777,787.20	0.28	98.0	Pulse	0.10	3
1	Rh		3,471,798.59	0.82	90.2	Pulse	0.10	3
1	In		3,805,651.73	0.80	95.5	Pulse	0.10	3
1	Tb		5,884,812.83	0.65	106.3	Analog	0.10	3
1	Ho		567,332.79	1.76	103.1	Pulse	0.10	3
1	Bi		3,193,304.54	1.14	95.6	Pulse	0.10	3
2	Sc		155,880.11	0.15	97.0	Pulse	0.30	3
2	Ge		98,614.79	0.70	99.1	Pulse	0.30	3
2	Ge		148,989.69	1.41	99.4	Pulse	0.30	3
2	Rh		2,214,549.63	0.38	91.0	Pulse	0.30	3
2	In		908,082.33	1.12	93.4	Pulse	0.30	3
2	Tb		3,247,944.73	0.50	99.2	Pulse	0.30	3
2	Ho		332,651.21	1.18	99.5	Pulse	0.30	3
2	Bi		2,052,186.59	0.85	91.7	Pulse	0.30	3
3	Sc		219,831.14	1.12	101.5	Pulse	0.30	3
3	Ge		137,229.06	0.49	97.8	Pulse	0.30	3
3	Ge		207,345.97	1.09	98.0	Pulse	0.30	3
3	Rh		2,012,758.95	0.94	92.3	Pulse	0.30	3
3	Tb		3,695,663.05	1.56	100.9	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:12
Sample Name	sampleconf
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	9/11/2019 11:44
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	0.031	ug/l	30.54	113.33	1.008E-04	Pulse	0.25	3
B			1	11.853	ug/l	2.02	31,478.36	2.799E-02	Pulse	0.15	3
Ca			1	375259.570	ug/l	0.22	168,102,077.50	6.367E+01	Analog	0.10	3
Sr			1	108.933	ug/l	0.42	2,550,002.20	7.250E-01	Pulse	0.10	3
Mo			1	32.073	ug/l	0.44	140,308.82	3.989E-02	Pulse	0.10	3
Ag			1	0.040	ug/l	21.72	493.36	1.281E-04	Pulse	0.10	3
Sn			1	1.158	ug/l	3.52	11,658.13	3.025E-03	Pulse	0.10	3
Sb			1	0.162	ug/l	4.77	1,896.86	3.212E-04	Pulse	0.10	3
Ba			1	679.247	ug/l	1.25	2,700,081.21	4.573E-01	Pulse	0.10	3
Tl			1	0.054	ug/l	11.21	1,393.47	4.346E-04	Pulse	0.10	3
Pb			1	0.658	ug/l	4.74	5,127.77	1.601E-03	Pulse	0.10	3
Pb			1	0.653	ug/l	6.45	4,477.52	1.398E-03	Pulse	0.10	3
Pb			1	0.645	ug/l	3.70	20,419.65	6.373E-03	Pulse	0.10	3
Na			2	100761.641	ug/l	1.27	67,714,295.08	4.340E+02	Analog	0.30	3
Mg			2	13928.152	ug/l	1.55	4,337,002.05	2.780E+01	Pulse	0.30	3
Al			2	170.077	ug/l	1.74	18,701.59	1.199E-01	Pulse	0.30	3
K			2	2850.433	ug/l	1.02	746,158.16	4.783E+00	Pulse	0.30	3
Ca			2	371844.556	ug/l	1.12	4,822,461.61	3.091E+01	Pulse	0.30	3
Ti			2	0.266	ug/l	7.59	27.78	1.781E-04	Pulse	0.30	3
V			2	0.805	ug/l	4.04	2,805.83	1.799E-02	Pulse	0.30	3
Cr			2	8.886	ug/l	2.21	36,129.44	2.316E-01	Pulse	0.30	3
Mn			2	3.205	ug/l	2.42	6,943.77	4.451E-02	Pulse	0.30	3
Fe			2	22.300	ug/l	2.36	75,171.16	4.819E-01	Pulse	0.30	3
Co			2	0.375	ug/l	5.34	2,396.67	1.535E-02	Pulse	0.30	3
Ni			2	0.469	ug/l	9.31	940.60	6.024E-03	Pulse	0.30	3
Cu			2	4.791	ug/l	1.00	29,370.73	1.882E-01	Pulse	0.30	3
Zn			2	1.998	ug/l	18.33	2,809.17	1.802E-02	Pulse	0.30	3
As			2	0.729	ug/l	10.22	305.34	1.959E-03	Pulse	1.00	3
Cd			2	0.003	ug/l	531.71	15.71	1.710E-05	Pulse	0.30	3
Sn			2	1.070	ug/l	6.49	3,497.10	3.818E-03	Pulse	0.30	3
Se			3	0.548	ug/l	2.32	61.60	2.965E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,124,567.35	0.14	90.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,640,158.87	0.87	93.9	Pulse	0.10	3
1	Ge		562,822.64	0.79	98.7	Pulse	0.10	3
1	Ge		778,773.48	0.72	98.1	Pulse	0.10	3
1	Rh		3,517,490.47	0.73	91.4	Pulse	0.10	3
1	In		3,853,597.49	0.74	96.7	Pulse	0.10	3
1	Tb		5,904,671.58	1.99	106.6	Analog	0.10	3
1	Ho		574,547.57	1.02	104.4	Pulse	0.10	3
1	Bi		3,204,688.60	1.26	96.0	Pulse	0.10	3
2	Sc		156,026.74	1.48	97.1	Pulse	0.30	3
2	Ge		99,289.13	1.25	99.8	Pulse	0.30	3
2	Ge		148,976.50	1.22	99.3	Pulse	0.30	3
2	Rh		2,209,890.95	0.13	90.8	Pulse	0.30	3
2	In		915,829.80	0.62	94.2	Pulse	0.30	3
2	Tb		3,270,219.04	0.13	99.9	Pulse	0.30	3
2	Ho		334,721.43	0.49	100.1	Pulse	0.30	3
2	Bi		2,048,276.79	0.78	91.5	Pulse	0.30	3
3	Sc		219,984.89	1.53	101.5	Pulse	0.30	3
3	Ge		138,201.11	1.01	98.5	Pulse	0.30	3
3	Ge		207,820.41	1.66	98.2	Pulse	0.30	3
3	Rh		2,027,020.34	0.63	92.9	Pulse	0.30	3
3	Tb		3,698,684.85	0.68	101.0	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:17
Sample Name	sampleconf
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	9/11/2019 11:44
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	65.98	46.67	3.582E-05	Pulse	0.25	3
B			1	22.740	ug/l	3.55	18,452.53	1.417E-02	Pulse	0.15	3
Ca			1	373369.750	ug/l	1.31	36,327,888.62	1.267E+01	Analog	0.10	3
Sr			1	103.728	ug/l	0.37	536,185.18	1.381E-01	Pulse	0.10	3
Mo			1	30.013	ug/l	2.50	29,110.75	7.501E-03	Pulse	0.10	3
Ag			1	0.075	ug/l	16.59	213.34	5.152E-05	Pulse	0.10	3
Sn			1	-0.382	ug/l	-43.01	2,625.34	6.338E-04	Pulse	0.10	3
Sb			1	0.202	ug/l	35.09	766.72	1.274E-04	Pulse	0.10	3
Ba			1	688.226	ug/l	0.21	558,416.80	9.269E-02	Pulse	0.10	3
Tl			1	0.039	ug/l	44.29	440.02	1.265E-04	Pulse	0.10	3
Pb			1	0.782	ug/l	16.60	1,550.14	4.457E-04	Pulse	0.10	3
Pb			1	0.626	ug/l	5.10	1,146.77	3.298E-04	Pulse	0.10	3
Pb			1	0.648	ug/l	7.89	5,503.94	1.583E-03	Pulse	0.10	3
Na			2	102522.741	ug/l	0.76	14,716,173.86	8.838E+01	Analog	0.30	3
Mg			2	14213.981	ug/l	0.57	944,924.06	5.676E+00	Pulse	0.30	3
Al			2	227.625	ug/l	1.28	5,871.10	3.526E-02	Pulse	0.30	3
K			2	2836.192	ug/l	1.74	169,906.25	1.021E+00	Pulse	0.30	3
Ca			2	371394.712	ug/l	0.82	1,028,069.06	6.175E+00	Pulse	0.30	3
Ti			2	1.020	ug/l	53.84	23.34	1.398E-04	Pulse	0.30	3
V			2	0.618	ug/l	18.10	724.47	4.348E-03	Pulse	0.30	3
Cr			2	8.328	ug/l	1.56	8,042.04	4.831E-02	Pulse	0.30	3
Mn			2	3.160	ug/l	2.44	1,583.43	9.509E-03	Pulse	0.30	3
Fe			2	24.785	ug/l	2.61	22,864.83	1.373E-01	Pulse	0.30	3
Co			2	0.356	ug/l	13.68	529.96	3.186E-03	Pulse	0.30	3
Ni			2	0.649	ug/l	13.93	405.57	2.438E-03	Pulse	0.30	3
Cu			2	-0.031	ug/l	-852.13	8,410.02	5.052E-02	Pulse	0.30	3
Zn			2	5.555	ug/l	13.77	2,356.87	1.416E-02	Pulse	0.30	3
As			2	0.553	ug/l	18.95	69.00	4.149E-04	Pulse	1.00	3
Cd			2	-0.010	ug/l	-250.48	11.06	1.119E-05	Pulse	0.30	3
Sn			2	-0.731	ug/l	-38.07	782.25	7.907E-04	Pulse	0.30	3
Se			3	1.393	ug/l	23.97	33.93	1.602E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,302,657.10	0.44	104.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,866,490.68	0.34	101.9	Pulse	0.10	3
1	Ge		581,914.87	0.26	102.0	Pulse	0.10	3
1	Ge		808,113.97	0.60	101.8	Pulse	0.10	3
1	Rh		3,881,390.88	0.66	100.8	Pulse	0.10	3
1	In		4,139,088.01	1.03	103.9	Pulse	0.10	3
1	Tb		6,024,592.41	0.98	108.8	Analog	0.10	3
1	Ho		578,601.50	0.84	105.2	Pulse	0.10	3
1	Bi		3,476,703.70	0.51	104.1	Pulse	0.10	3
2	Sc		166,491.49	1.25	103.6	Pulse	0.30	3
2	Ge		102,052.69	1.23	102.6	Pulse	0.30	3
2	Ge		153,545.25	1.41	102.4	Pulse	0.30	3
2	Rh		2,437,408.38	0.63	100.1	Pulse	0.30	3
2	In		989,843.10	0.41	101.9	Pulse	0.30	3
2	Tb		3,331,610.49	0.66	101.8	Pulse	0.30	3
2	Ho		342,477.03	1.27	102.5	Pulse	0.30	3
2	Bi		2,235,051.23	0.92	99.8	Pulse	0.30	3
3	Sc		219,531.93	0.35	101.3	Pulse	0.30	3
3	Ge		140,132.63	0.52	99.9	Pulse	0.30	3
3	Ge		211,986.06	0.61	100.2	Pulse	0.30	3
3	Rh		2,155,847.48	0.43	98.8	Pulse	0.30	3
3	Tb		3,725,176.66	0.49	101.7	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:22
Sample Name	sampleconf
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	9/11/2019 11:44
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	0.291	ug/l	9.44	901.37	8.012E-04	Pulse	0.25	3
B			1	80.158	ug/l	1.77	176,953.79	1.573E-01	Pulse	0.15	3
Ca			1	14298.082	ug/l	1.20	6,200,750.74	2.430E+00	Analog	0.10	3
Sr			1	44.863	ug/l	0.28	1,041,456.86	2.986E-01	Pulse	0.10	3
Mo			1	1.215	ug/l	5.60	5,417.79	1.553E-03	Pulse	0.10	3
Ag			1	0.044	ug/l	3.95	526.70	1.378E-04	Pulse	0.10	3
Sn			1	0.715	ug/l	2.47	8,279.17	2.166E-03	Pulse	0.10	3
Sb			1	0.144	ug/l	9.06	1,710.17	2.938E-04	Pulse	0.10	3
Ba			1	88.820	ug/l	0.47	348,343.96	5.982E-02	Pulse	0.10	3
Tl			1	0.032	ug/l	8.43	943.40	2.860E-04	Pulse	0.10	3
Pb			1	1.266	ug/l	0.98	9,887.14	2.998E-03	Pulse	0.10	3
Pb			1	1.194	ug/l	3.13	8,225.94	2.494E-03	Pulse	0.10	3
Pb			1	1.197	ug/l	0.71	37,953.72	1.151E-02	Pulse	0.10	3
Na			2	123850.867	ug/l	1.35	80,165,292.37	5.335E+02	Analog	0.30	3
Mg			2	2342.111	ug/l	1.39	702,702.09	4.676E+00	Pulse	0.30	3
Al			2	2668.662	ug/l	0.99	273,059.39	1.817E+00	Pulse	0.30	3
K			2	2131.161	ug/l	1.11	540,597.27	3.598E+00	Pulse	0.30	3
Ca			2	14204.703	ug/l	0.94	177,541.94	1.182E+00	Pulse	0.30	3
Ti			2	49.755	ug/l	0.86	4,620.88	3.075E-02	Pulse	0.30	3
V			2	13.629	ug/l	2.25	41,280.26	2.747E-01	Pulse	0.30	3
Cr			2	6.285	ug/l	2.93	24,878.79	1.656E-01	Pulse	0.30	3
Mn			2	191.437	ug/l	1.44	391,415.74	2.605E+00	Pulse	0.30	3
Fe			2	3261.676	ug/l	3.31	9,742,009.61	6.483E+01	Analog	0.30	3
Co			2	1.522	ug/l	0.89	9,203.06	6.124E-02	Pulse	0.30	3
Ni			2	5.735	ug/l	4.00	9,264.95	6.167E-02	Pulse	0.30	3
Cu			2	4.299	ug/l	1.89	26,164.31	1.741E-01	Pulse	0.30	3
Zn			2	13.571	ug/l	2.91	10,263.32	6.830E-02	Pulse	0.30	3
As			2	2.345	ug/l	1.50	900.70	5.994E-03	Pulse	1.00	3
Cd			2	0.021	ug/l	17.80	34.05	3.783E-05	Pulse	0.30	3
Sn			2	0.706	ug/l	7.95	2,621.37	2.912E-03	Pulse	0.30	3
Se			3	1.513	ug/l	5.30	162.00	7.841E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,125,217.96	0.37	90.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,551,780.22	0.99	90.7	Pulse	0.10	3
1	Ge		547,474.56	1.25	96.0	Pulse	0.10	3
1	Ge		761,690.09	0.68	96.0	Pulse	0.10	3
1	Rh		3,487,561.30	0.79	90.6	Pulse	0.10	3
1	In		3,823,010.02	1.32	95.9	Pulse	0.10	3
1	Tb		5,823,751.79	1.00	105.2	Analog	0.10	3
1	Ho		563,067.59	0.84	102.4	Pulse	0.10	3
1	Bi		3,298,021.41	0.53	98.8	Pulse	0.10	3
2	Sc		150,279.09	1.29	93.5	Pulse	0.30	3
2	Ge		97,086.18	0.55	97.6	Pulse	0.30	3
2	Ge		145,717.60	0.45	97.2	Pulse	0.30	3
2	Rh		2,226,938.38	1.16	91.5	Pulse	0.30	3
2	In		900,315.46	0.86	92.6	Pulse	0.30	3
2	Tb		3,184,490.64	0.99	97.3	Pulse	0.30	3
2	Ho		329,699.91	0.23	98.6	Pulse	0.30	3
2	Bi		2,110,887.90	0.19	94.3	Pulse	0.30	3
3	Sc		211,668.03	0.99	97.7	Pulse	0.30	3
3	Ge		136,099.40	0.46	97.0	Pulse	0.30	3
3	Ge		206,639.48	0.73	97.7	Pulse	0.30	3
3	Rh		2,064,824.01	0.14	94.7	Pulse	0.30	3
3	Tb		3,708,452.08	0.50	101.2	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:27
Sample Name	sampleconf
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	9/11/2019 11:44
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	0.213	ug/l	11.77	669.36	5.924E-04	Pulse	0.25	3
B			1	15.311	ug/l	3.17	39,025.21	3.454E-02	Pulse	0.15	3
Ca			1	1531.093	ug/l	0.39	683,940.17	2.641E-01	Pulse	0.10	3
Sr			1	7.381	ug/l	0.83	179,825.54	4.922E-02	Pulse	0.10	3
Mo			1	0.588	ug/l	9.36	2,830.37	7.748E-04	Pulse	0.10	3
Ag			1	0.026	ug/l	33.53	330.02	8.391E-05	Pulse	0.10	3
Sn			1	0.422	ug/l	11.35	6,271.50	1.598E-03	Pulse	0.10	3
Sb			1	0.242	ug/l	16.34	2,636.99	4.494E-04	Pulse	0.10	3
Ba			1	42.564	ug/l	1.68	168,277.12	2.867E-02	Pulse	0.10	3
Tl			1	0.073	ug/l	6.07	1,930.20	5.605E-04	Pulse	0.10	3
Pb			1	1.458	ug/l	2.83	11,845.28	3.441E-03	Pulse	0.10	3
Pb			1	1.394	ug/l	4.63	9,980.44	2.898E-03	Pulse	0.10	3
Pb			1	1.418	ug/l	1.45	46,700.80	1.356E-02	Pulse	0.10	3
Na			2	13020.882	ug/l	0.93	8,449,596.33	5.615E+01	Analog	0.30	3
Mg			2	736.900	ug/l	1.19	221,607.16	1.473E+00	Pulse	0.30	3
Al			2	3307.680	ug/l	0.70	338,728.16	2.251E+00	Pulse	0.30	3
K			2	1272.838	ug/l	0.78	328,524.80	2.183E+00	Pulse	0.30	3
Ca			2	1508.326	ug/l	0.89	18,972.02	1.261E-01	Pulse	0.30	3
Ti			2	36.340	ug/l	4.92	3,380.46	2.246E-02	Pulse	0.30	3
V			2	6.719	ug/l	0.49	20,522.83	1.364E-01	Pulse	0.30	3
Cr			2	3.748	ug/l	1.27	15,224.90	1.012E-01	Pulse	0.30	3
Mn			2	94.379	ug/l	1.05	193,314.44	1.285E+00	Pulse	0.30	3
Fe			2	3101.904	ug/l	1.11	9,278,234.08	6.166E+01	Analog	0.30	3
Co			2	1.195	ug/l	1.31	7,245.53	4.815E-02	Pulse	0.30	3
Ni			2	2.782	ug/l	3.41	4,585.14	3.047E-02	Pulse	0.30	3
Cu			2	1.222	ug/l	3.15	12,909.63	8.579E-02	Pulse	0.30	3
Zn			2	6.979	ug/l	2.96	5,967.84	3.966E-02	Pulse	0.30	3
As			2	1.411	ug/l	3.84	551.01	3.662E-03	Pulse	1.00	3
Cd			2	-0.002	ug/l	-569.26	10.87	1.172E-05	Pulse	0.30	3
Sn			2	0.342	ug/l	4.37	1,864.58	2.006E-03	Pulse	0.30	3
Se			3	0.278	ug/l	11.88	33.93	1.597E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,130,005.26	0.49	90.5	Pulse	0.10	3
1	Sc		2,589,860.43	0.24	92.1	Pulse	0.10	3
1	Ge		561,760.29	0.54	98.5	Pulse	0.10	3

Quantitation Report

1	Ge		775,506.03	0.28	97.7	Pulse	0.10	3
1	Rh		3,653,704.63	0.75	94.9	Pulse	0.10	3
1	In		3,925,403.58	1.01	98.5	Pulse	0.10	3
1	Tb		5,869,548.45	1.11	106.0	Analog	0.10	3
1	Ho		574,125.25	0.71	104.4	Pulse	0.10	3
1	Bi		3,443,007.97	0.72	103.1	Pulse	0.10	3
2	Sc		150,476.87	0.56	93.6	Pulse	0.30	3
2	Ge		99,097.07	0.35	99.6	Pulse	0.30	3
2	Ge		149,619.27	0.64	99.8	Pulse	0.30	3
2	Rh		2,326,478.45	0.82	95.6	Pulse	0.30	3
2	In		929,508.08	0.44	95.6	Pulse	0.30	3
2	Tb		3,241,359.73	0.23	99.0	Pulse	0.30	3
2	Ho		333,334.16	0.54	99.7	Pulse	0.30	3
2	Bi		2,208,627.62	0.39	98.6	Pulse	0.30	3
3	Sc		215,450.95	0.69	99.4	Pulse	0.30	3
3	Ge		140,454.67	1.21	100.1	Pulse	0.30	3
3	Ge		212,405.08	0.34	100.4	Pulse	0.30	3
3	Rh		2,166,913.18	0.09	99.3	Pulse	0.30	3
3	Tb		3,774,999.71	0.15	103.1	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:32
Sample Name	sampleconf
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	9/11/2019 11:44
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	0.063	ug/l	30.24	209.34	1.871E-04	Pulse	0.25	3
B			1	17.508	ug/l	0.41	43,250.71	3.869E-02	Pulse	0.15	3
Ca			1	6252.760	ug/l	0.46	2,709,458.29	1.065E+00	Pulse	0.10	3
Sr			1	19.192	ug/l	1.09	467,288.81	1.278E-01	Pulse	0.10	3
Mo			1	2.060	ug/l	1.67	9,516.59	2.603E-03	Pulse	0.10	3
Ag			1	0.089	ug/l	9.54	1,070.08	2.740E-04	Pulse	0.10	3
Sn			1	0.973	ug/l	5.33	10,410.54	2.665E-03	Pulse	0.10	3
Sb			1	0.459	ug/l	4.20	4,694.22	7.963E-04	Pulse	0.10	3
Ba			1	110.082	ug/l	0.66	436,703.55	7.413E-02	Pulse	0.10	3
Tl			1	0.015	ug/l	10.48	606.70	1.747E-04	Pulse	0.10	3
Pb			1	2.736	ug/l	3.94	22,160.72	6.380E-03	Pulse	0.10	3
Pb			1	2.644	ug/l	1.73	18,856.10	5.430E-03	Pulse	0.10	3
Pb			1	2.692	ug/l	1.23	88,263.35	2.541E-02	Pulse	0.10	3
Na			2	11300.829	ug/l	1.68	7,247,695.54	4.875E+01	Analog	0.30	3
Mg			2	1887.214	ug/l	1.55	560,327.84	3.769E+00	Pulse	0.30	3
Al			2	1724.592	ug/l	1.99	174,813.57	1.176E+00	Pulse	0.30	3
K			2	1248.904	ug/l	0.98	318,775.42	2.144E+00	Pulse	0.30	3
Ca			2	6189.314	ug/l	1.22	76,604.78	5.152E-01	Pulse	0.30	3
Ti			2	75.809	ug/l	2.69	6,966.04	4.684E-02	Pulse	0.30	3
V			2	10.600	ug/l	1.34	31,832.90	2.141E-01	Pulse	0.30	3
Cr			2	10.827	ug/l	2.02	41,761.45	2.809E-01	Pulse	0.30	3
Mn			2	153.945	ug/l	1.13	311,491.08	2.095E+00	Pulse	0.30	3
Fe			2	5289.507	ug/l	1.51	15,628,878.27	1.051E+02	Analog	0.30	3
Co			2	1.987	ug/l	3.76	11,868.88	7.982E-02	Pulse	0.30	3
Ni			2	6.914	ug/l	0.40	11,023.80	7.414E-02	Pulse	0.30	3
Cu			2	22.363	ug/l	1.34	102,992.73	6.927E-01	Pulse	0.30	3
Zn			2	87.191	ug/l	0.52	57,724.35	3.882E-01	Pulse	0.30	3
As			2	1.908	ug/l	2.41	729.02	4.903E-03	Pulse	1.00	3
Cd			2	0.106	ug/l	16.36	123.68	1.345E-04	Pulse	0.30	3
Sn			2	0.932	ug/l	7.29	3,194.81	3.474E-03	Pulse	0.30	3
Se			3	0.201	ug/l	3.77	25.73	1.211E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,117,797.99	0.58	89.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,543,725.33	0.61	90.4	Pulse	0.10	3
1	Ge		562,766.15	1.37	98.7	Pulse	0.10	3
1	Ge		776,318.97	0.85	97.8	Pulse	0.10	3
1	Rh		3,656,225.26	0.26	95.0	Pulse	0.10	3
1	In		3,906,701.08	0.45	98.0	Pulse	0.10	3
1	Tb		5,891,379.08	2.28	106.4	Analog	0.10	3
1	Ho		568,406.86	1.11	103.3	Pulse	0.10	3
1	Bi		3,473,036.09	0.58	104.0	Pulse	0.10	3
2	Sc		148,700.18	0.99	92.5	Pulse	0.30	3
2	Ge		99,364.09	0.58	99.8	Pulse	0.30	3
2	Ge		149,591.11	1.01	99.8	Pulse	0.30	3
2	Rh		2,316,642.48	0.14	95.2	Pulse	0.30	3
2	In		919,661.94	0.22	94.6	Pulse	0.30	3
2	Tb		3,237,465.91	0.63	98.9	Pulse	0.30	3
2	Ho		333,634.95	0.65	99.8	Pulse	0.30	3
2	Bi		2,216,279.43	0.35	99.0	Pulse	0.30	3
3	Sc		217,114.94	0.24	100.2	Pulse	0.30	3
3	Ge		141,199.98	0.35	100.7	Pulse	0.30	3
3	Ge		212,393.98	0.37	100.4	Pulse	0.30	3
3	Rh		2,172,241.16	0.42	99.6	Pulse	0.30	3
3	Tb		3,798,777.91	0.36	103.7	Pulse	0.30	3

Quantitation Report

File Name	042SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:37
Sample Name	sampleconf
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	9/11/2019 11:44
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	0.965	ug/l	5.94	2,868.29	2.616E-03	Pulse	0.25	3
B			1	67.545	ug/l	2.21	146,187.91	1.334E-01	Pulse	0.15	3
Ca			1	138515.422	ug/l	0.93	60,878,487.42	2.351E+01	Analog	0.10	3
Sr			1	59.733	ug/l	0.92	1,345,432.11	3.976E-01	Pulse	0.10	3
Mo			1	1.347	ug/l	4.16	5,811.28	1.717E-03	Pulse	0.10	3
Ag			1	0.671	ug/l	1.53	7,572.09	2.025E-03	Pulse	0.10	3
Sn			1	0.618	ug/l	5.69	7,395.35	1.978E-03	Pulse	0.10	3
Sb			1	0.203	ug/l	16.45	2,223.59	3.872E-04	Pulse	0.10	3
Ba			1	210.431	ug/l	1.13	814,065.48	1.417E-01	Pulse	0.10	3
Tl			1	0.067	ug/l	9.26	1,636.82	5.208E-04	Pulse	0.10	3
Pb			1	2.772	ug/l	4.54	20,297.98	6.463E-03	Pulse	0.10	3
Pb			1	2.722	ug/l	0.80	17,550.99	5.587E-03	Pulse	0.10	3
Pb			1	2.743	ug/l	1.93	81,297.43	2.588E-02	Pulse	0.10	3
Na			2	217128.595	ug/l	1.47	142,392,429.90	9.352E+02	Analog	0.30	3
Mg			2	6237.728	ug/l	1.11	1,895,830.41	1.245E+01	Pulse	0.30	3
Al			2	7838.186	ug/l	0.71	811,306.44	5.328E+00	Pulse	0.30	3
K			2	2815.425	ug/l	0.22	719,457.05	4.725E+00	Pulse	0.30	3
Ca			2	138703.023	ug/l	0.35	1,755,712.85	1.153E+01	Pulse	0.30	3
Ti			2	127.446	ug/l	0.34	11,989.02	7.874E-02	Pulse	0.30	3
V			2	18.793	ug/l	2.28	57,568.35	3.781E-01	Pulse	0.30	3
Cr			2	10.618	ug/l	2.41	41,956.36	2.756E-01	Pulse	0.30	3
Mn			2	143.276	ug/l	1.47	296,860.88	1.950E+00	Pulse	0.30	3
Fe			2	7562.514	ug/l	1.03	22,879,445.76	1.503E+02	Analog	0.30	3
Co			2	3.230	ug/l	1.93	19,728.03	1.296E-01	Pulse	0.30	3
Ni			2	8.536	ug/l	0.79	13,899.32	9.128E-02	Pulse	0.30	3
Cu			2	10.537	ug/l	1.29	53,775.27	3.532E-01	Pulse	0.30	3
Zn			2	18.782	ug/l	1.46	13,847.10	9.095E-02	Pulse	0.30	3
As			2	3.366	ug/l	4.98	1,300.39	8.543E-03	Pulse	1.00	3
Cd			2	0.013	ug/l	63.01	25.11	2.839E-05	Pulse	0.30	3
Sn			2	0.570	ug/l	4.78	2,274.64	2.574E-03	Pulse	0.30	3
Se			3	0.880	ug/l	6.67	93.00	4.640E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,096,039.08	0.77	87.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,590,191.16	1.15	92.1	Pulse	0.10	3
1	Ge		536,793.29	1.30	94.1	Pulse	0.10	3
1	Ge		739,269.16	1.25	93.1	Pulse	0.10	3
1	Rh		3,384,178.60	0.49	87.9	Pulse	0.10	3
1	In		3,738,718.09	0.51	93.8	Pulse	0.10	3
1	Tb		5,745,547.83	0.78	103.8	Analog	0.10	3
1	Ho		562,662.24	1.22	102.3	Pulse	0.10	3
1	Bi		3,141,299.64	1.13	94.1	Pulse	0.10	3
2	Sc		152,266.68	0.86	94.8	Pulse	0.30	3
2	Ge		95,265.44	0.59	95.7	Pulse	0.30	3
2	Ge		143,096.25	0.23	95.4	Pulse	0.30	3
2	Rh		2,148,788.60	1.13	88.3	Pulse	0.30	3
2	In		883,866.45	0.61	90.9	Pulse	0.30	3
2	Tb		3,159,096.47	0.49	96.5	Pulse	0.30	3
2	Ho		328,013.12	0.53	98.1	Pulse	0.30	3
2	Bi		2,010,282.42	0.31	89.8	Pulse	0.30	3
3	Sc		215,775.19	0.72	99.6	Pulse	0.30	3
3	Ge		133,259.60	0.91	95.0	Pulse	0.30	3
3	Ge		200,425.07	0.50	94.7	Pulse	0.30	3
3	Rh		1,961,733.33	0.17	89.9	Pulse	0.30	3
3	Tb		3,600,297.22	0.13	98.3	Pulse	0.30	3

Quantitation Report

File Name	043_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:42
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	9/11/2019 11:44
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	47.052	ug/l	15.39	315,648.28	2.532E-01	Pulse	0.25	3
B			1	92.555	ug/l	14.88	443,910.61	3.559E-01	Pulse	0.15	3
Ca			1	4997.267	ug/l	20.20	4,569,243.16	1.700E+00	Pulse	0.10	3
Sr			1	50.618	ug/l	19.39	2,545,800.59	6.737E-01	Pulse	0.10	3
Mo			1	49.903	ug/l	19.51	468,630.16	1.240E-01	Pulse	0.10	3
Ag			1	47.821	ug/l	20.36	1,159,744.49	2.879E-01	Pulse	0.10	3
Sn			1	49.034	ug/l	21.52	766,952.69	1.907E-01	Pulse	0.10	3
Sb			1	50.604	ug/l	20.32	945,987.90	1.619E-01	Pulse	0.10	3
Ba			1	48.308	ug/l	19.52	380,631.42	6.506E-02	Pulse	0.10	3
Tl			1	49.584	ug/l	16.79	2,276,053.35	6.608E-01	Pulse	0.10	3
Pb			1	49.645	ug/l	16.45	787,509.03	2.285E-01	Pulse	0.10	3
Pb			1	49.785	ug/l	17.02	694,616.42	2.017E-01	Pulse	0.10	3
Pb			1	49.792	ug/l	16.67	3,191,867.51	9.265E-01	Pulse	0.10	3
Na			2	5239.300	ug/l	8.89	6,848,828.75	4.520E+01	Analog	0.30	3
Mg			2	5062.968	ug/l	9.28	3,061,303.63	2.021E+01	Pulse	0.30	3
Al			2	4993.696	ug/l	9.16	1,028,247.91	6.788E+00	Pulse	0.30	3
K			2	5097.335	ug/l	9.01	2,557,753.99	1.688E+01	Pulse	0.30	3
Ca			2	5346.475	ug/l	9.54	134,720.21	8.896E-01	Pulse	0.30	3
Ti			2	52.631	ug/l	7.43	9,860.80	6.504E-02	Pulse	0.30	3
V			2	52.220	ug/l	9.17	317,010.22	2.093E+00	Pulse	0.30	3
Cr			2	51.616	ug/l	9.41	397,819.67	2.627E+00	Pulse	0.30	3
Mn			2	51.428	ug/l	8.90	212,098.68	1.400E+00	Pulse	0.30	3
Fe			2	5296.257	ug/l	9.54	31,872,737.62	2.105E+02	Analog	0.30	3
Co			2	51.524	ug/l	8.78	624,701.14	4.123E+00	Pulse	0.30	3
Ni			2	51.371	ug/l	9.05	164,649.86	1.087E+00	Pulse	0.30	3
Cu			2	50.665	ug/l	9.01	448,371.28	2.960E+00	Pulse	0.30	3
Zn			2	51.393	ug/l	8.23	69,114.69	4.560E-01	Pulse	0.30	3
As			2	52.182	ug/l	8.52	39,500.08	2.607E-01	Pulse	1.00	3
Cd			2	52.303	ug/l	7.49	107,421.74	1.188E-01	Pulse	0.30	3
Sn			2	52.129	ug/l	8.64	235,494.65	2.606E-01	Pulse	0.30	3
Se			3	198.388	ug/l	0.47	41,446.88	2.006E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,263,966.76	13.57	101.2	Pulse	0.10	3
1	Sc		2,758,840.43	19.35	98.1	Pulse	0.10	3
1	Ge		559,455.19	13.62	98.1	Pulse	0.10	3

Quantitation Report

1	Ge		787,774.26	14.44	99.2	Pulse	0.10	3
1	Rh		3,879,622.34	20.22	100.8	Mix	0.10	3
1	In		4,143,708.28	20.67	104.0	Mix	0.10	3
1	Tb		6,000,554.60	19.35	108.4	Mix	0.10	3
1	Ho		585,980.25	18.58	106.5	Pulse	0.10	3
1	Bi		3,509,250.68	16.53	105.1	Pulse	0.10	3
2	Sc		152,248.18	8.34	94.7	Pulse	0.30	3
2	Ge		92,878.54	6.39	93.3	Pulse	0.30	3
2	Ge		141,568.11	5.90	94.4	Pulse	0.30	3
2	Rh		2,258,453.66	7.39	92.8	Pulse	0.30	3
2	In		907,511.79	7.68	93.4	Pulse	0.30	3
2	Tb		3,107,843.42	8.21	94.9	Pulse	0.30	3
2	Ho		319,352.64	8.08	95.5	Pulse	0.30	3
2	Bi		2,094,053.39	6.21	93.5	Pulse	0.30	3
3	Sc		215,654.91	1.23	99.5	Pulse	0.30	3
3	Ge		135,909.43	0.34	96.9	Pulse	0.30	3
3	Ge		206,610.33	0.77	97.7	Pulse	0.30	3
3	Rh		2,092,199.64	0.56	95.9	Pulse	0.30	3
3	Tb		3,627,131.94	0.72	99.0	Pulse	0.30	3

Quantitation Report

File Name	044_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:47
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	9/11/2019 11:44
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	0.012	ug/l	19.83	105.33	8.320E-05	Pulse	0.25	3
B			1	3.996	ug/l	0.46	26,191.70	2.068E-02	Pulse	0.15	3
Ca			1	1.049	ug/l	83.92	12,588.53	4.671E-03	Pulse	0.10	3
Sr			1	0.008	ug/l	10.92	813.39	2.146E-04	Pulse	0.10	3
Mo			1	0.088	ug/l	12.61	996.73	2.628E-04	Pulse	0.10	3
Ag			1	0.014	ug/l	29.34	363.35	9.114E-05	Pulse	0.10	3
Sn			1	0.133	ug/l	21.46	5,191.06	1.299E-03	Pulse	0.10	3
Sb			1	0.049	ug/l	11.49	1,276.77	2.187E-04	Pulse	0.10	3
Ba			1	0.008	ug/l	89.76	153.34	2.627E-05	Pulse	0.10	3
Tl			1	0.024	ug/l	9.59	1,343.45	3.917E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	54.51	606.71	1.768E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	59.76	403.36	1.176E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	10.79	2,043.48	5.957E-04	Pulse	0.10	3
Na			2	8.000	ug/l	0.98	22,518.38	1.427E-01	Pulse	0.30	3
Mg			2	0.724	ug/l	16.85	775.59	4.916E-03	Pulse	0.30	3
Al			2	-0.519	ug/l	-71.68	573.35	3.633E-03	Pulse	0.30	3
K			2	-0.624	ug/l	-61.19	13,242.04	8.393E-02	Pulse	0.30	3
Ca			2	1.898	ug/l	40.87	160.01	1.014E-03	Pulse	0.30	3
Ti			2	0.023	ug/l	73.93	6.67	4.222E-05	Pulse	0.30	3
V			2	0.005	ug/l	34.70	330.01	2.092E-03	Pulse	0.30	3
Cr			2	-0.016	ug/l	-54.73	822.25	5.211E-03	Pulse	0.30	3
Mn			2	0.003	ug/l	203.38	155.56	9.861E-04	Pulse	0.30	3
Fe			2	0.952	ug/l	2.68	12,101.28	7.670E-02	Pulse	0.30	3
Co			2	0.005	ug/l	2.95	115.53	7.323E-04	Pulse	0.30	3
Ni			2	-0.002	ug/l	-421.83	162.23	1.028E-03	Pulse	0.30	3
Cu			2	-0.582	ug/l	-0.97	2,729.15	1.730E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.520	ug/l	-3.37	758.91	4.810E-03	Pulse	0.30	3
As			2	0.010	ug/l	75.09	30.00	1.901E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	85.80	18.80	1.967E-05	Pulse	0.30	3
Sn			2	0.141	ug/l	12.11	1,773.45	1.857E-03	Pulse	0.30	3
Se			3	0.095	ug/l	10.15	23.80	1.154E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,266,231.90	0.32	101.4	Pulse	0.10	3
1	Sc		2,695,270.90	0.23	95.8	Pulse	0.10	3
1	Ge		553,097.26	0.74	97.0	Pulse	0.10	3
1	Ge		764,458.11	1.18	96.3	Pulse	0.10	3
1	Rh		3,791,505.67	0.78	98.5	Pulse	0.10	3
1	In		3,994,670.51	1.11	100.2	Pulse	0.10	3
1	Tb		5,838,270.95	0.36	105.4	Analog	0.10	3
1	Ho		560,949.51	1.13	102.0	Pulse	0.10	3
1	Bi		3,430,644.64	0.35	102.8	Pulse	0.10	3
2	Sc		157,768.98	0.28	98.2	Pulse	0.30	3
2	Ge		97,514.03	0.68	98.0	Pulse	0.30	3
2	Ge		147,222.73	1.26	98.2	Pulse	0.30	3
2	Rh		2,404,685.95	1.15	98.8	Pulse	0.30	3
2	In		955,218.57	0.97	98.3	Pulse	0.30	3
2	Tb		3,198,182.79	0.49	97.7	Pulse	0.30	3
2	Ho		327,359.98	0.62	97.9	Pulse	0.30	3
2	Bi		2,216,241.23	0.38	99.0	Pulse	0.30	3
3	Sc		210,607.20	0.89	97.2	Pulse	0.30	3
3	Ge		136,203.78	1.36	97.1	Pulse	0.30	3
3	Ge		206,292.96	0.75	97.5	Pulse	0.30	3
3	Rh		2,121,476.09	0.14	97.3	Pulse	0.30	3
3	Tb		3,572,774.72	1.28	97.5	Pulse	0.30	3

Quantitation Report

File Name	045SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:52
Sample Name	sampleconf
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	9/11/2019 11:44
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	0.117	ug/l	8.76	388.01	3.342E-04	Pulse	0.25	3
B			1	13.766	ug/l	2.54	36,708.94	3.161E-02	Pulse	0.15	3
Ca			1	419175.426	ug/l	0.93	184,490,243.92	7.112E+01	Analog	0.10	3
Sr			1	294.276	ug/l	0.40	6,664,556.77	1.958E+00	Analog	0.10	3
Mo			1	0.904	ug/l	3.05	3,973.99	1.168E-03	Pulse	0.10	3
Ag			1	0.032	ug/l	17.79	380.02	1.016E-04	Pulse	0.10	3
Sn			1	0.661	ug/l	3.39	7,712.21	2.063E-03	Pulse	0.10	3
Sb			1	0.155	ug/l	3.03	1,766.83	3.106E-04	Pulse	0.10	3
Ba			1	1114.702	ug/l	0.78	4,269,713.68	7.505E-01	Pulse	0.10	3
Tl			1	0.040	ug/l	2.38	1,076.74	3.414E-04	Pulse	0.10	3
Pb			1	1.105	ug/l	5.18	8,289.26	2.628E-03	Pulse	0.10	3
Pb			1	1.050	ug/l	2.86	6,948.64	2.203E-03	Pulse	0.10	3
Pb			1	1.075	ug/l	1.60	32,729.00	1.038E-02	Pulse	0.10	3
Na			2	48325.381	ug/l	0.76	31,147,362.10	2.082E+02	Analog	0.30	3
Mg			2	19733.676	ug/l	0.44	5,892,243.66	3.939E+01	Analog	0.30	3
Al			2	1833.927	ug/l	0.24	187,002.59	1.250E+00	Pulse	0.30	3
K			2	3867.549	ug/l	0.89	966,196.32	6.459E+00	Pulse	0.30	3
Ca			2	433890.141	ug/l	0.54	5,395,897.70	3.607E+01	Analog	0.30	3
Ti			2	25.494	ug/l	12.40	2,358.03	1.576E-02	Pulse	0.30	3
V			2	3.400	ug/l	0.89	10,463.41	6.994E-02	Pulse	0.30	3
Cr			2	2.333	ug/l	2.58	9,761.89	6.525E-02	Pulse	0.30	3
Mn			2	235.728	ug/l	0.58	479,807.34	3.207E+00	Pulse	0.30	3
Fe			2	1879.738	ug/l	1.50	5,591,841.72	3.738E+01	Analog	0.30	3
Co			2	0.785	ug/l	0.28	4,751.20	3.176E-02	Pulse	0.30	3
Ni			2	2.627	ug/l	3.54	4,312.84	2.883E-02	Pulse	0.30	3
Cu			2	0.955	ug/l	4.07	11,687.61	7.813E-02	Pulse	0.30	3
Zn			2	6.807	ug/l	4.99	5,821.10	3.891E-02	Pulse	0.30	3
As			2	0.981	ug/l	4.69	387.01	2.587E-03	Pulse	1.00	3
Cd			2	0.067	ug/l	21.41	79.69	8.940E-05	Pulse	0.30	3
Sn			2	0.661	ug/l	2.10	2,494.67	2.799E-03	Pulse	0.30	3
Se			3	6.592	ug/l	1.26	649.14	3.352E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,161,404.70	1.05	93.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,593,976.47	1.07	92.2	Pulse	0.10	3
1	Ge		541,232.00	0.61	94.9	Pulse	0.10	3
1	Ge		747,573.22	0.25	94.2	Pulse	0.10	3
1	Rh		3,403,340.57	0.64	88.4	Pulse	0.10	3
1	In		3,739,023.99	0.60	93.8	Pulse	0.10	3
1	Tb		5,688,919.50	0.51	102.7	Analog	0.10	3
1	Ho		549,764.26	1.07	99.9	Pulse	0.10	3
1	Bi		3,154,056.20	0.11	94.5	Pulse	0.10	3
2	Sc		149,598.78	0.17	93.1	Pulse	0.30	3
2	Ge		94,678.67	0.39	95.1	Pulse	0.30	3
2	Ge		142,856.10	0.49	95.3	Pulse	0.30	3
2	Rh		2,141,965.33	0.01	88.0	Pulse	0.30	3
2	In		891,211.89	0.18	91.7	Pulse	0.30	3
2	Tb		3,151,826.61	0.57	96.3	Pulse	0.30	3
2	Ho		322,387.88	0.77	96.4	Pulse	0.30	3
2	Bi		1,999,203.46	0.64	89.3	Pulse	0.30	3
3	Sc		207,790.05	0.79	95.9	Pulse	0.30	3
3	Ge		128,755.44	0.28	91.8	Pulse	0.30	3
3	Ge		193,657.25	0.43	91.5	Pulse	0.30	3
3	Rh		1,920,017.15	0.95	88.0	Pulse	0.30	3
3	Tb		3,536,992.50	0.74	96.6	Pulse	0.30	3

Quantitation Report

File Name	046SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 13:57
Sample Name	sampleconf
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	9/11/2019 11:44
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	0.059	ug/l	15.70	201.33	1.773E-04	Pulse	0.25	3
B			1	65.325	ug/l	0.99	146,698.56	1.292E-01	Pulse	0.15	3
Ca			1	29297.554	ug/l	0.62	12,506,022.73	4.975E+00	Analog	0.10	3
Sr			1	26.614	ug/l	0.12	611,410.94	1.772E-01	Pulse	0.10	3
Mo			1	5.224	ug/l	0.94	22,546.50	6.534E-03	Pulse	0.10	3
Ag			1	0.093	ug/l	9.14	1,073.42	2.862E-04	Pulse	0.10	3
Sn			1	0.591	ug/l	1.40	7,228.64	1.926E-03	Pulse	0.10	3
Sb			1	0.187	ug/l	4.29	2,070.21	3.624E-04	Pulse	0.10	3
Ba			1	51.098	ug/l	0.38	196,695.06	3.442E-02	Pulse	0.10	3
Tl			1	0.133	ug/l	5.68	3,040.45	9.574E-04	Pulse	0.10	3
Pb			1	0.631	ug/l	7.11	4,881.02	1.537E-03	Pulse	0.10	3
Pb			1	0.588	ug/l	8.00	4,024.04	1.267E-03	Pulse	0.10	3
Pb			1	0.617	ug/l	4.63	19,429.28	6.118E-03	Pulse	0.10	3
Na			2	216809.939	ug/l	1.67	138,244,043.39	9.339E+02	Analog	0.30	3
Mg			2	1555.169	ug/l	1.81	459,772.12	3.106E+00	Pulse	0.30	3
Al			2	1384.554	ug/l	6.51	139,851.31	9.448E-01	Pulse	0.30	3
K			2	1708.346	ug/l	1.23	429,442.09	2.901E+00	Pulse	0.30	3
Ca			2	29034.978	ug/l	1.20	357,414.07	2.414E+00	Pulse	0.30	3
Ti			2	18.104	ug/l	30.81	1,662.07	1.120E-02	Pulse	0.30	3
V			2	7.371	ug/l	1.67	22,122.71	1.494E-01	Pulse	0.30	3
Cr			2	10.716	ug/l	2.03	41,159.94	2.780E-01	Pulse	0.30	3
Mn			2	83.390	ug/l	1.73	168,045.44	1.135E+00	Pulse	0.30	3
Fe			2	965.132	ug/l	1.69	2,843,846.55	1.921E+01	Pulse	0.30	3
Co			2	0.525	ug/l	4.23	3,160.45	2.135E-02	Pulse	0.30	3
Ni			2	3.495	ug/l	2.47	5,625.47	3.800E-02	Pulse	0.30	3
Cu			2	1.782	ug/l	5.63	15,078.16	1.019E-01	Pulse	0.30	3
Zn			2	12.642	ug/l	1.41	9,515.07	6.427E-02	Pulse	0.30	3
As			2	3.942	ug/l	2.93	1,477.40	9.981E-03	Pulse	1.00	3
Cd			2	0.186	ug/l	18.25	198.26	2.243E-04	Pulse	0.30	3
Sn			2	0.584	ug/l	16.90	2,304.65	2.609E-03	Pulse	0.30	3
Se			3	0.620	ug/l	2.80	65.73	3.330E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,135,537.12	0.47	90.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,513,903.56	1.27	89.4	Pulse	0.10	3
1	Ge		539,041.57	0.65	94.5	Pulse	0.10	3
1	Ge		753,723.25	1.48	95.0	Pulse	0.10	3
1	Rh		3,450,526.83	1.25	89.6	Pulse	0.10	3
1	In		3,752,657.55	1.31	94.2	Pulse	0.10	3
1	Tb		5,714,597.20	1.33	103.2	Analog	0.10	3
1	Ho		550,624.29	1.65	100.1	Pulse	0.10	3
1	Bi		3,176,004.02	0.34	95.1	Pulse	0.10	3
2	Sc		148,053.63	1.28	92.1	Pulse	0.30	3
2	Ge		95,055.04	0.27	95.5	Pulse	0.30	3
2	Ge		143,618.47	1.06	95.8	Pulse	0.30	3
2	Rh		2,155,875.19	0.65	88.6	Pulse	0.30	3
2	In		883,474.51	0.58	90.9	Pulse	0.30	3
2	Tb		3,111,190.08	0.64	95.0	Pulse	0.30	3
2	Ho		319,489.44	0.68	95.6	Pulse	0.30	3
2	Bi		2,030,750.61	0.82	90.7	Pulse	0.30	3
3	Sc		205,329.90	0.85	94.8	Pulse	0.30	3
3	Ge		131,356.98	1.55	93.6	Pulse	0.30	3
3	Ge		197,400.15	0.69	93.3	Pulse	0.30	3
3	Rh		1,974,544.30	0.70	90.5	Pulse	0.30	3
3	Tb		3,549,287.36	0.94	96.9	Pulse	0.30	3

Quantitation Report

File Name	047_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:02
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	9/11/2019 11:44
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	47.958	ug/l	5.75	310,371.12	2.581E-01	Pulse	0.25	3
B			1	93.403	ug/l	4.93	431,914.60	3.591E-01	Pulse	0.15	3
Ca			1	5350.709	ug/l	8.61	4,486,597.64	1.820E+00	Pulse	0.10	3
Sr			1	54.155	ug/l	8.13	2,483,148.66	7.208E-01	Pulse	0.10	3
Mo			1	53.168	ug/l	7.34	455,425.98	1.321E-01	Pulse	0.10	3
Ag			1	51.597	ug/l	8.50	1,140,527.43	3.106E-01	Pulse	0.10	3
Sn			1	52.531	ug/l	9.29	749,498.92	2.042E-01	Pulse	0.10	3
Sb			1	54.079	ug/l	10.16	927,802.25	1.730E-01	Pulse	0.10	3
Ba			1	51.680	ug/l	10.48	373,271.06	6.961E-02	Pulse	0.10	3
Tl			1	53.245	ug/l	6.34	2,247,213.87	7.096E-01	Pulse	0.10	3
Pb			1	52.874	ug/l	6.67	770,743.84	2.434E-01	Pulse	0.10	3
Pb			1	53.192	ug/l	7.18	682,237.57	2.155E-01	Pulse	0.10	3
Pb			1	52.962	ug/l	6.88	3,120,207.32	9.854E-01	Pulse	0.10	3
Na			2	5088.778	ug/l	1.12	6,734,895.15	4.391E+01	Analog	0.30	3
Mg			2	4864.186	ug/l	0.16	2,978,549.19	1.942E+01	Pulse	0.30	3
Al			2	4781.702	ug/l	0.27	997,087.01	6.500E+00	Pulse	0.30	3
K			2	4894.722	ug/l	0.27	2,487,417.06	1.622E+01	Pulse	0.30	3
Ca			2	5102.527	ug/l	0.96	130,229.01	8.490E-01	Pulse	0.30	3
Ti			2	49.407	ug/l	0.39	9,364.95	6.105E-02	Pulse	0.30	3
V			2	50.038	ug/l	0.86	307,604.36	2.005E+00	Pulse	0.30	3
Cr			2	49.511	ug/l	0.08	386,515.84	2.520E+00	Pulse	0.30	3
Mn			2	49.776	ug/l	0.16	207,850.02	1.355E+00	Pulse	0.30	3
Fe			2	5060.434	ug/l	0.71	30,844,784.33	2.011E+02	Analog	0.30	3
Co			2	49.686	ug/l	0.74	609,903.08	3.976E+00	Pulse	0.30	3
Ni			2	49.411	ug/l	1.29	160,360.54	1.045E+00	Pulse	0.30	3
Cu			2	48.812	ug/l	0.50	437,643.60	2.853E+00	Pulse	0.30	3
Zn			2	49.237	ug/l	0.76	67,069.37	4.372E-01	Pulse	0.30	3
As			2	50.212	ug/l	0.97	38,477.71	2.508E-01	Pulse	1.00	3
Cd			2	49.922	ug/l	0.70	104,665.08	1.134E-01	Pulse	0.30	3
Sn			2	49.518	ug/l	0.08	228,541.60	2.476E-01	Pulse	0.30	3
Se			3	197.464	ug/l	0.36	39,989.46	1.997E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,204,827.70	5.19	96.5	Pulse	0.10	3
1	Sc		2,476,542.26	7.99	88.0	Pulse	0.10	3
1	Ge		517,249.04	5.18	90.7	Pulse	0.10	3

Quantitation Report

1	Ge		723,348.77	5.21	91.1	Pulse	0.10	3
1	Rh		3,460,430.78	8.27	89.9	Pulse	0.10	3
1	In		3,690,440.64	8.95	92.6	Pulse	0.10	3
1	Tb		5,399,307.53	9.74	97.5	Mix	0.10	3
1	Ho		524,860.64	8.84	95.4	Pulse	0.10	3
1	Bi		3,175,950.06	6.61	95.1	Pulse	0.10	3
2	Sc		153,391.53	0.56	95.5	Pulse	0.30	3
2	Ge		94,459.90	0.56	94.9	Pulse	0.30	3
2	Ge		142,663.24	0.46	95.1	Pulse	0.30	3
2	Rh		2,293,628.73	0.33	94.2	Pulse	0.30	3
2	In		922,872.78	0.44	95.0	Pulse	0.30	3
2	Tb		3,157,780.78	0.39	96.4	Pulse	0.30	3
2	Ho		322,968.98	0.45	96.6	Pulse	0.30	3
2	Bi		2,127,398.04	0.53	95.0	Pulse	0.30	3
3	Sc		206,386.45	0.59	95.3	Pulse	0.30	3
3	Ge		132,365.02	0.83	94.4	Pulse	0.30	3
3	Ge		200,275.22	0.51	94.7	Pulse	0.30	3
3	Rh		2,031,794.29	0.60	93.1	Pulse	0.30	3
3	Tb		3,528,173.33	0.49	96.3	Pulse	0.30	3

Quantitation Report

File Name	048_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:07
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	9/11/2019 11:44
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	13.51	90.67	7.190E-05	Pulse	0.25	3
B			1	4.103	ug/l	2.06	26,607.84	2.109E-02	Pulse	0.15	3
Ca			1	3.940	ug/l	19.76	15,010.68	5.652E-03	Pulse	0.10	3
Sr			1	0.009	ug/l	41.62	860.06	2.285E-04	Pulse	0.10	3
Mo			1	0.085	ug/l	20.08	960.08	2.556E-04	Pulse	0.10	3
Ag			1	0.015	ug/l	26.84	376.69	9.554E-05	Pulse	0.10	3
Sn			1	0.165	ug/l	4.38	5,601.23	1.419E-03	Pulse	0.10	3
Sb			1	0.049	ug/l	21.51	1,260.11	2.206E-04	Pulse	0.10	3
Ba			1	0.020	ug/l	36.39	246.68	4.317E-05	Pulse	0.10	3
Tl			1	0.019	ug/l	18.54	1,113.42	3.319E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	4.61	513.36	1.528E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	49.07	390.02	1.163E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	28.43	1,966.80	5.861E-04	Pulse	0.10	3
Na			2	9.255	ug/l	1.31	24,027.15	1.535E-01	Pulse	0.30	3
Mg			2	0.630	ug/l	14.40	710.03	4.540E-03	Pulse	0.30	3
Al			2	-0.205	ug/l	-114.04	635.57	4.060E-03	Pulse	0.30	3
K			2	0.510	ug/l	52.45	13,719.03	8.767E-02	Pulse	0.30	3
Ca			2	3.711	ug/l	30.80	205.56	1.315E-03	Pulse	0.30	3
Ti			2	0.080	ug/l	43.25	17.78	1.132E-04	Pulse	0.30	3
V			2	0.001	ug/l	117.78	297.78	1.903E-03	Pulse	0.30	3
Cr			2	-0.006	ug/l	-88.06	892.26	5.705E-03	Pulse	0.30	3
Mn			2	-0.002	ug/l	-177.86	133.34	8.531E-04	Pulse	0.30	3
Fe			2	0.687	ug/l	6.51	10,357.83	6.618E-02	Pulse	0.30	3
Co			2	0.005	ug/l	32.16	115.53	7.385E-04	Pulse	0.30	3
Ni			2	0.005	ug/l	185.29	183.34	1.170E-03	Pulse	0.30	3
Cu			2	-0.589	ug/l	-1.33	2,645.81	1.691E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.542	ug/l	-6.62	723.36	4.621E-03	Pulse	0.30	3
As			2	0.008	ug/l	35.47	28.33	1.812E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	179.47	16.59	1.749E-05	Pulse	0.30	3
Sn			2	0.126	ug/l	5.14	1,693.45	1.784E-03	Pulse	0.30	3
Se			3	0.113	ug/l	9.93	27.07	1.340E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,261,815.39	0.90	101.0	Pulse	0.10	3
1	Sc		2,655,767.46	0.41	94.4	Pulse	0.10	3
1	Ge		543,325.89	1.11	95.3	Pulse	0.10	3
1	Ge		762,245.92	0.30	96.0	Pulse	0.10	3
1	Rh		3,758,050.15	1.14	97.6	Pulse	0.10	3
1	In		3,946,626.28	1.24	99.0	Pulse	0.10	3
1	Tb		5,711,617.83	1.48	103.1	Analog	0.10	3
1	Ho		548,501.55	1.78	99.7	Pulse	0.10	3
1	Bi		3,358,599.95	1.47	100.6	Pulse	0.10	3
2	Sc		156,480.01	1.44	97.4	Pulse	0.30	3
2	Ge		98,033.82	0.95	98.5	Pulse	0.30	3
2	Ge		146,843.87	0.86	97.9	Pulse	0.30	3
2	Rh		2,381,816.99	0.36	97.9	Pulse	0.30	3
2	In		949,262.02	0.45	97.7	Pulse	0.30	3
2	Tb		3,185,754.45	0.50	97.3	Pulse	0.30	3
2	Ho		325,907.74	1.04	97.5	Pulse	0.30	3
2	Bi		2,194,755.12	0.70	98.0	Pulse	0.30	3
3	Sc		205,427.69	0.74	94.8	Pulse	0.30	3
3	Ge		133,832.45	0.78	95.4	Pulse	0.30	3
3	Ge		202,001.27	0.48	95.5	Pulse	0.30	3
3	Rh		2,086,522.00	0.19	95.7	Pulse	0.30	3
3	Tb		3,503,859.17	0.59	95.6	Pulse	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:12
Sample Name	mp17220-s1
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	9/11/2019 11:44
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	68.401	ug/l	0.52	209,782.83	1.841E-01	Pulse	0.25	3
B			1	83.508	ug/l	0.64	186,441.43	1.636E-01	Pulse	0.15	3
Ca			1	375395.374	ug/l	0.86	157,924,827.65	6.369E+01	Analog	0.10	3
Sr			1	193.700	ug/l	0.40	4,274,053.58	1.289E+00	Pulse	0.10	3
Mo			1	112.747	ug/l	0.68	464,541.35	1.401E-01	Pulse	0.10	3
Ag			1	70.017	ug/l	0.51	769,455.43	2.108E-01	Pulse	0.10	3
Sn			1	77.238	ug/l	0.45	548,897.41	1.503E-01	Pulse	0.10	3
Sb			1	71.655	ug/l	0.78	643,556.87	1.146E-01	Pulse	0.10	3
Ba			1	737.811	ug/l	0.49	2,789,249.13	4.968E-01	Pulse	0.10	3
Tl			1	76.872	ug/l	0.64	1,561,188.36	5.122E-01	Pulse	0.10	3
Pb			1	84.286	ug/l	0.66	591,361.44	1.940E-01	Pulse	0.10	3
Pb			1	84.567	ug/l	0.74	522,180.75	1.713E-01	Pulse	0.10	3
Pb			1	84.372	ug/l	0.35	2,392,654.51	7.850E-01	Pulse	0.10	3
Na			2	103356.587	ug/l	0.78	65,806,866.27	4.452E+02	Analog	0.30	3
Mg			2	18053.644	ug/l	0.60	5,326,101.59	3.603E+01	Analog	0.30	3
Al			2	3816.141	ug/l	0.76	383,769.54	2.596E+00	Pulse	0.30	3
K			2	6577.103	ug/l	0.71	1,614,520.32	1.092E+01	Pulse	0.30	3
Ca			2	370739.297	ug/l	1.04	4,555,242.46	3.082E+01	Pulse	0.30	3
Ti			2	77.147	ug/l	1.56	7,046.04	4.767E-02	Pulse	0.30	3
V			2	76.575	ug/l	0.32	226,872.86	1.535E+00	Pulse	0.30	3
Cr			2	81.009	ug/l	0.95	304,852.58	2.063E+00	Pulse	0.30	3
Mn			2	76.052	ug/l	0.90	153,033.69	1.035E+00	Pulse	0.30	3
Fe			2	3950.825	ug/l	1.24	11,605,599.82	7.852E+01	Analog	0.30	3
Co			2	71.399	ug/l	1.40	422,278.59	2.857E+00	Pulse	0.30	3
Ni			2	69.752	ug/l	1.43	109,119.03	7.383E-01	Pulse	0.30	3
Cu			2	71.824	ug/l	0.43	312,248.33	2.113E+00	Pulse	0.30	3
Zn			2	63.955	ug/l	1.87	42,453.69	2.872E-01	Pulse	0.30	3
As			2	70.166	ug/l	0.47	25,911.47	1.753E-01	Pulse	1.00	3
Cd			2	69.271	ug/l	0.34	67,931.16	7.869E-02	Pulse	0.30	3
Sn			2	77.449	ug/l	1.18	167,399.81	1.939E-01	Pulse	0.30	3
Se			3	329.306	ug/l	1.04	31,977.09	1.665E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,139,660.98	1.06	91.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,479,390.43	0.69	88.1	Pulse	0.10	3
1	Ge		535,634.73	0.81	93.9	Pulse	0.10	3
1	Ge		747,933.14	0.99	94.2	Pulse	0.10	3
1	Rh		3,315,754.85	0.83	86.1	Pulse	0.10	3
1	In		3,650,917.73	0.82	91.6	Pulse	0.10	3
1	Tb		5,614,897.21	0.81	101.4	Analog	0.10	3
1	Ho		536,729.24	0.61	97.6	Pulse	0.10	3
1	Bi		3,047,918.91	0.79	91.3	Pulse	0.10	3
2	Sc		147,810.68	0.68	92.0	Pulse	0.30	3
2	Ge		94,471.97	1.46	94.9	Pulse	0.30	3
2	Ge		140,675.57	0.75	93.8	Pulse	0.30	3
2	Rh		2,079,098.39	0.52	85.4	Pulse	0.30	3
2	In		863,277.43	0.17	88.8	Pulse	0.30	3
2	Tb		3,058,141.20	0.21	93.4	Pulse	0.30	3
2	Ho		316,568.15	0.52	94.7	Pulse	0.30	3
2	Bi		1,958,200.96	0.16	87.5	Pulse	0.30	3
3	Sc		203,543.71	1.56	93.9	Pulse	0.30	3
3	Ge		125,928.95	0.42	89.8	Pulse	0.30	3
3	Ge		192,058.19	0.65	90.8	Pulse	0.30	3
3	Rh		1,877,468.05	0.27	86.1	Pulse	0.30	3
3	Tb		3,479,030.63	0.92	95.0	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:17
Sample Name	mp17220-s2
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	9/11/2019 11:44
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	69.135	ug/l	0.33	208,078.26	1.861E-01	Pulse	0.25	3
B			1	83.391	ug/l	1.44	182,705.41	1.634E-01	Pulse	0.15	3
Ca			1	370051.173	ug/l	0.37	154,264,834.37	6.279E+01	Analog	0.10	3
Sr			1	188.805	ug/l	0.54	4,107,260.46	1.256E+00	Pulse	0.10	3
Mo			1	112.349	ug/l	0.19	456,406.92	1.396E-01	Pulse	0.10	3
Ag			1	71.008	ug/l	1.53	768,254.78	2.137E-01	Pulse	0.10	3
Sn			1	77.520	ug/l	1.14	542,367.35	1.509E-01	Pulse	0.10	3
Sb			1	71.466	ug/l	1.57	638,909.94	1.143E-01	Pulse	0.10	3
Ba			1	727.204	ug/l	1.19	2,737,021.42	4.896E-01	Pulse	0.10	3
Tl			1	77.841	ug/l	0.90	1,570,164.41	5.187E-01	Pulse	0.10	3
Pb			1	80.111	ug/l	0.54	558,260.72	1.844E-01	Pulse	0.10	3
Pb			1	80.333	ug/l	0.46	492,657.10	1.627E-01	Pulse	0.10	3
Pb			1	80.155	ug/l	0.20	2,257,691.66	7.458E-01	Pulse	0.10	3
Na			2	102904.557	ug/l	1.43	63,857,328.57	4.433E+02	Analog	0.30	3
Mg			2	18204.777	ug/l	2.59	5,234,136.87	3.634E+01	Analog	0.30	3
Al			2	3822.573	ug/l	1.55	374,667.59	2.601E+00	Pulse	0.30	3
K			2	6605.463	ug/l	1.35	1,580,324.42	1.097E+01	Pulse	0.30	3
Ca			2	371463.982	ug/l	0.84	4,448,676.77	3.088E+01	Pulse	0.30	3
Ti			2	77.092	ug/l	0.95	6,862.60	4.763E-02	Pulse	0.30	3
V			2	77.128	ug/l	1.11	222,725.28	1.546E+00	Pulse	0.30	3
Cr			2	82.210	ug/l	1.37	301,514.03	2.093E+00	Pulse	0.30	3
Mn			2	76.761	ug/l	1.37	150,551.24	1.045E+00	Pulse	0.30	3
Fe			2	3953.923	ug/l	1.61	11,320,283.44	7.858E+01	Analog	0.30	3
Co			2	72.805	ug/l	1.11	419,693.41	2.913E+00	Pulse	0.30	3
Ni			2	70.190	ug/l	0.26	107,028.84	7.429E-01	Pulse	0.30	3
Cu			2	72.383	ug/l	1.03	306,650.74	2.129E+00	Pulse	0.30	3
Zn			2	62.039	ug/l	1.96	40,178.06	2.789E-01	Pulse	0.30	3
As			2	70.254	ug/l	2.18	25,284.16	1.755E-01	Pulse	1.00	3
Cd			2	70.302	ug/l	0.81	68,007.63	7.986E-02	Pulse	0.30	3
Sn			2	77.403	ug/l	0.32	165,033.90	1.938E-01	Pulse	0.30	3
Se			3	331.569	ug/l	0.91	31,930.00	1.676E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,118,375.66	0.73	89.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,456,881.06	0.58	87.3	Pulse	0.10	3
1	Ge		528,175.94	1.22	92.6	Pulse	0.10	3
1	Ge		733,738.30	0.77	92.4	Pulse	0.10	3
1	Rh		3,269,095.05	1.17	84.9	Pulse	0.10	3
1	In		3,594,741.70	1.34	90.2	Pulse	0.10	3
1	Tb		5,589,955.12	1.80	100.9	Analog	0.10	3
1	Ho		538,268.39	1.32	97.9	Pulse	0.10	3
1	Bi		3,027,212.24	0.89	90.7	Pulse	0.10	3
2	Sc		144,075.29	1.26	89.7	Pulse	0.30	3
2	Ge		93,157.68	1.54	93.6	Pulse	0.30	3
2	Ge		139,692.66	0.50	93.2	Pulse	0.30	3
2	Rh		2,054,039.64	0.47	84.4	Pulse	0.30	3
2	In		851,589.08	0.96	87.6	Pulse	0.30	3
2	Tb		3,037,087.93	0.69	92.8	Pulse	0.30	3
2	Ho		312,798.77	0.50	93.6	Pulse	0.30	3
2	Bi		1,929,679.09	0.57	86.2	Pulse	0.30	3
3	Sc		202,427.28	1.53	93.4	Pulse	0.30	3
3	Ge		125,656.02	1.06	89.6	Pulse	0.30	3
3	Ge		190,480.29	1.54	90.0	Pulse	0.30	3
3	Rh		1,857,669.65	1.33	85.2	Pulse	0.30	3
3	Tb		3,453,668.13	0.75	94.3	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:22
Sample Name	jc94229-1
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	9/11/2019 11:44
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	0.020	ug/l	23.94	82.67	7.292E-05	Pulse	0.25	3
B			1	10.188	ug/l	1.93	28,243.82	2.484E-02	Pulse	0.15	3
Ca			1	363053.655	ug/l	3.93	155,530,394.35	6.160E+01	Analog	0.10	3
Sr			1	104.681	ug/l	4.40	2,351,356.68	6.967E-01	Pulse	0.10	3
Mo			1	30.869	ug/l	6.20	129,521.28	3.839E-02	Pulse	0.10	3
Ag			1	0.044	ug/l	16.60	516.70	1.397E-04	Pulse	0.10	3
Sn			1	1.182	ug/l	9.93	11,387.82	3.072E-03	Pulse	0.10	3
Sb			1	0.182	ug/l	18.04	2,046.87	3.545E-04	Pulse	0.10	3
Ba			1	646.801	ug/l	5.15	2,512,458.09	4.355E-01	Pulse	0.10	3
Tl			1	0.053	ug/l	20.61	1,323.44	4.264E-04	Pulse	0.10	3
Pb			1	0.673	ug/l	7.63	5,081.07	1.635E-03	Pulse	0.10	3
Pb			1	0.680	ug/l	8.19	4,517.52	1.453E-03	Pulse	0.10	3
Pb			1	0.690	ug/l	3.89	21,133.51	6.797E-03	Pulse	0.10	3
Na			2	104423.940	ug/l	6.62	63,691,248.58	4.498E+02	Analog	0.30	3
Mg			2	14382.342	ug/l	7.40	4,063,281.64	2.871E+01	Pulse	0.30	3
Al			2	645.547	ug/l	8.93	62,641.04	4.428E-01	Pulse	0.30	3
K			2	2945.524	ug/l	7.13	699,272.30	4.939E+00	Pulse	0.30	3
Ca			2	385865.464	ug/l	7.29	4,540,539.82	3.208E+01	Pulse	0.30	3
Ti			2	0.450	ug/l	20.18	41.11	2.919E-04	Pulse	0.30	3
V			2	0.710	ug/l	5.06	2,280.19	1.608E-02	Pulse	0.30	3
Cr			2	9.030	ug/l	8.14	33,292.39	2.353E-01	Pulse	0.30	3
Mn			2	3.276	ug/l	5.34	6,442.45	4.547E-02	Pulse	0.30	3
Fe			2	23.537	ug/l	8.20	71,685.04	5.064E-01	Pulse	0.30	3
Co			2	0.383	ug/l	6.73	2,219.99	1.568E-02	Pulse	0.30	3
Ni			2	0.733	ug/l	10.32	1,246.73	8.813E-03	Pulse	0.30	3
Cu			2	5.106	ug/l	10.20	27,922.67	1.973E-01	Pulse	0.30	3
Zn			2	21.385	ug/l	9.75	14,465.38	1.023E-01	Pulse	0.30	3
As			2	0.823	ug/l	9.12	311.00	2.194E-03	Pulse	1.00	3
Cd			2	0.022	ug/l	139.65	33.16	3.802E-05	Pulse	0.30	3
Sn			2	1.123	ug/l	8.16	3,327.06	3.949E-03	Pulse	0.30	3
Se			3	0.478	ug/l	11.09	50.33	2.610E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,137,353.72	2.83	91.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,526,881.84	3.13	89.8	Pulse	0.10	3
1	Ge		542,146.32	1.64	95.0	Pulse	0.10	3
1	Ge		747,476.16	2.07	94.2	Pulse	0.10	3
1	Rh		3,378,844.64	3.70	87.8	Pulse	0.10	3
1	In		3,712,361.72	3.27	93.2	Pulse	0.10	3
1	Tb		5,777,216.37	4.00	104.3	Analog	0.10	3
1	Ho		550,652.99	3.37	100.1	Pulse	0.10	3
1	Bi		3,111,039.64	2.52	93.2	Pulse	0.10	3
2	Sc		142,004.13	6.55	88.4	Pulse	0.30	3
2	Ge		91,856.70	4.28	92.3	Pulse	0.30	3
2	Ge		137,707.19	4.31	91.8	Pulse	0.30	3
2	Rh		2,001,285.34	5.57	82.2	Pulse	0.30	3
2	In		844,391.40	6.10	86.9	Pulse	0.30	3
2	Tb		2,979,241.34	5.79	91.0	Pulse	0.30	3
2	Ho		304,884.09	6.30	91.2	Pulse	0.30	3
2	Bi		1,883,610.83	5.92	84.1	Pulse	0.30	3
3	Sc		203,546.85	0.48	94.0	Pulse	0.30	3
3	Ge		126,779.83	0.60	90.4	Pulse	0.30	3
3	Ge		192,826.72	0.31	91.2	Pulse	0.30	3
3	Rh		1,875,432.43	0.33	86.0	Pulse	0.30	3
3	Tb		3,464,951.25	0.65	94.6	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:27
Sample Name	mp17220-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	9/11/2019 11:44
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	0.045	ug/l	64.30	54.67	4.237E-05	Pulse	0.25	3
B			1	17.924	ug/l	6.11	15,918.88	1.234E-02	Pulse	0.15	3
Ca			1	371113.824	ug/l	1.37	33,714,172.83	1.260E+01	Analog	0.10	3
Sr			1	101.018	ug/l	0.38	495,200.28	1.345E-01	Pulse	0.10	3
Mo			1	29.315	ug/l	1.93	26,970.06	7.328E-03	Pulse	0.10	3
Ag			1	0.060	ug/l	17.14	166.68	4.269E-05	Pulse	0.10	3
Sn			1	-0.292	ug/l	-38.17	2,613.65	6.689E-04	Pulse	0.10	3
Sb			1	0.265	ug/l	29.05	846.73	1.474E-04	Pulse	0.10	3
Ba			1	677.604	ug/l	0.72	524,430.16	9.126E-02	Pulse	0.10	3
Tl			1	0.062	ug/l	12.68	513.36	1.573E-04	Pulse	0.10	3
Pb			1	0.764	ug/l	9.74	1,426.79	4.370E-04	Pulse	0.10	3
Pb			1	0.671	ug/l	8.62	1,136.75	3.481E-04	Pulse	0.10	3
Pb			1	0.667	ug/l	8.38	5,287.23	1.619E-03	Pulse	0.10	3
Na			2	103689.262	ug/l	1.65	14,056,500.83	8.939E+01	Analog	0.30	3
Mg			2	14240.043	ug/l	0.56	894,160.45	5.686E+00	Pulse	0.30	3
Al			2	242.651	ug/l	2.80	5,865.52	3.730E-02	Pulse	0.30	3
K			2	2882.877	ug/l	0.77	162,915.94	1.036E+00	Pulse	0.30	3
Ca			2	372298.969	ug/l	0.30	973,461.80	6.190E+00	Pulse	0.30	3
Ti			2	1.262	ug/l	36.16	26.67	1.697E-04	Pulse	0.30	3
V			2	0.550	ug/l	8.10	641.13	4.078E-03	Pulse	0.30	3
Cr			2	8.069	ug/l	4.36	7,389.51	4.699E-02	Pulse	0.30	3
Mn			2	3.073	ug/l	6.81	1,458.42	9.273E-03	Pulse	0.30	3
Fe			2	25.660	ug/l	1.52	22,144.99	1.408E-01	Pulse	0.30	3
Co			2	0.378	ug/l	4.10	528.85	3.363E-03	Pulse	0.30	3
Ni			2	0.710	ug/l	3.09	403.34	2.565E-03	Pulse	0.30	3
Cu			2	-0.643	ug/l	-32.57	7,392.85	4.701E-02	Pulse	0.30	3
Zn			2	6.270	ug/l	8.60	2,324.64	1.478E-02	Pulse	0.30	3
As			2	0.643	ug/l	13.25	72.33	4.601E-04	Pulse	1.00	3
Cd			2	0.008	ug/l	188.39	14.57	1.535E-05	Pulse	0.30	3
Sn			2	-0.607	ug/l	-12.96	807.81	8.525E-04	Pulse	0.30	3
Se			3	0.996	ug/l	10.49	23.93	1.201E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,289,674.19	0.18	103.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,676,440.27	0.49	95.1	Pulse	0.10	3
1	Ge		542,212.09	0.35	95.1	Pulse	0.10	3
1	Ge		761,524.62	0.73	95.9	Pulse	0.10	3
1	Rh		3,680,789.01	0.61	95.6	Pulse	0.10	3
1	In		3,907,460.48	0.72	98.0	Pulse	0.10	3
1	Tb		5,746,834.92	1.12	103.8	Analog	0.10	3
1	Ho		551,936.41	0.77	100.3	Pulse	0.10	3
1	Bi		3,266,190.47	1.13	97.8	Pulse	0.10	3
2	Sc		157,253.38	0.44	97.9	Pulse	0.30	3
2	Ge		96,463.22	0.38	96.9	Pulse	0.30	3
2	Ge		145,181.78	0.25	96.8	Pulse	0.30	3
2	Rh		2,298,055.60	0.56	94.4	Pulse	0.30	3
2	In		947,878.45	0.93	97.5	Pulse	0.30	3
2	Tb		3,192,910.29	0.44	97.5	Pulse	0.30	3
2	Ho		323,939.97	0.16	96.9	Pulse	0.30	3
2	Bi		2,119,544.64	0.17	94.7	Pulse	0.30	3
3	Sc		206,527.15	1.10	95.3	Pulse	0.30	3
3	Ge		131,121.61	0.35	93.5	Pulse	0.30	3
3	Ge		199,309.69	0.21	94.2	Pulse	0.30	3
3	Rh		1,993,367.84	0.97	91.4	Pulse	0.30	3
3	Tb		3,487,424.10	0.43	95.2	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:32
Sample Name	jc94139-1
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	9/11/2019 11:44
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	0.292	ug/l	21.23	916.04	8.042E-04	Pulse	0.25	3
B			1	73.876	ug/l	1.08	165,719.43	1.454E-01	Pulse	0.15	3
Ca			1	14419.957	ug/l	0.36	5,933,737.62	2.451E+00	Analog	0.10	3
Sr			1	44.760	ug/l	0.59	989,842.69	2.979E-01	Pulse	0.10	3
Mo			1	1.126	ug/l	7.10	4,794.26	1.443E-03	Pulse	0.10	3
Ag			1	0.054	ug/l	2.31	613.37	1.696E-04	Pulse	0.10	3
Sn			1	0.848	ug/l	2.15	8,769.41	2.424E-03	Pulse	0.10	3
Sb			1	0.180	ug/l	2.94	1,900.20	3.505E-04	Pulse	0.10	3
Ba			1	91.117	ug/l	1.93	332,667.08	6.136E-02	Pulse	0.10	3
Tl			1	0.028	ug/l	8.61	813.39	2.594E-04	Pulse	0.10	3
Pb			1	1.288	ug/l	2.46	9,560.10	3.050E-03	Pulse	0.10	3
Pb			1	1.195	ug/l	6.51	7,822.38	2.495E-03	Pulse	0.10	3
Pb			1	1.218	ug/l	3.50	36,705.89	1.171E-02	Pulse	0.10	3
Na			2	124901.080	ug/l	0.86	76,611,759.18	5.380E+02	Analog	0.30	3
Mg			2	2350.969	ug/l	1.01	668,426.30	4.694E+00	Pulse	0.30	3
Al			2	2716.597	ug/l	0.10	263,394.15	1.850E+00	Pulse	0.30	3
K			2	2163.383	ug/l	1.15	519,834.22	3.651E+00	Pulse	0.30	3
Ca			2	14321.966	ug/l	0.86	169,631.74	1.191E+00	Pulse	0.30	3
Ti			2	50.350	ug/l	7.01	4,433.29	3.112E-02	Pulse	0.30	3
V			2	13.644	ug/l	1.07	39,166.29	2.750E-01	Pulse	0.30	3
Cr			2	6.469	ug/l	2.16	24,240.15	1.702E-01	Pulse	0.30	3
Mn			2	190.532	ug/l	1.40	369,169.36	2.593E+00	Pulse	0.30	3
Fe			2	3186.878	ug/l	1.04	9,020,202.42	6.335E+01	Analog	0.30	3
Co			2	1.508	ug/l	1.43	8,641.35	6.068E-02	Pulse	0.30	3
Ni			2	5.878	ug/l	2.93	8,999.23	6.319E-02	Pulse	0.30	3
Cu			2	3.841	ug/l	1.51	22,920.54	1.610E-01	Pulse	0.30	3
Zn			2	13.471	ug/l	5.05	9,661.85	6.787E-02	Pulse	0.30	3
As			2	2.440	ug/l	4.75	887.03	6.231E-03	Pulse	1.00	3
Cd			2	0.023	ug/l	62.55	34.07	3.934E-05	Pulse	0.30	3
Sn			2	0.796	ug/l	8.89	2,716.94	3.136E-03	Pulse	0.30	3
Se			3	1.528	ug/l	1.07	152.47	7.918E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,140,006.03	0.97	91.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,421,135.80	0.74	86.1	Pulse	0.10	3
1	Ge		522,310.08	0.54	91.6	Pulse	0.10	3
1	Ge		723,168.76	0.69	91.1	Pulse	0.10	3
1	Rh		3,322,385.06	0.67	86.3	Pulse	0.10	3
1	In		3,617,139.28	0.38	90.8	Pulse	0.10	3
1	Tb		5,422,870.34	2.16	97.9	Mix	0.10	3
1	Ho		537,513.36	0.46	97.7	Pulse	0.10	3
1	Bi		3,135,258.39	0.84	93.9	Pulse	0.10	3
2	Sc		142,407.50	1.16	88.6	Pulse	0.30	3
2	Ge		92,726.87	0.50	93.2	Pulse	0.30	3
2	Ge		139,642.34	0.16	93.1	Pulse	0.30	3
2	Rh		2,123,957.00	0.40	87.3	Pulse	0.30	3
2	In		866,509.03	0.36	89.2	Pulse	0.30	3
2	Tb		3,045,016.54	0.22	93.0	Pulse	0.30	3
2	Ho		315,728.57	0.67	94.5	Pulse	0.30	3
2	Bi		2,020,140.61	0.33	90.2	Pulse	0.30	3
3	Sc		196,496.23	0.98	90.7	Pulse	0.30	3
3	Ge		127,157.25	1.04	90.7	Pulse	0.30	3
3	Ge		192,560.33	0.40	91.0	Pulse	0.30	3
3	Rh		1,927,041.45	0.45	88.3	Pulse	0.30	3
3	Tb		3,502,953.13	0.78	95.6	Pulse	0.30	3

Quantitation Report

File Name	054SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:37
Sample Name	jc94139-2
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	9/11/2019 11:44
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	0.209	ug/l	5.01	669.36	5.819E-04	Pulse	0.25	3
B			1	13.947	ug/l	1.37	36,762.30	3.195E-02	Pulse	0.15	3
Ca			1	1544.858	ug/l	0.49	652,608.86	2.664E-01	Pulse	0.10	3
Sr			1	7.421	ug/l	1.14	173,335.95	4.948E-02	Pulse	0.10	3
Mo			1	0.590	ug/l	5.27	2,723.69	7.774E-04	Pulse	0.10	3
Ag			1	0.034	ug/l	22.70	406.69	1.082E-04	Pulse	0.10	3
Sn			1	0.462	ug/l	1.96	6,301.49	1.677E-03	Pulse	0.10	3
Sb			1	0.238	ug/l	8.86	2,516.96	4.440E-04	Pulse	0.10	3
Ba			1	42.667	ug/l	1.89	163,037.03	2.874E-02	Pulse	0.10	3
Tl			1	0.065	ug/l	4.30	1,676.83	5.088E-04	Pulse	0.10	3
Pb			1	1.442	ug/l	3.15	11,221.58	3.404E-03	Pulse	0.10	3
Pb			1	1.434	ug/l	2.14	9,826.96	2.981E-03	Pulse	0.10	3
Pb			1	1.423	ug/l	1.88	44,868.46	1.361E-02	Pulse	0.10	3
Na			2	13103.535	ug/l	0.39	8,053,438.01	5.651E+01	Analog	0.30	3
Mg			2	739.156	ug/l	0.75	210,532.45	1.477E+00	Pulse	0.30	3
Al			2	3309.147	ug/l	1.03	320,963.77	2.252E+00	Pulse	0.30	3
K			2	1267.205	ug/l	0.22	309,831.08	2.174E+00	Pulse	0.30	3
Ca			2	1526.828	ug/l	2.67	18,187.87	1.276E-01	Pulse	0.30	3
Ti			2	40.064	ug/l	6.31	3,528.52	2.476E-02	Pulse	0.30	3
V			2	6.631	ug/l	0.28	19,185.67	1.346E-01	Pulse	0.30	3
Cr			2	3.694	ug/l	2.50	14,222.88	9.980E-02	Pulse	0.30	3
Mn			2	94.420	ug/l	0.14	183,166.28	1.285E+00	Pulse	0.30	3
Fe			2	3129.858	ug/l	0.35	8,866,371.87	6.221E+01	Analog	0.30	3
Co			2	1.132	ug/l	1.30	6,502.99	4.563E-02	Pulse	0.30	3
Ni			2	2.711	ug/l	3.45	4,235.03	2.972E-02	Pulse	0.30	3
Cu			2	0.854	ug/l	2.13	10,718.04	7.521E-02	Pulse	0.30	3
Zn			2	6.925	ug/l	6.08	5,618.82	3.942E-02	Pulse	0.30	3
As			2	1.397	ug/l	4.80	516.68	3.626E-03	Pulse	1.00	3
Cd			2	0.017	ug/l	41.39	28.68	3.245E-05	Pulse	0.30	3
Sn			2	0.436	ug/l	19.57	1,980.15	2.241E-03	Pulse	0.30	3
Se			3	0.311	ug/l	8.92	34.80	1.764E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,150,581.27	0.84	92.1	Pulse	0.10	3
1	Sc		2,449,600.69	0.53	87.1	Pulse	0.10	3
1	Ge		539,432.84	0.28	94.6	Pulse	0.10	3

Quantitation Report

1	Ge		740,875.95	0.21	93.3	Pulse	0.10	3
1	Rh		3,502,939.12	0.59	91.0	Pulse	0.10	3
1	In		3,757,600.01	1.04	94.3	Pulse	0.10	3
1	Tb		5,673,655.54	2.04	102.5	Analog	0.10	3
1	Ho		543,869.39	1.32	98.9	Pulse	0.10	3
1	Bi		3,296,071.93	0.88	98.7	Pulse	0.10	3
2	Sc		142,516.27	0.34	88.7	Pulse	0.30	3
2	Ge		93,608.08	0.90	94.1	Pulse	0.30	3
2	Ge		140,989.71	0.06	94.0	Pulse	0.30	3
2	Rh		2,198,584.36	0.90	90.3	Pulse	0.30	3
2	In		883,811.40	0.18	90.9	Pulse	0.30	3
2	Tb		3,070,672.03	0.77	93.8	Pulse	0.30	3
2	Ho		317,129.52	1.25	94.9	Pulse	0.30	3
2	Bi		2,101,342.14	0.69	93.9	Pulse	0.30	3
3	Sc		201,287.11	0.92	92.9	Pulse	0.30	3
3	Ge		130,791.42	0.81	93.2	Pulse	0.30	3
3	Ge		197,342.87	0.59	93.3	Pulse	0.30	3
3	Rh		2,026,985.34	0.37	92.9	Pulse	0.30	3
3	Tb		3,552,644.44	0.63	97.0	Pulse	0.30	3

Quantitation Report

File Name	055SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:42
Sample Name	jc94139-3
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	9/11/2019 11:44
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	0.047	ug/l	4.30	162.67	1.436E-04	Pulse	0.25	3
B			1	15.688	ug/l	2.55	39,933.91	3.525E-02	Pulse	0.15	3
Ca			1	6251.621	ug/l	0.48	2,566,067.05	1.065E+00	Pulse	0.10	3
Sr			1	19.337	ug/l	0.40	445,535.19	1.288E-01	Pulse	0.10	3
Mo			1	2.064	ug/l	7.02	9,019.57	2.608E-03	Pulse	0.10	3
Ag			1	0.096	ug/l	9.44	1,090.08	2.948E-04	Pulse	0.10	3
Sn			1	1.015	ug/l	8.88	10,163.66	2.748E-03	Pulse	0.10	3
Sb			1	0.493	ug/l	5.86	4,800.93	8.512E-04	Pulse	0.10	3
Ba			1	110.360	ug/l	1.32	419,235.27	7.432E-02	Pulse	0.10	3
Tl			1	0.019	ug/l	2.25	666.71	2.038E-04	Pulse	0.10	3
Pb			1	2.868	ug/l	0.99	21,873.62	6.685E-03	Pulse	0.10	3
Pb			1	2.725	ug/l	0.86	18,301.93	5.594E-03	Pulse	0.10	3
Pb			1	2.771	ug/l	0.64	85,552.88	2.615E-02	Pulse	0.10	3
Na			2	11371.077	ug/l	0.50	6,823,440.14	4.905E+01	Analog	0.30	3
Mg			2	1882.761	ug/l	0.47	523,037.88	3.760E+00	Pulse	0.30	3
Al			2	1753.839	ug/l	1.07	166,330.71	1.196E+00	Pulse	0.30	3
K			2	1250.906	ug/l	0.59	298,704.30	2.147E+00	Pulse	0.30	3
Ca			2	6248.998	ug/l	0.58	72,364.90	5.202E-01	Pulse	0.30	3
Ti			2	74.551	ug/l	4.72	6,407.99	4.606E-02	Pulse	0.30	3
V			2	10.334	ug/l	1.66	29,045.50	2.088E-01	Pulse	0.30	3
Cr			2	10.801	ug/l	1.04	38,983.62	2.802E-01	Pulse	0.30	3
Mn			2	154.396	ug/l	1.03	292,286.85	2.101E+00	Pulse	0.30	3
Fe			2	5299.908	ug/l	0.37	14,651,984.97	1.053E+02	Analog	0.30	3
Co			2	1.997	ug/l	0.63	11,164.34	8.025E-02	Pulse	0.30	3
Ni			2	6.925	ug/l	1.47	10,329.99	7.425E-02	Pulse	0.30	3
Cu			2	21.700	ug/l	0.30	93,713.63	6.736E-01	Pulse	0.30	3
Zn			2	87.504	ug/l	1.77	54,193.61	3.896E-01	Pulse	0.30	3
As			2	1.699	ug/l	3.69	609.34	4.380E-03	Pulse	1.00	3
Cd			2	0.101	ug/l	11.42	111.55	1.285E-04	Pulse	0.30	3
Sn			2	0.978	ug/l	4.96	3,115.90	3.589E-03	Pulse	0.30	3
Se			3	0.223	ug/l	12.64	25.60	1.318E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,133,075.65	0.89	90.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,409,480.49	0.36	85.7	Pulse	0.10	3
1	Ge		538,880.97	0.38	94.5	Pulse	0.10	3
1	Ge		743,741.13	0.93	93.7	Pulse	0.10	3
1	Rh		3,459,926.20	0.60	89.9	Pulse	0.10	3
1	In		3,698,435.38	0.48	92.8	Pulse	0.10	3
1	Tb		5,641,098.88	0.58	101.9	Analog	0.10	3
1	Ho		543,026.32	0.87	98.7	Pulse	0.10	3
1	Bi		3,271,839.22	0.87	98.0	Pulse	0.10	3
2	Sc		139,120.40	0.59	86.6	Pulse	0.30	3
2	Ge		93,584.71	0.38	94.0	Pulse	0.30	3
2	Ge		139,350.92	0.97	92.9	Pulse	0.30	3
2	Rh		2,172,350.47	0.51	89.2	Pulse	0.30	3
2	In		868,276.25	0.28	89.3	Pulse	0.30	3
2	Tb		3,045,935.36	0.16	93.0	Pulse	0.30	3
2	Ho		315,193.46	0.86	94.3	Pulse	0.30	3
2	Bi		2,084,404.71	0.96	93.1	Pulse	0.30	3
3	Sc		195,882.89	0.27	90.4	Pulse	0.30	3
3	Ge		128,818.13	1.32	91.8	Pulse	0.30	3
3	Ge		194,204.49	0.22	91.8	Pulse	0.30	3
3	Rh		2,006,736.45	0.14	92.0	Pulse	0.30	3
3	Tb		3,520,833.33	0.54	96.1	Pulse	0.30	3

Quantitation Report

File Name	056SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:47
Sample Name	jc94139-4
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	9/11/2019 11:44
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	0.958	ug/l	6.40	2,845.62	2.597E-03	Pulse	0.25	3
B			1	62.772	ug/l	1.16	136,214.85	1.244E-01	Pulse	0.15	3
Ca			1	136811.929	ug/l	0.47	57,161,400.81	2.322E+01	Analog	0.10	3
Sr			1	59.174	ug/l	0.97	1,270,957.25	3.939E-01	Pulse	0.10	3
Mo			1	1.361	ug/l	1.67	5,597.85	1.735E-03	Pulse	0.10	3
Ag			1	0.644	ug/l	2.89	6,915.12	1.946E-03	Pulse	0.10	3
Sn			1	0.645	ug/l	8.74	7,218.60	2.031E-03	Pulse	0.10	3
Sb			1	0.221	ug/l	10.12	2,313.59	4.162E-04	Pulse	0.10	3
Ba			1	207.349	ug/l	0.80	776,589.83	1.396E-01	Pulse	0.10	3
Tl			1	0.066	ug/l	13.52	1,556.83	5.155E-04	Pulse	0.10	3
Pb			1	2.849	ug/l	1.68	20,044.29	6.640E-03	Pulse	0.10	3
Pb			1	2.757	ug/l	2.42	17,083.88	5.660E-03	Pulse	0.10	3
Pb			1	2.776	ug/l	0.57	79,055.51	2.619E-02	Pulse	0.10	3
Na			2	218175.603	ug/l	1.40	134,446,167.99	9.397E+02	Analog	0.30	3
Mg			2	6243.532	ug/l	1.98	1,782,920.14	1.246E+01	Pulse	0.30	3
Al			2	7837.110	ug/l	1.88	762,176.70	5.328E+00	Pulse	0.30	3
K			2	2776.801	ug/l	1.70	666,872.61	4.661E+00	Pulse	0.30	3
Ca			2	137962.696	ug/l	1.87	1,640,774.66	1.147E+01	Pulse	0.30	3
Ti			2	124.009	ug/l	1.29	10,961.53	7.662E-02	Pulse	0.30	3
V			2	18.738	ug/l	2.89	53,928.34	3.770E-01	Pulse	0.30	3
Cr			2	10.444	ug/l	1.99	38,789.83	2.711E-01	Pulse	0.30	3
Mn			2	144.114	ug/l	2.66	280,540.04	1.961E+00	Pulse	0.30	3
Fe			2	7597.069	ug/l	2.73	21,593,056.36	1.510E+02	Analog	0.30	3
Co			2	3.159	ug/l	2.98	18,126.33	1.267E-01	Pulse	0.30	3
Ni			2	8.369	ug/l	2.17	12,807.31	8.952E-02	Pulse	0.30	3
Cu			2	10.123	ug/l	3.83	48,817.86	3.413E-01	Pulse	0.30	3
Zn			2	18.172	ug/l	3.91	12,629.40	8.830E-02	Pulse	0.30	3
As			2	3.445	ug/l	4.75	1,249.72	8.738E-03	Pulse	1.00	3
Cd			2	0.021	ug/l	75.10	31.78	3.774E-05	Pulse	0.30	3
Sn			2	0.594	ug/l	11.36	2,214.63	2.633E-03	Pulse	0.30	3
Se			3	0.854	ug/l	4.63	83.93	4.512E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,095,387.80	0.35	87.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,462,202.31	0.81	87.5	Pulse	0.10	3
1	Ge		511,279.18	0.63	89.6	Pulse	0.10	3
1	Ge		704,464.68	0.71	88.7	Pulse	0.10	3
1	Rh		3,227,392.14	1.89	83.8	Pulse	0.10	3
1	In		3,553,347.49	1.51	89.2	Pulse	0.10	3
1	Tb		5,562,704.29	1.67	100.5	Analog	0.10	3
1	Ho		538,195.50	1.59	97.8	Pulse	0.10	3
1	Bi		3,018,541.10	0.79	90.4	Pulse	0.10	3
2	Sc		143,090.33	1.75	89.0	Pulse	0.30	3
2	Ge		89,268.75	0.81	89.7	Pulse	0.30	3
2	Ge		133,687.53	1.24	89.1	Pulse	0.30	3
2	Rh		2,010,557.49	1.50	82.6	Pulse	0.30	3
2	In		841,495.01	1.46	86.6	Pulse	0.30	3
2	Tb		2,994,575.23	0.79	91.5	Pulse	0.30	3
2	Ho		311,723.22	1.29	93.3	Pulse	0.30	3
2	Bi		1,898,739.09	1.36	84.8	Pulse	0.30	3
3	Sc		197,574.42	0.54	91.2	Pulse	0.30	3
3	Ge		122,814.75	0.62	87.6	Pulse	0.30	3
3	Ge		186,026.10	0.41	87.9	Pulse	0.30	3
3	Rh		1,812,482.01	0.72	83.1	Pulse	0.30	3
3	Tb		3,366,185.22	0.23	91.9	Pulse	0.30	3

Quantitation Report

File Name	057_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:52
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	9/11/2019 11:44
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	46.575	ug/l	0.86	299,859.43	2.507E-01	Pulse	0.25	3
B			1	89.855	ug/l	2.26	413,447.53	3.457E-01	Pulse	0.15	3
Ca			1	5044.104	ug/l	0.21	4,336,528.17	1.716E+00	Pulse	0.10	3
Sr			1	51.519	ug/l	1.31	2,402,160.69	6.857E-01	Pulse	0.10	3
Mo			1	50.900	ug/l	0.65	443,181.00	1.265E-01	Pulse	0.10	3
Ag			1	48.673	ug/l	0.65	1,100,824.83	2.930E-01	Pulse	0.10	3
Sn			1	49.758	ug/l	1.19	726,856.55	1.935E-01	Pulse	0.10	3
Sb			1	49.723	ug/l	2.01	900,700.30	1.590E-01	Pulse	0.10	3
Ba			1	48.081	ug/l	0.56	366,767.01	6.476E-02	Pulse	0.10	3
Tl			1	50.803	ug/l	0.49	2,163,217.42	6.770E-01	Pulse	0.10	3
Pb			1	50.817	ug/l	0.44	747,458.48	2.339E-01	Pulse	0.10	3
Pb			1	50.859	ug/l	0.39	658,371.24	2.060E-01	Pulse	0.10	3
Pb			1	50.810	ug/l	0.34	3,020,777.20	9.454E-01	Pulse	0.10	3
Na			2	5110.042	ug/l	1.71	6,597,060.71	4.409E+01	Analog	0.30	3
Mg			2	4846.718	ug/l	0.80	2,895,144.88	1.935E+01	Pulse	0.30	3
Al			2	4820.677	ug/l	0.46	980,606.04	6.553E+00	Pulse	0.30	3
K			2	4920.257	ug/l	1.16	2,439,000.18	1.630E+01	Pulse	0.30	3
Ca			2	5107.035	ug/l	0.63	127,157.12	8.498E-01	Pulse	0.30	3
Ti			2	48.861	ug/l	2.39	9,033.65	6.038E-02	Pulse	0.30	3
V			2	50.019	ug/l	1.32	299,946.09	2.005E+00	Pulse	0.30	3
Cr			2	49.302	ug/l	0.58	375,461.46	2.509E+00	Pulse	0.30	3
Mn			2	49.723	ug/l	1.53	202,529.95	1.354E+00	Pulse	0.30	3
Fe			2	5076.464	ug/l	0.71	30,184,972.13	2.017E+02	Analog	0.30	3
Co			2	49.193	ug/l	1.11	589,055.45	3.937E+00	Pulse	0.30	3
Ni			2	48.508	ug/l	1.11	153,578.58	1.026E+00	Pulse	0.30	3
Cu			2	48.282	ug/l	0.59	422,385.81	2.823E+00	Pulse	0.30	3
Zn			2	49.229	ug/l	0.86	65,414.26	4.372E-01	Pulse	0.30	3
As			2	49.921	ug/l	0.37	37,318.37	2.494E-01	Pulse	1.00	3
Cd			2	50.010	ug/l	1.26	101,897.13	1.136E-01	Pulse	0.30	3
Sn			2	49.668	ug/l	0.62	222,782.99	2.484E-01	Pulse	0.30	3
Se			3	198.054	ug/l	0.93	38,466.37	2.003E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,196,231.01	0.67	95.8	Pulse	0.10	3
1	Sc		2,527,247.88	0.68	89.8	Pulse	0.10	3
1	Ge		519,002.01	0.52	91.0	Pulse	0.10	3

Quantitation Report

1	Ge		723,547.31	0.68	91.1	Pulse	0.10	3
1	Rh		3,503,258.18	0.60	91.0	Pulse	0.10	3
1	In		3,756,820.93	0.44	94.3	Pulse	0.10	3
1	Tb		5,663,455.54	0.61	102.3	Analog	0.10	3
1	Ho		539,691.27	0.94	98.1	Pulse	0.10	3
1	Bi		3,195,218.60	0.15	95.7	Pulse	0.10	3
2	Sc		149,643.73	1.39	93.1	Pulse	0.30	3
2	Ge		91,280.68	1.40	91.7	Pulse	0.30	3
2	Ge		138,157.61	1.66	92.1	Pulse	0.30	3
2	Rh		2,221,034.22	0.90	91.2	Pulse	0.30	3
2	In		896,956.75	1.20	92.3	Pulse	0.30	3
2	Tb		3,055,851.96	1.41	93.3	Pulse	0.30	3
2	Ho		310,965.68	1.16	93.0	Pulse	0.30	3
2	Bi		2,051,920.61	0.67	91.6	Pulse	0.30	3
3	Sc		196,784.06	0.38	90.8	Pulse	0.30	3
3	Ge		126,798.17	0.22	90.4	Pulse	0.30	3
3	Ge		192,078.99	0.65	90.8	Pulse	0.30	3
3	Rh		1,932,291.80	0.77	88.6	Pulse	0.30	3
3	Tb		3,388,482.23	0.15	92.5	Pulse	0.30	3

Quantitation Report

File Name	058_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 14:57
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	9/11/2019 11:44
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	39.31	54.67	4.463E-05	Pulse	0.25	3
B			1	3.553	ug/l	5.81	23,267.49	1.901E-02	Pulse	0.15	3
Ca			1	-0.161	ug/l	-181.32	10,903.99	4.260E-03	Pulse	0.10	3
Sr			1	0.008	ug/l	31.71	743.37	2.044E-04	Pulse	0.10	3
Mo			1	0.059	ug/l	31.21	696.71	1.913E-04	Pulse	0.10	3
Ag			1	0.014	ug/l	38.32	340.02	8.840E-05	Pulse	0.10	3
Sn			1	0.151	ug/l	9.28	5,261.08	1.368E-03	Pulse	0.10	3
Sb			1	0.047	ug/l	8.52	1,190.09	2.122E-04	Pulse	0.10	3
Ba			1	0.010	ug/l	73.52	163.34	2.914E-05	Pulse	0.10	3
Tl			1	0.021	ug/l	2.83	1,166.77	3.581E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	25.97	496.69	1.523E-04	Pulse	0.10	3
Pb			1	0.009	ug/l	53.57	366.69	1.126E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	23.94	1,693.44	5.199E-04	Pulse	0.10	3
Na			2	13.021	ug/l	2.94	28,246.92	1.860E-01	Pulse	0.30	3
Mg			2	0.530	ug/l	13.37	628.91	4.141E-03	Pulse	0.30	3
Al			2	-0.437	ug/l	-34.23	568.91	3.745E-03	Pulse	0.30	3
K			2	0.904	ug/l	23.73	13,513.34	8.897E-02	Pulse	0.30	3
Ca			2	3.412	ug/l	21.37	192.23	1.266E-03	Pulse	0.30	3
Ti			2	-0.005	ug/l	-198.59	1.11	7.367E-06	Pulse	0.30	3
V			2	0.008	ug/l	83.61	331.12	2.181E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	429.59	927.81	6.110E-03	Pulse	0.30	3
Mn			2	0.002	ug/l	12.63	146.67	9.657E-04	Pulse	0.30	3
Fe			2	0.846	ug/l	5.54	11,013.80	7.250E-02	Pulse	0.30	3
Co			2	0.005	ug/l	36.16	112.19	7.385E-04	Pulse	0.30	3
Ni			2	0.009	ug/l	41.54	192.23	1.265E-03	Pulse	0.30	3
Cu			2	-0.637	ug/l	-1.86	2,146.84	1.413E-02	Pulse	0.30	3
Zn			2	-0.510	ug/l	-8.37	744.47	4.902E-03	Pulse	0.30	3
As			2	0.001	ug/l	965.26	21.67	1.428E-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	245.43	16.59	1.796E-05	Pulse	0.30	3
Sn			2	0.159	ug/l	16.24	1,795.69	1.945E-03	Pulse	0.30	3
Se			3	0.109	ug/l	4.26	25.00	1.295E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,224,358.70	0.47	98.0	Pulse	0.10	3
1	Sc		2,559,559.76	0.34	91.0	Pulse	0.10	3
1	Ge		524,005.58	0.15	91.9	Pulse	0.10	3
1	Ge		732,164.83	0.50	92.2	Pulse	0.10	3
1	Rh		3,639,780.57	1.00	94.5	Pulse	0.10	3
1	In		3,844,700.82	0.21	96.5	Pulse	0.10	3
1	Tb		5,608,010.54	0.20	101.3	Analog	0.10	3
1	Ho		533,376.32	0.40	97.0	Pulse	0.10	3
1	Bi		3,258,441.41	0.78	97.6	Pulse	0.10	3
2	Sc		151,890.58	0.69	94.5	Pulse	0.30	3
2	Ge		93,303.98	1.23	93.8	Pulse	0.30	3
2	Ge		140,848.21	1.13	93.9	Pulse	0.30	3
2	Rh		2,283,227.06	0.64	93.8	Pulse	0.30	3
2	In		922,805.08	0.65	95.0	Pulse	0.30	3
2	Tb		3,092,962.72	0.64	94.5	Pulse	0.30	3
2	Ho		312,206.36	1.09	93.4	Pulse	0.30	3
2	Bi		2,111,527.21	0.45	94.3	Pulse	0.30	3
3	Sc		196,437.12	1.15	90.7	Pulse	0.30	3
3	Ge		127,629.22	1.94	91.0	Pulse	0.30	3
3	Ge		192,982.07	1.04	91.2	Pulse	0.30	3
3	Rh		1,987,516.52	0.35	91.1	Pulse	0.30	3
3	Tb		3,328,372.23	0.56	90.9	Pulse	0.30	3

Quantitation Report

File Name	059SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:02
Sample Name	jc94229-2
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	9/11/2019 11:44
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	0.122	ug/l	14.64	389.34	3.464E-04	Pulse	0.25	3
B			1	12.557	ug/l	4.70	32,963.39	2.932E-02	Pulse	0.15	3
Ca			1	413346.682	ug/l	0.56	171,447,857.44	7.013E+01	Analog	0.10	3
Sr			1	293.999	ug/l	0.56	6,329,045.32	1.956E+00	Analog	0.10	3
Mo			1	0.839	ug/l	4.39	3,513.85	1.086E-03	Pulse	0.10	3
Ag			1	0.033	ug/l	6.79	373.35	1.045E-04	Pulse	0.10	3
Sn			1	0.665	ug/l	9.00	7,395.38	2.069E-03	Pulse	0.10	3
Sb			1	0.150	ug/l	7.87	1,596.81	3.025E-04	Pulse	0.10	3
Ba			1	1132.458	ug/l	0.32	4,024,204.94	7.625E-01	Pulse	0.10	3
Tl			1	0.044	ug/l	6.49	1,083.41	3.650E-04	Pulse	0.10	3
Pb			1	1.155	ug/l	3.76	8,139.20	2.742E-03	Pulse	0.10	3
Pb			1	1.088	ug/l	3.65	6,768.48	2.280E-03	Pulse	0.10	3
Pb			1	1.088	ug/l	0.81	31,153.82	1.050E-02	Pulse	0.10	3
Na			2	46887.473	ug/l	2.42	29,716,332.15	2.020E+02	Analog	0.30	3
Mg			2	19152.452	ug/l	1.41	5,623,476.17	3.823E+01	Analog	0.30	3
Al			2	1812.889	ug/l	0.25	181,804.91	1.236E+00	Pulse	0.30	3
K			2	3731.995	ug/l	1.56	917,255.69	6.235E+00	Pulse	0.30	3
Ca			2	415578.227	ug/l	2.58	5,081,626.46	3.455E+01	Mix	0.30	3
Ti			2	24.382	ug/l	9.20	2,216.89	1.507E-02	Pulse	0.30	3
V			2	3.137	ug/l	1.70	9,516.16	6.467E-02	Pulse	0.30	3
Cr			2	2.265	ug/l	1.23	9,346.07	6.352E-02	Pulse	0.30	3
Mn			2	227.877	ug/l	1.43	456,120.17	3.101E+00	Pulse	0.30	3
Fe			2	1743.198	ug/l	2.21	5,099,574.52	3.467E+01	Pulse	0.30	3
Co			2	0.773	ug/l	0.16	4,598.05	3.125E-02	Pulse	0.30	3
Ni			2	2.355	ug/l	3.89	3,817.15	2.595E-02	Pulse	0.30	3
Cu			2	0.547	ug/l	12.19	9,768.55	6.641E-02	Pulse	0.30	3
Zn			2	6.587	ug/l	3.26	5,583.23	3.796E-02	Pulse	0.30	3
As			2	1.020	ug/l	5.51	395.01	2.686E-03	Pulse	1.00	3
Cd			2	0.027	ug/l	7.64	38.56	4.443E-05	Pulse	0.30	3
Sn			2	0.648	ug/l	7.74	2,403.55	2.768E-03	Pulse	0.30	3
Se			3	5.158	ug/l	3.49	489.81	2.627E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,124,227.73	0.22	90.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,444,560.54	0.37	86.9	Pulse	0.10	3
1	Ge		508,738.40	0.74	89.2	Pulse	0.10	3
1	Ge		703,008.24	1.17	88.6	Pulse	0.10	3
1	Rh		3,235,185.79	1.34	84.0	Pulse	0.10	3
1	In		3,573,055.07	0.81	89.7	Pulse	0.10	3
1	Tb		5,277,820.76	0.73	95.3	Pulse	0.10	3
1	Ho		529,709.91	1.05	96.3	Pulse	0.10	3
1	Bi		2,968,150.79	0.10	88.9	Pulse	0.10	3
2	Sc		147,124.91	1.21	91.6	Pulse	0.30	3
2	Ge		90,314.51	0.77	90.8	Pulse	0.30	3
2	Ge		136,783.75	1.08	91.2	Pulse	0.30	3
2	Rh		2,063,367.70	1.23	84.8	Pulse	0.30	3
2	In		868,039.26	1.14	89.3	Pulse	0.30	3
2	Tb		3,012,084.53	1.37	92.0	Pulse	0.30	3
2	Ho		310,195.91	1.55	92.8	Pulse	0.30	3
2	Bi		1,922,877.15	1.09	85.9	Pulse	0.30	3
3	Sc		199,146.58	4.58	91.9	Pulse	0.30	3
3	Ge		123,465.01	2.56	88.0	Pulse	0.30	3
3	Ge		186,431.88	3.07	88.1	Pulse	0.30	3
3	Rh		1,828,781.18	4.26	83.8	Pulse	0.30	3
3	Tb		3,363,400.98	4.17	91.8	Pulse	0.30	3

Quantitation Report

File Name	060SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:07
Sample Name	jc94229-3
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	9/11/2019 11:44
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	0.062	ug/l	17.06	206.67	1.863E-04	Pulse	0.25	3
B			1	62.608	ug/l	0.91	137,672.52	1.240E-01	Pulse	0.15	3
Ca			1	30172.873	ug/l	0.21	12,171,024.82	5.124E+00	Analog	0.10	3
Sr			1	26.804	ug/l	1.06	581,611.53	1.785E-01	Pulse	0.10	3
Mo			1	5.204	ug/l	2.82	21,211.46	6.508E-03	Pulse	0.10	3
Ag			1	0.095	ug/l	9.92	1,030.06	2.920E-04	Pulse	0.10	3
Sn			1	0.582	ug/l	4.69	6,731.69	1.909E-03	Pulse	0.10	3
Sb			1	0.217	ug/l	4.80	2,163.57	4.093E-04	Pulse	0.10	3
Ba			1	51.930	ug/l	1.77	184,874.50	3.498E-02	Pulse	0.10	3
Tl			1	0.141	ug/l	12.14	2,997.12	1.011E-03	Pulse	0.10	3
Pb			1	0.610	ug/l	3.05	4,414.17	1.490E-03	Pulse	0.10	3
Pb			1	0.614	ug/l	2.14	3,910.68	1.320E-03	Pulse	0.10	3
Pb			1	0.602	ug/l	1.52	17,704.93	5.975E-03	Pulse	0.10	3
Na			2	216442.908	ug/l	0.64	132,276,488.08	9.323E+02	Analog	0.30	3
Mg			2	1545.358	ug/l	0.31	437,897.22	3.086E+00	Pulse	0.30	3
Al			2	1333.632	ug/l	1.65	129,139.89	9.102E-01	Pulse	0.30	3
K			2	1718.752	ug/l	1.13	414,038.83	2.918E+00	Pulse	0.30	3
Ca			2	29231.356	ug/l	0.17	344,872.59	2.431E+00	Pulse	0.30	3
Ti			2	17.571	ug/l	12.09	1,542.45	1.087E-02	Pulse	0.30	3
V			2	7.258	ug/l	1.46	20,883.27	1.472E-01	Pulse	0.30	3
Cr			2	10.565	ug/l	0.54	38,908.98	2.742E-01	Pulse	0.30	3
Mn			2	83.404	ug/l	0.74	161,098.70	1.135E+00	Pulse	0.30	3
Fe			2	953.839	ug/l	0.83	2,694,006.70	1.899E+01	Pulse	0.30	3
Co			2	0.526	ug/l	3.80	3,034.15	2.138E-02	Pulse	0.30	3
Ni			2	3.472	ug/l	3.80	5,357.59	3.776E-02	Pulse	0.30	3
Cu			2	1.504	ug/l	0.69	13,318.83	9.387E-02	Pulse	0.30	3
Zn			2	12.052	ug/l	0.12	8,754.64	6.170E-02	Pulse	0.30	3
As			2	3.788	ug/l	5.86	1,361.39	9.595E-03	Pulse	1.00	3
Cd			2	0.201	ug/l	20.55	205.08	2.414E-04	Pulse	0.30	3
Sn			2	0.586	ug/l	5.13	2,220.19	2.614E-03	Pulse	0.30	3
Se			3	0.628	ug/l	7.05	61.40	3.369E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,109,907.94	0.73	88.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,375,541.74	0.76	84.4	Pulse	0.10	3
1	Ge		511,081.75	0.71	89.6	Pulse	0.10	3
1	Ge		711,740.66	0.63	89.7	Pulse	0.10	3
1	Rh		3,259,210.16	0.60	84.7	Pulse	0.10	3
1	In		3,527,118.29	0.31	88.5	Pulse	0.10	3
1	Tb		5,286,603.04	2.32	95.5	Mix	0.10	3
1	Ho		521,145.16	0.39	94.7	Pulse	0.10	3
1	Bi		2,962,906.21	0.30	88.7	Pulse	0.10	3
2	Sc		141,886.48	0.41	88.3	Pulse	0.30	3
2	Ge		89,926.69	1.84	90.4	Pulse	0.30	3
2	Ge		134,708.74	0.99	89.8	Pulse	0.30	3
2	Rh		2,048,967.21	1.11	84.2	Pulse	0.30	3
2	In		849,312.03	0.37	87.4	Pulse	0.30	3
2	Tb		2,966,685.44	1.13	90.6	Pulse	0.30	3
2	Ho		305,170.52	1.45	91.3	Pulse	0.30	3
2	Bi		1,929,299.78	0.66	86.2	Pulse	0.30	3
3	Sc		189,515.17	0.98	87.5	Pulse	0.30	3
3	Ge		120,919.68	0.92	86.2	Pulse	0.30	3
3	Ge		182,411.51	2.00	86.2	Pulse	0.30	3
3	Rh		1,799,078.33	1.53	82.5	Pulse	0.30	3
3	Tb		3,273,795.08	1.02	89.4	Pulse	0.30	3

Quantitation Report

File Name	061SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:12
Sample Name	jc94229-4
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	9/11/2019 11:44
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	0.047	ug/l	4.40	160.00	1.451E-04	Pulse	0.25	3
B			1	104.152	ug/l	2.11	223,442.13	2.027E-01	Pulse	0.15	3
Ca			1	28929.754	ug/l	1.38	11,694,453.16	4.913E+00	Analog	0.10	3
Sr			1	68.425	ug/l	0.32	1,494,183.00	4.554E-01	Pulse	0.10	3
Mo			1	4.321	ug/l	1.89	17,760.48	5.412E-03	Pulse	0.10	3
Ag			1	0.051	ug/l	6.06	566.70	1.589E-04	Pulse	0.10	3
Sn			1	0.355	ug/l	2.30	5,237.71	1.469E-03	Pulse	0.10	3
Sb			1	0.202	ug/l	2.00	2,050.23	3.863E-04	Pulse	0.10	3
Ba			1	99.434	ug/l	3.09	355,303.56	6.696E-02	Pulse	0.10	3
Tl			1	0.013	ug/l	27.77	476.69	1.598E-04	Pulse	0.10	3
Pb			1	0.344	ug/l	3.31	2,613.67	8.772E-04	Pulse	0.10	3
Pb			1	0.329	ug/l	5.84	2,213.59	7.429E-04	Pulse	0.10	3
Pb			1	0.331	ug/l	5.56	10,288.47	3.453E-03	Pulse	0.10	3
Na			2	182358.615	ug/l	1.44	111,221,395.58	7.855E+02	Analog	0.30	3
Mg			2	2641.329	ug/l	1.68	746,712.66	5.274E+00	Pulse	0.30	3
Al			2	699.648	ug/l	3.02	67,892.86	4.796E-01	Pulse	0.30	3
K			2	1450.882	ug/l	1.32	350,684.54	2.477E+00	Pulse	0.30	3
Ca			2	28524.168	ug/l	1.75	335,830.96	2.372E+00	Pulse	0.30	3
Ti			2	13.921	ug/l	6.80	1,218.95	8.613E-03	Pulse	0.30	3
V			2	8.687	ug/l	3.57	24,884.34	1.758E-01	Pulse	0.30	3
Cr			2	4.143	ug/l	2.00	15,745.38	1.112E-01	Pulse	0.30	3
Mn			2	32.075	ug/l	1.65	61,909.67	4.372E-01	Pulse	0.30	3
Fe			2	889.961	ug/l	1.72	2,508,643.58	1.772E+01	Pulse	0.30	3
Co			2	0.375	ug/l	4.29	2,171.17	1.534E-02	Pulse	0.30	3
Ni			2	1.290	ug/l	11.12	2,079.05	1.470E-02	Pulse	0.30	3
Cu			2	1.979	ug/l	2.31	15,222.75	1.075E-01	Pulse	0.30	3
Zn			2	4.543	ug/l	4.48	4,116.12	2.908E-02	Pulse	0.30	3
As			2	2.224	ug/l	3.83	805.69	5.691E-03	Pulse	1.00	3
Cd			2	0.015	ug/l	46.78	26.47	3.078E-05	Pulse	0.30	3
Sn			2	0.216	ug/l	16.07	1,454.53	1.691E-03	Pulse	0.30	3
Se			3	0.710	ug/l	6.92	70.80	3.781E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,102,653.94	0.93	88.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,380,631.94	0.85	84.6	Pulse	0.10	3
1	Ge		510,984.93	1.06	89.6	Pulse	0.10	3
1	Ge		710,965.90	0.74	89.6	Pulse	0.10	3
1	Rh		3,281,013.29	1.07	85.2	Pulse	0.10	3
1	In		3,566,468.68	0.94	89.5	Pulse	0.10	3
1	Tb		5,309,618.25	3.28	95.9	Mix	0.10	3
1	Ho		519,573.32	1.69	94.5	Pulse	0.10	3
1	Bi		2,979,983.08	1.31	89.3	Pulse	0.10	3
2	Sc		141,616.93	1.70	88.1	Pulse	0.30	3
2	Ge		90,705.27	0.92	91.1	Pulse	0.30	3
2	Ge		136,278.64	0.92	90.9	Pulse	0.30	3
2	Rh		2,048,277.69	1.00	84.1	Pulse	0.30	3
2	In		860,031.82	0.06	88.5	Pulse	0.30	3
2	Tb		2,993,584.46	0.53	91.4	Pulse	0.30	3
2	Ho		305,965.05	1.11	91.5	Pulse	0.30	3
2	Bi		1,926,827.28	0.35	86.1	Pulse	0.30	3
3	Sc		192,398.54	3.68	88.8	Pulse	0.30	3
3	Ge		123,313.23	2.43	87.9	Pulse	0.30	3
3	Ge		187,191.14	2.48	88.5	Pulse	0.30	3
3	Rh		1,822,848.95	4.18	83.6	Pulse	0.30	3
3	Tb		3,313,510.01	4.56	90.5	Pulse	0.30	3

Quantitation Report

File Name	062SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:17
Sample Name	jc94229-5
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	9/11/2019 11:44
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	5481.89	21.33	1.846E-05	Pulse	0.25	3
B			1	7.002	ug/l	2.48	21,638.59	1.881E-02	Pulse	0.15	3
Ca			1	140.369	ug/l	4.32	67,728.68	2.813E-02	Pulse	0.10	3
Sr			1	1.311	ug/l	0.98	31,060.81	8.823E-03	Pulse	0.10	3
Mo			1	0.050	ug/l	22.23	376.69	1.068E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	48.77	156.67	4.184E-05	Pulse	0.10	3
Sn			1	0.328	ug/l	9.24	5,294.42	1.418E-03	Pulse	0.10	3
Sb			1	0.074	ug/l	19.60	990.06	1.819E-04	Pulse	0.10	3
Ba			1	1.675	ug/l	8.01	6,234.85	1.143E-03	Pulse	0.10	3
Tl			1	0.004	ug/l	1.73	323.35	9.997E-05	Pulse	0.10	3
Pb			1	0.015	ug/l	40.01	390.02	1.206E-04	Pulse	0.10	3
Pb			1	-0.001	ug/l	-523.29	243.34	7.518E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	1807.50	1,226.74	3.795E-04	Pulse	0.10	3
Na			2	63.836	ug/l	2.19	51,701.83	3.487E-01	Pulse	0.30	3
Mg			2	13.299	ug/l	1.44	4,235.03	2.857E-02	Pulse	0.30	3
Al			2	8.941	ug/l	23.64	1,538.99	1.041E-02	Pulse	0.30	3
K			2	4.323	ug/l	45.44	13,794.68	9.311E-02	Pulse	0.30	3
Ca			2	140.736	ug/l	6.21	1,835.68	1.240E-02	Pulse	0.30	3
Ti			2	0.125	ug/l	82.25	13.33	9.129E-05	Pulse	0.30	3
V			2	0.355	ug/l	11.55	1,334.52	8.984E-03	Pulse	0.30	3
Cr			2	0.310	ug/l	5.14	2,059.04	1.390E-02	Pulse	0.30	3
Mn			2	2.742	ug/l	2.55	5,666.59	3.821E-02	Pulse	0.30	3
Fe			2	2.138	ug/l	11.51	12,043.41	8.134E-02	Pulse	0.30	3
Co			2	0.071	ug/l	6.56	469.98	3.174E-03	Pulse	0.30	3
Ni			2	0.231	ug/l	4.50	520.01	3.508E-03	Pulse	0.30	3
Cu			2	-0.808	ug/l	-5.64	4,072.78	2.750E-02	Pulse	0.30	3
Zn			2	2.613	ug/l	16.09	3,060.32	2.068E-02	Pulse	0.30	3
As			2	0.147	ug/l	8.29	75.00	5.066E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.005	ug/l	-278.07	7.75	8.332E-06	Pulse	0.30	3
Sn			2	0.341	ug/l	11.46	1,852.36	2.003E-03	Pulse	0.30	3
Se			3	0.044	ug/l	22.05	7.87	4.151E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,150,463.97	0.88	92.1	Pulse	0.10	3
1	Sc		2,408,376.68	1.55	85.6	Pulse	0.10	3
1	Ge		549,964.72	1.26	96.4	Pulse	0.10	3
1	Ge		757,207.38	0.84	95.4	Pulse	0.10	3
1	Rh		3,520,757.03	1.97	91.5	Pulse	0.10	3
1	In		3,735,805.43	1.96	93.7	Pulse	0.10	3
1	Tb		5,463,381.07	4.31	98.7	Mix	0.10	3
1	Ho		528,255.73	1.12	96.0	Pulse	0.10	3
1	Bi		3,234,481.30	1.48	96.9	Pulse	0.10	3
2	Sc		148,275.22	3.70	92.3	Pulse	0.30	3
2	Ge		98,815.31	3.47	99.3	Pulse	0.30	3
2	Ge		149,768.37	2.49	99.9	Pulse	0.30	3
2	Rh		2,307,836.37	3.84	94.8	Pulse	0.30	3
2	In		925,565.25	3.39	95.2	Pulse	0.30	3
2	Tb		3,149,371.82	3.41	96.2	Pulse	0.30	3
2	Ho		322,369.54	4.18	96.4	Pulse	0.30	3
2	Bi		2,145,981.86	3.69	95.9	Pulse	0.30	3
3	Sc		189,896.09	6.50	87.7	Pulse	0.30	3
3	Ge		125,477.05	5.28	89.5	Pulse	0.30	3
3	Ge		189,748.78	4.51	89.7	Pulse	0.30	3
3	Rh		1,903,266.66	6.13	87.3	Pulse	0.30	3
3	Tb		3,278,949.52	6.36	89.5	Pulse	0.30	3

Quantitation Report

File Name	063SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:22
Sample Name	jc94611-5
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	9/11/2019 11:44
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	98.42	46.67	4.351E-05	Pulse	0.25	3
B			1	96.484	ug/l	1.70	201,927.95	1.882E-01	Pulse	0.15	3
Ca			1	118172.180	ug/l	1.43	46,986,830.97	2.005E+01	Analog	0.10	3
Sr			1	1164.130	ug/l	0.59	23,890,901.31	7.746E+00	Analog	0.10	3
Mo			1	19.950	ug/l	3.05	76,560.43	2.483E-02	Pulse	0.10	3
Ag			1	0.011	ug/l	42.55	133.34	3.904E-05	Pulse	0.10	3
Sn			1	0.432	ug/l	9.95	5,511.19	1.619E-03	Pulse	0.10	3
Sb			1	0.684	ug/l	5.57	5,881.32	1.156E-03	Pulse	0.10	3
Ba			1	175.180	ug/l	2.57	600,158.83	1.180E-01	Pulse	0.10	3
Tl			1	0.018	ug/l	11.28	546.70	1.960E-04	Pulse	0.10	3
Pb			1	0.554	ug/l	5.83	3,797.30	1.361E-03	Pulse	0.10	3
Pb			1	0.451	ug/l	6.92	2,767.04	9.902E-04	Pulse	0.10	3
Pb			1	0.484	ug/l	1.27	13,612.96	4.876E-03	Pulse	0.10	3
Na			2	443489.131	ug/l	2.76	263,882,887.29	1.910E+03	Analog	0.30	3
Mg			2	7664.698	ug/l	2.33	2,113,636.38	1.530E+01	Pulse	0.30	3
Al			2	182.057	ug/l	2.64	17,683.81	1.280E-01	Pulse	0.30	3
K			2	25696.997	ug/l	1.73	5,861,817.13	4.243E+01	Analog	0.30	3
Ca			2	120004.068	ug/l	1.92	1,378,305.12	9.976E+00	Pulse	0.30	3
Ti			2	8.714	ug/l	7.16	745.58	5.397E-03	Pulse	0.30	3
V			2	1.021	ug/l	1.39	3,083.66	2.232E-02	Pulse	0.30	3
Cr			2	2.012	ug/l	1.34	7,890.85	5.710E-02	Pulse	0.30	3
Mn			2	7104.850	ug/l	2.62	13,350,740.86	9.664E+01	Analog	0.30	3
Fe			2	4285.119	ug/l	2.44	11,765,179.25	8.516E+01	Analog	0.30	3
Co			2	1.707	ug/l	2.60	9,481.08	6.863E-02	Pulse	0.30	3
Ni			2	2.487	ug/l	5.52	3,778.26	2.735E-02	Pulse	0.30	3
Cu			2	1.486	ug/l	6.85	12,896.28	9.336E-02	Pulse	0.30	3
Zn			2	9.649	ug/l	0.76	7,083.82	5.126E-02	Pulse	0.30	3
As			2	4.874	ug/l	3.43	1,700.10	1.231E-02	Pulse	1.00	3
Cd			2	0.023	ug/l	110.06	32.00	3.926E-05	Pulse	0.30	3
Sn			2	0.369	ug/l	12.77	1,676.78	2.072E-03	Pulse	0.30	3
Se			3	0.214	ug/l	4.87	22.33	1.276E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,073,320.39	1.01	85.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,343,384.13	1.52	83.3	Pulse	0.10	3
1	Ge		491,086.83	1.26	86.1	Pulse	0.10	3
1	Ge		681,725.15	0.68	85.9	Pulse	0.10	3
1	Rh		3,084,314.95	1.22	80.1	Pulse	0.10	3
1	In		3,404,509.50	1.54	85.4	Pulse	0.10	3
1	Tb		5,090,054.50	2.56	91.9	Pulse	0.10	3
1	Ho		508,292.88	3.01	92.4	Pulse	0.10	3
1	Bi		2,792,235.27	1.97	83.6	Pulse	0.10	3
2	Sc		138,187.32	1.70	86.0	Pulse	0.30	3
2	Ge		86,584.42	1.74	87.0	Pulse	0.30	3
2	Ge		129,637.33	0.76	86.4	Pulse	0.30	3
2	Rh		1,928,661.94	1.01	79.2	Pulse	0.30	3
2	In		809,266.04	1.56	83.3	Pulse	0.30	3
2	Tb		2,858,711.90	0.75	87.3	Pulse	0.30	3
2	Ho		293,639.94	0.95	87.8	Pulse	0.30	3
2	Bi		1,798,424.10	0.82	80.3	Pulse	0.30	3
3	Sc		186,718.64	0.73	86.2	Pulse	0.30	3
3	Ge		116,248.46	0.77	82.9	Pulse	0.30	3
3	Ge		175,035.70	0.87	82.7	Pulse	0.30	3
3	Rh		1,708,426.39	0.83	78.3	Pulse	0.30	3
3	Tb		3,189,579.04	0.74	87.1	Pulse	0.30	3

Quantitation Report

File Name	064SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:27
Sample Name	jc94611-6
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	9/11/2019 11:44
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	31.49	44.00	4.028E-05	Pulse	0.25	3
B			1	52.645	ug/l	1.03	114,753.94	1.052E-01	Pulse	0.15	3
Ca			1	45147.371	ug/l	0.60	18,114,190.56	7.664E+00	Analog	0.10	3
Sr			1	455.668	ug/l	1.76	9,567,577.57	3.032E+00	Analog	0.10	3
Mo			1	22.240	ug/l	1.84	87,315.09	2.767E-02	Pulse	0.10	3
Ag			1	0.015	ug/l	54.28	180.01	5.185E-05	Pulse	0.10	3
Sn			1	0.700	ug/l	4.30	7,398.69	2.138E-03	Pulse	0.10	3
Sb			1	0.617	ug/l	6.90	5,357.80	1.050E-03	Pulse	0.10	3
Ba			1	59.927	ug/l	0.64	206,115.26	4.036E-02	Pulse	0.10	3
Tl			1	0.136	ug/l	9.28	2,760.37	9.807E-04	Pulse	0.10	3
Pb			1	0.329	ug/l	4.08	2,373.62	8.433E-04	Pulse	0.10	3
Pb			1	0.292	ug/l	13.82	1,876.86	6.671E-04	Pulse	0.10	3
Pb			1	0.310	ug/l	5.32	9,164.81	3.256E-03	Pulse	0.10	3
Na			2	352793.635	ug/l	1.81	221,957,231.18	1.520E+03	Analog	0.30	3
Mg			2	2519.600	ug/l	2.13	734,794.71	5.031E+00	Pulse	0.30	3
Al			2	258.104	ug/l	0.85	26,244.90	1.797E-01	Pulse	0.30	3
K			2	7118.999	ug/l	1.35	1,726,049.48	1.182E+01	Pulse	0.30	3
Ca			2	44341.874	ug/l	1.42	538,534.48	3.687E+00	Pulse	0.30	3
Ti			2	3.814	ug/l	17.55	345.56	2.370E-03	Pulse	0.30	3
V			2	1.437	ug/l	1.95	4,476.21	3.064E-02	Pulse	0.30	3
Cr			2	19.777	ug/l	2.47	74,210.56	5.081E-01	Pulse	0.30	3
Mn			2	8.179	ug/l	2.49	16,384.90	1.122E-01	Pulse	0.30	3
Fe			2	342.333	ug/l	1.44	999,042.91	6.839E+00	Pulse	0.30	3
Co			2	0.293	ug/l	6.13	1,760.75	1.206E-02	Pulse	0.30	3
Ni			2	3.820	ug/l	4.64	6,053.41	4.144E-02	Pulse	0.30	3
Cu			2	2.758	ug/l	3.53	18,969.99	1.299E-01	Pulse	0.30	3
Zn			2	2.704	ug/l	4.98	3,080.32	2.108E-02	Pulse	0.30	3
As			2	0.383	ug/l	12.19	160.00	1.096E-03	Pulse	1.00	3
Cd			2	0.027	ug/l	13.87	38.76	4.469E-05	Pulse	0.30	3
Sn			2	0.549	ug/l	11.08	2,184.62	2.520E-03	Pulse	0.30	3
Se			3	0.309	ug/l	12.99	32.40	1.757E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,091,004.38	1.03	87.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,363,610.43	1.11	84.0	Pulse	0.10	3
1	Ge		509,917.40	1.35	89.4	Pulse	0.10	3
1	Ge		705,967.44	1.67	88.9	Pulse	0.10	3
1	Rh		3,155,576.00	0.82	82.0	Pulse	0.10	3
1	In		3,461,357.00	0.99	86.9	Pulse	0.10	3
1	Tb		5,106,756.49	1.53	92.2	Pulse	0.10	3
1	Ho		503,870.23	2.18	91.6	Pulse	0.10	3
1	Bi		2,814,263.40	0.84	84.3	Pulse	0.10	3
2	Sc		146,097.24	1.69	90.9	Pulse	0.30	3
2	Ge		92,574.13	0.89	93.0	Pulse	0.30	3
2	Ge		140,434.44	1.06	93.6	Pulse	0.30	3
2	Rh		2,066,700.75	0.84	84.9	Pulse	0.30	3
2	In		867,180.81	1.12	89.2	Pulse	0.30	3
2	Tb		2,986,965.02	0.58	91.2	Pulse	0.30	3
2	Ho		309,161.57	0.64	92.5	Pulse	0.30	3
2	Bi		1,900,497.15	0.68	84.9	Pulse	0.30	3
3	Sc		192,386.63	0.68	88.8	Pulse	0.30	3
3	Ge		122,172.33	0.75	87.1	Pulse	0.30	3
3	Ge		184,534.99	1.04	87.2	Pulse	0.30	3
3	Rh		1,777,201.39	0.22	81.5	Pulse	0.30	3
3	Tb		3,253,118.83	0.30	88.8	Pulse	0.30	3

Quantitation Report

File Name	065SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:32
Sample Name	mp17206-mb1conf
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	9/11/2019 11:44
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	79.24	32.00	2.515E-05	Pulse	0.25	3
B			1	1.207	ug/l	4.71	12,887.33	1.013E-02	Pulse	0.15	3
Ca			1	8.230	ug/l	1.94	18,524.26	7.107E-03	Pulse	0.10	3
Sr			1	0.049	ug/l	16.13	2,773.68	7.573E-04	Pulse	0.10	3
Mo			1	0.295	ug/l	6.03	2,850.35	7.781E-04	Pulse	0.10	3
Ag			1	0.004	ug/l	32.00	110.01	2.882E-05	Pulse	0.10	3
Sn			1	0.037	ug/l	47.93	3,537.19	9.256E-04	Pulse	0.10	3
Sb			1	0.057	ug/l	18.63	1,350.12	2.450E-04	Pulse	0.10	3
Ba			1	0.043	ug/l	10.40	406.69	7.384E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	147.89	250.01	7.840E-05	Pulse	0.10	3
Pb			1	0.006	ug/l	30.12	366.69	1.149E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	47.10	343.35	1.076E-04	Pulse	0.10	3
Pb			1	0.004	ug/l	46.65	1,436.75	4.505E-04	Pulse	0.10	3
Na			2	46.778	ug/l	2.59	72,952.28	4.768E-01	Pulse	0.30	3
Mg			2	0.659	ug/l	10.19	712.25	4.656E-03	Pulse	0.30	3
Al			2	2.177	ug/l	24.32	1,115.61	7.295E-03	Pulse	0.30	3
K			2	1.724	ug/l	55.99	14,026.00	9.167E-02	Pulse	0.30	3
Ca			2	9.739	ug/l	19.61	354.45	2.318E-03	Pulse	0.30	3
Ti			2	0.136	ug/l	51.92	27.78	1.813E-04	Pulse	0.30	3
V			2	0.007	ug/l	66.73	328.89	2.149E-03	Pulse	0.30	3
Cr			2	-0.015	ug/l	-35.74	806.70	5.270E-03	Pulse	0.30	3
Mn			2	0.089	ug/l	15.90	511.13	3.340E-03	Pulse	0.30	3
Fe			2	1.115	ug/l	3.11	12,727.23	8.318E-02	Pulse	0.30	3
Co			2	0.000	ug/l	723.45	54.41	3.548E-04	Pulse	0.30	3
Ni			2	0.004	ug/l	212.65	176.67	1.154E-03	Pulse	0.30	3
Cu			2	-0.615	ug/l	-1.18	2,356.87	1.540E-02	Pulse	0.30	3
Zn			2	0.021	ug/l	261.70	1,455.64	9.516E-03	Pulse	0.30	3
As			2	0.003	ug/l	26.90	23.67	1.547E-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	-54.63	6.48	6.958E-06	Pulse	0.30	3
Sn			2	0.014	ug/l	6.09	1,138.95	1.224E-03	Pulse	0.30	3
Se			3	0.022	ug/l	42.10	8.00	4.157E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,272,718.61	0.42	101.9	Pulse	0.10	3
1	Sc		2,606,394.02	0.89	92.7	Pulse	0.10	3
1	Ge		534,040.90	1.27	93.6	Pulse	0.10	3
1	Ge		740,795.62	0.40	93.3	Pulse	0.10	3
1	Rh		3,662,615.36	0.38	95.1	Pulse	0.10	3
1	In		3,820,821.51	0.99	95.9	Pulse	0.10	3
1	Tb		5,508,201.79	0.38	99.5	Analog	0.10	3
1	Ho		523,687.46	0.71	95.2	Pulse	0.10	3
1	Bi		3,189,065.58	0.65	95.5	Pulse	0.10	3
2	Sc		153,032.37	1.14	95.2	Pulse	0.30	3
2	Ge		94,585.87	0.15	95.0	Pulse	0.30	3
2	Ge		142,857.24	0.80	95.3	Pulse	0.30	3
2	Rh		2,290,427.89	0.89	94.1	Pulse	0.30	3
2	In		930,458.27	0.34	95.7	Pulse	0.30	3
2	Tb		3,057,330.92	0.63	93.4	Pulse	0.30	3
2	Ho		312,051.69	0.74	93.4	Pulse	0.30	3
2	Bi		2,086,082.83	1.13	93.2	Pulse	0.30	3
3	Sc		198,833.11	0.75	91.8	Pulse	0.30	3
3	Ge		127,568.29	0.56	90.9	Pulse	0.30	3
3	Ge		192,516.18	0.35	91.0	Pulse	0.30	3
3	Rh		1,983,482.84	0.57	90.9	Pulse	0.30	3
3	Tb		3,337,424.80	0.49	91.1	Pulse	0.30	3

Quantitation Report

File Name	066SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:37
Sample Name	mp17206-b1conf
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	9/11/2019 11:44
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	68.267	ug/l	0.65	456,014.58	3.674E-01	Pulse	0.25	3
B			1	64.015	ug/l	1.23	307,618.19	2.479E-01	Pulse	0.15	3
Ca			1	24.211	ug/l	3.78	31,891.53	1.253E-02	Pulse	0.10	3
Sr			1	77.015	ug/l	0.40	3,660,535.99	1.025E+00	Pulse	0.10	3
Mo			1	0.196	ug/l	3.56	1,896.87	5.311E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	8.61	203.34	5.397E-05	Pulse	0.10	3
Sn			1	0.235	ug/l	9.78	6,381.50	1.694E-03	Pulse	0.10	3
Sb			1	0.306	ug/l	3.78	5,434.49	1.041E-03	Pulse	0.10	3
Ba			1	77.237	ug/l	0.84	543,178.92	1.040E-01	Pulse	0.10	3
Tl			1	76.655	ug/l	0.44	3,197,823.18	1.021E+00	Pulse	0.10	3
Pb			1	78.657	ug/l	1.03	1,133,386.36	3.620E-01	Pulse	0.10	3
Pb			1	78.666	ug/l	1.04	997,590.14	3.187E-01	Pulse	0.10	3
Pb			1	78.339	ug/l	0.77	4,562,511.10	1.457E+00	Pulse	0.10	3
Na			2	24.583	ug/l	1.37	42,838.45	2.856E-01	Pulse	0.30	3
Mg			2	0.871	ug/l	16.74	825.59	5.504E-03	Pulse	0.30	3
Al			2	1.790	ug/l	24.47	1,015.62	6.770E-03	Pulse	0.30	3
K			2	1.019	ug/l	6.99	13,403.26	8.935E-02	Pulse	0.30	3
Ca			2	259.685	ug/l	0.90	6,581.38	4.387E-02	Pulse	0.30	3
Ti			2	0.193	ug/l	38.74	37.78	2.517E-04	Pulse	0.30	3
V			2	76.782	ug/l	0.26	461,468.32	3.076E+00	Pulse	0.30	3
Cr			2	75.115	ug/l	0.15	572,999.20	3.820E+00	Pulse	0.30	3
Mn			2	76.347	ug/l	0.30	311,704.06	2.078E+00	Pulse	0.30	3
Fe			2	1.011	ug/l	3.75	11,858.58	7.905E-02	Pulse	0.30	3
Co			2	74.945	ug/l	0.09	899,670.39	5.997E+00	Pulse	0.30	3
Ni			2	74.375	ug/l	0.47	235,988.53	1.573E+00	Pulse	0.30	3
Cu			2	74.114	ug/l	0.36	645,917.56	4.306E+00	Pulse	0.30	3
Zn			2	77.678	ug/l	1.41	102,664.83	6.844E-01	Pulse	0.30	3
As			2	0.201	ug/l	8.06	171.33	1.142E-03	Pulse	1.00	3
Cd			2	75.087	ug/l	0.55	155,788.91	1.706E-01	Pulse	0.30	3
Sn			2	0.199	ug/l	6.29	1,956.81	2.143E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	79.373	ug/l	2.97	15,062.97	8.027E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,241,150.31	0.47	99.4	Pulse	0.10	3
1	Sc		2,545,273.50	0.41	90.5	Pulse	0.10	3
1	Ge		522,939.95	0.37	91.7	Pulse	0.10	3
1	Ge		724,651.97	0.16	91.3	Pulse	0.10	3
1	Rh		3,571,181.09	0.55	92.8	Pulse	0.10	3
1	In		3,767,531.73	0.12	94.5	Pulse	0.10	3
1	Tb		5,222,135.44	0.67	94.3	Pulse	0.10	3
1	Ho		512,766.71	1.27	93.2	Pulse	0.10	3
1	Bi		3,130,558.81	0.08	93.8	Pulse	0.10	3
2	Sc		150,010.02	0.22	93.3	Pulse	0.30	3
2	Ge		92,828.17	0.25	93.3	Pulse	0.30	3
2	Ge		138,389.65	0.90	92.3	Pulse	0.30	3
2	Rh		2,242,756.30	0.33	92.1	Pulse	0.30	3
2	In		913,305.63	0.86	94.0	Pulse	0.30	3
2	Tb		2,997,633.14	0.39	91.6	Pulse	0.30	3
2	Ho		306,908.45	0.18	91.8	Pulse	0.30	3
2	Bi		2,061,385.06	0.45	92.1	Pulse	0.30	3
3	Sc		192,167.19	3.97	88.7	Pulse	0.30	3
3	Ge		124,287.10	2.52	88.6	Pulse	0.30	3
3	Ge		187,726.88	2.29	88.7	Pulse	0.30	3
3	Rh		1,917,584.02	3.76	87.9	Pulse	0.30	3
3	Tb		3,256,522.78	3.99	88.9	Pulse	0.30	3

Quantitation Report

File Name	067_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:42
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	9/11/2019 11:44
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	45.579	ug/l	0.59	290,408.24	2.453E-01	Pulse	0.25	3
B			1	88.613	ug/l	1.83	403,609.37	3.410E-01	Pulse	0.15	3
Ca			1	5017.258	ug/l	0.71	4,146,276.19	1.707E+00	Pulse	0.10	3
Sr			1	51.400	ug/l	0.60	2,300,516.27	6.841E-01	Pulse	0.10	3
Mo			1	50.572	ug/l	0.97	422,648.08	1.257E-01	Pulse	0.10	3
Ag			1	48.609	ug/l	0.60	1,045,324.59	2.926E-01	Pulse	0.10	3
Sn			1	49.510	ug/l	0.81	687,697.62	1.925E-01	Pulse	0.10	3
Sb			1	52.002	ug/l	1.48	845,635.46	1.663E-01	Pulse	0.10	3
Ba			1	50.487	ug/l	0.59	345,708.46	6.800E-02	Pulse	0.10	3
Tl			1	50.116	ug/l	0.48	2,001,517.84	6.679E-01	Pulse	0.10	3
Pb			1	50.414	ug/l	1.29	695,505.98	2.321E-01	Pulse	0.10	3
Pb			1	50.233	ug/l	0.53	609,914.25	2.035E-01	Pulse	0.10	3
Pb			1	50.130	ug/l	0.60	2,795,412.66	9.328E-01	Pulse	0.10	3
Na			2	5040.020	ug/l	0.67	6,299,178.64	4.349E+01	Analog	0.30	3
Mg			2	4829.704	ug/l	0.52	2,792,829.06	1.928E+01	Pulse	0.30	3
Al			2	4838.807	ug/l	0.67	952,803.02	6.578E+00	Pulse	0.30	3
K			2	4914.575	ug/l	0.99	2,358,360.53	1.628E+01	Pulse	0.30	3
Ca			2	5117.614	ug/l	1.53	123,334.45	8.515E-01	Pulse	0.30	3
Ti			2	49.540	ug/l	2.46	8,866.90	6.122E-02	Pulse	0.30	3
V			2	49.566	ug/l	0.73	287,745.45	1.987E+00	Pulse	0.30	3
Cr			2	48.967	ug/l	1.59	360,963.29	2.492E+00	Pulse	0.30	3
Mn			2	49.644	ug/l	1.50	195,741.36	1.351E+00	Pulse	0.30	3
Fe			2	5056.166	ug/l	1.21	29,101,526.62	2.009E+02	Analog	0.30	3
Co			2	48.455	ug/l	0.70	561,689.32	3.878E+00	Pulse	0.30	3
Ni			2	48.087	ug/l	1.16	147,377.02	1.017E+00	Pulse	0.30	3
Cu			2	47.530	ug/l	0.29	402,629.77	2.780E+00	Pulse	0.30	3
Zn			2	48.670	ug/l	1.36	62,618.82	4.323E-01	Pulse	0.30	3
As			2	49.484	ug/l	2.10	35,803.65	2.472E-01	Pulse	1.00	3
Cd			2	48.795	ug/l	0.71	96,521.59	1.109E-01	Pulse	0.30	3
Sn			2	49.553	ug/l	0.45	215,776.44	2.478E-01	Pulse	0.30	3
Se			3	197.521	ug/l	0.71	35,899.64	1.997E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,183,820.60	0.75	94.8	Pulse	0.10	3
1	Sc		2,429,335.38	0.72	86.4	Pulse	0.10	3
1	Ge		491,590.55	0.84	86.2	Pulse	0.10	3

Quantitation Report

1	Ge		694,403.43	0.24	87.5	Pulse	0.10	3
1	Rh		3,362,634.95	0.46	87.3	Pulse	0.10	3
1	In		3,572,005.44	0.76	89.6	Pulse	0.10	3
1	Tb		5,083,978.78	0.47	91.8	Pulse	0.10	3
1	Ho		504,151.56	0.86	91.6	Pulse	0.10	3
1	Bi		2,996,966.52	0.36	89.8	Pulse	0.10	3
2	Sc		144,857.79	1.27	90.1	Pulse	0.30	3
2	Ge		87,887.97	0.96	88.3	Pulse	0.30	3
2	Ge		133,232.87	1.23	88.8	Pulse	0.30	3
2	Rh		2,117,146.24	0.69	87.0	Pulse	0.30	3
2	In		870,718.70	0.42	89.6	Pulse	0.30	3
2	Tb		2,926,059.95	0.15	89.4	Pulse	0.30	3
2	Ho		298,963.50	0.35	89.4	Pulse	0.30	3
2	Bi		1,956,542.77	0.68	87.4	Pulse	0.30	3
3	Sc		185,752.18	0.92	85.7	Pulse	0.30	3
3	Ge		118,799.47	0.37	84.7	Pulse	0.30	3
3	Ge		179,743.09	0.58	85.0	Pulse	0.30	3
3	Rh		1,822,428.82	0.92	83.5	Pulse	0.30	3
3	Tb		3,206,639.80	0.61	87.5	Pulse	0.30	3

Quantitation Report

File Name	068_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:47
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	9/11/2019 11:44
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	0.013	ug/l	4.90	108.00	8.813E-05	Pulse	0.25	3
B			1	3.967	ug/l	6.69	25,212.32	2.057E-02	Pulse	0.15	3
Ca			1	1.142	ug/l	56.06	11,754.62	4.702E-03	Pulse	0.10	3
Sr			1	0.016	ug/l	6.24	1,120.08	3.190E-04	Pulse	0.10	3
Mo			1	0.074	ug/l	13.79	796.71	2.270E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	23.66	210.01	5.731E-05	Pulse	0.10	3
Sn			1	0.128	ug/l	5.02	4,684.22	1.278E-03	Pulse	0.10	3
Sb			1	0.055	ug/l	1.24	1,223.43	2.397E-04	Pulse	0.10	3
Ba			1	0.013	ug/l	69.31	170.01	3.330E-05	Pulse	0.10	3
Tl			1	0.025	ug/l	1.09	1,266.78	4.106E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	41.94	483.36	1.567E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	38.80	520.03	1.685E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	11.98	2,323.53	7.533E-04	Pulse	0.10	3
Na			2	15.803	ug/l	2.03	30,912.71	2.099E-01	Pulse	0.30	3
Mg			2	0.632	ug/l	22.87	670.02	4.548E-03	Pulse	0.30	3
Al			2	2.140	ug/l	4.82	1,066.72	7.245E-03	Pulse	0.30	3
K			2	0.481	ug/l	154.99	12,892.86	8.757E-02	Pulse	0.30	3
Ca			2	3.379	ug/l	11.54	185.56	1.260E-03	Pulse	0.30	3
Ti			2	0.032	ug/l	67.45	7.78	5.293E-05	Pulse	0.30	3
V			2	0.000	ug/l	8486.40	276.67	1.878E-03	Pulse	0.30	3
Cr			2	0.004	ug/l	217.25	920.04	6.247E-03	Pulse	0.30	3
Mn			2	0.018	ug/l	74.17	207.78	1.410E-03	Pulse	0.30	3
Fe			2	0.950	ug/l	9.44	11,286.56	7.664E-02	Pulse	0.30	3
Co			2	0.008	ug/l	46.22	148.86	1.009E-03	Pulse	0.30	3
Ni			2	0.026	ug/l	54.47	237.78	1.614E-03	Pulse	0.30	3
Cu			2	-0.562	ug/l	-3.10	2,713.60	1.843E-02	Pulse	0.30	3
Zn			2	-0.191	ug/l	-34.50	1,130.05	7.673E-03	Pulse	0.30	3
As			2	0.019	ug/l	16.82	34.33	2.333E-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	83.71	33.25	3.715E-05	Pulse	0.30	3
Sn			2	0.118	ug/l	11.71	1,562.32	1.743E-03	Pulse	0.30	3
Se			3	0.142	ug/l	7.22	29.87	1.633E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,225,518.22	0.64	98.1	Pulse	0.10	3
1	Sc		2,499,692.62	0.60	88.9	Pulse	0.10	3
1	Ge		508,725.08	0.57	89.2	Pulse	0.10	3
1	Ge		707,700.90	0.60	89.2	Pulse	0.10	3
1	Rh		3,510,844.11	0.48	91.2	Pulse	0.10	3
1	In		3,665,454.73	0.36	92.0	Pulse	0.10	3
1	Tb		5,103,597.84	0.12	92.2	Pulse	0.10	3
1	Ho		506,036.05	0.28	92.0	Pulse	0.10	3
1	Bi		3,085,110.16	0.38	92.4	Pulse	0.10	3
2	Sc		147,240.23	0.81	91.6	Pulse	0.30	3
2	Ge		91,475.04	1.18	91.9	Pulse	0.30	3
2	Ge		137,042.36	0.61	91.4	Pulse	0.30	3
2	Rh		2,218,886.30	0.83	91.2	Pulse	0.30	3
2	In		896,424.25	0.61	92.2	Pulse	0.30	3
2	Tb		2,965,098.91	0.46	90.6	Pulse	0.30	3
2	Ho		302,411.07	0.32	90.5	Pulse	0.30	3
2	Bi		2,029,545.68	0.63	90.7	Pulse	0.30	3
3	Sc		187,862.56	0.78	86.7	Pulse	0.30	3
3	Ge		120,518.93	0.78	85.9	Pulse	0.30	3
3	Ge		182,922.03	0.08	86.5	Pulse	0.30	3
3	Rh		1,897,092.50	0.67	87.0	Pulse	0.30	3
3	Tb		3,206,793.48	0.80	87.5	Pulse	0.30	3

Quantitation Report

File Name	069SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:52
Sample Name	jc94283-2 8
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	9/11/2019 11:44
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	0.080	ug/l	155.50	33.33	2.679E-05	Pulse	0.25	3
B			1	150.708	ug/l	5.79	21,102.30	1.697E-02	Pulse	0.15	3
Ca			1	38357.554	ug/l	0.89	670,626.03	2.646E-01	Pulse	0.10	3
Sr			1	164.351	ug/l	2.01	154,728.58	4.385E-02	Pulse	0.10	3
Mo			1	4.358	ug/l	10.29	920.06	2.606E-04	Pulse	0.10	3
Ag			1	0.914	ug/l	13.00	433.36	1.166E-04	Pulse	0.10	3
Sn			1	12.924	ug/l	4.14	6,624.98	1.783E-03	Pulse	0.10	3
Sb			1	6.762	ug/l	6.37	2,546.97	4.952E-04	Pulse	0.10	3
Ba			1	100.030	ug/l	1.28	13,940.19	2.710E-03	Pulse	0.10	3
Tl			1	1.888	ug/l	4.60	1,783.52	5.771E-04	Pulse	0.10	3
Pb			1	2761.079	ug/l	1.09	785,559.94	2.542E-01	Pulse	0.10	3
Pb			1	2776.089	ug/l	0.82	695,120.69	2.249E-01	Pulse	0.10	3
Pb			1	2772.552	ug/l	0.79	3,188,388.52	1.032E+00	Pulse	0.10	3
Na			2	55933.729	ug/l	1.16	1,442,025.01	9.710E+00	Pulse	0.30	3
Mg			2	7488.701	ug/l	1.40	89,086.58	5.999E-01	Pulse	0.30	3
Al			2	421.458	ug/l	5.21	2,344.64	1.579E-02	Pulse	0.30	3
K			2	2063.880	ug/l	2.06	32,973.56	2.220E-01	Pulse	0.30	3
Ca			2	39094.476	ug/l	2.53	19,408.12	1.307E-01	Pulse	0.30	3
Ti			2	10.944	ug/l	20.78	42.22	2.842E-04	Pulse	0.30	3
V			2	3.321	ug/l	4.45	673.35	4.533E-03	Pulse	0.30	3
Cr			2	1.081	ug/l	27.96	1,057.82	7.121E-03	Pulse	0.30	3
Mn			2	11.370	ug/l	4.37	1,054.49	7.099E-03	Pulse	0.30	3
Fe			2	403.307	ug/l	1.60	53,365.79	3.593E-01	Pulse	0.30	3
Co			2	0.209	ug/l	20.57	99.86	6.724E-04	Pulse	0.30	3
Ni			2	1.035	ug/l	55.46	223.34	1.503E-03	Pulse	0.30	3
Cu			2	14.620	ug/l	13.32	10,022.05	6.749E-02	Pulse	0.30	3
Zn			2	173.590	ug/l	2.66	5,866.66	3.950E-02	Pulse	0.30	3
As			2	8.187	ug/l	8.91	142.00	9.564E-04	Pulse	1.00	3
Cd			2	0.026	ug/l	549.98	13.26	1.471E-05	Pulse	0.30	3
Sn			2	10.828	ug/l	6.73	2,014.60	2.233E-03	Pulse	0.30	3
Se			3	7.071	ug/l	10.07	29.93	1.623E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,243,725.30	0.11	99.6	Pulse	0.10	3
1	Sc		2,534,360.17	1.05	90.1	Pulse	0.10	3
1	Ge		519,072.95	0.45	91.0	Pulse	0.10	3

Quantitation Report

1	Ge		726,846.71	0.19	91.6	Pulse	0.10	3
1	Rh		3,528,510.47	0.82	91.7	Pulse	0.10	3
1	In		3,715,186.86	0.88	93.2	Pulse	0.10	3
1	Tb		5,145,198.99	1.43	92.9	Pulse	0.10	3
1	Ho		507,331.52	0.47	92.2	Pulse	0.10	3
1	Bi		3,090,363.08	0.07	92.6	Pulse	0.10	3
2	Sc		148,520.43	0.78	92.4	Pulse	0.30	3
2	Ge		91,295.18	1.16	91.7	Pulse	0.30	3
2	Ge		137,261.92	1.53	91.5	Pulse	0.30	3
2	Rh		2,207,978.18	0.62	90.7	Pulse	0.30	3
2	In		902,359.22	0.47	92.9	Pulse	0.30	3
2	Tb		2,958,619.19	0.91	90.4	Pulse	0.30	3
2	Ho		303,053.03	1.36	90.7	Pulse	0.30	3
2	Bi		2,037,373.81	0.46	91.0	Pulse	0.30	3
3	Sc		188,916.08	0.10	87.2	Pulse	0.30	3
3	Ge		123,232.08	0.97	87.9	Pulse	0.30	3
3	Ge		184,481.82	1.38	87.2	Pulse	0.30	3
3	Rh		1,894,016.38	0.47	86.8	Pulse	0.30	3
3	Tb		3,201,307.44	0.94	87.4	Pulse	0.30	3

Quantitation Report

File Name	070SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 15:57
Sample Name	jc94447-4 1
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	9/11/2019 11:44
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	389.89	26.67	2.126E-05	Pulse	0.25	3
B			1	16.498	ug/l	2.59	85,098.40	6.800E-02	Pulse	0.15	3
Ca			1	43644.334	ug/l	0.57	38,099,519.43	1.481E+01	Analog	0.10	3
Sr			1	183.788	ug/l	0.48	8,306,978.00	2.446E+00	Analog	0.10	3
Mo			1	0.614	ug/l	4.54	5,327.78	1.569E-03	Pulse	0.10	3
Ag			1	0.005	ug/l	14.52	133.34	3.681E-05	Pulse	0.10	3
Sn			1	-0.082	ug/l	-23.83	1,676.82	4.629E-04	Pulse	0.10	3
Sb			1	0.099	ug/l	4.77	1,966.86	3.809E-04	Pulse	0.10	3
Ba			1	37.028	ug/l	3.13	257,592.74	4.988E-02	Pulse	0.10	3
Tl			1	0.009	ug/l	25.98	590.03	1.994E-04	Pulse	0.10	3
Pb			1	1.459	ug/l	3.08	20,131.01	6.800E-03	Pulse	0.10	3
Pb			1	1.396	ug/l	2.29	16,967.05	5.731E-03	Pulse	0.10	3
Pb			1	1.425	ug/l	1.77	79,566.81	2.688E-02	Pulse	0.10	3
Na			2	16574.777	ug/l	1.31	22,125,194.12	1.428E+02	Analog	0.30	3
Mg			2	8786.133	ug/l	2.02	5,432,143.95	3.507E+01	Analog	0.30	3
Al			2	30.805	ug/l	2.55	7,154.93	4.619E-02	Pulse	0.30	3
K			2	3310.163	ug/l	1.05	1,702,920.52	1.099E+01	Pulse	0.30	3
Ca			2	44058.786	ug/l	0.34	1,134,732.63	7.326E+00	Pulse	0.30	3
Ti			2	0.239	ug/l	11.29	47.78	3.085E-04	Pulse	0.30	3
V			2	0.468	ug/l	5.80	3,192.57	2.062E-02	Pulse	0.30	3
Cr			2	0.201	ug/l	6.07	2,515.78	1.624E-02	Pulse	0.30	3
Mn			2	5.877	ug/l	1.22	24,905.55	1.608E-01	Pulse	0.30	3
Fe			2	58.000	ug/l	0.88	362,942.19	2.343E+00	Pulse	0.30	3
Co			2	0.136	ug/l	1.39	1,735.80	1.121E-02	Pulse	0.30	3
Ni			2	1.227	ug/l	4.31	4,181.70	2.699E-02	Pulse	0.30	3
Cu			2	52.984	ug/l	0.99	479,026.96	3.093E+00	Pulse	0.30	3
Zn			2	166.171	ug/l	0.32	225,146.49	1.453E+00	Pulse	0.30	3
As			2	0.249	ug/l	4.74	214.33	1.384E-03	Pulse	1.00	3
Cd			2	0.000	ug/l	-1947.30	11.79	1.300E-05	Pulse	0.30	3
Sn			2	-0.118	ug/l	-6.07	512.24	5.653E-04	Pulse	0.30	3
Se			3	0.127	ug/l	9.76	26.73	1.480E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,251,474.61	0.77	100.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,571,857.31	0.71	91.4	Pulse	0.10	3
1	Ge		518,271.76	1.03	90.9	Pulse	0.10	3
1	Ge		720,602.70	0.74	90.8	Pulse	0.10	3
1	Rh		3,396,225.15	0.46	88.2	Pulse	0.10	3
1	In		3,623,865.90	0.54	90.9	Pulse	0.10	3
1	Tb		5,168,471.69	3.49	93.3	Mix	0.10	3
1	Ho		506,666.41	0.97	92.1	Pulse	0.10	3
1	Bi		2,960,223.50	0.22	88.7	Pulse	0.10	3
2	Sc		154,901.59	1.18	96.4	Pulse	0.30	3
2	Ge		93,461.66	0.95	93.9	Pulse	0.30	3
2	Ge		141,099.99	0.79	94.1	Pulse	0.30	3
2	Rh		2,137,098.80	0.46	87.8	Pulse	0.30	3
2	In		906,142.75	0.21	93.2	Pulse	0.30	3
2	Tb		3,002,674.19	0.72	91.7	Pulse	0.30	3
2	Ho		308,570.40	0.38	92.3	Pulse	0.30	3
2	Bi		1,968,327.98	0.80	87.9	Pulse	0.30	3
3	Sc		186,738.63	0.68	86.2	Pulse	0.30	3
3	Ge		120,631.94	0.73	86.0	Pulse	0.30	3
3	Ge		180,599.57	0.66	85.4	Pulse	0.30	3
3	Rh		1,782,851.32	0.39	81.7	Pulse	0.30	3
3	Tb		3,175,535.36	0.13	86.7	Pulse	0.30	3

Quantitation Report

File Name	071SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:02
Sample Name	mp17203-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	9/11/2019 11:44
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	246.10	28.00	2.441E-05	Pulse	0.25	3
B			1	4.980	ug/l	0.81	17,204.77	1.498E-02	Pulse	0.15	3
Ca			1	26.813	ug/l	9.59	20,810.41	8.864E-03	Pulse	0.10	3
Sr			1	0.122	ug/l	6.62	3,067.07	9.146E-04	Pulse	0.10	3
Mo			1	0.069	ug/l	4.22	433.35	1.293E-04	Pulse	0.10	3
Ag			1	0.015	ug/l	27.95	180.01	5.078E-05	Pulse	0.10	3
Sn			1	0.387	ug/l	7.43	5,431.15	1.531E-03	Pulse	0.10	3
Sb			1	0.108	ug/l	7.27	1,173.42	2.349E-04	Pulse	0.10	3
Ba			1	0.087	ug/l	6.42	370.02	7.408E-05	Pulse	0.10	3
Tl			1	0.010	ug/l	22.30	433.36	1.394E-04	Pulse	0.10	3
Pb			1	0.027	ug/l	4.54	456.70	1.469E-04	Pulse	0.10	3
Pb			1	0.031	ug/l	63.11	430.02	1.383E-04	Pulse	0.10	3
Pb			1	0.029	ug/l	22.24	2,000.14	6.435E-04	Pulse	0.10	3
Na			2	49.907	ug/l	2.57	40,767.88	2.888E-01	Pulse	0.30	3
Mg			2	3.622	ug/l	5.90	1,306.74	9.255E-03	Pulse	0.30	3
Al			2	0.205	ug/l	219.00	632.24	4.477E-03	Pulse	0.30	3
K			2	4.921	ug/l	8.09	13,284.27	9.410E-02	Pulse	0.30	3
Ca			2	26.928	ug/l	14.61	414.46	2.937E-03	Pulse	0.30	3
Ti			2	0.322	ug/l	20.40	30.00	2.125E-04	Pulse	0.30	3
V			2	0.267	ug/l	5.61	1,020.04	7.226E-03	Pulse	0.30	3
Cr			2	0.115	ug/l	15.72	1,262.29	8.940E-03	Pulse	0.30	3
Mn			2	0.103	ug/l	32.94	325.56	2.307E-03	Pulse	0.30	3
Fe			2	3.226	ug/l	0.48	14,534.32	1.030E-01	Pulse	0.30	3
Co			2	0.023	ug/l	29.86	178.85	1.268E-03	Pulse	0.30	3
Ni			2	0.041	ug/l	66.33	212.23	1.503E-03	Pulse	0.30	3
Cu			2	-0.775	ug/l	-2.62	4,016.10	2.845E-02	Pulse	0.30	3
Zn			2	2.354	ug/l	3.46	2,761.38	1.956E-02	Pulse	0.30	3
As			2	0.100	ug/l	34.09	55.00	3.896E-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	291.25	14.40	1.660E-05	Pulse	0.30	3
Sn			2	0.307	ug/l	9.54	1,665.67	1.919E-03	Pulse	0.30	3
Se			3	0.113	ug/l	8.57	14.07	7.632E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,148,230.87	0.51	91.9	Pulse	0.10	3
1	Sc		2,348,384.55	1.20	83.5	Pulse	0.10	3
1	Ge		523,248.96	1.04	91.7	Pulse	0.10	3
1	Ge		722,069.73	1.03	91.0	Pulse	0.10	3
1	Rh		3,352,475.58	1.02	87.1	Pulse	0.10	3
1	In		3,545,898.61	0.58	89.0	Pulse	0.10	3
1	Tb		4,995,599.61	0.74	90.2	Pulse	0.10	3
1	Ho		494,481.66	1.53	89.9	Pulse	0.10	3
1	Bi		3,109,028.60	0.64	93.1	Pulse	0.10	3
2	Sc		141,175.36	0.57	87.9	Pulse	0.30	3
2	Ge		93,662.88	1.11	94.1	Pulse	0.30	3
2	Ge		141,080.67	0.30	94.1	Pulse	0.30	3
2	Rh		2,128,058.25	0.15	87.4	Pulse	0.30	3
2	In		867,972.61	0.33	89.3	Pulse	0.30	3
2	Tb		2,904,623.57	0.65	88.7	Pulse	0.30	3
2	Ho		297,568.80	0.87	89.0	Pulse	0.30	3
2	Bi		2,021,258.81	0.79	90.3	Pulse	0.30	3
3	Sc		187,834.39	1.66	86.7	Pulse	0.30	3
3	Ge		122,474.53	0.80	87.3	Pulse	0.30	3
3	Ge		184,324.86	0.62	87.1	Pulse	0.30	3
3	Rh		1,883,621.80	0.61	86.4	Pulse	0.30	3
3	Tb		3,247,226.33	0.53	88.6	Pulse	0.30	3

Quantitation Report

File Name	072SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:07
Sample Name	mp17203-b1conf
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	9/11/2019 11:44
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	65.030	ug/l	0.98	198,704.05	1.750E-01	Pulse	0.25	3
B			1	69.812	ug/l	0.82	156,314.87	1.377E-01	Pulse	0.15	3
Ca			1	3960.356	ug/l	0.34	1,563,422.90	6.762E-01	Pulse	0.10	3
Sr			1	76.431	ug/l	0.38	1,680,182.84	5.087E-01	Pulse	0.10	3
Mo			1	75.139	ug/l	0.49	308,470.29	9.339E-02	Pulse	0.10	3
Ag			1	76.417	ug/l	0.90	800,563.16	2.300E-01	Pulse	0.10	3
Sn			1	76.188	ug/l	1.20	516,149.34	1.483E-01	Pulse	0.10	3
Sb			1	76.070	ug/l	0.51	615,792.92	1.217E-01	Pulse	0.10	3
Ba			1	74.039	ug/l	0.85	252,355.07	4.986E-02	Pulse	0.10	3
Tl			1	74.847	ug/l	1.57	1,495,249.56	4.987E-01	Pulse	0.10	3
Pb			1	76.394	ug/l	1.59	527,220.60	1.759E-01	Pulse	0.10	3
Pb			1	77.269	ug/l	1.09	469,345.80	1.565E-01	Pulse	0.10	3
Pb			1	76.580	ug/l	1.04	2,136,345.37	7.125E-01	Pulse	0.10	3
Na			2	3828.596	ug/l	0.78	2,276,702.69	1.656E+01	Pulse	0.30	3
Mg			2	3780.724	ug/l	1.12	1,037,442.74	7.548E+00	Pulse	0.30	3
Al			2	3752.110	ug/l	0.40	350,918.23	2.553E+00	Pulse	0.30	3
K			2	3845.338	ug/l	0.86	882,745.73	6.422E+00	Pulse	0.30	3
Ca			2	4182.089	ug/l	0.89	47,881.90	3.483E-01	Pulse	0.30	3
Ti			2	76.994	ug/l	1.36	6,539.13	4.757E-02	Pulse	0.30	3
V			2	75.303	ug/l	1.30	207,476.39	1.509E+00	Pulse	0.30	3
Cr			2	73.860	ug/l	1.18	258,548.70	1.881E+00	Pulse	0.30	3
Mn			2	74.626	ug/l	1.02	139,651.50	1.016E+00	Pulse	0.30	3
Fe			2	4101.087	ug/l	0.98	11,203,938.44	8.151E+01	Analog	0.30	3
Co			2	74.458	ug/l	0.59	409,536.52	2.979E+00	Pulse	0.30	3
Ni			2	74.121	ug/l	1.68	107,827.15	7.844E-01	Pulse	0.30	3
Cu			2	72.915	ug/l	0.20	294,688.15	2.144E+00	Pulse	0.30	3
Zn			2	66.889	ug/l	0.69	41,236.19	3.000E-01	Pulse	0.30	3
As			2	71.207	ug/l	0.64	24,454.24	1.779E-01	Pulse	1.00	3
Cd			2	71.845	ug/l	1.35	68,810.14	8.161E-02	Pulse	0.30	3
Sn			2	76.377	ug/l	0.38	161,253.67	1.912E-01	Pulse	0.30	3
Se			3	338.374	ug/l	1.02	31,185.76	1.711E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,135,397.04	0.28	90.9	Pulse	0.10	3
1	Sc		2,311,946.94	0.07	82.2	Pulse	0.10	3
1	Ge		504,223.30	1.19	88.4	Pulse	0.10	3

Quantitation Report

1	Ge		704,492.70	0.53	88.7	Pulse	0.10	3
1	Rh		3,303,135.06	1.10	85.8	Pulse	0.10	3
1	In		3,480,519.01	1.12	87.3	Pulse	0.10	3
1	Tb		5,060,906.38	0.20	91.4	Pulse	0.10	3
1	Ho		503,326.19	0.18	91.5	Pulse	0.10	3
1	Bi		2,998,477.14	1.43	89.8	Pulse	0.10	3
2	Sc		137,457.85	0.54	85.5	Pulse	0.30	3
2	Ge		89,269.80	0.60	89.7	Pulse	0.30	3
2	Ge		133,965.15	0.87	89.3	Pulse	0.30	3
2	Rh		2,087,097.55	0.83	85.7	Pulse	0.30	3
2	In		843,165.95	0.63	86.8	Pulse	0.30	3
2	Tb		2,896,884.47	0.45	88.5	Pulse	0.30	3
2	Ho		295,633.74	1.01	88.4	Pulse	0.30	3
2	Bi		1,968,481.94	1.09	87.9	Pulse	0.30	3
3	Sc		188,621.87	0.55	87.1	Pulse	0.30	3
3	Ge		121,204.16	0.57	86.4	Pulse	0.30	3
3	Ge		182,294.51	0.92	86.2	Pulse	0.30	3
3	Rh		1,879,308.26	0.65	86.2	Pulse	0.30	3
3	Tb		3,300,987.02	0.09	90.1	Pulse	0.30	3

Quantitation Report

File Name	073SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:12
Sample Name	mp17203-s1 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	9/11/2019 11:44
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	68.840	ug/l	1.18	85,038.85	7.412E-02	Pulse	0.25	3
B			1	148.031	ug/l	0.98	134,952.87	1.176E-01	Pulse	0.15	3
Ca			1	71345.746	ug/l	0.24	11,568,439.41	4.846E+00	Analog	0.10	3
Sr			1	458.769	ug/l	0.25	3,934,985.78	1.221E+00	Pulse	0.10	3
Mo			1	82.736	ug/l	1.70	132,605.44	4.116E-02	Pulse	0.10	3
Ag			1	76.369	ug/l	1.30	320,267.49	9.196E-02	Pulse	0.10	3
Sn			1	78.557	ug/l	0.17	214,638.12	6.163E-02	Pulse	0.10	3
Sb			1	78.679	ug/l	0.35	255,067.93	5.038E-02	Pulse	0.10	3
Ba			1	131.063	ug/l	1.25	178,798.39	3.531E-02	Pulse	0.10	3
Tl			1	77.031	ug/l	0.26	593,695.07	2.054E-01	Pulse	0.10	3
Pb			1	78.907	ug/l	0.62	210,200.05	7.271E-02	Pulse	0.10	3
Pb			1	80.331	ug/l	0.49	188,323.15	6.514E-02	Pulse	0.10	3
Pb			1	79.610	ug/l	0.48	857,213.43	2.965E-01	Pulse	0.10	3
Na			2	320065.197	ug/l	3.44	76,399,496.96	5.515E+02	Analog	0.30	3
Mg			2	26154.164	ug/l	2.96	2,893,143.64	2.088E+01	Pulse	0.30	3
Al			2	5924.240	ug/l	3.56	223,589.69	1.614E+00	Pulse	0.30	3
K			2	11758.700	ug/l	3.34	1,085,617.18	7.836E+00	Pulse	0.30	3
Ca			2	72865.867	ug/l	3.21	335,769.38	2.424E+00	Pulse	0.30	3
Ti			2	80.917	ug/l	5.37	2,771.38	2.001E-02	Pulse	0.30	3
V			2	78.353	ug/l	2.72	87,197.30	6.293E-01	Pulse	0.30	3
Cr			2	75.857	ug/l	3.04	107,555.54	7.763E-01	Pulse	0.30	3
Mn			2	946.229	ug/l	3.06	713,425.30	5.149E+00	Pulse	0.30	3
Fe			2	4055.290	ug/l	3.47	4,469,488.85	3.226E+01	Pulse	0.30	3
Co			2	94.670	ug/l	3.32	209,949.48	1.515E+00	Pulse	0.30	3
Ni			2	132.383	ug/l	2.78	77,690.66	5.607E-01	Pulse	0.30	3
Cu			2	85.365	ug/l	3.50	142,824.66	1.031E+00	Pulse	0.30	3
Zn			2	279.579	ug/l	4.41	68,604.71	4.953E-01	Pulse	0.30	3
As			2	77.895	ug/l	3.17	10,795.91	7.792E-02	Pulse	1.00	3
Cd			2	79.224	ug/l	2.66	30,049.50	3.601E-02	Pulse	0.30	3
Sn			2	80.170	ug/l	1.89	67,586.04	8.097E-02	Pulse	0.30	3
Se			3	354.984	ug/l	0.60	12,850.83	7.180E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,147,413.43	0.53	91.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,387,109.13	0.71	84.9	Pulse	0.10	3
1	Ge		500,365.23	0.74	87.7	Pulse	0.10	3
1	Ge		689,455.98	0.74	86.9	Pulse	0.10	3
1	Rh		3,222,259.85	0.72	83.7	Pulse	0.10	3
1	In		3,482,778.92	0.57	87.4	Pulse	0.10	3
1	Tb		5,063,313.36	0.89	91.4	Pulse	0.10	3
1	Ho		518,065.98	0.50	94.2	Pulse	0.10	3
1	Bi		2,891,073.91	1.27	86.6	Pulse	0.10	3
2	Sc		138,625.34	2.75	86.3	Pulse	0.30	3
2	Ge		88,141.52	1.32	88.6	Pulse	0.30	3
2	Ge		132,882.06	1.07	88.6	Pulse	0.30	3
2	Rh		2,001,550.47	1.73	82.2	Pulse	0.30	3
2	In		834,902.00	2.27	85.9	Pulse	0.30	3
2	Tb		2,868,443.15	1.36	87.6	Pulse	0.30	3
2	Ho		307,434.27	0.63	92.0	Pulse	0.30	3
2	Bi		1,864,058.61	1.28	83.3	Pulse	0.30	3
3	Sc		185,715.97	0.36	85.7	Pulse	0.30	3
3	Ge		119,964.93	0.79	85.5	Pulse	0.30	3
3	Ge		178,973.21	0.47	84.6	Pulse	0.30	3
3	Rh		1,766,656.11	0.40	81.0	Pulse	0.30	3
3	Tb		3,209,912.37	0.27	87.6	Pulse	0.30	3

Quantitation Report

File Name	074SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:17
Sample Name	mp17203-s2
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	9/11/2019 11:44
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	67.765	ug/l	0.54	82,755.70	7.296E-02	Pulse	0.25	3
B			1	145.546	ug/l	1.80	131,273.75	1.157E-01	Pulse	0.15	3
Ca			1	70339.188	ug/l	0.41	11,289,376.50	4.778E+00	Analog	0.10	3
Sr			1	446.985	ug/l	0.58	3,830,574.74	1.190E+00	Pulse	0.10	3
Mo			1	79.646	ug/l	1.19	127,552.81	3.962E-02	Pulse	0.10	3
Ag			1	74.946	ug/l	0.31	315,663.49	9.024E-02	Pulse	0.10	3
Sn			1	77.333	ug/l	0.65	212,249.28	6.068E-02	Pulse	0.10	3
Sb			1	76.910	ug/l	1.18	250,105.48	4.925E-02	Pulse	0.10	3
Ba			1	128.122	ug/l	1.45	175,347.71	3.452E-02	Pulse	0.10	3
Tl			1	76.177	ug/l	0.94	585,087.28	2.031E-01	Pulse	0.10	3
Pb			1	79.174	ug/l	0.46	210,177.36	7.295E-02	Pulse	0.10	3
Pb			1	79.305	ug/l	1.84	185,286.94	6.431E-02	Pulse	0.10	3
Pb			1	78.875	ug/l	0.65	846,392.76	2.938E-01	Pulse	0.10	3
Na			2	312342.181	ug/l	0.76	75,735,254.77	5.382E+02	Analog	0.30	3
Mg			2	25388.673	ug/l	0.31	2,852,594.75	2.027E+01	Pulse	0.30	3
Al			2	5799.455	ug/l	0.58	222,356.73	1.580E+00	Pulse	0.30	3
K			2	11488.944	ug/l	0.85	1,077,730.65	7.658E+00	Pulse	0.30	3
Ca			2	70957.088	ug/l	0.44	332,128.29	2.360E+00	Pulse	0.30	3
Ti			2	76.441	ug/l	3.53	2,660.25	1.890E-02	Pulse	0.30	3
V			2	76.385	ug/l	0.82	86,345.05	6.136E-01	Pulse	0.30	3
Cr			2	72.960	ug/l	1.31	105,103.16	7.469E-01	Pulse	0.30	3
Mn			2	916.693	ug/l	0.91	702,009.33	4.989E+00	Pulse	0.30	3
Fe			2	3954.938	ug/l	1.09	4,427,770.94	3.146E+01	Pulse	0.30	3
Co			2	92.481	ug/l	0.26	208,332.44	1.480E+00	Pulse	0.30	3
Ni			2	128.596	ug/l	0.81	76,652.77	5.447E-01	Pulse	0.30	3
Cu			2	82.029	ug/l	0.54	139,688.62	9.926E-01	Pulse	0.30	3
Zn			2	270.342	ug/l	0.62	67,438.88	4.792E-01	Pulse	0.30	3
As			2	73.911	ug/l	1.53	10,406.67	7.394E-02	Pulse	1.00	3
Cd			2	78.240	ug/l	1.09	30,039.92	3.556E-02	Pulse	0.30	3
Sn			2	77.101	ug/l	0.85	65,822.00	7.791E-02	Pulse	0.30	3
Se			3	354.712	ug/l	1.05	12,718.73	7.175E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,134,270.86	0.21	90.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,362,883.51	0.82	84.0	Pulse	0.10	3
1	Ge		496,760.41	1.09	87.1	Pulse	0.10	3
1	Ge		685,324.57	1.08	86.3	Pulse	0.10	3
1	Rh		3,219,627.14	1.14	83.6	Pulse	0.10	3
1	In		3,498,004.72	1.32	87.8	Pulse	0.10	3
1	Tb		5,078,917.63	1.54	91.7	Pulse	0.10	3
1	Ho		520,178.98	1.51	94.6	Pulse	0.10	3
1	Bi		2,881,006.31	0.38	86.3	Pulse	0.10	3
2	Sc		140,728.19	0.55	87.6	Pulse	0.30	3
2	Ge		88,173.71	0.39	88.6	Pulse	0.30	3
2	Ge		131,901.82	0.34	88.0	Pulse	0.30	3
2	Rh		2,018,568.32	0.28	82.9	Pulse	0.30	3
2	In		844,832.36	0.79	86.9	Pulse	0.30	3
2	Tb		2,884,886.41	0.41	88.1	Pulse	0.30	3
2	Ho		308,526.18	0.30	92.3	Pulse	0.30	3
2	Bi		1,886,790.48	0.54	84.3	Pulse	0.30	3
3	Sc		184,355.91	1.00	85.1	Pulse	0.30	3
3	Ge		118,205.61	0.79	84.3	Pulse	0.30	3
3	Ge		177,276.94	0.83	83.8	Pulse	0.30	3
3	Rh		1,753,605.97	0.51	80.4	Pulse	0.30	3
3	Tb		3,205,174.80	0.29	87.5	Pulse	0.30	3

Quantitation Report

File Name	075SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:22
Sample Name	jc94533-3
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	9/11/2019 11:44
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	0.029	ug/l	67.05	57.33	4.987E-05	Pulse	0.25	3
B			1	161.364	ug/l	1.53	147,174.97	1.277E-01	Pulse	0.15	3
Ca			1	227695.818	ug/l	0.87	37,369,378.61	1.546E+01	Analog	0.10	3
Sr			1	3061.145	ug/l	1.07	24,387,930.47	8.148E+00	Analog	0.10	3
Mo			1	5.299	ug/l	3.16	8,012.36	2.677E-03	Pulse	0.10	3
Ag			1	0.048	ug/l	24.43	210.01	6.397E-05	Pulse	0.10	3
Sn			1	1.797	ug/l	1.46	7,138.53	2.174E-03	Pulse	0.10	3
Sb			1	0.365	ug/l	19.08	1,426.79	2.962E-04	Pulse	0.10	3
Ba			1	359.894	ug/l	0.46	466,947.31	9.694E-02	Pulse	0.10	3
Tl			1	0.037	ug/l	47.93	443.36	1.727E-04	Pulse	0.10	3
Pb			1	0.520	ug/l	8.14	1,450.13	5.644E-04	Pulse	0.10	3
Pb			1	0.410	ug/l	6.26	1,050.08	4.086E-04	Pulse	0.10	3
Pb			1	0.459	ug/l	2.48	5,360.60	2.086E-03	Pulse	0.10	3
Na			2	2377792.688	ug/l	1.13	584,909,132.31	4.096E+03	Analog	0.30	3
Mg			2	11232.221	ug/l	0.90	1,280,641.72	8.969E+00	Pulse	0.30	3
Al			2	6.347	ug/l	19.33	865.59	6.063E-03	Pulse	0.30	3
K			2	31695.712	ug/l	0.63	2,995,119.81	2.098E+01	Pulse	0.30	3
Ca			2	234436.522	ug/l	0.62	1,113,152.70	7.796E+00	Pulse	0.30	3
Ti			2	0.636	ug/l	45.06	24.44	1.711E-04	Pulse	0.30	3
V			2	1.071	ug/l	12.44	1,492.31	1.045E-02	Pulse	0.30	3
Cr			2	1.767	ug/l	3.15	3,421.52	2.396E-02	Pulse	0.30	3
Mn			2	818.356	ug/l	0.77	635,890.50	4.453E+00	Pulse	0.30	3
Fe			2	4289.771	ug/l	0.81	4,872,560.36	3.412E+01	Pulse	0.30	3
Co			2	0.395	ug/l	11.95	951.33	6.664E-03	Pulse	0.30	3
Ni			2	1.042	ug/l	9.30	781.14	5.471E-03	Pulse	0.30	3
Cu			2	-1.897	ug/l	-4.58	4,128.35	2.891E-02	Pulse	0.30	3
Zn			2	-1.192	ug/l	-18.87	1,036.71	7.261E-03	Pulse	0.30	3
As			2	1.203	ug/l	0.62	191.33	1.340E-03	Pulse	1.00	3
Cd			2	-0.019	ug/l	-27.25	3.81	4.754E-06	Pulse	0.30	3
Sn			2	1.737	ug/l	0.30	2,309.09	2.884E-03	Pulse	0.30	3
Se			3	0.539	ug/l	7.25	21.33	1.283E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,152,551.42	1.27	92.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,417,741.94	0.70	85.9	Pulse	0.10	3
1	Ge		475,794.63	0.69	83.4	Pulse	0.10	3
1	Ge		657,306.42	0.42	82.8	Pulse	0.10	3
1	Rh		2,993,321.00	0.85	77.8	Pulse	0.10	3
1	In		3,283,421.19	0.50	82.4	Pulse	0.10	3
1	Tb		4,816,842.22	0.72	87.0	Pulse	0.10	3
1	Ho		478,639.20	0.21	87.0	Pulse	0.10	3
1	Bi		2,569,649.34	0.43	77.0	Pulse	0.10	3
2	Sc		142,787.74	0.31	88.9	Pulse	0.30	3
2	Ge		84,636.64	0.79	85.0	Pulse	0.30	3
2	Ge		126,748.47	0.44	84.5	Pulse	0.30	3
2	Rh		1,867,113.53	0.40	76.7	Pulse	0.30	3
2	In		800,724.45	0.53	82.4	Pulse	0.30	3
2	Tb		2,740,947.11	0.36	83.7	Pulse	0.30	3
2	Ho		281,665.32	0.81	84.3	Pulse	0.30	3
2	Bi		1,678,635.42	0.49	75.0	Pulse	0.30	3
3	Sc		180,584.39	0.64	83.4	Pulse	0.30	3
3	Ge		109,942.00	0.58	78.4	Pulse	0.30	3
3	Ge		166,199.31	1.30	78.6	Pulse	0.30	3
3	Rh		1,603,395.21	0.34	73.5	Pulse	0.30	3
3	Tb		2,991,595.23	0.74	81.7	Pulse	0.30	3

Quantitation Report

File Name	076SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:27
Sample Name	jc94533-5
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	9/11/2019 11:44
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	0.020	ug/l	106.54	45.33	3.946E-05	Pulse	0.25	3
B			1	162.192	ug/l	0.68	146,744.26	1.283E-01	Pulse	0.15	3
Ca			1	225265.282	ug/l	1.69	36,911,579.45	1.529E+01	Analog	0.10	3
Sr			1	3056.791	ug/l	1.58	24,182,185.47	8.136E+00	Analog	0.10	3
Mo			1	5.505	ug/l	2.34	8,262.45	2.780E-03	Pulse	0.10	3
Ag			1	0.022	ug/l	11.38	106.67	3.288E-05	Pulse	0.10	3
Sn			1	1.995	ug/l	7.67	7,538.75	2.327E-03	Pulse	0.10	3
Sb			1	0.371	ug/l	15.53	1,436.79	2.998E-04	Pulse	0.10	3
Ba			1	359.779	ug/l	0.71	464,513.78	9.691E-02	Pulse	0.10	3
Tl			1	-0.001	ug/l	-219.00	180.01	7.045E-05	Pulse	0.10	3
Pb			1	0.512	ug/l	2.47	1,423.46	5.570E-04	Pulse	0.10	3
Pb			1	0.497	ug/l	11.36	1,223.43	4.788E-04	Pulse	0.10	3
Pb			1	0.497	ug/l	2.91	5,687.31	2.226E-03	Pulse	0.10	3
Na			2	2333687.069	ug/l	1.09	579,513,434.75	4.020E+03	Analog	0.30	3
Mg			2	10934.209	ug/l	1.03	1,258,522.00	8.731E+00	Pulse	0.30	3
Al			2	8.768	ug/l	11.02	968.95	6.721E-03	Pulse	0.30	3
K			2	31031.510	ug/l	1.34	2,960,400.30	2.054E+01	Pulse	0.30	3
Ca			2	229770.863	ug/l	1.74	1,101,308.74	7.641E+00	Pulse	0.30	3
Ti			2	0.851	ug/l	67.41	32.22	2.241E-04	Pulse	0.30	3
V			2	1.034	ug/l	10.12	1,464.53	1.015E-02	Pulse	0.30	3
Cr			2	1.363	ug/l	5.11	2,863.62	1.986E-02	Pulse	0.30	3
Mn			2	815.163	ug/l	1.63	639,395.77	4.436E+00	Pulse	0.30	3
Fe			2	4347.720	ug/l	1.59	4,984,998.00	3.459E+01	Pulse	0.30	3
Co			2	0.370	ug/l	3.43	902.13	6.259E-03	Pulse	0.30	3
Ni			2	1.047	ug/l	4.28	791.14	5.490E-03	Pulse	0.30	3
Cu			2	-1.798	ug/l	-2.83	4,331.74	3.005E-02	Pulse	0.30	3
Zn			2	0.764	ug/l	67.64	1,535.65	1.066E-02	Pulse	0.30	3
As			2	1.083	ug/l	6.51	176.00	1.221E-03	Pulse	1.00	3
Cd			2	0.002	ug/l	1070.08	11.59	1.435E-05	Pulse	0.30	3
Sn			2	1.607	ug/l	3.89	2,232.41	2.755E-03	Pulse	0.30	3
Se			3	0.464	ug/l	18.94	18.47	1.131E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,143,371.79	1.24	91.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,414,226.26	1.59	85.8	Pulse	0.10	3
1	Ge		475,829.58	0.87	83.4	Pulse	0.10	3
1	Ge		659,158.53	0.42	83.0	Pulse	0.10	3
1	Rh		2,972,508.29	1.04	77.2	Pulse	0.10	3
1	In		3,240,431.17	1.68	81.3	Pulse	0.10	3
1	Tb		4,793,495.24	0.74	86.6	Pulse	0.10	3
1	Ho		473,544.51	0.39	86.1	Pulse	0.10	3
1	Bi		2,555,547.62	0.27	76.5	Pulse	0.10	3
2	Sc		144,154.31	1.26	89.7	Pulse	0.30	3
2	Ge		85,632.77	1.25	86.1	Pulse	0.30	3
2	Ge		129,030.76	0.79	86.0	Pulse	0.30	3
2	Rh		1,890,420.13	0.78	77.7	Pulse	0.30	3
2	In		810,468.01	1.05	83.4	Pulse	0.30	3
2	Tb		2,804,711.35	1.23	85.7	Pulse	0.30	3
2	Ho		287,600.04	1.45	86.0	Pulse	0.30	3
2	Bi		1,698,379.76	0.79	75.9	Pulse	0.30	3
3	Sc		177,189.69	8.02	81.8	Pulse	0.30	3
3	Ge		108,138.14	5.24	77.1	Pulse	0.30	3
3	Ge		163,956.39	5.16	77.5	Pulse	0.30	3
3	Rh		1,586,680.94	6.84	72.7	Pulse	0.30	3
3	Tb		2,945,364.68	7.03	80.4	Pulse	0.30	3

Quantitation Report

File Name	077_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:32
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	9/11/2019 11:44
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	45.677	ug/l	1.02	288,140.36	2.458E-01	Pulse	0.25	3
B			1	86.940	ug/l	1.28	392,189.92	3.346E-01	Pulse	0.15	3
Ca			1	5048.506	ug/l	0.46	4,070,519.52	1.717E+00	Pulse	0.10	3
Sr			1	51.983	ug/l	0.31	2,265,361.74	6.919E-01	Pulse	0.10	3
Mo			1	51.085	ug/l	0.55	415,710.22	1.270E-01	Pulse	0.10	3
Ag			1	49.228	ug/l	1.25	1,030,221.39	2.964E-01	Pulse	0.10	3
Sn			1	49.881	ug/l	0.39	674,279.52	1.940E-01	Pulse	0.10	3
Sb			1	52.788	ug/l	0.36	830,373.92	1.688E-01	Pulse	0.10	3
Ba			1	50.867	ug/l	0.28	336,921.34	6.851E-02	Pulse	0.10	3
Tl			1	51.000	ug/l	0.93	1,959,829.81	6.796E-01	Pulse	0.10	3
Pb			1	50.927	ug/l	0.81	676,042.44	2.344E-01	Pulse	0.10	3
Pb			1	50.758	ug/l	0.51	592,995.72	2.056E-01	Pulse	0.10	3
Pb			1	50.795	ug/l	0.32	2,725,410.64	9.451E-01	Pulse	0.10	3
Na			2	5210.635	ug/l	0.52	6,341,534.47	4.496E+01	Analog	0.30	3
Mg			2	4882.281	ug/l	0.12	2,749,208.50	1.949E+01	Pulse	0.30	3
Al			2	4902.144	ug/l	0.20	939,966.80	6.664E+00	Pulse	0.30	3
K			2	4960.338	ug/l	0.79	2,317,811.99	1.643E+01	Pulse	0.30	3
Ca			2	5196.524	ug/l	0.27	121,963.34	8.646E-01	Pulse	0.30	3
Ti			2	48.516	ug/l	1.57	8,456.70	5.995E-02	Pulse	0.30	3
V			2	50.253	ug/l	0.39	284,082.58	2.014E+00	Pulse	0.30	3
Cr			2	49.476	ug/l	0.60	355,179.15	2.518E+00	Pulse	0.30	3
Mn			2	50.609	ug/l	0.69	194,325.98	1.378E+00	Pulse	0.30	3
Fe			2	5134.674	ug/l	0.28	28,780,811.08	2.040E+02	Analog	0.30	3
Co			2	49.125	ug/l	0.56	554,530.19	3.931E+00	Pulse	0.30	3
Ni			2	48.843	ug/l	0.62	145,774.47	1.033E+00	Pulse	0.30	3
Cu			2	48.004	ug/l	0.57	395,904.84	2.807E+00	Pulse	0.30	3
Zn			2	49.298	ug/l	1.88	61,747.81	4.378E-01	Pulse	0.30	3
As			2	49.782	ug/l	0.82	35,078.80	2.487E-01	Pulse	1.00	3
Cd			2	49.369	ug/l	0.31	95,778.21	1.122E-01	Pulse	0.30	3
Sn			2	49.561	ug/l	0.50	211,658.89	2.479E-01	Pulse	0.30	3
Se			3	198.464	ug/l	0.79	35,260.51	2.007E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,172,036.10	0.35	93.8	Pulse	0.10	3
1	Sc		2,370,228.66	0.81	84.3	Pulse	0.10	3
1	Ge		478,858.11	0.68	83.9	Pulse	0.10	3

Quantitation Report

1	Ge		676,797.02	1.30	85.3	Pulse	0.10	3
1	Rh		3,274,176.82	0.66	85.1	Pulse	0.10	3
1	In		3,476,371.93	0.61	87.2	Pulse	0.10	3
1	Tb		4,917,915.76	0.85	88.8	Pulse	0.10	3
1	Ho		485,451.59	0.38	88.2	Pulse	0.10	3
1	Bi		2,883,673.29	0.34	86.4	Pulse	0.10	3
2	Sc		141,055.03	0.70	87.8	Pulse	0.30	3
2	Ge		87,156.40	1.02	87.6	Pulse	0.30	3
2	Ge		130,142.32	0.57	86.8	Pulse	0.30	3
2	Rh		2,071,509.36	0.32	85.1	Pulse	0.30	3
2	In		853,951.25	0.88	87.9	Pulse	0.30	3
2	Tb		2,871,726.62	0.69	87.7	Pulse	0.30	3
2	Ho		294,345.24	1.08	88.1	Pulse	0.30	3
2	Bi		1,921,224.51	0.13	85.8	Pulse	0.30	3
3	Sc		180,436.72	0.56	83.3	Pulse	0.30	3
3	Ge		116,087.14	1.07	82.8	Pulse	0.30	3
3	Ge		175,707.13	0.79	83.1	Pulse	0.30	3
3	Rh		1,778,320.42	0.08	81.5	Pulse	0.30	3
3	Tb		3,145,324.11	0.09	85.9	Pulse	0.30	3

Quantitation Report

File Name	078_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:37
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	9/11/2019 11:44
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	67.85	84.00	7.023E-05	Pulse	0.25	3
B			1	3.798	ug/l	3.99	23,863.74	1.993E-02	Pulse	0.15	3
Ca			1	2.211	ug/l	23.87	12,268.32	5.065E-03	Pulse	0.10	3
Sr			1	0.029	ug/l	3.10	1,656.82	4.871E-04	Pulse	0.10	3
Mo			1	0.083	ug/l	12.67	850.06	2.500E-04	Pulse	0.10	3
Ag			1	0.014	ug/l	51.78	326.68	9.192E-05	Pulse	0.10	3
Sn			1	0.153	ug/l	13.75	4,897.63	1.375E-03	Pulse	0.10	3
Sb			1	0.058	ug/l	13.87	1,236.77	2.493E-04	Pulse	0.10	3
Ba			1	0.024	ug/l	60.28	236.68	4.778E-05	Pulse	0.10	3
Tl			1	0.021	ug/l	19.34	1,040.08	3.492E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	55.91	516.70	1.732E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	33.33	413.36	1.388E-04	Pulse	0.10	3
Pb			1	0.017	ug/l	2.65	2,053.48	6.892E-04	Pulse	0.10	3
Na			2	48.523	ug/l	2.48	71,022.00	4.918E-01	Pulse	0.30	3
Mg			2	0.863	ug/l	8.61	790.03	5.471E-03	Pulse	0.30	3
Al			2	2.298	ug/l	25.66	1,076.71	7.460E-03	Pulse	0.30	3
K			2	1.674	ug/l	14.34	13,216.44	9.151E-02	Pulse	0.30	3
Ca			2	4.823	ug/l	13.19	216.67	1.500E-03	Pulse	0.30	3
Ti			2	0.051	ug/l	54.75	11.11	7.677E-05	Pulse	0.30	3
V			2	0.002	ug/l	332.94	281.12	1.947E-03	Pulse	0.30	3
Cr			2	0.008	ug/l	52.55	925.59	6.409E-03	Pulse	0.30	3
Mn			2	0.022	ug/l	31.76	220.00	1.524E-03	Pulse	0.30	3
Fe			2	1.078	ug/l	5.05	11,798.76	8.171E-02	Pulse	0.30	3
Co			2	0.007	ug/l	43.73	132.19	9.167E-04	Pulse	0.30	3
Ni			2	0.028	ug/l	40.51	238.89	1.655E-03	Pulse	0.30	3
Cu			2	-0.590	ug/l	-1.46	2,430.21	1.683E-02	Pulse	0.30	3
Zn			2	-0.155	ug/l	-15.04	1,153.39	7.986E-03	Pulse	0.30	3
As			2	0.010	ug/l	65.27	27.33	1.893E-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	175.61	17.69	2.014E-05	Pulse	0.30	3
Sn			2	0.162	ug/l	7.50	1,723.44	1.962E-03	Pulse	0.30	3
Se			3	0.115	ug/l	14.27	24.27	1.351E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,197,232.92	0.58	95.9	Pulse	0.10	3
1	Sc		2,421,541.16	0.85	86.1	Pulse	0.10	3
1	Ge		495,585.19	0.48	86.9	Pulse	0.10	3
1	Ge		691,020.30	2.09	87.1	Pulse	0.10	3
1	Rh		3,402,481.10	1.70	88.4	Pulse	0.10	3
1	In		3,561,700.51	1.01	89.4	Pulse	0.10	3
1	Tb		4,960,283.05	0.71	89.6	Pulse	0.10	3
1	Ho		491,008.81	1.38	89.3	Pulse	0.10	3
1	Bi		2,979,399.85	0.92	89.2	Pulse	0.10	3
2	Sc		144,421.75	0.96	89.9	Pulse	0.30	3
2	Ge		88,154.84	0.16	88.6	Pulse	0.30	3
2	Ge		133,946.42	1.03	89.3	Pulse	0.30	3
2	Rh		2,146,048.87	0.54	88.2	Pulse	0.30	3
2	In		878,271.92	0.10	90.4	Pulse	0.30	3
2	Tb		2,909,421.48	0.13	88.9	Pulse	0.30	3
2	Ho		297,045.23	0.56	88.9	Pulse	0.30	3
2	Bi		1,989,727.84	0.22	88.9	Pulse	0.30	3
3	Sc		184,700.89	0.65	85.3	Pulse	0.30	3
3	Ge		118,255.05	0.87	84.3	Pulse	0.30	3
3	Ge		179,563.68	0.37	84.9	Pulse	0.30	3
3	Rh		1,863,682.15	1.06	85.4	Pulse	0.30	3
3	Tb		3,190,715.50	0.70	87.1	Pulse	0.30	3

Quantitation Report

File Name	079SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:42
Sample Name	jc94533-7
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	9/11/2019 11:44
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	55.31	37.33	3.346E-05	Pulse	0.25	3
B			1	116.186	ug/l	1.51	104,395.12	9.351E-02	Pulse	0.15	3
Ca			1	149452.209	ug/l	0.53	23,313,022.15	1.015E+01	Analog	0.10	3
Sr			1	1220.409	ug/l	2.59	10,117,767.98	3.248E+00	Analog	0.10	3
Mo			1	6.733	ug/l	4.40	10,563.89	3.390E-03	Pulse	0.10	3
Ag			1	0.052	ug/l	27.98	233.35	6.948E-05	Pulse	0.10	3
Sn			1	1.944	ug/l	7.06	7,672.15	2.288E-03	Pulse	0.10	3
Sb			1	0.463	ug/l	4.51	1,743.51	3.590E-04	Pulse	0.10	3
Ba			1	283.533	ug/l	1.38	370,837.33	7.637E-02	Pulse	0.10	3
Tl			1	0.165	ug/l	13.38	1,423.46	5.151E-04	Pulse	0.10	3
Pb			1	2.788	ug/l	6.42	7,325.42	2.652E-03	Pulse	0.10	3
Pb			1	2.612	ug/l	5.78	6,058.14	2.192E-03	Pulse	0.10	3
Pb			1	2.682	ug/l	4.42	28,612.02	1.036E-02	Pulse	0.10	3
Na			2	428485.118	ug/l	0.89	102,454,940.37	7.383E+02	Analog	0.30	3
Mg			2	8401.054	ug/l	0.61	931,037.22	6.709E+00	Pulse	0.30	3
Al			2	19.325	ug/l	10.20	1,331.18	9.589E-03	Pulse	0.30	3
K			2	29256.439	ug/l	1.11	2,687,866.63	1.937E+01	Pulse	0.30	3
Ca			2	149054.030	ug/l	0.71	687,936.22	4.957E+00	Pulse	0.30	3
Ti			2	1.501	ug/l	39.81	53.33	3.847E-04	Pulse	0.30	3
V			2	0.326	ug/l	23.62	622.24	4.486E-03	Pulse	0.30	3
Cr			2	1.439	ug/l	2.48	2,863.63	2.063E-02	Pulse	0.30	3
Mn			2	15497.624	ug/l	1.45	11,701,800.92	8.432E+01	Analog	0.30	3
Fe			2	35111.611	ug/l	1.52	38,721,757.35	2.790E+02	Analog	0.30	3
Co			2	4.093	ug/l	1.42	9,137.02	6.584E-02	Pulse	0.30	3
Ni			2	1.112	ug/l	5.93	800.03	5.764E-03	Pulse	0.30	3
Cu			2	-2.088	ug/l	-2.96	3,709.34	2.672E-02	Pulse	0.30	3
Zn			2	2.184	ug/l	23.30	1,822.35	1.313E-02	Pulse	0.30	3
As			2	2.507	ug/l	3.89	366.68	2.642E-03	Pulse	1.00	3
Cd			2	0.037	ug/l	51.74	24.76	3.012E-05	Pulse	0.30	3
Sn			2	1.932	ug/l	2.54	2,531.34	3.078E-03	Pulse	0.30	3
Se			3	0.619	ug/l	9.82	24.80	1.444E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,116,456.93	0.54	89.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,297,556.53	0.20	81.7	Pulse	0.10	3
1	Ge		471,905.37	0.51	82.7	Pulse	0.10	3
1	Ge		651,688.83	0.75	82.1	Pulse	0.10	3
1	Rh		3,115,494.33	1.45	80.9	Pulse	0.10	3
1	In		3,354,016.05	0.83	84.2	Pulse	0.10	3
1	Tb		4,855,859.72	0.68	87.7	Pulse	0.10	3
1	Ho		478,516.15	0.77	87.0	Pulse	0.10	3
1	Bi		2,763,181.73	0.73	82.8	Pulse	0.10	3
2	Sc		138,783.26	0.88	86.4	Pulse	0.30	3
2	Ge		85,619.25	0.87	86.0	Pulse	0.30	3
2	Ge		128,260.05	0.65	85.5	Pulse	0.30	3
2	Rh		1,966,239.58	0.11	80.8	Pulse	0.30	3
2	In		822,512.72	0.45	84.6	Pulse	0.30	3
2	Tb		2,833,786.41	0.54	86.5	Pulse	0.30	3
2	Ho		288,111.16	0.54	86.2	Pulse	0.30	3
2	Bi		1,832,251.52	0.46	81.8	Pulse	0.30	3
3	Sc		181,189.67	0.68	83.6	Pulse	0.30	3
3	Ge		114,137.82	0.12	81.4	Pulse	0.30	3
3	Ge		171,812.72	0.87	81.2	Pulse	0.30	3
3	Rh		1,708,740.24	0.91	78.3	Pulse	0.30	3
3	Tb		3,131,221.75	0.39	85.5	Pulse	0.30	3

Quantitation Report

File Name	080SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:47
Sample Name	jc94533-11
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	9/11/2019 11:44
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	232.77	29.33	2.584E-05	Pulse	0.25	3
B			1	122.705	ug/l	1.10	111,797.41	9.845E-02	Pulse	0.15	3
Ca			1	211928.448	ug/l	0.69	34,991,623.65	1.439E+01	Analog	0.10	3
Sr			1	2196.618	ug/l	0.72	18,041,382.65	5.847E+00	Analog	0.10	3
Mo			1	14.005	ug/l	5.90	21,605.28	7.003E-03	Pulse	0.10	3
Ag			1	0.755	ug/l	10.71	3,067.12	9.156E-04	Pulse	0.10	3
Sn			1	0.819	ug/l	14.18	4,744.26	1.416E-03	Pulse	0.10	3
Sb			1	0.369	ug/l	10.10	1,456.79	2.988E-04	Pulse	0.10	3
Ba			1	348.134	ug/l	0.46	456,810.68	9.377E-02	Pulse	0.10	3
Tl			1	0.316	ug/l	10.84	2,430.30	9.175E-04	Pulse	0.10	3
Pb			1	0.128	ug/l	5.90	540.03	2.039E-04	Pulse	0.10	3
Pb			1	0.145	ug/l	16.78	513.37	1.939E-04	Pulse	0.10	3
Pb			1	0.124	ug/l	2.30	2,220.16	8.382E-04	Pulse	0.10	3
Na			2	1652518.660	ug/l	12.47	383,655,806.98	2.847E+03	Analog	0.30	3
Mg			2	8387.024	ug/l	12.61	902,470.97	6.698E+00	Pulse	0.30	3
Al			2	13.995	ug/l	3.38	1,107.83	8.141E-03	Pulse	0.30	3
K			2	59871.847	ug/l	13.08	5,326,871.73	3.955E+01	Analog	0.30	3
Ca			2	234214.855	ug/l	12.30	1,049,715.10	7.789E+00	Pulse	0.30	3
Ti			2	0.746	ug/l	49.86	27.78	1.980E-04	Pulse	0.30	3
V			2	1.359	ug/l	11.39	1,723.44	1.276E-02	Pulse	0.30	3
Cr			2	0.814	ug/l	23.82	1,925.69	1.429E-02	Pulse	0.30	3
Mn			2	2627.549	ug/l	12.73	1,926,250.90	1.430E+01	Pulse	0.30	3
Fe			2	657.795	ug/l	12.50	709,643.48	5.266E+00	Pulse	0.30	3
Co			2	9.982	ug/l	10.39	21,609.04	1.601E-01	Pulse	0.30	3
Ni			2	1.945	ug/l	20.28	1,246.73	9.289E-03	Pulse	0.30	3
Cu			2	-0.387	ug/l	-82.75	6,256.83	4.626E-02	Pulse	0.30	3
Zn			2	3.320	ug/l	34.73	2,034.60	1.510E-02	Pulse	0.30	3
As			2	0.958	ug/l	20.51	147.00	1.096E-03	Pulse	1.00	3
Cd			2	10.986	ug/l	11.84	3,838.85	5.005E-03	Pulse	0.30	3
Sn			2	0.937	ug/l	23.35	1,603.43	2.088E-03	Pulse	0.30	3
Se			3	0.553	ug/l	13.13	22.80	1.312E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,135,640.05	0.31	90.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,432,082.31	1.08	86.5	Pulse	0.10	3
1	Ge		482,849.28	0.62	84.6	Pulse	0.10	3
1	Ge		672,656.71	1.34	84.7	Pulse	0.10	3
1	Rh		3,085,930.68	1.25	80.2	Pulse	0.10	3
1	In		3,349,410.09	0.89	84.0	Pulse	0.10	3
1	Tb		4,871,800.66	1.85	88.0	Pulse	0.10	3
1	Ho		483,987.68	0.66	88.0	Pulse	0.10	3
1	Bi		2,648,771.42	0.64	79.3	Pulse	0.10	3
2	Sc		136,104.79	11.90	84.7	Pulse	0.30	3
2	Ge		80,365.97	11.65	80.8	Pulse	0.30	3
2	Ge		120,762.87	12.20	80.5	Pulse	0.30	3
2	Rh		1,797,015.69	12.28	73.8	Pulse	0.30	3
2	In		774,243.00	11.83	79.7	Pulse	0.30	3
2	Tb		2,622,374.13	12.33	80.1	Pulse	0.30	3
2	Ho		269,515.77	12.43	80.6	Pulse	0.30	3
2	Bi		1,623,602.30	12.25	72.5	Pulse	0.30	3
3	Sc		187,503.32	0.94	86.5	Pulse	0.30	3
3	Ge		115,529.96	0.29	82.4	Pulse	0.30	3
3	Ge		173,650.97	0.65	82.1	Pulse	0.30	3
3	Rh		1,694,076.25	1.02	77.7	Pulse	0.30	3
3	Tb		3,122,425.29	1.09	85.2	Pulse	0.30	3

Quantitation Report

File Name	081SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:52
Sample Name	jc94536-3
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	9/11/2019 11:44
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	38.94	42.67	3.657E-05	Pulse	0.25	3
B			1	166.466	ug/l	1.75	153,502.09	1.316E-01	Pulse	0.15	3
Ca			1	66555.986	ug/l	0.98	10,945,582.34	4.521E+00	Analog	0.10	3
Sr			1	433.887	ug/l	0.58	3,739,210.99	1.155E+00	Pulse	0.10	3
Mo			1	1.026	ug/l	9.56	1,793.51	5.539E-04	Pulse	0.10	3
Ag			1	0.032	ug/l	49.98	156.67	4.520E-05	Pulse	0.10	3
Sn			1	0.768	ug/l	3.76	4,777.56	1.377E-03	Pulse	0.10	3
Sb			1	0.144	ug/l	10.40	770.06	1.547E-04	Pulse	0.10	3
Ba			1	245.290	ug/l	1.44	328,825.82	6.607E-02	Pulse	0.10	3
Tl			1	0.025	ug/l	37.79	393.36	1.401E-04	Pulse	0.10	3
Pb			1	0.329	ug/l	18.38	1,090.08	3.884E-04	Pulse	0.10	3
Pb			1	0.339	ug/l	8.23	983.40	3.507E-04	Pulse	0.10	3
Pb			1	0.305	ug/l	10.09	4,247.06	1.514E-03	Pulse	0.10	3
Na			2	445840.547	ug/l	0.73	111,168,875.59	7.681E+02	Analog	0.30	3
Mg			2	3725.822	ug/l	2.07	430,707.26	2.976E+00	Pulse	0.30	3
Al			2	4.260	ug/l	24.52	795.58	5.496E-03	Pulse	0.30	3
K			2	35547.854	ug/l	1.72	3,402,871.11	2.352E+01	Pulse	0.30	3
Ca			2	66605.604	ug/l	1.29	320,602.80	2.215E+00	Pulse	0.30	3
Ti			2	0.410	ug/l	59.93	16.67	1.152E-04	Pulse	0.30	3
V			2	0.555	ug/l	14.31	913.37	6.315E-03	Pulse	0.30	3
Cr			2	1.193	ug/l	10.26	2,623.58	1.814E-02	Pulse	0.30	3
Mn			2	132.486	ug/l	1.96	104,442.16	7.218E-01	Pulse	0.30	3
Fe			2	285.435	ug/l	1.37	333,852.02	2.307E+00	Pulse	0.30	3
Co			2	0.326	ug/l	5.50	804.69	5.558E-03	Pulse	0.30	3
Ni			2	0.285	ug/l	47.44	328.90	2.268E-03	Pulse	0.30	3
Cu			2	-2.082	ug/l	-10.74	3,874.95	2.680E-02	Pulse	0.30	3
Zn			2	4.397	ug/l	0.83	2,456.88	1.698E-02	Pulse	0.30	3
As			2	0.243	ug/l	36.08	55.33	3.815E-04	Pulse	1.00	3
Cd			2	0.010	ug/l	129.05	15.42	1.810E-05	Pulse	0.30	3
Sn			2	0.821	ug/l	15.57	1,676.78	1.972E-03	Pulse	0.30	3
Se			3	0.612	ug/l	6.95	25.60	1.431E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,166,702.74	0.26	93.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,421,034.86	0.32	86.1	Pulse	0.10	3
1	Ge		494,134.49	0.19	86.6	Pulse	0.10	3
1	Ge		696,358.30	0.63	87.7	Pulse	0.10	3
1	Rh		3,237,658.60	0.81	84.1	Pulse	0.10	3
1	In		3,469,570.95	0.64	87.1	Pulse	0.10	3
1	Tb		4,976,793.57	0.43	89.9	Pulse	0.10	3
1	Ho		494,297.27	0.75	89.9	Pulse	0.10	3
1	Bi		2,804,158.91	1.53	84.0	Pulse	0.10	3
2	Sc		144,732.20	1.40	90.1	Pulse	0.30	3
2	Ge		88,650.01	0.71	89.1	Pulse	0.30	3
2	Ge		134,667.32	0.36	89.8	Pulse	0.30	3
2	Rh		2,044,295.48	0.76	84.0	Pulse	0.30	3
2	In		850,554.57	0.94	87.5	Pulse	0.30	3
2	Tb		2,900,250.37	1.29	88.6	Pulse	0.30	3
2	Ho		296,996.25	0.61	88.8	Pulse	0.30	3
2	Bi		1,866,032.36	0.36	83.3	Pulse	0.30	3
3	Sc		186,028.08	1.37	85.9	Pulse	0.30	3
3	Ge		118,922.96	0.58	84.8	Pulse	0.30	3
3	Ge		178,863.45	1.10	84.6	Pulse	0.30	3
3	Rh		1,768,970.62	0.43	81.1	Pulse	0.30	3
3	Tb		3,198,979.18	0.70	87.3	Pulse	0.30	3

Quantitation Report

File Name	082SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 16:57
Sample Name	jc94536-5
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	9/11/2019 11:44
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	61.85	44.00	3.821E-05	Pulse	0.25	3
B			1	194.523	ug/l	1.35	175,752.76	1.528E-01	Pulse	0.15	3
Ca			1	131981.136	ug/l	0.44	21,853,958.01	8.961E+00	Analog	0.10	3
Sr			1	941.065	ug/l	0.40	8,018,679.05	2.505E+00	Analog	0.10	3
Mo			1	3.436	ug/l	6.01	5,604.55	1.752E-03	Pulse	0.10	3
Ag			1	0.027	ug/l	54.73	133.34	3.871E-05	Pulse	0.10	3
Sn			1	0.934	ug/l	15.86	5,177.73	1.505E-03	Pulse	0.10	3
Sb			1	1.710	ug/l	4.38	5,734.58	1.156E-03	Pulse	0.10	3
Ba			1	398.134	ug/l	0.19	531,727.65	1.072E-01	Pulse	0.10	3
Tl			1	0.157	ug/l	9.51	1,346.79	4.923E-04	Pulse	0.10	3
Pb			1	0.143	ug/l	37.28	593.37	2.170E-04	Pulse	0.10	3
Pb			1	0.103	ug/l	25.64	436.69	1.595E-04	Pulse	0.10	3
Pb			1	0.112	ug/l	24.30	2,173.49	7.946E-04	Pulse	0.10	3
Na			2	881384.688	ug/l	0.35	219,504,831.28	1.518E+03	Analog	0.30	3
Mg			2	8092.824	ug/l	0.56	934,208.64	6.463E+00	Pulse	0.30	3
Al			2	1.436	ug/l	39.73	683.35	4.728E-03	Pulse	0.30	3
K			2	28874.038	ug/l	0.54	2,763,347.88	1.912E+01	Pulse	0.30	3
Ca			2	134664.446	ug/l	0.73	647,358.03	4.478E+00	Pulse	0.30	3
Ti			2	0.067	ug/l	207.90	4.44	3.046E-05	Pulse	0.30	3
V			2	1.214	ug/l	3.54	1,676.77	1.160E-02	Pulse	0.30	3
Cr			2	4.539	ug/l	3.40	7,531.79	5.211E-02	Pulse	0.30	3
Mn			2	394.425	ug/l	1.41	310,330.40	2.147E+00	Pulse	0.30	3
Fe			2	19.803	ug/l	1.33	28,364.47	1.962E-01	Pulse	0.30	3
Co			2	0.567	ug/l	3.39	1,361.11	9.414E-03	Pulse	0.30	3
Ni			2	1.828	ug/l	9.54	1,270.07	8.791E-03	Pulse	0.30	3
Cu			2	-1.478	ug/l	-0.80	4,876.32	3.373E-02	Pulse	0.30	3
Zn			2	-0.631	ug/l	-42.80	1,190.06	8.236E-03	Pulse	0.30	3
As			2	0.281	ug/l	8.20	60.67	4.198E-04	Pulse	1.00	3
Cd			2	0.044	ug/l	30.07	28.45	3.369E-05	Pulse	0.30	3
Sn			2	0.650	ug/l	6.87	1,522.32	1.802E-03	Pulse	0.30	3
Se			3	1.594	ug/l	2.60	59.73	3.417E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,150,170.90	0.60	92.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,438,698.61	1.41	86.7	Pulse	0.10	3
1	Ge		497,728.67	1.28	87.3	Pulse	0.10	3
1	Ge		685,229.47	0.93	86.3	Pulse	0.10	3
1	Rh		3,201,299.54	1.50	83.2	Pulse	0.10	3
1	In		3,438,921.24	1.08	86.3	Pulse	0.10	3
1	Tb		4,958,407.84	0.62	89.5	Pulse	0.10	3
1	Ho		488,999.98	0.21	88.9	Pulse	0.10	3
1	Bi		2,737,217.98	0.93	82.0	Pulse	0.10	3
2	Sc		144,559.10	1.28	90.0	Pulse	0.30	3
2	Ge		87,796.17	0.46	88.2	Pulse	0.30	3
2	Ge		132,006.38	1.69	88.0	Pulse	0.30	3
2	Rh		1,978,497.28	0.75	81.3	Pulse	0.30	3
2	In		844,759.04	0.22	86.9	Pulse	0.30	3
2	Tb		2,865,365.51	1.09	87.5	Pulse	0.30	3
2	Ho		292,456.34	0.59	87.5	Pulse	0.30	3
2	Bi		1,787,725.28	1.24	79.8	Pulse	0.30	3
3	Sc		185,780.01	0.76	85.8	Pulse	0.30	3
3	Ge		116,023.43	0.77	82.7	Pulse	0.30	3
3	Ge		174,784.29	0.87	82.6	Pulse	0.30	3
3	Rh		1,712,173.20	0.24	78.5	Pulse	0.30	3
3	Tb		3,124,389.60	0.43	85.3	Pulse	0.30	3

Quantitation Report

File Name	083SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:02
Sample Name	jc94536-7
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	9/11/2019 11:44
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	-134.32	12.00	1.043E-05	Pulse	0.25	3
B			1	190.828	ug/l	1.64	172,580.35	1.500E-01	Pulse	0.15	3
Ca			1	130280.267	ug/l	0.97	21,468,968.01	8.846E+00	Analog	0.10	3
Sr			1	955.750	ug/l	0.23	8,003,534.26	2.544E+00	Analog	0.10	3
Mo			1	3.888	ug/l	5.21	6,218.11	1.976E-03	Pulse	0.10	3
Ag			1	0.011	ug/l	71.06	66.67	1.968E-05	Pulse	0.10	3
Sn			1	0.812	ug/l	4.96	4,800.90	1.411E-03	Pulse	0.10	3
Sb			1	1.653	ug/l	4.74	5,481.16	1.120E-03	Pulse	0.10	3
Ba			1	392.275	ug/l	1.41	517,043.69	1.057E-01	Pulse	0.10	3
Tl			1	0.137	ug/l	15.69	1,186.77	4.397E-04	Pulse	0.10	3
Pb			1	0.132	ug/l	20.77	560.03	2.075E-04	Pulse	0.10	3
Pb			1	0.089	ug/l	47.57	400.02	1.483E-04	Pulse	0.10	3
Pb			1	0.109	ug/l	24.49	2,110.16	7.818E-04	Pulse	0.10	3
Na			2	868467.727	ug/l	5.63	216,874,995.83	1.496E+03	Analog	0.30	3
Mg			2	7970.484	ug/l	5.81	922,518.09	6.365E+00	Pulse	0.30	3
Al			2	2.347	ug/l	55.99	723.36	4.976E-03	Pulse	0.30	3
K			2	28495.730	ug/l	5.16	2,735,204.68	1.887E+01	Pulse	0.30	3
Ca			2	132421.958	ug/l	5.72	638,293.08	4.404E+00	Pulse	0.30	3
Ti			2	0.211	ug/l	149.43	10.00	6.600E-05	Pulse	0.30	3
V			2	1.156	ug/l	15.03	1,608.99	1.113E-02	Pulse	0.30	3
Cr			2	4.131	ug/l	6.87	6,952.65	4.797E-02	Pulse	0.30	3
Mn			2	390.094	ug/l	6.54	307,663.15	2.123E+00	Pulse	0.30	3
Fe			2	13.715	ug/l	6.33	21,440.74	1.479E-01	Pulse	0.30	3
Co			2	0.525	ug/l	6.70	1,268.89	8.746E-03	Pulse	0.30	3
Ni			2	1.507	ug/l	6.73	1,078.94	7.434E-03	Pulse	0.30	3
Cu			2	-1.434	ug/l	-6.87	4,968.59	3.424E-02	Pulse	0.30	3
Zn			2	-1.862	ug/l	-15.93	883.37	6.095E-03	Pulse	0.30	3
As			2	0.296	ug/l	30.93	62.67	4.345E-04	Pulse	1.00	3
Cd			2	0.046	ug/l	42.86	29.55	3.460E-05	Pulse	0.30	3
Sn			2	0.673	ug/l	18.47	1,543.43	1.824E-03	Pulse	0.30	3
Se			3	1.480	ug/l	3.87	55.87	3.187E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,150,401.54	0.25	92.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,427,127.52	0.83	86.3	Pulse	0.10	3
1	Ge		488,915.93	0.23	85.7	Pulse	0.10	3
1	Ge		684,788.43	0.07	86.3	Pulse	0.10	3
1	Rh		3,146,088.70	1.08	81.7	Pulse	0.10	3
1	In		3,402,476.54	1.56	85.4	Pulse	0.10	3
1	Tb		4,893,449.09	0.55	88.4	Pulse	0.10	3
1	Ho		487,230.85	0.45	88.6	Pulse	0.10	3
1	Bi		2,700,172.25	0.63	80.9	Pulse	0.10	3
2	Sc		145,250.66	5.62	90.4	Pulse	0.30	3
2	Ge		87,813.46	4.25	88.2	Pulse	0.30	3
2	Ge		132,155.55	3.80	88.1	Pulse	0.30	3
2	Rh		1,999,437.28	5.85	82.1	Pulse	0.30	3
2	In		847,538.70	4.95	87.2	Pulse	0.30	3
2	Tb		2,892,674.82	4.74	88.3	Pulse	0.30	3
2	Ho		294,737.99	4.49	88.2	Pulse	0.30	3
2	Bi		1,807,378.16	5.17	80.7	Pulse	0.30	3
3	Sc		187,525.34	1.59	86.6	Pulse	0.30	3
3	Ge		116,500.31	1.26	83.1	Pulse	0.30	3
3	Ge		175,309.44	0.41	82.9	Pulse	0.30	3
3	Rh		1,732,043.89	0.50	79.4	Pulse	0.30	3
3	Tb		3,155,582.58	0.50	86.1	Pulse	0.30	3

Quantitation Report

File Name	084SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:07
Sample Name	jc94536-11
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	9/11/2019 11:44
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	24.70	58.67	5.454E-05	Pulse	0.25	3
B			1	322.439	ug/l	0.43	661,915.08	6.158E-01	Pulse	0.15	3
Ca			1	29861.568	ug/l	0.62	11,417,531.50	5.071E+00	Analog	0.10	3
Sr			1	144.926	ug/l	1.15	2,930,424.33	9.644E-01	Pulse	0.10	3
Mo			1	0.659	ug/l	7.88	2,623.65	8.628E-04	Pulse	0.10	3
Ag			1	0.011	ug/l	30.34	133.34	4.088E-05	Pulse	0.10	3
Sn			1	0.659	ug/l	7.40	6,731.71	2.059E-03	Pulse	0.10	3
Sb			1	0.137	ug/l	9.96	1,346.78	2.814E-04	Pulse	0.10	3
Ba			1	215.453	ug/l	0.79	694,790.02	1.451E-01	Pulse	0.10	3
Tl			1	0.086	ug/l	16.36	1,740.18	6.486E-04	Pulse	0.10	3
Pb			1	0.591	ug/l	4.73	3,873.98	1.444E-03	Pulse	0.10	3
Pb			1	0.499	ug/l	5.89	2,913.73	1.087E-03	Pulse	0.10	3
Pb			1	0.543	ug/l	1.86	14,553.40	5.427E-03	Pulse	0.10	3
Na			2	309585.200	ug/l	1.35	180,929,921.70	1.333E+03	Analog	0.30	3
Mg			2	3228.190	ug/l	1.45	874,469.08	6.445E+00	Pulse	0.30	3
Al			2	101.158	ug/l	1.58	9,911.93	7.305E-02	Pulse	0.30	3
K			2	7072.941	ug/l	1.49	1,592,960.32	1.174E+01	Pulse	0.30	3
Ca			2	29949.471	ug/l	0.56	337,921.80	2.490E+00	Pulse	0.30	3
Ti			2	4.022	ug/l	13.17	338.89	2.498E-03	Pulse	0.30	3
V			2	0.644	ug/l	10.95	2,002.37	1.477E-02	Pulse	0.30	3
Cr			2	5.299	ug/l	0.58	19,069.97	1.405E-01	Pulse	0.30	3
Mn			2	121.176	ug/l	0.78	223,777.67	1.649E+00	Pulse	0.30	3
Fe			2	291.582	ug/l	1.30	791,195.77	5.831E+00	Pulse	0.30	3
Co			2	0.319	ug/l	0.07	1,775.76	1.309E-02	Pulse	0.30	3
Ni			2	5.851	ug/l	3.02	8,534.54	6.291E-02	Pulse	0.30	3
Cu			2	0.522	ug/l	4.92	8,915.84	6.570E-02	Pulse	0.30	3
Zn			2	2.455	ug/l	6.17	2,713.59	2.000E-02	Pulse	0.30	3
As			2	0.247	ug/l	13.08	102.67	7.565E-04	Pulse	1.00	3
Cd			2	0.091	ug/l	5.25	94.25	1.167E-04	Pulse	0.30	3
Sn			2	0.572	ug/l	7.77	2,082.39	2.579E-03	Pulse	0.30	3
Se			3	1.154	ug/l	3.02	104.53	6.027E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,074,975.77	1.18	86.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,251,738.35	0.76	80.0	Pulse	0.10	3
1	Ge		501,482.62	1.06	87.9	Pulse	0.10	3
1	Ge		697,866.19	0.47	87.9	Pulse	0.10	3
1	Rh		3,038,781.00	1.44	78.9	Pulse	0.10	3
1	In		3,268,215.79	1.43	82.0	Pulse	0.10	3
1	Tb		4,788,889.10	1.21	86.5	Pulse	0.10	3
1	Ho		472,921.29	1.54	86.0	Pulse	0.10	3
1	Bi		2,681,763.50	0.50	80.3	Pulse	0.10	3
2	Sc		135,699.51	1.18	84.4	Pulse	0.30	3
2	Ge		90,550.94	0.47	91.0	Pulse	0.30	3
2	Ge		137,324.71	1.09	91.6	Pulse	0.30	3
2	Rh		1,929,712.35	0.27	79.3	Pulse	0.30	3
2	In		807,580.00	0.64	83.1	Pulse	0.30	3
2	Tb		2,802,086.48	0.51	85.6	Pulse	0.30	3
2	Ho		287,895.22	0.39	86.1	Pulse	0.30	3
2	Bi		1,782,338.26	0.41	79.6	Pulse	0.30	3
3	Sc		180,203.38	1.28	83.2	Pulse	0.30	3
3	Ge		115,260.33	0.55	82.2	Pulse	0.30	3
3	Ge		173,439.57	0.75	82.0	Pulse	0.30	3
3	Rh		1,685,475.32	0.13	77.3	Pulse	0.30	3
3	Tb		3,100,285.02	0.50	84.6	Pulse	0.30	3

Quantitation Report

File Name	085SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:12
Sample Name	mp17187-mb1conf
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	9/11/2019 11:44
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	-119.36	14.67	1.155E-05	Pulse	0.25	3
B			1	3.730	ug/l	2.73	25,036.51	1.968E-02	Pulse	0.15	3
Ca			1	7.860	ug/l	4.52	17,546.62	6.982E-03	Pulse	0.10	3
Sr			1	0.044	ug/l	9.78	2,410.29	6.825E-04	Pulse	0.10	3
Mo			1	0.009	ug/l	52.92	233.34	6.608E-05	Pulse	0.10	3
Ag			1	0.004	ug/l	72.04	103.34	2.810E-05	Pulse	0.10	3
Sn			1	0.018	ug/l	36.96	3,143.76	8.535E-04	Pulse	0.10	3
Sb			1	0.029	ug/l	22.31	780.06	1.547E-04	Pulse	0.10	3
Ba			1	0.053	ug/l	13.13	440.02	8.731E-05	Pulse	0.10	3
Tl			1	0.001	ug/l	120.46	253.35	8.300E-05	Pulse	0.10	3
Pb			1	0.018	ug/l	17.49	520.03	1.703E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	56.67	420.03	1.376E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	14.86	1,993.47	6.530E-04	Pulse	0.10	3
Na			2	75.440	ug/l	1.88	109,363.20	7.236E-01	Pulse	0.30	3
Mg			2	1.298	ug/l	19.60	1,087.85	7.208E-03	Pulse	0.30	3
Al			2	1.215	ug/l	9.63	905.59	5.989E-03	Pulse	0.30	3
K			2	2.654	ug/l	24.70	14,316.25	9.474E-02	Pulse	0.30	3
Ca			2	9.740	ug/l	12.15	350.01	2.318E-03	Pulse	0.30	3
Ti			2	0.572	ug/l	18.97	108.89	7.208E-04	Pulse	0.30	3
V			2	0.000	ug/l	-577.41	281.12	1.861E-03	Pulse	0.30	3
Cr			2	0.051	ug/l	23.70	1,302.29	8.618E-03	Pulse	0.30	3
Mn			2	0.081	ug/l	12.30	468.90	3.105E-03	Pulse	0.30	3
Fe			2	3.160	ug/l	4.41	24,858.81	1.644E-01	Pulse	0.30	3
Co			2	0.002	ug/l	109.79	71.05	4.695E-04	Pulse	0.30	3
Ni			2	0.019	ug/l	46.24	220.00	1.458E-03	Pulse	0.30	3
Cu			2	-0.537	ug/l	-3.92	3,003.64	1.987E-02	Pulse	0.30	3
Zn			2	2.639	ug/l	0.29	4,877.45	3.227E-02	Pulse	0.30	3
As			2	0.019	ug/l	30.07	35.00	2.319E-04	Pulse	1.00	3
Cd			2	-0.001	ug/l	-299.98	9.97	1.103E-05	Pulse	0.30	3
Sn			2	-0.015	ug/l	-116.86	983.38	1.081E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.035	ug/l	7.74	9.87	5.456E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,272,476.55	0.39	101.9	Pulse	0.10	3
1	Sc		2,513,321.94	0.85	89.3	Pulse	0.10	3
1	Ge		514,033.54	0.54	90.1	Pulse	0.10	3
1	Ge		716,430.14	0.27	90.3	Pulse	0.10	3
1	Rh		3,532,350.36	0.42	91.8	Pulse	0.10	3
1	In		3,683,800.19	0.56	92.4	Pulse	0.10	3
1	Tb		5,040,746.28	0.35	91.0	Pulse	0.10	3
1	Ho		500,086.87	0.37	90.9	Pulse	0.10	3
1	Bi		3,052,992.77	0.29	91.4	Pulse	0.10	3
2	Sc		151,160.36	1.85	94.1	Pulse	0.30	3
2	Ge		92,911.93	1.11	93.4	Pulse	0.30	3
2	Ge		139,573.47	0.50	93.1	Pulse	0.30	3
2	Rh		2,215,936.51	1.13	91.0	Pulse	0.30	3
2	In		909,557.81	1.50	93.6	Pulse	0.30	3
2	Tb		2,966,680.51	1.44	90.6	Pulse	0.30	3
2	Ho		301,156.42	1.42	90.1	Pulse	0.30	3
2	Bi		2,031,784.23	1.67	90.8	Pulse	0.30	3
3	Sc		186,084.45	0.97	85.9	Pulse	0.30	3
3	Ge		119,926.85	0.94	85.5	Pulse	0.30	3
3	Ge		180,864.31	0.87	85.5	Pulse	0.30	3
3	Rh		1,859,327.78	1.16	85.2	Pulse	0.30	3
3	Tb		3,158,788.62	0.83	86.2	Pulse	0.30	3

Quantitation Report

File Name	086SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:17
Sample Name	mp17187-b1conf
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	9/11/2019 11:44
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	69.409	ug/l	0.56	450,633.62	3.736E-01	Pulse	0.25	3
B			1	66.743	ug/l	0.93	311,438.78	2.582E-01	Pulse	0.15	3
Ca			1	2049.553	ug/l	0.43	1,689,757.58	6.998E-01	Pulse	0.10	3
Sr			1	80.188	ug/l	1.10	3,547,785.99	1.067E+00	Pulse	0.10	3
Mo			1	78.070	ug/l	0.49	644,953.38	1.940E-01	Pulse	0.10	3
Ag			1	78.893	ug/l	1.11	1,669,915.18	4.749E-01	Pulse	0.10	3
Sn			1	77.518	ug/l	1.48	1,058,243.89	3.010E-01	Pulse	0.10	3
Sb			1	82.859	ug/l	1.25	1,302,190.47	2.650E-01	Pulse	0.10	3
Ba			1	79.381	ug/l	0.21	525,370.02	1.069E-01	Pulse	0.10	3
Tl			1	78.961	ug/l	1.54	3,066,297.77	1.052E+00	Pulse	0.10	3
Pb			1	80.957	ug/l	0.91	1,085,908.84	3.726E-01	Pulse	0.10	3
Pb			1	80.971	ug/l	0.63	955,882.77	3.280E-01	Pulse	0.10	3
Pb			1	80.871	ug/l	0.82	4,384,512.77	1.505E+00	Pulse	0.10	3
Na			2	2006.194	ug/l	0.25	2,499,749.69	1.735E+01	Pulse	0.30	3
Mg			2	1963.383	ug/l	0.59	1,129,135.96	7.839E+00	Pulse	0.30	3
Al			2	1999.222	ug/l	0.55	391,826.94	2.720E+00	Pulse	0.30	3
K			2	2015.011	ug/l	0.59	968,864.27	6.726E+00	Pulse	0.30	3
Ca			2	2304.622	ug/l	0.84	55,287.91	3.839E-01	Pulse	0.30	3
Ti			2	77.425	ug/l	1.16	13,779.14	9.567E-02	Pulse	0.30	3
V			2	78.636	ug/l	1.02	453,775.17	3.150E+00	Pulse	0.30	3
Cr			2	76.408	ug/l	0.69	559,639.65	3.885E+00	Pulse	0.30	3
Mn			2	78.254	ug/l	0.51	306,770.25	2.130E+00	Pulse	0.30	3
Fe			2	2087.564	ug/l	0.58	11,952,075.64	8.298E+01	Analog	0.30	3
Co			2	75.679	ug/l	0.39	872,303.48	6.056E+00	Pulse	0.30	3
Ni			2	75.079	ug/l	0.99	228,730.66	1.588E+00	Pulse	0.30	3
Cu			2	74.665	ug/l	1.06	624,749.98	4.337E+00	Pulse	0.30	3
Zn			2	79.855	ug/l	1.70	101,308.99	7.033E-01	Pulse	0.30	3
As			2	76.477	ug/l	0.35	55,020.62	3.820E-01	Pulse	1.00	3
Cd			2	76.288	ug/l	0.47	149,803.31	1.733E-01	Pulse	0.30	3
Sn			2	77.700	ug/l	0.37	335,324.66	3.879E-01	Pulse	0.30	3
Se			3	197.925	ug/l	0.61	34,686.77	2.001E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,206,299.28	0.24	96.6	Pulse	0.10	3
1	Sc		2,414,721.11	0.30	85.8	Pulse	0.10	3
1	Ge		489,958.90	1.81	85.9	Pulse	0.10	3

Quantitation Report

1	Ge		687,683.45	0.43	86.6	Pulse	0.10	3
1	Rh		3,324,298.28	0.31	86.4	Pulse	0.10	3
1	In		3,516,302.22	1.21	88.2	Pulse	0.10	3
1	Tb		4,914,407.53	1.01	88.7	Pulse	0.10	3
1	Ho		483,474.95	0.77	87.9	Pulse	0.10	3
1	Bi		2,914,361.93	0.75	87.3	Pulse	0.10	3
2	Sc		144,038.05	0.59	89.6	Pulse	0.30	3
2	Ge		88,575.01	0.20	89.0	Pulse	0.30	3
2	Ge		132,407.02	0.80	88.3	Pulse	0.30	3
2	Rh		2,092,198.11	0.45	86.0	Pulse	0.30	3
2	In		864,399.75	0.52	88.9	Pulse	0.30	3
2	Tb		2,882,894.61	0.42	88.0	Pulse	0.30	3
2	Ho		292,432.91	0.25	87.5	Pulse	0.30	3
2	Bi		1,927,764.71	0.80	86.1	Pulse	0.30	3
3	Sc		179,148.71	0.89	82.7	Pulse	0.30	3
3	Ge		114,214.24	1.09	81.4	Pulse	0.30	3
3	Ge		173,314.12	0.78	81.9	Pulse	0.30	3
3	Rh		1,776,558.89	0.28	81.4	Pulse	0.30	3
3	Tb		3,072,281.96	0.50	83.9	Pulse	0.30	3

Quantitation Report

File Name	087_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:22
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	9/11/2019 11:44
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	44.972	ug/l	0.60	284,933.39	2.421E-01	Pulse	0.25	3
B			1	88.588	ug/l	0.59	401,237.35	3.409E-01	Pulse	0.15	3
Ca			1	5033.784	ug/l	0.22	4,060,178.38	1.712E+00	Pulse	0.10	3
Sr			1	51.718	ug/l	0.43	2,245,292.67	6.884E-01	Pulse	0.10	3
Mo			1	51.073	ug/l	1.42	414,024.08	1.269E-01	Pulse	0.10	3
Ag			1	49.442	ug/l	0.70	1,024,487.17	2.976E-01	Pulse	0.10	3
Sn			1	50.151	ug/l	0.99	671,192.80	1.950E-01	Pulse	0.10	3
Sb			1	52.476	ug/l	0.66	818,478.95	1.679E-01	Pulse	0.10	3
Ba			1	50.554	ug/l	0.43	332,021.52	6.809E-02	Pulse	0.10	3
Tl			1	50.447	ug/l	0.65	1,917,356.85	6.723E-01	Pulse	0.10	3
Pb			1	50.217	ug/l	0.33	659,322.31	2.312E-01	Pulse	0.10	3
Pb			1	50.486	ug/l	0.74	583,362.05	2.045E-01	Pulse	0.10	3
Pb			1	50.281	ug/l	0.26	2,668,365.69	9.356E-01	Pulse	0.10	3
Na			2	5085.881	ug/l	1.06	6,253,673.50	4.388E+01	Analog	0.30	3
Mg			2	4809.257	ug/l	0.59	2,736,121.77	1.920E+01	Pulse	0.30	3
Al			2	4871.687	ug/l	0.81	943,783.16	6.623E+00	Pulse	0.30	3
K			2	4924.932	ug/l	0.89	2,325,183.52	1.632E+01	Pulse	0.30	3
Ca			2	5165.102	ug/l	1.04	122,479.14	8.594E-01	Pulse	0.30	3
Ti			2	48.601	ug/l	2.16	8,560.06	6.006E-02	Pulse	0.30	3
V			2	49.187	ug/l	0.41	280,950.58	1.971E+00	Pulse	0.30	3
Cr			2	48.610	ug/l	0.52	352,581.54	2.474E+00	Pulse	0.30	3
Mn			2	49.783	ug/l	0.21	193,142.32	1.355E+00	Pulse	0.30	3
Fe			2	5091.179	ug/l	0.69	28,831,842.19	2.023E+02	Analog	0.30	3
Co			2	48.078	ug/l	0.81	548,319.58	3.848E+00	Pulse	0.30	3
Ni			2	47.616	ug/l	1.51	143,580.45	1.008E+00	Pulse	0.30	3
Cu			2	47.122	ug/l	0.07	392,796.57	2.756E+00	Pulse	0.30	3
Zn			2	48.403	ug/l	1.95	61,273.91	4.300E-01	Pulse	0.30	3
As			2	49.467	ug/l	1.56	35,216.08	2.471E-01	Pulse	1.00	3
Cd			2	48.938	ug/l	0.40	94,774.56	1.112E-01	Pulse	0.30	3
Sn			2	49.760	ug/l	0.35	212,130.82	2.488E-01	Pulse	0.30	3
Se			3	197.160	ug/l	0.49	34,245.04	1.994E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,177,137.91	0.32	94.3	Pulse	0.10	3
1	Sc		2,371,037.10	0.25	84.3	Pulse	0.10	3
1	Ge		481,183.33	1.44	84.4	Pulse	0.10	3

Quantitation Report

1	Ge		673,273.84	0.32	84.8	Pulse	0.10	3
1	Rh		3,261,699.85	0.22	84.7	Pulse	0.10	3
1	In		3,441,930.22	0.10	86.4	Pulse	0.10	3
1	Tb		4,876,242.63	0.14	88.1	Pulse	0.10	3
1	Ho		479,814.58	0.69	87.2	Pulse	0.10	3
1	Bi		2,852,149.54	0.42	85.4	Pulse	0.10	3
2	Sc		142,517.92	0.86	88.7	Pulse	0.30	3
2	Ge		85,904.09	0.50	86.3	Pulse	0.30	3
2	Ge		129,754.81	0.39	86.5	Pulse	0.30	3
2	Rh		2,054,318.74	0.87	84.4	Pulse	0.30	3
2	In		852,465.76	0.54	87.7	Pulse	0.30	3
2	Tb		2,836,161.41	0.72	86.6	Pulse	0.30	3
2	Ho		291,342.90	0.54	87.2	Pulse	0.30	3
2	Bi		1,893,155.69	0.56	84.6	Pulse	0.30	3
3	Sc		178,746.36	0.45	82.5	Pulse	0.30	3
3	Ge		113,621.50	0.70	81.0	Pulse	0.30	3
3	Ge		171,768.98	0.28	81.2	Pulse	0.30	3
3	Rh		1,740,593.54	0.89	79.8	Pulse	0.30	3
3	Tb		3,063,459.88	0.63	83.6	Pulse	0.30	3

Quantitation Report

File Name	088_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:27
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	9/11/2019 11:44
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	26.21	112.00	9.397E-05	Pulse	0.25	3
B			1	4.594	ug/l	2.59	27,331.29	2.295E-02	Pulse	0.15	3
Ca			1	0.239	ug/l	207.54	10,547.06	4.396E-03	Pulse	0.10	3
Sr			1	0.019	ug/l	5.98	1,176.76	3.492E-04	Pulse	0.10	3
Mo			1	0.083	ug/l	10.53	840.06	2.491E-04	Pulse	0.10	3
Ag			1	0.018	ug/l	22.02	396.69	1.128E-04	Pulse	0.10	3
Sn			1	0.162	ug/l	6.54	4,964.30	1.411E-03	Pulse	0.10	3
Sb			1	0.075	ug/l	3.25	1,473.46	3.033E-04	Pulse	0.10	3
Ba			1	0.016	ug/l	34.13	180.01	3.703E-05	Pulse	0.10	3
Tl			1	0.026	ug/l	13.71	1,206.76	4.154E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	34.68	556.70	1.914E-04	Pulse	0.10	3
Pb			1	0.024	ug/l	19.86	510.03	1.755E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	8.54	2,290.17	7.881E-04	Pulse	0.10	3
Na			2	29.977	ug/l	3.70	47,497.35	3.320E-01	Pulse	0.30	3
Mg			2	0.754	ug/l	12.76	721.14	5.036E-03	Pulse	0.30	3
Al			2	2.193	ug/l	18.62	1,047.82	7.318E-03	Pulse	0.30	3
K			2	1.052	ug/l	69.25	12,797.25	8.946E-02	Pulse	0.30	3
Ca			2	3.833	ug/l	23.28	191.12	1.336E-03	Pulse	0.30	3
Ti			2	0.045	ug/l	2.02	10.00	6.990E-05	Pulse	0.30	3
V			2	0.000	ug/l	-3637.23	267.78	1.870E-03	Pulse	0.30	3
Cr			2	-0.002	ug/l	-130.74	844.48	5.903E-03	Pulse	0.30	3
Mn			2	0.011	ug/l	45.32	173.34	1.213E-03	Pulse	0.30	3
Fe			2	0.973	ug/l	8.23	11,091.62	7.755E-02	Pulse	0.30	3
Co			2	0.006	ug/l	30.85	121.09	8.455E-04	Pulse	0.30	3
Ni			2	0.026	ug/l	79.99	230.00	1.610E-03	Pulse	0.30	3
Cu			2	-0.565	ug/l	-1.91	2,615.80	1.829E-02	Pulse	0.30	3
Zn			2	-0.156	ug/l	-9.39	1,141.17	7.974E-03	Pulse	0.30	3
As			2	0.015	ug/l	57.82	30.33	2.115E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.005	ug/l	131.33	22.13	2.542E-05	Pulse	0.30	3
Sn			2	0.196	ug/l	22.36	1,856.80	2.130E-03	Pulse	0.30	3
Se			3	0.123	ug/l	6.62	25.07	1.436E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,190,985.83	0.57	95.4	Pulse	0.10	3
1	Sc		2,399,575.90	0.81	85.3	Pulse	0.10	3
1	Ge		486,037.60	1.42	85.2	Pulse	0.10	3
1	Ge		678,539.96	0.75	85.5	Pulse	0.10	3
1	Rh		3,370,703.91	0.86	87.6	Pulse	0.10	3
1	In		3,518,795.35	0.70	88.3	Pulse	0.10	3
1	Tb		4,858,967.01	0.72	87.7	Pulse	0.10	3
1	Ho		477,976.05	0.48	86.9	Pulse	0.10	3
1	Bi		2,906,041.93	0.74	87.0	Pulse	0.10	3
2	Sc		143,087.79	1.63	89.0	Pulse	0.30	3
2	Ge		88,172.80	0.99	88.6	Pulse	0.30	3
2	Ge		132,646.93	1.04	88.5	Pulse	0.30	3
2	Rh		2,133,513.74	0.58	87.6	Pulse	0.30	3
2	In		871,795.65	0.65	89.7	Pulse	0.30	3
2	Tb		2,845,266.28	0.34	86.9	Pulse	0.30	3
2	Ho		291,594.25	0.96	87.2	Pulse	0.30	3
2	Bi		1,958,453.26	1.00	87.5	Pulse	0.30	3
3	Sc		179,047.27	1.43	82.6	Pulse	0.30	3
3	Ge		115,165.21	1.60	82.1	Pulse	0.30	3
3	Ge		174,581.35	0.46	82.5	Pulse	0.30	3
3	Rh		1,812,856.11	0.27	83.1	Pulse	0.30	3
3	Tb		3,077,218.97	0.68	84.0	Pulse	0.30	3

Quantitation Report

File Name	089SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:32
Sample Name	mp17187-s1 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	9/11/2019 11:44
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	64.642	ug/l	0.41	190,263.75	1.740E-01	Pulse	0.25	3
B			1	349.684	ug/l	0.79	729,860.60	6.673E-01	Pulse	0.15	3
Ca			1	210101.741	ug/l	0.52	84,792,965.40	3.565E+01	Analog	0.10	3
Sr			1	1114.765	ug/l	0.87	22,364,009.67	7.418E+00	Analog	0.10	3
Mo			1	88.251	ug/l	1.09	330,668.45	1.097E-01	Pulse	0.10	3
Ag			1	68.236	ug/l	0.72	675,896.66	2.054E-01	Pulse	0.10	3
Sn			1	71.706	ug/l	1.30	459,469.71	1.396E-01	Pulse	0.10	3
Sb			1	103.558	ug/l	1.02	787,134.44	1.656E-01	Pulse	0.10	3
Ba			1	141.565	ug/l	0.41	453,054.59	9.533E-02	Pulse	0.10	3
Tl			1	72.213	ug/l	0.48	1,276,102.04	4.812E-01	Pulse	0.10	3
Pb			1	112.119	ug/l	0.33	684,364.75	2.581E-01	Pulse	0.10	3
Pb			1	110.514	ug/l	0.33	593,682.95	2.239E-01	Pulse	0.10	3
Pb			1	110.805	ug/l	0.08	2,733,761.22	1.031E+00	Pulse	0.10	3
Na			2	224049.802	ug/l	0.09	137,794,518.97	9.650E+02	Analog	0.30	3
Mg			2	32467.707	ug/l	1.27	9,252,505.19	6.480E+01	Analog	0.30	3
Al			2	3419.608	ug/l	0.75	332,280.03	2.327E+00	Pulse	0.30	3
K			2	29607.088	ug/l	1.58	6,977,898.61	4.887E+01	Analog	0.30	3
Ca			2	213528.058	ug/l	0.62	2,534,544.27	1.775E+01	Pulse	0.30	3
Ti			2	109.383	ug/l	1.42	9,649.58	6.758E-02	Pulse	0.30	3
V			2	76.121	ug/l	0.10	217,869.13	1.526E+00	Pulse	0.30	3
Cr			2	158.250	ug/l	1.09	574,469.49	4.023E+00	Pulse	0.30	3
Mn			2	1301.361	ug/l	0.92	2,527,614.41	1.770E+01	Pulse	0.30	3
Fe			2	12137.462	ug/l	0.39	34,432,534.19	2.411E+02	Analog	0.30	3
Co			2	65.072	ug/l	0.50	371,799.39	2.604E+00	Pulse	0.30	3
Ni			2	65.056	ug/l	0.71	98,326.35	6.886E-01	Pulse	0.30	3
Cu			2	66.888	ug/l	1.52	281,409.08	1.971E+00	Pulse	0.30	3
Zn			2	95.043	ug/l	0.61	60,302.53	4.223E-01	Pulse	0.30	3
As			2	89.913	ug/l	0.88	32,070.30	2.246E-01	Pulse	1.00	3
Cd			2	65.200	ug/l	0.85	61,063.33	7.407E-02	Pulse	0.30	3
Sn			2	71.249	ug/l	1.24	147,149.30	1.785E-01	Pulse	0.30	3
Se			3	171.541	ug/l	0.68	14,112.80	8.674E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,093,686.98	0.31	87.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,378,462.41	0.26	84.5	Pulse	0.10	3
1	Ge		463,547.51	0.75	81.3	Pulse	0.10	3
1	Ge		648,127.97	0.74	81.6	Pulse	0.10	3
1	Rh		3,014,927.46	0.53	78.3	Pulse	0.10	3
1	In		3,290,872.50	1.40	82.6	Pulse	0.10	3
1	Tb		4,752,550.14	0.48	85.8	Pulse	0.10	3
1	Ho		472,370.34	0.24	85.9	Pulse	0.10	3
1	Bi		2,652,019.54	0.16	79.4	Pulse	0.10	3
2	Sc		142,787.34	0.47	88.9	Pulse	0.30	3
2	Ge		85,323.46	0.75	85.7	Pulse	0.30	3
2	Ge		127,413.13	1.15	85.0	Pulse	0.30	3
2	Rh		1,902,094.86	0.55	78.1	Pulse	0.30	3
2	In		824,433.21	0.24	84.8	Pulse	0.30	3
2	Tb		2,807,316.97	0.53	85.7	Pulse	0.30	3
2	Ho		289,079.24	0.70	86.5	Pulse	0.30	3
2	Bi		1,774,002.85	0.83	79.2	Pulse	0.30	3
3	Sc		174,103.22	0.80	80.4	Pulse	0.30	3
3	Ge		108,498.14	0.20	77.4	Pulse	0.30	3
3	Ge		162,703.57	0.69	76.9	Pulse	0.30	3
3	Rh		1,572,077.61	0.22	72.1	Pulse	0.30	3
3	Tb		2,922,019.53	0.59	79.8	Pulse	0.30	3

Quantitation Report

File Name	090SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:37
Sample Name	mp17187-s2
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	9/11/2019 11:44
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	65.242	ug/l	1.22	189,495.49	1.756E-01	Pulse	0.25	3
B			1	355.819	ug/l	0.65	732,758.29	6.789E-01	Pulse	0.15	3
Ca			1	217043.616	ug/l	0.14	84,389,495.41	3.683E+01	Analog	0.10	3
Sr			1	1150.739	ug/l	0.35	22,625,677.16	7.657E+00	Analog	0.10	3
Mo			1	90.220	ug/l	1.41	331,283.98	1.121E-01	Pulse	0.10	3
Ag			1	68.826	ug/l	1.15	667,879.34	2.072E-01	Pulse	0.10	3
Sn			1	72.769	ug/l	0.79	456,801.16	1.417E-01	Pulse	0.10	3
Sb			1	105.820	ug/l	0.96	793,048.97	1.692E-01	Pulse	0.10	3
Ba			1	144.550	ug/l	0.98	456,132.70	9.734E-02	Pulse	0.10	3
Tl			1	73.473	ug/l	0.70	1,274,549.07	4.896E-01	Pulse	0.10	3
Pb			1	115.323	ug/l	0.60	690,991.11	2.654E-01	Pulse	0.10	3
Pb			1	113.340	ug/l	0.77	597,685.28	2.296E-01	Pulse	0.10	3
Pb			1	113.892	ug/l	0.46	2,758,322.67	1.060E+00	Pulse	0.10	3
Na			2	231447.540	ug/l	0.47	137,858,714.52	9.969E+02	Analog	0.30	3
Mg			2	33261.677	ug/l	0.65	9,180,330.47	6.639E+01	Analog	0.30	3
Al			2	3516.706	ug/l	0.42	330,932.33	2.393E+00	Pulse	0.30	3
K			2	30403.007	ug/l	0.37	6,939,590.28	5.018E+01	Analog	0.30	3
Ca			2	218530.672	ug/l	0.23	2,512,279.76	1.817E+01	Pulse	0.30	3
Ti			2	109.792	ug/l	1.76	9,380.53	6.783E-02	Pulse	0.30	3
V			2	78.096	ug/l	0.01	216,477.63	1.565E+00	Pulse	0.30	3
Cr			2	163.161	ug/l	0.56	573,618.26	4.148E+00	Pulse	0.30	3
Mn			2	1343.234	ug/l	0.72	2,526,726.01	1.827E+01	Pulse	0.30	3
Fe			2	12572.979	ug/l	1.03	34,543,030.85	2.498E+02	Analog	0.30	3
Co			2	66.665	ug/l	0.81	368,885.51	2.668E+00	Pulse	0.30	3
Ni			2	66.790	ug/l	1.15	97,758.48	7.070E-01	Pulse	0.30	3
Cu			2	68.204	ug/l	0.70	277,773.91	2.009E+00	Pulse	0.30	3
Zn			2	95.817	ug/l	1.70	58,863.94	4.257E-01	Pulse	0.30	3
As			2	92.795	ug/l	1.40	32,053.93	2.318E-01	Pulse	1.00	3
Cd			2	66.365	ug/l	0.41	60,674.19	7.539E-02	Pulse	0.30	3
Sn			2	72.381	ug/l	0.34	145,915.40	1.813E-01	Pulse	0.30	3
Se			3	173.678	ug/l	1.03	14,091.11	8.782E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,079,246.53	0.45	86.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,291,424.24	0.52	81.5	Pulse	0.10	3
1	Ge		452,777.01	1.15	79.4	Pulse	0.10	3
1	Ge		633,485.29	1.30	79.8	Pulse	0.10	3
1	Rh		2,954,805.27	0.56	76.8	Pulse	0.10	3
1	In		3,223,872.99	0.66	80.9	Pulse	0.10	3
1	Tb		4,686,375.14	1.25	84.6	Pulse	0.10	3
1	Ho		466,917.98	1.57	84.9	Pulse	0.10	3
1	Bi		2,603,325.90	0.27	78.0	Pulse	0.10	3
2	Sc		138,292.48	1.00	86.1	Pulse	0.30	3
2	Ge		82,705.23	0.85	83.1	Pulse	0.30	3
2	Ge		123,209.37	0.87	82.2	Pulse	0.30	3
2	Rh		1,858,773.61	0.62	76.4	Pulse	0.30	3
2	In		804,809.06	0.82	82.8	Pulse	0.30	3
2	Tb		2,733,705.66	0.98	83.5	Pulse	0.30	3
2	Ho		281,793.64	0.76	84.3	Pulse	0.30	3
2	Bi		1,741,756.84	0.61	77.8	Pulse	0.30	3
3	Sc		170,885.11	1.45	78.9	Pulse	0.30	3
3	Ge		105,379.17	0.85	75.1	Pulse	0.30	3
3	Ge		160,462.13	1.04	75.9	Pulse	0.30	3
3	Rh		1,556,890.67	0.39	71.4	Pulse	0.30	3
3	Tb		2,912,690.65	0.15	79.5	Pulse	0.30	3

Quantitation Report

File Name	091SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:42
Sample Name	jc94351-5
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	9/11/2019 11:44
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	5.71	180.00	1.694E-04	Pulse	0.25	3
B			1	292.139	ug/l	1.03	593,422.01	5.584E-01	Pulse	0.15	3
Ca			1	213541.628	ug/l	0.78	81,267,922.12	3.623E+01	Analog	0.10	3
Sr			1	1061.765	ug/l	0.78	20,553,691.36	7.065E+00	Analog	0.10	3
Mo			1	13.306	ug/l	1.68	48,216.72	1.657E-02	Pulse	0.10	3
Ag			1	0.067	ug/l	12.81	660.04	2.074E-04	Pulse	0.10	3
Sn			1	1.122	ug/l	3.93	9,403.17	2.955E-03	Pulse	0.10	3
Sb			1	33.211	ug/l	0.45	246,494.12	5.316E-02	Pulse	0.10	3
Ba			1	70.553	ug/l	1.08	220,336.74	4.752E-02	Pulse	0.10	3
Tl			1	0.142	ug/l	3.37	2,630.36	1.021E-03	Pulse	0.10	3
Pb			1	38.977	ug/l	0.29	231,234.60	8.977E-02	Pulse	0.10	3
Pb			1	37.038	ug/l	0.67	193,389.09	7.508E-02	Pulse	0.10	3
Pb			1	37.761	ug/l	0.20	905,553.53	3.515E-01	Pulse	0.10	3
Na			2	228952.910	ug/l	1.34	131,701,825.88	9.862E+02	Analog	0.30	3
Mg			2	31604.749	ug/l	1.10	8,424,748.55	6.308E+01	Analog	0.30	3
Al			2	1581.581	ug/l	1.50	144,051.31	1.079E+00	Pulse	0.30	3
K			2	28886.905	ug/l	0.49	6,369,097.11	4.768E+01	Analog	0.30	3
Ca			2	218730.794	ug/l	0.97	2,428,687.89	1.818E+01	Pulse	0.30	3
Ti			2	42.820	ug/l	4.88	3,532.66	2.646E-02	Pulse	0.30	3
V			2	5.667	ug/l	1.07	15,404.01	1.153E-01	Pulse	0.30	3
Cr			2	95.673	ug/l	1.48	325,174.48	2.435E+00	Pulse	0.30	3
Mn			2	1278.396	ug/l	1.04	2,322,563.73	1.739E+01	Pulse	0.30	3
Fe			2	10759.382	ug/l	1.86	28,547,355.53	2.138E+02	Analog	0.30	3
Co			2	0.691	ug/l	0.49	3,738.96	2.799E-02	Pulse	0.30	3
Ni			2	2.787	ug/l	3.11	4,076.10	3.052E-02	Pulse	0.30	3
Cu			2	5.147	ug/l	2.45	26,504.81	1.985E-01	Pulse	0.30	3
Zn			2	47.521	ug/l	1.28	28,824.36	2.158E-01	Pulse	0.30	3
As			2	22.415	ug/l	1.72	7,491.41	5.610E-02	Pulse	1.00	3
Cd			2	0.054	ug/l	54.38	59.50	7.471E-05	Pulse	0.30	3
Sn			2	1.080	ug/l	3.92	3,048.11	3.843E-03	Pulse	0.30	3
Se			3	0.433	ug/l	15.23	35.67	2.383E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,062,709.27	0.74	85.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,242,941.48	0.85	79.7	Pulse	0.10	3
1	Ge		443,320.79	1.46	77.7	Pulse	0.10	3
1	Ge		619,177.36	1.31	78.0	Pulse	0.10	3
1	Rh		2,909,114.44	0.54	75.6	Pulse	0.10	3
1	In		3,182,898.59	1.00	79.9	Pulse	0.10	3
1	Tb		4,637,129.41	0.67	83.7	Pulse	0.10	3
1	Ho		458,875.23	0.80	83.4	Pulse	0.10	3
1	Bi		2,575,976.63	0.48	77.2	Pulse	0.10	3
2	Sc		133,580.46	2.42	83.1	Pulse	0.30	3
2	Ge		80,538.03	2.00	80.9	Pulse	0.30	3
2	Ge		120,516.52	1.93	80.4	Pulse	0.30	3
2	Rh		1,828,431.25	1.75	75.1	Pulse	0.30	3
2	In		792,944.81	2.04	81.6	Pulse	0.30	3
2	Tb		2,697,114.61	1.49	82.4	Pulse	0.30	3
2	Ho		277,681.69	1.08	83.1	Pulse	0.30	3
2	Bi		1,720,274.34	1.49	76.8	Pulse	0.30	3
3	Sc		156,968.20	7.37	72.5	Pulse	0.30	3
3	Ge		99,898.04	4.67	71.2	Pulse	0.30	3
3	Ge		150,373.35	5.01	71.1	Pulse	0.30	3
3	Rh		1,441,980.26	6.79	66.1	Pulse	0.30	3
3	Tb		2,697,341.77	7.25	73.6	Pulse	0.30	3

Quantitation Report

File Name	092SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:47
Sample Name	mp17229-mb1 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	9/11/2019 11:44
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	0.013	ug/l	49.50	36.00	3.207E-05	Pulse	0.25	3
B			1	37.248	ug/l	3.45	37,840.06	3.376E-02	Pulse	0.15	3
Ca			1	132.717	ug/l	7.46	30,502.05	1.332E-02	Pulse	0.10	3
Sr			1	0.675	ug/l	11.11	6,201.44	1.900E-03	Pulse	0.10	3
Mo			1	0.460	ug/l	18.88	890.06	2.725E-04	Pulse	0.10	3
Ag			1	0.060	ug/l	4.94	270.01	7.865E-05	Pulse	0.10	3
Sn			1	13.499	ug/l	0.77	38,588.01	1.124E-02	Pulse	0.10	3
Sb			1	0.242	ug/l	12.40	1,030.08	2.173E-04	Pulse	0.10	3
Ba			1	0.279	ug/l	42.69	430.02	9.090E-05	Pulse	0.10	3
Tl			1	0.044	ug/l	25.65	553.36	1.904E-04	Pulse	0.10	3
Pb			1	0.121	ug/l	33.58	573.37	1.973E-04	Pulse	0.10	3
Pb			1	0.174	ug/l	18.03	630.04	2.169E-04	Pulse	0.10	3
Pb			1	0.138	ug/l	9.84	2,593.53	8.928E-04	Pulse	0.10	3
Na			2	336.135	ug/l	9.95	92,616.13	6.529E-01	Pulse	0.30	3
Mg			2	18.988	ug/l	14.08	2,434.66	1.718E-02	Pulse	0.30	3
Al			2	3.031	ug/l	24.63	734.47	5.162E-03	Pulse	0.30	3
K			2	25.144	ug/l	43.56	14,557.56	1.026E-01	Pulse	0.30	3
Ca			2	112.808	ug/l	14.32	631.13	4.449E-03	Pulse	0.30	3
Ti			2	0.939	ug/l	50.11	34.44	2.459E-04	Pulse	0.30	3
V			2	0.066	ug/l	37.20	341.12	2.404E-03	Pulse	0.30	3
Cr			2	0.785	ug/l	6.69	1,992.37	1.400E-02	Pulse	0.30	3
Mn			2	0.626	ug/l	12.50	613.35	4.319E-03	Pulse	0.30	3
Fe			2	20.773	ug/l	7.59	28,958.81	2.039E-01	Pulse	0.30	3
Co			2	0.016	ug/l	72.92	84.37	5.993E-04	Pulse	0.30	3
Ni			2	0.251	ug/l	13.25	303.34	2.126E-03	Pulse	0.30	3
Cu			2	-1.741	ug/l	-5.68	4,365.08	3.071E-02	Pulse	0.30	3
Zn			2	-0.048	ug/l	-927.07	1,312.29	9.249E-03	Pulse	0.30	3
As			2	0.094	ug/l	29.87	33.00	2.328E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.015	ug/l	200.68	17.71	2.041E-05	Pulse	0.30	3
Sn			2	13.087	ug/l	7.33	12,482.93	1.418E-02	Pulse	0.30	3
Se			3	0.301	ug/l	36.12	13.53	8.019E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,121,259.56	1.24	89.8	Pulse	0.10	3
1	Sc		2,290,379.29	0.99	81.4	Pulse	0.10	3
1	Ge		469,228.03	1.40	82.3	Pulse	0.10	3
1	Ge		658,762.93	1.18	83.0	Pulse	0.10	3
1	Rh		3,267,973.91	1.65	84.9	Pulse	0.10	3
1	In		3,434,050.30	1.48	86.2	Pulse	0.10	3
1	Tb		4,744,790.66	1.72	85.7	Pulse	0.10	3
1	Ho		470,202.31	1.47	85.5	Pulse	0.10	3
1	Bi		2,904,275.89	1.19	87.0	Pulse	0.10	3
2	Sc		142,315.26	5.64	88.6	Pulse	0.30	3
2	Ge		87,937.50	3.87	88.4	Pulse	0.30	3
2	Ge		131,376.90	3.66	87.6	Pulse	0.30	3
2	Rh		2,139,350.33	5.60	87.9	Pulse	0.30	3
2	In		881,695.65	4.69	90.7	Pulse	0.30	3
2	Tb		2,894,329.33	5.45	88.4	Pulse	0.30	3
2	Ho		293,539.70	5.84	87.8	Pulse	0.30	3
2	Bi		1,989,385.20	3.90	88.9	Pulse	0.30	3
3	Sc		172,269.26	0.44	79.5	Pulse	0.30	3
3	Ge		110,840.32	1.38	79.0	Pulse	0.30	3
3	Ge		168,797.26	0.43	79.8	Pulse	0.30	3
3	Rh		1,743,366.67	0.30	79.9	Pulse	0.30	3
3	Tb		2,968,361.41	0.31	81.0	Pulse	0.30	3

Quantitation Report

File Name	093SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:52
Sample Name	mp17229-b1
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	9/11/2019 11:44
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	162.639	ug/l	1.06	198,265.36	1.751E-01	Pulse	0.25	3
B			1	168.996	ug/l	1.78	151,161.86	1.335E-01	Pulse	0.15	3
Ca			1	9539.631	ug/l	0.25	1,497,646.18	6.517E-01	Pulse	0.10	3
Sr			1	186.484	ug/l	0.72	1,593,892.84	4.965E-01	Pulse	0.10	3
Mo			1	183.776	ug/l	1.15	293,317.92	9.136E-02	Pulse	0.10	3
Ag			1	88.664	ug/l	1.02	360,276.16	1.068E-01	Pulse	0.10	3
Sn			1	195.711	ug/l	1.60	514,185.11	1.524E-01	Pulse	0.10	3
Sb			1	194.203	ug/l	0.92	588,931.66	1.243E-01	Pulse	0.10	3
Ba			1	186.462	ug/l	0.69	238,088.76	5.023E-02	Pulse	0.10	3
Tl			1	183.768	ug/l	0.47	1,372,660.40	4.898E-01	Pulse	0.10	3
Pb			1	188.629	ug/l	1.07	486,745.10	1.737E-01	Pulse	0.10	3
Pb			1	191.029	ug/l	0.32	433,835.94	1.548E-01	Pulse	0.10	3
Pb			1	188.909	ug/l	0.54	1,970,384.85	7.031E-01	Pulse	0.10	3
Na			2	9296.075	ug/l	0.95	2,202,389.91	1.609E+01	Pulse	0.30	3
Mg			2	9086.926	ug/l	1.27	993,336.90	7.256E+00	Pulse	0.30	3
Al			2	9162.870	ug/l	1.87	341,381.56	2.494E+00	Pulse	0.30	3
K			2	9349.020	ug/l	1.25	855,263.20	6.248E+00	Pulse	0.30	3
Ca			2	10256.257	ug/l	1.32	46,778.82	3.417E-01	Pulse	0.30	3
Ti			2	183.345	ug/l	3.50	6,204.56	4.532E-02	Pulse	0.30	3
V			2	182.074	ug/l	1.80	199,842.56	1.460E+00	Pulse	0.30	3
Cr			2	178.228	ug/l	1.40	248,569.98	1.816E+00	Pulse	0.30	3
Mn			2	183.296	ug/l	0.92	136,644.28	9.982E-01	Pulse	0.30	3
Fe			2	9850.244	ug/l	0.48	10,720,003.46	7.831E+01	Analog	0.30	3
Co			2	178.169	ug/l	0.81	390,383.39	2.852E+00	Pulse	0.30	3
Ni			2	176.757	ug/l	0.91	102,435.14	7.483E-01	Pulse	0.30	3
Cu			2	184.754	ug/l	1.10	297,349.56	2.172E+00	Pulse	0.30	3
Zn			2	187.557	ug/l	2.39	45,902.00	3.353E-01	Pulse	0.30	3
As			2	184.157	ug/l	0.34	25,193.67	1.840E-01	Pulse	1.00	3
Cd			2	179.884	ug/l	1.02	68,062.63	8.174E-02	Pulse	0.30	3
Sn			2	194.172	ug/l	0.65	161,931.97	1.945E-01	Pulse	0.30	3
Se			3	474.375	ug/l	0.10	15,752.56	9.595E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,132,546.67	1.47	90.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,297,983.72	0.18	81.7	Pulse	0.10	3
1	Ge		470,676.31	0.04	82.5	Pulse	0.10	3
1	Ge		654,236.81	1.19	82.4	Pulse	0.10	3
1	Rh		3,210,733.49	1.25	83.4	Pulse	0.10	3
1	In		3,374,784.22	0.67	84.7	Pulse	0.10	3
1	Tb		4,739,883.78	0.29	85.6	Pulse	0.10	3
1	Ho		469,278.75	1.30	85.3	Pulse	0.10	3
1	Bi		2,802,490.17	0.44	83.9	Pulse	0.10	3
2	Sc		136,898.90	0.99	85.2	Pulse	0.30	3
2	Ge		84,024.45	1.34	84.4	Pulse	0.30	3
2	Ge		126,178.49	0.11	84.1	Pulse	0.30	3
2	Rh		2,014,796.52	0.50	82.8	Pulse	0.30	3
2	In		832,748.94	1.07	85.7	Pulse	0.30	3
2	Tb		2,768,162.67	0.99	84.5	Pulse	0.30	3
2	Ho		283,606.90	0.80	84.8	Pulse	0.30	3
2	Bi		1,873,116.94	0.31	83.7	Pulse	0.30	3
3	Sc		169,739.63	0.16	78.3	Pulse	0.30	3
3	Ge		109,819.33	1.08	78.3	Pulse	0.30	3
3	Ge		164,179.94	0.74	77.6	Pulse	0.30	3
3	Rh		1,701,669.00	0.69	78.0	Pulse	0.30	3
3	Tb		2,965,034.26	0.19	80.9	Pulse	0.30	3

Quantitation Report

File Name	094SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 17:57
Sample Name	mp17229-s1
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	9/11/2019 11:44
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	167.356	ug/l	0.98	197,999.97	1.802E-01	Pulse	0.25	3
B			1	195.759	ug/l	0.35	168,977.98	1.537E-01	Pulse	0.15	3
Ca			1	42806.889	ug/l	0.54	7,014,328.23	2.909E+00	Analog	0.10	3
Sr			1	412.611	ug/l	0.07	3,465,736.72	1.098E+00	Pulse	0.10	3
Mo			1	193.293	ug/l	0.83	303,224.21	9.609E-02	Pulse	0.10	3
Ag			1	103.173	ug/l	0.44	416,630.02	1.242E-01	Pulse	0.10	3
Sn			1	212.172	ug/l	0.74	553,771.25	1.651E-01	Pulse	0.10	3
Sb			1	89.290	ug/l	0.71	273,881.25	5.716E-02	Pulse	0.10	3
Ba			1	1156.570	ug/l	0.55	1,492,495.92	3.115E-01	Pulse	0.10	3
Tl			1	178.390	ug/l	1.53	1,318,530.14	4.755E-01	Pulse	0.10	3
Pb			1	810.062	ug/l	1.04	2,067,713.51	7.456E-01	Pulse	0.10	3
Pb			1	783.766	ug/l	0.42	1,760,802.84	6.349E-01	Pulse	0.10	3
Pb			1	795.400	ug/l	0.63	8,206,525.77	2.959E+00	Pulse	0.10	3
Na			2	10389.795	ug/l	2.25	2,607,002.19	1.797E+01	Pulse	0.30	3
Mg			2	20873.000	ug/l	2.02	2,417,447.40	1.667E+01	Pulse	0.30	3
Al			2	66285.999	ug/l	2.09	2,613,057.05	1.801E+01	Pulse	0.30	3
K			2	15130.214	ug/l	1.28	1,459,146.19	1.006E+01	Pulse	0.30	3
Ca			2	43222.458	ug/l	1.68	208,586.79	1.438E+00	Pulse	0.30	3
Ti			2	2109.029	ug/l	2.17	75,590.34	5.211E-01	Pulse	0.30	3
V			2	391.065	ug/l	1.31	454,584.34	3.134E+00	Pulse	0.30	3
Cr			2	336.438	ug/l	1.19	496,486.23	3.422E+00	Pulse	0.30	3
Mn			2	1049.747	ug/l	1.31	828,721.41	5.712E+00	Pulse	0.30	3
Fe			2	184503.378	ug/l	2.11	212,667,400.44	1.466E+03	Analog	0.30	3
Co			2	361.334	ug/l	2.21	838,851.79	5.783E+00	Pulse	0.30	3
Ni			2	2919.137	ug/l	1.46	1,790,366.04	1.234E+01	Pulse	0.30	3
Cu			2	280618.419	ug/l	0.68	467,516,159.20	3.222E+03	Analog	0.30	3
Zn			2	935.352	ug/l	2.27	237,172.89	1.635E+00	Pulse	0.30	3
As			2	284.806	ug/l	2.35	41,272.45	2.845E-01	Pulse	1.00	3
Cd			2	177.311	ug/l	1.14	67,062.85	8.057E-02	Pulse	0.30	3
Sn			2	212.304	ug/l	0.85	176,893.82	2.125E-01	Pulse	0.30	3
Se			3	522.791	ug/l	0.86	17,512.53	1.057E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,099,076.06	0.46	88.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,410,875.02	0.53	85.7	Pulse	0.10	3
1	Ge		470,804.11	0.55	82.5	Pulse	0.10	3
1	Ge		649,731.23	0.65	81.9	Pulse	0.10	3
1	Rh		3,155,488.49	0.24	82.0	Pulse	0.10	3
1	In		3,353,794.28	0.52	84.2	Pulse	0.10	3
1	Tb		4,791,411.49	0.42	86.5	Pulse	0.10	3
1	Ho		511,799.87	0.47	93.0	Pulse	0.10	3
1	Bi		2,773,416.83	1.31	83.1	Pulse	0.10	3
2	Sc		145,096.01	2.05	90.3	Pulse	0.30	3
2	Ge		85,852.59	0.80	86.3	Pulse	0.30	3
2	Ge		127,379.50	1.56	84.9	Pulse	0.30	3
2	Rh		1,988,712.70	0.34	81.7	Pulse	0.30	3
2	In		832,398.80	0.67	85.7	Pulse	0.30	3
2	Tb		2,817,531.76	0.71	86.1	Pulse	0.30	3
2	Ho		308,911.44	0.94	92.4	Pulse	0.30	3
2	Bi		1,861,241.73	0.52	83.1	Pulse	0.30	3
3	Sc		183,052.43	0.57	84.5	Pulse	0.30	3
3	Ge		112,561.01	2.09	80.2	Pulse	0.30	3
3	Ge		165,625.83	1.01	78.3	Pulse	0.30	3
3	Rh		1,675,146.53	0.38	76.8	Pulse	0.30	3
3	Tb		2,990,852.94	1.06	81.6	Pulse	0.30	3

Quantitation Report

File Name	095SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:02
Sample Name	mp17229-s2
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	9/11/2019 11:44
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	164.547	ug/l	1.36	196,314.71	1.771E-01	Pulse	0.25	3
B			1	195.533	ug/l	1.99	170,204.82	1.536E-01	Pulse	0.15	3
Ca			1	26053.951	ug/l	0.48	4,205,397.33	1.772E+00	Pulse	0.10	3
Sr			1	348.183	ug/l	0.37	2,926,245.48	9.268E-01	Pulse	0.10	3
Mo			1	193.658	ug/l	1.05	303,959.14	9.627E-02	Pulse	0.10	3
Ag			1	93.030	ug/l	0.42	379,500.63	1.120E-01	Pulse	0.10	3
Sn			1	206.954	ug/l	0.80	545,728.04	1.611E-01	Pulse	0.10	3
Sb			1	99.358	ug/l	0.51	307,615.46	6.360E-02	Pulse	0.10	3
Ba			1	879.186	ug/l	0.55	1,145,202.54	2.368E-01	Pulse	0.10	3
Tl			1	181.738	ug/l	0.17	1,366,142.90	4.844E-01	Pulse	0.10	3
Pb			1	644.528	ug/l	0.14	1,673,205.29	5.933E-01	Pulse	0.10	3
Pb			1	623.958	ug/l	0.67	1,425,612.74	5.055E-01	Pulse	0.10	3
Pb			1	632.918	ug/l	0.34	6,641,206.93	2.355E+00	Pulse	0.10	3
Na			2	10187.774	ug/l	0.82	2,478,128.58	1.762E+01	Pulse	0.30	3
Mg			2	17535.883	ug/l	0.33	1,968,721.52	1.400E+01	Pulse	0.30	3
Al			2	63329.055	ug/l	0.18	2,420,029.97	1.721E+01	Pulse	0.30	3
K			2	13953.664	ug/l	0.72	1,305,193.66	9.283E+00	Pulse	0.30	3
Ca			2	27070.153	ug/l	0.09	126,663.22	9.008E-01	Pulse	0.30	3
Ti			2	2091.238	ug/l	0.77	72,654.17	5.167E-01	Pulse	0.30	3
V			2	375.520	ug/l	0.06	423,105.36	3.009E+00	Pulse	0.30	3
Cr			2	315.703	ug/l	0.35	451,605.16	3.212E+00	Pulse	0.30	3
Mn			2	870.781	ug/l	0.10	666,310.83	4.739E+00	Pulse	0.30	3
Fe			2	177427.958	ug/l	0.02	198,242,543.23	1.410E+03	Analog	0.30	3
Co			2	221.931	ug/l	0.57	499,449.71	3.552E+00	Pulse	0.30	3
Ni			2	1549.215	ug/l	0.39	921,027.88	6.550E+00	Pulse	0.30	3
Cu			2	225794.508	ug/l	0.72	364,563,167.74	2.593E+03	Analog	0.30	3
Zn			2	756.847	ug/l	1.00	186,274.05	1.325E+00	Pulse	0.30	3
As			2	275.070	ug/l	0.77	38,641.09	2.748E-01	Pulse	1.00	3
Cd			2	180.470	ug/l	0.93	67,618.55	8.200E-02	Pulse	0.30	3
Sn			2	208.418	ug/l	0.76	172,051.45	2.086E-01	Pulse	0.30	3
Se			3	489.858	ug/l	1.58	16,449.70	9.908E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,108,416.16	1.36	88.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,372,603.14	0.35	84.3	Pulse	0.10	3
1	Ge		468,025.76	0.41	82.1	Pulse	0.10	3
1	Ge		649,307.18	0.39	81.8	Pulse	0.10	3
1	Rh		3,157,258.60	0.81	82.0	Pulse	0.10	3
1	In		3,387,851.10	0.73	85.0	Pulse	0.10	3
1	Tb		4,836,573.88	1.03	87.3	Pulse	0.10	3
1	Ho		511,934.65	0.20	93.1	Pulse	0.10	3
1	Bi		2,820,325.48	0.93	84.5	Pulse	0.10	3
2	Sc		140,611.18	0.95	87.5	Pulse	0.30	3
2	Ge		84,394.04	1.56	84.8	Pulse	0.30	3
2	Ge		125,330.98	0.16	83.6	Pulse	0.30	3
2	Rh		1,971,474.30	0.50	81.0	Pulse	0.30	3
2	In		824,624.99	0.80	84.9	Pulse	0.30	3
2	Tb		2,788,242.88	0.70	85.2	Pulse	0.30	3
2	Ho		302,498.36	1.40	90.5	Pulse	0.30	3
2	Bi		1,852,540.76	0.77	82.7	Pulse	0.30	3
3	Sc		182,037.92	0.69	84.0	Pulse	0.30	3
3	Ge		111,041.72	0.67	79.2	Pulse	0.30	3
3	Ge		166,047.79	1.27	78.5	Pulse	0.30	3
3	Rh		1,672,586.22	0.53	76.7	Pulse	0.30	3
3	Tb		2,996,874.74	0.13	81.8	Pulse	0.30	3

Quantitation Report

File Name	096SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:07
Sample Name	jc94207-16ar
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	9/11/2019 11:44
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	4.101	ug/l	2.47	4,903.44	4.432E-03	Pulse	0.25	3
B			1	49.165	ug/l	2.28	47,326.00	4.278E-02	Pulse	0.15	3
Ca			1	22242.182	ug/l	2.96	3,633,604.01	1.514E+00	Pulse	0.10	3
Sr			1	175.731	ug/l	2.57	1,497,470.03	4.678E-01	Pulse	0.10	3
Mo			1	16.796	ug/l	3.86	26,849.96	8.390E-03	Pulse	0.10	3
Ag			1	7.119	ug/l	4.54	29,401.44	8.578E-03	Pulse	0.10	3
Sn			1	31.577	ug/l	2.70	86,514.09	2.524E-02	Pulse	0.10	3
Sb			1	5.587	ug/l	5.82	18,154.43	3.636E-03	Pulse	0.10	3
Ba			1	763.255	ug/l	6.31	1,026,282.38	2.056E-01	Pulse	0.10	3
Tl			1	1.653	ug/l	3.55	12,822.67	4.480E-03	Pulse	0.10	3
Pb			1	540.233	ug/l	2.06	1,422,741.44	4.973E-01	Pulse	0.10	3
Pb			1	514.888	ug/l	2.34	1,193,336.91	4.171E-01	Pulse	0.10	3
Pb			1	524.279	ug/l	2.05	5,580,781.74	1.951E+00	Pulse	0.10	3
Na			2	1339.126	ug/l	4.64	326,841.02	2.381E+00	Pulse	0.30	3
Mg			2	9503.208	ug/l	4.34	1,041,815.34	7.589E+00	Pulse	0.30	3
Al			2	54653.722	ug/l	5.08	2,038,751.24	1.485E+01	Pulse	0.30	3
K			2	4821.267	ug/l	4.81	448,001.67	3.264E+00	Pulse	0.30	3
Ca			2	23898.326	ug/l	4.85	109,173.61	7.953E-01	Pulse	0.30	3
Ti			2	2143.220	ug/l	4.45	72,698.93	5.296E-01	Pulse	0.30	3
V			2	211.151	ug/l	4.08	232,414.02	1.693E+00	Pulse	0.30	3
Cr			2	154.965	ug/l	3.70	216,893.62	1.580E+00	Pulse	0.30	3
Mn			2	760.013	ug/l	3.96	567,874.01	4.136E+00	Pulse	0.30	3
Fe			2	195458.291	ug/l	5.09	213,173,147.08	1.553E+03	Analog	0.30	3
Co			2	54.393	ug/l	4.42	119,550.61	8.708E-01	Pulse	0.30	3
Ni			2	1090.057	ug/l	4.24	632,801.96	4.609E+00	Pulse	0.30	3
Cu			2	252346.541	ug/l	4.42	397,792,873.08	2.898E+03	Analog	0.30	3
Zn			2	660.039	ug/l	4.21	158,784.06	1.157E+00	Pulse	0.30	3
As			2	115.923	ug/l	4.64	15,909.43	1.159E-01	Pulse	1.00	3
Cd			2	3.059	ug/l	6.00	1,134.69	1.403E-03	Pulse	0.30	3
Sn			2	33.187	ug/l	3.82	27,652.10	3.419E-02	Pulse	0.30	3
Se			3	33.425	ug/l	2.52	1,127.91	6.779E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,106,533.11	1.66	88.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,401,993.45	3.50	85.4	Pulse	0.10	3
1	Ge		467,602.04	1.63	82.0	Pulse	0.10	3
1	Ge		649,492.27	2.17	81.8	Pulse	0.10	3
1	Rh		3,202,047.35	2.34	83.2	Pulse	0.10	3
1	In		3,429,057.56	2.88	86.0	Pulse	0.10	3
1	Tb		5,006,322.84	6.78	90.4	Mix	0.10	3
1	Ho		524,764.44	3.70	95.4	Pulse	0.10	3
1	Bi		2,862,220.17	3.02	85.7	Pulse	0.10	3
2	Sc		137,456.29	4.35	85.5	Pulse	0.30	3
2	Ge		83,434.13	3.50	83.8	Pulse	0.30	3
2	Ge		122,899.05	3.94	82.0	Pulse	0.30	3
2	Rh		1,942,917.42	3.77	79.8	Pulse	0.30	3
2	In		809,429.22	3.77	83.3	Pulse	0.30	3
2	Tb		2,751,707.18	3.41	84.0	Pulse	0.30	3
2	Ho		306,618.58	3.71	91.7	Pulse	0.30	3
2	Bi		1,833,879.23	3.01	81.9	Pulse	0.30	3
3	Sc		182,380.38	0.27	84.2	Pulse	0.30	3
3	Ge		112,994.34	1.22	80.6	Pulse	0.30	3
3	Ge		166,429.45	1.29	78.7	Pulse	0.30	3
3	Rh		1,699,223.41	0.52	77.9	Pulse	0.30	3
3	Tb		3,023,326.34	0.32	82.5	Pulse	0.30	3

Quantitation Report

File Name	097_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:12
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	9/11/2019 11:44
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	44.087	ug/l	0.71	258,672.84	2.373E-01	Pulse	0.25	3
B			1	86.227	ug/l	0.50	361,840.95	3.319E-01	Pulse	0.15	3
Ca			1	5014.240	ug/l	0.52	3,784,279.42	1.706E+00	Pulse	0.10	3
Sr			1	51.507	ug/l	0.57	2,154,651.17	6.856E-01	Pulse	0.10	3
Mo			1	50.585	ug/l	0.01	395,145.05	1.257E-01	Pulse	0.10	3
Ag			1	49.067	ug/l	0.17	985,186.08	2.954E-01	Pulse	0.10	3
Sn			1	50.148	ug/l	0.58	650,324.93	1.950E-01	Pulse	0.10	3
Sb			1	52.265	ug/l	0.60	796,487.91	1.672E-01	Pulse	0.10	3
Ba			1	50.756	ug/l	0.66	325,707.34	6.836E-02	Pulse	0.10	3
Tl			1	50.784	ug/l	0.50	1,892,295.18	6.768E-01	Pulse	0.10	3
Pb			1	50.669	ug/l	0.66	652,193.58	2.332E-01	Pulse	0.10	3
Pb			1	50.525	ug/l	0.35	572,359.61	2.047E-01	Pulse	0.10	3
Pb			1	50.579	ug/l	0.22	2,631,474.90	9.411E-01	Pulse	0.10	3
Na			2	5007.928	ug/l	0.33	5,872,481.71	4.321E+01	Analog	0.30	3
Mg			2	4744.069	ug/l	0.48	2,573,786.84	1.894E+01	Pulse	0.30	3
Al			2	4790.064	ug/l	0.57	884,940.17	6.512E+00	Pulse	0.30	3
K			2	4902.808	ug/l	0.29	2,207,454.56	1.624E+01	Pulse	0.30	3
Ca			2	5102.129	ug/l	0.72	115,377.01	8.490E-01	Pulse	0.30	3
Ti			2	49.425	ug/l	2.04	8,299.94	6.107E-02	Pulse	0.30	3
V			2	49.418	ug/l	0.32	269,165.80	1.981E+00	Pulse	0.30	3
Cr			2	48.468	ug/l	0.41	335,255.14	2.467E+00	Pulse	0.30	3
Mn			2	49.890	ug/l	0.25	184,574.22	1.358E+00	Pulse	0.30	3
Fe			2	5140.668	ug/l	1.13	27,761,061.12	2.043E+02	Analog	0.30	3
Co			2	48.308	ug/l	0.61	525,399.94	3.866E+00	Pulse	0.30	3
Ni			2	48.121	ug/l	0.82	138,377.31	1.018E+00	Pulse	0.30	3
Cu			2	55.393	ug/l	0.99	439,099.32	3.231E+00	Pulse	0.30	3
Zn			2	48.778	ug/l	0.35	58,879.59	4.332E-01	Pulse	0.30	3
As			2	49.923	ug/l	0.73	33,894.62	2.494E-01	Pulse	1.00	3
Cd			2	49.225	ug/l	0.58	92,547.81	1.118E-01	Pulse	0.30	3
Sn			2	49.554	ug/l	0.53	205,086.28	2.478E-01	Pulse	0.30	3
Se			3	194.999	ug/l	0.57	33,256.16	1.972E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,090,124.82	0.20	87.3	Pulse	0.10	3
1	Sc		2,218,544.91	0.51	78.9	Pulse	0.10	3
1	Ge		458,072.92	0.57	80.3	Pulse	0.10	3

Quantitation Report

1	Ge		642,888.09	0.50	81.0	Pulse	0.10	3
1	Rh		3,142,902.77	0.50	81.6	Pulse	0.10	3
1	In		3,335,125.11	1.02	83.7	Pulse	0.10	3
1	Tb		4,764,413.05	0.32	86.0	Pulse	0.10	3
1	Ho		470,585.68	0.24	85.5	Pulse	0.10	3
1	Bi		2,796,133.60	0.30	83.8	Pulse	0.10	3
2	Sc		135,903.18	0.35	84.6	Pulse	0.30	3
2	Ge		83,805.65	0.78	84.2	Pulse	0.30	3
2	Ge		126,308.56	1.41	84.2	Pulse	0.30	3
2	Rh		2,005,773.18	0.46	82.4	Pulse	0.30	3
2	In		827,567.79	0.41	85.2	Pulse	0.30	3
2	Tb		2,795,634.61	0.73	85.4	Pulse	0.30	3
2	Ho		286,887.43	0.44	85.8	Pulse	0.30	3
2	Bi		1,861,317.70	0.37	83.1	Pulse	0.30	3
3	Sc		175,247.00	1.03	80.9	Pulse	0.30	3
3	Ge		111,852.95	0.89	79.7	Pulse	0.30	3
3	Ge		168,658.11	0.29	79.7	Pulse	0.30	3
3	Rh		1,712,224.86	0.44	78.5	Pulse	0.30	3
3	Tb		3,007,298.35	1.04	82.1	Pulse	0.30	3

Quantitation Report

File Name	098_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:17
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	9/11/2019 11:44
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	35.34	104.00	9.483E-05	Pulse	0.25	3
B			1	4.455	ug/l	1.69	24,573.57	2.242E-02	Pulse	0.15	3
Ca			1	1.463	ug/l	26.90	10,663.80	4.811E-03	Pulse	0.10	3
Sr			1	0.018	ug/l	15.81	1,096.75	3.395E-04	Pulse	0.10	3
Mo			1	0.069	ug/l	23.46	693.37	2.145E-04	Pulse	0.10	3
Ag			1	0.009	ug/l	12.82	206.68	6.119E-05	Pulse	0.10	3
Sn			1	0.143	ug/l	5.20	4,520.83	1.337E-03	Pulse	0.10	3
Sb			1	0.048	ug/l	25.75	1,030.07	2.153E-04	Pulse	0.10	3
Ba			1	0.029	ug/l	25.50	260.01	5.444E-05	Pulse	0.10	3
Tl			1	0.023	ug/l	9.95	1,083.42	3.776E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	3.58	420.02	1.463E-04	Pulse	0.10	3
Pb			1	0.016	ug/l	41.62	406.69	1.416E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	14.52	1,886.79	6.573E-04	Pulse	0.10	3
Na			2	15.749	ug/l	0.95	28,171.29	2.095E-01	Pulse	0.30	3
Mg			2	0.755	ug/l	14.94	677.80	5.039E-03	Pulse	0.30	3
Al			2	2.092	ug/l	3.12	965.60	7.180E-03	Pulse	0.30	3
K			2	0.486	ug/l	141.57	11,779.81	8.759E-02	Pulse	0.30	3
Ca			2	2.758	ug/l	34.98	155.56	1.157E-03	Pulse	0.30	3
Ti			2	0.022	ug/l	137.83	5.56	4.131E-05	Pulse	0.30	3
V			2	-0.006	ug/l	-155.03	217.78	1.618E-03	Pulse	0.30	3
Cr			2	0.008	ug/l	218.45	862.26	6.410E-03	Pulse	0.30	3
Mn			2	0.014	ug/l	49.88	173.33	1.289E-03	Pulse	0.30	3
Fe			2	1.916	ug/l	7.40	15,470.79	1.150E-01	Pulse	0.30	3
Co			2	0.008	ug/l	56.29	126.63	9.406E-04	Pulse	0.30	3
Ni			2	0.036	ug/l	42.37	246.67	1.833E-03	Pulse	0.30	3
Cu			2	2.742	ug/l	8.69	27,991.73	2.081E-01	Pulse	0.30	3
Zn			2	-0.151	ug/l	-20.19	1,078.94	8.022E-03	Pulse	0.30	3
As			2	0.018	ug/l	40.76	30.67	2.280E-04	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	115.70	19.91	2.369E-05	Pulse	0.30	3
Sn			2	0.148	ug/l	17.29	1,585.65	1.889E-03	Pulse	0.30	3
Se			3	0.134	ug/l	15.21	26.53	1.549E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,096,056.64	0.95	87.8	Pulse	0.10	3
1	Sc		2,216,870.96	1.21	78.8	Pulse	0.10	3
1	Ge		459,412.06	1.11	80.5	Pulse	0.10	3
1	Ge		642,502.40	1.07	80.9	Pulse	0.10	3
1	Rh		3,228,099.02	1.11	83.9	Pulse	0.10	3
1	In		3,381,088.32	1.48	84.8	Pulse	0.10	3
1	Tb		4,779,907.12	1.02	86.3	Pulse	0.10	3
1	Ho		472,349.76	1.50	85.9	Pulse	0.10	3
1	Bi		2,870,362.98	0.98	86.0	Pulse	0.10	3
2	Sc		134,488.08	0.40	83.7	Pulse	0.30	3
2	Ge		83,626.84	0.80	84.0	Pulse	0.30	3
2	Ge		126,048.54	0.48	84.1	Pulse	0.30	3
2	Rh		2,047,068.81	1.12	84.1	Pulse	0.30	3
2	In		839,253.63	0.89	86.4	Pulse	0.30	3
2	Tb		2,790,912.32	0.88	85.2	Pulse	0.30	3
2	Ho		284,847.76	0.73	85.2	Pulse	0.30	3
2	Bi		1,899,061.17	1.11	84.8	Pulse	0.30	3
3	Sc		176,274.65	0.69	81.4	Pulse	0.30	3
3	Ge		113,113.94	0.40	80.6	Pulse	0.30	3
3	Ge		171,378.92	0.94	81.0	Pulse	0.30	3
3	Rh		1,760,332.98	0.25	80.7	Pulse	0.30	3
3	Tb		3,012,075.51	0.60	82.2	Pulse	0.30	3

Quantitation Report

File Name	099SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:22
Sample Name	mp17229-sd1
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/11/2019 11:44
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	4.825	ug/l	17.04	1,122.72	1.057E-03	Pulse	0.25	3
B			1	92.093	ug/l	15.03	20,788.73	1.950E-02	Pulse	0.15	3
Ca			1	27481.929	ug/l	13.28	782,937.20	3.773E-01	Pulse	0.10	3
Sr			1	200.836	ug/l	12.83	312,162.54	1.070E-01	Pulse	0.10	3
Mo			1	20.650	ug/l	17.66	6,091.40	2.096E-03	Pulse	0.10	3
Ag			1	8.376	ug/l	13.74	6,198.13	2.024E-03	Pulse	0.10	3
Sn			1	36.450	ug/l	12.75	19,736.30	6.428E-03	Pulse	0.10	3
Sb			1	7.882	ug/l	7.76	4,577.50	1.071E-03	Pulse	0.10	3
Ba			1	929.567	ug/l	13.40	212,893.32	5.008E-02	Pulse	0.10	3
Tl			1	2.185	ug/l	15.34	3,220.46	1.239E-03	Pulse	0.10	3
Pb			1	619.278	ug/l	12.34	296,603.84	1.141E-01	Pulse	0.10	3
Pb			1	588.182	ug/l	11.69	248,093.13	9.536E-02	Pulse	0.10	3
Pb			1	597.037	ug/l	12.16	1,156,089.77	4.446E-01	Pulse	0.10	3
Na			2	1707.255	ug/l	0.60	97,222.59	6.621E-01	Pulse	0.30	3
Mg			2	9594.595	ug/l	0.81	225,255.97	1.534E+00	Pulse	0.30	3
Al			2	55019.360	ug/l	0.59	439,674.65	2.994E+00	Pulse	0.30	3
K			2	4851.517	ug/l	1.81	106,536.62	7.255E-01	Pulse	0.30	3
Ca			2	24088.158	ug/l	0.45	23,626.88	1.609E-01	Pulse	0.30	3
Ti			2	2134.286	ug/l	1.66	15,490.66	1.055E-01	Pulse	0.30	3
V			2	208.443	ug/l	0.56	49,300.83	3.357E-01	Pulse	0.30	3
Cr			2	154.620	ug/l	0.84	46,997.54	3.200E-01	Pulse	0.30	3
Mn			2	764.991	ug/l	1.06	122,375.21	8.334E-01	Pulse	0.30	3
Fe			2	196449.814	ug/l	0.66	45,850,913.73	3.122E+02	Analog	0.30	3
Co			2	54.725	ug/l	1.57	25,772.16	1.755E-01	Pulse	0.30	3
Ni			2	1093.174	ug/l	0.86	135,884.71	9.253E-01	Pulse	0.30	3
Cu			2	256839.030	ug/l	0.68	86,625,165.44	5.899E+02	Analog	0.30	3
Zn			2	732.253	ug/l	0.34	38,751.26	2.639E-01	Pulse	0.30	3
As			2	123.046	ug/l	1.41	3,629.08	2.471E-02	Pulse	1.00	3
Cd			2	3.237	ug/l	4.14	274.02	3.077E-04	Pulse	0.30	3
Sn			2	28.593	ug/l	2.43	6,097.93	6.848E-03	Pulse	0.30	3
Se			3	39.786	ug/l	3.63	290.27	1.628E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,074,119.35	10.57	86.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,098,566.69	12.90	74.6	Pulse	0.10	3
1	Ge		444,798.26	11.35	78.0	Pulse	0.10	3
1	Ge		614,169.51	10.80	77.4	Pulse	0.10	3
1	Rh		2,950,796.99	13.40	76.7	Pulse	0.10	3
1	In		3,101,396.92	13.57	77.8	Pulse	0.10	3
1	Tb		4,304,033.48	14.02	77.7	Pulse	0.10	3
1	Ho		432,783.37	13.63	78.7	Pulse	0.10	3
1	Bi		2,627,154.08	12.57	78.7	Pulse	0.10	3
2	Sc		146,849.96	0.36	91.4	Pulse	0.30	3
2	Ge		89,910.93	0.28	90.3	Pulse	0.30	3
2	Ge		134,610.64	0.16	89.8	Pulse	0.30	3
2	Rh		2,147,350.40	0.78	88.2	Pulse	0.30	3
2	In		890,492.44	0.49	91.6	Pulse	0.30	3
2	Tb		2,931,831.06	0.19	89.5	Pulse	0.30	3
2	Ho		303,583.58	0.28	90.8	Pulse	0.30	3
2	Bi		1,989,410.27	0.37	88.9	Pulse	0.30	3
3	Sc		185,629.68	0.39	85.7	Pulse	0.30	3
3	Ge		117,859.19	1.22	84.0	Pulse	0.30	3
3	Ge		178,218.04	0.78	84.2	Pulse	0.30	3
3	Rh		1,813,874.93	0.29	83.2	Pulse	0.30	3
3	Tb		3,115,838.35	0.45	85.1	Pulse	0.30	3

Quantitation Report

File Name	100SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:27
Sample Name	jc94365-1
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	9/11/2019 11:44
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	4.607	ug/l	13.24	5,091.49	4.978E-03	Pulse	0.25	3
B			1	140.252	ug/l	14.85	114,134.81	1.117E-01	Pulse	0.15	3
Ca			1	54417.038	ug/l	15.15	8,363,039.25	3.697E+00	Analog	0.10	3
Sr			1	380.986	ug/l	16.03	2,910,595.48	1.014E+00	Pulse	0.10	3
Mo			1	13.402	ug/l	21.02	19,155.51	6.704E-03	Pulse	0.10	3
Ag			1	16.559	ug/l	14.19	61,647.27	1.994E-02	Pulse	0.10	3
Sn			1	198.971	ug/l	14.37	478,655.28	1.549E-01	Pulse	0.10	3
Sb			1	6.704	ug/l	14.53	19,162.38	4.350E-03	Pulse	0.10	3
Ba			1	1060.347	ug/l	16.02	1,255,741.54	2.856E-01	Pulse	0.10	3
Tl			1	1.378	ug/l	15.08	9,877.05	3.746E-03	Pulse	0.10	3
Pb			1	981.452	ug/l	14.10	2,382,232.36	9.034E-01	Pulse	0.10	3
Pb			1	936.798	ug/l	13.64	2,001,962.89	7.589E-01	Pulse	0.10	3
Pb			1	952.341	ug/l	13.85	9,345,050.38	3.543E+00	Pulse	0.10	3
Na			2	43131.838	ug/l	1.29	11,160,239.83	7.438E+01	Analog	0.30	3
Mg			2	34170.579	ug/l	1.29	4,093,373.87	2.728E+01	Pulse	0.30	3
Al			2	76987.021	ug/l	0.63	3,139,231.61	2.092E+01	Pulse	0.30	3
K			2	17619.756	ug/l	1.13	1,755,370.90	1.170E+01	Pulse	0.30	3
Ca			2	49156.408	ug/l	1.11	245,352.54	1.635E+00	Pulse	0.30	3
Ti			2	1927.952	ug/l	0.43	71,480.21	4.764E-01	Pulse	0.30	3
V			2	202.411	ug/l	0.11	243,499.52	1.623E+00	Pulse	0.30	3
Cr			2	445.188	ug/l	1.02	679,196.26	4.527E+00	Pulse	0.30	3
Mn			2	1478.665	ug/l	0.81	1,207,283.87	8.046E+00	Pulse	0.30	3
Fe			2	156435.426	ug/l	1.40	186,511,388.14	1.243E+03	Analog	0.30	3
Co			2	44.470	ug/l	0.90	106,839.18	7.120E-01	Pulse	0.30	3
Ni			2	161.843	ug/l	1.51	102,816.38	6.853E-01	Pulse	0.30	3
Cu			2	1307.227	ug/l	1.23	2,259,834.22	1.506E+01	Pulse	0.30	3
Zn			2	1390.273	ug/l	1.17	363,976.73	2.426E+00	Pulse	0.30	3
As			2	104.292	ug/l	0.67	15,647.50	1.043E-01	Pulse	1.00	3
Cd			2	10.797	ug/l	3.64	4,161.29	4.919E-03	Pulse	0.30	3
Sn			2	177.928	ug/l	0.38	150,822.84	1.783E-01	Pulse	0.30	3
Se			3	16.446	ug/l	14.17	579.94	3.345E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,032,737.70	11.56	82.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,291,786.74	12.98	81.5	Pulse	0.10	3
1	Ge		449,265.36	11.00	78.8	Pulse	0.10	3
1	Ge		612,504.04	11.11	77.2	Pulse	0.10	3
1	Rh		2,913,423.39	13.95	75.7	Pulse	0.10	3
1	In		3,129,169.34	13.08	78.5	Pulse	0.10	3
1	Tb		4,462,634.73	13.74	80.6	Pulse	0.10	3
1	Ho		474,766.93	11.94	86.3	Pulse	0.10	3
1	Bi		2,668,005.22	12.34	79.9	Pulse	0.10	3
2	Sc		150,049.89	0.56	93.4	Pulse	0.30	3
2	Ge		88,146.12	1.18	88.6	Pulse	0.30	3
2	Ge		129,382.24	1.45	86.3	Pulse	0.30	3
2	Rh		2,031,258.67	0.78	83.4	Pulse	0.30	3
2	In		845,942.74	0.83	87.0	Pulse	0.30	3
2	Tb		2,849,908.71	0.53	87.0	Pulse	0.30	3
2	Ho		311,821.09	0.56	93.3	Pulse	0.30	3
2	Bi		1,906,878.47	0.22	85.2	Pulse	0.30	3
3	Sc		194,752.92	18.92	89.9	Pulse	0.30	3
3	Ge		118,071.04	14.66	84.2	Pulse	0.30	3
3	Ge		175,657.28	13.93	83.0	Pulse	0.30	3
3	Rh		1,751,234.65	18.70	80.3	Pulse	0.30	3
3	Tb		3,217,414.73	23.15	87.8	Mix	0.30	3

Quantitation Report

File Name	101SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:32
Sample Name	jc94365-2
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	9/11/2019 11:44
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	4.046	ug/l	3.14	4,912.78	4.373E-03	Pulse	0.25	3
B			1	128.124	ug/l	1.48	115,190.16	1.025E-01	Pulse	0.15	3
Ca			1	25251.936	ug/l	0.64	4,316,980.56	1.718E+00	Pulse	0.10	3
Sr			1	250.507	ug/l	0.32	2,165,641.37	6.669E-01	Pulse	0.10	3
Mo			1	11.043	ug/l	1.35	17,964.07	5.532E-03	Pulse	0.10	3
Ag			1	15.307	ug/l	1.84	63,641.94	1.844E-02	Pulse	0.10	3
Sn			1	167.032	ug/l	0.33	449,284.41	1.302E-01	Pulse	0.10	3
Sb			1	5.516	ug/l	1.00	17,710.76	3.590E-03	Pulse	0.10	3
Ba			1	904.787	ug/l	0.71	1,202,048.76	2.437E-01	Pulse	0.10	3
Tl			1	1.242	ug/l	11.10	9,770.24	3.385E-03	Pulse	0.10	3
Pb			1	889.930	ug/l	0.23	2,364,068.71	8.191E-01	Pulse	0.10	3
Pb			1	853.171	ug/l	0.54	1,994,638.88	6.911E-01	Pulse	0.10	3
Pb			1	867.040	ug/l	0.39	9,309,437.73	3.226E+00	Pulse	0.10	3
Na			2	48143.609	ug/l	0.56	12,242,076.46	8.301E+01	Analog	0.30	3
Mg			2	32873.164	ug/l	0.56	3,870,480.54	2.625E+01	Pulse	0.30	3
Al			2	73073.084	ug/l	0.21	2,928,548.91	1.986E+01	Pulse	0.30	3
K			2	17304.650	ug/l	0.41	1,694,651.32	1.149E+01	Pulse	0.30	3
Ca			2	26112.593	ug/l	0.80	128,151.76	8.690E-01	Pulse	0.30	3
Ti			2	1895.909	ug/l	0.46	69,086.22	4.685E-01	Pulse	0.30	3
V			2	196.652	ug/l	0.42	232,513.99	1.577E+00	Pulse	0.30	3
Cr			2	455.620	ug/l	0.53	683,174.80	4.633E+00	Pulse	0.30	3
Mn			2	1320.016	ug/l	0.60	1,059,267.60	7.183E+00	Pulse	0.30	3
Fe			2	144056.217	ug/l	0.46	168,810,486.62	1.145E+03	Analog	0.30	3
Co			2	42.175	ug/l	0.55	99,588.25	6.753E-01	Pulse	0.30	3
Ni			2	157.262	ug/l	0.94	98,198.65	6.659E-01	Pulse	0.30	3
Cu			2	1343.759	ug/l	0.51	2,282,939.98	1.548E+01	Pulse	0.30	3
Zn			2	1344.444	ug/l	0.51	345,987.77	2.346E+00	Pulse	0.30	3
As			2	100.493	ug/l	1.83	14,818.39	1.005E-01	Pulse	1.00	3
Cd			2	12.467	ug/l	2.25	4,764.99	5.677E-03	Pulse	0.30	3
Sn			2	167.261	ug/l	0.88	140,738.36	1.677E-01	Pulse	0.30	3
Se			3	15.155	ug/l	0.32	539.34	3.084E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,123,296.29	0.22	89.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,512,715.64	0.47	89.3	Pulse	0.10	3
1	Ge		489,712.47	1.18	85.9	Pulse	0.10	3
1	Ge		670,589.10	0.22	84.5	Pulse	0.10	3
1	Rh		3,247,547.87	0.32	84.4	Pulse	0.10	3
1	In		3,451,895.93	0.50	86.6	Pulse	0.10	3
1	Tb		4,932,904.51	0.29	89.1	Pulse	0.10	3
1	Ho		520,396.24	0.95	94.6	Pulse	0.10	3
1	Bi		2,886,112.56	0.35	86.4	Pulse	0.10	3
2	Sc		147,474.10	0.66	91.8	Pulse	0.30	3
2	Ge		87,126.19	1.18	87.6	Pulse	0.30	3
2	Ge		129,179.58	0.81	86.1	Pulse	0.30	3
2	Rh		2,026,098.88	1.11	83.2	Pulse	0.30	3
2	In		839,433.09	1.10	86.4	Pulse	0.30	3
2	Tb		2,836,677.53	1.25	86.6	Pulse	0.30	3
2	Ho		309,848.59	1.43	92.7	Pulse	0.30	3
2	Bi		1,898,060.48	1.54	84.8	Pulse	0.30	3
3	Sc		193,549.56	1.09	89.3	Pulse	0.30	3
3	Ge		117,625.14	1.01	83.9	Pulse	0.30	3
3	Ge		174,888.72	0.31	82.7	Pulse	0.30	3
3	Rh		1,756,897.19	0.72	80.5	Pulse	0.30	3
3	Tb		3,110,517.58	1.00	84.9	Pulse	0.30	3

Quantitation Report

File Name	102SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:37
Sample Name	jc94365-3
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	9/11/2019 11:44
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	3.694	ug/l	2.54	4,524.68	3.994E-03	Pulse	0.25	3
B			1	133.713	ug/l	2.08	120,965.33	1.068E-01	Pulse	0.15	3
Ca			1	21649.953	ug/l	0.31	3,765,420.46	1.474E+00	Pulse	0.10	3
Sr			1	211.520	ug/l	0.13	1,851,764.87	5.631E-01	Pulse	0.10	3
Mo			1	6.565	ug/l	3.82	10,874.10	3.306E-03	Pulse	0.10	3
Ag			1	8.430	ug/l	2.17	35,223.24	1.016E-02	Pulse	0.10	3
Sn			1	128.883	ug/l	0.74	348,898.89	1.006E-01	Pulse	0.10	3
Sb			1	3.383	ug/l	2.97	11,034.32	2.226E-03	Pulse	0.10	3
Ba			1	749.664	ug/l	0.68	1,000,948.16	2.019E-01	Pulse	0.10	3
Tl			1	1.050	ug/l	4.63	8,356.00	2.874E-03	Pulse	0.10	3
Pb			1	622.819	ug/l	2.17	1,666,764.25	5.733E-01	Pulse	0.10	3
Pb			1	598.894	ug/l	1.39	1,410,629.41	4.852E-01	Pulse	0.10	3
Pb			1	609.171	ug/l	1.48	6,589,519.75	2.266E+00	Pulse	0.10	3
Na			2	50240.609	ug/l	1.53	13,139,568.09	8.663E+01	Analog	0.30	3
Mg			2	33912.397	ug/l	0.49	4,106,903.03	2.708E+01	Pulse	0.30	3
Al			2	70076.748	ug/l	0.57	2,888,705.93	1.904E+01	Pulse	0.30	3
K			2	16836.759	ug/l	0.76	1,696,268.96	1.118E+01	Pulse	0.30	3
Ca			2	22504.911	ug/l	0.52	113,618.68	7.490E-01	Pulse	0.30	3
Ti			2	1737.405	ug/l	0.78	65,117.85	4.293E-01	Pulse	0.30	3
V			2	172.616	ug/l	0.34	209,962.88	1.384E+00	Pulse	0.30	3
Cr			2	335.716	ug/l	0.88	517,994.20	3.415E+00	Pulse	0.30	3
Mn			2	1501.781	ug/l	1.20	1,239,516.10	8.172E+00	Pulse	0.30	3
Fe			2	139673.574	ug/l	0.96	168,347,739.98	1.110E+03	Analog	0.30	3
Co			2	39.147	ug/l	0.80	95,081.68	6.268E-01	Pulse	0.30	3
Ni			2	129.692	ug/l	0.93	83,325.63	5.493E-01	Pulse	0.30	3
Cu			2	673.437	ug/l	0.53	1,180,646.97	7.784E+00	Pulse	0.30	3
Zn			2	954.150	ug/l	0.83	252,972.73	1.668E+00	Pulse	0.30	3
As			2	73.492	ug/l	1.65	11,153.48	7.353E-02	Pulse	1.00	3
Cd			2	4.103	ug/l	1.77	1,617.08	1.878E-03	Pulse	0.30	3
Sn			2	127.674	ug/l	1.32	110,465.13	1.283E-01	Pulse	0.30	3
Se			3	9.062	ug/l	2.33	326.80	1.852E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,132,801.78	0.40	90.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,555,299.70	0.45	90.8	Pulse	0.10	3
1	Ge		492,638.00	0.98	86.4	Pulse	0.10	3
1	Ge		683,768.04	1.05	86.1	Pulse	0.10	3
1	Rh		3,288,610.68	1.12	85.4	Pulse	0.10	3
1	In		3,467,975.84	0.63	87.0	Pulse	0.10	3
1	Tb		4,957,599.41	0.89	89.5	Pulse	0.10	3
1	Ho		519,743.26	1.03	94.5	Pulse	0.10	3
1	Bi		2,907,734.54	0.98	87.1	Pulse	0.10	3
2	Sc		151,688.51	0.68	94.4	Pulse	0.30	3
2	Ge		88,688.62	0.69	89.1	Pulse	0.30	3
2	Ge		132,128.98	0.90	88.1	Pulse	0.30	3
2	Rh		2,073,054.29	0.50	85.2	Pulse	0.30	3
2	In		861,333.55	0.96	88.6	Pulse	0.30	3
2	Tb		2,894,200.51	0.53	88.4	Pulse	0.30	3
2	Ho		313,824.72	0.41	93.9	Pulse	0.30	3
2	Bi		1,919,945.48	0.89	85.8	Pulse	0.30	3
3	Sc		193,448.03	0.58	89.3	Pulse	0.30	3
3	Ge		117,488.15	0.27	83.8	Pulse	0.30	3
3	Ge		176,474.58	0.52	83.4	Pulse	0.30	3
3	Rh		1,759,170.28	0.65	80.6	Pulse	0.30	3
3	Tb		3,093,290.50	0.49	84.4	Pulse	0.30	3

Quantitation Report

File Name	103SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:42
Sample Name	jc94365-4
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	9/11/2019 11:44
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	4.124	ug/l	2.33	5,063.48	4.458E-03	Pulse	0.25	3
B			1	133.940	ug/l	0.54	121,491.54	1.070E-01	Pulse	0.15	3
Ca			1	21896.180	ug/l	0.92	3,856,663.07	1.490E+00	Pulse	0.10	3
Sr			1	211.813	ug/l	1.16	1,873,524.66	5.639E-01	Pulse	0.10	3
Mo			1	8.621	ug/l	1.32	14,380.34	4.328E-03	Pulse	0.10	3
Ag			1	12.720	ug/l	1.14	54,236.67	1.532E-02	Pulse	0.10	3
Sn			1	138.999	ug/l	1.16	383,885.28	1.084E-01	Pulse	0.10	3
Sb			1	3.791	ug/l	5.35	12,518.80	2.487E-03	Pulse	0.10	3
Ba			1	770.933	ug/l	0.49	1,044,834.36	2.076E-01	Pulse	0.10	3
Tl			1	1.182	ug/l	2.50	9,443.36	3.224E-03	Pulse	0.10	3
Pb			1	727.168	ug/l	0.70	1,960,530.44	6.693E-01	Pulse	0.10	3
Pb			1	697.339	ug/l	0.56	1,654,680.60	5.649E-01	Pulse	0.10	3
Pb			1	706.736	ug/l	0.59	7,701,628.59	2.629E+00	Pulse	0.10	3
Na			2	45010.041	ug/l	1.51	12,001,962.58	7.762E+01	Analog	0.30	3
Mg			2	34543.671	ug/l	1.26	4,264,738.30	2.758E+01	Pulse	0.30	3
Al			2	74449.453	ug/l	1.19	3,128,649.11	2.023E+01	Pulse	0.30	3
K			2	17336.695	ug/l	1.15	1,780,254.86	1.151E+01	Pulse	0.30	3
Ca			2	22384.529	ug/l	0.60	115,210.32	7.450E-01	Pulse	0.30	3
Ti			2	1830.291	ug/l	1.48	69,933.79	4.523E-01	Pulse	0.30	3
V			2	186.093	ug/l	1.31	230,735.34	1.492E+00	Pulse	0.30	3
Cr			2	394.158	ug/l	1.27	619,849.96	4.008E+00	Pulse	0.30	3
Mn			2	1465.719	ug/l	1.03	1,233,347.80	7.976E+00	Pulse	0.30	3
Fe			2	147102.342	ug/l	1.26	180,754,717.26	1.169E+03	Analog	0.30	3
Co			2	41.998	ug/l	1.61	103,987.08	6.725E-01	Pulse	0.30	3
Ni			2	144.627	ug/l	0.97	94,712.84	6.125E-01	Pulse	0.30	3
Cu			2	842.959	ug/l	0.94	1,504,662.96	9.730E+00	Pulse	0.30	3
Zn			2	1148.390	ug/l	0.95	310,110.88	2.005E+00	Pulse	0.30	3
As			2	78.370	ug/l	0.12	12,124.18	7.840E-02	Pulse	1.00	3
Cd			2	6.426	ug/l	2.39	2,549.13	2.933E-03	Pulse	0.30	3
Sn			2	138.601	ug/l	0.14	120,918.11	1.391E-01	Pulse	0.30	3
Se			3	10.294	ug/l	2.15	376.33	2.101E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,135,967.10	0.17	91.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,587,991.78	0.94	92.0	Pulse	0.10	3
1	Ge		499,492.40	0.76	87.6	Pulse	0.10	3
1	Ge		691,277.39	1.13	87.1	Pulse	0.10	3
1	Rh		3,322,820.78	0.81	86.3	Pulse	0.10	3
1	In		3,539,982.45	0.34	88.8	Pulse	0.10	3
1	Tb		5,032,164.51	1.12	90.9	Pulse	0.10	3
1	Ho		531,886.46	0.79	96.7	Pulse	0.10	3
1	Bi		2,929,178.81	0.45	87.7	Pulse	0.10	3
2	Sc		154,649.51	1.01	96.2	Pulse	0.30	3
2	Ge		90,289.70	0.54	90.7	Pulse	0.30	3
2	Ge		133,496.79	0.35	89.0	Pulse	0.30	3
2	Rh		2,084,965.33	0.27	85.7	Pulse	0.30	3
2	In		869,056.64	0.52	89.4	Pulse	0.30	3
2	Tb		2,906,528.91	0.11	88.8	Pulse	0.30	3
2	Ho		316,862.90	0.61	94.8	Pulse	0.30	3
2	Bi		1,943,847.00	0.06	86.8	Pulse	0.30	3
3	Sc		200,508.85	0.94	92.5	Pulse	0.30	3
3	Ge		121,319.37	0.58	86.5	Pulse	0.30	3
3	Ge		179,130.72	0.75	84.7	Pulse	0.30	3
3	Rh		1,773,028.61	0.37	81.3	Pulse	0.30	3
3	Tb		3,127,719.32	0.39	85.4	Pulse	0.30	3

Quantitation Report

File Name	104SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:47
Sample Name	jc94365-5
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	9/11/2019 11:44
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	2.866	ug/l	5.78	3,600.44	3.104E-03	Pulse	0.25	3
B			1	106.430	ug/l	0.48	99,926.32	8.613E-02	Pulse	0.15	3
Ca			1	17269.692	ug/l	0.54	2,988,446.00	1.176E+00	Pulse	0.10	3
Sr			1	185.800	ug/l	0.42	1,661,298.25	4.946E-01	Pulse	0.10	3
Mo			1	4.748	ug/l	3.96	8,072.41	2.403E-03	Pulse	0.10	3
Ag			1	6.381	ug/l	0.81	27,320.96	7.689E-03	Pulse	0.10	3
Sn			1	103.380	ug/l	0.69	287,295.32	8.086E-02	Pulse	0.10	3
Sb			1	2.699	ug/l	3.82	8,976.23	1.789E-03	Pulse	0.10	3
Ba			1	541.704	ug/l	1.01	732,044.05	1.459E-01	Pulse	0.10	3
Tl			1	0.850	ug/l	5.57	6,811.86	2.338E-03	Pulse	0.10	3
Pb			1	488.194	ug/l	1.03	1,309,113.24	4.494E-01	Pulse	0.10	3
Pb			1	467.944	ug/l	0.44	1,104,395.74	3.791E-01	Pulse	0.10	3
Pb			1	474.863	ug/l	0.36	5,147,086.64	1.767E+00	Pulse	0.10	3
Na			2	46836.900	ug/l	1.47	12,301,099.51	8.076E+01	Analog	0.30	3
Mg			2	27467.405	ug/l	1.25	3,340,274.04	2.193E+01	Pulse	0.30	3
Al			2	55891.254	ug/l	1.11	2,313,686.23	1.519E+01	Pulse	0.30	3
K			2	13613.218	ug/l	1.40	1,379,700.47	9.058E+00	Pulse	0.30	3
Ca			2	17660.398	ug/l	1.85	89,545.85	5.879E-01	Pulse	0.30	3
Ti			2	1374.523	ug/l	1.19	51,734.65	3.396E-01	Pulse	0.30	3
V			2	138.339	ug/l	1.14	169,025.81	1.110E+00	Pulse	0.30	3
Cr			2	263.000	ug/l	0.79	407,705.89	2.677E+00	Pulse	0.30	3
Mn			2	1266.636	ug/l	1.18	1,049,835.83	6.892E+00	Pulse	0.30	3
Fe			2	112995.810	ug/l	1.16	136,763,701.23	8.979E+02	Analog	0.30	3
Co			2	30.628	ug/l	1.17	74,711.54	4.905E-01	Pulse	0.30	3
Ni			2	97.389	ug/l	0.96	62,875.86	4.128E-01	Pulse	0.30	3
Cu			2	527.971	ug/l	1.24	931,136.91	6.113E+00	Pulse	0.30	3
Zn			2	764.148	ug/l	1.20	203,725.11	1.338E+00	Pulse	0.30	3
As			2	60.198	ug/l	2.18	9,176.59	6.025E-02	Pulse	1.00	3
Cd			2	3.355	ug/l	4.29	1,333.89	1.538E-03	Pulse	0.30	3
Sn			2	104.154	ug/l	0.52	90,953.27	1.048E-01	Pulse	0.30	3
Se			3	7.202	ug/l	9.26	263.07	1.476E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,160,237.59	0.47	92.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,540,565.74	0.69	90.3	Pulse	0.10	3
1	Ge		501,540.68	0.24	87.9	Pulse	0.10	3
1	Ge		691,970.30	0.67	87.2	Pulse	0.10	3
1	Rh		3,358,661.51	0.74	87.2	Pulse	0.10	3
1	In		3,553,142.89	0.41	89.2	Pulse	0.10	3
1	Tb		5,017,667.01	0.84	90.6	Pulse	0.10	3
1	Ho		519,690.91	1.22	94.5	Pulse	0.10	3
1	Bi		2,913,298.29	1.14	87.3	Pulse	0.10	3
2	Sc		152,331.62	1.31	94.8	Pulse	0.30	3
2	Ge		89,871.90	0.55	90.3	Pulse	0.30	3
2	Ge		134,027.85	0.37	89.4	Pulse	0.30	3
2	Rh		2,091,606.23	0.79	85.9	Pulse	0.30	3
2	In		867,506.40	0.29	89.3	Pulse	0.30	3
2	Tb		2,924,122.66	0.70	89.3	Pulse	0.30	3
2	Ho		311,334.06	0.13	93.1	Pulse	0.30	3
2	Bi		1,934,079.57	0.12	86.4	Pulse	0.30	3
3	Sc		197,081.26	12.08	91.0	Pulse	0.30	3
3	Ge		120,422.78	8.26	85.9	Pulse	0.30	3
3	Ge		179,073.27	7.95	84.7	Pulse	0.30	3
3	Rh		1,803,075.10	11.59	82.7	Pulse	0.30	3
3	Tb		3,199,210.78	14.72	87.3	Mix	0.30	3

Quantitation Report

File Name	105SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:52
Sample Name	jc94365-6
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	9/11/2019 11:44
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	3.749	ug/l	1.68	4,620.69	4.054E-03	Pulse	0.25	3
B			1	120.337	ug/l	2.91	110,148.40	9.665E-02	Pulse	0.15	3
Ca			1	15262.295	ug/l	0.41	2,685,862.04	1.040E+00	Pulse	0.10	3
Sr			1	180.881	ug/l	0.75	1,598,963.16	4.815E-01	Pulse	0.10	3
Mo			1	9.663	ug/l	4.29	16,088.62	4.846E-03	Pulse	0.10	3
Ag			1	11.749	ug/l	1.11	49,996.35	1.415E-02	Pulse	0.10	3
Sn			1	126.278	ug/l	0.86	348,285.85	9.859E-02	Pulse	0.10	3
Sb			1	3.345	ug/l	5.32	10,987.57	2.202E-03	Pulse	0.10	3
Ba			1	680.425	ug/l	0.63	914,529.00	1.833E-01	Pulse	0.10	3
Tl			1	1.157	ug/l	3.45	9,159.86	3.157E-03	Pulse	0.10	3
Pb			1	670.972	ug/l	1.53	1,792,328.98	6.176E-01	Pulse	0.10	3
Pb			1	644.399	ug/l	1.17	1,514,988.10	5.220E-01	Pulse	0.10	3
Pb			1	654.386	ug/l	1.00	7,065,555.78	2.435E+00	Pulse	0.10	3
Na			2	48131.208	ug/l	0.81	12,877,771.71	8.299E+01	Analog	0.30	3
Mg			2	31022.362	ug/l	0.89	3,843,209.43	2.477E+01	Pulse	0.30	3
Al			2	66602.285	ug/l	1.16	2,808,560.72	1.810E+01	Pulse	0.30	3
K			2	15751.748	ug/l	0.38	1,624,311.12	1.047E+01	Pulse	0.30	3
Ca			2	15635.988	ug/l	0.65	80,783.04	5.206E-01	Pulse	0.30	3
Ti			2	1697.444	ug/l	0.99	65,081.12	4.194E-01	Pulse	0.30	3
V			2	163.348	ug/l	0.85	203,266.29	1.310E+00	Pulse	0.30	3
Cr			2	357.697	ug/l	0.41	564,550.57	3.638E+00	Pulse	0.30	3
Mn			2	1151.381	ug/l	0.72	972,200.69	6.265E+00	Pulse	0.30	3
Fe			2	130278.162	ug/l	1.06	160,631,624.73	1.035E+03	Analog	0.30	3
Co			2	37.015	ug/l	1.05	91,973.89	5.927E-01	Pulse	0.30	3
Ni			2	126.375	ug/l	0.45	83,065.53	5.353E-01	Pulse	0.30	3
Cu			2	796.442	ug/l	1.54	1,426,899.28	9.196E+00	Pulse	0.30	3
Zn			2	1044.702	ug/l	1.16	283,203.30	1.825E+00	Pulse	0.30	3
As			2	66.251	ug/l	1.13	10,286.92	6.630E-02	Pulse	1.00	3
Cd			2	6.453	ug/l	4.87	2,582.30	2.945E-03	Pulse	0.30	3
Sn			2	123.689	ug/l	1.32	108,993.87	1.243E-01	Pulse	0.30	3
Se			3	8.996	ug/l	1.51	331.73	1.838E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,139,695.93	0.93	91.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,582,368.82	0.88	91.8	Pulse	0.10	3
1	Ge		499,357.87	1.34	87.5	Pulse	0.10	3
1	Ge		688,918.74	0.48	86.8	Pulse	0.10	3
1	Rh		3,320,626.62	0.79	86.3	Pulse	0.10	3
1	In		3,532,668.40	0.93	88.6	Pulse	0.10	3
1	Tb		4,990,422.63	0.46	90.1	Pulse	0.10	3
1	Ho		525,415.58	0.76	95.5	Pulse	0.10	3
1	Bi		2,902,286.93	0.97	86.9	Pulse	0.10	3
2	Sc		155,173.37	0.61	96.6	Pulse	0.30	3
2	Ge		91,090.70	0.44	91.5	Pulse	0.30	3
2	Ge		135,254.60	0.25	90.2	Pulse	0.30	3
2	Rh		2,112,880.12	0.22	86.8	Pulse	0.30	3
2	In		876,986.32	1.05	90.2	Pulse	0.30	3
2	Tb		2,919,856.97	0.48	89.2	Pulse	0.30	3
2	Ho		317,111.57	0.37	94.9	Pulse	0.30	3
2	Bi		1,946,075.41	0.62	86.9	Pulse	0.30	3
3	Sc		200,535.48	0.36	92.6	Pulse	0.30	3
3	Ge		122,033.00	0.45	87.0	Pulse	0.30	3
3	Ge		180,437.63	0.23	85.3	Pulse	0.30	3
3	Rh		1,802,624.72	0.16	82.6	Pulse	0.30	3
3	Tb		3,167,036.26	0.31	86.5	Pulse	0.30	3

Quantitation Report

File Name	106SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 18:57
Sample Name	jc94365-7
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	9/11/2019 11:44
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	4.058	ug/l	1.82	4,995.46	4.386E-03	Pulse	0.25	3
B			1	104.578	ug/l	1.44	96,482.26	8.472E-02	Pulse	0.15	3
Ca			1	20225.825	ug/l	0.33	3,505,633.28	1.377E+00	Pulse	0.10	3
Sr			1	443.498	ug/l	0.06	3,926,228.38	1.181E+00	Pulse	0.10	3
Mo			1	16.889	ug/l	3.61	28,055.41	8.436E-03	Pulse	0.10	3
Ag			1	28.687	ug/l	0.95	123,091.88	3.455E-02	Pulse	0.10	3
Sn			1	246.194	ug/l	0.36	682,223.04	1.915E-01	Pulse	0.10	3
Sb			1	8.767	ug/l	1.58	28,373.01	5.669E-03	Pulse	0.10	3
Ba			1	2364.943	ug/l	0.71	3,187,313.50	6.369E-01	Pulse	0.10	3
Tl			1	1.301	ug/l	1.67	10,464.11	3.540E-03	Pulse	0.10	3
Pb			1	1484.676	ug/l	0.28	4,038,996.40	1.366E+00	Pulse	0.10	3
Pb			1	1424.860	ug/l	0.09	3,411,457.87	1.154E+00	Pulse	0.10	3
Pb			1	1499.726	ug/l	0.11	16,490,261.42	5.579E+00	Analog	0.10	3
Na			2	44051.477	ug/l	0.24	11,546,667.59	7.596E+01	Analog	0.30	3
Mg			2	25963.960	ug/l	0.50	3,150,871.26	2.073E+01	Pulse	0.30	3
Al			2	62025.523	ug/l	0.71	2,562,163.93	1.686E+01	Pulse	0.30	3
K			2	14207.031	ug/l	0.70	1,436,319.32	9.450E+00	Pulse	0.30	3
Ca			2	21256.357	ug/l	0.54	107,537.23	7.075E-01	Pulse	0.30	3
Ti			2	1882.484	ug/l	1.14	70,699.32	4.651E-01	Pulse	0.30	3
V			2	220.152	ug/l	1.19	268,246.87	1.765E+00	Pulse	0.30	3
Cr			2	812.536	ug/l	0.36	1,255,023.18	8.257E+00	Pulse	0.30	3
Mn			2	990.864	ug/l	0.62	819,587.89	5.392E+00	Pulse	0.30	3
Fe			2	125335.465	ug/l	0.78	151,379,669.54	9.959E+02	Analog	0.30	3
Co			2	42.850	ug/l	0.86	104,288.28	6.861E-01	Pulse	0.30	3
Ni			2	198.912	ug/l	0.93	127,976.73	8.420E-01	Pulse	0.30	3
Cu			2	3477.238	ug/l	1.09	6,076,520.59	3.998E+01	Analog	0.30	3
Zn			2	2181.234	ug/l	0.12	577,690.50	3.801E+00	Pulse	0.30	3
As			2	191.810	ug/l	0.60	29,135.53	1.917E-01	Pulse	1.00	3
Cd			2	42.935	ug/l	2.47	17,147.27	1.952E-02	Pulse	0.30	3
Sn			2	244.573	ug/l	0.61	214,914.06	2.446E-01	Pulse	0.30	3
Se			3	45.607	ug/l	1.46	1,661.48	9.242E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,138,805.45	0.91	91.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,545,966.26	0.43	90.5	Pulse	0.10	3
1	Ge		496,591.15	0.34	87.1	Pulse	0.10	3
1	Ge		684,360.46	0.60	86.2	Pulse	0.10	3
1	Rh		3,325,826.83	0.48	86.4	Pulse	0.10	3
1	In		3,563,095.24	0.48	89.4	Pulse	0.10	3
1	Tb		5,004,367.12	0.78	90.4	Pulse	0.10	3
1	Ho		525,902.22	0.59	95.6	Pulse	0.10	3
1	Bi		2,955,732.04	1.00	88.5	Pulse	0.10	3
2	Sc		152,000.97	0.68	94.6	Pulse	0.30	3
2	Ge		91,070.79	0.22	91.5	Pulse	0.30	3
2	Ge		133,892.19	0.83	89.3	Pulse	0.30	3
2	Rh		2,102,647.69	0.35	86.4	Pulse	0.30	3
2	In		878,498.72	0.23	90.4	Pulse	0.30	3
2	Tb		2,921,026.34	0.38	89.2	Pulse	0.30	3
2	Ho		315,750.06	0.67	94.5	Pulse	0.30	3
2	Bi		1,976,429.44	0.52	88.3	Pulse	0.30	3
3	Sc		198,696.32	1.33	91.7	Pulse	0.30	3
3	Ge		120,147.57	1.68	85.7	Pulse	0.30	3
3	Ge		179,788.20	1.21	85.0	Pulse	0.30	3
3	Rh		1,800,805.62	0.61	82.6	Pulse	0.30	3
3	Tb		3,191,554.32	0.58	87.1	Pulse	0.30	3

Quantitation Report

File Name	107SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:02
Sample Name	mp17229-sd1
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/11/2019 11:44
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	4.076	ug/l	8.04	1,110.72	8.958E-04	Pulse	0.25	3
B			1	61.227	ug/l	3.82	18,381.41	1.483E-02	Pulse	0.15	3
Ca			1	23071.466	ug/l	0.62	822,327.23	3.175E-01	Pulse	0.10	3
Sr			1	173.422	ug/l	0.98	330,720.72	9.242E-02	Pulse	0.10	3
Mo			1	17.645	ug/l	7.95	6,431.53	1.798E-03	Pulse	0.10	3
Ag			1	7.310	ug/l	2.12	6,625.02	1.767E-03	Pulse	0.10	3
Sn			1	31.966	ug/l	3.07	21,498.71	5.734E-03	Pulse	0.10	3
Sb			1	5.871	ug/l	2.87	4,510.81	8.137E-04	Pulse	0.10	3
Ba			1	746.871	ug/l	0.98	223,074.05	4.024E-02	Pulse	0.10	3
Tl			1	1.547	ug/l	9.02	2,767.04	8.984E-04	Pulse	0.10	3
Pb			1	533.162	ug/l	0.69	302,401.95	9.822E-02	Pulse	0.10	3
Pb			1	513.615	ug/l	0.76	256,385.56	8.328E-02	Pulse	0.10	3
Pb			1	518.020	ug/l	0.44	1,187,668.85	3.858E-01	Pulse	0.10	3
Na			2	1476.734	ug/l	1.88	90,581.83	5.826E-01	Pulse	0.30	3
Mg			2	9514.732	ug/l	1.34	236,509.48	1.521E+00	Pulse	0.30	3
Al			2	54397.553	ug/l	0.84	460,266.14	2.960E+00	Pulse	0.30	3
K			2	4865.883	ug/l	1.62	113,092.35	7.274E-01	Pulse	0.30	3
Ca			2	23773.860	ug/l	0.40	24,691.75	1.588E-01	Pulse	0.30	3
Ti			2	2103.043	ug/l	1.80	16,162.42	1.039E-01	Pulse	0.30	3
V			2	208.729	ug/l	1.40	52,269.77	3.362E-01	Pulse	0.30	3
Cr			2	155.253	ug/l	0.45	49,962.72	3.213E-01	Pulse	0.30	3
Mn			2	764.877	ug/l	1.06	129,548.17	8.332E-01	Pulse	0.30	3
Fe			2	197957.646	ug/l	1.97	48,914,978.06	3.146E+02	Analog	0.30	3
Co			2	53.970	ug/l	0.81	26,911.34	1.731E-01	Pulse	0.30	3
Ni			2	1096.144	ug/l	1.63	144,253.95	9.278E-01	Pulse	0.30	3
Cu			2	256668.239	ug/l	0.67	91,655,796.36	5.895E+02	Analog	0.30	3
Zn			2	721.851	ug/l	1.98	40,463.18	2.603E-01	Pulse	0.30	3
As			2	124.213	ug/l	1.89	3,879.14	2.495E-02	Pulse	1.00	3
Cd			2	2.833	ug/l	21.90	251.77	2.709E-04	Pulse	0.30	3
Sn			2	30.681	ug/l	0.97	6,749.31	7.263E-03	Pulse	0.30	3
Se			3	40.063	ug/l	3.28	314.73	1.640E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,239,717.62	0.64	99.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,590,237.30	1.04	92.1	Pulse	0.10	3
1	Ge		525,938.01	1.11	92.2	Pulse	0.10	3
1	Ge		732,503.17	1.54	92.3	Pulse	0.10	3
1	Rh		3,578,285.05	0.99	93.0	Pulse	0.10	3
1	In		3,749,462.22	0.15	94.1	Pulse	0.10	3
1	Tb		5,543,534.09	1.27	100.1	Analog	0.10	3
1	Ho		514,200.30	1.33	93.5	Pulse	0.10	3
1	Bi		3,078,817.66	1.28	92.2	Pulse	0.10	3
2	Sc		155,487.91	0.97	96.8	Pulse	0.30	3
2	Ge		95,684.51	0.59	96.2	Pulse	0.30	3
2	Ge		141,788.39	1.14	94.5	Pulse	0.30	3
2	Rh		2,249,280.33	0.16	92.4	Pulse	0.30	3
2	In		929,225.20	0.39	95.6	Pulse	0.30	3
2	Tb		3,036,528.70	0.31	92.7	Pulse	0.30	3
2	Ho		314,613.78	0.29	94.1	Pulse	0.30	3
2	Bi		2,047,604.16	0.28	91.5	Pulse	0.30	3
3	Sc		199,744.32	0.35	92.2	Pulse	0.30	3
3	Ge		127,373.42	1.52	90.8	Pulse	0.30	3
3	Ge		191,948.02	0.16	90.7	Pulse	0.30	3
3	Rh		1,928,851.73	0.41	88.4	Pulse	0.30	3
3	Tb		3,269,417.16	0.14	89.2	Pulse	0.30	3

Quantitation Report

File Name	108SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:07
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	9/11/2019 11:44
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	246.05	29.33	2.468E-05	Pulse	0.25	3
B			1	1.174	ug/l	7.91	11,899.98	1.000E-02	Pulse	0.15	3
Ca			1	-3.168	ug/l	-23.32	7,885.54	3.240E-03	Pulse	0.10	3
Sr			1	0.003	ug/l	60.49	503.36	1.453E-04	Pulse	0.10	3
Mo			1	-0.005	ug/l	-22.37	110.01	3.175E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	38.68	86.67	2.382E-05	Pulse	0.10	3
Sn			1	-0.010	ug/l	-150.84	2,696.99	7.429E-04	Pulse	0.10	3
Sb			1	-0.001	ug/l	-127.51	293.35	5.873E-05	Pulse	0.10	3
Ba			1	0.017	ug/l	54.76	193.34	3.861E-05	Pulse	0.10	3
Tl			1	-0.002	ug/l	-56.60	123.34	4.159E-05	Pulse	0.10	3
Pb			1	0.049	ug/l	11.19	916.73	3.096E-04	Pulse	0.10	3
Pb			1	0.037	ug/l	13.31	666.71	2.251E-04	Pulse	0.10	3
Pb			1	0.039	ug/l	7.10	3,293.61	1.112E-03	Pulse	0.10	3
Na			2	7.951	ug/l	5.40	20,920.84	1.423E-01	Pulse	0.30	3
Mg			2	0.169	ug/l	9.46	396.68	2.699E-03	Pulse	0.30	3
Al			2	-0.878	ug/l	-15.08	462.23	3.145E-03	Pulse	0.30	3
K			2	-1.339	ug/l	-35.64	11,992.17	8.158E-02	Pulse	0.30	3
Ca			2	0.158	ug/l	899.51	106.67	7.247E-04	Pulse	0.30	3
Ti			2	0.099	ug/l	18.44	20.00	1.360E-04	Pulse	0.30	3
V			2	-0.017	ug/l	-37.94	175.56	1.195E-03	Pulse	0.30	3
Cr			2	-0.049	ug/l	-8.31	521.13	3.546E-03	Pulse	0.30	3
Mn			2	0.004	ug/l	20.67	150.00	1.020E-03	Pulse	0.30	3
Fe			2	2.313	ug/l	2.64	19,225.76	1.308E-01	Pulse	0.30	3
Co			2	-0.001	ug/l	-53.49	35.51	2.415E-04	Pulse	0.30	3
Ni			2	0.004	ug/l	82.53	170.00	1.157E-03	Pulse	0.30	3
Cu			2	1.148	ug/l	8.31	17,146.85	1.166E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.498	ug/l	-0.79	735.58	5.003E-03	Pulse	0.30	3
As			2	0.002	ug/l	320.35	22.00	1.498E-04	Pulse	1.00	3
Cd			2	-0.003	ug/l	-105.53	6.65	7.419E-06	Pulse	0.30	3
Sn			2	0.013	ug/l	285.96	1,092.33	1.218E-03	Pulse	0.30	3
Se			3	0.021	ug/l	33.03	7.07	4.064E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,189,664.20	0.22	95.3	Pulse	0.10	3
1	Sc		2,433,060.85	0.84	86.5	Pulse	0.10	3
1	Ge		499,815.64	0.80	87.6	Pulse	0.10	3
1	Ge		695,241.79	0.78	87.6	Pulse	0.10	3
1	Rh		3,463,986.93	0.67	90.0	Pulse	0.10	3
1	In		3,631,414.86	1.21	91.1	Pulse	0.10	3
1	Tb		4,997,517.32	1.12	90.2	Pulse	0.10	3
1	Ho		487,178.59	1.45	88.6	Pulse	0.10	3
1	Bi		2,961,785.16	0.46	88.7	Pulse	0.10	3
2	Sc		147,009.71	0.71	91.5	Pulse	0.30	3
2	Ge		91,476.22	1.14	91.9	Pulse	0.30	3
2	Ge		136,625.26	1.13	91.1	Pulse	0.30	3
2	Rh		2,202,738.80	0.32	90.5	Pulse	0.30	3
2	In		897,032.40	0.46	92.3	Pulse	0.30	3
2	Tb		2,915,755.79	0.60	89.1	Pulse	0.30	3
2	Ho		297,524.74	0.74	89.0	Pulse	0.30	3
2	Bi		1,978,395.41	0.77	88.4	Pulse	0.30	3
3	Sc		176,479.85	11.98	81.5	Pulse	0.30	3
3	Ge		115,854.74	8.49	82.6	Pulse	0.30	3
3	Ge		174,775.65	8.47	82.6	Pulse	0.30	3
3	Rh		1,763,497.29	11.44	80.8	Pulse	0.30	3
3	Tb		2,963,495.71	11.73	80.9	Pulse	0.30	3

Quantitation Report

File Name	109_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:12
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	9/11/2019 11:44
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	44.607	ug/l	0.37	286,717.63	2.401E-01	Pulse	0.25	3
B			1	85.698	ug/l	0.28	394,010.25	3.299E-01	Pulse	0.15	3
Ca			1	5012.078	ug/l	0.54	4,227,522.33	1.705E+00	Pulse	0.10	3
Sr			1	51.755	ug/l	0.10	2,353,746.37	6.889E-01	Pulse	0.10	3
Mo			1	50.859	ug/l	1.38	431,901.07	1.264E-01	Pulse	0.10	3
Ag			1	49.054	ug/l	0.98	1,062,579.78	2.953E-01	Pulse	0.10	3
Sn			1	49.783	ug/l	0.85	696,509.83	1.936E-01	Pulse	0.10	3
Sb			1	53.005	ug/l	0.54	855,360.22	1.695E-01	Pulse	0.10	3
Ba			1	50.663	ug/l	0.60	344,239.96	6.824E-02	Pulse	0.10	3
Tl			1	50.523	ug/l	0.68	1,961,699.03	6.733E-01	Pulse	0.10	3
Pb			1	50.353	ug/l	0.36	675,392.73	2.318E-01	Pulse	0.10	3
Pb			1	50.579	ug/l	0.56	597,074.81	2.049E-01	Pulse	0.10	3
Pb			1	50.320	ug/l	0.06	2,728,076.00	9.363E-01	Pulse	0.10	3
Na			2	4989.559	ug/l	0.69	6,383,832.66	4.305E+01	Analog	0.30	3
Mg			2	4715.604	ug/l	0.76	2,791,349.13	1.882E+01	Pulse	0.30	3
Al			2	4773.683	ug/l	0.23	962,240.00	6.489E+00	Pulse	0.30	3
K			2	4935.876	ug/l	0.10	2,424,651.29	1.635E+01	Pulse	0.30	3
Ca			2	5201.952	ug/l	0.25	128,343.24	8.655E-01	Pulse	0.30	3
Ti			2	49.502	ug/l	1.89	9,070.34	6.117E-02	Pulse	0.30	3
V			2	49.403	ug/l	0.78	293,588.81	1.980E+00	Pulse	0.30	3
Cr			2	48.622	ug/l	0.20	366,936.76	2.475E+00	Pulse	0.30	3
Mn			2	49.605	ug/l	0.47	200,232.88	1.350E+00	Pulse	0.30	3
Fe			2	5133.742	ug/l	0.27	30,248,996.58	2.040E+02	Analog	0.30	3
Co			2	48.630	ug/l	0.43	577,051.44	3.892E+00	Pulse	0.30	3
Ni			2	48.719	ug/l	0.11	152,854.58	1.031E+00	Pulse	0.30	3
Cu			2	48.879	ug/l	0.16	423,638.71	2.857E+00	Pulse	0.30	3
Zn			2	48.515	ug/l	0.94	63,902.53	4.310E-01	Pulse	0.30	3
As			2	49.955	ug/l	0.49	37,004.69	2.496E-01	Pulse	1.00	3
Cd			2	48.951	ug/l	0.84	98,554.49	1.112E-01	Pulse	0.30	3
Sn			2	49.376	ug/l	0.64	218,836.40	2.469E-01	Pulse	0.30	3
Se			3	199.104	ug/l	0.77	36,996.61	2.013E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,194,250.34	0.54	95.6	Pulse	0.10	3
1	Sc		2,479,491.84	0.82	88.1	Pulse	0.10	3
1	Ge		507,485.66	0.72	89.0	Pulse	0.10	3

Quantitation Report

1	Ge		704,854.50	0.42	88.8	Pulse	0.10	3
1	Rh		3,416,884.53	0.53	88.8	Pulse	0.10	3
1	In		3,598,272.89	1.06	90.3	Pulse	0.10	3
1	Tb		5,045,007.53	0.80	91.1	Pulse	0.10	3
1	Ho		495,615.23	1.25	90.1	Pulse	0.10	3
1	Bi		2,913,731.83	1.05	87.3	Pulse	0.10	3
2	Sc		148,279.34	0.06	92.3	Pulse	0.30	3
2	Ge		91,022.77	1.04	91.5	Pulse	0.30	3
2	Ge		137,682.12	0.43	91.8	Pulse	0.30	3
2	Rh		2,155,914.01	0.40	88.6	Pulse	0.30	3
2	In		886,230.07	0.52	91.2	Pulse	0.30	3
2	Tb		2,930,434.19	0.18	89.5	Pulse	0.30	3
2	Ho		298,239.29	0.16	89.2	Pulse	0.30	3
2	Bi		1,928,447.08	0.66	86.1	Pulse	0.30	3
3	Sc		192,180.14	0.49	88.7	Pulse	0.30	3
3	Ge		121,569.87	0.28	86.7	Pulse	0.30	3
3	Ge		183,765.96	0.85	86.9	Pulse	0.30	3
3	Rh		1,848,101.94	0.12	84.7	Pulse	0.30	3
3	Tb		3,203,880.36	0.33	87.5	Pulse	0.30	3

Quantitation Report

File Name	110_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:17
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	9/11/2019 11:44
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	0.011	ug/l	48.73	90.67	7.670E-05	Pulse	0.25	3
B			1	3.228	ug/l	3.39	20,997.86	1.778E-02	Pulse	0.15	3
Ca			1	0.923	ug/l	56.01	11,250.81	4.628E-03	Pulse	0.10	3
Sr			1	0.013	ug/l	20.18	963.41	2.791E-04	Pulse	0.10	3
Mo			1	0.069	ug/l	28.06	746.71	2.162E-04	Pulse	0.10	3
Ag			1	0.009	ug/l	18.04	223.34	6.225E-05	Pulse	0.10	3
Sn			1	0.142	ug/l	7.68	4,774.25	1.330E-03	Pulse	0.10	3
Sb			1	0.047	ug/l	20.95	1,056.75	2.121E-04	Pulse	0.10	3
Ba			1	0.017	ug/l	27.61	190.01	3.816E-05	Pulse	0.10	3
Tl			1	0.022	ug/l	10.80	1,070.08	3.618E-04	Pulse	0.10	3
Pb			1	0.044	ug/l	12.11	850.06	2.874E-04	Pulse	0.10	3
Pb			1	0.043	ug/l	12.25	743.38	2.513E-04	Pulse	0.10	3
Pb			1	0.040	ug/l	3.89	3,326.96	1.125E-03	Pulse	0.10	3
Na			2	8.126	ug/l	1.09	20,775.07	1.438E-01	Pulse	0.30	3
Mg			2	0.791	ug/l	15.61	748.91	5.183E-03	Pulse	0.30	3
Al			2	2.174	ug/l	9.81	1,053.38	7.291E-03	Pulse	0.30	3
K			2	0.151	ug/l	198.65	12,493.67	8.649E-02	Pulse	0.30	3
Ca			2	4.079	ug/l	18.15	198.89	1.377E-03	Pulse	0.30	3
Ti			2	0.026	ug/l	123.74	6.67	4.595E-05	Pulse	0.30	3
V			2	-0.006	ug/l	-104.95	233.34	1.616E-03	Pulse	0.30	3
Cr			2	-0.004	ug/l	-164.56	842.26	5.829E-03	Pulse	0.30	3
Mn			2	0.010	ug/l	105.84	172.23	1.192E-03	Pulse	0.30	3
Fe			2	1.534	ug/l	4.07	14,424.21	9.984E-02	Pulse	0.30	3
Co			2	0.004	ug/l	62.01	101.07	6.985E-04	Pulse	0.30	3
Ni			2	0.018	ug/l	50.41	207.78	1.437E-03	Pulse	0.30	3
Cu			2	0.263	ug/l	3.38	9,509.53	6.583E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.172	ug/l	-21.03	1,132.27	7.837E-03	Pulse	0.30	3
As			2	0.008	ug/l	108.33	25.67	1.778E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	91.57	17.70	2.000E-05	Pulse	0.30	3
Sn			2	0.152	ug/l	8.54	1,693.44	1.910E-03	Pulse	0.30	3
Se			3	0.103	ug/l	1.05	22.67	1.234E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,181,324.11	0.70	94.6	Pulse	0.10	3
1	Sc		2,431,155.38	0.30	86.4	Pulse	0.10	3
1	Ge		501,048.98	0.96	87.8	Pulse	0.10	3
1	Ge		696,841.13	0.91	87.8	Pulse	0.10	3
1	Rh		3,452,736.62	0.12	89.7	Pulse	0.10	3
1	In		3,589,621.62	0.44	90.1	Pulse	0.10	3
1	Tb		4,981,578.36	0.59	90.0	Pulse	0.10	3
1	Ho		489,803.06	0.83	89.0	Pulse	0.10	3
1	Bi		2,958,026.10	0.03	88.6	Pulse	0.10	3
2	Sc		144,460.23	0.81	89.9	Pulse	0.30	3
2	Ge		90,049.54	0.99	90.5	Pulse	0.30	3
2	Ge		135,841.51	0.58	90.6	Pulse	0.30	3
2	Rh		2,164,454.92	0.46	88.9	Pulse	0.30	3
2	In		886,739.52	0.89	91.2	Pulse	0.30	3
2	Tb		2,891,860.30	0.32	88.3	Pulse	0.30	3
2	Ho		293,704.20	0.75	87.9	Pulse	0.30	3
2	Bi		1,964,110.06	0.36	87.7	Pulse	0.30	3
3	Sc		187,235.49	0.83	86.4	Pulse	0.30	3
3	Ge		120,889.15	1.00	86.2	Pulse	0.30	3
3	Ge		183,686.21	0.51	86.8	Pulse	0.30	3
3	Rh		1,886,170.48	0.28	86.5	Pulse	0.30	3
3	Tb		3,191,129.04	0.55	87.1	Pulse	0.30	3

Quantitation Report

File Name	111SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:22
Sample Name	jc94365-1
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	9/11/2019 11:44
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	4.327	ug/l	4.47	5,554.30	4.675E-03	Pulse	0.25	3
B			1	125.538	ug/l	0.96	119,497.99	1.006E-01	Pulse	0.15	3
Ca			1	49558.424	ug/l	0.43	9,048,032.37	3.368E+00	Analog	0.10	3
Sr			1	338.435	ug/l	1.00	3,071,629.85	9.009E-01	Pulse	0.10	3
Mo			1	11.645	ug/l	2.79	19,879.70	5.831E-03	Pulse	0.10	3
Ag			1	15.023	ug/l	0.60	65,512.41	1.809E-02	Pulse	0.10	3
Sn			1	175.744	ug/l	0.17	495,687.84	1.369E-01	Pulse	0.10	3
Sb			1	5.836	ug/l	7.66	19,923.40	3.795E-03	Pulse	0.10	3
Ba			1	925.933	ug/l	4.01	1,310,782.92	2.494E-01	Pulse	0.10	3
Tl			1	1.236	ug/l	0.81	10,050.48	3.369E-03	Pulse	0.10	3
Pb			1	891.341	ug/l	0.79	2,447,812.26	8.204E-01	Pulse	0.10	3
Pb			1	851.896	ug/l	0.37	2,058,918.77	6.901E-01	Pulse	0.10	3
Pb			1	877.940	ug/l	2.62	9,744,882.93	3.266E+00	Mix	0.10	3
Na			2	43600.334	ug/l	1.32	12,019,996.74	7.519E+01	Analog	0.30	3
Mg			2	33997.272	ug/l	0.21	4,339,400.94	2.714E+01	Pulse	0.30	3
Al			2	76422.141	ug/l	0.21	3,320,262.92	2.077E+01	Pulse	0.30	3
K			2	17672.058	ug/l	0.14	1,875,856.04	1.173E+01	Pulse	0.30	3
Ca			2	49294.482	ug/l	0.43	262,157.09	1.640E+00	Pulse	0.30	3
Ti			2	1939.797	ug/l	0.51	76,628.03	4.793E-01	Pulse	0.30	3
V			2	202.696	ug/l	0.52	259,802.66	1.625E+00	Pulse	0.30	3
Cr			2	443.837	ug/l	0.63	721,480.27	4.513E+00	Pulse	0.30	3
Mn			2	1469.856	ug/l	0.74	1,278,672.14	7.998E+00	Pulse	0.30	3
Fe			2	156602.269	ug/l	0.92	198,941,232.10	1.244E+03	Analog	0.30	3
Co			2	44.108	ug/l	0.86	112,907.83	7.062E-01	Pulse	0.30	3
Ni			2	159.089	ug/l	0.27	107,691.82	6.736E-01	Pulse	0.30	3
Cu			2	1287.782	ug/l	0.66	2,372,178.45	1.484E+01	Pulse	0.30	3
Zn			2	1374.544	ug/l	0.87	383,453.40	2.398E+00	Pulse	0.30	3
As			2	104.383	ug/l	1.11	16,686.19	1.044E-01	Pulse	1.00	3
Cd			2	10.622	ug/l	1.63	4,313.49	4.839E-03	Pulse	0.30	3
Sn			2	176.079	ug/l	0.68	157,281.91	1.764E-01	Pulse	0.30	3
Se			3	17.360	ug/l	5.46	644.21	3.530E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,187,957.58	0.23	95.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,686,836.94	0.53	95.5	Pulse	0.10	3
1	Ge		516,132.82	0.34	90.5	Pulse	0.10	3
1	Ge		710,839.29	0.59	89.5	Pulse	0.10	3
1	Rh		3,409,551.20	0.02	88.6	Pulse	0.10	3
1	In		3,620,695.97	0.41	90.9	Pulse	0.10	3
1	Tb		5,262,701.69	4.61	95.0	Mix	0.10	3
1	Ho		540,392.95	0.55	98.2	Pulse	0.10	3
1	Bi		2,983,568.91	0.29	89.4	Pulse	0.10	3
2	Sc		159,872.71	0.29	99.5	Pulse	0.30	3
2	Ge		93,647.24	0.39	94.1	Pulse	0.30	3
2	Ge		138,266.11	0.64	92.2	Pulse	0.30	3
2	Rh		2,138,041.93	0.63	87.8	Pulse	0.30	3
2	In		891,381.71	0.48	91.7	Pulse	0.30	3
2	Tb		2,963,196.76	0.35	90.5	Pulse	0.30	3
2	Ho		323,124.79	0.73	96.7	Pulse	0.30	3
2	Bi		1,978,326.79	0.24	88.4	Pulse	0.30	3
3	Sc		205,070.85	2.22	94.7	Pulse	0.30	3
3	Ge		123,752.49	1.60	88.2	Pulse	0.30	3
3	Ge		182,566.26	1.59	86.3	Pulse	0.30	3
3	Rh		1,833,135.76	0.98	84.0	Pulse	0.30	3
3	Tb		3,217,561.40	1.81	87.8	Pulse	0.30	3

Quantitation Report

File Name	112SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:27
Sample Name	jc94441-4ar
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	9/11/2019 11:44
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	4.158	ug/l	3.83	4,964.80	4.494E-03	Pulse	0.25	3
B			1	91.222	ug/l	0.67	82,431.39	7.461E-02	Pulse	0.15	3
Ca			1	447732.812	ug/l	0.32	75,622,602.21	3.039E+01	Analog	0.10	3
Sr			1	1336.872	ug/l	1.22	10,993,923.17	3.558E+00	Analog	0.10	3
Mo			1	8.925	ug/l	4.76	13,836.54	4.479E-03	Pulse	0.10	3
Ag			1	0.885	ug/l	3.24	3,617.23	1.072E-03	Pulse	0.10	3
Sn			1	35.119	ug/l	1.84	94,435.96	2.798E-02	Pulse	0.10	3
Sb			1	3.526	ug/l	2.73	11,314.54	2.318E-03	Pulse	0.10	3
Ba			1	1022.527	ug/l	0.49	1,344,747.69	2.754E-01	Pulse	0.10	3
Tl			1	0.964	ug/l	2.95	7,302.08	2.642E-03	Pulse	0.10	3
Pb			1	948.775	ug/l	0.47	2,412,867.15	8.733E-01	Pulse	0.10	3
Pb			1	924.831	ug/l	0.51	2,070,024.61	7.492E-01	Pulse	0.10	3
Pb			1	946.718	ug/l	2.15	9,732,397.62	3.522E+00	Mix	0.10	3
Na			2	2215.665	ug/l	0.49	585,338.50	3.891E+00	Pulse	0.30	3
Mg			2	70542.177	ug/l	0.55	8,472,335.77	5.632E+01	Analog	0.30	3
Al			2	102125.017	ug/l	0.80	4,175,039.14	2.775E+01	Pulse	0.30	3
K			2	3847.512	ug/l	0.75	394,428.51	2.622E+00	Pulse	0.30	3
Ca			2	440968.256	ug/l	0.22	2,205,975.19	1.466E+01	Pulse	0.30	3
Ti			2	7104.095	ug/l	0.69	264,077.57	1.755E+00	Pulse	0.30	3
V			2	3203.880	ug/l	0.84	3,860,123.60	2.566E+01	Pulse	0.30	3
Cr			2	9815.818	ug/l	0.77	14,995,434.96	9.968E+01	Analog	0.30	3
Mn			2	4452.941	ug/l	0.55	3,644,939.99	2.423E+01	Pulse	0.30	3
Fe			2	400050.195	ug/l	0.48	478,217,172.11	3.179E+03	Analog	0.30	3
Co			2	473.268	ug/l	1.02	1,139,456.48	7.574E+00	Pulse	0.30	3
Ni			2	1542.400	ug/l	0.74	981,069.96	6.522E+00	Pulse	0.30	3
Cu			2	220.098	ug/l	0.73	387,831.42	2.578E+00	Pulse	0.30	3
Zn			2	1204.556	ug/l	1.15	316,358.75	2.103E+00	Pulse	0.30	3
As			2	39.808	ug/l	2.07	6,000.79	3.989E-02	Pulse	1.00	3
Cd			2	2.080	ug/l	6.83	793.42	9.584E-04	Pulse	0.30	3
Sn			2	35.249	ug/l	3.01	30,005.31	3.625E-02	Pulse	0.30	3
Se			3	4.767	ug/l	8.89	169.13	9.832E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,104,812.17	0.66	88.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,488,432.72	0.04	88.5	Pulse	0.10	3
1	Ge		469,965.30	0.86	82.4	Pulse	0.10	3
1	Ge		641,909.70	0.33	80.9	Pulse	0.10	3
1	Rh		3,089,763.18	0.63	80.3	Pulse	0.10	3
1	In		3,374,938.17	1.17	84.7	Pulse	0.10	3
1	Tb		4,883,326.91	1.81	88.2	Pulse	0.10	3
1	Ho		511,742.43	1.24	93.0	Pulse	0.10	3
1	Bi		2,763,032.67	1.09	82.8	Pulse	0.10	3
2	Sc		150,443.60	1.03	93.6	Pulse	0.30	3
2	Ge		85,330.18	1.11	85.7	Pulse	0.30	3
2	Ge		124,564.86	0.69	83.1	Pulse	0.30	3
2	Rh		1,961,044.99	0.79	80.6	Pulse	0.30	3
2	In		827,876.99	0.39	85.2	Pulse	0.30	3
2	Tb		2,832,807.39	0.24	86.5	Pulse	0.30	3
2	Ho		305,799.64	0.77	91.5	Pulse	0.30	3
2	Bi		1,827,548.54	0.40	81.6	Pulse	0.30	3
3	Sc		200,438.01	1.29	92.5	Pulse	0.30	3
3	Ge		117,570.95	0.44	83.8	Pulse	0.30	3
3	Ge		171,956.94	0.77	81.3	Pulse	0.30	3
3	Rh		1,718,460.25	1.01	78.8	Pulse	0.30	3
3	Tb		3,138,394.11	1.12	85.7	Pulse	0.30	3

Quantitation Report

File Name	113SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:32
Sample Name	mp17232a-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	9/11/2019 11:44
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	2.11	44.00	4.224E-05	Pulse	0.25	3
B			1	4.349	ug/l	6.96	14,364.07	1.379E-02	Pulse	0.15	3
Ca			1	32.065	ug/l	13.25	20,727.32	9.755E-03	Pulse	0.10	3
Sr			1	0.093	ug/l	16.21	2,266.91	7.201E-04	Pulse	0.10	3
Mo			1	0.096	ug/l	30.76	513.36	1.631E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	51.77	100.00	3.004E-05	Pulse	0.10	3
Sn			1	0.670	ug/l	3.79	6,925.08	2.079E-03	Pulse	0.10	3
Sb			1	0.078	ug/l	18.63	896.73	1.877E-04	Pulse	0.10	3
Ba			1	0.191	ug/l	12.21	690.05	1.446E-04	Pulse	0.10	3
Tl			1	0.007	ug/l	36.69	363.35	1.237E-04	Pulse	0.10	3
Pb			1	0.230	ug/l	12.90	1,803.51	6.140E-04	Pulse	0.10	3
Pb			1	0.211	ug/l	1.90	1,480.13	5.041E-04	Pulse	0.10	3
Pb			1	0.218	ug/l	4.67	7,070.94	2.408E-03	Pulse	0.10	3
Na			2	28.033	ug/l	2.80	24,857.18	1.946E-01	Pulse	0.30	3
Mg			2	4.632	ug/l	7.11	1,440.08	1.127E-02	Pulse	0.30	3
Al			2	7.159	ug/l	9.66	1,175.61	9.201E-03	Pulse	0.30	3
K			2	5.772	ug/l	25.36	12,204.55	9.550E-02	Pulse	0.30	3
Ca			2	25.710	ug/l	5.46	362.23	2.836E-03	Pulse	0.30	3
Ti			2	1.007	ug/l	57.55	81.11	6.361E-04	Pulse	0.30	3
V			2	0.175	ug/l	4.10	687.80	5.383E-03	Pulse	0.30	3
Cr			2	0.685	ug/l	3.71	2,990.31	2.340E-02	Pulse	0.30	3
Mn			2	0.235	ug/l	34.41	525.57	4.108E-03	Pulse	0.30	3
Fe			2	24.496	ug/l	6.87	67,171.37	5.255E-01	Pulse	0.30	3
Co			2	0.030	ug/l	14.93	195.37	1.528E-03	Pulse	0.30	3
Ni			2	0.125	ug/l	5.05	305.56	2.391E-03	Pulse	0.30	3
Cu			2	2.232	ug/l	6.08	14,664.43	1.148E-01	Pulse	0.30	3
Zn			2	2.674	ug/l	4.92	2,678.03	2.095E-02	Pulse	0.30	3
As			2	0.088	ug/l	13.45	45.67	3.575E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.001	ug/l	-621.22	9.96	1.223E-05	Pulse	0.30	3
Sn			2	0.728	ug/l	11.82	2,404.66	2.965E-03	Pulse	0.30	3
Se			3	0.100	ug/l	24.58	12.53	6.990E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,041,833.67	1.20	83.4	Pulse	0.10	3
1	Sc		2,125,296.95	0.63	75.5	Pulse	0.10	3
1	Ge		474,624.23	0.71	83.2	Pulse	0.10	3
1	Ge		660,871.79	0.27	83.3	Pulse	0.10	3
1	Rh		3,147,056.83	0.86	81.7	Pulse	0.10	3
1	In		3,330,677.19	1.38	83.6	Pulse	0.10	3
1	Tb		4,773,733.47	1.19	86.2	Pulse	0.10	3
1	Ho		468,734.40	0.50	85.2	Pulse	0.10	3
1	Bi		2,936,587.97	0.90	88.0	Pulse	0.10	3
2	Sc		127,783.37	1.21	79.5	Pulse	0.30	3
2	Ge		86,133.03	1.57	86.6	Pulse	0.30	3
2	Ge		129,638.53	0.89	86.4	Pulse	0.30	3
2	Rh		2,011,654.58	0.25	82.6	Pulse	0.30	3
2	In		811,253.39	0.90	83.5	Pulse	0.30	3
2	Tb		2,745,639.89	0.53	83.9	Pulse	0.30	3
2	Ho		282,069.81	1.05	84.4	Pulse	0.30	3
2	Bi		1,907,378.61	0.80	85.2	Pulse	0.30	3
3	Sc		182,170.11	0.64	84.1	Pulse	0.30	3
3	Ge		118,397.19	1.94	84.4	Pulse	0.30	3
3	Ge		179,119.52	0.93	84.7	Pulse	0.30	3
3	Rh		1,841,235.27	0.17	84.4	Pulse	0.30	3
3	Tb		3,179,147.03	0.18	86.8	Pulse	0.30	3

Quantitation Report

File Name	114SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:37
Sample Name	mp17232a-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	9/11/2019 11:44
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	62.196	ug/l	1.14	181,136.97	1.674E-01	Pulse	0.25	3
B			1	66.942	ug/l	0.98	143,109.10	1.322E-01	Pulse	0.15	3
Ca			1	3806.200	ug/l	0.61	1,447,369.46	6.501E-01	Pulse	0.10	3
Sr			1	72.892	ug/l	1.04	1,568,085.24	4.851E-01	Pulse	0.10	3
Mo			1	72.832	ug/l	1.97	292,595.53	9.052E-02	Pulse	0.10	3
Ag			1	71.030	ug/l	0.46	731,875.90	2.138E-01	Pulse	0.10	3
Sn			1	73.400	ug/l	0.34	489,184.54	1.429E-01	Pulse	0.10	3
Sb			1	74.309	ug/l	0.89	583,543.15	1.189E-01	Pulse	0.10	3
Ba			1	72.057	ug/l	0.65	238,248.83	4.853E-02	Pulse	0.10	3
Tl			1	72.202	ug/l	1.44	1,382,164.20	4.811E-01	Pulse	0.10	3
Pb			1	74.294	ug/l	0.47	491,331.31	1.710E-01	Pulse	0.10	3
Pb			1	74.240	ug/l	0.83	432,091.43	1.504E-01	Pulse	0.10	3
Pb			1	74.057	ug/l	0.70	1,979,616.94	6.891E-01	Pulse	0.10	3
Na			2	3642.151	ug/l	0.65	2,093,023.11	1.576E+01	Pulse	0.30	3
Mg			2	3569.131	ug/l	0.47	946,286.49	7.125E+00	Pulse	0.30	3
Al			2	3536.260	ug/l	0.73	319,571.36	2.406E+00	Pulse	0.30	3
K			2	3686.824	ug/l	0.81	818,184.71	6.161E+00	Pulse	0.30	3
Ca			2	4009.444	ug/l	1.41	44,355.60	3.340E-01	Pulse	0.30	3
Ti			2	73.316	ug/l	2.30	6,016.73	4.530E-02	Pulse	0.30	3
V			2	72.612	ug/l	0.92	193,307.16	1.456E+00	Pulse	0.30	3
Cr			2	71.184	ug/l	0.41	240,788.60	1.813E+00	Pulse	0.30	3
Mn			2	71.859	ug/l	1.37	129,924.44	9.783E-01	Pulse	0.30	3
Fe			2	4005.053	ug/l	1.20	10,570,793.75	7.960E+01	Analog	0.30	3
Co			2	71.537	ug/l	0.46	380,157.68	2.863E+00	Pulse	0.30	3
Ni			2	71.442	ug/l	0.56	100,416.74	7.561E-01	Pulse	0.30	3
Cu			2	72.223	ug/l	1.43	282,063.56	2.124E+00	Pulse	0.30	3
Zn			2	65.674	ug/l	0.30	39,138.86	2.947E-01	Pulse	0.30	3
As			2	69.269	ug/l	0.89	22,983.75	1.731E-01	Pulse	1.00	3
Cd			2	68.779	ug/l	0.50	64,399.72	7.813E-02	Pulse	0.30	3
Sn			2	73.106	ug/l	0.80	150,923.94	1.831E-01	Pulse	0.30	3
Se			3	341.835	ug/l	0.54	31,331.91	1.728E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,082,165.47	0.28	86.7	Pulse	0.10	3
1	Sc		2,226,496.43	1.02	79.1	Pulse	0.10	3
1	Ge		494,179.19	0.95	86.6	Pulse	0.10	3

Quantitation Report

1	Ge		686,507.26	0.87	86.5	Pulse	0.10	3
1	Rh		3,232,580.89	1.38	84.0	Pulse	0.10	3
1	In		3,422,950.78	0.88	85.9	Pulse	0.10	3
1	Tb		4,909,450.24	0.94	88.7	Pulse	0.10	3
1	Ho		487,479.68	1.49	88.6	Pulse	0.10	3
1	Bi		2,872,926.31	0.76	86.1	Pulse	0.10	3
2	Sc		132,808.46	0.71	82.6	Pulse	0.30	3
2	Ge		87,728.04	1.12	88.2	Pulse	0.30	3
2	Ge		132,105.87	0.35	88.1	Pulse	0.30	3
2	Rh		2,029,674.78	0.52	83.4	Pulse	0.30	3
2	In		824,253.18	0.26	84.8	Pulse	0.30	3
2	Tb		2,779,384.40	0.23	84.9	Pulse	0.30	3
2	Ho		286,118.63	0.35	85.6	Pulse	0.30	3
2	Bi		1,880,954.23	0.92	84.0	Pulse	0.30	3
3	Sc		187,659.66	0.56	86.6	Pulse	0.30	3
3	Ge		119,230.74	0.75	85.0	Pulse	0.30	3
3	Ge		181,289.74	1.17	85.7	Pulse	0.30	3
3	Rh		1,842,170.07	0.43	84.5	Pulse	0.30	3
3	Tb		3,229,201.12	0.35	88.2	Pulse	0.30	3

Quantitation Report

File Name	115SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:42
Sample Name	mp17232a-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	9/11/2019 11:44
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	62.366	ug/l	0.58	181,293.68	1.678E-01	Pulse	0.25	3
B			1	192.886	ug/l	1.54	400,291.08	3.706E-01	Pulse	0.15	3
Ca			1	52592.628	ug/l	0.62	19,940,120.12	8.927E+00	Analog	0.10	3
Sr			1	476.932	ug/l	0.78	9,976,334.65	3.174E+00	Analog	0.10	3
Mo			1	75.888	ug/l	0.29	296,499.51	9.432E-02	Pulse	0.10	3
Ag			1	70.934	ug/l	0.74	717,856.81	2.135E-01	Pulse	0.10	3
Sn			1	74.116	ug/l	1.66	485,144.01	1.443E-01	Pulse	0.10	3
Sb			1	73.420	ug/l	0.53	574,116.76	1.174E-01	Pulse	0.10	3
Ba			1	120.533	ug/l	0.54	396,798.41	8.117E-02	Pulse	0.10	3
Tl			1	73.404	ug/l	1.18	1,371,183.21	4.891E-01	Pulse	0.10	3
Pb			1	75.124	ug/l	0.11	484,823.60	1.729E-01	Pulse	0.10	3
Pb			1	75.555	ug/l	0.44	429,137.51	1.531E-01	Pulse	0.10	3
Pb			1	75.203	ug/l	0.22	1,961,699.82	6.997E-01	Pulse	0.10	3
Na			2	16630.154	ug/l	0.18	9,575,663.79	7.170E+01	Analog	0.30	3
Mg			2	9879.941	ug/l	0.48	2,633,756.21	1.972E+01	Pulse	0.30	3
Al			2	3504.708	ug/l	0.68	318,512.78	2.385E+00	Pulse	0.30	3
K			2	12054.989	ug/l	0.57	2,664,279.97	1.995E+01	Pulse	0.30	3
Ca			2	52107.435	ug/l	0.63	578,586.45	4.332E+00	Pulse	0.30	3
Ti			2	70.791	ug/l	0.70	5,842.20	4.374E-02	Pulse	0.30	3
V			2	73.108	ug/l	0.94	195,717.70	1.465E+00	Pulse	0.30	3
Cr			2	71.284	ug/l	0.63	242,481.09	1.816E+00	Pulse	0.30	3
Mn			2	2063.060	ug/l	0.69	3,747,923.46	2.806E+01	Pulse	0.30	3
Fe			2	69967.580	ug/l	0.85	185,629,814.85	1.390E+03	Analog	0.30	3
Co			2	86.994	ug/l	0.67	464,888.43	3.481E+00	Pulse	0.30	3
Ni			2	74.521	ug/l	0.63	105,326.74	7.887E-01	Pulse	0.30	3
Cu			2	69.410	ug/l	1.02	272,885.94	2.043E+00	Pulse	0.30	3
Zn			2	68.623	ug/l	0.02	41,071.39	3.075E-01	Pulse	0.30	3
As			2	1545.336	ug/l	0.17	515,253.80	3.858E+00	Pulse	1.00	3
Cd			2	67.831	ug/l	1.11	62,380.25	7.705E-02	Pulse	0.30	3
Sn			2	74.374	ug/l	0.44	150,788.59	1.863E-01	Pulse	0.30	3
Se			3	334.630	ug/l	0.49	30,530.04	1.692E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,080,162.80	0.68	86.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,233,668.46	0.65	79.4	Pulse	0.10	3
1	Ge		494,307.74	0.84	86.7	Pulse	0.10	3
1	Ge		685,256.63	1.16	86.3	Pulse	0.10	3
1	Rh		3,143,681.52	1.14	81.7	Pulse	0.10	3
1	In		3,361,960.58	0.50	84.4	Pulse	0.10	3
1	Tb		4,888,642.42	0.96	88.3	Pulse	0.10	3
1	Ho		484,481.34	0.98	88.1	Pulse	0.10	3
1	Bi		2,803,530.27	1.03	84.0	Pulse	0.10	3
2	Sc		133,555.52	0.61	83.1	Pulse	0.30	3
2	Ge		88,512.18	0.32	88.9	Pulse	0.30	3
2	Ge		131,573.65	1.30	87.7	Pulse	0.30	3
2	Rh		1,985,673.25	0.37	81.6	Pulse	0.30	3
2	In		809,556.17	0.37	83.3	Pulse	0.30	3
2	Tb		2,776,387.95	0.37	84.8	Pulse	0.30	3
2	Ho		285,855.62	0.30	85.5	Pulse	0.30	3
2	Bi		1,816,172.70	0.57	81.1	Pulse	0.30	3
3	Sc		186,327.79	1.10	86.0	Pulse	0.30	3
3	Ge		120,488.53	0.76	85.9	Pulse	0.30	3
3	Ge		180,449.91	0.50	85.3	Pulse	0.30	3
3	Rh		1,791,041.04	0.24	82.1	Pulse	0.30	3
3	Tb		3,200,739.45	0.18	87.4	Pulse	0.30	3

Quantitation Report

File Name	116SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:47
Sample Name	mp17232a-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	9/11/2019 11:44
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	64.964	ug/l	0.70	190,681.93	1.748E-01	Pulse	0.25	3
B			1	202.663	ug/l	0.19	424,372.65	3.891E-01	Pulse	0.15	3
Ca			1	53652.532	ug/l	0.60	20,662,817.19	9.107E+00	Analog	0.10	3
Sr			1	490.757	ug/l	1.50	10,339,381.72	3.266E+00	Analog	0.10	3
Mo			1	76.643	ug/l	1.24	301,601.17	9.526E-02	Pulse	0.10	3
Ag			1	72.016	ug/l	0.72	736,384.60	2.168E-01	Pulse	0.10	3
Sn			1	75.246	ug/l	1.39	497,584.68	1.465E-01	Pulse	0.10	3
Sb			1	74.287	ug/l	0.67	584,875.62	1.188E-01	Pulse	0.10	3
Ba			1	123.425	ug/l	0.49	409,094.13	8.311E-02	Pulse	0.10	3
Tl			1	74.102	ug/l	1.39	1,394,829.46	4.938E-01	Pulse	0.10	3
Pb			1	75.815	ug/l	0.89	493,014.06	1.745E-01	Pulse	0.10	3
Pb			1	76.645	ug/l	0.86	438,661.49	1.553E-01	Pulse	0.10	3
Pb			1	76.052	ug/l	0.57	1,999,046.21	7.076E-01	Pulse	0.10	3
Na			2	17016.805	ug/l	0.65	9,867,191.28	7.336E+01	Analog	0.30	3
Mg			2	10163.589	ug/l	1.51	2,728,233.92	2.029E+01	Pulse	0.30	3
Al			2	3597.528	ug/l	1.37	329,215.67	2.448E+00	Pulse	0.30	3
K			2	12477.758	ug/l	1.30	2,776,582.04	2.065E+01	Pulse	0.30	3
Ca			2	53954.520	ug/l	1.17	603,289.19	4.486E+00	Pulse	0.30	3
Ti			2	74.625	ug/l	3.49	6,200.11	4.611E-02	Pulse	0.30	3
V			2	74.548	ug/l	2.51	200,946.46	1.494E+00	Pulse	0.30	3
Cr			2	72.697	ug/l	1.71	248,992.83	1.852E+00	Pulse	0.30	3
Mn			2	2127.076	ug/l	1.32	3,891,176.79	2.893E+01	Pulse	0.30	3
Fe			2	72179.786	ug/l	1.20	192,837,334.56	1.434E+03	Analog	0.30	3
Co			2	88.818	ug/l	1.03	477,962.06	3.554E+00	Pulse	0.30	3
Ni			2	77.156	ug/l	1.34	109,808.03	8.165E-01	Pulse	0.30	3
Cu			2	70.412	ug/l	1.52	278,655.80	2.072E+00	Pulse	0.30	3
Zn			2	67.138	ug/l	1.31	40,489.92	3.011E-01	Pulse	0.30	3
As			2	1610.142	ug/l	1.27	540,609.42	4.020E+00	Pulse	1.00	3
Cd			2	70.080	ug/l	0.91	64,881.82	7.961E-02	Pulse	0.30	3
Sn			2	75.382	ug/l	0.46	153,852.17	1.888E-01	Pulse	0.30	3
Se			3	353.275	ug/l	1.50	32,509.26	1.786E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,090,666.28	0.47	87.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,268,899.03	0.43	80.7	Pulse	0.10	3
1	Ge		496,761.61	0.65	87.1	Pulse	0.10	3
1	Ge		692,994.26	1.06	87.3	Pulse	0.10	3
1	Rh		3,166,254.22	0.65	82.2	Pulse	0.10	3
1	In		3,397,159.69	1.17	85.2	Pulse	0.10	3
1	Tb		4,921,999.93	0.59	88.9	Pulse	0.10	3
1	Ho		488,163.78	1.23	88.7	Pulse	0.10	3
1	Bi		2,824,953.50	0.38	84.6	Pulse	0.10	3
2	Sc		134,501.29	1.33	83.7	Pulse	0.30	3
2	Ge		88,417.45	1.64	88.8	Pulse	0.30	3
2	Ge		133,108.08	1.34	88.8	Pulse	0.30	3
2	Rh		1,995,176.93	0.41	82.0	Pulse	0.30	3
2	In		815,036.04	0.57	83.9	Pulse	0.30	3
2	Tb		2,786,990.24	0.31	85.1	Pulse	0.30	3
2	Ho		284,285.78	0.88	85.0	Pulse	0.30	3
2	Bi		1,818,129.16	0.11	81.2	Pulse	0.30	3
3	Sc		189,521.31	0.99	87.5	Pulse	0.30	3
3	Ge		122,192.26	0.88	87.1	Pulse	0.30	3
3	Ge		182,026.66	1.19	86.1	Pulse	0.30	3
3	Rh		1,798,538.82	0.86	82.5	Pulse	0.30	3
3	Tb		3,183,166.19	0.80	86.9	Pulse	0.30	3

Quantitation Report

File Name	117SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:52
Sample Name	jc94613-1
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	9/11/2019 11:44
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	0.043	ug/l	43.01	144.00	1.331E-04	Pulse	0.25	3
B			1	132.251	ug/l	11.02	281,814.34	2.558E-01	Pulse	0.15	3
Ca			1	48931.467	ug/l	15.12	18,874,273.05	8.306E+00	Analog	0.10	3
Sr			1	397.449	ug/l	14.45	8,453,858.42	2.645E+00	Analog	0.10	3
Mo			1	1.575	ug/l	13.27	6,404.85	2.001E-03	Pulse	0.10	3
Ag			1	0.021	ug/l	41.02	236.68	7.016E-05	Pulse	0.10	3
Sn			1	0.753	ug/l	24.47	7,632.19	2.240E-03	Pulse	0.10	3
Sb			1	0.195	ug/l	24.43	1,856.86	3.747E-04	Pulse	0.10	3
Ba			1	47.674	ug/l	16.63	159,554.77	3.211E-02	Pulse	0.10	3
Tl			1	0.054	ug/l	23.43	1,216.76	4.336E-04	Pulse	0.10	3
Pb			1	0.157	ug/l	14.71	1,260.11	4.475E-04	Pulse	0.10	3
Pb			1	0.137	ug/l	67.91	966.74	3.547E-04	Pulse	0.10	3
Pb			1	0.135	ug/l	26.17	4,573.80	1.636E-03	Pulse	0.10	3
Na			2	12921.754	ug/l	0.91	7,527,441.92	5.573E+01	Analog	0.30	3
Mg			2	6417.017	ug/l	0.70	1,730,232.47	1.281E+01	Pulse	0.30	3
Al			2	6.862	ug/l	2.35	1,215.62	8.999E-03	Pulse	0.30	3
K			2	8434.792	ug/l	0.59	1,888,958.61	1.398E+01	Pulse	0.30	3
Ca			2	48647.829	ug/l	0.19	546,357.76	4.045E+00	Pulse	0.30	3
Ti			2	0.257	ug/l	46.30	23.33	1.727E-04	Pulse	0.30	3
V			2	0.456	ug/l	12.71	1,485.64	1.099E-02	Pulse	0.30	3
Cr			2	0.753	ug/l	3.12	3,397.06	2.515E-02	Pulse	0.30	3
Mn			2	2008.196	ug/l	0.31	3,689,944.44	2.732E+01	Pulse	0.30	3
Fe			2	66385.003	ug/l	0.72	178,136,730.70	1.319E+03	Analog	0.30	3
Co			2	17.161	ug/l	1.77	92,788.21	6.870E-01	Pulse	0.30	3
Ni			2	5.946	ug/l	2.53	8,631.23	6.390E-02	Pulse	0.30	3
Cu			2	0.030	ug/l	94.50	6,963.76	5.156E-02	Pulse	0.30	3
Zn			2	4.985	ug/l	4.42	4,186.14	3.099E-02	Pulse	0.30	3
As			2	1474.275	ug/l	0.96	497,162.68	3.681E+00	Pulse	1.00	3
Cd			2	0.022	ug/l	60.48	31.75	3.877E-05	Pulse	0.30	3
Sn			2	0.762	ug/l	6.86	2,498.01	3.051E-03	Pulse	0.30	3
Se			3	0.340	ug/l	7.78	34.20	1.912E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,109,298.93	9.94	88.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,304,674.55	14.10	81.9	Pulse	0.10	3
1	Ge		506,103.52	10.87	88.7	Pulse	0.10	3
1	Ge		695,200.00	9.69	87.6	Pulse	0.10	3
1	Rh		3,238,176.10	13.47	84.1	Pulse	0.10	3
1	In		3,453,069.04	13.55	86.6	Pulse	0.10	3
1	Tb		5,064,195.24	17.16	91.5	Mix	0.10	3
1	Ho		486,183.96	12.69	88.4	Pulse	0.10	3
1	Bi		2,845,991.41	13.63	85.2	Pulse	0.10	3
2	Sc		135,082.19	0.80	84.1	Pulse	0.30	3
2	Ge		89,065.29	0.94	89.5	Pulse	0.30	3
2	Ge		134,498.78	0.19	89.7	Pulse	0.30	3
2	Rh		2,021,471.24	0.31	83.0	Pulse	0.30	3
2	In		818,564.95	0.65	84.2	Pulse	0.30	3
2	Tb		2,800,847.80	1.12	85.5	Pulse	0.30	3
2	Ho		286,734.91	0.54	85.8	Pulse	0.30	3
2	Bi		1,838,974.37	0.77	82.1	Pulse	0.30	3
3	Sc		184,873.35	2.02	85.3	Pulse	0.30	3
3	Ge		119,767.63	0.49	85.4	Pulse	0.30	3
3	Ge		178,949.66	2.30	84.6	Pulse	0.30	3
3	Rh		1,787,378.54	1.25	81.9	Pulse	0.30	3
3	Tb		3,149,522.65	1.80	86.0	Pulse	0.30	3

Quantitation Report

File Name	118SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 19:57
Sample Name	mp17232a-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	9/11/2019 11:44
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	19.57	45.33	3.722E-05	Pulse	0.25	3
B			1	137.794	ug/l	1.55	70,295.29	5.771E-02	Pulse	0.15	3
Ca			1	47078.300	ug/l	0.41	3,972,479.84	1.602E+00	Pulse	0.10	3
Sr			1	356.860	ug/l	0.92	1,636,457.11	4.750E-01	Pulse	0.10	3
Mo			1	1.376	ug/l	12.35	1,330.10	3.860E-04	Pulse	0.10	3
Ag			1	0.052	ug/l	13.33	136.67	3.763E-05	Pulse	0.10	3
Sn			1	-0.756	ug/l	-6.38	1,776.83	4.893E-04	Pulse	0.10	3
Sb			1	0.196	ug/l	43.09	646.70	1.254E-04	Pulse	0.10	3
Ba			1	47.896	ug/l	3.27	33,366.63	6.465E-03	Pulse	0.10	3
Tl			1	0.040	ug/l	72.26	376.69	1.279E-04	Pulse	0.10	3
Pb			1	0.368	ug/l	13.46	750.05	2.549E-04	Pulse	0.10	3
Pb			1	0.399	ug/l	22.08	700.04	2.379E-04	Pulse	0.10	3
Pb			1	0.381	ug/l	12.04	3,196.93	1.087E-03	Pulse	0.10	3
Na			2	12194.085	ug/l	1.28	1,537,479.42	1.058E+01	Pulse	0.30	3
Mg			2	6438.211	ug/l	1.35	373,832.12	2.572E+00	Pulse	0.30	3
Al			2	0.907	ug/l	433.81	648.91	4.461E-03	Pulse	0.30	3
K			2	8442.610	ug/l	0.99	416,910.44	2.868E+00	Pulse	0.30	3
Ca			2	48274.432	ug/l	0.33	116,768.87	8.033E-01	Pulse	0.30	3
Ti			2	1.511	ug/l	116.30	28.89	2.004E-04	Pulse	0.30	3
V			2	0.181	ug/l	36.95	377.79	2.598E-03	Pulse	0.30	3
Cr			2	0.025	ug/l	98.28	894.48	6.152E-03	Pulse	0.30	3
Mn			2	1975.837	ug/l	1.09	781,438.56	5.376E+00	Pulse	0.30	3
Fe			2	65853.391	ug/l	1.91	38,032,917.38	2.617E+02	Analog	0.30	3
Co			2	16.586	ug/l	2.32	19,342.22	1.331E-01	Pulse	0.30	3
Ni			2	6.062	ug/l	5.11	2,016.82	1.388E-02	Pulse	0.30	3
Cu			2	-4.148	ug/l	-0.61	3,908.29	2.689E-02	Pulse	0.30	3
Zn			2	2.837	ug/l	21.34	1,714.55	1.180E-02	Pulse	0.30	3
As			2	1563.898	ug/l	0.73	113,521.93	7.810E-01	Pulse	1.00	3
Cd			2	0.007	ug/l	415.48	13.24	1.514E-05	Pulse	0.30	3
Sn			2	-0.970	ug/l	-10.03	587.79	6.717E-04	Pulse	0.30	3
Se			3	0.652	ug/l	22.73	15.80	8.525E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,217,939.64	0.62	97.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,480,015.90	0.13	88.2	Pulse	0.10	3
1	Ge		511,112.39	0.22	89.6	Pulse	0.10	3
1	Ge		706,855.43	0.27	89.0	Pulse	0.10	3
1	Rh		3,445,127.24	0.38	89.5	Pulse	0.10	3
1	In		3,631,884.10	0.68	91.1	Pulse	0.10	3
1	Tb		5,164,287.42	4.43	93.3	Mix	0.10	3
1	Ho		495,147.58	0.31	90.0	Pulse	0.10	3
1	Bi		2,941,690.27	0.54	88.1	Pulse	0.10	3
2	Sc		145,368.14	1.35	90.5	Pulse	0.30	3
2	Ge		91,086.24	0.62	91.5	Pulse	0.30	3
2	Ge		135,620.73	1.01	90.4	Pulse	0.30	3
2	Rh		2,151,573.32	0.74	88.4	Pulse	0.30	3
2	In		875,176.00	0.43	90.1	Pulse	0.30	3
2	Tb		2,888,594.61	0.66	88.2	Pulse	0.30	3
2	Ho		295,045.08	0.97	88.3	Pulse	0.30	3
2	Bi		1,946,048.53	0.85	86.9	Pulse	0.30	3
3	Sc		190,270.42	0.50	87.8	Pulse	0.30	3
3	Ge		122,446.36	0.48	87.3	Pulse	0.30	3
3	Ge		185,429.74	0.46	87.7	Pulse	0.30	3
3	Rh		1,899,685.75	0.29	87.1	Pulse	0.30	3
3	Tb		3,244,227.86	0.41	88.6	Pulse	0.30	3

Quantitation Report

File Name	119SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 20:02
Sample Name	mp17232a-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	9/11/2019 11:44
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	68.620	ug/l	1.41	208,475.34	1.847E-01	Pulse	0.25	3
B			1	187.662	ug/l	0.68	407,206.60	3.607E-01	Pulse	0.15	3
Ca			1	47929.149	ug/l	0.78	19,021,261.38	8.136E+00	Analog	0.10	3
Sr			1	444.156	ug/l	0.78	9,505,018.19	2.956E+00	Analog	0.10	3
Mo			1	83.120	ug/l	0.23	332,230.84	1.033E-01	Pulse	0.10	3
Ag			1	74.781	ug/l	0.36	767,723.53	2.251E-01	Pulse	0.10	3
Sn			1	80.439	ug/l	0.83	533,926.82	1.565E-01	Pulse	0.10	3
Sb			1	80.699	ug/l	1.48	625,919.29	1.291E-01	Pulse	0.10	3
Ba			1	123.599	ug/l	1.69	403,622.44	8.323E-02	Pulse	0.10	3
Tl			1	80.075	ug/l	0.32	1,478,181.49	5.336E-01	Pulse	0.10	3
Pb			1	78.555	ug/l	0.76	500,960.51	1.808E-01	Pulse	0.10	3
Pb			1	78.788	ug/l	1.11	442,175.31	1.596E-01	Pulse	0.10	3
Pb			1	78.459	ug/l	0.33	2,022,386.64	7.300E-01	Pulse	0.10	3
Na			2	15578.259	ug/l	1.09	9,331,519.91	6.717E+01	Analog	0.30	3
Mg			2	9476.555	ug/l	1.03	2,627,923.65	1.892E+01	Pulse	0.30	3
Al			2	3739.348	ug/l	1.40	353,474.59	2.544E+00	Pulse	0.30	3
K			2	11440.962	ug/l	1.12	2,630,974.55	1.894E+01	Pulse	0.30	3
Ca			2	47548.548	ug/l	1.50	549,227.29	3.953E+00	Pulse	0.30	3
Ti			2	76.029	ug/l	0.67	6,526.91	4.698E-02	Pulse	0.30	3
V			2	78.304	ug/l	0.86	218,058.23	1.570E+00	Pulse	0.30	3
Cr			2	76.888	ug/l	1.00	272,013.13	1.958E+00	Pulse	0.30	3
Mn			2	1849.459	ug/l	0.95	3,495,135.83	2.516E+01	Pulse	0.30	3
Fe			2	62477.810	ug/l	1.08	172,436,659.81	1.241E+03	Analog	0.30	3
Co			2	90.690	ug/l	1.32	504,139.04	3.629E+00	Pulse	0.30	3
Ni			2	79.038	ug/l	0.81	116,204.19	8.364E-01	Pulse	0.30	3
Cu			2	74.174	ug/l	1.33	302,857.77	2.180E+00	Pulse	0.30	3
Zn			2	72.542	ug/l	1.63	45,087.43	3.246E-01	Pulse	0.30	3
As			2	1387.550	ug/l	1.28	481,253.71	3.464E+00	Pulse	1.00	3
Cd			2	73.727	ug/l	1.58	69,293.74	8.375E-02	Pulse	0.30	3
Sn			2	80.248	ug/l	0.87	166,211.65	2.009E-01	Pulse	0.30	3
Se			3	357.712	ug/l	0.56	32,876.92	1.809E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,128,914.58	0.19	90.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,337,881.27	0.24	83.1	Pulse	0.10	3
1	Ge		500,273.77	0.95	87.7	Pulse	0.10	3
1	Ge		695,068.48	0.68	87.6	Pulse	0.10	3
1	Rh		3,216,089.22	0.98	83.5	Pulse	0.10	3
1	In		3,410,626.00	0.69	85.6	Pulse	0.10	3
1	Tb		4,849,850.86	1.55	87.6	Pulse	0.10	3
1	Ho		484,012.02	0.89	88.0	Pulse	0.10	3
1	Bi		2,770,393.29	0.96	83.0	Pulse	0.10	3
2	Sc		138,941.26	1.27	86.5	Pulse	0.30	3
2	Ge		89,130.08	0.99	89.6	Pulse	0.30	3
2	Ge		133,349.74	0.62	88.9	Pulse	0.30	3
2	Rh		2,022,961.52	0.21	83.1	Pulse	0.30	3
2	In		827,442.44	0.80	85.1	Pulse	0.30	3
2	Tb		2,812,828.01	0.80	85.9	Pulse	0.30	3
2	Ho		287,818.46	0.86	86.1	Pulse	0.30	3
2	Bi		1,827,298.54	0.72	81.6	Pulse	0.30	3
3	Sc		190,082.27	1.08	87.7	Pulse	0.30	3
3	Ge		121,845.23	0.94	86.9	Pulse	0.30	3
3	Ge		181,787.21	1.01	85.9	Pulse	0.30	3
3	Rh		1,811,483.89	0.49	83.0	Pulse	0.30	3
3	Tb		3,210,776.47	0.13	87.6	Pulse	0.30	3

Quantitation Report

File Name	120_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 20:07
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	9/11/2019 11:44
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	44.856	ug/l	0.56	296,089.93	2.414E-01	Pulse	0.25	3
B			1	87.107	ug/l	0.32	411,170.10	3.353E-01	Pulse	0.15	3
Ca			1	5006.329	ug/l	0.50	4,327,305.25	1.703E+00	Pulse	0.10	3
Sr			1	51.497	ug/l	0.64	2,380,765.96	6.854E-01	Pulse	0.10	3
Mo			1	50.796	ug/l	0.36	438,513.93	1.262E-01	Pulse	0.10	3
Ag			1	49.550	ug/l	0.43	1,079,374.85	2.983E-01	Pulse	0.10	3
Sn			1	49.270	ug/l	0.59	693,276.26	1.916E-01	Pulse	0.10	3
Sb			1	52.879	ug/l	0.29	856,369.88	1.691E-01	Pulse	0.10	3
Ba			1	51.031	ug/l	0.27	347,996.23	6.873E-02	Pulse	0.10	3
Tl			1	50.983	ug/l	0.23	1,950,886.59	6.794E-01	Pulse	0.10	3
Pb			1	50.358	ug/l	0.80	665,638.97	2.318E-01	Pulse	0.10	3
Pb			1	50.697	ug/l	1.56	589,769.17	2.054E-01	Pulse	0.10	3
Pb			1	50.392	ug/l	0.77	2,692,308.75	9.376E-01	Pulse	0.10	3
Na			2	5045.273	ug/l	1.06	6,522,016.55	4.353E+01	Analog	0.30	3
Mg			2	4745.146	ug/l	0.74	2,838,017.18	1.894E+01	Pulse	0.30	3
Al			2	4783.324	ug/l	1.06	974,197.63	6.502E+00	Pulse	0.30	3
K			2	4943.046	ug/l	1.00	2,453,357.68	1.638E+01	Pulse	0.30	3
Ca			2	5171.214	ug/l	1.25	128,911.28	8.604E-01	Pulse	0.30	3
Ti			2	50.011	ug/l	3.29	9,258.25	6.180E-02	Pulse	0.30	3
V			2	49.739	ug/l	0.82	298,655.34	1.993E+00	Pulse	0.30	3
Cr			2	48.828	ug/l	0.81	372,318.84	2.485E+00	Pulse	0.30	3
Mn			2	49.348	ug/l	1.36	201,263.46	1.343E+00	Pulse	0.30	3
Fe			2	5178.095	ug/l	1.43	30,826,592.11	2.058E+02	Analog	0.30	3
Co			2	48.608	ug/l	1.25	582,784.09	3.890E+00	Pulse	0.30	3
Ni			2	48.473	ug/l	0.77	153,664.14	1.026E+00	Pulse	0.30	3
Cu			2	47.589	ug/l	1.17	416,933.85	2.783E+00	Pulse	0.30	3
Zn			2	48.661	ug/l	1.11	64,756.03	4.322E-01	Pulse	0.30	3
As			2	50.123	ug/l	1.04	37,514.81	2.504E-01	Pulse	1.00	3
Cd			2	48.594	ug/l	1.18	97,799.51	1.104E-01	Pulse	0.30	3
Sn			2	49.313	ug/l	0.32	218,473.23	2.466E-01	Pulse	0.30	3
Se			3	199.919	ug/l	0.58	37,775.36	2.022E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,226,450.59	0.93	98.2	Pulse	0.10	3
1	Sc		2,540,896.05	0.51	90.3	Pulse	0.10	3
1	Ge		512,447.96	0.76	89.8	Pulse	0.10	3

Quantitation Report

1	Ge		717,985.46	0.67	90.4	Pulse	0.10	3
1	Rh		3,473,428.39	0.11	90.2	Pulse	0.10	3
1	In		3,618,415.96	0.51	90.8	Pulse	0.10	3
1	Tb		5,063,154.92	0.18	91.4	Pulse	0.10	3
1	Ho		496,070.72	0.30	90.2	Pulse	0.10	3
1	Bi		2,871,428.39	0.07	86.0	Pulse	0.10	3
2	Sc		149,822.41	0.40	93.2	Pulse	0.30	3
2	Ge		91,351.25	0.37	91.8	Pulse	0.30	3
2	Ge		137,781.95	0.68	91.9	Pulse	0.30	3
2	Rh		2,149,383.67	0.97	88.3	Pulse	0.30	3
2	In		885,875.61	0.48	91.2	Pulse	0.30	3
2	Tb		2,917,810.58	0.64	89.1	Pulse	0.30	3
2	Ho		296,847.49	0.20	88.8	Pulse	0.30	3
2	Bi		1,911,202.56	0.39	85.4	Pulse	0.30	3
3	Sc		197,361.48	0.74	91.1	Pulse	0.30	3
3	Ge		124,285.36	0.69	88.6	Pulse	0.30	3
3	Ge		186,869.45	1.09	88.3	Pulse	0.30	3
3	Rh		1,897,013.12	0.59	87.0	Pulse	0.30	3
3	Tb		3,274,414.66	0.59	89.4	Pulse	0.30	3

Quantitation Report

File Name	121_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 20:12
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	9/11/2019 11:44
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	0.011	ug/l	42.92	94.67	7.623E-05	Pulse	0.25	3
B			1	4.515	ug/l	3.21	28,110.21	2.265E-02	Pulse	0.15	3
Ca			1	0.737	ug/l	52.32	11,574.46	4.565E-03	Pulse	0.10	3
Sr			1	0.017	ug/l	19.58	1,160.09	3.296E-04	Pulse	0.10	3
Mo			1	0.075	ug/l	18.44	813.39	2.307E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	17.60	290.01	7.927E-05	Pulse	0.10	3
Sn			1	0.131	ug/l	22.23	4,714.26	1.288E-03	Pulse	0.10	3
Sb			1	0.057	ug/l	12.80	1,223.43	2.444E-04	Pulse	0.10	3
Ba			1	0.015	ug/l	35.82	180.01	3.597E-05	Pulse	0.10	3
Tl			1	0.030	ug/l	24.82	1,400.13	4.788E-04	Pulse	0.10	3
Pb			1	0.050	ug/l	15.83	920.06	3.144E-04	Pulse	0.10	3
Pb			1	0.046	ug/l	14.73	766.72	2.620E-04	Pulse	0.10	3
Pb			1	0.045	ug/l	13.13	3,540.30	1.210E-03	Pulse	0.10	3
Na			2	4.869	ug/l	12.11	17,948.53	1.158E-01	Pulse	0.30	3
Mg			2	0.784	ug/l	19.59	800.03	5.153E-03	Pulse	0.30	3
Al			2	1.959	ug/l	9.47	1,085.60	6.999E-03	Pulse	0.30	3
K			2	-0.863	ug/l	-137.81	12,889.54	8.315E-02	Pulse	0.30	3
Ca			2	3.534	ug/l	27.78	198.89	1.286E-03	Pulse	0.30	3
Ti			2	0.035	ug/l	75.50	8.89	5.686E-05	Pulse	0.30	3
V			2	-0.014	ug/l	-22.88	201.12	1.299E-03	Pulse	0.30	3
Cr			2	-0.008	ug/l	-115.49	872.26	5.617E-03	Pulse	0.30	3
Mn			2	0.039	ug/l	3.32	304.45	1.962E-03	Pulse	0.30	3
Fe			2	2.018	ug/l	7.29	18,454.89	1.191E-01	Pulse	0.30	3
Co			2	0.006	ug/l	19.11	131.06	8.419E-04	Pulse	0.30	3
Ni			2	0.015	ug/l	106.08	214.45	1.381E-03	Pulse	0.30	3
Cu			2	-0.414	ug/l	-4.84	4,179.47	2.694E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.201	ug/l	-27.48	1,176.72	7.590E-03	Pulse	0.30	3
As			2	0.067	ug/l	26.89	74.00	4.741E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	262.74	18.81	2.073E-05	Pulse	0.30	3
Sn			2	0.141	ug/l	12.50	1,711.23	1.857E-03	Pulse	0.30	3
Se			3	0.127	ug/l	8.22	27.67	1.481E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,241,218.33	0.33	99.4	Pulse	0.10	3
1	Sc		2,535,165.06	0.87	90.1	Pulse	0.10	3
1	Ge		517,733.16	1.42	90.8	Pulse	0.10	3
1	Ge		719,724.62	0.49	90.7	Pulse	0.10	3
1	Rh		3,523,939.43	1.22	91.5	Pulse	0.10	3
1	In		3,660,503.87	1.17	91.9	Pulse	0.10	3
1	Tb		5,005,597.53	0.16	90.4	Pulse	0.10	3
1	Ho		492,002.23	0.79	89.4	Pulse	0.10	3
1	Bi		2,927,933.19	0.94	87.7	Pulse	0.10	3
2	Sc		155,226.01	4.31	96.6	Pulse	0.30	3
2	Ge		93,899.14	2.57	94.4	Pulse	0.30	3
2	Ge		140,392.13	1.17	93.6	Pulse	0.30	3
2	Rh		2,263,807.97	2.63	93.0	Pulse	0.30	3
2	In		920,938.80	2.50	94.8	Pulse	0.30	3
2	Tb		2,983,300.37	2.90	91.1	Pulse	0.30	3
2	Ho		302,695.93	2.81	90.6	Pulse	0.30	3
2	Bi		1,996,059.50	2.14	89.2	Pulse	0.30	3
3	Sc		195,579.35	0.93	90.3	Pulse	0.30	3
3	Ge		124,071.52	0.48	88.5	Pulse	0.30	3
3	Ge		186,884.60	1.12	88.3	Pulse	0.30	3
3	Rh		1,925,609.44	0.44	88.3	Pulse	0.30	3
3	Tb		3,214,449.87	0.65	87.7	Pulse	0.30	3

Quantitation Report

File Name	122SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Method File	
Method Path	
Acq Time	9/11/2019 20:17
Sample Name	jc94537-1
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	9/11/2019 11:44
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	62.47	76.00	6.894E-05	Pulse	0.25	3
B			1	100.928	ug/l	1.70	216,705.30	1.966E-01	Pulse	0.15	3
Ca			1	39428.129	ug/l	0.53	15,447,921.44	6.694E+00	Analog	0.10	3
Sr			1	306.391	ug/l	0.20	6,508,326.15	2.039E+00	Analog	0.10	3
Mo			1	0.419	ug/l	3.22	1,800.18	5.640E-04	Pulse	0.10	3
Ag			1	0.023	ug/l	15.46	256.68	7.487E-05	Pulse	0.10	3
Sn			1	0.649	ug/l	8.04	6,995.17	2.039E-03	Pulse	0.10	3
Sb			1	0.191	ug/l	9.67	1,766.83	3.677E-04	Pulse	0.10	3
Ba			1	14.824	ug/l	1.48	48,025.15	9.996E-03	Pulse	0.10	3
Tl			1	0.017	ug/l	19.48	520.03	1.868E-04	Pulse	0.10	3
Pb			1	0.170	ug/l	3.98	1,330.11	4.778E-04	Pulse	0.10	3
Pb			1	0.199	ug/l	7.85	1,333.45	4.790E-04	Pulse	0.10	3
Pb			1	0.182	ug/l	1.35	5,764.00	2.071E-03	Pulse	0.10	3
Na			2	22299.635	ug/l	0.71	13,149,407.53	9.612E+01	Analog	0.30	3
Mg			2	5045.386	ug/l	0.38	1,377,844.22	1.007E+01	Pulse	0.30	3
Al			2	1.216	ug/l	56.28	706.69	5.164E-03	Pulse	0.30	3
K			2	7097.893	ug/l	0.37	1,611,759.35	1.178E+01	Pulse	0.30	3
Ca			2	39376.621	ug/l	0.35	447,892.76	3.274E+00	Pulse	0.30	3
Ti			2	2.200	ug/l	16.24	187.78	1.373E-03	Pulse	0.30	3
V			2	0.185	ug/l	10.71	764.47	5.587E-03	Pulse	0.30	3
Cr			2	0.476	ug/l	3.11	2,476.88	1.811E-02	Pulse	0.30	3
Mn			2	24.779	ug/l	0.77	46,235.58	3.380E-01	Pulse	0.30	3
Fe			2	644.905	ug/l	0.32	1,757,909.06	1.285E+01	Pulse	0.30	3
Co			2	0.414	ug/l	6.92	2,313.23	1.691E-02	Pulse	0.30	3
Ni			2	4.812	ug/l	1.57	7,102.73	5.192E-02	Pulse	0.30	3
Cu			2	3.005	ug/l	0.01	18,736.37	1.370E-01	Pulse	0.30	3
Zn			2	4.061	ug/l	7.73	3,690.46	2.698E-02	Pulse	0.30	3
As			2	24.799	ug/l	1.22	8,488.22	6.205E-02	Pulse	1.00	3
Cd			2	0.001	ug/l	244.23	12.07	1.451E-05	Pulse	0.30	3
Sn			2	0.638	ug/l	14.29	2,281.31	2.742E-03	Pulse	0.30	3
Se			3	0.233	ug/l	19.61	24.80	1.370E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,102,532.17	0.50	88.3	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	5000	2888	2849.5	3.27
59	5000	4044	3968.6	2.51
89	10000	7168	7043.9	2.12
140	10000	7149	7220.5	2.21
205	10000	5132	4826.0	2.71
156/140	1	0.853 %	0.707 %	12.90
70/140	20	11.319 %	9.556 %	20.34
9	20	5	2.3	87.37
11	2000	1312	1337.6	3.64
88	200	107	100.4	11.67
95	20	7	7.4	37.30
107	20	3	3.4	55.49
121	100	68	69.7	13.91
137	50	23	20.8	21.93
208	100	35	40.0	17.73
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	-24	V
Extract 2	-150.0	V	Cell Exit	-60	V
Omega Bias	-65	V	Deflect	14.0	V
Omega Lens	7.2	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	2.59E+2	Pa	Internal Temp	26.7	℃
Water RF/WC/IF	1.28	L/min	S/C Temp (L)	1.6	℃
Carrier Gas(BP)	1.42E+2	kPa			

US EPA Tune Check Sample Report

Batch Folder C:\Agilent\ICPMH\1\DATA\xa091119m1.b
Report Comment
Instrument Name G3281A JP10340551

[1]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	86141	0.77	5.00	
24	363749	0.70	5.00	
25	47625	0.64	5.00	
26	55685	0.40	5.00	
59	441600	0.30	5.00	
115	697798	0.39	5.00	
206	176723	0.35	5.00	
207	162266	0.51	5.00	
208	382388	0.61	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	85341	85689	86057	86751	86868
24	360559	362742	363012	365161	367271
25	47174	47900	47451	47795	47805
26	55531	55592	55467	56006	55826
59	439855	441357	440902	442940	442944
115	697125	700531	696689	700478	694169
206	176945	177658	176646	176174	176191
207	162625	163478	161862	162091	161273
208	385115	384687	381153	380497	380486

Integration Time [sec] = 0.1

Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	13989	8.95	8.9 - 9.1		0.766	0.900	
24	58916	23.90	23.9 - 24.1		0.758	0.900	
25	7803	24.90	24.9 - 25.1		0.732	0.900	
26	9035	25.90	25.9 - 26.1		0.759	0.900	
59	75759	58.95	58.9 - 59.1		0.720	0.900	
115	126734	115.00	114.9 - 115.1		0.710	0.900	
206	30865	206.00	205.9 - 206.1		0.755	0.900	
207	27912	206.95	206.9 - 207.1		0.722	0.900	
208	66782	207.95	207.9 - 208.1		0.752	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	7.2	V			
Extract 2	-150.0	V	Cell Entrance	-24	V			
Omega Bias	-65	V	Cell Exit	-60	V			
Deflect	14.0	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						

137 Ba [1] ISTD :159 Tb [1]
x10 -1
y = 0.001347 * x + 1.571554E-005
R = 1.0000
DL = 0.006319 ug/l
BEC = 0.01167 ug/l
1
0
0.0020
50.0
100.0
Conc(ug/l)

Quantitation Report

File Name	001CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 10:24
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	9/12/2019 13:37
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	185.47	14.67	1.330E-05	Pulse	0.25	3
B			1	0.528	ug/l	38.01	13,850.35	1.256E-02	Pulse	0.15	3
Ca			1	-0.366	ug/l	-177.85	6,478.20	3.023E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	-4159.86	396.69	1.256E-04	Pulse	0.10	3
Mo			1	0.003	ug/l	90.06	40.00	1.267E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	72637.86	26.67	7.988E-06	Pulse	0.10	3
Sn			1	0.002	ug/l	605.16	1,933.55	5.800E-04	Pulse	0.10	3
Sb			1	0.003	ug/l	33.06	203.34	4.307E-05	Pulse	0.10	3
Ba			1	-0.007	ug/l	-49.15	60.00	1.271E-05	Pulse	0.10	3
Tl			1	-0.001	ug/l	-133.39	170.01	5.924E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	121.09	263.35	9.191E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	341.74	203.34	7.100E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	111.80	933.38	3.257E-04	Pulse	0.10	3
Na			2	-0.222	ug/l	-57.44	10,764.63	8.571E-02	Pulse	0.30	3
Mg			2	0.060	ug/l	43.33	296.67	2.362E-03	Pulse	0.30	3
Al			2	-2.920	ug/l	-9.14	428.90	3.415E-03	Pulse	0.30	3
K			2	-0.598	ug/l	-36.75	10,428.90	8.303E-02	Pulse	0.30	3
Ca			2	-2.554	ug/l	-31.18	82.22	6.544E-04	Pulse	0.30	3
Ti			2	0.022	ug/l	152.66	4.44	3.555E-05	Pulse	0.30	3
V			2	0.004	ug/l	197.38	338.90	2.698E-03	Pulse	0.30	3
Cr			2	0.001	ug/l	821.83	500.01	3.981E-03	Pulse	0.30	3
Mn			2	0.001	ug/l	753.46	143.34	1.140E-03	Pulse	0.30	3
Fe			2	-0.051	ug/l	-64.89	2,659.15	2.117E-02	Pulse	0.30	3
Co			2	0.001	ug/l	136.36	41.10	3.269E-04	Pulse	0.30	3
Ni			2	0.002	ug/l	324.30	155.56	1.238E-03	Pulse	0.30	3
Cu			2	-0.140	ug/l	-12.73	2,756.94	2.195E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.345	ug/l	-15.72	793.36	6.318E-03	Pulse	0.30	3
As			2	0.011	ug/l	34.58	20.33	1.619E-04	Pulse	1.00	3
Cd			2	-0.005	ug/l	-100.27	11.11	1.351E-05	Pulse	0.30	3
Sn			2	0.004	ug/l	351.82	608.91	7.375E-04	Pulse	0.30	3
Se			3	-0.006	ug/l	-131.41	5.27	3.402E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,103,008.67	0.41	100.0	Pulse	0.10	3
1	Sc		2,142,016.32	0.93	100.0	Pulse	0.10	3
1	Ge		456,156.48	0.61	100.0	Pulse	0.10	3
1	Ge		631,603.13	0.95	100.0	Pulse	0.10	3
1	Rh		3,158,890.99	0.26	100.0	Pulse	0.10	3
1	In		3,332,025.31	0.97	100.0	Pulse	0.10	3
1	Tb		4,722,037.43	0.34	100.0	Pulse	0.10	3
1	Ho		467,963.82	1.50	100.0	Pulse	0.10	3
1	Bi		2,866,587.56	0.77	100.0	Pulse	0.10	3
2	Sc		125,601.44	0.68	100.0	Pulse	0.30	3
2	Ge		81,121.92	0.66	100.0	Pulse	0.30	3
2	Ge		122,505.08	0.85	100.0	Pulse	0.30	3
2	Rh		1,989,203.74	0.89	100.0	Pulse	0.30	3
2	In		825,262.54	0.70	100.0	Pulse	0.30	3
2	Tb		2,780,606.14	0.80	100.0	Pulse	0.30	3
2	Ho		283,693.10	0.92	100.0	Pulse	0.30	3
2	Bi		1,909,315.13	0.82	100.0	Pulse	0.30	3
3	Sc		148,151.78	0.66	100.0	Pulse	0.30	3
3	Ge		102,441.80	0.88	100.0	Pulse	0.30	3
3	Ge		154,572.51	1.05	100.0	Pulse	0.30	3
3	Rh		1,736,171.42	0.60	100.0	Pulse	0.30	3
3	Tb		3,166,291.68	0.41	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 10:29
Sample Name	STDA
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	9/12/2019 13:37
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	23.87	38.67	3.494E-05	Pulse	0.25	3
B			1	0.188	ug/l	57.48	12,711.70	1.149E-02	Pulse	0.15	3
Ca			1	-0.078	ug/l	-425.71	6,594.95	3.121E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	83.27	443.36	1.421E-04	Pulse	0.10	3
Mo			1	0.008	ug/l	40.46	83.34	2.671E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	18.55	56.67	1.728E-05	Pulse	0.10	3
Sn			1	0.012	ug/l	99.34	2,030.22	6.193E-04	Pulse	0.10	3
Sb			1	0.005	ug/l	93.76	233.35	5.014E-05	Pulse	0.10	3
Ba			1	0.008	ug/l	32.66	150.01	3.224E-05	Pulse	0.10	3
Tl			1	0.002	ug/l	14.17	283.34	9.890E-05	Pulse	0.10	3
Pb			1	0.005	ug/l	105.65	280.02	9.771E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	123.63	220.01	7.679E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	31.92	1,073.39	3.747E-04	Pulse	0.10	3
Na			2	1.716	ug/l	14.30	12,728.26	1.018E-01	Pulse	0.30	3
Mg			2	0.318	ug/l	20.46	420.01	3.360E-03	Pulse	0.30	3
Al			2	-2.647	ug/l	-13.39	472.23	3.779E-03	Pulse	0.30	3
K			2	-0.559	ug/l	-69.09	10,393.33	8.316E-02	Pulse	0.30	3
Ca			2	-2.530	ug/l	-44.94	82.23	6.585E-04	Pulse	0.30	3
Ti			2	-0.007	ug/l	0.00	0.00	0.000E+00	Pulse	0.30	3
V			2	-0.003	ug/l	-257.99	304.45	2.435E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	104.58	504.46	4.037E-03	Pulse	0.30	3
Mn			2	0.009	ug/l	121.41	167.78	1.341E-03	Pulse	0.30	3
Fe			2	0.313	ug/l	7.70	4,478.48	3.583E-02	Pulse	0.30	3
Co			2	0.003	ug/l	44.62	61.10	4.885E-04	Pulse	0.30	3
Ni			2	0.014	ug/l	116.72	184.45	1.477E-03	Pulse	0.30	3
Cu			2	-0.150	ug/l	-4.52	2,672.47	2.138E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.424	ug/l	-20.87	701.14	5.610E-03	Pulse	0.30	3
As			2	0.014	ug/l	96.24	22.33	1.784E-04	Pulse	1.00	3
Cd			2	-0.006	ug/l	-32.62	8.89	1.082E-05	Pulse	0.30	3
Sn			2	0.008	ug/l	315.23	622.24	7.584E-04	Pulse	0.30	3
Se			3	-0.017	ug/l	-30.88	3.53	2.298E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,106,442.65	0.30	100.0	Pulse	0.10	3
1	Sc		2,113,477.36	0.58	100.0	Pulse	0.10	3
1	Ge		442,603.11	1.20	100.0	Pulse	0.10	3
1	Ge		618,677.52	0.29	100.0	Pulse	0.10	3
1	Rh		3,121,654.64	0.32	100.0	Pulse	0.10	3
1	In		3,278,627.31	0.51	100.0	Pulse	0.10	3
1	Tb		4,651,840.14	0.59	100.0	Pulse	0.10	3
1	Ho		460,899.08	1.26	100.0	Pulse	0.10	3
1	Bi		2,865,059.75	0.23	100.0	Pulse	0.10	3
2	Sc		124,983.40	0.65	100.0	Pulse	0.30	3
2	Ge		80,229.04	0.62	100.0	Pulse	0.30	3
2	Ge		121,149.14	0.84	100.0	Pulse	0.30	3
2	Rh		1,975,413.04	0.26	100.0	Pulse	0.30	3
2	In		820,812.52	0.36	100.0	Pulse	0.30	3
2	Tb		2,769,018.50	0.72	100.0	Pulse	0.30	3
2	Ho		283,790.81	0.93	100.0	Pulse	0.30	3
2	Bi		1,911,849.92	0.57	100.0	Pulse	0.30	3
3	Sc		145,498.44	0.40	100.0	Pulse	0.30	3
3	Ge		101,879.44	0.20	100.0	Pulse	0.30	3
3	Ge		153,752.70	0.06	100.0	Pulse	0.30	3
3	Rh		1,744,902.19	0.70	100.0	Pulse	0.30	3
3	Tb		3,192,875.22	0.39	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 10:37
Sample Name	STDA
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	9/12/2019 13:37
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	---	13.33	1.216E-05	Pulse	0.25	3
B			1	0.000	ug/l	---	11,871.04	1.090E-02	Pulse	0.15	3
Ca			1	0.000	ug/l	---	6,598.25	3.147E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	1588.47	393.36	1.271E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	-6090.33	20.00	6.455E-06	Pulse	0.10	3
Ag			1	0.000	ug/l	2096.29	26.67	8.291E-06	Pulse	0.10	3
Sn			1	0.001	ug/l	988.69	1,856.86	5.753E-04	Pulse	0.10	3
Sb			1	-0.001	ug/l	-66.24	143.34	3.103E-05	Pulse	0.10	3
Ba			1	0.000	ug/l	2589.17	100.00	2.164E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	1175.60	203.34	7.134E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	1152.01	213.34	7.490E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	667.18	200.01	7.025E-05	Pulse	0.10	3
Pb			1	0.001	ug/l	357.40	900.05	3.159E-04	Pulse	0.10	3
Na			2	0.000	ug/l	---	10,649.01	8.756E-02	Pulse	0.30	3
Mg			2	0.000	ug/l	---	261.11	2.128E-03	Pulse	0.30	3
Al			2	-2.811	ug/l	-7.01	434.46	3.561E-03	Pulse	0.30	3
K			2	0.555	ug/l	187.17	10,561.24	8.675E-02	Pulse	0.30	3
Ca			2	-0.523	ug/l	-170.81	122.23	9.969E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	1.11	8.817E-06	Pulse	0.30	3
V			2	0.000	ug/l	---	308.89	2.553E-03	Pulse	0.30	3
Cr			2	0.000	ug/l	---	477.79	3.939E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	---	135.56	1.104E-03	Pulse	0.30	3
Fe			2	-0.046	ug/l	-43.62	2,599.13	2.134E-02	Pulse	0.30	3
Co			2	0.000	ug/l	---	31.10	2.541E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	---	144.45	1.187E-03	Pulse	0.30	3
Cu			2	-0.148	ug/l	-18.49	2,612.46	2.149E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.352	ug/l	-7.06	763.36	6.254E-03	Pulse	0.30	3
As			2	0.000	ug/l	---	12.67	1.046E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	-3059.18	20.00	2.491E-05	Pulse	0.30	3
Sn			2	0.000	ug/l	---	577.80	7.194E-04	Pulse	0.30	3
Se			3	-0.013	ug/l	-75.43	4.00	2.620E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,089,774.52	1.57	100.0	Pulse	0.10	3
1	Sc		2,097,134.50	1.36	100.0	Pulse	0.10	3
1	Ge		439,074.90	0.59	100.0	Pulse	0.10	3
1	Ge		615,050.61	0.70	100.0	Pulse	0.10	3
1	Rh		3,094,731.73	0.68	100.0	Pulse	0.10	3
1	In		3,227,612.18	0.69	100.0	Pulse	0.10	3
1	Tb		4,619,683.58	0.29	100.0	Pulse	0.10	3
1	Ho		458,405.42	0.79	100.0	Pulse	0.10	3
1	Bi		2,849,778.19	0.70	100.0	Pulse	0.10	3
2	Sc		121,940.93	6.39	100.0	Pulse	0.30	3
2	Ge		78,896.76	4.46	100.0	Pulse	0.30	3
2	Ge		119,971.21	4.32	100.0	Pulse	0.30	3
2	Rh		1,922,469.71	5.66	100.0	Pulse	0.30	3
2	In		804,339.00	5.16	100.0	Pulse	0.30	3
2	Tb		2,681,384.20	5.29	100.0	Pulse	0.30	3
2	Ho		273,779.82	6.06	100.0	Pulse	0.30	3
2	Bi		1,866,288.12	5.01	100.0	Pulse	0.30	3
3	Sc		147,232.56	0.96	100.0	Pulse	0.30	3
3	Ge		101,598.77	0.95	100.0	Pulse	0.30	3
3	Ge		153,198.77	1.27	100.0	Pulse	0.30	3
3	Rh		1,736,180.80	0.58	100.0	Pulse	0.30	3
3	Tb		3,181,100.91	0.81	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 10:42
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	9/12/2019 13:37
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	0.522	ug/l	7.96	2,621.57	2.361E-03	Pulse	0.25	3
B			1	23.766	ug/l	0.81	95,218.63	8.574E-02	Pulse	0.15	3
Ca			1	262.791	ug/l	0.99	195,342.13	9.217E-02	Pulse	0.10	3
Sr			1	4.908	ug/l	0.85	201,281.79	6.425E-02	Pulse	0.10	3
Mo			1	0.997	ug/l	4.72	7,642.14	2.439E-03	Pulse	0.10	3
Ag			1	0.459	ug/l	6.22	9,056.24	2.742E-03	Pulse	0.10	3
Sn			1	4.852	ug/l	2.39	63,887.08	1.935E-02	Pulse	0.10	3
Sb			1	2.075	ug/l	4.15	30,971.38	6.623E-03	Pulse	0.10	3
Ba			1	0.972	ug/l	0.90	6,164.81	1.318E-03	Pulse	0.10	3
Tl			1	0.509	ug/l	3.57	19,743.80	6.865E-03	Pulse	0.10	3
Pb			1	0.488	ug/l	7.55	6,658.40	2.316E-03	Pulse	0.10	3
Pb			1	0.479	ug/l	7.46	5,761.33	2.004E-03	Pulse	0.10	3
Pb			1	0.485	ug/l	2.81	26,850.62	9.337E-03	Pulse	0.10	3
Na			2	246.731	ug/l	0.38	275,923.01	2.140E+00	Pulse	0.30	3
Mg			2	252.451	ug/l	0.20	126,400.86	9.805E-01	Pulse	0.30	3
Al			2	22.716	ug/l	4.49	4,845.20	3.758E-02	Pulse	0.30	3
K			2	251.200	ug/l	0.21	115,489.81	8.958E-01	Pulse	0.30	3
Ca			2	274.773	ug/l	2.20	6,112.31	4.741E-02	Pulse	0.30	3
Ti			2	1.214	ug/l	12.18	193.34	1.500E-03	Pulse	0.30	3
V			2	0.959	ug/l	0.67	5,275.35	4.092E-02	Pulse	0.30	3
Cr			2	1.009	ug/l	4.04	7,080.49	5.492E-02	Pulse	0.30	3
Mn			2	0.981	ug/l	1.40	3,660.45	2.839E-02	Pulse	0.30	3
Fe			2	25.678	ug/l	1.04	136,664.25	1.060E+00	Pulse	0.30	3
Co			2	0.478	ug/l	0.62	4,989.33	3.870E-02	Pulse	0.30	3
Ni			2	1.020	ug/l	1.56	2,933.63	2.276E-02	Pulse	0.30	3
Cu			2	1.885	ug/l	1.51	17,745.29	1.376E-01	Pulse	0.30	3
Zn			2	5.074	ug/l	2.01	7,100.50	5.508E-02	Pulse	0.30	3
As			2	0.508	ug/l	7.20	355.68	2.759E-03	Pulse	1.00	3
Cd			2	0.494	ug/l	6.72	949.41	1.131E-03	Pulse	0.30	3
Sn			2	4.922	ug/l	0.52	21,171.07	2.522E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.495	ug/l	6.97	83.93	5.480E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,110,535.31	0.87	101.9	Pulse	0.10	3
1	Sc		2,119,354.50	0.78	101.1	Pulse	0.10	3
1	Ge		446,230.45	0.69	101.6	Pulse	0.10	3
1	Ge		621,262.50	0.56	101.0	Pulse	0.10	3
1	Rh		3,132,969.12	0.60	101.2	Pulse	0.10	3
1	In		3,302,431.68	0.18	102.3	Pulse	0.10	3
1	Tb		4,676,905.87	0.77	101.2	Pulse	0.10	3
1	Ho		466,976.73	0.40	101.9	Pulse	0.10	3
1	Bi		2,875,966.00	0.55	100.9	Pulse	0.10	3
2	Sc		128,918.77	0.16	105.7	Pulse	0.30	3
2	Ge		82,023.35	1.30	104.0	Pulse	0.30	3
2	Ge		123,029.36	0.64	102.5	Pulse	0.30	3
2	Rh		2,015,381.45	0.14	104.8	Pulse	0.30	3
2	In		839,456.15	0.76	104.4	Pulse	0.30	3
2	Tb		2,808,327.60	0.62	104.7	Pulse	0.30	3
2	Ho		287,882.31	0.81	105.2	Pulse	0.30	3
2	Bi		1,930,218.39	0.63	103.4	Pulse	0.30	3
3	Sc		144,855.52	0.75	98.4	Pulse	0.30	3
3	Ge		101,466.95	1.36	99.9	Pulse	0.30	3
3	Ge		153,104.18	1.27	99.9	Pulse	0.30	3
3	Rh		1,744,051.04	0.47	100.5	Pulse	0.30	3
3	Tb		3,201,155.78	0.32	100.6	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 10:47
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	9/12/2019 13:37
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	5.061	ug/l	1.79	24,957.04	2.281E-02	Pulse	0.25	3
B			1	5.418	ug/l	5.05	30,590.21	2.796E-02	Pulse	0.15	3
Ca			1	6.775	ug/l	20.72	11,237.58	5.442E-03	Pulse	0.10	3
Sr			1	5.047	ug/l	0.91	200,728.55	6.606E-02	Pulse	0.10	3
Mo			1	5.102	ug/l	1.71	37,845.80	1.246E-02	Pulse	0.10	3
Ag			1	5.048	ug/l	1.71	95,889.57	3.010E-02	Pulse	0.10	3
Sn			1	5.147	ug/l	1.53	65,252.81	2.049E-02	Pulse	0.10	3
Sb			1	5.098	ug/l	2.01	73,924.74	1.622E-02	Pulse	0.10	3
Ba			1	5.084	ug/l	2.60	31,018.61	6.806E-03	Pulse	0.10	3
Tl			1	4.902	ug/l	0.79	185,032.54	6.553E-02	Pulse	0.10	3
Pb			1	4.932	ug/l	1.78	64,149.77	2.272E-02	Pulse	0.10	3
Pb			1	5.012	ug/l	1.35	57,388.88	2.033E-02	Pulse	0.10	3
Pb			1	4.969	ug/l	0.92	262,106.12	9.283E-02	Pulse	0.10	3
Na			2	4.978	ug/l	10.57	16,126.68	1.290E-01	Pulse	0.30	3
Mg			2	5.283	ug/l	6.91	2,826.94	2.260E-02	Pulse	0.30	3
Al			2	1.645	ug/l	8.49	1,187.84	9.499E-03	Pulse	0.30	3
K			2	4.539	ug/l	17.07	12,454.76	9.961E-02	Pulse	0.30	3
Ca			2	17.606	ug/l	10.85	506.68	4.053E-03	Pulse	0.30	3
Ti			2	5.052	ug/l	5.48	776.69	6.213E-03	Pulse	0.30	3
V			2	5.000	ug/l	1.62	25,331.74	2.026E-01	Pulse	0.30	3
Cr			2	5.078	ug/l	0.81	32,559.84	2.604E-01	Pulse	0.30	3
Mn			2	4.963	ug/l	1.93	17,403.77	1.392E-01	Pulse	0.30	3
Fe			2	6.020	ug/l	1.20	33,295.88	2.663E-01	Pulse	0.30	3
Co			2	5.018	ug/l	1.94	50,500.40	4.039E-01	Pulse	0.30	3
Ni			2	5.108	ug/l	1.43	13,654.69	1.092E-01	Pulse	0.30	3
Cu			2	4.968	ug/l	1.04	39,240.17	3.138E-01	Pulse	0.30	3
Zn			2	4.663	ug/l	1.59	6,423.55	5.138E-02	Pulse	0.30	3
As			2	5.060	ug/l	1.13	3,320.01	2.655E-02	Pulse	1.00	3
Cd			2	5.064	ug/l	1.27	9,419.89	1.135E-02	Pulse	0.30	3
Sn			2	5.055	ug/l	1.72	21,475.84	2.588E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	5.119	ug/l	0.78	808.29	5.298E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,094,266.81	0.66	100.4	Pulse	0.10	3
1	Sc		2,066,318.25	1.18	98.5	Pulse	0.10	3
1	Ge		433,304.38	0.98	98.7	Pulse	0.10	3
1	Ge		609,212.97	0.88	99.1	Pulse	0.10	3
1	Rh		3,038,335.37	0.61	98.2	Pulse	0.10	3
1	In		3,185,297.16	0.13	98.7	Pulse	0.10	3
1	Tb		4,558,017.43	0.38	98.7	Pulse	0.10	3
1	Ho		451,445.01	0.08	98.5	Pulse	0.10	3
1	Bi		2,823,539.75	0.11	99.1	Pulse	0.10	3
2	Sc		125,035.35	0.66	102.5	Pulse	0.30	3
2	Ge		81,648.17	1.73	103.5	Pulse	0.30	3
2	Ge		121,537.42	0.81	101.3	Pulse	0.30	3
2	Rh		1,975,253.04	0.46	102.7	Pulse	0.30	3
2	In		829,752.30	0.31	103.2	Pulse	0.30	3
2	Tb		2,770,394.89	0.53	103.3	Pulse	0.30	3
2	Ho		282,725.04	0.69	103.3	Pulse	0.30	3
2	Bi		1,911,106.38	0.86	102.4	Pulse	0.30	3
3	Sc		144,336.26	1.19	98.0	Pulse	0.30	3
3	Ge		100,875.53	0.45	99.3	Pulse	0.30	3
3	Ge		152,575.03	0.50	99.6	Pulse	0.30	3
3	Rh		1,747,751.18	0.80	100.7	Pulse	0.30	3
3	Tb		3,207,598.48	1.07	100.8	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 10:52
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	9/12/2019 13:37
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	24.985	ug/l	1.19	125,537.55	1.125E-01	Pulse	0.25	3
B			1	24.244	ug/l	3.76	97,306.61	8.725E-02	Pulse	0.15	3
Ca			1	36.739	ug/l	1.42	32,806.58	1.559E-02	Pulse	0.10	3
Sr			1	25.098	ug/l	0.57	1,016,789.96	3.280E-01	Pulse	0.10	3
Mo			1	24.963	ug/l	0.33	188,855.09	6.092E-02	Pulse	0.10	3
Ag			1	25.118	ug/l	0.95	487,229.71	1.498E-01	Pulse	0.10	3
Sn			1	24.960	ug/l	0.59	316,042.32	9.715E-02	Pulse	0.10	3
Sb			1	25.206	ug/l	0.45	371,894.93	8.007E-02	Pulse	0.10	3
Ba			1	24.854	ug/l	0.27	154,142.32	3.319E-02	Pulse	0.10	3
Tl			1	24.680	ug/l	0.93	944,990.48	3.297E-01	Pulse	0.10	3
Pb			1	24.857	ug/l	1.65	327,384.27	1.142E-01	Pulse	0.10	3
Pb			1	24.761	ug/l	0.38	287,098.03	1.001E-01	Pulse	0.10	3
Pb			1	24.790	ug/l	1.03	1,324,113.20	4.619E-01	Pulse	0.10	3
Na			2	25.369	ug/l	0.18	38,010.30	2.986E-01	Pulse	0.30	3
Mg			2	25.989	ug/l	4.25	13,088.52	1.028E-01	Pulse	0.30	3
Al			2	23.905	ug/l	8.43	4,983.02	3.917E-02	Pulse	0.30	3
K			2	24.446	ug/l	2.11	20,857.58	1.639E-01	Pulse	0.30	3
Ca			2	113.419	ug/l	4.40	2,571.35	2.021E-02	Pulse	0.30	3
Ti			2	24.596	ug/l	0.67	3,846.05	3.021E-02	Pulse	0.30	3
V			2	24.860	ug/l	0.31	126,936.06	9.973E-01	Pulse	0.30	3
Cr			2	24.889	ug/l	1.24	160,499.84	1.261E+00	Pulse	0.30	3
Mn			2	25.081	ug/l	1.66	88,946.23	6.989E-01	Pulse	0.30	3
Fe			2	26.365	ug/l	2.14	138,444.28	1.088E+00	Pulse	0.30	3
Co			2	24.922	ug/l	0.23	255,188.24	2.005E+00	Pulse	0.30	3
Ni			2	24.636	ug/l	1.06	66,466.53	5.222E-01	Pulse	0.30	3
Cu			2	25.043	ug/l	0.27	185,951.48	1.461E+00	Pulse	0.30	3
Zn			2	25.150	ug/l	1.38	29,997.51	2.357E-01	Pulse	0.30	3
As			2	24.883	ug/l	0.88	16,568.40	1.302E-01	Pulse	1.00	3
Cd			2	24.903	ug/l	1.09	46,247.06	5.574E-02	Pulse	0.30	3
Sn			2	24.893	ug/l	1.62	103,417.97	1.246E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	25.055	ug/l	0.12	3,969.88	2.577E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,115,641.22	1.65	102.4	Pulse	0.10	3
1	Sc		2,103,799.03	1.04	100.3	Pulse	0.10	3
1	Ge		442,248.52	0.72	100.7	Pulse	0.10	3
1	Ge		612,963.21	1.46	99.7	Pulse	0.10	3
1	Rh		3,099,949.64	0.76	100.2	Pulse	0.10	3
1	In		3,253,294.25	0.69	100.8	Pulse	0.10	3
1	Tb		4,644,782.43	0.70	100.5	Pulse	0.10	3
1	Ho		458,788.40	1.74	100.1	Pulse	0.10	3
1	Bi		2,866,690.58	1.13	100.6	Pulse	0.10	3
2	Sc		127,286.05	1.10	104.4	Pulse	0.30	3
2	Ge		81,611.42	0.95	103.4	Pulse	0.30	3
2	Ge		123,515.54	1.20	103.0	Pulse	0.30	3
2	Rh		1,985,747.70	0.71	103.3	Pulse	0.30	3
2	In		829,820.82	0.91	103.2	Pulse	0.30	3
2	Tb		2,788,068.64	0.84	104.0	Pulse	0.30	3
2	Ho		286,889.94	0.83	104.8	Pulse	0.30	3
2	Bi		1,929,827.91	1.37	103.4	Pulse	0.30	3
3	Sc		144,136.15	1.11	97.9	Pulse	0.30	3
3	Ge		100,161.81	1.10	98.6	Pulse	0.30	3
3	Ge		154,022.91	0.26	100.5	Pulse	0.30	3
3	Rh		1,752,869.97	0.88	101.0	Pulse	0.30	3
3	Tb		3,229,987.79	1.23	101.5	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 10:57
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	9/12/2019 13:37
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	50.100	ug/l	1.49	250,922.86	2.257E-01	Pulse	0.25	3
B			1	48.272	ug/l	0.97	181,172.57	1.629E-01	Pulse	0.15	3
Ca			1	65.976	ug/l	1.16	53,159.29	2.550E-02	Pulse	0.10	3
Sr			1	50.768	ug/l	0.83	2,047,922.21	6.634E-01	Pulse	0.10	3
Mo			1	50.171	ug/l	0.91	377,970.71	1.224E-01	Pulse	0.10	3
Ag			1	49.841	ug/l	0.75	963,741.24	2.972E-01	Pulse	0.10	3
Sn			1	50.228	ug/l	0.96	632,128.98	1.949E-01	Pulse	0.10	3
Sb			1	50.382	ug/l	0.37	742,597.96	1.600E-01	Pulse	0.10	3
Ba			1	50.546	ug/l	0.71	313,103.11	6.747E-02	Pulse	0.10	3
Tl			1	49.847	ug/l	1.18	1,909,026.69	6.657E-01	Pulse	0.10	3
Pb			1	50.177	ug/l	0.86	660,920.96	2.305E-01	Pulse	0.10	3
Pb			1	50.069	ug/l	0.15	580,506.27	2.024E-01	Pulse	0.10	3
Pb			1	50.024	ug/l	0.14	2,672,057.94	9.318E-01	Pulse	0.10	3
Na			2	50.458	ug/l	0.45	63,929.76	5.074E-01	Pulse	0.30	3
Mg			2	50.274	ug/l	0.95	24,818.32	1.970E-01	Pulse	0.30	3
Al			2	49.783	ug/l	2.94	9,281.56	7.366E-02	Pulse	0.30	3
K			2	48.755	ug/l	3.35	30,535.69	2.423E-01	Pulse	0.30	3
Ca			2	211.793	ug/l	3.29	4,636.26	3.679E-02	Pulse	0.30	3
Ti			2	48.823	ug/l	1.32	7,556.27	5.997E-02	Pulse	0.30	3
V			2	49.713	ug/l	0.70	250,974.26	1.992E+00	Pulse	0.30	3
Cr			2	49.702	ug/l	0.94	316,827.20	2.514E+00	Pulse	0.30	3
Mn			2	50.234	ug/l	0.82	176,235.25	1.399E+00	Pulse	0.30	3
Fe			2	51.072	ug/l	0.16	262,789.41	2.086E+00	Pulse	0.30	3
Co			2	50.008	ug/l	0.44	506,887.34	4.023E+00	Pulse	0.30	3
Ni			2	49.925	ug/l	0.76	133,196.79	1.057E+00	Pulse	0.30	3
Cu			2	50.292	ug/l	0.74	365,894.36	2.904E+00	Pulse	0.30	3
Zn			2	50.339	ug/l	1.10	58,256.34	4.623E-01	Pulse	0.30	3
As			2	49.833	ug/l	0.41	32,836.49	2.606E-01	Pulse	1.00	3
Cd			2	50.192	ug/l	0.98	92,880.34	1.123E-01	Pulse	0.30	3
Sn			2	50.228	ug/l	1.69	207,364.13	2.508E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	50.733	ug/l	1.01	7,918.72	5.215E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,112,025.72	0.47	102.0	Pulse	0.10	3
1	Sc		2,084,771.79	0.46	99.4	Pulse	0.10	3
1	Ge		442,385.23	1.31	100.8	Pulse	0.10	3
1	Ge		615,023.40	1.27	100.0	Pulse	0.10	3
1	Rh		3,087,272.66	1.20	99.8	Pulse	0.10	3
1	In		3,243,325.08	1.37	100.5	Pulse	0.10	3
1	Tb		4,641,134.51	1.46	100.5	Pulse	0.10	3
1	Ho		459,906.23	0.41	100.3	Pulse	0.10	3
1	Bi		2,867,563.81	0.03	100.6	Pulse	0.10	3
2	Sc		126,007.56	0.33	103.3	Pulse	0.30	3
2	Ge		81,292.05	0.63	103.0	Pulse	0.30	3
2	Ge		121,792.70	1.19	101.5	Pulse	0.30	3
2	Rh		1,976,440.06	1.17	102.8	Pulse	0.30	3
2	In		827,011.89	0.66	102.8	Pulse	0.30	3
2	Tb		2,784,013.85	0.63	103.8	Pulse	0.30	3
2	Ho		287,012.39	0.37	104.8	Pulse	0.30	3
2	Bi		1,920,192.42	0.46	102.9	Pulse	0.30	3
3	Sc		143,769.13	0.07	97.6	Pulse	0.30	3
3	Ge		99,499.53	1.05	97.9	Pulse	0.30	3
3	Ge		151,853.62	0.70	99.1	Pulse	0.30	3
3	Rh		1,745,448.13	0.58	100.5	Pulse	0.30	3
3	Tb		3,222,856.33	0.38	101.3	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:02
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	9/12/2019 13:37
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	99.951	ug/l	0.51	495,941.47	4.502E-01	Pulse	0.25	3
B			1	96.010	ug/l	1.43	345,126.56	3.133E-01	Pulse	0.15	3
Ca			1	128.066	ug/l	1.20	96,238.34	4.653E-02	Pulse	0.10	3
Sr			1	99.922	ug/l	0.33	4,014,934.42	1.306E+00	Pulse	0.10	3
Mo			1	99.770	ug/l	0.76	748,734.81	2.435E-01	Pulse	0.10	3
Ag			1	99.938	ug/l	1.98	1,924,155.70	5.959E-01	Pulse	0.10	3
Sn			1	100.342	ug/l	0.81	1,255,716.98	3.888E-01	Pulse	0.10	3
Sb			1	99.254	ug/l	0.50	1,460,891.02	3.152E-01	Pulse	0.10	3
Ba			1	99.554	ug/l	0.51	615,832.87	1.329E-01	Pulse	0.10	3
Tl			1	100.572	ug/l	0.20	3,828,897.65	1.343E+00	Pulse	0.10	3
Pb			1	100.209	ug/l	0.96	1,311,972.48	4.602E-01	Pulse	0.10	3
Pb			1	100.273	ug/l	0.63	1,155,569.02	4.054E-01	Pulse	0.10	3
Pb			1	99.821	ug/l	0.72	5,299,781.46	1.859E+00	Pulse	0.10	3
Na			2	99.032	ug/l	1.12	113,969.34	9.115E-01	Pulse	0.30	3
Mg			2	100.115	ug/l	2.18	48,776.67	3.901E-01	Pulse	0.30	3
Al			2	102.054	ug/l	1.44	17,920.76	1.433E-01	Pulse	0.30	3
K			2	98.882	ug/l	1.38	50,538.12	4.042E-01	Pulse	0.30	3
Ca			2	423.636	ug/l	2.80	9,065.92	7.251E-02	Pulse	0.30	3
Ti			2	100.685	ug/l	0.72	15,462.87	1.237E-01	Pulse	0.30	3
V			2	100.179	ug/l	0.63	501,559.44	4.011E+00	Pulse	0.30	3
Cr			2	100.173	ug/l	0.33	633,168.15	5.064E+00	Pulse	0.30	3
Mn			2	99.865	ug/l	0.60	347,541.49	2.779E+00	Pulse	0.30	3
Fe			2	102.440	ug/l	0.55	520,142.97	4.160E+00	Pulse	0.30	3
Co			2	100.015	ug/l	0.28	1,005,988.18	8.045E+00	Pulse	0.30	3
Ni			2	100.123	ug/l	1.20	264,914.92	2.119E+00	Pulse	0.30	3
Cu			2	99.845	ug/l	0.46	717,146.79	5.735E+00	Pulse	0.30	3
Zn			2	99.789	ug/l	0.46	113,441.53	9.072E-01	Pulse	0.30	3
As			2	100.110	ug/l	0.44	65,447.34	5.234E-01	Pulse	1.00	3
Cd			2	99.937	ug/l	0.28	184,568.90	2.236E-01	Pulse	0.30	3
Sn			2	99.917	ug/l	0.65	411,169.19	4.981E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	101.236	ug/l	0.63	15,694.43	1.040E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,101,673.18	0.35	101.1	Pulse	0.10	3
1	Sc		2,068,257.99	0.52	98.6	Pulse	0.10	3
1	Ge		438,338.57	0.85	99.8	Pulse	0.10	3
1	Ge		610,494.82	0.68	99.3	Pulse	0.10	3
1	Rh		3,075,340.58	0.85	99.4	Pulse	0.10	3
1	In		3,229,666.02	1.04	100.1	Pulse	0.10	3
1	Tb		4,635,059.62	0.44	100.3	Pulse	0.10	3
1	Ho		460,192.61	0.84	100.4	Pulse	0.10	3
1	Bi		2,850,721.42	0.59	100.0	Pulse	0.10	3
2	Sc		125,045.17	0.72	102.5	Pulse	0.30	3
2	Ge		79,804.66	1.08	101.2	Pulse	0.30	3
2	Ge		120,311.71	1.00	100.3	Pulse	0.30	3
2	Rh		1,965,232.91	0.59	102.2	Pulse	0.30	3
2	In		825,450.75	0.63	102.6	Pulse	0.30	3
2	Tb		2,783,221.42	1.03	103.8	Pulse	0.30	3
2	Ho		285,026.02	0.34	104.1	Pulse	0.30	3
2	Bi		1,930,934.37	0.53	103.5	Pulse	0.30	3
3	Sc		142,646.11	0.30	96.9	Pulse	0.30	3
3	Ge		99,643.57	1.29	98.1	Pulse	0.30	3
3	Ge		150,875.91	0.13	98.5	Pulse	0.30	3
3	Rh		1,730,248.27	0.66	99.7	Pulse	0.30	3
3	Tb		3,219,446.89	0.38	101.2	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:07
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	9/12/2019 13:37
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	37.47	128.00	1.161E-04	Pulse	0.25	3
B			1	202.666	ug/l	1.42	715,193.51	6.492E-01	Pulse	0.15	3
Ca			1	504.807	ug/l	1.12	361,695.44	1.742E-01	Pulse	0.10	3
Sr			1	0.026	ug/l	24.80	1,446.79	4.695E-04	Pulse	0.10	3
Mo			1	0.151	ug/l	15.38	1,156.75	3.751E-04	Pulse	0.10	3
Ag			1	0.018	ug/l	26.81	376.68	1.165E-04	Pulse	0.10	3
Sn			1	0.236	ug/l	17.86	4,814.25	1.486E-03	Pulse	0.10	3
Sb			1	0.698	ug/l	9.65	10,420.55	2.249E-03	Pulse	0.10	3
Ba			1	0.026	ug/l	21.21	260.01	5.609E-05	Pulse	0.10	3
Tl			1	0.037	ug/l	3.86	1,626.82	5.651E-04	Pulse	0.10	3
Pb			1	0.034	ug/l	14.06	660.04	2.295E-04	Pulse	0.10	3
Pb			1	0.034	ug/l	15.46	586.70	2.038E-04	Pulse	0.10	3
Pb			1	0.035	ug/l	6.49	2,713.53	9.432E-04	Pulse	0.10	3
Na			2	494.324	ug/l	1.15	529,483.52	4.200E+00	Pulse	0.30	3
Mg			2	498.940	ug/l	0.99	244,021.70	1.936E+00	Pulse	0.30	3
Al			2	500.940	ug/l	1.00	85,086.98	6.749E-01	Pulse	0.30	3
K			2	494.603	ug/l	0.66	211,983.21	1.682E+00	Pulse	0.30	3
Ca			2	493.656	ug/l	3.26	10,627.97	8.432E-02	Pulse	0.30	3
Ti			2	0.058	ug/l	99.81	10.00	7.967E-05	Pulse	0.30	3
V			2	-0.006	ug/l	-250.46	292.23	2.317E-03	Pulse	0.30	3
Cr			2	0.016	ug/l	19.28	600.02	4.759E-03	Pulse	0.30	3
Mn			2	0.026	ug/l	5.68	228.89	1.815E-03	Pulse	0.30	3
Fe			2	503.946	ug/l	0.22	2,568,355.94	2.037E+01	Pulse	0.30	3
Co			2	0.030	ug/l	4.69	336.40	2.668E-03	Pulse	0.30	3
Ni			2	0.048	ug/l	20.79	276.67	2.194E-03	Pulse	0.30	3
Cu			2	-0.124	ug/l	-15.90	2,884.73	2.288E-02	Pulse	0.30	3
Zn			2	0.021	ug/l	168.43	1,212.28	9.617E-03	Pulse	0.30	3
As			2	0.044	ug/l	12.98	42.00	3.332E-04	Pulse	1.00	3
Cd			2	0.010	ug/l	69.22	39.88	4.792E-05	Pulse	0.30	3
Sn			2	0.322	ug/l	16.52	1,927.92	2.320E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	195.389	ug/l	0.37	30,749.88	2.007E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,101,702.32	0.39	101.1	Pulse	0.10	3
1	Sc		2,076,866.95	1.38	99.0	Pulse	0.10	3
1	Ge		439,822.60	0.05	100.2	Pulse	0.10	3
1	Ge		613,904.58	0.75	99.8	Pulse	0.10	3
1	Rh		3,082,981.93	0.45	99.6	Pulse	0.10	3
1	In		3,238,358.64	1.35	100.3	Pulse	0.10	3
1	Tb		4,631,998.06	0.79	100.3	Pulse	0.10	3
1	Ho		461,432.53	0.95	100.7	Pulse	0.10	3
1	Bi		2,878,152.04	1.35	101.0	Pulse	0.10	3
2	Sc		126,069.73	0.81	103.4	Pulse	0.30	3
2	Ge		80,433.42	0.66	101.9	Pulse	0.30	3
2	Ge		121,280.69	0.51	101.1	Pulse	0.30	3
2	Rh		1,967,778.39	0.05	102.4	Pulse	0.30	3
2	In		831,217.07	0.73	103.3	Pulse	0.30	3
2	Tb		2,792,729.41	0.16	104.2	Pulse	0.30	3
2	Ho		285,249.42	1.05	104.2	Pulse	0.30	3
2	Bi		1,917,311.31	0.99	102.7	Pulse	0.30	3
3	Sc		143,302.39	1.12	97.3	Pulse	0.30	3
3	Ge		100,733.28	0.87	99.1	Pulse	0.30	3
3	Ge		153,189.95	0.10	100.0	Pulse	0.30	3
3	Rh		1,751,512.99	0.64	100.9	Pulse	0.30	3
3	Tb		3,235,032.23	0.61	101.7	Pulse	0.30	3

Quantitation Report

File Name	010CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:12
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	9/12/2019 13:37
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	70.32	54.67	4.902E-05	Pulse	0.25	3
B			1	7.948	ug/l	2.66	40,058.56	3.593E-02	Pulse	0.15	3
Ca			1	1013.468	ug/l	1.09	731,554.54	3.465E-01	Pulse	0.10	3
Sr			1	0.017	ug/l	9.24	1,060.08	3.430E-04	Pulse	0.10	3
Mo			1	0.046	ug/l	16.04	370.02	1.196E-04	Pulse	0.10	3
Ag			1	0.006	ug/l	10.36	143.34	4.378E-05	Pulse	0.10	3
Sn			1	0.055	ug/l	22.67	2,566.98	7.840E-04	Pulse	0.10	3
Sb			1	0.236	ug/l	11.10	3,667.25	7.818E-04	Pulse	0.10	3
Ba			1	0.017	ug/l	52.72	203.34	4.350E-05	Pulse	0.10	3
Tl			1	0.007	ug/l	3.36	486.70	1.679E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	37.94	396.69	1.370E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	26.38	460.03	1.589E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	15.49	1,830.12	6.317E-04	Pulse	0.10	3
Na			2	983.637	ug/l	0.66	1,046,693.74	8.271E+00	Pulse	0.30	3
Mg			2	989.943	ug/l	0.23	485,763.87	3.839E+00	Pulse	0.30	3
Al			2	1001.440	ug/l	1.02	169,827.83	1.342E+00	Pulse	0.30	3
K			2	994.237	ug/l	0.15	416,899.32	3.294E+00	Pulse	0.30	3
Ca			2	1016.687	ug/l	1.86	21,828.87	1.725E-01	Pulse	0.30	3
Ti			2	0.043	ug/l	57.63	7.78	6.139E-05	Pulse	0.30	3
V			2	-0.005	ug/l	-15.20	296.67	2.344E-03	Pulse	0.30	3
Cr			2	-0.002	ug/l	-436.15	485.57	3.836E-03	Pulse	0.30	3
Mn			2	0.033	ug/l	25.37	255.56	2.020E-03	Pulse	0.30	3
Fe			2	1004.001	ug/l	0.43	5,133,492.02	4.056E+01	Pulse	0.30	3
Co			2	0.050	ug/l	6.01	543.93	4.298E-03	Pulse	0.30	3
Ni			2	0.071	ug/l	75.03	340.06	2.686E-03	Pulse	0.30	3
Cu			2	-0.141	ug/l	-3.34	2,768.05	2.187E-02	Pulse	0.30	3
Zn			2	0.165	ug/l	47.24	1,380.07	1.090E-02	Pulse	0.30	3
As			2	0.017	ug/l	54.79	24.33	1.922E-04	Pulse	1.00	3
Cd			2	-0.004	ug/l	-25.77	14.40	1.711E-05	Pulse	0.30	3
Sn			2	0.123	ug/l	13.04	1,118.95	1.330E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	376.315	ug/l	1.01	60,640.20	3.866E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,114,955.04	0.10	102.3	Pulse	0.10	3
1	Sc		2,111,538.30	1.51	100.7	Pulse	0.10	3
1	Ge		442,546.87	1.39	100.8	Pulse	0.10	3
1	Ge		623,569.07	1.44	101.4	Pulse	0.10	3
1	Rh		3,089,476.93	1.07	99.8	Pulse	0.10	3
1	In		3,275,312.33	1.19	101.5	Pulse	0.10	3
1	Tb		4,686,809.09	1.47	101.5	Pulse	0.10	3
1	Ho		469,327.27	2.49	102.4	Pulse	0.10	3
1	Bi		2,898,567.98	0.99	101.7	Pulse	0.10	3
2	Sc		126,549.95	0.31	103.8	Pulse	0.30	3
2	Ge		82,058.95	0.74	104.0	Pulse	0.30	3
2	Ge		123,290.20	0.70	102.8	Pulse	0.30	3
2	Rh		1,987,098.25	1.10	103.4	Pulse	0.30	3
2	In		841,130.74	1.61	104.6	Pulse	0.30	3
2	Tb		2,829,341.07	0.93	105.5	Pulse	0.30	3
2	Ho		290,245.77	1.38	106.0	Pulse	0.30	3
2	Bi		1,929,680.20	0.53	103.4	Pulse	0.30	3
3	Sc		146,209.31	1.01	99.3	Pulse	0.30	3
3	Ge		101,897.39	0.32	100.3	Pulse	0.30	3
3	Ge		156,873.69	0.44	102.4	Pulse	0.30	3
3	Rh		1,784,672.15	0.83	102.8	Pulse	0.30	3
3	Tb		3,326,979.31	0.26	104.6	Pulse	0.30	3

Quantitation Report

File Name	011CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:17
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	9/12/2019 13:37
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	-99904.93	13.33	1.215E-05	Pulse	0.25	3
B			1	3.940	ug/l	7.94	25,668.69	2.330E-02	Pulse	0.15	3
Ca			1	5091.655	ug/l	0.26	3,590,430.57	1.728E+00	Pulse	0.10	3
Sr			1	0.044	ug/l	5.16	2,120.22	6.988E-04	Pulse	0.10	3
Mo			1	0.026	ug/l	34.99	216.68	7.122E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	66.65	86.67	2.702E-05	Pulse	0.10	3
Sn			1	0.053	ug/l	36.37	2,500.30	7.786E-04	Pulse	0.10	3
Sb			1	0.143	ug/l	2.55	2,253.58	4.858E-04	Pulse	0.10	3
Ba			1	0.008	ug/l	135.52	146.67	3.158E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	73.04	350.02	1.248E-04	Pulse	0.10	3
Pb			1	0.017	ug/l	51.71	416.69	1.487E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	56.30	283.35	1.010E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	12.11	1,506.76	5.377E-04	Pulse	0.10	3
Na			2	5019.110	ug/l	1.53	5,310,688.26	4.184E+01	Analog	0.30	3
Mg			2	4966.867	ug/l	1.04	2,443,194.76	1.925E+01	Pulse	0.30	3
Al			2	5002.165	ug/l	1.42	847,041.46	6.674E+00	Pulse	0.30	3
K			2	4989.076	ug/l	0.50	2,054,741.44	1.619E+01	Pulse	0.30	3
Ca			2	4968.098	ug/l	0.53	106,446.37	8.387E-01	Pulse	0.30	3
Ti			2	0.007	ug/l	347.56	2.22	1.758E-05	Pulse	0.30	3
V			2	-0.016	ug/l	-50.12	244.45	1.927E-03	Pulse	0.30	3
Cr			2	0.020	ug/l	36.98	631.13	4.973E-03	Pulse	0.30	3
Mn			2	0.077	ug/l	4.02	412.23	3.248E-03	Pulse	0.30	3
Fe			2	5065.461	ug/l	1.23	25,962,505.08	2.046E+02	Analog	0.30	3
Co			2	0.226	ug/l	3.33	2,337.88	1.842E-02	Pulse	0.30	3
Ni			2	0.172	ug/l	21.89	613.36	4.833E-03	Pulse	0.30	3
Cu			2	-0.147	ug/l	-10.77	2,733.60	2.154E-02	Pulse	0.30	3
Zn			2	-0.169	ug/l	-26.89	1,003.38	7.906E-03	Pulse	0.30	3
As			2	0.045	ug/l	25.59	43.33	3.415E-04	Pulse	1.00	3
Cd			2	-0.003	ug/l	-93.38	15.53	1.868E-05	Pulse	0.30	3
Sn			2	0.079	ug/l	2.54	923.37	1.111E-03	Pulse	0.30	3
Se			3	0.179	ug/l	13.63	34.20	2.239E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,101,627.71	0.52	101.1	Pulse	0.10	3
1	Sc		2,077,685.18	0.73	99.1	Pulse	0.10	3
1	Ge		437,345.66	0.91	99.6	Pulse	0.10	3

Quantitation Report

1	Ge		612,070.11	1.19	99.5	Pulse	0.10	3
1	Rh		3,032,987.45	1.56	98.0	Pulse	0.10	3
1	In		3,213,540.61	1.54	99.6	Pulse	0.10	3
1	Tb		4,638,421.70	1.14	100.4	Pulse	0.10	3
1	Ho		459,705.84	1.38	100.3	Pulse	0.10	3
1	Bi		2,802,682.56	0.55	98.3	Pulse	0.10	3
2	Sc		126,918.03	0.34	104.1	Pulse	0.30	3
2	Ge		81,941.93	1.31	103.9	Pulse	0.30	3
2	Ge		122,421.90	1.04	102.0	Pulse	0.30	3
2	Rh		1,973,928.95	0.53	102.7	Pulse	0.30	3
2	In		830,957.14	0.55	103.3	Pulse	0.30	3
2	Tb		2,802,704.26	0.25	104.5	Pulse	0.30	3
2	Ho		287,919.90	0.42	105.2	Pulse	0.30	3
2	Bi		1,896,766.31	0.53	101.6	Pulse	0.30	3
3	Sc		145,753.93	0.29	99.0	Pulse	0.30	3
3	Ge		101,008.41	0.86	99.4	Pulse	0.30	3
3	Ge		152,770.42	1.21	99.7	Pulse	0.30	3
3	Rh		1,737,046.11	0.11	100.0	Pulse	0.30	3
3	Tb		3,281,875.36	0.47	103.2	Pulse	0.30	3

Quantitation Report

File Name	012CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:22
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	9/12/2019 13:37
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	62.25	34.67	3.110E-05	Pulse	0.25	3
B			1	2.434	ug/l	6.96	20,746.39	1.856E-02	Pulse	0.15	3
Ca			1	9952.266	ug/l	1.50	7,196,893.02	3.375E+00	Analog	0.10	3
Sr			1	0.086	ug/l	8.79	3,833.96	1.254E-03	Pulse	0.10	3
Mo			1	0.028	ug/l	35.93	226.68	7.410E-05	Pulse	0.10	3
Ag			1	0.004	ug/l	43.22	106.67	3.291E-05	Pulse	0.10	3
Sn			1	0.173	ug/l	16.70	4,020.66	1.241E-03	Pulse	0.10	3
Sb			1	0.129	ug/l	11.92	2,066.88	4.413E-04	Pulse	0.10	3
Ba			1	0.009	ug/l	47.21	153.34	3.273E-05	Pulse	0.10	3
Tl			1	0.002	ug/l	81.87	276.68	9.913E-05	Pulse	0.10	3
Pb			1	0.022	ug/l	13.35	490.02	1.755E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	65.07	310.02	1.110E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	15.59	1,553.43	5.562E-04	Pulse	0.10	3
Na			2	9992.447	ug/l	1.50	10,710,892.63	8.322E+01	Analog	0.30	3
Mg			2	10017.564	ug/l	2.20	4,996,563.00	3.882E+01	Analog	0.30	3
Al			2	9998.713	ug/l	1.40	1,716,072.33	1.333E+01	Pulse	0.30	3
K			2	10021.633	ug/l	1.25	4,174,536.36	3.243E+01	Pulse	0.30	3
Ca			2	10068.547	ug/l	1.57	218,620.69	1.699E+00	Pulse	0.30	3
Ti			2	0.021	ug/l	59.32	4.44	3.459E-05	Pulse	0.30	3
V			2	-0.015	ug/l	-13.34	248.89	1.933E-03	Pulse	0.30	3
Cr			2	0.043	ug/l	1.18	783.36	6.086E-03	Pulse	0.30	3
Mn			2	0.137	ug/l	1.98	634.46	4.929E-03	Pulse	0.30	3
Fe			2	9924.024	ug/l	0.99	51,584,710.17	4.008E+02	Analog	0.30	3
Co			2	0.455	ug/l	2.09	4,739.28	3.682E-02	Pulse	0.30	3
Ni			2	0.371	ug/l	15.53	1,162.28	9.035E-03	Pulse	0.30	3
Cu			2	-0.118	ug/l	-11.59	2,990.31	2.323E-02	Pulse	0.30	3
Zn			2	0.105	ug/l	28.90	1,334.52	1.037E-02	Pulse	0.30	3
As			2	0.068	ug/l	35.71	59.33	4.606E-04	Pulse	1.00	3
Cd			2	-0.001	ug/l	-708.38	19.97	2.405E-05	Pulse	0.30	3
Sn			2	0.197	ug/l	5.52	1,412.31	1.702E-03	Pulse	0.30	3
Se			3	0.058	ug/l	6.58	15.13	9.925E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,117,885.04	1.17	102.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,132,573.30	0.50	101.7	Pulse	0.10	3
1	Ge		447,035.12	1.44	101.8	Pulse	0.10	3
1	Ge		620,527.01	0.70	100.9	Pulse	0.10	3
1	Rh		3,056,385.16	0.44	98.8	Pulse	0.10	3
1	In		3,239,223.06	0.47	100.4	Pulse	0.10	3
1	Tb		4,684,308.68	0.31	101.4	Pulse	0.10	3
1	Ho		465,749.50	0.30	101.6	Pulse	0.10	3
1	Bi		2,793,177.46	0.46	98.0	Pulse	0.10	3
2	Sc		128,718.53	1.17	105.6	Pulse	0.30	3
2	Ge		82,059.11	0.99	104.0	Pulse	0.30	3
2	Ge		123,827.39	0.78	103.2	Pulse	0.30	3
2	Rh		1,960,173.26	0.44	102.0	Pulse	0.30	3
2	In		829,732.86	0.53	103.2	Pulse	0.30	3
2	Tb		2,836,825.72	0.27	105.8	Pulse	0.30	3
2	Ho		289,160.14	0.25	105.6	Pulse	0.30	3
2	Bi		1,870,065.00	0.47	100.2	Pulse	0.30	3
3	Sc		146,443.46	0.92	99.5	Pulse	0.30	3
3	Ge		101,923.01	0.13	100.3	Pulse	0.30	3
3	Ge		152,431.81	1.82	99.5	Pulse	0.30	3
3	Rh		1,731,960.35	0.09	99.8	Pulse	0.30	3
3	Tb		3,263,261.19	0.17	102.6	Pulse	0.30	3

Quantitation Report

File Name	013SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:27
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	9/12/2019 13:37
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	95.52	22.67	2.022E-05	Pulse	0.25	3
B			1	1.567	ug/l	11.07	17,798.62	1.583E-02	Pulse	0.15	3
Ca			1	0.431	ug/l	119.92	6,918.42	3.293E-03	Pulse	0.10	3
Sr			1	0.002	ug/l	6.67	480.02	1.539E-04	Pulse	0.10	3
Mo			1	0.009	ug/l	72.25	86.67	2.784E-05	Pulse	0.10	3
Ag			1	0.001	ug/l	99.27	46.67	1.428E-05	Pulse	0.10	3
Sn			1	0.006	ug/l	121.03	1,936.87	5.943E-04	Pulse	0.10	3
Sb			1	0.048	ug/l	16.62	850.05	1.839E-04	Pulse	0.10	3
Ba			1	-0.008	ug/l	-62.35	46.67	1.014E-05	Pulse	0.10	3
Tl			1	0.002	ug/l	44.70	260.01	9.069E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	38.99	266.68	9.306E-05	Pulse	0.10	3
Pb			1	0.009	ug/l	48.80	293.35	1.024E-04	Pulse	0.10	3
Pb			1	0.005	ug/l	16.25	1,143.40	3.989E-04	Pulse	0.10	3
Na			2	-0.287	ug/l	-127.21	10,842.47	8.517E-02	Pulse	0.30	3
Mg			2	0.852	ug/l	14.71	691.13	5.430E-03	Pulse	0.30	3
Al			2	-2.391	ug/l	-14.39	524.46	4.121E-03	Pulse	0.30	3
K			2	-1.272	ug/l	-21.14	10,294.37	8.086E-02	Pulse	0.30	3
Ca			2	-1.935	ug/l	-56.96	96.67	7.588E-04	Pulse	0.30	3
Ti			2	-0.007	ug/l	0.00	0.00	0.000E+00	Pulse	0.30	3
V			2	-0.028	ug/l	-20.44	182.23	1.432E-03	Pulse	0.30	3
Cr			2	-0.020	ug/l	-27.79	375.56	2.950E-03	Pulse	0.30	3
Mn			2	-0.007	ug/l	-102.74	114.44	8.988E-04	Pulse	0.30	3
Fe			2	1.134	ug/l	5.42	8,781.31	6.898E-02	Pulse	0.30	3
Co			2	0.001	ug/l	157.59	37.76	2.968E-04	Pulse	0.30	3
Ni			2	0.007	ug/l	293.30	171.11	1.344E-03	Pulse	0.30	3
Cu			2	-0.200	ug/l	-10.28	2,359.08	1.853E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.314	ug/l	-11.26	840.03	6.599E-03	Pulse	0.30	3
As			2	-0.001	ug/l	-246.23	12.67	9.953E-05	Pulse	1.00	3
Cd			2	-0.007	ug/l	-14.85	7.77	9.367E-06	Pulse	0.30	3
Sn			2	0.034	ug/l	19.03	736.69	8.875E-04	Pulse	0.30	3
Se			3	0.011	ug/l	103.47	7.93	5.175E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,124,559.97	1.24	103.2	Pulse	0.10	3
1	Sc		2,101,418.82	0.84	100.2	Pulse	0.10	3
1	Ge		442,806.58	0.25	100.8	Pulse	0.10	3
1	Ge		619,641.03	0.50	100.7	Pulse	0.10	3
1	Rh		3,119,493.70	0.92	100.8	Pulse	0.10	3
1	In		3,259,595.77	0.82	101.0	Pulse	0.10	3
1	Tb		4,628,615.55	1.56	100.2	Pulse	0.10	3
1	Ho		459,736.32	1.05	100.3	Pulse	0.10	3
1	Bi		2,866,767.87	0.88	100.6	Pulse	0.10	3
2	Sc		127,312.16	0.47	104.4	Pulse	0.30	3
2	Ge		80,364.33	0.85	101.9	Pulse	0.30	3
2	Ge		122,898.02	0.56	102.4	Pulse	0.30	3
2	Rh		2,000,402.63	0.62	104.1	Pulse	0.30	3
2	In		830,138.49	0.24	103.2	Pulse	0.30	3
2	Tb		2,786,815.79	0.35	103.9	Pulse	0.30	3
2	Ho		285,297.32	0.54	104.2	Pulse	0.30	3
2	Bi		1,923,540.48	0.67	103.1	Pulse	0.30	3
3	Sc		143,481.32	0.22	97.5	Pulse	0.30	3
3	Ge		100,825.09	0.34	99.2	Pulse	0.30	3
3	Ge		153,294.21	0.21	100.1	Pulse	0.30	3
3	Rh		1,769,005.90	0.79	101.9	Pulse	0.30	3
3	Tb		3,240,742.30	0.76	101.9	Pulse	0.30	3

Quantitation Report

File Name	014_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:32
Sample Name	sampleconf
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	9/12/2019 13:37
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	59.198	ug/l	14.50	305,167.08	2.666E-01	Pulse	0.25	3
B			1	117.458	ug/l	15.10	435,838.71	3.808E-01	Pulse	0.15	3
Ca			1	5466.087	ug/l	17.21	4,006,611.19	1.855E+00	Pulse	0.10	3
Sr			1	60.191	ug/l	18.04	2,467,534.97	7.865E-01	Pulse	0.10	3
Mo			1	59.784	ug/l	17.25	458,118.45	1.459E-01	Pulse	0.10	3
Ag			1	58.532	ug/l	17.18	1,161,295.22	3.490E-01	Pulse	0.10	3
Sn			1	59.491	ug/l	17.68	767,391.68	2.308E-01	Pulse	0.10	3
Sb			1	61.946	ug/l	17.81	949,506.39	1.967E-01	Pulse	0.10	3
Ba			1	59.569	ug/l	17.09	384,076.76	7.951E-02	Pulse	0.10	3
Tl			1	62.167	ug/l	17.75	2,382,446.58	8.303E-01	Pulse	0.10	3
Pb			1	61.046	ug/l	16.77	805,390.80	2.804E-01	Pulse	0.10	3
Pb			1	58.524	ug/l	17.09	679,479.13	2.366E-01	Pulse	0.10	3
Pb			1	59.546	ug/l	16.92	3,185,473.65	1.109E+00	Pulse	0.10	3
Na			2	5523.809	ug/l	1.11	5,881,475.32	4.604E+01	Analog	0.30	3
Mg			2	5399.567	ug/l	1.61	2,672,844.76	2.093E+01	Pulse	0.30	3
Al			2	5528.398	ug/l	1.44	941,995.07	7.375E+00	Pulse	0.30	3
K			2	5438.885	ug/l	1.55	2,253,182.41	1.764E+01	Pulse	0.30	3
Ca			2	5618.824	ug/l	1.42	121,137.59	9.484E-01	Pulse	0.30	3
Ti			2	60.816	ug/l	4.88	9,539.52	7.469E-02	Pulse	0.30	3
V			2	61.387	ug/l	0.98	314,048.74	2.459E+00	Pulse	0.30	3
Cr			2	60.127	ug/l	1.04	388,404.13	3.041E+00	Pulse	0.30	3
Mn			2	60.382	ug/l	1.27	214,696.75	1.681E+00	Pulse	0.30	3
Fe			2	5523.195	ug/l	0.75	28,489,553.31	2.231E+02	Analog	0.30	3
Co			2	60.119	ug/l	1.49	617,664.74	4.836E+00	Pulse	0.30	3
Ni			2	59.593	ug/l	1.90	161,114.08	1.262E+00	Pulse	0.30	3
Cu			2	59.398	ug/l	0.89	437,338.88	3.424E+00	Pulse	0.30	3
Zn			2	58.596	ug/l	0.85	68,543.48	5.366E-01	Pulse	0.30	3
As			2	62.245	ug/l	2.24	41,567.24	3.255E-01	Pulse	1.00	3
Cd			2	60.420	ug/l	0.63	112,307.78	1.352E-01	Pulse	0.30	3
Sn			2	60.269	ug/l	0.32	249,837.63	3.007E-01	Pulse	0.30	3
Se			3	260.282	ug/l	0.48	40,854.84	2.674E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,160,540.36	14.27	106.5	Pulse	0.10	3
1	Sc		2,202,800.90	17.02	105.0	Pulse	0.10	3
1	Ge		455,390.14	15.18	103.7	Pulse	0.10	3

Quantitation Report

1	Ge		644,426.98	14.26	104.8	Pulse	0.10	3
1	Rh		3,202,855.06	17.07	103.5	Pulse	0.10	3
1	In		3,393,872.90	17.23	105.2	Pulse	0.10	3
1	Tb		4,932,697.64	18.22	106.8	Mix	0.10	3
1	Ho		486,035.41	17.46	106.0	Pulse	0.10	3
1	Bi		2,926,657.71	16.64	102.7	Pulse	0.10	3
2	Sc		127,733.20	1.10	104.8	Pulse	0.30	3
2	Ge		82,418.68	2.55	104.5	Pulse	0.30	3
2	Ge		124,025.33	0.44	103.4	Pulse	0.30	3
2	Rh		1,963,742.15	0.99	102.1	Pulse	0.30	3
2	In		830,744.80	0.59	103.3	Pulse	0.30	3
2	Tb		2,803,457.25	0.56	104.6	Pulse	0.30	3
2	Ho		285,634.23	1.38	104.3	Pulse	0.30	3
2	Bi		1,889,759.99	0.83	101.3	Pulse	0.30	3
3	Sc		143,790.50	1.05	97.7	Pulse	0.30	3
3	Ge		101,375.18	0.75	99.8	Pulse	0.30	3
3	Ge		152,797.91	0.64	99.7	Pulse	0.30	3
3	Rh		1,729,997.26	0.59	99.6	Pulse	0.30	3
3	Tb		3,251,987.30	0.44	102.2	Pulse	0.30	3

Quantitation Report

File Name	015_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:37
Sample Name	ICVA 5
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	9/12/2019 13:37
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	59.869	ug/l	0.49	301,153.97	2.697E-01	Pulse	0.25	3
B			1	122.932	ug/l	0.92	444,594.78	3.981E-01	Pulse	0.15	3
Ca			1	5531.985	ug/l	0.35	3,996,063.90	1.877E+00	Pulse	0.10	3
Sr			1	60.890	ug/l	1.60	2,457,739.60	7.956E-01	Pulse	0.10	3
Mo			1	59.896	ug/l	1.24	451,524.37	1.462E-01	Pulse	0.10	3
Ag			1	58.650	ug/l	0.36	1,150,725.69	3.497E-01	Pulse	0.10	3
Sn			1	59.858	ug/l	1.06	764,047.46	2.322E-01	Pulse	0.10	3
Sb			1	63.352	ug/l	1.00	950,940.17	2.012E-01	Pulse	0.10	3
Ba			1	60.801	ug/l	1.46	383,548.65	8.115E-02	Pulse	0.10	3
Tl			1	62.814	ug/l	0.94	2,386,324.55	8.389E-01	Pulse	0.10	3
Pb			1	61.537	ug/l	0.96	804,006.89	2.826E-01	Pulse	0.10	3
Pb			1	58.703	ug/l	0.86	675,127.83	2.373E-01	Pulse	0.10	3
Pb			1	59.871	ug/l	0.79	3,172,230.68	1.115E+00	Pulse	0.10	3
Na			2	5408.102	ug/l	1.33	5,782,871.30	4.508E+01	Analog	0.30	3
Mg			2	5389.257	ug/l	0.27	2,679,371.77	2.089E+01	Pulse	0.30	3
Al			2	5478.511	ug/l	0.37	937,567.04	7.309E+00	Pulse	0.30	3
K			2	5424.337	ug/l	0.10	2,256,977.76	1.759E+01	Pulse	0.30	3
Ca			2	5607.331	ug/l	0.67	121,411.94	9.465E-01	Pulse	0.30	3
Ti			2	59.024	ug/l	1.97	9,299.37	7.249E-02	Pulse	0.30	3
V			2	60.453	ug/l	1.00	310,611.12	2.421E+00	Pulse	0.30	3
Cr			2	59.177	ug/l	0.79	383,917.60	2.993E+00	Pulse	0.30	3
Mn			2	59.954	ug/l	0.62	214,102.21	1.669E+00	Pulse	0.30	3
Fe			2	5480.272	ug/l	0.89	28,389,716.65	2.213E+02	Analog	0.30	3
Co			2	59.355	ug/l	0.35	612,461.68	4.775E+00	Pulse	0.30	3
Ni			2	59.128	ug/l	0.15	160,561.28	1.252E+00	Pulse	0.30	3
Cu			2	58.965	ug/l	0.95	436,048.65	3.399E+00	Pulse	0.30	3
Zn			2	58.668	ug/l	1.04	68,917.44	5.373E-01	Pulse	0.30	3
As			2	61.865	ug/l	0.93	41,496.05	3.235E-01	Pulse	1.00	3
Cd			2	59.482	ug/l	0.91	110,804.15	1.331E-01	Pulse	0.30	3
Sn			2	59.602	ug/l	0.43	247,608.64	2.974E-01	Pulse	0.30	3
Se			3	276.310	ug/l	9.53	41,005.15	2.838E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,116,870.55	1.15	102.5	Pulse	0.10	3
1	Sc		2,128,642.57	0.91	101.5	Pulse	0.10	3
1	Ge		444,373.55	1.10	101.2	Pulse	0.10	3

Quantitation Report

1	Ge		630,160.75	1.54	102.5	Pulse	0.10	3
1	Rh		3,089,016.83	0.33	99.8	Pulse	0.10	3
1	In		3,290,709.61	0.30	102.0	Pulse	0.10	3
1	Tb		4,726,868.05	1.42	102.3	Pulse	0.10	3
1	Ho		465,323.47	1.72	101.5	Pulse	0.10	3
1	Bi		2,844,501.21	0.46	99.8	Pulse	0.10	3
2	Sc		128,276.29	0.13	105.2	Pulse	0.30	3
2	Ge		81,558.90	0.78	103.4	Pulse	0.30	3
2	Ge		123,920.30	0.90	103.3	Pulse	0.30	3
2	Rh		1,967,234.30	0.25	102.3	Pulse	0.30	3
2	In		832,523.81	0.26	103.5	Pulse	0.30	3
2	Tb		2,806,473.92	0.25	104.7	Pulse	0.30	3
2	Ho		286,798.05	0.39	104.8	Pulse	0.30	3
2	Bi		1,899,038.40	0.47	101.8	Pulse	0.30	3
3	Sc		132,572.90	10.38	90.0	Pulse	0.30	3
3	Ge		94,933.63	6.96	93.4	Pulse	0.30	3
3	Ge		145,218.17	8.23	94.8	Pulse	0.30	3
3	Rh		1,600,042.40	10.40	92.2	Pulse	0.30	3
3	Tb		3,012,191.13	11.09	94.7	Pulse	0.30	3

Quantitation Report

File Name	016_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:42
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	9/12/2019 13:37
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	22.15	81.33	7.414E-05	Pulse	0.25	3
B			1	5.526	ug/l	2.03	31,039.80	2.830E-02	Pulse	0.15	3
Ca			1	1.523	ug/l	18.83	7,605.37	3.663E-03	Pulse	0.10	3
Sr			1	0.008	ug/l	43.72	700.05	2.276E-04	Pulse	0.10	3
Mo			1	0.095	ug/l	19.55	733.38	2.382E-04	Pulse	0.10	3
Ag			1	0.066	ug/l	15.07	1,300.10	4.002E-04	Pulse	0.10	3
Sn			1	0.172	ug/l	17.41	4,024.01	1.238E-03	Pulse	0.10	3
Sb			1	0.136	ug/l	6.77	2,136.90	4.643E-04	Pulse	0.10	3
Ba			1	0.004	ug/l	168.43	120.00	2.612E-05	Pulse	0.10	3
Tl			1	0.029	ug/l	4.41	1,283.44	4.511E-04	Pulse	0.10	3
Pb			1	0.033	ug/l	12.40	633.37	2.227E-04	Pulse	0.10	3
Pb			1	0.026	ug/l	23.81	490.03	1.724E-04	Pulse	0.10	3
Pb			1	0.029	ug/l	7.29	2,376.84	8.354E-04	Pulse	0.10	3
Na			2	-0.183	ug/l	-351.00	10,368.83	8.603E-02	Pulse	0.30	3
Mg			2	0.614	ug/l	16.76	543.35	4.507E-03	Pulse	0.30	3
Al			2	64.458	ug/l	10.98	11,212.75	9.322E-02	Pulse	0.30	3
K			2	0.478	ug/l	401.05	10,420.01	8.650E-02	Pulse	0.30	3
Ca			2	-0.070	ug/l	-826.99	130.00	1.073E-03	Pulse	0.30	3
Ti			2	0.009	ug/l	310.02	2.22	1.998E-05	Pulse	0.30	3
V			2	-0.012	ug/l	-28.09	250.01	2.074E-03	Pulse	0.30	3
Cr			2	0.037	ug/l	50.89	697.80	5.817E-03	Pulse	0.30	3
Mn			2	0.002	ug/l	86.02	141.12	1.165E-03	Pulse	0.30	3
Fe			2	1.816	ug/l	7.14	11,657.59	9.654E-02	Pulse	0.30	3
Co			2	0.007	ug/l	46.92	94.41	7.883E-04	Pulse	0.30	3
Ni			2	0.009	ug/l	280.57	163.34	1.373E-03	Pulse	0.30	3
Cu			2	-0.172	ug/l	-8.18	2,424.69	2.010E-02	Pulse	0.30	3
Zn			2	-0.340	ug/l	-5.61	770.03	6.367E-03	Pulse	0.30	3
As			2	0.012	ug/l	89.44	19.67	1.652E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.001	ug/l	-1384.88	18.80	2.384E-05	Pulse	0.30	3
Sn			2	0.245	ug/l	11.81	1,531.21	1.937E-03	Pulse	0.30	3
Se			3	0.112	ug/l	15.11	23.33	1.552E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,096,840.96	0.89	100.6	Pulse	0.10	3
1	Sc		2,076,290.18	0.84	99.0	Pulse	0.10	3
1	Ge		439,083.37	1.18	100.0	Pulse	0.10	3
1	Ge		609,374.37	0.92	99.1	Pulse	0.10	3
1	Rh		3,076,769.54	0.68	99.4	Pulse	0.10	3
1	In		3,250,033.12	0.64	100.7	Pulse	0.10	3
1	Tb		4,600,290.87	1.44	99.6	Pulse	0.10	3
1	Ho		454,977.96	1.09	99.3	Pulse	0.10	3
1	Bi		2,845,465.37	1.15	99.8	Pulse	0.10	3
2	Sc		120,849.44	6.89	99.1	Pulse	0.30	3
2	Ge		78,107.20	6.21	99.0	Pulse	0.30	3
2	Ge		116,576.36	4.06	97.2	Pulse	0.30	3
2	Rh		1,904,037.35	7.19	99.0	Pulse	0.30	3
2	In		793,434.51	7.12	98.6	Pulse	0.30	3
2	Tb		2,662,867.12	7.38	99.3	Pulse	0.30	3
2	Ho		270,932.47	7.60	99.0	Pulse	0.30	3
2	Bi		1,827,279.58	6.13	97.9	Pulse	0.30	3
3	Sc		142,154.27	2.02	96.6	Pulse	0.30	3
3	Ge		99,981.11	1.43	98.4	Pulse	0.30	3
3	Ge		150,504.07	1.73	98.2	Pulse	0.30	3
3	Rh		1,745,650.94	1.33	100.5	Pulse	0.30	3
3	Tb		3,207,829.11	1.21	100.8	Pulse	0.30	3

Quantitation Report

File Name	017_ICB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:47
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	9/12/2019 13:37
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	118.89	30.67	2.710E-05	Pulse	0.25	3
B			1	2.601	ug/l	7.22	21,558.50	1.909E-02	Pulse	0.15	3
Ca			1	-0.652	ug/l	-42.23	6,124.71	2.926E-03	Pulse	0.10	3
Sr			1	0.002	ug/l	78.50	490.03	1.570E-04	Pulse	0.10	3
Mo			1	0.018	ug/l	46.51	156.67	5.014E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	79.09	80.00	2.440E-05	Pulse	0.10	3
Sn			1	0.018	ug/l	23.72	2,100.24	6.430E-04	Pulse	0.10	3
Sb			1	0.025	ug/l	32.82	520.03	1.119E-04	Pulse	0.10	3
Ba			1	-0.003	ug/l	-180.02	80.00	1.716E-05	Pulse	0.10	3
Tl			1	0.003	ug/l	31.21	323.35	1.123E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	72.21	386.69	1.344E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	37.85	306.68	1.066E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	28.02	1,453.42	5.048E-04	Pulse	0.10	3
Na			2	-1.059	ug/l	-40.38	9,907.45	7.874E-02	Pulse	0.30	3
Mg			2	0.134	ug/l	44.77	333.34	2.649E-03	Pulse	0.30	3
Al			2	-2.804	ug/l	-11.90	448.90	3.571E-03	Pulse	0.30	3
K			2	-1.941	ug/l	-31.45	9,901.92	7.870E-02	Pulse	0.30	3
Ca			2	-2.507	ug/l	-47.86	83.33	6.624E-04	Pulse	0.30	3
Ti			2	0.007	ug/l	171.97	2.22	1.776E-05	Pulse	0.30	3
V			2	-0.023	ug/l	-7.50	207.78	1.651E-03	Pulse	0.30	3
Cr			2	-0.011	ug/l	-24.40	427.79	3.400E-03	Pulse	0.30	3
Mn			2	-0.008	ug/l	-64.27	110.00	8.752E-04	Pulse	0.30	3
Fe			2	0.185	ug/l	14.06	3,860.51	3.068E-02	Pulse	0.30	3
Co			2	0.001	ug/l	29.97	43.32	3.443E-04	Pulse	0.30	3
Ni			2	-0.001	ug/l	-682.41	147.78	1.174E-03	Pulse	0.30	3
Cu			2	-0.191	ug/l	-10.25	2,395.77	1.904E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.305	ug/l	-9.55	841.14	6.682E-03	Pulse	0.30	3
As			2	0.013	ug/l	29.62	21.67	1.722E-04	Pulse	1.00	3
Cd			2	-0.005	ug/l	-84.46	11.09	1.330E-05	Pulse	0.30	3
Sn			2	0.054	ug/l	24.87	820.03	9.858E-04	Pulse	0.30	3
Se			3	0.033	ug/l	64.49	11.27	7.394E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,129,720.29	0.74	103.7	Pulse	0.10	3
1	Sc		2,092,980.75	0.67	99.8	Pulse	0.10	3
1	Ge		446,443.78	0.30	101.7	Pulse	0.10	3
1	Ge		616,346.92	0.25	100.2	Pulse	0.10	3
1	Rh		3,123,971.52	0.91	100.9	Pulse	0.10	3
1	In		3,265,760.22	1.15	101.2	Pulse	0.10	3
1	Tb		4,648,581.91	1.00	100.6	Pulse	0.10	3
1	Ho		464,303.38	0.48	101.3	Pulse	0.10	3
1	Bi		2,878,612.14	0.94	101.0	Pulse	0.10	3
2	Sc		125,848.01	1.18	103.2	Pulse	0.30	3
2	Ge		81,567.89	0.43	103.4	Pulse	0.30	3
2	Ge		122,833.51	0.78	102.4	Pulse	0.30	3
2	Rh		1,977,454.50	0.73	102.9	Pulse	0.30	3
2	In		831,657.37	0.60	103.4	Pulse	0.30	3
2	Tb		2,764,670.10	0.46	103.1	Pulse	0.30	3
2	Ho		283,674.92	1.44	103.6	Pulse	0.30	3
2	Bi		1,911,626.04	0.91	102.4	Pulse	0.30	3
3	Sc		142,347.92	0.17	96.7	Pulse	0.30	3
3	Ge		100,002.41	1.03	98.4	Pulse	0.30	3
3	Ge		152,426.91	0.70	99.5	Pulse	0.30	3
3	Rh		1,775,342.71	0.99	102.3	Pulse	0.30	3
3	Tb		3,240,217.30	0.88	101.9	Pulse	0.30	3

Quantitation Report

File Name	018_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:52
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	9/12/2019 13:37
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	50.579	ug/l	0.14	261,898.57	2.278E-01	Pulse	0.25	3
B			1	99.271	ug/l	1.51	371,936.17	3.235E-01	Pulse	0.15	3
Ca			1	5053.972	ug/l	1.32	3,729,393.69	1.715E+00	Pulse	0.10	3
Sr			1	51.665	ug/l	1.14	2,123,218.98	6.751E-01	Pulse	0.10	3
Mo			1	51.141	ug/l	0.45	392,524.97	1.248E-01	Pulse	0.10	3
Ag			1	49.638	ug/l	0.47	986,119.60	2.960E-01	Pulse	0.10	3
Sn			1	50.324	ug/l	0.74	650,701.46	1.953E-01	Pulse	0.10	3
Sb			1	51.970	ug/l	1.26	786,860.56	1.650E-01	Pulse	0.10	3
Ba			1	51.154	ug/l	1.23	325,527.22	6.828E-02	Pulse	0.10	3
Tl			1	50.413	ug/l	1.29	1,934,990.39	6.733E-01	Pulse	0.10	3
Pb			1	50.119	ug/l	1.32	661,608.84	2.302E-01	Pulse	0.10	3
Pb			1	50.857	ug/l	1.20	590,940.90	2.056E-01	Pulse	0.10	3
Pb			1	50.296	ug/l	1.12	2,692,532.01	9.369E-01	Pulse	0.10	3
Na			2	4985.421	ug/l	1.24	5,431,186.45	4.156E+01	Analog	0.30	3
Mg			2	4932.944	ug/l	1.61	2,498,153.72	1.912E+01	Pulse	0.30	3
Al			2	4994.481	ug/l	1.37	870,760.33	6.664E+00	Pulse	0.30	3
K			2	4966.978	ug/l	1.70	2,106,030.75	1.612E+01	Pulse	0.30	3
Ca			2	5142.872	ug/l	1.15	113,441.86	8.682E-01	Pulse	0.30	3
Ti			2	50.779	ug/l	3.87	8,147.65	6.237E-02	Pulse	0.30	3
V			2	50.309	ug/l	2.14	263,347.92	2.016E+00	Pulse	0.30	3
Cr			2	49.999	ug/l	1.42	330,496.56	2.529E+00	Pulse	0.30	3
Mn			2	49.942	ug/l	0.25	181,711.79	1.391E+00	Pulse	0.30	3
Fe			2	5020.705	ug/l	1.45	26,493,592.28	2.028E+02	Analog	0.30	3
Co			2	49.493	ug/l	1.59	520,206.65	3.981E+00	Pulse	0.30	3
Ni			2	49.652	ug/l	1.10	137,368.25	1.051E+00	Pulse	0.30	3
Cu			2	49.792	ug/l	1.99	375,656.09	2.875E+00	Pulse	0.30	3
Zn			2	49.542	ug/l	1.46	59,471.68	4.551E-01	Pulse	0.30	3
As			2	49.775	ug/l	1.08	34,011.56	2.603E-01	Pulse	1.00	3
Cd			2	50.457	ug/l	0.91	94,866.44	1.129E-01	Pulse	0.30	3
Sn			2	50.113	ug/l	0.39	210,207.55	2.502E-01	Pulse	0.30	3
Se			3	195.717	ug/l	1.75	30,853.60	2.011E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,149,626.76	1.03	105.5	Pulse	0.10	3
1	Sc		2,174,402.31	1.29	103.7	Pulse	0.10	3
1	Ge		453,068.25	0.74	103.2	Pulse	0.10	3

Quantitation Report

1	Ge		636,995.96	0.56	103.6	Pulse	0.10	3
1	Rh		3,145,110.06	0.25	101.6	Pulse	0.10	3
1	In		3,331,996.38	0.36	103.2	Pulse	0.10	3
1	Tb		4,767,889.41	0.89	103.2	Pulse	0.10	3
1	Ho		473,918.44	0.49	103.4	Pulse	0.10	3
1	Bi		2,874,106.93	0.95	100.9	Pulse	0.10	3
2	Sc		130,681.32	1.42	107.2	Pulse	0.30	3
2	Ge		83,342.29	1.02	105.6	Pulse	0.30	3
2	Ge		126,215.57	0.47	105.2	Pulse	0.30	3
2	Rh		1,993,037.98	0.68	103.7	Pulse	0.30	3
2	In		840,224.82	1.10	104.5	Pulse	0.30	3
2	Tb		2,831,705.02	0.60	105.6	Pulse	0.30	3
2	Ho		290,303.77	0.15	106.0	Pulse	0.30	3
2	Bi		1,908,918.88	0.68	102.3	Pulse	0.30	3
3	Sc		145,290.15	0.73	98.7	Pulse	0.30	3
3	Ge		99,965.42	0.66	98.4	Pulse	0.30	3
3	Ge		153,474.01	1.46	100.2	Pulse	0.30	3
3	Rh		1,734,857.92	0.73	99.9	Pulse	0.30	3
3	Tb		3,261,128.62	0.67	102.5	Pulse	0.30	3

Quantitation Report

File Name	019_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 11:57
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	9/12/2019 13:37
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	0.011	ug/l	35.76	69.33	6.165E-05	Pulse	0.25	3
B			1	4.223	ug/l	1.92	27,226.66	2.420E-02	Pulse	0.15	3
Ca			1	1.300	ug/l	15.86	7,598.70	3.587E-03	Pulse	0.10	3
Sr			1	0.008	ug/l	32.24	710.04	2.247E-04	Pulse	0.10	3
Mo			1	0.087	ug/l	18.41	693.38	2.194E-04	Pulse	0.10	3
Ag			1	0.013	ug/l	22.75	286.68	8.719E-05	Pulse	0.10	3
Sn			1	0.095	ug/l	5.38	3,093.78	9.406E-04	Pulse	0.10	3
Sb			1	0.135	ug/l	9.92	2,123.56	4.608E-04	Pulse	0.10	3
Ba			1	-0.002	ug/l	-208.31	83.34	1.808E-05	Pulse	0.10	3
Tl			1	0.020	ug/l	8.39	963.40	3.352E-04	Pulse	0.10	3
Pb			1	0.025	ug/l	14.08	543.36	1.890E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	19.97	363.35	1.265E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	9.47	1,896.79	6.602E-04	Pulse	0.10	3
Na			2	-0.700	ug/l	-1.01	10,571.19	8.174E-02	Pulse	0.30	3
Mg			2	0.556	ug/l	19.26	554.46	4.285E-03	Pulse	0.30	3
Al			2	-2.338	ug/l	-11.70	542.24	4.191E-03	Pulse	0.30	3
K			2	-1.145	ug/l	-33.35	10,511.18	8.126E-02	Pulse	0.30	3
Ca			2	-0.529	ug/l	-153.99	128.89	9.958E-04	Pulse	0.30	3
Ti			2	0.014	ug/l	151.40	3.33	2.586E-05	Pulse	0.30	3
V			2	-0.023	ug/l	-10.78	212.23	1.641E-03	Pulse	0.30	3
Cr			2	-0.010	ug/l	-38.76	445.57	3.444E-03	Pulse	0.30	3
Mn			2	-0.005	ug/l	-45.66	123.34	9.532E-04	Pulse	0.30	3
Fe			2	0.745	ug/l	8.01	6,893.75	5.330E-02	Pulse	0.30	3
Co			2	0.005	ug/l	34.91	79.98	6.181E-04	Pulse	0.30	3
Ni			2	0.008	ug/l	161.00	176.67	1.364E-03	Pulse	0.30	3
Cu			2	-0.196	ug/l	-1.59	2,424.65	1.875E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.203	ug/l	-2.01	982.26	7.595E-03	Pulse	0.30	3
As			2	0.007	ug/l	116.06	18.00	1.390E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	-2296.15	21.03	2.474E-05	Pulse	0.30	3
Sn			2	0.141	ug/l	7.55	1,206.74	1.421E-03	Pulse	0.30	3
Se			3	0.090	ug/l	13.00	20.47	1.329E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,125,217.79	0.73	103.3	Pulse	0.10	3
1	Sc		2,118,356.27	0.88	101.0	Pulse	0.10	3
1	Ge		445,183.03	0.33	101.4	Pulse	0.10	3
1	Ge		620,825.11	0.52	100.9	Pulse	0.10	3
1	Rh		3,159,634.64	0.40	102.1	Pulse	0.10	3
1	In		3,289,519.06	0.61	101.9	Pulse	0.10	3
1	Tb		4,605,553.99	0.91	99.7	Pulse	0.10	3
1	Ho		461,982.40	1.65	100.8	Pulse	0.10	3
1	Bi		2,873,580.89	0.81	100.8	Pulse	0.10	3
2	Sc		129,334.04	0.90	106.1	Pulse	0.30	3
2	Ge		81,916.15	1.44	103.8	Pulse	0.30	3
2	Ge		124,164.74	0.53	103.5	Pulse	0.30	3
2	Rh		2,020,309.09	0.53	105.1	Pulse	0.30	3
2	In		849,134.52	0.50	105.6	Pulse	0.30	3
2	Tb		2,820,154.61	0.86	105.2	Pulse	0.30	3
2	Ho		287,775.71	0.98	105.1	Pulse	0.30	3
2	Bi		1,943,253.32	0.06	104.1	Pulse	0.30	3
3	Sc		145,357.08	0.53	98.7	Pulse	0.30	3
3	Ge		102,051.34	0.21	100.4	Pulse	0.30	3
3	Ge		153,936.48	1.31	100.5	Pulse	0.30	3
3	Rh		1,778,275.62	1.26	102.4	Pulse	0.30	3
3	Tb		3,250,210.50	1.00	102.2	Pulse	0.30	3

Quantitation Report

File Name	020LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:02
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	9/12/2019 13:37
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	0.509	ug/l	3.02	2,601.57	2.303E-03	Pulse	0.25	3
B			1	25.900	ug/l	0.55	104,442.06	9.247E-02	Pulse	0.15	3
Ca			1	260.713	ug/l	0.21	197,760.20	9.147E-02	Pulse	0.10	3
Sr			1	4.909	ug/l	1.08	205,289.33	6.426E-02	Pulse	0.10	3
Mo			1	1.020	ug/l	5.50	7,968.95	2.495E-03	Pulse	0.10	3
Ag			1	0.476	ug/l	2.87	9,526.59	2.843E-03	Pulse	0.10	3
Sn			1	4.982	ug/l	2.56	66,474.37	1.985E-02	Pulse	0.10	3
Sb			1	2.110	ug/l	1.57	32,043.79	6.733E-03	Pulse	0.10	3
Ba			1	0.997	ug/l	3.27	6,431.57	1.351E-03	Pulse	0.10	3
Tl			1	0.492	ug/l	1.14	19,473.36	6.647E-03	Pulse	0.10	3
Pb			1	0.500	ug/l	7.68	6,948.57	2.371E-03	Pulse	0.10	3
Pb			1	0.494	ug/l	1.41	6,051.49	2.066E-03	Pulse	0.10	3
Pb			1	0.485	ug/l	1.50	27,330.76	9.328E-03	Pulse	0.10	3
Na			2	247.227	ug/l	1.16	280,496.81	2.144E+00	Pulse	0.30	3
Mg			2	253.551	ug/l	2.05	128,794.40	9.847E-01	Pulse	0.30	3
Al			2	23.668	ug/l	4.78	5,081.94	3.885E-02	Pulse	0.30	3
K			2	256.150	ug/l	1.96	119,261.14	9.118E-01	Pulse	0.30	3
Ca			2	272.550	ug/l	3.96	6,151.20	4.704E-02	Pulse	0.30	3
Ti			2	0.974	ug/l	20.23	157.78	1.205E-03	Pulse	0.30	3
V			2	0.951	ug/l	3.66	5,310.91	4.061E-02	Pulse	0.30	3
Cr			2	0.988	ug/l	4.00	7,039.35	5.383E-02	Pulse	0.30	3
Mn			2	1.006	ug/l	6.64	3,802.70	2.908E-02	Pulse	0.30	3
Fe			2	26.004	ug/l	1.37	140,380.59	1.073E+00	Pulse	0.30	3
Co			2	0.508	ug/l	1.81	5,377.23	4.111E-02	Pulse	0.30	3
Ni			2	0.989	ug/l	8.55	2,888.07	2.209E-02	Pulse	0.30	3
Cu			2	1.819	ug/l	2.28	17,511.70	1.339E-01	Pulse	0.30	3
Zn			2	5.106	ug/l	5.05	7,240.57	5.536E-02	Pulse	0.30	3
As			2	0.523	ug/l	1.96	371.34	2.838E-03	Pulse	1.00	3
Cd			2	0.473	ug/l	3.53	932.72	1.083E-03	Pulse	0.30	3
Sn			2	5.012	ug/l	2.34	22,114.50	2.567E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.518	ug/l	11.27	89.47	5.723E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,129,523.65	0.26	103.6	Pulse	0.10	3
1	Sc		2,162,029.81	0.31	103.1	Pulse	0.10	3
1	Ge		455,619.96	0.54	103.8	Pulse	0.10	3
1	Ge		635,029.43	0.09	103.2	Pulse	0.10	3
1	Rh		3,195,134.33	1.17	103.2	Pulse	0.10	3
1	In		3,350,055.84	1.42	103.8	Pulse	0.10	3
1	Tb		4,759,511.70	0.78	103.0	Pulse	0.10	3
1	Ho		467,780.02	2.14	102.0	Pulse	0.10	3
1	Bi		2,929,830.16	1.07	102.8	Pulse	0.10	3
2	Sc		130,818.75	1.55	107.3	Pulse	0.30	3
2	Ge		84,346.08	1.58	106.9	Pulse	0.30	3
2	Ge		127,003.63	1.44	105.9	Pulse	0.30	3
2	Rh		2,039,234.15	0.27	106.1	Pulse	0.30	3
2	In		861,607.63	0.53	107.1	Pulse	0.30	3
2	Tb		2,853,578.50	0.55	106.4	Pulse	0.30	3
2	Ho		290,446.67	1.30	106.1	Pulse	0.30	3
2	Bi		1,958,101.31	0.35	104.9	Pulse	0.30	3
3	Sc		147,369.38	0.75	100.1	Pulse	0.30	3
3	Ge		102,404.85	0.02	100.8	Pulse	0.30	3
3	Ge		156,429.49	1.27	102.1	Pulse	0.30	3
3	Rh		1,787,480.48	0.83	103.0	Pulse	0.30	3
3	Tb		3,270,456.47	0.31	102.8	Pulse	0.30	3

Quantitation Report

File Name	021ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:07
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	9/12/2019 13:37
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	294.93	16.00	1.460E-05	Pulse	0.25	3
B			1	3.138	ug/l	4.94	22,711.10	2.078E-02	Pulse	0.15	3
Ca			1	95171.779	ug/l	0.30	68,504,765.65	3.224E+01	Analog	0.10	3
Sr			1	1967.109	ug/l	1.15	73,198,963.91	2.570E+01	Analog	0.10	3
Mo			1	2085.413	ug/l	0.52	14,494,808.12	5.089E+00	Analog	0.10	3
Ag			1	0.030	ug/l	20.16	586.70	1.868E-04	Pulse	0.10	3
Sn			1	1820.467	ug/l	1.00	22,100,497.17	7.044E+00	Analog	0.10	3
Sb			1	0.218	ug/l	5.36	3,367.18	7.264E-04	Pulse	0.10	3
Ba			1	0.233	ug/l	8.18	1,543.47	3.329E-04	Pulse	0.10	3
Tl			1	0.006	ug/l	39.58	400.02	1.496E-04	Pulse	0.10	3
Pb			1	0.119	ug/l	18.73	1,656.83	6.190E-04	Pulse	0.10	3
Pb			1	0.118	ug/l	13.86	1,446.79	5.424E-04	Pulse	0.10	3
Pb			1	0.114	ug/l	5.79	6,454.16	2.417E-03	Pulse	0.10	3
Na			2	94016.832	ug/l	1.31	102,905,298.13	7.823E+02	Analog	0.30	3
Mg			2	92926.570	ug/l	1.44	47,372,763.67	3.601E+02	Analog	0.30	3
Al			2	97854.867	ug/l	1.18	17,157,318.21	1.304E+02	Analog	0.30	3
K			2	98764.148	ug/l	1.12	41,949,893.89	3.189E+02	Analog	0.30	3
Ca			2	101928.845	ug/l	0.55	2,260,916.92	1.719E+01	Pulse	0.30	3
Ti			2	1866.701	ug/l	1.48	301,555.41	2.292E+00	Pulse	0.30	3
V			2	-0.013	ug/l	-15.19	267.78	2.035E-03	Pulse	0.30	3
Cr			2	0.278	ug/l	3.40	2,365.76	1.799E-02	Pulse	0.30	3
Mn			2	0.529	ug/l	5.09	2,082.38	1.583E-02	Pulse	0.30	3
Fe			2	91727.780	ug/l	0.98	487,259,482.86	3.704E+03	Analog	0.30	3
Co			2	0.180	ug/l	11.90	1,938.10	1.473E-02	Pulse	0.30	3
Ni			2	0.511	ug/l	5.87	1,577.88	1.199E-02	Pulse	0.30	3
Cu			2	1.965	ug/l	0.51	18,711.88	1.422E-01	Pulse	0.30	3
Zn			2	0.172	ug/l	36.32	1,443.42	1.097E-02	Pulse	0.30	3
As			2	0.073	ug/l	17.53	63.67	4.844E-04	Pulse	1.00	3
Cd			2	-0.304	ug/l	-11.34	-521.18	-6.547E-04	Pulse	0.30	3
Sn			2	1870.191	ug/l	0.81	7,413,054.71	9.311E+00	Analog	0.30	3
Se			3	0.112	ug/l	15.08	23.00	1.548E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,093,090.74	0.85	100.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,124,493.67	1.11	101.3	Pulse	0.10	3
1	Ge		441,770.62	1.91	100.6	Pulse	0.10	3
1	Ge		599,523.82	1.28	97.5	Pulse	0.10	3
1	Rh		2,848,376.21	0.87	92.0	Pulse	0.10	3
1	In		3,137,358.90	1.04	97.2	Pulse	0.10	3
1	Tb		4,636,190.97	1.39	100.4	Pulse	0.10	3
1	Ho		460,304.64	1.70	100.4	Pulse	0.10	3
1	Bi		2,671,608.60	2.52	93.7	Pulse	0.10	3
2	Sc		131,558.80	1.14	107.9	Pulse	0.30	3
2	Ge		82,540.48	0.69	104.6	Pulse	0.30	3
2	Ge		119,602.93	1.72	99.7	Pulse	0.30	3
2	Rh		1,831,108.26	1.15	95.2	Pulse	0.30	3
2	In		796,205.10	0.50	99.0	Pulse	0.30	3
2	Tb		2,763,902.67	0.14	103.1	Pulse	0.30	3
2	Ho		284,584.76	0.23	103.9	Pulse	0.30	3
2	Bi		1,770,747.78	0.34	94.9	Pulse	0.30	3
3	Sc		151,901.66	1.44	103.2	Pulse	0.30	3
3	Ge		101,975.52	0.88	100.4	Pulse	0.30	3
3	Ge		148,746.92	1.31	97.1	Pulse	0.30	3
3	Rh		1,599,787.96	0.09	92.1	Pulse	0.30	3
3	Tb		3,159,175.29	0.16	99.3	Pulse	0.30	3

Quantitation Report

File Name	022ICSB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:12
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	9/12/2019 13:37
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	142.55	20.00	1.936E-05	Pulse	0.25	3
B			1	52.568	ug/l	0.28	182,370.00	1.765E-01	Pulse	0.15	3
Ca			1	95322.725	ug/l	1.40	66,189,804.01	3.230E+01	Analog	0.10	3
Sr			1	1964.730	ug/l	1.13	72,670,663.92	2.567E+01	Analog	0.10	3
Mo			1	2060.682	ug/l	1.82	14,236,221.04	5.029E+00	Analog	0.10	3
Ag			1	20.096	ug/l	0.81	373,616.19	1.198E-01	Pulse	0.10	3
Sn			1	1804.208	ug/l	1.96	21,766,754.68	6.982E+00	Analog	0.10	3
Sb			1	0.189	ug/l	4.16	2,937.05	6.317E-04	Pulse	0.10	3
Ba			1	0.225	ug/l	11.41	1,496.80	3.221E-04	Pulse	0.10	3
Tl			1	0.004	ug/l	39.22	316.68	1.183E-04	Pulse	0.10	3
Pb			1	0.090	ug/l	11.36	1,303.44	4.869E-04	Pulse	0.10	3
Pb			1	0.092	ug/l	10.64	1,176.77	4.392E-04	Pulse	0.10	3
Pb			1	0.089	ug/l	7.25	5,260.57	1.964E-03	Pulse	0.10	3
Na			2	92028.390	ug/l	1.32	96,836,447.26	7.657E+02	Analog	0.30	3
Mg			2	91724.589	ug/l	1.13	44,953,268.21	3.555E+02	Analog	0.30	3
Al			2	96475.748	ug/l	1.67	16,261,006.58	1.286E+02	Analog	0.30	3
K			2	96751.691	ug/l	1.39	39,507,348.43	3.124E+02	Analog	0.30	3
Ca			2	100065.693	ug/l	1.34	2,133,657.76	1.687E+01	Pulse	0.30	3
Ti			2	1829.928	ug/l	1.13	284,192.31	2.247E+00	Pulse	0.30	3
V			2	20.456	ug/l	1.60	103,826.18	8.210E-01	Pulse	0.30	3
Cr			2	21.152	ug/l	0.87	135,607.03	1.072E+00	Pulse	0.30	3
Mn			2	21.253	ug/l	0.16	74,917.31	5.924E-01	Pulse	0.30	3
Fe			2	90839.197	ug/l	1.21	463,876,621.57	3.668E+03	Analog	0.30	3
Co			2	20.357	ug/l	0.62	207,114.09	1.638E+00	Pulse	0.30	3
Ni			2	20.382	ug/l	0.48	54,662.54	4.322E-01	Pulse	0.30	3
Cu			2	19.046	ug/l	1.06	141,422.00	1.118E+00	Pulse	0.30	3
Zn			2	17.985	ug/l	2.63	21,653.33	1.712E-01	Pulse	0.30	3
As			2	20.882	ug/l	0.71	13,818.18	1.093E-01	Pulse	1.00	3
Cd			2	19.863	ug/l	0.80	34,684.00	4.446E-02	Pulse	0.30	3
Sn			2	1877.614	ug/l	0.10	7,291,745.27	9.348E+00	Analog	0.30	3
Se			3	20.288	ug/l	0.55	3,052.22	2.088E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,033,510.66	0.10	94.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,049,450.33	0.11	97.7	Pulse	0.10	3
1	Ge		431,629.73	0.76	98.3	Pulse	0.10	3
1	Ge		585,235.19	0.77	95.2	Pulse	0.10	3
1	Rh		2,831,281.52	0.66	91.5	Pulse	0.10	3
1	In		3,118,259.99	1.39	96.6	Pulse	0.10	3
1	Tb		4,650,746.80	1.38	100.7	Pulse	0.10	3
1	Ho		462,688.73	1.08	100.9	Pulse	0.10	3
1	Bi		2,678,877.88	1.11	94.0	Pulse	0.10	3
2	Sc		126,466.76	0.61	103.7	Pulse	0.30	3
2	Ge		78,941.69	0.79	100.1	Pulse	0.30	3
2	Ge		117,873.65	0.58	98.3	Pulse	0.30	3
2	Rh		1,807,011.87	0.17	94.0	Pulse	0.30	3
2	In		780,066.92	0.49	97.0	Pulse	0.30	3
2	Tb		2,730,333.15	0.30	101.8	Pulse	0.30	3
2	Ho		280,350.27	0.27	102.4	Pulse	0.30	3
2	Bi		1,743,687.88	0.49	93.4	Pulse	0.30	3
3	Sc		150,080.71	0.38	101.9	Pulse	0.30	3
3	Ge		100,355.54	0.07	98.8	Pulse	0.30	3
3	Ge		146,196.80	1.61	95.4	Pulse	0.30	3
3	Rh		1,595,954.00	0.54	91.9	Pulse	0.30	3
3	Tb		3,171,859.39	0.69	99.7	Pulse	0.30	3

Quantitation Report

File Name	023SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:17
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	9/12/2019 13:37
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	125.31	20.00	2.099E-05	Pulse	0.25	3
B			1	1.123	ug/l	8.66	13,745.85	1.443E-02	Pulse	0.15	3
Ca			1	10.515	ug/l	9.98	12,772.05	6.709E-03	Pulse	0.10	3
Sr			1	0.214	ug/l	7.50	8,886.14	2.926E-03	Pulse	0.10	3
Mo			1	0.904	ug/l	7.21	6,714.97	2.211E-03	Pulse	0.10	3
Ag			1	0.008	ug/l	21.84	190.01	5.807E-05	Pulse	0.10	3
Sn			1	0.398	ug/l	7.85	6,918.47	2.112E-03	Pulse	0.10	3
Sb			1	0.028	ug/l	12.48	573.36	1.217E-04	Pulse	0.10	3
Ba			1	0.007	ug/l	26.83	146.68	3.114E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	713.09	210.01	7.165E-05	Pulse	0.10	3
Pb			1	0.007	ug/l	8.69	303.35	1.035E-04	Pulse	0.10	3
Pb			1	0.007	ug/l	88.84	280.02	9.548E-05	Pulse	0.10	3
Pb			1	0.006	ug/l	8.81	1,213.40	4.140E-04	Pulse	0.10	3
Na			2	10.688	ug/l	7.02	21,092.21	1.765E-01	Pulse	0.30	3
Mg			2	7.245	ug/l	6.31	3,611.56	3.021E-02	Pulse	0.30	3
Al			2	4.182	ug/l	8.72	1,538.97	1.288E-02	Pulse	0.30	3
K			2	7.071	ug/l	20.65	12,880.64	1.078E-01	Pulse	0.30	3
Ca			2	5.530	ug/l	16.42	241.12	2.017E-03	Pulse	0.30	3
Ti			2	0.294	ug/l	37.29	44.44	3.700E-04	Pulse	0.30	3
V			2	-0.026	ug/l	-8.74	180.00	1.505E-03	Pulse	0.30	3
Cr			2	0.003	ug/l	58.37	486.68	4.072E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-154.32	117.78	9.832E-04	Pulse	0.30	3
Fe			2	9.929	ug/l	4.13	50,715.69	4.241E-01	Pulse	0.30	3
Co			2	0.002	ug/l	39.69	50.97	4.262E-04	Pulse	0.30	3
Ni			2	0.001	ug/l	436.74	144.45	1.208E-03	Pulse	0.30	3
Cu			2	-0.224	ug/l	-3.95	2,050.15	1.715E-02	Pulse	0.30	3
Zn			2	-0.373	ug/l	-9.69	725.58	6.072E-03	Pulse	0.30	3
As			2	0.004	ug/l	194.04	14.67	1.230E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.005	ug/l	-19.78	11.55	1.396E-05	Pulse	0.30	3
Sn			2	0.361	ug/l	2.57	2,081.28	2.516E-03	Pulse	0.30	3
Se			3	0.015	ug/l	43.42	8.40	5.578E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		952,437.37	0.54	87.4	Pulse	0.10	3
1	Sc		1,904,104.76	0.70	90.8	Pulse	0.10	3
1	Ge		415,542.99	0.33	94.6	Pulse	0.10	3
1	Ge		583,218.57	0.47	94.8	Pulse	0.10	3
1	Rh		3,036,552.35	0.10	98.1	Pulse	0.10	3
1	In		3,274,526.14	0.60	101.5	Pulse	0.10	3
1	Tb		4,711,215.03	0.69	102.0	Pulse	0.10	3
1	Ho		469,178.03	0.18	102.4	Pulse	0.10	3
1	Bi		2,930,831.21	0.72	102.8	Pulse	0.10	3
2	Sc		119,533.72	2.08	98.0	Pulse	0.30	3
2	Ge		77,754.11	1.51	98.6	Pulse	0.30	3
2	Ge		116,424.81	0.91	97.0	Pulse	0.30	3
2	Rh		1,972,610.47	2.09	102.6	Pulse	0.30	3
2	In		827,259.82	1.36	102.8	Pulse	0.30	3
2	Tb		2,810,469.54	1.98	104.8	Pulse	0.30	3
2	Ho		288,246.45	2.16	105.3	Pulse	0.30	3
2	Bi		1,950,585.34	1.02	104.5	Pulse	0.30	3
3	Sc		139,160.48	2.95	94.5	Pulse	0.30	3
3	Ge		99,751.92	1.98	98.2	Pulse	0.30	3
3	Ge		150,340.07	2.07	98.1	Pulse	0.30	3
3	Rh		1,729,749.31	2.60	99.6	Pulse	0.30	3
3	Tb		3,181,158.55	2.59	100.0	Pulse	0.30	3

Quantitation Report

File Name	024_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:22
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	9/12/2019 13:37
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	50.649	ug/l	0.83	221,559.18	2.281E-01	Pulse	0.25	3
B			1	98.947	ug/l	1.35	313,237.16	3.225E-01	Pulse	0.15	3
Ca			1	5097.815	ug/l	0.82	3,399,352.86	1.730E+00	Pulse	0.10	3
Sr			1	51.507	ug/l	0.22	2,059,973.56	6.730E-01	Pulse	0.10	3
Mo			1	51.065	ug/l	0.50	381,426.84	1.246E-01	Pulse	0.10	3
Ag			1	49.215	ug/l	0.61	963,899.39	2.934E-01	Pulse	0.10	3
Sn			1	50.450	ug/l	1.41	643,085.04	1.958E-01	Pulse	0.10	3
Sb			1	51.231	ug/l	0.12	780,371.34	1.627E-01	Pulse	0.10	3
Ba			1	50.325	ug/l	1.71	322,149.34	6.717E-02	Pulse	0.10	3
Tl			1	50.462	ug/l	0.55	1,973,547.52	6.740E-01	Pulse	0.10	3
Pb			1	50.714	ug/l	0.35	682,149.08	2.329E-01	Pulse	0.10	3
Pb			1	50.675	ug/l	0.43	599,986.23	2.049E-01	Pulse	0.10	3
Pb			1	50.416	ug/l	0.24	2,750,038.93	9.391E-01	Pulse	0.10	3
Na			2	4933.100	ug/l	1.54	5,009,429.25	4.113E+01	Analog	0.30	3
Mg			2	4832.017	ug/l	0.65	2,280,991.44	1.873E+01	Pulse	0.30	3
Al			2	4929.008	ug/l	0.37	801,021.83	6.577E+00	Pulse	0.30	3
K			2	4973.977	ug/l	0.41	1,965,907.07	1.614E+01	Pulse	0.30	3
Ca			2	5186.118	ug/l	0.35	106,629.66	8.755E-01	Pulse	0.30	3
Ti			2	50.736	ug/l	1.50	7,589.60	6.232E-02	Pulse	0.30	3
V			2	50.570	ug/l	0.34	246,759.32	2.026E+00	Pulse	0.30	3
Cr			2	50.295	ug/l	0.17	309,891.93	2.544E+00	Pulse	0.30	3
Mn			2	50.674	ug/l	0.34	171,846.00	1.411E+00	Pulse	0.30	3
Fe			2	5119.653	ug/l	0.45	25,182,009.55	2.068E+02	Analog	0.30	3
Co			2	50.449	ug/l	0.53	494,282.09	4.058E+00	Pulse	0.30	3
Ni			2	50.090	ug/l	0.18	129,169.62	1.061E+00	Pulse	0.30	3
Cu			2	50.104	ug/l	1.09	352,349.06	2.893E+00	Pulse	0.30	3
Zn			2	50.597	ug/l	1.25	56,590.49	4.646E-01	Pulse	0.30	3
As			2	50.915	ug/l	0.97	32,427.71	2.662E-01	Pulse	1.00	3
Cd			2	50.364	ug/l	1.53	92,621.69	1.127E-01	Pulse	0.30	3
Sn			2	50.464	ug/l	0.86	207,068.32	2.519E-01	Pulse	0.30	3
Se			3	196.745	ug/l	1.52	30,911.25	2.021E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		971,250.09	0.92	89.1	Pulse	0.10	3
1	Sc		1,964,890.29	1.26	93.7	Pulse	0.10	3
1	Ge		427,455.50	1.09	97.4	Pulse	0.10	3

Quantitation Report

1	Ge		601,495.32	1.55	97.8	Pulse	0.10	3
1	Rh		3,060,738.49	0.30	98.9	Pulse	0.10	3
1	In		3,284,925.06	0.71	101.8	Pulse	0.10	3
1	Tb		4,796,424.20	1.31	103.8	Pulse	0.10	3
1	Ho		477,692.54	1.31	104.2	Pulse	0.10	3
1	Bi		2,928,319.95	0.42	102.8	Pulse	0.10	3
2	Sc		121,798.05	0.46	99.9	Pulse	0.30	3
2	Ge		78,972.88	1.08	100.1	Pulse	0.30	3
2	Ge		119,895.93	0.67	99.9	Pulse	0.30	3
2	Rh		1,943,522.35	0.52	101.1	Pulse	0.30	3
2	In		821,915.88	0.58	102.2	Pulse	0.30	3
2	Tb		2,824,543.98	0.33	105.3	Pulse	0.30	3
2	Ho		288,068.03	0.60	105.2	Pulse	0.30	3
2	Bi		1,918,924.78	0.45	102.8	Pulse	0.30	3
3	Sc		145,458.26	2.09	98.8	Pulse	0.30	3
3	Ge		100,283.95	0.26	98.7	Pulse	0.30	3
3	Ge		152,956.01	1.62	99.8	Pulse	0.30	3
3	Rh		1,731,928.82	0.76	99.8	Pulse	0.30	3
3	Tb		3,270,122.72	0.44	102.8	Pulse	0.30	3

Quantitation Report

File Name	025_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:27
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	9/12/2019 13:37
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	0.012	ug/l	59.06	66.67	6.714E-05	Pulse	0.25	3
B			1	3.214	ug/l	7.15	20,844.30	2.102E-02	Pulse	0.15	3
Ca			1	1.069	ug/l	43.72	6,898.36	3.509E-03	Pulse	0.10	3
Sr			1	0.024	ug/l	10.71	1,380.12	4.422E-04	Pulse	0.10	3
Mo			1	0.159	ug/l	14.31	1,233.43	3.952E-04	Pulse	0.10	3
Ag			1	0.013	ug/l	27.69	276.68	8.376E-05	Pulse	0.10	3
Sn			1	0.136	ug/l	13.53	3,630.58	1.098E-03	Pulse	0.10	3
Sb			1	0.150	ug/l	14.20	2,440.29	5.096E-04	Pulse	0.10	3
Ba			1	0.003	ug/l	95.43	120.01	2.505E-05	Pulse	0.10	3
Tl			1	0.020	ug/l	20.51	983.41	3.313E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	10.57	513.36	1.730E-04	Pulse	0.10	3
Pb			1	0.017	ug/l	32.09	406.69	1.370E-04	Pulse	0.10	3
Pb			1	0.016	ug/l	11.77	1,793.45	6.042E-04	Pulse	0.10	3
Na			2	3.516	ug/l	70.36	14,256.12	1.168E-01	Pulse	0.30	3
Mg			2	1.240	ug/l	7.46	845.59	6.933E-03	Pulse	0.30	3
Al			2	-1.754	ug/l	-19.04	605.58	4.970E-03	Pulse	0.30	3
K			2	1.188	ug/l	34.93	10,828.04	8.880E-02	Pulse	0.30	3
Ca			2	-0.050	ug/l	-1814.53	131.11	1.077E-03	Pulse	0.30	3
Ti			2	0.060	ug/l	75.79	10.00	8.238E-05	Pulse	0.30	3
V			2	-0.027	ug/l	-36.92	178.89	1.468E-03	Pulse	0.30	3
Cr			2	-0.009	ug/l	-39.03	422.23	3.462E-03	Pulse	0.30	3
Mn			2	-0.003	ug/l	-183.47	123.34	1.011E-03	Pulse	0.30	3
Fe			2	1.734	ug/l	4.48	11,362.90	9.321E-02	Pulse	0.30	3
Co			2	0.006	ug/l	16.37	89.97	7.384E-04	Pulse	0.30	3
Ni			2	0.001	ug/l	427.62	147.78	1.212E-03	Pulse	0.30	3
Cu			2	-0.233	ug/l	-2.45	2,026.82	1.662E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.229	ug/l	-26.13	897.81	7.366E-03	Pulse	0.30	3
As			2	0.013	ug/l	64.21	21.33	1.746E-04	Pulse	1.00	3
Cd			2	-0.004	ug/l	-86.20	13.19	1.581E-05	Pulse	0.30	3
Sn			2	0.192	ug/l	3.32	1,398.97	1.674E-03	Pulse	0.30	3
Se			3	0.098	ug/l	5.82	21.20	1.408E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		991,644.80	0.49	91.0	Pulse	0.10	3
1	Sc		1,965,598.15	0.42	93.7	Pulse	0.10	3
1	Ge		426,381.97	0.50	97.1	Pulse	0.10	3
1	Ge		601,710.34	0.85	97.8	Pulse	0.10	3
1	Rh		3,119,979.54	1.24	100.8	Pulse	0.10	3
1	In		3,306,516.07	0.80	102.4	Pulse	0.10	3
1	Tb		4,789,165.87	0.63	103.7	Pulse	0.10	3
1	Ho		477,763.85	0.38	104.2	Pulse	0.10	3
1	Bi		2,968,374.54	0.52	104.2	Pulse	0.10	3
2	Sc		121,932.55	1.22	100.0	Pulse	0.30	3
2	Ge		79,473.06	1.17	100.7	Pulse	0.30	3
2	Ge		120,202.79	1.11	100.2	Pulse	0.30	3
2	Rh		1,990,912.28	0.60	103.6	Pulse	0.30	3
2	In		835,482.78	1.00	103.9	Pulse	0.30	3
2	Tb		2,828,867.11	0.99	105.5	Pulse	0.30	3
2	Ho		290,468.67	0.27	106.1	Pulse	0.30	3
2	Bi		1,975,122.35	0.40	105.8	Pulse	0.30	3
3	Sc		142,195.03	3.01	96.6	Pulse	0.30	3
3	Ge		98,829.73	1.85	97.3	Pulse	0.30	3
3	Ge		150,657.71	2.63	98.3	Pulse	0.30	3
3	Rh		1,746,846.18	2.38	100.6	Pulse	0.30	3
3	Tb		3,192,493.48	2.96	100.4	Pulse	0.30	3

Quantitation Report

File Name	026SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:32
Sample Name	mp17239-s1conf
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	74.314	ug/l	1.89	14,226.10	1.340E-02	Pulse	0.25	3
B			1	2756.420	ug/l	0.98	380,259.26	3.581E-01	Pulse	0.15	3
Ca			1	261625.593	ug/l	0.93	7,770,910.92	3.548E+00	Analog	0.10	3
Sr			1	4989.735	ug/l	0.49	8,050,659.46	2.608E+00	Analog	0.10	3
Mo			1	84.453	ug/l	2.78	25,474.47	8.250E-03	Pulse	0.10	3
Ag			1	67.691	ug/l	1.47	54,625.02	1.615E-02	Pulse	0.10	3
Sn			1	73.608	ug/l	1.80	40,469.71	1.196E-02	Pulse	0.10	3
Sb			1	75.499	ug/l	1.30	47,860.59	9.622E-03	Pulse	0.10	3
Ba			1	105.182	ug/l	2.04	28,036.17	5.635E-03	Pulse	0.10	3
Tl			1	73.024	ug/l	0.08	109,587.52	3.908E-02	Pulse	0.10	3
Pb			1	79.791	ug/l	2.62	41,295.18	1.473E-02	Pulse	0.10	3
Pb			1	80.966	ug/l	1.59	36,900.26	1.316E-02	Pulse	0.10	3
Pb			1	80.151	ug/l	0.96	168,249.86	6.000E-02	Pulse	0.10	3
Na			2	6173975.230	ug/l	1.16	286,910,379.71	2.055E+03	Analog	0.30	3
Mg			2	747556.856	ug/l	1.38	16,181,194.91	1.159E+02	Analog	0.30	3
Al			2	4095.257	ug/l	0.99	31,506.13	2.256E-01	Pulse	0.30	3
K			2	238236.344	ug/l	1.03	4,307,300.11	3.085E+01	Pulse	0.30	3
Ca			2	273978.845	ug/l	0.72	258,164.36	1.849E+00	Pulse	0.30	3
Ti			2	88.782	ug/l	5.36	610.02	4.370E-03	Pulse	0.30	3
V			2	80.785	ug/l	2.54	18,410.39	1.318E-01	Pulse	0.30	3
Cr			2	72.021	ug/l	2.10	20,867.73	1.494E-01	Pulse	0.30	3
Mn			2	187.517	ug/l	0.95	29,293.83	2.098E-01	Pulse	0.30	3
Fe			2	4538.234	ug/l	1.08	1,026,820.27	7.353E+00	Pulse	0.30	3
Co			2	69.312	ug/l	0.38	31,176.80	2.233E-01	Pulse	0.30	3
Ni			2	67.125	ug/l	3.09	8,096.52	5.797E-02	Pulse	0.30	3
Cu			2	68.312	ug/l	2.90	25,982.93	1.861E-01	Pulse	0.30	3
Zn			2	66.538	ug/l	4.11	4,659.60	3.337E-02	Pulse	0.30	3
As			2	73.558	ug/l	3.20	2,162.82	1.548E-02	Pulse	1.00	3
Cd			2	68.721	ug/l	1.61	5,382.19	6.175E-03	Pulse	0.30	3
Sn			2	74.983	ug/l	3.02	13,641.59	1.565E-02	Pulse	0.30	3
Se			3	352.741	ug/l	1.27	2,248.02	1.453E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,061,732.49	1.24	97.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,190,099.60	1.28	104.4	Pulse	0.10	3
1	Ge		454,205.45	1.30	103.4	Pulse	0.10	3
1	Ge		637,469.77	1.07	103.6	Pulse	0.10	3
1	Rh		3,087,273.81	1.03	99.8	Pulse	0.10	3
1	In		3,382,435.60	1.56	104.8	Pulse	0.10	3
1	Tb		4,974,691.38	1.43	107.7	Pulse	0.10	3
1	Ho		495,107.12	1.16	108.0	Pulse	0.10	3
1	Bi		2,804,345.48	1.34	98.4	Pulse	0.10	3
2	Sc		139,645.14	1.11	114.5	Pulse	0.30	3
2	Ge		86,067.23	1.41	109.1	Pulse	0.30	3
2	Ge		130,173.72	1.44	108.5	Pulse	0.30	3
2	Rh		1,987,169.64	0.87	103.4	Pulse	0.30	3
2	In		871,663.06	0.61	108.4	Pulse	0.30	3
2	Tb		2,963,136.83	0.55	110.5	Pulse	0.30	3
2	Ho		305,034.07	0.34	111.4	Pulse	0.30	3
2	Bi		1,856,667.91	0.18	99.5	Pulse	0.30	3
3	Sc		153,309.30	0.81	104.1	Pulse	0.30	3
3	Ge		102,447.39	0.90	100.8	Pulse	0.30	3
3	Ge		154,692.43	0.23	101.0	Pulse	0.30	3
3	Rh		1,661,791.78	1.08	95.7	Pulse	0.30	3
3	Tb		3,203,143.21	1.06	100.7	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:37
Sample Name	mp17220-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	9/12/2019 13:37
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	0.011	ug/l	64.11	38.67	3.739E-05	Pulse	0.25	3
B			1	8.148	ug/l	3.44	24,544.73	2.373E-02	Pulse	0.15	3
Ca			1	19.337	ug/l	9.47	13,369.24	6.422E-03	Pulse	0.10	3
Sr			1	0.129	ug/l	7.78	3,200.47	9.696E-04	Pulse	0.10	3
Mo			1	0.278	ug/l	2.15	1,140.10	3.454E-04	Pulse	0.10	3
Ag			1	0.015	ug/l	23.08	183.34	5.246E-05	Pulse	0.10	3
Sn			1	0.761	ug/l	6.28	7,148.57	2.044E-03	Pulse	0.10	3
Sb			1	0.264	ug/l	5.76	2,293.60	4.526E-04	Pulse	0.10	3
Ba			1	0.045	ug/l	11.12	260.01	5.130E-05	Pulse	0.10	3
Tl			1	0.017	ug/l	6.11	590.04	1.821E-04	Pulse	0.10	3
Pb			1	0.057	ug/l	11.37	656.71	2.027E-04	Pulse	0.10	3
Pb			1	0.053	ug/l	15.15	566.70	1.749E-04	Pulse	0.10	3
Pb			1	0.052	ug/l	11.07	2,536.86	7.828E-04	Pulse	0.10	3
Na			2	64.114	ug/l	9.26	45,043.28	3.543E-01	Pulse	0.30	3
Mg			2	7.893	ug/l	8.43	2,214.62	1.742E-02	Pulse	0.30	3
Al			2	0.807	ug/l	132.82	997.82	7.845E-03	Pulse	0.30	3
K			2	2.490	ug/l	107.33	11,311.72	8.898E-02	Pulse	0.30	3
Ca			2	18.497	ug/l	36.88	335.56	2.644E-03	Pulse	0.30	3
Ti			2	0.672	ug/l	51.40	53.33	4.214E-04	Pulse	0.30	3
V			2	0.287	ug/l	6.71	1,055.61	8.303E-03	Pulse	0.30	3
Cr			2	0.289	ug/l	8.59	1,427.86	1.123E-02	Pulse	0.30	3
Mn			2	0.101	ug/l	36.03	320.01	2.512E-03	Pulse	0.30	3
Fe			2	7.830	ug/l	0.74	23,059.59	1.813E-01	Pulse	0.30	3
Co			2	0.015	ug/l	30.71	108.83	8.578E-04	Pulse	0.30	3
Ni			2	0.051	ug/l	68.57	218.89	1.724E-03	Pulse	0.30	3
Cu			2	0.266	ug/l	11.94	4,776.31	3.756E-02	Pulse	0.30	3
Zn			2	1.305	ug/l	1.40	1,945.70	1.530E-02	Pulse	0.30	3
As			2	0.129	ug/l	13.83	56.33	4.430E-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	-420.75	19.89	2.281E-05	Pulse	0.30	3
Sn			2	0.767	ug/l	8.26	2,286.86	2.627E-03	Pulse	0.30	3
Se			3	0.049	ug/l	8.15	10.67	6.541E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,034,514.43	0.73	94.9	Pulse	0.10	3
1	Sc		2,081,680.49	0.79	99.3	Pulse	0.10	3
1	Ge		462,687.55	1.19	105.4	Pulse	0.10	3
1	Ge		645,831.46	0.28	105.0	Pulse	0.10	3
1	Rh		3,301,112.24	0.24	106.7	Pulse	0.10	3
1	In		3,497,092.71	0.82	108.3	Pulse	0.10	3
1	Tb		5,065,789.30	1.75	109.7	Pulse	0.10	3
1	Ho		507,880.40	1.49	110.8	Pulse	0.10	3
1	Bi		3,239,527.76	0.76	113.7	Pulse	0.10	3
2	Sc		127,197.30	1.78	104.3	Pulse	0.30	3
2	Ge		85,106.25	1.23	107.9	Pulse	0.30	3
2	Ge		128,990.03	0.20	107.5	Pulse	0.30	3
2	Rh		2,083,347.90	0.21	108.4	Pulse	0.30	3
2	In		870,606.69	0.71	108.2	Pulse	0.30	3
2	Tb		2,978,945.30	1.11	111.1	Pulse	0.30	3
2	Ho		306,808.99	1.28	112.1	Pulse	0.30	3
2	Bi		2,103,656.93	0.34	112.7	Pulse	0.30	3
3	Sc		151,666.04	7.14	103.0	Pulse	0.30	3
3	Ge		107,390.91	5.48	105.7	Pulse	0.30	3
3	Ge		162,974.41	4.75	106.4	Pulse	0.30	3
3	Rh		1,842,402.98	6.69	106.1	Pulse	0.30	3
3	Tb		3,409,885.28	7.31	107.2	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:42
Sample Name	mp17220-b1conf
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	9/12/2019 13:37
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	75.854	ug/l	0.46	162,215.20	1.708E-01	Pulse	0.25	3
B			1	85.597	ug/l	0.95	138,337.87	1.457E-01	Pulse	0.15	3
Ca			1	4067.116	ug/l	0.53	1,331,601.75	6.921E-01	Pulse	0.10	3
Sr			1	78.592	ug/l	0.79	1,571,635.76	5.135E-01	Pulse	0.10	3
Mo			1	77.341	ug/l	1.23	288,828.68	9.437E-02	Pulse	0.10	3
Ag			1	75.395	ug/l	0.92	751,742.91	2.248E-01	Pulse	0.10	3
Sn			1	78.405	ug/l	0.31	509,207.06	1.523E-01	Pulse	0.10	3
Sb			1	75.844	ug/l	0.98	599,629.04	1.204E-01	Pulse	0.10	3
Ba			1	74.470	ug/l	0.67	247,455.25	4.971E-02	Pulse	0.10	3
Tl			1	75.106	ug/l	0.15	1,560,846.69	5.016E-01	Pulse	0.10	3
Pb			1	77.901	ug/l	0.31	556,838.25	1.789E-01	Pulse	0.10	3
Pb			1	77.432	ug/l	0.90	487,174.64	1.566E-01	Pulse	0.10	3
Pb			1	77.357	ug/l	0.54	2,242,319.64	7.205E-01	Pulse	0.10	3
Na			2	3939.265	ug/l	0.29	1,953,866.38	1.647E+01	Pulse	0.30	3
Mg			2	3903.376	ug/l	0.50	897,299.34	7.566E+00	Pulse	0.30	3
Al			2	3895.536	ug/l	1.05	308,759.27	2.603E+00	Pulse	0.30	3
K			2	3981.919	ug/l	0.60	772,313.49	6.512E+00	Pulse	0.30	3
Ca			2	4272.409	ug/l	2.26	42,846.27	3.612E-01	Pulse	0.30	3
Ti			2	76.164	ug/l	0.88	5,547.65	4.678E-02	Pulse	0.30	3
V			2	78.957	ug/l	0.58	187,649.66	1.582E+00	Pulse	0.30	3
Cr			2	77.924	ug/l	0.16	233,866.74	1.972E+00	Pulse	0.30	3
Mn			2	78.053	ug/l	0.62	128,901.97	1.087E+00	Pulse	0.30	3
Fe			2	4196.457	ug/l	0.98	10,051,173.49	8.475E+01	Analog	0.30	3
Co			2	78.311	ug/l	0.81	373,549.64	3.150E+00	Pulse	0.30	3
Ni			2	77.767	ug/l	0.50	97,669.26	8.235E-01	Pulse	0.30	3
Cu			2	79.008	ug/l	0.57	271,275.69	2.287E+00	Pulse	0.30	3
Zn			2	71.814	ug/l	1.14	39,433.00	3.325E-01	Pulse	0.30	3
As			2	73.080	ug/l	1.40	22,665.03	1.911E-01	Pulse	1.00	3
Cd			2	74.313	ug/l	0.44	68,966.13	8.315E-02	Pulse	0.30	3
Sn			2	78.328	ug/l	0.74	162,297.56	1.957E-01	Pulse	0.30	3
Se			3	323.936	ug/l	1.48	27,125.04	1.664E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		949,589.66	0.73	87.1	Pulse	0.10	3
1	Sc		1,924,115.86	0.65	91.7	Pulse	0.10	3
1	Ge		446,283.03	0.45	101.6	Pulse	0.10	3

Quantitation Report

1	Ge		627,365.80	0.67	102.0	Pulse	0.10	3
1	Rh		3,060,723.18	0.92	98.9	Pulse	0.10	3
1	In		3,344,450.58	0.50	103.6	Pulse	0.10	3
1	Tb		4,978,565.45	0.74	107.8	Pulse	0.10	3
1	Ho		500,709.84	1.54	109.2	Pulse	0.10	3
1	Bi		3,111,952.56	1.06	109.2	Pulse	0.10	3
2	Sc		118,600.07	0.64	97.3	Pulse	0.30	3
2	Ge		83,083.10	1.01	105.3	Pulse	0.30	3
2	Ge		124,147.74	0.93	103.5	Pulse	0.30	3
2	Rh		1,979,216.94	0.67	103.0	Pulse	0.30	3
2	In		829,426.66	1.05	103.1	Pulse	0.30	3
2	Tb		2,907,515.72	0.90	108.4	Pulse	0.30	3
2	Ho		300,640.42	0.41	109.8	Pulse	0.30	3
2	Bi		2,049,267.28	0.44	109.8	Pulse	0.30	3
3	Sc		150,808.23	0.82	102.4	Pulse	0.30	3
3	Ge		106,670.86	0.61	105.0	Pulse	0.30	3
3	Ge		163,035.14	1.69	106.4	Pulse	0.30	3
3	Rh		1,799,786.94	0.89	103.7	Pulse	0.30	3
3	Tb		3,420,290.77	1.30	107.5	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:47
Sample Name	mp17220-s1 4
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	9/12/2019 13:37
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	77.878	ug/l	1.12	35,853.63	3.509E-02	Pulse	0.25	3
B			1	100.956	ug/l	2.63	43,623.02	4.269E-02	Pulse	0.15	3
Ca			1	388444.031	ug/l	0.64	27,100,747.93	1.316E+01	Analog	0.10	3
Sr			1	186.908	ug/l	0.77	773,101.94	2.443E-01	Pulse	0.10	3
Mo			1	113.194	ug/l	0.63	87,432.40	2.763E-02	Pulse	0.10	3
Ag			1	75.212	ug/l	1.39	154,938.54	4.485E-02	Pulse	0.10	3
Sn			1	80.286	ug/l	0.92	109,288.69	3.164E-02	Pulse	0.10	3
Sb			1	78.763	ug/l	1.51	128,125.53	2.504E-02	Pulse	0.10	3
Ba			1	788.214	ug/l	1.38	538,239.83	1.052E-01	Pulse	0.10	3
Tl			1	78.593	ug/l	0.65	323,752.74	1.050E-01	Pulse	0.10	3
Pb			1	81.426	ug/l	0.43	115,481.85	3.746E-02	Pulse	0.10	3
Pb			1	82.562	ug/l	0.42	103,072.03	3.344E-02	Pulse	0.10	3
Pb			1	81.554	ug/l	0.27	469,058.62	1.522E-01	Pulse	0.10	3
Na			2	105454.704	ug/l	0.45	11,296,080.10	8.782E+01	Analog	0.30	3
Mg			2	18219.817	ug/l	0.51	908,463.51	7.063E+00	Pulse	0.30	3
Al			2	4085.472	ug/l	0.55	70,976.97	5.518E-01	Pulse	0.30	3
K			2	6924.095	ug/l	0.11	298,415.52	2.320E+00	Pulse	0.30	3
Ca			2	384645.761	ug/l	0.22	834,284.93	6.486E+00	Pulse	0.30	3
Ti			2	82.096	ug/l	3.26	1,297.84	1.009E-02	Pulse	0.30	3
V			2	79.150	ug/l	2.33	41,061.89	3.193E-01	Pulse	0.30	3
Cr			2	86.083	ug/l	1.90	56,430.03	4.387E-01	Pulse	0.30	3
Mn			2	80.986	ug/l	0.31	29,122.41	2.264E-01	Pulse	0.30	3
Fe			2	4070.373	ug/l	0.32	2,117,071.24	1.646E+01	Pulse	0.30	3
Co			2	77.552	ug/l	1.16	80,267.14	6.241E-01	Pulse	0.30	3
Ni			2	76.798	ug/l	1.38	21,043.65	1.636E-01	Pulse	0.30	3
Cu			2	84.494	ug/l	0.71	65,952.71	5.128E-01	Pulse	0.30	3
Zn			2	76.581	ug/l	0.08	10,074.30	7.832E-02	Pulse	0.30	3
As			2	76.865	ug/l	2.76	5,181.17	4.028E-02	Pulse	1.00	3
Cd			2	76.576	ug/l	2.16	14,791.37	1.716E-02	Pulse	0.30	3
Sn			2	80.018	ug/l	0.60	34,964.34	4.055E-02	Pulse	0.30	3
Se			3	375.051	ug/l	1.70	6,133.42	3.856E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,021,900.76	0.72	93.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,058,957.16	0.50	98.2	Pulse	0.10	3
1	Ge		444,305.40	0.31	101.2	Pulse	0.10	3
1	Ge		623,081.83	1.03	101.3	Pulse	0.10	3
1	Rh		3,164,577.97	0.93	102.3	Pulse	0.10	3
1	In		3,454,509.04	0.10	107.0	Pulse	0.10	3
1	Tb		5,116,860.96	1.20	110.8	Pulse	0.10	3
1	Ho		509,268.04	0.76	111.1	Pulse	0.10	3
1	Bi		3,082,617.98	0.90	108.2	Pulse	0.10	3
2	Sc		128,624.45	0.33	105.5	Pulse	0.30	3
2	Ge		83,338.84	1.74	105.6	Pulse	0.30	3
2	Ge		125,672.36	0.08	104.8	Pulse	0.30	3
2	Rh		2,019,792.90	0.27	105.1	Pulse	0.30	3
2	In		862,186.43	0.26	107.2	Pulse	0.30	3
2	Tb		2,969,962.87	0.48	110.8	Pulse	0.30	3
2	Ho		305,253.76	1.06	111.5	Pulse	0.30	3
2	Bi		1,999,806.52	0.58	107.2	Pulse	0.30	3
3	Sc		154,750.59	0.35	105.1	Pulse	0.30	3
3	Ge		104,808.55	1.11	103.2	Pulse	0.30	3
3	Ge		159,057.12	0.67	103.8	Pulse	0.30	3
3	Rh		1,785,330.21	0.16	102.8	Pulse	0.30	3
3	Tb		3,397,199.66	0.40	106.8	Pulse	0.30	3

Quantitation Report

File Name	030SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:52
Sample Name	mp17220-s2
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	9/12/2019 13:37
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	78.148	ug/l	0.70	36,850.34	3.521E-02	Pulse	0.25	3
B			1	95.603	ug/l	2.38	42,916.48	4.101E-02	Pulse	0.15	3
Ca			1	393975.706	ug/l	1.79	27,650,292.09	1.335E+01	Analog	0.10	3
Sr			1	190.337	ug/l	0.50	784,453.11	2.488E-01	Pulse	0.10	3
Mo			1	112.796	ug/l	1.93	86,805.91	2.753E-02	Pulse	0.10	3
Ag			1	75.227	ug/l	1.48	155,609.79	4.486E-02	Pulse	0.10	3
Sn			1	80.928	ug/l	0.96	110,599.82	3.188E-02	Pulse	0.10	3
Sb			1	79.154	ug/l	1.13	128,912.53	2.517E-02	Pulse	0.10	3
Ba			1	793.208	ug/l	0.59	542,298.71	1.059E-01	Pulse	0.10	3
Tl			1	79.288	ug/l	0.61	326,769.14	1.060E-01	Pulse	0.10	3
Pb			1	82.394	ug/l	0.70	116,910.57	3.791E-02	Pulse	0.10	3
Pb			1	82.844	ug/l	0.70	103,475.14	3.355E-02	Pulse	0.10	3
Pb			1	82.053	ug/l	0.31	472,154.50	1.531E-01	Pulse	0.10	3
Na			2	107585.975	ug/l	2.86	11,415,109.55	8.960E+01	Analog	0.30	3
Mg			2	18341.614	ug/l	0.88	906,007.36	7.110E+00	Pulse	0.30	3
Al			2	4081.626	ug/l	0.93	70,250.66	5.513E-01	Pulse	0.30	3
K			2	6999.424	ug/l	0.53	298,741.75	2.344E+00	Pulse	0.30	3
Ca			2	385686.415	ug/l	0.36	828,779.67	6.504E+00	Pulse	0.30	3
Ti			2	75.538	ug/l	6.56	1,183.39	9.285E-03	Pulse	0.30	3
V			2	81.745	ug/l	1.01	42,008.64	3.296E-01	Pulse	0.30	3
Cr			2	89.231	ug/l	0.85	57,931.87	4.546E-01	Pulse	0.30	3
Mn			2	82.595	ug/l	0.84	29,420.73	2.309E-01	Pulse	0.30	3
Fe			2	4128.806	ug/l	0.84	2,127,399.57	1.670E+01	Pulse	0.30	3
Co			2	78.769	ug/l	1.43	80,765.04	6.338E-01	Pulse	0.30	3
Ni			2	79.244	ug/l	1.09	21,506.37	1.688E-01	Pulse	0.30	3
Cu			2	82.232	ug/l	1.48	63,691.62	4.998E-01	Pulse	0.30	3
Zn			2	73.242	ug/l	2.68	9,597.34	7.532E-02	Pulse	0.30	3
As			2	79.875	ug/l	1.88	5,333.22	4.186E-02	Pulse	1.00	3
Cd			2	78.795	ug/l	1.98	15,106.09	1.765E-02	Pulse	0.30	3
Sn			2	82.260	ug/l	0.40	35,658.08	4.167E-02	Pulse	0.30	3
Se			3	379.551	ug/l	1.26	6,185.70	3.902E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,046,639.01	0.66	96.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,071,208.82	0.27	98.8	Pulse	0.10	3
1	Ge		449,100.39	1.55	102.3	Pulse	0.10	3
1	Ge		626,249.95	1.00	101.8	Pulse	0.10	3
1	Rh		3,153,111.00	0.56	101.9	Pulse	0.10	3
1	In		3,468,865.55	0.82	107.5	Pulse	0.10	3
1	Tb		5,122,610.55	0.27	110.9	Pulse	0.10	3
1	Ho		510,923.46	0.98	111.5	Pulse	0.10	3
1	Bi		3,084,074.02	0.18	108.2	Pulse	0.10	3
2	Sc		127,431.89	1.10	104.5	Pulse	0.30	3
2	Ge		81,845.68	1.28	103.7	Pulse	0.30	3
2	Ge		123,714.53	0.39	103.1	Pulse	0.30	3
2	Rh		2,002,451.10	0.45	104.2	Pulse	0.30	3
2	In		855,769.87	0.83	106.4	Pulse	0.30	3
2	Tb		2,965,817.87	0.13	110.6	Pulse	0.30	3
2	Ho		303,359.51	0.28	110.8	Pulse	0.30	3
2	Bi		1,982,603.95	0.13	106.2	Pulse	0.30	3
3	Sc		151,050.59	0.71	102.6	Pulse	0.30	3
3	Ge		103,354.97	0.64	101.7	Pulse	0.30	3
3	Ge		158,523.46	1.28	103.5	Pulse	0.30	3
3	Rh		1,790,266.46	0.71	103.1	Pulse	0.30	3
3	Tb		3,424,342.02	0.29	107.6	Pulse	0.30	3

Quantitation Report

File Name	031SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 12:57
Sample Name	jc94229-1
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	9/12/2019 13:37
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	0.034	ug/l	84.91	29.33	2.764E-05	Pulse	0.25	3
B			1	14.504	ug/l	11.91	16,386.03	1.546E-02	Pulse	0.15	3
Ca			1	387710.146	ug/l	0.56	27,318,500.42	1.314E+01	Analog	0.10	3
Sr			1	107.145	ug/l	0.97	445,745.96	1.401E-01	Pulse	0.10	3
Mo			1	31.781	ug/l	2.50	24,696.62	7.762E-03	Pulse	0.10	3
Ag			1	0.076	ug/l	18.78	186.68	5.357E-05	Pulse	0.10	3
Sn			1	2.360	ug/l	5.25	5,177.75	1.485E-03	Pulse	0.10	3
Sb			1	0.639	ug/l	12.10	1,203.43	2.357E-04	Pulse	0.10	3
Ba			1	716.358	ug/l	0.54	488,073.48	9.561E-02	Pulse	0.10	3
Tl			1	0.390	ug/l	14.21	1,836.86	5.907E-04	Pulse	0.10	3
Pb			1	0.893	ug/l	3.45	1,503.47	4.831E-04	Pulse	0.10	3
Pb			1	0.793	ug/l	11.48	1,206.76	3.877E-04	Pulse	0.10	3
Pb			1	0.854	ug/l	5.97	5,884.03	1.890E-03	Pulse	0.10	3
Na			2	101622.617	ug/l	1.65	10,971,758.45	8.463E+01	Analog	0.30	3
Mg			2	14299.828	ug/l	1.24	718,685.13	5.544E+00	Pulse	0.30	3
Al			2	155.155	ug/l	1.47	3,628.24	2.799E-02	Pulse	0.30	3
K			2	2910.256	ug/l	0.24	132,804.82	1.024E+00	Pulse	0.30	3
Ca			2	379286.086	ug/l	0.17	829,192.93	6.396E+00	Pulse	0.30	3
Ti			2	1.459	ug/l	57.44	24.45	1.881E-04	Pulse	0.30	3
V			2	0.709	ug/l	9.32	698.91	5.389E-03	Pulse	0.30	3
Cr			2	9.354	ug/l	0.45	6,635.85	5.118E-02	Pulse	0.30	3
Mn			2	3.236	ug/l	7.56	1,310.07	1.011E-02	Pulse	0.30	3
Fe			2	32.593	ug/l	2.05	20,073.47	1.548E-01	Pulse	0.30	3
Co			2	0.398	ug/l	15.16	447.74	3.456E-03	Pulse	0.30	3
Ni			2	0.594	ug/l	38.21	316.67	2.444E-03	Pulse	0.30	3
Cu			2	4.725	ug/l	4.34	7,381.74	5.695E-02	Pulse	0.30	3
Zn			2	0.890	ug/l	6.38	1,325.63	1.023E-02	Pulse	0.30	3
As			2	1.516	ug/l	9.52	116.33	8.970E-04	Pulse	1.00	3
Cd			2	-0.048	ug/l	-123.75	12.45	1.434E-05	Pulse	0.30	3
Sn			2	2.474	ug/l	2.10	1,693.45	1.951E-03	Pulse	0.30	3
Se			3	1.301	ug/l	9.15	27.60	1.737E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,059,761.97	0.50	97.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,079,427.52	0.60	99.2	Pulse	0.10	3
1	Ge		454,390.90	1.02	103.5	Pulse	0.10	3
1	Ge		632,359.80	0.97	102.8	Pulse	0.10	3
1	Rh		3,181,617.45	0.75	102.8	Pulse	0.10	3
1	In		3,486,455.92	0.49	108.0	Pulse	0.10	3
1	Tb		5,104,887.01	0.25	110.5	Pulse	0.10	3
1	Ho		505,651.23	0.49	110.3	Pulse	0.10	3
1	Bi		3,111,786.00	0.98	109.2	Pulse	0.10	3
2	Sc		129,644.71	0.89	106.3	Pulse	0.30	3
2	Ge		83,691.73	1.06	106.1	Pulse	0.30	3
2	Ge		125,574.08	0.32	104.7	Pulse	0.30	3
2	Rh		2,031,619.16	0.27	105.7	Pulse	0.30	3
2	In		867,959.32	0.42	107.9	Pulse	0.30	3
2	Tb		2,987,011.90	0.57	111.4	Pulse	0.30	3
2	Ho		306,894.79	0.31	112.1	Pulse	0.30	3
2	Bi		2,011,820.89	0.42	107.8	Pulse	0.30	3
3	Sc		154,685.15	0.81	105.1	Pulse	0.30	3
3	Ge		104,765.99	0.25	103.1	Pulse	0.30	3
3	Ge		158,890.52	0.30	103.7	Pulse	0.30	3
3	Rh		1,791,784.31	0.62	103.2	Pulse	0.30	3
3	Tb		3,408,658.61	0.67	107.2	Pulse	0.30	3

Quantitation Report

File Name	032SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:02
Sample Name	mp17220-sd1
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	9/12/2019 13:37
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	0.126	ug/l	97.77	25.33	2.355E-05	Pulse	0.25	3
B			1	28.998	ug/l	27.89	13,614.64	1.272E-02	Pulse	0.15	3
Ca			1	386409.093	ug/l	4.37	5,443,362.42	2.621E+00	Analog	0.10	3
Sr			1	103.557	ug/l	5.05	88,101.28	2.718E-02	Pulse	0.10	3
Mo			1	32.874	ug/l	5.36	5,221.05	1.611E-03	Pulse	0.10	3
Ag			1	0.135	ug/l	96.36	83.34	2.405E-05	Pulse	0.10	3
Sn			1	3.121	ug/l	29.68	2,850.38	8.133E-04	Pulse	0.10	3
Sb			1	1.208	ug/l	22.39	560.03	1.097E-04	Pulse	0.10	3
Ba			1	703.005	ug/l	3.61	96,043.14	1.878E-02	Pulse	0.10	3
Tl			1	0.316	ug/l	27.73	483.36	1.548E-04	Pulse	0.10	3
Pb			1	0.824	ug/l	31.06	463.36	1.485E-04	Pulse	0.10	3
Pb			1	1.082	ug/l	31.02	483.37	1.545E-04	Pulse	0.10	3
Pb			1	0.826	ug/l	7.17	1,900.14	6.078E-04	Pulse	0.10	3
Na			2	99491.681	ug/l	0.85	2,140,679.43	1.664E+01	Pulse	0.30	3
Mg			2	14399.263	ug/l	0.92	143,828.77	1.118E+00	Pulse	0.30	3
Al			2	62.077	ug/l	63.98	1,153.43	8.962E-03	Pulse	0.30	3
K			2	2897.805	ug/l	4.22	34,988.87	2.720E-01	Pulse	0.30	3
Ca			2	374473.953	ug/l	0.32	162,569.26	1.264E+00	Pulse	0.30	3
Ti			2	1.752	ug/l	0.95	6.67	5.185E-05	Pulse	0.30	3
V			2	0.502	ug/l	31.50	380.01	2.954E-03	Pulse	0.30	3
Cr			2	9.824	ug/l	4.39	1,783.46	1.386E-02	Pulse	0.30	3
Mn			2	2.655	ug/l	19.18	332.23	2.581E-03	Pulse	0.30	3
Fe			2	53.058	ug/l	9.33	8,495.98	6.606E-02	Pulse	0.30	3
Co			2	0.438	ug/l	32.92	123.32	9.589E-04	Pulse	0.30	3
Ni			2	0.482	ug/l	159.99	178.89	1.391E-03	Pulse	0.30	3
Cu			2	0.233	ug/l	289.43	3,886.06	3.021E-02	Pulse	0.30	3
Zn			2	-15.315	ug/l	-22.29	857.81	6.668E-03	Pulse	0.30	3
As			2	1.478	ug/l	11.76	33.33	2.591E-04	Pulse	1.00	3
Cd			2	-0.116	ug/l	-242.32	17.37	2.000E-05	Pulse	0.30	3
Sn			2	3.917	ug/l	16.89	966.72	1.109E-03	Pulse	0.30	3
Se			3	0.734	ug/l	22.43	9.27	5.512E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,070,467.06	1.74	98.2	Pulse	0.10	3
1	Sc		2,078,603.66	3.29	99.1	Pulse	0.10	3
1	Ge		450,359.12	1.62	102.6	Pulse	0.10	3

Quantitation Report

1	Ge		632,203.24	1.56	102.8	Pulse	0.10	3
1	Rh		3,244,079.74	3.03	104.8	Pulse	0.10	3
1	In		3,502,728.62	2.84	108.5	Pulse	0.10	3
1	Tb		5,117,568.78	3.75	110.8	Mix	0.10	3
1	Ho		505,865.75	2.72	110.4	Pulse	0.10	3
1	Bi		3,127,990.79	2.56	109.8	Pulse	0.10	3
2	Sc		128,633.58	0.79	105.5	Pulse	0.30	3
2	Ge		83,934.13	0.72	106.4	Pulse	0.30	3
2	Ge		127,317.45	1.16	106.1	Pulse	0.30	3
2	Rh		2,082,982.35	0.64	108.3	Pulse	0.30	3
2	In		871,294.81	0.87	108.3	Pulse	0.30	3
2	Tb		2,981,518.77	0.09	111.2	Pulse	0.30	3
2	Ho		305,332.02	0.27	111.5	Pulse	0.30	3
2	Bi		2,060,116.37	0.33	110.4	Pulse	0.30	3
3	Sc		162,675.82	8.80	110.5	Pulse	0.30	3
3	Ge		110,357.90	7.30	108.6	Pulse	0.30	3
3	Ge		168,535.78	7.66	110.0	Pulse	0.30	3
3	Rh		1,958,414.72	9.13	112.8	Pulse	0.30	3
3	Tb		3,617,099.37	8.91	113.7	Pulse	0.30	3

Quantitation Report

File Name	033SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:07
Sample Name	mp17203-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	9/12/2019 13:37
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	260.83	16.00	1.632E-05	Pulse	0.25	3
B			1	2.097	ug/l	15.69	13,928.28	1.420E-02	Pulse	0.15	3
Ca			1	27.201	ug/l	3.02	15,147.35	7.755E-03	Pulse	0.10	3
Sr			1	0.087	ug/l	13.38	2,203.67	6.954E-04	Pulse	0.10	3
Mo			1	0.140	ug/l	12.38	560.03	1.770E-04	Pulse	0.10	3
Ag			1	0.010	ug/l	43.59	133.34	3.908E-05	Pulse	0.10	3
Sn			1	0.527	ug/l	4.26	5,417.79	1.592E-03	Pulse	0.10	3
Sb			1	0.145	ug/l	16.32	1,350.11	2.639E-04	Pulse	0.10	3
Ba			1	0.056	ug/l	23.37	300.01	5.861E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	119.12	316.68	9.753E-05	Pulse	0.10	3
Pb			1	0.025	ug/l	45.43	420.02	1.294E-04	Pulse	0.10	3
Pb			1	0.038	ug/l	18.84	466.70	1.439E-04	Pulse	0.10	3
Pb			1	0.027	ug/l	10.27	1,776.78	5.479E-04	Pulse	0.10	3
Na			2	26.595	ug/l	2.70	23,782.37	1.982E-01	Pulse	0.30	3
Mg			2	3.398	ug/l	8.50	1,045.60	8.713E-03	Pulse	0.30	3
Al			2	-3.920	ug/l	-19.49	563.35	4.695E-03	Pulse	0.30	3
K			2	-0.798	ug/l	-225.21	10,042.00	8.367E-02	Pulse	0.30	3
Ca			2	24.463	ug/l	16.15	377.79	3.147E-03	Pulse	0.30	3
Ti			2	0.739	ug/l	16.89	55.56	4.626E-04	Pulse	0.30	3
V			2	0.227	ug/l	11.45	850.03	7.086E-03	Pulse	0.30	3
Cr			2	0.218	ug/l	11.63	1,132.28	9.435E-03	Pulse	0.30	3
Mn			2	0.110	ug/l	21.81	315.56	2.631E-03	Pulse	0.30	3
Fe			2	5.226	ug/l	0.73	15,447.36	1.287E-01	Pulse	0.30	3
Co			2	0.013	ug/l	41.40	91.07	7.599E-04	Pulse	0.30	3
Ni			2	0.034	ug/l	120.20	185.56	1.548E-03	Pulse	0.30	3
Cu			2	0.684	ug/l	5.64	5,936.70	4.948E-02	Pulse	0.30	3
Zn			2	2.606	ug/l	3.94	2,538.00	2.115E-02	Pulse	0.30	3
As			2	0.101	ug/l	8.74	44.33	3.694E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.000	ug/l	62770.61	21.06	2.518E-05	Pulse	0.30	3
Sn			2	0.624	ug/l	11.52	1,901.25	2.274E-03	Pulse	0.30	3
Se			3	0.050	ug/l	12.36	10.80	6.590E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		980,725.06	1.43	90.0	Pulse	0.10	3
1	Sc		1,953,299.61	0.50	93.1	Pulse	0.10	3
1	Ge		464,055.10	1.23	105.7	Pulse	0.10	3
1	Ge		645,156.97	0.34	104.9	Pulse	0.10	3
1	Rh		3,166,239.95	1.35	102.3	Pulse	0.10	3
1	In		3,404,167.76	1.00	105.5	Pulse	0.10	3
1	Tb		5,120,134.92	1.21	110.8	Pulse	0.10	3
1	Ho		509,560.00	1.59	111.2	Pulse	0.10	3
1	Bi		3,242,867.66	0.58	113.8	Pulse	0.10	3
2	Sc		119,994.64	0.71	98.4	Pulse	0.30	3
2	Ge		85,924.49	1.26	108.9	Pulse	0.30	3
2	Ge		128,583.72	0.79	107.2	Pulse	0.30	3
2	Rh		2,022,983.95	0.42	105.2	Pulse	0.30	3
2	In		836,127.27	0.31	104.0	Pulse	0.30	3
2	Tb		2,934,138.50	0.49	109.4	Pulse	0.30	3
2	Ho		301,333.90	0.33	110.1	Pulse	0.30	3
2	Bi		2,075,269.57	0.54	111.2	Pulse	0.30	3
3	Sc		150,375.30	0.10	102.1	Pulse	0.30	3
3	Ge		107,590.87	1.42	105.9	Pulse	0.30	3
3	Ge		163,892.29	0.57	107.0	Pulse	0.30	3
3	Rh		1,846,674.23	0.37	106.4	Pulse	0.30	3
3	Tb		3,446,820.83	0.78	108.4	Pulse	0.30	3

Quantitation Report

File Name	034_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:12
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	9/12/2019 13:37
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	50.759	ug/l	0.21	234,314.60	2.286E-01	Pulse	0.25	3
B			1	98.707	ug/l	0.56	329,781.91	3.218E-01	Pulse	0.15	3
Ca			1	5083.424	ug/l	0.17	3,502,700.16	1.725E+00	Pulse	0.10	3
Sr			1	51.751	ug/l	0.72	2,131,032.00	6.762E-01	Pulse	0.10	3
Mo			1	50.838	ug/l	1.14	390,986.99	1.241E-01	Pulse	0.10	3
Ag			1	49.519	ug/l	0.30	1,008,300.66	2.952E-01	Pulse	0.10	3
Sn			1	50.868	ug/l	0.31	674,123.09	1.974E-01	Pulse	0.10	3
Sb			1	50.719	ug/l	0.52	821,530.95	1.611E-01	Pulse	0.10	3
Ba			1	48.976	ug/l	1.19	333,441.28	6.537E-02	Pulse	0.10	3
Tl			1	50.910	ug/l	1.34	2,104,359.61	6.799E-01	Pulse	0.10	3
Pb			1	50.857	ug/l	0.85	723,007.25	2.336E-01	Pulse	0.10	3
Pb			1	51.364	ug/l	1.51	642,717.75	2.077E-01	Pulse	0.10	3
Pb			1	50.909	ug/l	1.15	2,934,957.22	9.483E-01	Pulse	0.10	3
Na			2	5034.344	ug/l	1.95	5,248,621.04	4.197E+01	Analog	0.30	3
Mg			2	4890.475	ug/l	1.33	2,370,176.57	1.895E+01	Pulse	0.30	3
Al			2	4891.622	ug/l	1.50	816,135.87	6.527E+00	Pulse	0.30	3
K			2	4940.325	ug/l	0.73	2,004,793.60	1.603E+01	Pulse	0.30	3
Ca			2	5086.287	ug/l	0.08	107,371.10	8.586E-01	Pulse	0.30	3
Ti			2	48.649	ug/l	2.62	7,471.76	5.975E-02	Pulse	0.30	3
V			2	50.691	ug/l	0.78	253,946.63	2.031E+00	Pulse	0.30	3
Cr			2	50.550	ug/l	0.47	319,771.43	2.557E+00	Pulse	0.30	3
Mn			2	50.483	ug/l	0.26	175,764.53	1.406E+00	Pulse	0.30	3
Fe			2	5072.163	ug/l	0.97	25,614,666.76	2.048E+02	Analog	0.30	3
Co			2	50.139	ug/l	0.96	504,343.21	4.033E+00	Pulse	0.30	3
Ni			2	50.070	ug/l	1.19	132,563.14	1.060E+00	Pulse	0.30	3
Cu			2	50.371	ug/l	0.49	363,665.59	2.908E+00	Pulse	0.30	3
Zn			2	50.857	ug/l	1.76	58,393.38	4.670E-01	Pulse	0.30	3
As			2	50.693	ug/l	1.28	33,148.13	2.651E-01	Pulse	1.00	3
Cd			2	50.442	ug/l	0.72	94,424.95	1.129E-01	Pulse	0.30	3
Sn			2	50.281	ug/l	0.57	209,996.75	2.510E-01	Pulse	0.30	3
Se			3	195.329	ug/l	0.32	31,326.24	2.007E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,024,889.28	0.36	94.0	Pulse	0.10	3
1	Sc		2,030,237.94	0.83	96.8	Pulse	0.10	3
1	Ge		439,045.85	0.85	100.0	Pulse	0.10	3

Quantitation Report

1	Ge		615,674.24	1.04	100.1	Pulse	0.10	3
1	Rh		3,151,293.70	0.84	101.8	Pulse	0.10	3
1	In		3,415,146.66	0.78	105.8	Pulse	0.10	3
1	Tb		5,100,552.21	1.13	110.4	Pulse	0.10	3
1	Ho		505,203.13	0.80	110.2	Pulse	0.10	3
1	Bi		3,095,223.91	1.15	108.6	Pulse	0.10	3
2	Sc		125,048.87	0.37	102.5	Pulse	0.30	3
2	Ge		80,945.86	0.87	102.6	Pulse	0.30	3
2	Ge		121,478.74	1.04	101.3	Pulse	0.30	3
2	Rh		1,994,181.38	0.67	103.7	Pulse	0.30	3
2	In		836,579.83	0.20	104.0	Pulse	0.30	3
2	Tb		2,910,970.79	0.09	108.6	Pulse	0.30	3
2	Ho		300,263.05	0.51	109.7	Pulse	0.30	3
2	Bi		1,991,732.35	0.43	106.7	Pulse	0.30	3
3	Sc		148,431.77	0.46	100.8	Pulse	0.30	3
3	Ge		101,573.92	0.45	100.0	Pulse	0.30	3
3	Ge		156,109.70	0.60	101.9	Pulse	0.30	3
3	Rh		1,768,102.85	1.07	101.8	Pulse	0.30	3
3	Tb		3,346,688.83	0.14	105.2	Pulse	0.30	3

Quantitation Report

File Name	035_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:17
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	9/12/2019 13:37
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	20.94	52.00	4.947E-05	Pulse	0.25	3
B			1	2.639	ug/l	1.89	20,196.75	1.921E-02	Pulse	0.15	3
Ca			1	1.424	ug/l	31.36	7,348.56	3.629E-03	Pulse	0.10	3
Sr			1	0.014	ug/l	23.81	986.73	3.081E-04	Pulse	0.10	3
Mo			1	0.072	ug/l	15.89	586.70	1.832E-04	Pulse	0.10	3
Ag			1	0.013	ug/l	13.44	303.35	8.811E-05	Pulse	0.10	3
Sn			1	0.078	ug/l	11.84	3,010.41	8.746E-04	Pulse	0.10	3
Sb			1	0.122	ug/l	2.35	2,116.90	4.213E-04	Pulse	0.10	3
Ba			1	-0.001	ug/l	-269.52	103.33	2.056E-05	Pulse	0.10	3
Tl			1	0.015	ug/l	12.61	856.72	2.746E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	26.38	490.03	1.570E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	15.11	430.02	1.378E-04	Pulse	0.10	3
Pb			1	0.017	ug/l	6.05	1,923.46	6.164E-04	Pulse	0.10	3
Na			2	0.836	ug/l	31.72	11,812.02	9.451E-02	Pulse	0.30	3
Mg			2	0.798	ug/l	17.84	652.24	5.219E-03	Pulse	0.30	3
Al			2	-2.320	ug/l	-13.04	526.68	4.215E-03	Pulse	0.30	3
K			2	-0.758	ug/l	-46.61	10,312.17	8.252E-02	Pulse	0.30	3
Ca			2	-1.477	ug/l	-63.52	104.45	8.360E-04	Pulse	0.30	3
Ti			2	0.036	ug/l	59.54	6.67	5.329E-05	Pulse	0.30	3
V			2	-0.018	ug/l	-24.54	227.78	1.823E-03	Pulse	0.30	3
Cr			2	-0.010	ug/l	-58.33	427.79	3.423E-03	Pulse	0.30	3
Mn			2	-0.005	ug/l	-180.69	121.11	9.698E-04	Pulse	0.30	3
Fe			2	0.926	ug/l	4.01	7,571.83	6.058E-02	Pulse	0.30	3
Co			2	0.005	ug/l	41.76	77.76	6.218E-04	Pulse	0.30	3
Ni			2	0.014	ug/l	62.83	184.45	1.476E-03	Pulse	0.30	3
Cu			2	-0.184	ug/l	-7.82	2,431.32	1.946E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.174	ug/l	-17.32	982.27	7.859E-03	Pulse	0.30	3
As			2	0.009	ug/l	30.39	19.00	1.521E-04	Pulse	1.00	3
Cd			2	-0.002	ug/l	-435.56	17.71	2.075E-05	Pulse	0.30	3
Sn			2	0.143	ug/l	7.69	1,224.51	1.433E-03	Pulse	0.30	3
Se			3	0.079	ug/l	14.46	19.00	1.215E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,051,564.25	0.57	96.5	Pulse	0.10	3
1	Sc		2,024,982.16	0.89	96.6	Pulse	0.10	3
1	Ge		442,031.18	0.86	100.7	Pulse	0.10	3
1	Ge		618,145.30	0.23	100.5	Pulse	0.10	3
1	Rh		3,203,011.62	0.59	103.5	Pulse	0.10	3
1	In		3,442,147.70	0.54	106.6	Pulse	0.10	3
1	Tb		5,025,146.59	0.37	108.8	Pulse	0.10	3
1	Ho		493,692.98	0.51	107.7	Pulse	0.10	3
1	Bi		3,120,285.69	0.33	109.5	Pulse	0.10	3
2	Sc		124,973.72	0.40	102.5	Pulse	0.30	3
2	Ge		81,601.23	0.27	103.4	Pulse	0.30	3
2	Ge		123,436.79	0.19	102.9	Pulse	0.30	3
2	Rh		2,046,104.43	0.07	106.4	Pulse	0.30	3
2	In		854,697.38	0.28	106.3	Pulse	0.30	3
2	Tb		2,899,678.78	1.01	108.1	Pulse	0.30	3
2	Ho		296,999.02	0.78	108.5	Pulse	0.30	3
2	Bi		2,039,463.74	0.66	109.3	Pulse	0.30	3
3	Sc		148,034.63	1.03	100.5	Pulse	0.30	3
3	Ge		102,905.46	1.77	101.3	Pulse	0.30	3
3	Ge		156,363.82	0.50	102.1	Pulse	0.30	3
3	Rh		1,828,301.11	0.41	105.3	Pulse	0.30	3
3	Tb		3,347,558.83	0.86	105.2	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:22
Sample Name	mp17203-b1conf
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	9/12/2019 13:37
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	73.110	ug/l	0.19	159,880.40	1.646E-01	Pulse	0.25	3
B			1	79.666	ug/l	1.06	132,395.90	1.363E-01	Pulse	0.15	3
Ca			1	4012.794	ug/l	0.93	1,308,161.70	6.829E-01	Pulse	0.10	3
Sr			1	76.114	ug/l	1.00	1,529,860.29	4.973E-01	Pulse	0.10	3
Mo			1	76.714	ug/l	1.03	287,958.24	9.361E-02	Pulse	0.10	3
Ag			1	76.612	ug/l	0.73	761,304.18	2.284E-01	Pulse	0.10	3
Sn			1	77.846	ug/l	1.24	503,914.41	1.512E-01	Pulse	0.10	3
Sb			1	74.557	ug/l	0.85	593,606.42	1.184E-01	Pulse	0.10	3
Ba			1	73.156	ug/l	0.87	244,808.06	4.883E-02	Pulse	0.10	3
Tl			1	73.692	ug/l	1.24	1,540,965.86	4.921E-01	Pulse	0.10	3
Pb			1	76.767	ug/l	0.16	552,148.83	1.763E-01	Pulse	0.10	3
Pb			1	76.962	ug/l	1.02	487,259.11	1.556E-01	Pulse	0.10	3
Pb			1	76.540	ug/l	0.25	2,232,558.47	7.129E-01	Pulse	0.10	3
Na			2	3805.181	ug/l	0.68	1,896,661.59	1.592E+01	Pulse	0.30	3
Mg			2	3780.686	ug/l	0.70	873,210.80	7.328E+00	Pulse	0.30	3
Al			2	3722.565	ug/l	0.60	296,479.29	2.488E+00	Pulse	0.30	3
K			2	3826.328	ug/l	0.91	746,042.32	6.261E+00	Pulse	0.30	3
Ca			2	4114.302	ug/l	1.15	41,458.22	3.479E-01	Pulse	0.30	3
Ti			2	83.470	ug/l	3.28	6,108.97	5.126E-02	Pulse	0.30	3
V			2	76.016	ug/l	1.10	181,524.46	1.523E+00	Pulse	0.30	3
Cr			2	75.918	ug/l	0.72	228,945.29	1.921E+00	Pulse	0.30	3
Mn			2	75.758	ug/l	1.54	125,707.10	1.055E+00	Pulse	0.30	3
Fe			2	4119.038	ug/l	1.19	9,912,583.77	8.319E+01	Analog	0.30	3
Co			2	75.682	ug/l	0.69	362,737.14	3.044E+00	Pulse	0.30	3
Ni			2	74.917	ug/l	0.59	94,542.22	7.934E-01	Pulse	0.30	3
Cu			2	76.172	ug/l	1.01	262,908.08	2.206E+00	Pulse	0.30	3
Zn			2	67.950	ug/l	1.43	37,546.32	3.151E-01	Pulse	0.30	3
As			2	71.625	ug/l	0.78	22,319.55	1.873E-01	Pulse	1.00	3
Cd			2	72.215	ug/l	1.60	66,407.12	8.080E-02	Pulse	0.30	3
Sn			2	77.453	ug/l	1.00	159,031.55	1.935E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	322.247	ug/l	1.49	26,454.35	1.655E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		971,045.47	0.78	89.1	Pulse	0.10	3
1	Sc		1,915,713.36	0.19	91.3	Pulse	0.10	3
1	Ge		442,905.32	1.35	100.9	Pulse	0.10	3
1	Ge		621,424.26	0.63	101.0	Pulse	0.10	3
1	Rh		3,076,295.27	0.39	99.4	Pulse	0.10	3
1	In		3,333,299.34	0.42	103.3	Pulse	0.10	3
1	Tb		5,013,822.11	1.01	108.5	Pulse	0.10	3
1	Ho		499,668.52	0.90	109.0	Pulse	0.10	3
1	Bi		3,131,427.97	0.63	109.9	Pulse	0.10	3
2	Sc		119,165.09	0.59	97.7	Pulse	0.30	3
2	Ge		82,206.37	1.36	104.2	Pulse	0.30	3
2	Ge		124,262.41	0.81	103.6	Pulse	0.30	3
2	Rh		1,962,424.65	0.50	102.1	Pulse	0.30	3
2	In		821,900.47	0.75	102.2	Pulse	0.30	3
2	Tb		2,893,594.26	0.73	107.9	Pulse	0.30	3
2	Ho		297,280.92	0.57	108.6	Pulse	0.30	3
2	Bi		2,004,756.86	0.61	107.4	Pulse	0.30	3
3	Sc		149,402.42	0.79	101.5	Pulse	0.30	3
3	Ge		105,442.83	1.97	103.8	Pulse	0.30	3
3	Ge		159,836.07	1.59	104.3	Pulse	0.30	3
3	Rh		1,806,353.75	0.63	104.0	Pulse	0.30	3
3	Tb		3,417,692.99	0.71	107.4	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:27
Sample Name	sampleconf
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	9/12/2019 13:37
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	357.517	ug/l	0.98	321,680.72	3.221E-01	Pulse	0.25	3
B			1	3015.526	ug/l	0.70	1,908,184.85	1.910E+00	Pulse	0.15	3
Ca			1	657449.103	ug/l	0.94	91,242,811.97	4.455E+01	Analog	0.10	3
Sr			1	3060.277	ug/l	1.40	22,973,867.16	7.996E+00	Analog	0.10	3
Mo			1	544.623	ug/l	0.91	763,690.04	2.658E-01	Pulse	0.10	3
Ag			1	329.497	ug/l	0.23	1,266,377.53	3.929E-01	Pulse	0.10	3
Sn			1	371.166	ug/l	0.79	927,595.77	2.878E-01	Pulse	0.10	3
Sb			1	372.856	ug/l	1.77	1,162,359.44	2.368E-01	Pulse	0.10	3
Ba			1	816.736	ug/l	0.99	1,069,993.00	2.180E-01	Pulse	0.10	3
Tl			1	374.014	ug/l	1.43	2,799,494.54	9.990E-01	Pulse	0.10	3
Pb			1	384.292	ug/l	0.67	989,206.83	3.530E-01	Pulse	0.10	3
Pb			1	389.327	ug/l	0.45	882,146.63	3.148E-01	Pulse	0.10	3
Pb			1	385.540	ug/l	0.16	4,024,577.33	1.436E+00	Pulse	0.10	3
Na			2	836244.341	ug/l	1.25	174,861,517.49	1.392E+03	Analog	0.30	3
Mg			2	87919.082	ug/l	0.25	8,563,342.16	6.815E+01	Analog	0.30	3
Al			2	8997.176	ug/l	1.16	302,278.93	2.406E+00	Pulse	0.30	3
K			2	93612.995	ug/l	2.38	7,604,939.70	6.052E+01	Analog	0.30	3
Ca			2	659430.302	ug/l	1.02	2,794,275.45	2.224E+01	Pulse	0.30	3
Ti			2	371.457	ug/l	1.93	11,465.17	9.124E-02	Pulse	0.30	3
V			2	370.960	ug/l	0.53	373,357.42	2.971E+00	Pulse	0.30	3
Cr			2	364.319	ug/l	0.67	462,960.99	3.684E+00	Pulse	0.30	3
Mn			2	2157.913	ug/l	0.73	1,508,916.19	1.201E+01	Pulse	0.30	3
Fe			2	17652.252	ug/l	1.35	17,916,638.18	1.426E+02	Analog	0.30	3
Co			2	341.587	ug/l	1.10	690,549.37	5.495E+00	Pulse	0.30	3
Ni			2	333.729	ug/l	1.22	177,528.03	1.413E+00	Pulse	0.30	3
Cu			2	330.288	ug/l	0.80	478,085.61	3.805E+00	Pulse	0.30	3
Zn			2	322.133	ug/l	1.29	74,020.21	5.891E-01	Pulse	0.30	3
As			2	395.540	ug/l	0.65	51,975.41	4.136E-01	Pulse	1.00	3
Cd			2	333.856	ug/l	1.11	118,699.86	1.494E-01	Pulse	0.30	3
Sn			2	369.265	ug/l	1.25	292,671.48	3.684E-01	Pulse	0.30	3
Se			3	877.019	ug/l	0.47	26,427.97	1.802E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		998,865.16	0.54	91.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,048,218.35	0.92	97.7	Pulse	0.10	3
1	Ge		419,863.59	1.01	95.6	Pulse	0.10	3
1	Ge		593,299.37	0.81	96.5	Pulse	0.10	3
1	Rh		2,873,119.33	0.36	92.8	Pulse	0.10	3
1	In		3,223,082.52	0.54	99.9	Pulse	0.10	3
1	Tb		4,908,746.70	0.64	106.3	Pulse	0.10	3
1	Ho		489,593.33	0.44	106.8	Pulse	0.10	3
1	Bi		2,802,330.90	0.61	98.3	Pulse	0.10	3
2	Sc		125,662.38	0.49	103.1	Pulse	0.30	3
2	Ge		77,781.66	0.53	98.6	Pulse	0.30	3
2	Ge		116,852.36	0.38	97.4	Pulse	0.30	3
2	Rh		1,812,397.98	0.51	94.3	Pulse	0.30	3
2	In		794,509.36	0.25	98.8	Pulse	0.30	3
2	Tb		2,821,431.69	0.39	105.2	Pulse	0.30	3
2	Ho		291,462.49	1.03	106.5	Pulse	0.30	3
2	Bi		1,799,999.65	0.78	96.4	Pulse	0.30	3
3	Sc		145,299.01	0.95	98.7	Pulse	0.30	3
3	Ge		95,306.83	0.81	93.8	Pulse	0.30	3
3	Ge		146,657.25	0.04	95.7	Pulse	0.30	3
3	Rh		1,580,039.45	0.61	91.0	Pulse	0.30	3
3	Tb		3,186,464.81	0.95	100.2	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:32
Sample Name	mp17229-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	9/12/2019 13:37
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	0.096	ug/l	18.72	104.00	9.889E-05	Pulse	0.25	3
B			1	66.546	ug/l	3.94	55,514.98	5.281E-02	Pulse	0.15	3
Ca			1	132.422	ug/l	5.97	24,608.93	1.212E-02	Pulse	0.10	3
Sr			1	0.623	ug/l	8.50	5,641.20	1.754E-03	Pulse	0.10	3
Mo			1	1.060	ug/l	14.21	1,690.15	5.241E-04	Pulse	0.10	3
Ag			1	0.128	ug/l	7.13	553.37	1.607E-04	Pulse	0.10	3
Sn			1	14.297	ug/l	1.22	40,072.20	1.164E-02	Pulse	0.10	3
Sb			1	0.513	ug/l	5.40	1,813.52	3.586E-04	Pulse	0.10	3
Ba			1	0.416	ug/l	8.46	670.04	1.325E-04	Pulse	0.10	3
Tl			1	0.095	ug/l	29.62	1,033.40	3.229E-04	Pulse	0.10	3
Pb			1	0.248	ug/l	25.38	963.40	3.011E-04	Pulse	0.10	3
Pb			1	0.284	ug/l	5.19	950.07	2.969E-04	Pulse	0.10	3
Pb			1	0.246	ug/l	7.32	3,893.68	1.217E-03	Pulse	0.10	3
Na			2	138.454	ug/l	6.31	39,901.62	3.179E-01	Pulse	0.30	3
Mg			2	21.467	ug/l	8.02	2,355.75	1.877E-02	Pulse	0.30	3
Al			2	-5.925	ug/l	-21.04	718.92	5.728E-03	Pulse	0.30	3
K			2	20.778	ug/l	14.13	12,342.45	9.838E-02	Pulse	0.30	3
Ca			2	103.887	ug/l	15.02	575.57	4.588E-03	Pulse	0.30	3
Ti			2	1.046	ug/l	10.14	33.33	2.656E-04	Pulse	0.30	3
V			2	0.127	ug/l	25.08	447.79	3.570E-03	Pulse	0.30	3
Cr			2	2.011	ug/l	4.64	3,042.54	2.425E-02	Pulse	0.30	3
Mn			2	0.331	ug/l	36.05	370.01	2.947E-03	Pulse	0.30	3
Fe			2	26.034	ug/l	1.84	29,290.45	2.335E-01	Pulse	0.30	3
Co			2	0.056	ug/l	3.92	144.37	1.151E-03	Pulse	0.30	3
Ni			2	0.429	ug/l	11.66	376.68	3.001E-03	Pulse	0.30	3
Cu			2	1.805	ug/l	4.52	6,345.74	5.057E-02	Pulse	0.30	3
Zn			2	0.359	ug/l	29.40	1,263.40	1.007E-02	Pulse	0.30	3
As			2	0.200	ug/l	25.35	39.33	3.133E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.052	ug/l	105.26	42.05	4.865E-05	Pulse	0.30	3
Sn			2	14.378	ug/l	1.18	13,012.22	1.503E-02	Pulse	0.30	3
Se			3	0.564	ug/l	5.12	24.47	1.559E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,051,267.55	0.43	96.5	Pulse	0.10	3
1	Sc		2,030,893.82	0.56	96.8	Pulse	0.10	3
1	Ge		443,913.56	0.64	101.1	Pulse	0.10	3
1	Ge		624,607.52	0.84	101.6	Pulse	0.10	3
1	Rh		3,219,962.55	1.94	104.0	Pulse	0.10	3
1	In		3,443,791.63	0.91	106.7	Pulse	0.10	3
1	Tb		5,056,721.91	1.53	109.5	Pulse	0.10	3
1	Ho		501,419.07	1.54	109.4	Pulse	0.10	3
1	Bi		3,200,232.24	0.47	112.3	Pulse	0.10	3
2	Sc		125,474.03	0.88	102.9	Pulse	0.30	3
2	Ge		82,704.94	0.91	104.8	Pulse	0.30	3
2	Ge		124,658.27	0.18	103.9	Pulse	0.30	3
2	Rh		2,079,257.14	0.87	108.2	Pulse	0.30	3
2	In		865,568.90	1.18	107.6	Pulse	0.30	3
2	Tb		2,937,448.91	0.68	109.5	Pulse	0.30	3
2	Ho		301,690.32	0.79	110.2	Pulse	0.30	3
2	Bi		2,074,012.56	0.69	111.1	Pulse	0.30	3
3	Sc		147,880.56	0.11	100.4	Pulse	0.30	3
3	Ge		103,205.57	0.72	101.6	Pulse	0.30	3
3	Ge		156,907.94	0.57	102.4	Pulse	0.30	3
3	Rh		1,829,983.12	0.30	105.4	Pulse	0.30	3
3	Tb		3,345,111.05	0.60	105.2	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:37
Sample Name	mp17229-b1conf
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	9/12/2019 13:37
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	183.088	ug/l	1.02	166,223.86	1.649E-01	Pulse	0.25	3
B			1	207.189	ug/l	1.20	142,505.51	1.414E-01	Pulse	0.15	3
Ca			1	9709.672	ug/l	1.17	1,305,799.01	6.610E-01	Pulse	0.10	3
Sr			1	185.572	ug/l	1.11	1,503,578.68	4.850E-01	Pulse	0.10	3
Mo			1	182.069	ug/l	0.39	275,492.03	8.887E-02	Pulse	0.10	3
Ag			1	88.136	ug/l	0.35	351,303.51	1.051E-01	Pulse	0.10	3
Sn			1	197.165	ug/l	0.75	511,887.80	1.531E-01	Pulse	0.10	3
Sb			1	186.066	ug/l	0.75	583,098.12	1.182E-01	Pulse	0.10	3
Ba			1	179.659	ug/l	0.48	236,657.93	4.797E-02	Pulse	0.10	3
Tl			1	181.785	ug/l	0.56	1,488,129.72	4.856E-01	Pulse	0.10	3
Pb			1	186.700	ug/l	0.82	525,682.86	1.715E-01	Pulse	0.10	3
Pb			1	189.801	ug/l	0.83	470,401.71	1.535E-01	Pulse	0.10	3
Pb			1	187.376	ug/l	0.91	2,139,517.52	6.981E-01	Pulse	0.10	3
Na			2	9333.717	ug/l	0.86	1,877,796.87	1.562E+01	Pulse	0.30	3
Mg			2	9249.505	ug/l	0.41	862,183.75	7.171E+00	Pulse	0.30	3
Al			2	9207.129	ug/l	1.00	295,940.78	2.462E+00	Pulse	0.30	3
K			2	9413.153	ug/l	0.94	740,855.87	6.162E+00	Pulse	0.30	3
Ca			2	10162.730	ug/l	0.83	41,331.24	3.438E-01	Pulse	0.30	3
Ti			2	178.214	ug/l	3.35	5,263.14	4.378E-02	Pulse	0.30	3
V			2	185.557	ug/l	1.11	178,833.60	1.487E+00	Pulse	0.30	3
Cr			2	185.230	ug/l	1.01	225,437.70	1.875E+00	Pulse	0.30	3
Mn			2	186.514	ug/l	0.78	124,903.41	1.039E+00	Pulse	0.30	3
Fe			2	9762.877	ug/l	1.18	9,481,982.68	7.887E+01	Analog	0.30	3
Co			2	185.859	ug/l	0.48	359,509.12	2.990E+00	Pulse	0.30	3
Ni			2	185.810	ug/l	0.56	94,635.90	7.871E-01	Pulse	0.30	3
Cu			2	195.971	ug/l	0.08	272,869.38	2.270E+00	Pulse	0.30	3
Zn			2	231.540	ug/l	1.68	51,226.43	4.261E-01	Pulse	0.30	3
As			2	188.211	ug/l	0.42	23,669.41	1.969E-01	Pulse	1.00	3
Cd			2	184.786	ug/l	0.63	67,825.75	8.270E-02	Pulse	0.30	3
Sn			2	195.716	ug/l	1.53	160,389.59	1.956E-01	Pulse	0.30	3
Se			3	470.529	ug/l	1.29	14,852.12	9.670E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,007,818.76	0.74	92.5	Pulse	0.10	3
1	Sc		1,975,459.55	0.68	94.2	Pulse	0.10	3
1	Ge		433,380.32	0.91	98.7	Pulse	0.10	3

Quantitation Report

1	Ge		607,501.72	0.70	98.8	Pulse	0.10	3
1	Rh		3,100,165.27	0.68	100.2	Pulse	0.10	3
1	In		3,342,475.74	0.83	103.6	Pulse	0.10	3
1	Tb		4,933,643.78	0.78	106.8	Pulse	0.10	3
1	Ho		491,465.37	0.74	107.2	Pulse	0.10	3
1	Bi		3,064,578.81	0.17	107.5	Pulse	0.10	3
2	Sc		120,230.09	0.49	98.6	Pulse	0.30	3
2	Ge		79,845.08	0.78	101.2	Pulse	0.30	3
2	Ge		120,039.61	0.54	100.1	Pulse	0.30	3
2	Rh		1,966,412.28	0.30	102.3	Pulse	0.30	3
2	In		820,133.93	0.62	102.0	Pulse	0.30	3
2	Tb		2,840,439.61	1.04	105.9	Pulse	0.30	3
2	Ho		294,130.29	0.71	107.4	Pulse	0.30	3
2	Bi		1,987,076.93	0.60	106.5	Pulse	0.30	3
3	Sc		145,925.45	0.94	99.1	Pulse	0.30	3
3	Ge		100,081.69	0.98	98.5	Pulse	0.30	3
3	Ge		153,609.36	1.40	100.3	Pulse	0.30	3
3	Rh		1,761,078.89	0.09	101.4	Pulse	0.30	3
3	Tb		3,318,563.69	0.51	104.3	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:42
Sample Name	jc94536-11 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	9/12/2019 13:37
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	0.059	ug/l	46.57	64.00	6.513E-05	Pulse	0.25	3
B			1	372.427	ug/l	0.74	241,173.69	2.455E-01	Pulse	0.15	3
Ca			1	29847.111	ug/l	0.95	3,930,431.40	2.025E+00	Pulse	0.10	3
Sr			1	142.247	ug/l	0.88	1,100,094.72	3.718E-01	Pulse	0.10	3
Mo			1	1.129	ug/l	2.74	1,650.16	5.578E-04	Pulse	0.10	3
Ag			1	0.045	ug/l	28.79	200.01	6.134E-05	Pulse	0.10	3
Sn			1	1.274	ug/l	1.06	5,077.70	1.557E-03	Pulse	0.10	3
Sb			1	0.409	ug/l	12.26	1,433.45	2.926E-04	Pulse	0.10	3
Ba			1	211.702	ug/l	0.80	277,024.74	5.652E-02	Pulse	0.10	3
Tl			1	0.174	ug/l	12.35	1,590.14	5.346E-04	Pulse	0.10	3
Pb			1	0.702	ug/l	5.68	2,133.57	7.172E-04	Pulse	0.10	3
Pb			1	0.654	ug/l	3.68	1,770.19	5.953E-04	Pulse	0.10	3
Pb			1	0.651	ug/l	4.52	8,097.85	2.723E-03	Pulse	0.10	3
Na			2	313331.025	ug/l	0.91	62,313,921.97	5.214E+02	Analog	0.30	3
Mg			2	3324.221	ug/l	0.88	308,142.01	2.579E+00	Pulse	0.30	3
Al			2	86.314	ug/l	9.74	3,623.77	3.031E-02	Pulse	0.30	3
K			2	7108.088	ug/l	0.67	558,528.92	4.674E+00	Pulse	0.30	3
Ca			2	29587.918	ug/l	1.11	119,351.43	9.988E-01	Pulse	0.30	3
Ti			2	3.866	ug/l	24.02	114.45	9.583E-04	Pulse	0.30	3
V			2	0.683	ug/l	13.43	957.82	8.019E-03	Pulse	0.30	3
Cr			2	5.608	ug/l	1.23	7,240.55	6.059E-02	Pulse	0.30	3
Mn			2	124.112	ug/l	0.60	82,659.47	6.917E-01	Pulse	0.30	3
Fe			2	312.766	ug/l	0.41	304,626.92	2.549E+00	Pulse	0.30	3
Co			2	0.367	ug/l	8.10	736.98	6.165E-03	Pulse	0.30	3
Ni			2	6.303	ug/l	1.28	3,328.16	2.785E-02	Pulse	0.30	3
Cu			2	1.141	ug/l	7.59	5,136.42	4.298E-02	Pulse	0.30	3
Zn			2	1.734	ug/l	10.78	1,498.98	1.254E-02	Pulse	0.30	3
As			2	0.359	ug/l	22.14	57.33	4.797E-04	Pulse	1.00	3
Cd			2	0.078	ug/l	24.36	48.73	6.009E-05	Pulse	0.30	3
Sn			2	1.463	ug/l	9.68	1,764.57	2.176E-03	Pulse	0.30	3
Se			3	1.374	ug/l	7.51	49.27	3.222E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		982,468.81	0.62	90.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,940,545.33	0.30	92.5	Pulse	0.10	3
1	Ge		427,308.00	0.85	97.3	Pulse	0.10	3
1	Ge		599,849.34	0.60	97.5	Pulse	0.10	3
1	Rh		2,958,880.58	0.81	95.6	Pulse	0.10	3
1	In		3,260,379.71	0.63	101.0	Pulse	0.10	3
1	Tb		4,901,624.72	0.62	106.1	Pulse	0.10	3
1	Ho		490,478.38	1.19	107.0	Pulse	0.10	3
1	Bi		2,974,083.50	0.88	104.4	Pulse	0.10	3
2	Sc		119,502.97	0.80	98.0	Pulse	0.30	3
2	Ge		79,260.86	0.95	100.5	Pulse	0.30	3
2	Ge		119,227.09	1.64	99.4	Pulse	0.30	3
2	Rh		1,904,913.88	0.31	99.1	Pulse	0.30	3
2	In		810,844.63	0.43	100.8	Pulse	0.30	3
2	Tb		2,855,619.54	0.33	106.5	Pulse	0.30	3
2	Ho		291,866.92	0.36	106.6	Pulse	0.30	3
2	Bi		1,911,644.37	0.60	102.4	Pulse	0.30	3
3	Sc		145,417.15	1.87	98.8	Pulse	0.30	3
3	Ge		101,467.78	0.38	99.9	Pulse	0.30	3
3	Ge		152,922.96	0.66	99.8	Pulse	0.30	3
3	Rh		1,716,643.89	0.52	98.9	Pulse	0.30	3
3	Tb		3,304,920.70	1.04	103.9	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:47
Sample Name	mp17229-s1 4
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	182.661	ug/l	0.68	33,782.76	3.292E-02	Pulse	0.25	3
B			1	340.050	ug/l	3.27	55,138.16	5.373E-02	Pulse	0.15	3
Ca			1	44245.649	ug/l	0.97	1,216,555.24	6.027E-01	Pulse	0.10	3
Sr			1	402.363	ug/l	0.54	661,900.98	2.104E-01	Pulse	0.10	3
Mo			1	188.955	ug/l	1.87	58,049.48	1.845E-02	Pulse	0.10	3
Ag			1	107.233	ug/l	0.78	85,795.01	2.558E-02	Pulse	0.10	3
Sn			1	217.378	ug/l	1.50	114,743.55	3.422E-02	Pulse	0.10	3
Sb			1	87.399	ug/l	1.34	55,600.04	1.113E-02	Pulse	0.10	3
Ba			1	1132.772	ug/l	0.87	302,057.28	6.048E-02	Pulse	0.10	3
Tl			1	175.867	ug/l	0.65	292,904.90	9.401E-02	Pulse	0.10	3
Pb			1	803.841	ug/l	0.96	460,224.69	1.477E-01	Pulse	0.10	3
Pb			1	775.497	ug/l	0.37	390,834.37	1.254E-01	Pulse	0.10	3
Pb			1	784.095	ug/l	0.28	1,820,533.71	5.843E-01	Pulse	0.10	3
Na			2	11226.527	ug/l	0.58	468,662.05	3.824E+00	Pulse	0.30	3
Mg			2	22418.022	ug/l	0.69	426,212.25	3.477E+00	Pulse	0.30	3
Al			2	69276.837	ug/l	0.26	453,588.00	3.701E+00	Pulse	0.30	3
K			2	15715.485	ug/l	1.07	259,132.41	2.114E+00	Pulse	0.30	3
Ca			2	44993.647	ug/l	1.66	37,327.41	3.045E-01	Pulse	0.30	3
Ti			2	2245.735	ug/l	1.94	13,522.27	1.103E-01	Pulse	0.30	3
V			2	418.088	ug/l	0.55	82,331.43	6.717E-01	Pulse	0.30	3
Cr			2	367.880	ug/l	1.80	91,579.80	7.472E-01	Pulse	0.30	3
Mn			2	1120.511	ug/l	0.63	152,974.27	1.248E+00	Pulse	0.30	3
Fe			2	196871.302	ug/l	0.27	38,979,549.56	3.180E+02	Analog	0.30	3
Co			2	401.114	ug/l	0.59	158,217.62	1.291E+00	Pulse	0.30	3
Ni			2	3276.709	ug/l	0.46	339,909.44	2.773E+00	Pulse	0.30	3
Cu			2	311284.804	ug/l	1.26	87,209,565.42	7.115E+02	Analog	0.30	3
Zn			2	1155.092	ug/l	1.12	52,105.73	4.251E-01	Pulse	0.30	3
As			2	301.967	ug/l	0.54	7,751.86	6.324E-02	Pulse	1.00	3
Cd			2	188.338	ug/l	3.14	13,909.39	1.688E-02	Pulse	0.30	3
Sn			2	216.338	ug/l	1.18	36,089.07	4.380E-02	Pulse	0.30	3
Se			3	526.961	ug/l	0.46	3,311.00	2.169E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,026,270.39	0.82	94.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,018,569.45	0.97	96.3	Pulse	0.10	3
1	Ge		437,222.03	1.10	99.6	Pulse	0.10	3
1	Ge		607,468.10	0.73	98.8	Pulse	0.10	3
1	Rh		3,146,152.98	0.94	101.7	Pulse	0.10	3
1	In		3,353,640.48	0.85	103.9	Pulse	0.10	3
1	Tb		4,994,404.30	0.87	108.1	Pulse	0.10	3
1	Ho		501,896.74	0.32	109.5	Pulse	0.10	3
1	Bi		3,115,556.20	0.26	109.3	Pulse	0.10	3
2	Sc		122,573.67	0.60	100.5	Pulse	0.30	3
2	Ge		80,596.23	1.34	102.2	Pulse	0.30	3
2	Ge		120,681.88	1.18	100.6	Pulse	0.30	3
2	Rh		1,982,171.73	0.74	103.1	Pulse	0.30	3
2	In		824,027.26	0.35	102.4	Pulse	0.30	3
2	Tb		2,871,379.89	0.42	107.1	Pulse	0.30	3
2	Ho		300,062.07	1.00	109.6	Pulse	0.30	3
2	Bi		2,004,860.41	0.40	107.4	Pulse	0.30	3
3	Sc		147,907.38	0.76	100.5	Pulse	0.30	3
3	Ge		101,239.67	0.23	99.6	Pulse	0.30	3
3	Ge		152,651.33	0.80	99.6	Pulse	0.30	3
3	Rh		1,785,044.02	0.62	102.8	Pulse	0.30	3
3	Tb		3,347,847.85	0.18	105.2	Pulse	0.30	3

Quantitation Report

File Name	042SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:52
Sample Name	mp17229-s2
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	193.252	ug/l	2.13	35,629.29	3.483E-02	Pulse	0.25	3
B			1	315.463	ug/l	3.28	51,803.47	5.064E-02	Pulse	0.15	3
Ca			1	28277.911	ug/l	1.48	782,800.25	3.863E-01	Pulse	0.10	3
Sr			1	354.511	ug/l	1.52	582,045.41	1.854E-01	Pulse	0.10	3
Mo			1	200.812	ug/l	1.23	61,562.70	1.961E-02	Pulse	0.10	3
Ag			1	98.416	ug/l	1.57	79,351.90	2.348E-02	Pulse	0.10	3
Sn			1	220.231	ug/l	0.95	117,124.02	3.466E-02	Pulse	0.10	3
Sb			1	102.488	ug/l	0.49	65,259.94	1.305E-02	Pulse	0.10	3
Ba			1	908.336	ug/l	1.39	242,547.24	4.850E-02	Pulse	0.10	3
Tl			1	187.128	ug/l	0.46	310,682.98	1.000E-01	Pulse	0.10	3
Pb			1	672.443	ug/l	0.76	383,844.02	1.236E-01	Pulse	0.10	3
Pb			1	643.366	ug/l	0.56	323,279.46	1.041E-01	Pulse	0.10	3
Pb			1	650.937	ug/l	0.23	1,506,868.07	4.852E-01	Pulse	0.10	3
Na			2	11166.657	ug/l	0.08	466,197.45	3.804E+00	Pulse	0.30	3
Mg			2	19333.550	ug/l	0.52	367,584.33	2.999E+00	Pulse	0.30	3
Al			2	69421.962	ug/l	0.69	454,498.91	3.708E+00	Pulse	0.30	3
K			2	15010.450	ug/l	1.16	247,960.60	2.023E+00	Pulse	0.30	3
Ca			2	29328.785	ug/l	0.37	24,375.74	1.989E-01	Pulse	0.30	3
Ti			2	2222.336	ug/l	0.33	13,381.04	1.092E-01	Pulse	0.30	3
V			2	411.951	ug/l	0.73	81,123.45	6.619E-01	Pulse	0.30	3
Cr			2	357.630	ug/l	0.45	89,041.84	7.265E-01	Pulse	0.30	3
Mn			2	964.017	ug/l	0.87	131,618.94	1.074E+00	Pulse	0.30	3
Fe			2	197661.442	ug/l	1.05	39,132,619.55	3.193E+02	Analog	0.30	3
Co			2	252.267	ug/l	0.85	99,513.54	8.119E-01	Pulse	0.30	3
Ni			2	1788.095	ug/l	0.56	185,542.38	1.514E+00	Pulse	0.30	3
Cu			2	257046.365	ug/l	0.36	72,013,001.58	5.876E+02	Analog	0.30	3
Zn			2	857.830	ug/l	1.00	38,991.84	3.181E-01	Pulse	0.30	3
As			2	304.457	ug/l	1.54	7,815.22	6.376E-02	Pulse	1.00	3
Cd			2	198.855	ug/l	2.50	14,831.12	1.782E-02	Pulse	0.30	3
Sn			2	217.133	ug/l	1.74	36,585.78	4.396E-02	Pulse	0.30	3
Se			3	515.109	ug/l	2.01	3,242.72	2.120E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,023,109.82	0.75	93.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,026,067.52	0.74	96.6	Pulse	0.10	3
1	Ge		439,085.83	0.31	100.0	Pulse	0.10	3
1	Ge		611,355.47	1.29	99.4	Pulse	0.10	3
1	Rh		3,139,678.50	0.13	101.5	Pulse	0.10	3
1	In		3,379,606.16	0.56	104.7	Pulse	0.10	3
1	Tb		5,000,885.97	0.48	108.3	Pulse	0.10	3
1	Ho		503,454.01	0.61	109.8	Pulse	0.10	3
1	Bi		3,105,939.02	0.36	109.0	Pulse	0.10	3
2	Sc		122,565.16	0.28	100.5	Pulse	0.30	3
2	Ge		80,097.32	0.40	101.5	Pulse	0.30	3
2	Ge		121,618.70	0.26	101.4	Pulse	0.30	3
2	Rh		2,001,895.62	0.59	104.1	Pulse	0.30	3
2	In		832,439.51	1.11	103.5	Pulse	0.30	3
2	Tb		2,880,061.27	0.79	107.4	Pulse	0.30	3
2	Ho		299,649.61	0.49	109.4	Pulse	0.30	3
2	Bi		2,020,029.16	0.33	108.2	Pulse	0.30	3
3	Sc		146,138.58	0.61	99.3	Pulse	0.30	3
3	Ge		101,193.86	0.74	99.6	Pulse	0.30	3
3	Ge		152,948.60	0.71	99.8	Pulse	0.30	3
3	Rh		1,769,150.00	0.66	101.9	Pulse	0.30	3
3	Tb		3,315,152.37	1.15	104.2	Pulse	0.30	3

Quantitation Report

File Name	043SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 13:57
Sample Name	jc94207-16ar
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	4.691	ug/l	4.94	872.04	8.573E-04	Pulse	0.25	3
B			1	126.329	ug/l	0.66	27,267.61	2.681E-02	Pulse	0.15	3
Ca			1	24969.704	ug/l	0.57	694,478.17	3.415E-01	Pulse	0.10	3
Sr			1	182.608	ug/l	1.30	302,655.94	9.555E-02	Pulse	0.10	3
Mo			1	20.779	ug/l	5.40	6,444.87	2.035E-03	Pulse	0.10	3
Ag			1	7.458	ug/l	4.79	6,088.11	1.787E-03	Pulse	0.10	3
Sn			1	36.630	ug/l	5.10	21,265.54	6.241E-03	Pulse	0.10	3
Sb			1	5.846	ug/l	3.50	3,890.61	7.755E-04	Pulse	0.10	3
Ba			1	811.281	ug/l	0.84	217,335.16	4.332E-02	Pulse	0.10	3
Tl			1	1.858	ug/l	7.59	3,323.83	1.063E-03	Pulse	0.10	3
Pb			1	565.529	ug/l	1.47	325,054.43	1.039E-01	Pulse	0.10	3
Pb			1	541.384	ug/l	1.52	273,918.98	8.760E-02	Pulse	0.10	3
Pb			1	549.257	ug/l	0.91	1,280,336.91	4.094E-01	Pulse	0.10	3
Na			2	1410.640	ug/l	1.57	69,817.09	5.570E-01	Pulse	0.30	3
Mg			2	10208.409	ug/l	1.27	198,617.33	1.585E+00	Pulse	0.30	3
Al			2	58125.778	ug/l	1.45	389,315.03	3.106E+00	Pulse	0.30	3
K			2	5050.568	ug/l	2.53	92,380.51	7.371E-01	Pulse	0.30	3
Ca			2	25005.426	ug/l	1.67	21,272.60	1.697E-01	Pulse	0.30	3
Ti			2	2278.366	ug/l	1.41	14,029.35	1.119E-01	Pulse	0.30	3
V			2	226.795	ug/l	1.04	45,818.71	3.655E-01	Pulse	0.30	3
Cr			2	170.938	ug/l	2.41	43,776.62	3.493E-01	Pulse	0.30	3
Mn			2	814.634	ug/l	1.49	113,764.07	9.076E-01	Pulse	0.30	3
Fe			2	206794.512	ug/l	1.64	41,867,351.67	3.340E+02	Analog	0.30	3
Co			2	59.664	ug/l	2.33	24,091.57	1.922E-01	Pulse	0.30	3
Ni			2	1229.706	ug/l	1.35	130,537.95	1.041E+00	Pulse	0.30	3
Cu			2	277934.238	ug/l	2.19	79,621,536.84	6.353E+02	Analog	0.30	3
Zn			2	725.983	ug/l	1.73	33,927.40	2.707E-01	Pulse	0.30	3
As			2	128.312	ug/l	2.62	3,376.36	2.693E-02	Pulse	1.00	3
Cd			2	3.408	ug/l	21.95	280.63	3.302E-04	Pulse	0.30	3
Sn			2	36.926	ug/l	3.43	6,878.25	8.072E-03	Pulse	0.30	3
Se			3	35.310	ug/l	4.30	229.80	1.491E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,017,069.19	0.43	93.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,033,521.90	0.97	97.0	Pulse	0.10	3
1	Ge		439,241.89	0.94	100.0	Pulse	0.10	3
1	Ge		610,301.45	1.08	99.2	Pulse	0.10	3
1	Rh		3,167,483.28	0.18	102.4	Pulse	0.10	3
1	In		3,407,131.01	0.37	105.6	Pulse	0.10	3
1	Tb		5,016,789.72	0.49	108.6	Pulse	0.10	3
1	Ho		506,494.61	1.12	110.5	Pulse	0.10	3
1	Bi		3,127,398.18	0.98	109.7	Pulse	0.10	3
2	Sc		125,356.77	1.44	102.8	Pulse	0.30	3
2	Ge		81,202.89	1.09	102.9	Pulse	0.30	3
2	Ge		122,396.32	1.38	102.0	Pulse	0.30	3
2	Rh		2,041,110.40	1.55	106.2	Pulse	0.30	3
2	In		852,318.90	2.04	106.0	Pulse	0.30	3
2	Tb		2,944,189.19	2.23	109.8	Pulse	0.30	3
2	Ho		306,383.76	1.48	111.9	Pulse	0.30	3
2	Bi		2,051,462.21	1.46	109.9	Pulse	0.30	3
3	Sc		148,042.43	2.54	100.6	Pulse	0.30	3
3	Ge		101,139.35	1.30	99.5	Pulse	0.30	3
3	Ge		154,222.80	1.80	100.7	Pulse	0.30	3
3	Rh		1,782,789.17	2.01	102.7	Pulse	0.30	3
3	Tb		3,320,496.33	2.31	104.4	Pulse	0.30	3

Quantitation Report

File Name	044SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:02
Sample Name	mp17229-sd1
Sample Type	Sample
Comment	
Prep Dilution	125.000
Auto Dilution	N/A
Total Dilution	125.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	4.926	ug/l	16.46	198.67	1.897E-04	Pulse	0.25	3
B			1	369.315	ug/l	8.35	21,160.22	2.020E-02	Pulse	0.15	3
Ca			1	24054.078	ug/l	4.96	139,844.53	6.834E-02	Pulse	0.10	3
Sr			1	165.302	ug/l	2.48	55,804.34	1.740E-02	Pulse	0.10	3
Mo			1	21.469	ug/l	3.56	1,366.78	4.257E-04	Pulse	0.10	3
Ag			1	8.239	ug/l	2.71	1,373.45	4.010E-04	Pulse	0.10	3
Sn			1	39.511	ug/l	11.52	6,141.47	1.795E-03	Pulse	0.10	3
Sb			1	7.746	ug/l	13.40	1,156.76	2.298E-04	Pulse	0.10	3
Ba			1	735.339	ug/l	2.74	39,487.83	7.871E-03	Pulse	0.10	3
Tl			1	2.560	ug/l	9.85	1,083.42	3.439E-04	Pulse	0.10	3
Pb			1	510.815	ug/l	4.01	59,353.36	1.884E-02	Pulse	0.10	3
Pb			1	491.939	ug/l	4.46	50,323.31	1.597E-02	Pulse	0.10	3
Pb			1	495.178	ug/l	4.34	233,348.46	7.407E-02	Pulse	0.10	3
Na			2	1648.971	ug/l	4.89	24,570.15	1.973E-01	Pulse	0.30	3
Mg			2	9330.079	ug/l	2.44	36,286.59	2.914E-01	Pulse	0.30	3
Al			2	53173.819	ug/l	2.89	71,509.16	5.743E-01	Pulse	0.30	3
K			2	4650.149	ug/l	5.57	25,531.79	2.050E-01	Pulse	0.30	3
Ca			2	24073.487	ug/l	4.79	4,178.35	3.356E-02	Pulse	0.30	3
Ti			2	2067.101	ug/l	2.78	2,530.23	2.032E-02	Pulse	0.30	3
V			2	205.455	ug/l	1.79	8,510.06	6.832E-02	Pulse	0.30	3
Cr			2	158.436	ug/l	7.48	8,463.38	6.796E-02	Pulse	0.30	3
Mn			2	748.621	ug/l	2.69	20,886.67	1.677E-01	Pulse	0.30	3
Fe			2	191034.405	ug/l	2.08	7,688,238.58	6.174E+01	Analog	0.30	3
Co			2	52.451	ug/l	0.72	4,236.51	3.401E-02	Pulse	0.30	3
Ni			2	1122.888	ug/l	2.95	23,805.11	1.912E-01	Pulse	0.30	3
Cu			2	256635.933	ug/l	1.74	14,614,536.09	1.173E+02	Analog	0.30	3
Zn			2	736.313	ug/l	6.37	7,769.72	6.242E-02	Pulse	0.30	3
As			2	121.466	ug/l	10.10	645.01	5.184E-03	Pulse	1.00	3
Cd			2	1.652	ug/l	48.21	46.56	5.474E-05	Pulse	0.30	3
Sn			2	36.677	ug/l	1.73	1,854.58	2.180E-03	Pulse	0.30	3
Se			3	36.587	ug/l	14.05	52.73	3.407E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,048,332.73	3.49	96.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,049,040.23	4.17	97.7	Pulse	0.10	3
1	Ge		442,328.00	4.50	100.7	Pulse	0.10	3
1	Ge		620,978.46	5.15	101.0	Pulse	0.10	3
1	Rh		3,208,548.49	3.66	103.7	Pulse	0.10	3
1	In		3,427,834.69	4.12	106.2	Pulse	0.10	3
1	Tb		5,020,261.39	3.90	108.7	Pulse	0.10	3
1	Ho		502,931.05	3.90	109.7	Pulse	0.10	3
1	Bi		3,154,185.99	4.11	110.7	Pulse	0.10	3
2	Sc		124,574.32	2.24	102.2	Pulse	0.30	3
2	Ge		81,851.45	1.33	103.7	Pulse	0.30	3
2	Ge		123,589.39	1.25	103.0	Pulse	0.30	3
2	Rh		2,038,596.03	0.75	106.0	Pulse	0.30	3
2	In		850,715.32	0.54	105.8	Pulse	0.30	3
2	Tb		2,917,939.75	1.60	108.8	Pulse	0.30	3
2	Ho		299,783.66	1.01	109.5	Pulse	0.30	3
2	Bi		2,053,849.15	0.10	110.0	Pulse	0.30	3
3	Sc		147,875.10	4.67	100.4	Pulse	0.30	3
3	Ge		102,608.68	3.07	101.0	Pulse	0.30	3
3	Ge		155,051.41	3.25	101.2	Pulse	0.30	3
3	Rh		1,794,675.83	3.68	103.4	Pulse	0.30	3
3	Tb		3,317,450.56	4.17	104.3	Pulse	0.30	3

Quantitation Report

File Name	045_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:06
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	9/12/2019 13:37
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	49.799	ug/l	0.80	235,659.06	2.243E-01	Pulse	0.25	3
B			1	100.009	ug/l	1.60	342,355.87	3.259E-01	Pulse	0.15	3
Ca			1	5108.491	ug/l	0.36	3,566,339.63	1.734E+00	Pulse	0.10	3
Sr			1	52.267	ug/l	1.57	2,140,221.22	6.830E-01	Pulse	0.10	3
Mo			1	51.417	ug/l	1.68	393,215.07	1.255E-01	Pulse	0.10	3
Ag			1	48.764	ug/l	0.17	988,917.41	2.907E-01	Pulse	0.10	3
Sn			1	50.860	ug/l	0.07	671,285.95	1.974E-01	Pulse	0.10	3
Sb			1	51.284	ug/l	1.18	820,276.08	1.629E-01	Pulse	0.10	3
Ba			1	50.034	ug/l	1.88	336,357.16	6.678E-02	Pulse	0.10	3
Tl			1	50.863	ug/l	0.54	2,068,730.80	6.793E-01	Pulse	0.10	3
Pb			1	50.416	ug/l	0.37	705,256.60	2.316E-01	Pulse	0.10	3
Pb			1	50.851	ug/l	0.25	626,143.57	2.056E-01	Pulse	0.10	3
Pb			1	50.537	ug/l	0.65	2,866,874.11	9.414E-01	Pulse	0.10	3
Na			2	5016.063	ug/l	1.35	5,331,898.82	4.182E+01	Analog	0.30	3
Mg			2	4839.322	ug/l	0.95	2,391,416.78	1.876E+01	Pulse	0.30	3
Al			2	4882.470	ug/l	1.13	830,584.05	6.515E+00	Pulse	0.30	3
K			2	4965.419	ug/l	0.99	2,054,422.84	1.611E+01	Pulse	0.30	3
Ca			2	5142.023	ug/l	1.33	110,673.91	8.680E-01	Pulse	0.30	3
Ti			2	49.580	ug/l	1.30	7,765.23	6.090E-02	Pulse	0.30	3
V			2	50.359	ug/l	1.31	257,226.02	2.018E+00	Pulse	0.30	3
Cr			2	50.040	ug/l	1.71	322,731.62	2.531E+00	Pulse	0.30	3
Mn			2	49.940	ug/l	1.87	177,272.73	1.390E+00	Pulse	0.30	3
Fe			2	5040.004	ug/l	1.07	25,951,777.30	2.035E+02	Analog	0.30	3
Co			2	49.825	ug/l	1.05	511,019.39	4.008E+00	Pulse	0.30	3
Ni			2	49.822	ug/l	0.56	134,501.68	1.055E+00	Pulse	0.30	3
Cu			2	50.340	ug/l	0.73	370,578.80	2.906E+00	Pulse	0.30	3
Zn			2	50.483	ug/l	0.69	59,118.35	4.636E-01	Pulse	0.30	3
As			2	50.894	ug/l	0.34	33,934.41	2.661E-01	Pulse	1.00	3
Cd			2	51.000	ug/l	1.45	96,710.53	1.141E-01	Pulse	0.30	3
Sn			2	50.527	ug/l	1.16	213,783.94	2.522E-01	Pulse	0.30	3
Se			3	198.566	ug/l	0.18	31,484.00	2.040E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,050,712.50	1.24	96.4	Pulse	0.10	3
1	Sc		2,056,991.27	0.52	98.1	Pulse	0.10	3
1	Ge		443,174.82	0.29	100.9	Pulse	0.10	3

Quantitation Report

1	Ge		623,190.38	0.70	101.3	Pulse	0.10	3
1	Rh		3,134,439.85	2.10	101.3	Pulse	0.10	3
1	In		3,401,329.77	0.96	105.4	Pulse	0.10	3
1	Tb		5,036,449.51	0.42	109.0	Pulse	0.10	3
1	Ho		497,639.99	0.93	108.6	Pulse	0.10	3
1	Bi		3,045,434.85	0.60	106.9	Pulse	0.10	3
2	Sc		127,509.41	1.34	104.6	Pulse	0.30	3
2	Ge		81,974.08	0.21	103.9	Pulse	0.30	3
2	Ge		124,324.53	1.37	103.6	Pulse	0.30	3
2	Rh		2,020,700.61	1.40	105.1	Pulse	0.30	3
2	In		847,559.81	1.23	105.4	Pulse	0.30	3
2	Tb		2,911,720.09	0.77	108.6	Pulse	0.30	3
2	Ho		298,551.85	0.81	109.0	Pulse	0.30	3
2	Bi		1,973,847.28	0.65	105.8	Pulse	0.30	3
3	Sc		149,311.51	0.27	101.4	Pulse	0.30	3
3	Ge		101,337.13	0.81	99.7	Pulse	0.30	3
3	Ge		154,339.43	0.85	100.7	Pulse	0.30	3
3	Rh		1,748,002.71	0.66	100.7	Pulse	0.30	3
3	Tb		3,299,490.22	0.86	103.7	Pulse	0.30	3

Quantitation Report

File Name	046_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:11
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	9/12/2019 13:37
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	0.011	ug/l	13.80	64.00	6.148E-05	Pulse	0.25	3
B			1	4.217	ug/l	5.23	25,170.09	2.418E-02	Pulse	0.15	3
Ca			1	0.682	ug/l	68.03	6,945.07	3.378E-03	Pulse	0.10	3
Sr			1	0.009	ug/l	16.62	776.72	2.404E-04	Pulse	0.10	3
Mo			1	0.079	ug/l	22.62	643.38	1.985E-04	Pulse	0.10	3
Ag			1	0.010	ug/l	8.16	223.34	6.471E-05	Pulse	0.10	3
Sn			1	0.072	ug/l	14.36	2,940.40	8.512E-04	Pulse	0.10	3
Sb			1	0.129	ug/l	14.19	2,213.58	4.420E-04	Pulse	0.10	3
Ba			1	0.010	ug/l	43.23	176.68	3.518E-05	Pulse	0.10	3
Tl			1	0.017	ug/l	10.13	950.06	3.036E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	20.37	510.03	1.631E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	13.62	483.36	1.545E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	22.16	2,106.81	6.735E-04	Pulse	0.10	3
Na			2	1.218	ug/l	23.40	12,304.58	9.769E-02	Pulse	0.30	3
Mg			2	0.599	ug/l	21.16	560.02	4.449E-03	Pulse	0.30	3
Al			2	-2.679	ug/l	-10.64	471.12	3.737E-03	Pulse	0.30	3
K			2	-1.461	ug/l	-53.85	10,109.84	8.025E-02	Pulse	0.30	3
Ca			2	0.096	ug/l	1261.68	138.89	1.101E-03	Pulse	0.30	3
Ti			2	0.007	ug/l	172.36	2.22	1.772E-05	Pulse	0.30	3
V			2	-0.020	ug/l	-29.02	220.01	1.746E-03	Pulse	0.30	3
Cr			2	-0.004	ug/l	-326.95	471.12	3.745E-03	Pulse	0.30	3
Mn			2	-0.010	ug/l	-71.94	104.44	8.303E-04	Pulse	0.30	3
Fe			2	0.995	ug/l	9.91	7,979.82	6.338E-02	Pulse	0.30	3
Co			2	0.005	ug/l	33.59	78.87	6.252E-04	Pulse	0.30	3
Ni			2	0.008	ug/l	65.89	171.11	1.358E-03	Pulse	0.30	3
Cu			2	0.153	ug/l	21.89	4,873.02	3.870E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.215	ug/l	-36.89	943.37	7.494E-03	Pulse	0.30	3
As			2	0.006	ug/l	168.00	17.33	1.373E-04	Pulse	1.00	3
Cd			2	-0.002	ug/l	-254.73	17.71	2.041E-05	Pulse	0.30	3
Sn			2	0.117	ug/l	11.23	1,125.61	1.302E-03	Pulse	0.30	3
Se			3	0.080	ug/l	5.36	18.80	1.223E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,041,216.07	0.39	95.5	Pulse	0.10	3
1	Sc		2,056,080.75	0.98	98.0	Pulse	0.10	3
1	Ge		442,755.19	1.92	100.8	Pulse	0.10	3
1	Ge		620,491.80	1.02	100.9	Pulse	0.10	3
1	Rh		3,234,261.51	1.77	104.5	Pulse	0.10	3
1	In		3,452,249.68	1.89	107.0	Pulse	0.10	3
1	Tb		5,013,900.45	1.41	108.5	Pulse	0.10	3
1	Ho		501,651.93	1.49	109.4	Pulse	0.10	3
1	Bi		3,130,220.06	1.02	109.8	Pulse	0.10	3
2	Sc		125,975.46	1.23	103.3	Pulse	0.30	3
2	Ge		82,180.89	1.08	104.2	Pulse	0.30	3
2	Ge		125,304.68	0.86	104.4	Pulse	0.30	3
2	Rh		2,058,456.44	1.27	107.1	Pulse	0.30	3
2	In		864,518.68	0.99	107.5	Pulse	0.30	3
2	Tb		2,905,633.29	0.81	108.4	Pulse	0.30	3
2	Ho		298,247.19	0.69	108.9	Pulse	0.30	3
2	Bi		2,033,411.31	0.85	109.0	Pulse	0.30	3
3	Sc		148,757.68	2.22	101.0	Pulse	0.30	3
3	Ge		102,024.26	2.22	100.4	Pulse	0.30	3
3	Ge		153,749.89	2.55	100.4	Pulse	0.30	3
3	Rh		1,801,766.74	2.81	103.8	Pulse	0.30	3
3	Tb		3,297,350.70	2.67	103.7	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:17
Sample Name	jc94365-1
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	5.466	ug/l	6.90	1,040.05	9.968E-04	Pulse	0.25	3
B			1	215.194	ug/l	2.51	39,659.75	3.801E-02	Pulse	0.15	3
Ca			1	53572.224	ug/l	1.94	1,528,462.43	7.291E-01	Pulse	0.10	3
Sr			1	348.135	ug/l	1.97	584,609.67	1.821E-01	Pulse	0.10	3
Mo			1	12.648	ug/l	6.13	3,987.34	1.241E-03	Pulse	0.10	3
Ag			1	15.723	ug/l	4.83	12,925.78	3.758E-03	Pulse	0.10	3
Sn			1	191.136	ug/l	3.00	103,737.31	3.015E-02	Pulse	0.10	3
Sb			1	7.092	ug/l	9.55	4,700.88	9.338E-04	Pulse	0.10	3
Ba			1	977.291	ug/l	2.88	262,875.52	5.218E-02	Pulse	0.10	3
Tl			1	1.323	ug/l	5.11	2,430.29	7.773E-04	Pulse	0.10	3
Pb			1	941.498	ug/l	0.95	541,005.59	1.730E-01	Pulse	0.10	3
Pb			1	898.948	ug/l	1.19	454,684.06	1.454E-01	Pulse	0.10	3
Pb			1	909.099	ug/l	0.76	2,118,472.37	6.774E-01	Pulse	0.10	3
Na			2	46587.799	ug/l	1.20	2,010,933.81	1.559E+01	Pulse	0.30	3
Mg			2	38746.308	ug/l	0.95	774,965.65	6.008E+00	Pulse	0.30	3
Al			2	86917.054	ug/l	1.96	598,535.86	4.641E+00	Pulse	0.30	3
K			2	19600.760	ug/l	1.50	337,368.87	2.616E+00	Pulse	0.30	3
Ca			2	54313.555	ug/l	2.01	47,381.61	3.674E-01	Pulse	0.30	3
Ti			2	2242.593	ug/l	4.73	14,205.83	1.102E-01	Pulse	0.30	3
V			2	224.850	ug/l	2.17	46,740.24	3.624E-01	Pulse	0.30	3
Cr			2	509.138	ug/l	2.95	133,157.92	1.033E+00	Pulse	0.30	3
Mn			2	1664.875	ug/l	2.63	239,076.99	1.854E+00	Pulse	0.30	3
Fe			2	174525.672	ug/l	2.34	36,356,933.00	2.819E+02	Analog	0.30	3
Co			2	50.810	ug/l	0.57	21,119.00	1.637E-01	Pulse	0.30	3
Ni			2	186.433	ug/l	1.32	20,495.13	1.589E-01	Pulse	0.30	3
Cu			2	1525.404	ug/l	2.12	453,508.19	3.517E+00	Pulse	0.30	3
Zn			2	1642.137	ug/l	0.97	77,438.42	6.004E-01	Pulse	0.30	3
As			2	117.868	ug/l	2.76	3,191.65	2.475E-02	Pulse	1.00	3
Cd			2	11.680	ug/l	8.33	920.83	1.070E-03	Pulse	0.30	3
Sn			2	192.500	ug/l	0.67	33,596.97	3.905E-02	Pulse	0.30	3
Se			3	16.727	ug/l	1.72	112.73	7.273E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,043,549.81	0.43	95.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,096,650.96	1.24	100.0	Pulse	0.10	3
1	Ge		446,244.02	0.53	101.6	Pulse	0.10	3
1	Ge		626,926.09	0.35	101.9	Pulse	0.10	3
1	Rh		3,211,532.14	0.83	103.8	Pulse	0.10	3
1	In		3,440,921.45	1.03	106.6	Pulse	0.10	3
1	Tb		5,039,014.09	1.67	109.1	Pulse	0.10	3
1	Ho		507,885.69	0.46	110.8	Pulse	0.10	3
1	Bi		3,127,170.16	0.77	109.7	Pulse	0.10	3
2	Sc		128,990.51	1.37	105.8	Pulse	0.30	3
2	Ge		83,705.22	1.01	106.1	Pulse	0.30	3
2	Ge		126,225.53	0.61	105.2	Pulse	0.30	3
2	Rh		2,036,915.82	1.05	106.0	Pulse	0.30	3
2	In		860,375.20	0.76	107.0	Pulse	0.30	3
2	Tb		2,935,853.49	0.73	109.5	Pulse	0.30	3
2	Ho		305,515.27	0.35	111.6	Pulse	0.30	3
2	Bi		2,036,652.84	0.31	109.1	Pulse	0.30	3
3	Sc		150,716.28	2.01	102.4	Pulse	0.30	3
3	Ge		100,611.03	3.89	99.0	Pulse	0.30	3
3	Ge		155,050.48	4.08	101.2	Pulse	0.30	3
3	Rh		1,779,108.89	1.49	102.5	Pulse	0.30	3
3	Tb		3,304,657.92	0.72	103.9	Pulse	0.30	3

Quantitation Report

File Name	048SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:21
Sample Name	jc94365-2
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	4.593	ug/l	7.14	894.71	8.396E-04	Pulse	0.25	3
B			1	200.782	ug/l	2.77	38,544.16	3.619E-02	Pulse	0.15	3
Ca			1	27180.551	ug/l	3.17	802,735.93	3.715E-01	Pulse	0.10	3
Sr			1	251.647	ug/l	2.83	434,117.66	1.316E-01	Pulse	0.10	3
Mo			1	12.111	ug/l	6.16	3,923.97	1.189E-03	Pulse	0.10	3
Ag			1	15.710	ug/l	4.41	13,289.42	3.755E-03	Pulse	0.10	3
Sn			1	172.466	ug/l	3.73	96,502.20	2.726E-02	Pulse	0.10	3
Sb			1	6.293	ug/l	5.27	4,347.47	8.322E-04	Pulse	0.10	3
Ba			1	907.805	ug/l	3.10	253,271.98	4.847E-02	Pulse	0.10	3
Tl			1	1.492	ug/l	1.46	2,780.39	8.676E-04	Pulse	0.10	3
Pb			1	914.954	ug/l	1.53	538,736.80	1.681E-01	Pulse	0.10	3
Pb			1	878.073	ug/l	1.22	455,120.58	1.420E-01	Pulse	0.10	3
Pb			1	889.923	ug/l	1.53	2,124,968.98	6.632E-01	Pulse	0.10	3
Na			2	51098.874	ug/l	0.28	2,199,565.75	1.709E+01	Pulse	0.30	3
Mg			2	36799.548	ug/l	0.16	734,358.88	5.707E+00	Pulse	0.30	3
Al			2	81949.747	ug/l	0.87	563,147.70	4.376E+00	Pulse	0.30	3
K			2	19126.521	ug/l	1.23	328,733.62	2.555E+00	Pulse	0.30	3
Ca			2	28639.659	ug/l	1.19	24,994.40	1.942E-01	Pulse	0.30	3
Ti			2	2129.488	ug/l	0.48	13,462.27	1.046E-01	Pulse	0.30	3
V			2	216.516	ug/l	2.30	44,921.75	3.491E-01	Pulse	0.30	3
Cr			2	514.230	ug/l	0.30	134,202.51	1.043E+00	Pulse	0.30	3
Mn			2	1472.373	ug/l	0.40	210,992.91	1.640E+00	Pulse	0.30	3
Fe			2	160429.080	ug/l	0.38	33,348,543.12	2.591E+02	Analog	0.30	3
Co			2	48.061	ug/l	1.17	19,932.28	1.549E-01	Pulse	0.30	3
Ni			2	180.421	ug/l	1.73	19,794.19	1.538E-01	Pulse	0.30	3
Cu			2	1541.541	ug/l	0.84	457,267.81	3.553E+00	Pulse	0.30	3
Zn			2	1530.428	ug/l	1.04	72,087.45	5.602E-01	Pulse	0.30	3
As			2	113.125	ug/l	1.42	3,057.29	2.376E-02	Pulse	1.00	3
Cd			2	12.368	ug/l	7.96	969.71	1.132E-03	Pulse	0.30	3
Sn			2	178.575	ug/l	1.28	31,068.50	3.628E-02	Pulse	0.30	3
Se			3	16.001	ug/l	9.81	115.67	6.975E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,065,087.29	1.02	97.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,162,249.86	2.98	103.1	Pulse	0.10	3
1	Ge		461,577.65	1.82	105.1	Pulse	0.10	3
1	Ge		640,495.62	0.80	104.1	Pulse	0.10	3
1	Rh		3,299,262.45	2.04	106.6	Pulse	0.10	3
1	In		3,541,492.48	2.32	109.7	Pulse	0.10	3
1	Tb		5,227,148.99	2.19	113.1	Mix	0.10	3
1	Ho		521,568.53	2.72	113.8	Pulse	0.10	3
1	Bi		3,204,763.91	1.51	112.5	Pulse	0.10	3
2	Sc		128,685.52	0.18	105.5	Pulse	0.30	3
2	Ge		84,597.50	1.59	107.2	Pulse	0.30	3
2	Ge		127,283.90	1.05	106.1	Pulse	0.30	3
2	Rh		2,040,145.82	0.95	106.1	Pulse	0.30	3
2	In		856,439.62	0.61	106.5	Pulse	0.30	3
2	Tb		2,947,706.48	0.93	109.9	Pulse	0.30	3
2	Ho		307,873.09	1.20	112.5	Pulse	0.30	3
2	Bi		2,040,965.20	0.39	109.4	Pulse	0.30	3
3	Sc		164,123.18	11.71	111.5	Pulse	0.30	3
3	Ge		109,327.62	8.45	107.6	Pulse	0.30	3
3	Ge		166,564.28	8.11	108.7	Pulse	0.30	3
3	Rh		1,930,936.52	11.35	111.2	Pulse	0.30	3
3	Tb		3,589,368.12	12.06	112.8	Mix	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:27
Sample Name	jc94365-3
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	9/12/2019 13:37
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	4.328	ug/l	2.59	2,045.49	1.961E-03	Pulse	0.25	3
B			1	170.447	ug/l	1.58	67,341.59	6.458E-02	Pulse	0.15	3
Ca			1	23677.869	ug/l	0.59	1,754,487.94	8.053E-01	Pulse	0.10	3
Sr			1	221.127	ug/l	0.80	927,123.11	2.890E-01	Pulse	0.10	3
Mo			1	7.154	ug/l	5.66	5,621.19	1.752E-03	Pulse	0.10	3
Ag			1	8.853	ug/l	0.85	18,354.56	5.286E-03	Pulse	0.10	3
Sn			1	137.425	ug/l	0.58	186,604.76	5.374E-02	Pulse	0.10	3
Sb			1	3.446	ug/l	7.80	5,741.26	1.127E-03	Pulse	0.10	3
Ba			1	771.414	ug/l	0.13	524,187.08	1.030E-01	Pulse	0.10	3
Tl			1	1.118	ug/l	3.96	4,924.35	1.564E-03	Pulse	0.10	3
Pb			1	657.503	ug/l	1.26	950,787.51	3.020E-01	Pulse	0.10	3
Pb			1	629.185	ug/l	1.01	800,871.68	2.544E-01	Pulse	0.10	3
Pb			1	637.387	ug/l	0.79	3,737,805.62	1.187E+00	Pulse	0.10	3
Na			2	55458.822	ug/l	2.28	6,176,617.67	4.623E+01	Analog	0.30	3
Mg			2	38031.737	ug/l	1.54	1,969,662.63	1.474E+01	Pulse	0.30	3
Al			2	78629.817	ug/l	1.16	1,401,258.24	1.049E+01	Pulse	0.30	3
K			2	18804.665	ug/l	1.60	822,430.92	6.155E+00	Pulse	0.30	3
Ca			2	24351.063	ug/l	0.69	55,004.70	4.116E-01	Pulse	0.30	3
Ti			2	1917.785	ug/l	1.93	31,472.07	2.355E-01	Pulse	0.30	3
V			2	191.795	ug/l	0.81	102,884.88	7.700E-01	Pulse	0.30	3
Cr			2	377.499	ug/l	0.97	255,302.52	1.911E+00	Pulse	0.30	3
Mn			2	1679.491	ug/l	0.73	624,487.58	4.674E+00	Pulse	0.30	3
Fe			2	154003.745	ug/l	2.01	83,094,712.26	6.219E+02	Analog	0.30	3
Co			2	44.550	ug/l	0.67	47,916.90	3.586E-01	Pulse	0.30	3
Ni			2	148.617	ug/l	0.62	42,157.24	3.155E-01	Pulse	0.30	3
Cu			2	779.523	ug/l	0.87	599,189.71	4.484E+00	Pulse	0.30	3
Zn			2	1061.524	ug/l	0.88	128,877.61	9.645E-01	Pulse	0.30	3
As			2	80.407	ug/l	0.90	5,630.32	4.214E-02	Pulse	1.00	3
Cd			2	4.678	ug/l	5.86	932.94	1.072E-03	Pulse	0.30	3
Sn			2	139.990	ug/l	0.93	61,290.67	7.041E-02	Pulse	0.30	3
Se			3	9.931	ug/l	2.26	168.93	1.060E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,042,739.92	0.77	95.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,178,696.53	0.81	103.9	Pulse	0.10	3
1	Ge		460,181.01	0.82	104.8	Pulse	0.10	3
1	Ge		637,906.53	0.84	103.7	Pulse	0.10	3
1	Rh		3,207,803.39	0.45	103.7	Pulse	0.10	3
1	In		3,472,144.64	0.89	107.6	Pulse	0.10	3
1	Tb		5,091,437.21	0.87	110.2	Pulse	0.10	3
1	Ho		528,548.65	0.66	115.3	Pulse	0.10	3
1	Bi		3,148,489.64	0.53	110.5	Pulse	0.10	3
2	Sc		133,625.24	0.59	109.6	Pulse	0.30	3
2	Ge		85,233.32	0.46	108.0	Pulse	0.30	3
2	Ge		128,143.87	0.96	106.8	Pulse	0.30	3
2	Rh		2,054,889.92	0.59	106.9	Pulse	0.30	3
2	In		870,480.71	0.73	108.2	Pulse	0.30	3
2	Tb		2,981,025.16	0.50	111.2	Pulse	0.30	3
2	Ho		312,954.95	0.28	114.3	Pulse	0.30	3
2	Bi		2,037,895.96	0.24	109.2	Pulse	0.30	3
3	Sc		159,113.35	0.52	108.1	Pulse	0.30	3
3	Ge		106,085.67	0.40	104.4	Pulse	0.30	3
3	Ge		159,339.95	0.91	104.0	Pulse	0.30	3
3	Rh		1,797,671.46	0.08	103.5	Pulse	0.30	3
3	Tb		3,375,550.84	0.94	106.1	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:31
Sample Name	jc94365-4
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	9/12/2019 13:37
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	5.142	ug/l	4.97	2,457.55	2.328E-03	Pulse	0.25	3
B			1	169.532	ug/l	2.62	67,863.61	6.429E-02	Pulse	0.15	3
Ca			1	23579.736	ug/l	0.83	1,762,174.35	8.020E-01	Pulse	0.10	3
Sr			1	216.091	ug/l	1.85	920,946.52	2.824E-01	Pulse	0.10	3
Mo			1	8.580	ug/l	7.30	6,845.10	2.100E-03	Pulse	0.10	3
Ag			1	13.170	ug/l	0.71	27,428.10	7.860E-03	Pulse	0.10	3
Sn			1	147.803	ug/l	0.41	201,555.99	5.776E-02	Pulse	0.10	3
Sb			1	4.090	ug/l	4.95	6,818.41	1.332E-03	Pulse	0.10	3
Ba			1	786.694	ug/l	1.32	537,707.48	1.050E-01	Pulse	0.10	3
Tl			1	1.229	ug/l	8.87	5,394.50	1.711E-03	Pulse	0.10	3
Pb			1	752.395	ug/l	0.48	1,089,456.63	3.456E-01	Pulse	0.10	3
Pb			1	724.272	ug/l	1.26	923,092.22	2.928E-01	Pulse	0.10	3
Pb			1	731.009	ug/l	0.79	4,292,355.95	1.362E+00	Pulse	0.10	3
Na			2	48672.999	ug/l	4.31	5,455,099.50	4.058E+01	Analog	0.30	3
Mg			2	38093.707	ug/l	4.26	1,984,695.13	1.476E+01	Pulse	0.30	3
Al			2	81529.621	ug/l	4.02	1,461,725.57	1.087E+01	Pulse	0.30	3
K			2	18849.803	ug/l	3.92	829,429.99	6.170E+00	Pulse	0.30	3
Ca			2	24397.067	ug/l	4.21	55,439.51	4.124E-01	Pulse	0.30	3
Ti			2	2047.208	ug/l	4.83	33,793.32	2.514E-01	Pulse	0.30	3
V			2	207.187	ug/l	4.72	111,765.96	8.316E-01	Pulse	0.30	3
Cr			2	443.895	ug/l	4.77	301,867.77	2.246E+00	Pulse	0.30	3
Mn			2	1612.771	ug/l	4.84	603,173.12	4.488E+00	Pulse	0.30	3
Fe			2	158896.687	ug/l	4.75	86,238,852.13	6.416E+02	Analog	0.30	3
Co			2	46.808	ug/l	4.59	50,639.82	3.768E-01	Pulse	0.30	3
Ni			2	164.282	ug/l	4.28	46,862.00	3.486E-01	Pulse	0.30	3
Cu			2	974.909	ug/l	4.20	752,867.73	5.601E+00	Pulse	0.30	3
Zn			2	1251.122	ug/l	4.66	152,557.70	1.135E+00	Pulse	0.30	3
As			2	85.423	ug/l	4.81	6,016.12	4.476E-02	Pulse	1.00	3
Cd			2	6.955	ug/l	4.17	1,360.65	1.581E-03	Pulse	0.30	3
Sn			2	149.038	ug/l	3.02	64,437.54	7.491E-02	Pulse	0.30	3
Se			3	10.664	ug/l	4.52	180.67	1.135E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,055,646.99	0.30	96.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,197,455.70	1.21	104.8	Pulse	0.10	3
1	Ge		462,687.01	0.86	105.4	Pulse	0.10	3
1	Ge		643,128.13	0.38	104.6	Pulse	0.10	3
1	Rh		3,261,337.76	1.61	105.4	Pulse	0.10	3
1	In		3,489,546.14	1.37	108.1	Pulse	0.10	3
1	Tb		5,121,746.49	1.56	110.9	Pulse	0.10	3
1	Ho		527,491.78	1.91	115.1	Pulse	0.10	3
1	Bi		3,152,769.54	1.24	110.6	Pulse	0.10	3
2	Sc		134,579.42	4.18	110.4	Pulse	0.30	3
2	Ge		85,152.86	2.83	107.9	Pulse	0.30	3
2	Ge		127,583.29	2.94	106.3	Pulse	0.30	3
2	Rh		2,040,800.82	4.30	106.2	Pulse	0.30	3
2	In		860,734.67	3.25	107.0	Pulse	0.30	3
2	Tb		2,957,339.26	3.52	110.3	Pulse	0.30	3
2	Ho		313,950.84	3.38	114.7	Pulse	0.30	3
2	Bi		2,034,177.84	3.68	109.0	Pulse	0.30	3
3	Sc		158,011.57	0.75	107.3	Pulse	0.30	3
3	Ge		105,777.12	1.02	104.1	Pulse	0.30	3
3	Ge		159,071.84	1.73	103.8	Pulse	0.30	3
3	Rh		1,802,525.27	0.81	103.8	Pulse	0.30	3
3	Tb		3,360,080.77	0.70	105.6	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:37
Sample Name	jc94365-5
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	9/12/2019 13:37
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	3.354	ug/l	4.89	1,633.44	1.523E-03	Pulse	0.25	3
B			1	139.435	ug/l	1.79	58,803.78	5.481E-02	Pulse	0.15	3
Ca			1	19091.393	ug/l	0.88	1,426,963.52	6.499E-01	Pulse	0.10	3
Sr			1	203.877	ug/l	1.82	868,632.49	2.665E-01	Pulse	0.10	3
Mo			1	5.332	ug/l	5.31	4,264.04	1.308E-03	Pulse	0.10	3
Ag			1	7.148	ug/l	2.84	14,920.85	4.270E-03	Pulse	0.10	3
Sn			1	115.302	ug/l	1.44	157,919.45	4.518E-02	Pulse	0.10	3
Sb			1	3.157	ug/l	11.56	5,311.11	1.035E-03	Pulse	0.10	3
Ba			1	580.491	ug/l	0.15	397,495.40	7.748E-02	Pulse	0.10	3
Tl			1	0.885	ug/l	2.86	3,950.69	1.252E-03	Pulse	0.10	3
Pb			1	535.442	ug/l	0.44	776,007.41	2.459E-01	Pulse	0.10	3
Pb			1	511.722	ug/l	0.23	652,801.79	2.069E-01	Pulse	0.10	3
Pb			1	517.076	ug/l	0.37	3,039,041.57	9.632E-01	Pulse	0.10	3
Na			2	53478.728	ug/l	2.21	5,878,596.71	4.458E+01	Analog	0.30	3
Mg			2	31824.599	ug/l	0.70	1,626,637.47	1.234E+01	Pulse	0.30	3
Al			2	64269.722	ug/l	0.88	1,130,505.27	8.573E+00	Pulse	0.30	3
K			2	15421.150	ug/l	0.34	667,635.69	5.063E+00	Pulse	0.30	3
Ca			2	20019.378	ug/l	1.23	44,651.81	3.386E-01	Pulse	0.30	3
Ti			2	1600.877	ug/l	2.01	25,926.96	1.966E-01	Pulse	0.30	3
V			2	160.417	ug/l	0.37	84,979.05	6.444E-01	Pulse	0.30	3
Cr			2	308.589	ug/l	0.82	206,056.58	1.563E+00	Pulse	0.30	3
Mn			2	1466.643	ug/l	0.72	538,206.94	4.081E+00	Pulse	0.30	3
Fe			2	129882.710	ug/l	0.25	69,163,830.58	5.245E+02	Analog	0.30	3
Co			2	36.403	ug/l	1.54	38,647.85	2.931E-01	Pulse	0.30	3
Ni			2	117.198	ug/l	1.57	32,841.71	2.490E-01	Pulse	0.30	3
Cu			2	640.537	ug/l	0.70	486,608.54	3.690E+00	Pulse	0.30	3
Zn			2	885.356	ug/l	0.32	106,283.27	8.060E-01	Pulse	0.30	3
As			2	68.373	ug/l	2.29	4,726.70	3.584E-02	Pulse	1.00	3
Cd			2	3.399	ug/l	3.37	681.92	7.855E-04	Pulse	0.30	3
Sn			2	115.481	ug/l	1.30	50,528.46	5.821E-02	Pulse	0.30	3
Se			3	7.691	ug/l	3.11	132.53	8.300E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,072,948.42	0.87	98.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,195,612.57	0.47	104.7	Pulse	0.10	3
1	Ge		465,062.90	0.61	105.9	Pulse	0.10	3
1	Ge		644,255.73	0.15	104.7	Pulse	0.10	3
1	Rh		3,260,113.70	1.34	105.3	Pulse	0.10	3
1	In		3,494,922.15	0.43	108.3	Pulse	0.10	3
1	Tb		5,130,313.57	0.58	111.1	Pulse	0.10	3
1	Ho		527,354.77	0.48	115.0	Pulse	0.10	3
1	Bi		3,155,199.95	0.69	110.7	Pulse	0.10	3
2	Sc		131,869.19	0.23	108.1	Pulse	0.30	3
2	Ge		85,761.27	0.58	108.7	Pulse	0.30	3
2	Ge		127,983.61	0.49	106.7	Pulse	0.30	3
2	Rh		2,073,743.95	0.31	107.9	Pulse	0.30	3
2	In		868,081.12	0.62	107.9	Pulse	0.30	3
2	Tb		2,977,112.66	0.93	111.0	Pulse	0.30	3
2	Ho		312,431.01	0.15	114.1	Pulse	0.30	3
2	Bi		2,033,224.16	0.31	108.9	Pulse	0.30	3
3	Sc		157,579.41	1.09	107.0	Pulse	0.30	3
3	Ge		105,687.89	0.29	104.0	Pulse	0.30	3
3	Ge		159,703.12	1.00	104.2	Pulse	0.30	3
3	Rh		1,815,864.37	0.70	104.6	Pulse	0.30	3
3	Tb		3,382,290.35	0.26	106.3	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:41
Sample Name	jc94365-6
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	9/12/2019 13:37
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	4.186	ug/l	3.12	2,022.82	1.898E-03	Pulse	0.25	3
B			1	154.649	ug/l	2.90	63,534.11	5.960E-02	Pulse	0.15	3
Ca			1	16600.846	ug/l	0.25	1,255,434.95	5.655E-01	Pulse	0.10	3
Sr			1	186.308	ug/l	0.31	803,903.68	2.435E-01	Pulse	0.10	3
Mo			1	10.251	ug/l	2.73	8,279.09	2.508E-03	Pulse	0.10	3
Ag			1	12.489	ug/l	1.33	26,509.74	7.454E-03	Pulse	0.10	3
Sn			1	135.354	ug/l	0.68	188,280.54	5.294E-02	Pulse	0.10	3
Sb			1	3.534	ug/l	9.45	5,994.69	1.155E-03	Pulse	0.10	3
Ba			1	693.274	ug/l	1.87	480,110.65	9.253E-02	Pulse	0.10	3
Tl			1	1.232	ug/l	3.92	5,437.89	1.715E-03	Pulse	0.10	3
Pb			1	705.212	ug/l	0.65	1,026,909.90	3.239E-01	Pulse	0.10	3
Pb			1	677.531	ug/l	0.52	868,429.39	2.739E-01	Pulse	0.10	3
Pb			1	686.537	ug/l	0.64	4,054,069.10	1.279E+00	Pulse	0.10	3
Na			2	54569.455	ug/l	5.30	6,053,636.70	4.549E+01	Analog	0.30	3
Mg			2	35604.592	ug/l	3.82	1,837,092.15	1.380E+01	Pulse	0.30	3
Al			2	75768.861	ug/l	3.69	1,345,313.42	1.011E+01	Pulse	0.30	3
K			2	17692.651	ug/l	3.43	771,649.59	5.796E+00	Pulse	0.30	3
Ca			2	17197.962	ug/l	2.07	38,760.55	2.910E-01	Pulse	0.30	3
Ti			2	1926.808	ug/l	2.65	31,508.85	2.366E-01	Pulse	0.30	3
V			2	186.788	ug/l	2.91	99,850.13	7.499E-01	Pulse	0.30	3
Cr			2	415.238	ug/l	3.21	279,758.64	2.101E+00	Pulse	0.30	3
Mn			2	1306.943	ug/l	3.05	484,249.04	3.637E+00	Pulse	0.30	3
Fe			2	148434.243	ug/l	2.58	79,815,325.72	5.994E+02	Analog	0.30	3
Co			2	43.810	ug/l	3.00	46,952.95	3.526E-01	Pulse	0.30	3
Ni			2	151.013	ug/l	3.94	42,675.23	3.206E-01	Pulse	0.30	3
Cu			2	946.347	ug/l	2.44	724,045.06	5.438E+00	Pulse	0.30	3
Zn			2	1190.646	ug/l	3.75	143,857.60	1.081E+00	Pulse	0.30	3
As			2	74.044	ug/l	3.62	5,166.83	3.881E-02	Pulse	1.00	3
Cd			2	6.937	ug/l	3.42	1,356.12	1.577E-03	Pulse	0.30	3
Sn			2	138.949	ug/l	2.99	60,077.22	6.989E-02	Pulse	0.30	3
Se			3	8.969	ug/l	5.40	156.20	9.613E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,066,066.47	0.50	97.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,219,873.20	0.69	105.9	Pulse	0.10	3
1	Ge		471,646.21	1.13	107.4	Pulse	0.10	3
1	Ge		655,630.93	1.04	106.6	Pulse	0.10	3
1	Rh		3,301,142.24	0.59	106.7	Pulse	0.10	3
1	In		3,556,270.82	0.39	110.2	Pulse	0.10	3
1	Tb		5,188,975.13	0.61	112.3	Pulse	0.10	3
1	Ho		532,088.68	0.25	116.1	Pulse	0.10	3
1	Bi		3,170,543.81	1.18	111.3	Pulse	0.10	3
2	Sc		133,220.45	2.96	109.2	Pulse	0.30	3
2	Ge		85,777.01	1.66	108.7	Pulse	0.30	3
2	Ge		127,776.41	1.79	106.5	Pulse	0.30	3
2	Rh		2,036,519.37	2.94	105.9	Pulse	0.30	3
2	In		860,016.74	2.46	106.9	Pulse	0.30	3
2	Tb		2,945,280.30	3.00	109.8	Pulse	0.30	3
2	Ho		310,298.31	3.38	113.3	Pulse	0.30	3
2	Bi		2,014,954.15	1.61	108.0	Pulse	0.30	3
3	Sc		159,406.41	0.72	108.3	Pulse	0.30	3
3	Ge		107,352.96	0.64	105.7	Pulse	0.30	3
3	Ge		162,507.92	0.36	106.1	Pulse	0.30	3
3	Rh		1,823,334.16	0.67	105.0	Pulse	0.30	3
3	Tb		3,411,706.32	0.60	107.2	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:46
Sample Name	jc94365-7
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	4.774	ug/l	7.67	938.71	8.722E-04	Pulse	0.25	3
B			1	148.632	ug/l	0.28	31,892.47	2.962E-02	Pulse	0.15	3
Ca			1	21475.516	ug/l	0.21	639,869.65	2.942E-01	Pulse	0.10	3
Sr			1	440.943	ug/l	0.97	767,234.55	2.306E-01	Pulse	0.10	3
Mo			1	17.741	ug/l	4.30	5,784.60	1.738E-03	Pulse	0.10	3
Ag			1	29.500	ug/l	1.45	25,134.16	7.043E-03	Pulse	0.10	3
Sn			1	253.958	ug/l	0.93	142,297.59	3.988E-02	Pulse	0.10	3
Sb			1	9.806	ug/l	6.93	6,715.05	1.278E-03	Pulse	0.10	3
Ba			1	2323.106	ug/l	2.93	651,550.70	1.240E-01	Pulse	0.10	3
Tl			1	1.598	ug/l	4.62	2,963.75	9.241E-04	Pulse	0.10	3
Pb			1	1495.990	ug/l	0.14	881,523.27	2.749E-01	Pulse	0.10	3
Pb			1	1446.851	ug/l	0.90	750,428.43	2.340E-01	Pulse	0.10	3
Pb			1	1457.586	ug/l	0.72	3,482,964.84	1.086E+00	Pulse	0.10	3
Na			2	45187.326	ug/l	0.39	2,006,862.14	1.513E+01	Pulse	0.30	3
Mg			2	27947.745	ug/l	0.23	575,111.68	4.334E+00	Pulse	0.30	3
Al			2	66110.910	ug/l	1.11	468,580.55	3.532E+00	Pulse	0.30	3
K			2	15015.730	ug/l	0.76	268,514.86	2.024E+00	Pulse	0.30	3
Ca			2	22499.090	ug/l	1.80	20,278.02	1.528E-01	Pulse	0.30	3
Ti			2	1992.419	ug/l	2.99	12,985.20	9.788E-02	Pulse	0.30	3
V			2	236.228	ug/l	1.62	50,499.91	3.806E-01	Pulse	0.30	3
Cr			2	886.302	ug/l	1.56	238,094.11	1.795E+00	Pulse	0.30	3
Mn			2	1057.002	ug/l	1.54	156,204.36	1.177E+00	Pulse	0.30	3
Fe			2	133163.809	ug/l	1.69	28,539,003.31	2.151E+02	Analog	0.30	3
Co			2	46.846	ug/l	2.50	20,029.80	1.510E-01	Pulse	0.30	3
Ni			2	223.748	ug/l	1.07	25,274.00	1.905E-01	Pulse	0.30	3
Cu			2	3660.839	ug/l	0.26	1,114,194.78	8.397E+00	Pulse	0.30	3
Zn			2	2375.340	ug/l	1.18	114,665.76	8.643E-01	Pulse	0.30	3
As			2	205.137	ug/l	0.92	5,704.68	4.300E-02	Pulse	1.00	3
Cd			2	45.799	ug/l	1.68	3,622.24	4.124E-03	Pulse	0.30	3
Sn			2	252.707	ug/l	1.45	44,838.13	5.104E-02	Pulse	0.30	3
Se			3	46.017	ug/l	2.90	308.00	1.931E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,076,717.47	0.87	98.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,175,245.85	0.75	103.7	Pulse	0.10	3
1	Ge		465,231.21	0.64	106.0	Pulse	0.10	3
1	Ge		646,878.22	0.40	105.2	Pulse	0.10	3
1	Rh		3,327,746.72	0.54	107.5	Pulse	0.10	3
1	In		3,568,513.36	0.51	110.6	Pulse	0.10	3
1	Tb		5,256,320.96	2.66	113.8	Mix	0.10	3
1	Ho		524,396.59	0.59	114.4	Pulse	0.10	3
1	Bi		3,207,248.08	0.63	112.5	Pulse	0.10	3
2	Sc		132,685.62	0.94	108.8	Pulse	0.30	3
2	Ge		85,955.60	0.95	108.9	Pulse	0.30	3
2	Ge		128,234.52	0.41	106.9	Pulse	0.30	3
2	Rh		2,090,807.76	0.21	108.8	Pulse	0.30	3
2	In		878,479.00	0.45	109.2	Pulse	0.30	3
2	Tb		2,986,106.62	0.71	111.4	Pulse	0.30	3
2	Ho		309,243.89	0.62	113.0	Pulse	0.30	3
2	Bi		2,076,752.07	0.79	111.3	Pulse	0.30	3
3	Sc		156,233.48	0.35	106.1	Pulse	0.30	3
3	Ge		106,174.18	2.16	104.5	Pulse	0.30	3
3	Ge		159,569.70	1.23	104.2	Pulse	0.30	3
3	Rh		1,858,548.33	0.19	107.0	Pulse	0.30	3
3	Tb		3,398,645.91	0.41	106.8	Pulse	0.30	3

Quantitation Report

File Name	054SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:51
Sample Name	jc94365-7
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	9/12/2019 13:37
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	4.842	ug/l	11.17	492.01	4.483E-04	Pulse	0.25	3
B			1	165.668	ug/l	2.90	23,405.34	2.133E-02	Pulse	0.15	3
Ca			1	23044.869	ug/l	0.16	345,829.89	1.593E-01	Pulse	0.10	3
Sr			1	462.259	ug/l	0.91	403,479.62	1.209E-01	Pulse	0.10	3
Mo			1	19.315	ug/l	6.28	3,167.10	9.492E-04	Pulse	0.10	3
Ag			1	31.994	ug/l	2.23	13,613.05	3.823E-03	Pulse	0.10	3
Sn			1	265.187	ug/l	4.16	75,069.28	2.109E-02	Pulse	0.10	3
Sb			1	9.966	ug/l	5.57	3,450.51	6.659E-04	Pulse	0.10	3
Ba			1	2469.841	ug/l	1.28	341,785.40	6.593E-02	Pulse	0.10	3
Tl			1	1.355	ug/l	2.83	1,390.12	4.322E-04	Pulse	0.10	3
Pb			1	1570.783	ug/l	0.52	464,300.86	1.443E-01	Pulse	0.10	3
Pb			1	1510.182	ug/l	0.77	392,927.05	1.221E-01	Pulse	0.10	3
Pb			1	1531.115	ug/l	0.81	1,835,307.82	5.705E-01	Pulse	0.10	3
Na			2	48454.198	ug/l	1.02	1,070,868.99	8.150E+00	Pulse	0.30	3
Mg			2	30411.343	ug/l	0.43	309,982.94	2.359E+00	Pulse	0.30	3
Al			2	71415.356	ug/l	0.57	251,075.31	1.911E+00	Pulse	0.30	3
K			2	15816.276	ug/l	0.59	145,325.39	1.106E+00	Pulse	0.30	3
Ca			2	24691.603	ug/l	3.25	11,081.60	8.435E-02	Pulse	0.30	3
Ti			2	2186.260	ug/l	4.20	7,056.03	5.371E-02	Pulse	0.30	3
V			2	256.741	ug/l	0.66	27,330.41	2.080E-01	Pulse	0.30	3
Cr			2	953.449	ug/l	0.52	127,066.98	9.671E-01	Pulse	0.30	3
Mn			2	1141.740	ug/l	0.97	83,614.24	6.364E-01	Pulse	0.30	3
Fe			2	143393.760	ug/l	1.28	15,218,543.28	1.158E+02	Analog	0.30	3
Co			2	51.104	ug/l	1.59	10,835.90	8.247E-02	Pulse	0.30	3
Ni			2	233.344	ug/l	3.03	13,123.10	9.989E-02	Pulse	0.30	3
Cu			2	3962.685	ug/l	0.20	598,971.10	4.559E+00	Pulse	0.30	3
Zn			2	2553.340	ug/l	1.10	61,605.26	4.689E-01	Pulse	0.30	3
As			2	220.602	ug/l	2.57	3,044.29	2.317E-02	Pulse	1.00	3
Cd			2	48.179	ug/l	3.03	1,903.21	2.181E-03	Pulse	0.30	3
Sn			2	273.189	ug/l	1.44	24,368.97	2.792E-02	Pulse	0.30	3
Se			3	47.582	ug/l	1.10	162.73	1.017E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,097,320.95	1.08	100.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,171,137.62	1.47	103.5	Pulse	0.10	3
1	Ge		468,108.51	1.29	106.6	Pulse	0.10	3
1	Ge		656,359.64	0.36	106.7	Pulse	0.10	3
1	Rh		3,337,131.41	0.61	107.8	Pulse	0.10	3
1	In		3,560,296.10	1.55	110.3	Pulse	0.10	3
1	Tb		5,184,341.18	1.36	112.2	Pulse	0.10	3
1	Ho		517,233.03	0.30	112.8	Pulse	0.10	3
1	Bi		3,217,022.66	1.05	112.9	Pulse	0.10	3
2	Sc		131,392.24	0.55	107.8	Pulse	0.30	3
2	Ge		85,720.15	1.50	108.6	Pulse	0.30	3
2	Ge		128,355.44	1.19	107.0	Pulse	0.30	3
2	Rh		2,108,786.03	0.40	109.7	Pulse	0.30	3
2	In		872,856.43	0.87	108.5	Pulse	0.30	3
2	Tb		2,962,275.51	0.14	110.5	Pulse	0.30	3
2	Ho		306,151.30	1.05	111.8	Pulse	0.30	3
2	Bi		2,073,095.27	0.48	111.1	Pulse	0.30	3
3	Sc		154,330.25	0.31	104.8	Pulse	0.30	3
3	Ge		106,045.28	1.31	104.4	Pulse	0.30	3
3	Ge		159,932.13	0.88	104.4	Pulse	0.30	3
3	Rh		1,865,330.00	0.74	107.4	Pulse	0.30	3
3	Tb		3,400,523.76	0.08	106.9	Pulse	0.30	3

Quantitation Report

File Name	055_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 14:56
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	9/12/2019 13:37
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	49.558	ug/l	0.29	246,196.48	2.232E-01	Pulse	0.25	3
B			1	96.727	ug/l	0.35	348,021.75	3.155E-01	Pulse	0.15	3
Ca			1	5078.009	ug/l	0.44	3,741,480.05	1.723E+00	Pulse	0.10	3
Sr			1	52.261	ug/l	0.14	2,216,165.59	6.829E-01	Pulse	0.10	3
Mo			1	51.628	ug/l	0.96	408,877.12	1.260E-01	Pulse	0.10	3
Ag			1	49.564	ug/l	0.70	1,036,832.98	2.955E-01	Pulse	0.10	3
Sn			1	50.623	ug/l	0.43	689,245.54	1.964E-01	Pulse	0.10	3
Sb			1	51.461	ug/l	3.45	841,204.00	1.634E-01	Pulse	0.10	3
Ba			1	49.663	ug/l	3.29	341,216.33	6.629E-02	Pulse	0.10	3
Tl			1	50.568	ug/l	0.87	2,081,795.07	6.754E-01	Pulse	0.10	3
Pb			1	50.712	ug/l	0.64	718,035.02	2.329E-01	Pulse	0.10	3
Pb			1	51.008	ug/l	1.12	635,701.20	2.062E-01	Pulse	0.10	3
Pb			1	50.524	ug/l	0.60	2,901,074.37	9.411E-01	Pulse	0.10	3
Na			2	4963.652	ug/l	0.77	5,410,718.68	4.138E+01	Analog	0.30	3
Mg			2	4824.437	ug/l	0.77	2,444,752.26	1.870E+01	Pulse	0.30	3
Al			2	4841.084	ug/l	0.77	844,526.50	6.459E+00	Pulse	0.30	3
K			2	4968.413	ug/l	0.53	2,107,917.90	1.612E+01	Pulse	0.30	3
Ca			2	5096.543	ug/l	1.15	112,484.74	8.604E-01	Pulse	0.30	3
Ti			2	48.929	ug/l	3.43	7,856.39	6.010E-02	Pulse	0.30	3
V			2	50.505	ug/l	0.62	264,537.34	2.023E+00	Pulse	0.30	3
Cr			2	50.103	ug/l	0.56	331,383.77	2.535E+00	Pulse	0.30	3
Mn			2	50.634	ug/l	0.94	184,313.16	1.410E+00	Pulse	0.30	3
Fe			2	5155.835	ug/l	0.10	27,222,624.47	2.082E+02	Analog	0.30	3
Co			2	50.561	ug/l	0.97	531,741.08	4.067E+00	Pulse	0.30	3
Ni			2	49.905	ug/l	0.93	138,141.56	1.057E+00	Pulse	0.30	3
Cu			2	50.364	ug/l	0.40	380,173.69	2.908E+00	Pulse	0.30	3
Zn			2	50.474	ug/l	0.57	60,603.59	4.635E-01	Pulse	0.30	3
As			2	51.139	ug/l	0.53	34,963.54	2.674E-01	Pulse	1.00	3
Cd			2	50.613	ug/l	0.44	97,758.34	1.133E-01	Pulse	0.30	3
Sn			2	50.359	ug/l	0.46	217,016.58	2.514E-01	Pulse	0.30	3
Se			3	195.927	ug/l	0.47	31,801.14	2.013E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,102,963.31	0.11	101.2	Pulse	0.10	3
1	Sc		2,170,917.73	0.18	103.5	Pulse	0.10	3
1	Ge		464,752.36	0.69	105.8	Pulse	0.10	3

Quantitation Report

1	Ge		652,010.80	0.74	106.0	Pulse	0.10	3
1	Rh		3,245,274.22	0.12	104.9	Pulse	0.10	3
1	In		3,508,665.40	0.85	108.7	Pulse	0.10	3
1	Tb		5,151,433.78	3.61	111.5	Mix	0.10	3
1	Ho		508,060.97	0.76	110.8	Pulse	0.10	3
1	Bi		3,082,662.76	1.23	108.2	Pulse	0.10	3
2	Sc		130,742.58	0.49	107.2	Pulse	0.30	3
2	Ge		84,900.15	0.02	107.6	Pulse	0.30	3
2	Ge		128,846.63	0.44	107.4	Pulse	0.30	3
2	Rh		2,060,825.82	0.63	107.2	Pulse	0.30	3
2	In		863,201.40	0.48	107.3	Pulse	0.30	3
2	Tb		2,956,925.51	0.34	110.3	Pulse	0.30	3
2	Ho		303,001.88	1.32	110.7	Pulse	0.30	3
2	Bi		1,995,213.60	0.79	106.9	Pulse	0.30	3
3	Sc		152,045.40	0.89	103.3	Pulse	0.30	3
3	Ge		104,265.28	1.25	102.6	Pulse	0.30	3
3	Ge		157,997.22	0.94	103.1	Pulse	0.30	3
3	Rh		1,811,186.73	0.52	104.3	Pulse	0.30	3
3	Tb		3,374,279.31	0.60	106.1	Pulse	0.30	3

Quantitation Report

File Name	056_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:01
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	9/12/2019 13:37
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	33.32	84.00	7.673E-05	Pulse	0.25	3
B			1	3.344	ug/l	2.18	23,420.90	2.143E-02	Pulse	0.15	3
Ca			1	0.075	ug/l	796.52	6,754.97	3.172E-03	Pulse	0.10	3
Sr			1	0.010	ug/l	5.32	853.39	2.598E-04	Pulse	0.10	3
Mo			1	0.076	ug/l	10.37	633.37	1.929E-04	Pulse	0.10	3
Ag			1	0.013	ug/l	25.52	293.35	8.403E-05	Pulse	0.10	3
Sn			1	0.087	ug/l	15.45	3,170.44	9.078E-04	Pulse	0.10	3
Sb			1	0.126	ug/l	20.06	2,186.90	4.323E-04	Pulse	0.10	3
Ba			1	0.004	ug/l	175.70	136.67	2.701E-05	Pulse	0.10	3
Tl			1	0.014	ug/l	25.12	823.39	2.623E-04	Pulse	0.10	3
Pb			1	0.039	ug/l	34.63	790.06	2.511E-04	Pulse	0.10	3
Pb			1	0.031	ug/l	30.75	600.04	1.911E-04	Pulse	0.10	3
Pb			1	0.037	ug/l	1.83	3,133.60	9.972E-04	Pulse	0.10	3
Na			2	5.867	ug/l	179.16	17,444.80	1.364E-01	Pulse	0.30	3
Mg			2	0.691	ug/l	16.81	615.58	4.808E-03	Pulse	0.30	3
Al			2	-2.462	ug/l	-10.88	515.57	4.026E-03	Pulse	0.30	3
K			2	-1.889	ug/l	-35.58	10,098.71	7.887E-02	Pulse	0.30	3
Ca			2	0.258	ug/l	492.54	144.45	1.129E-03	Pulse	0.30	3
Ti			2	0.042	ug/l	57.84	7.78	6.070E-05	Pulse	0.30	3
V			2	-0.018	ug/l	-47.89	232.23	1.813E-03	Pulse	0.30	3
Cr			2	-0.010	ug/l	-74.24	441.12	3.445E-03	Pulse	0.30	3
Mn			2	-0.002	ug/l	-285.17	135.56	1.058E-03	Pulse	0.30	3
Fe			2	1.146	ug/l	3.11	8,895.83	6.947E-02	Pulse	0.30	3
Co			2	0.005	ug/l	32.18	84.43	6.595E-04	Pulse	0.30	3
Ni			2	0.003	ug/l	313.18	161.11	1.258E-03	Pulse	0.30	3
Cu			2	-0.087	ug/l	-17.06	3,199.24	2.498E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.195	ug/l	-19.95	982.26	7.671E-03	Pulse	0.30	3
As			2	0.014	ug/l	46.73	23.00	1.795E-04	Pulse	1.00	3
Cd			2	-0.001	ug/l	-170.87	19.92	2.298E-05	Pulse	0.30	3
Sn			2	0.138	ug/l	6.41	1,218.95	1.406E-03	Pulse	0.30	3
Se			3	0.079	ug/l	1.00	19.07	1.211E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,093,045.80	0.88	100.3	Pulse	0.10	3
1	Sc		2,128,849.34	0.99	101.5	Pulse	0.10	3
1	Ge		461,001.01	0.63	105.0	Pulse	0.10	3
1	Ge		640,926.81	0.42	104.2	Pulse	0.10	3
1	Rh		3,285,748.49	0.95	106.2	Pulse	0.10	3
1	In		3,493,241.78	0.63	108.2	Pulse	0.10	3
1	Tb		5,056,293.36	0.37	109.5	Pulse	0.10	3
1	Ho		504,196.87	1.42	110.0	Pulse	0.10	3
1	Bi		3,142,153.18	0.86	110.3	Pulse	0.10	3
2	Sc		128,057.76	0.41	105.0	Pulse	0.30	3
2	Ge		84,492.40	1.23	107.1	Pulse	0.30	3
2	Ge		127,164.80	0.58	106.0	Pulse	0.30	3
2	Rh		2,086,158.87	0.14	108.5	Pulse	0.30	3
2	In		866,750.62	0.42	107.8	Pulse	0.30	3
2	Tb		2,921,633.43	0.34	109.0	Pulse	0.30	3
2	Ho		299,228.19	0.25	109.3	Pulse	0.30	3
2	Bi		2,035,922.28	0.69	109.1	Pulse	0.30	3
3	Sc		150,158.62	1.03	102.0	Pulse	0.30	3
3	Ge		104,614.12	0.16	103.0	Pulse	0.30	3
3	Ge		157,450.80	0.30	102.8	Pulse	0.30	3
3	Rh		1,852,931.46	0.17	106.7	Pulse	0.30	3
3	Tb		3,373,050.35	0.31	106.0	Pulse	0.30	3

Quantitation Report

File Name	057SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:06
Sample Name	jc94441-4ar
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	9/12/2019 13:37
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	4.930	ug/l	6.39	481.35	4.562E-04	Pulse	0.25	3
B			1	197.417	ug/l	2.36	24,618.25	2.333E-02	Pulse	0.15	3
Ca			1	534566.626	ug/l	0.90	7,548,660.51	3.625E+00	Analog	0.10	3
Sr			1	1328.030	ug/l	0.61	1,106,915.92	3.471E-01	Pulse	0.10	3
Mo			1	12.997	ug/l	4.78	2,043.55	6.409E-04	Pulse	0.10	3
Ag			1	1.210	ug/l	7.99	520.03	1.522E-04	Pulse	0.10	3
Sn			1	44.568	ug/l	2.65	13,736.53	4.021E-03	Pulse	0.10	3
Sb			1	6.139	ug/l	9.80	2,103.56	4.228E-04	Pulse	0.10	3
Ba			1	1139.617	ug/l	1.04	151,394.08	3.043E-02	Pulse	0.10	3
Tl			1	1.107	ug/l	17.58	1,126.76	3.661E-04	Pulse	0.10	3
Pb			1	1015.840	ug/l	1.72	287,487.80	9.337E-02	Pulse	0.10	3
Pb			1	991.193	ug/l	1.75	246,913.81	8.019E-02	Pulse	0.10	3
Pb			1	996.117	ug/l	0.80	1,143,224.90	3.713E-01	Pulse	0.10	3
Na			2	2740.331	ug/l	1.05	66,877.71	5.435E-01	Pulse	0.30	3
Mg			2	86564.186	ug/l	0.78	825,809.69	6.712E+00	Pulse	0.30	3
Al			2	128979.405	ug/l	0.35	423,949.62	3.445E+00	Pulse	0.30	3
K			2	4686.479	ug/l	1.39	47,684.42	3.875E-01	Pulse	0.30	3
Ca			2	543846.175	ug/l	1.14	225,776.60	1.835E+00	Pulse	0.30	3
Ti			2	8875.971	ug/l	1.37	26,825.04	2.180E-01	Pulse	0.30	3
V			2	4008.995	ug/l	0.66	395,066.26	3.211E+00	Pulse	0.30	3
Cr			2	12088.119	ug/l	0.80	1,503,000.08	1.222E+01	Pulse	0.30	3
Mn			2	5616.264	ug/l	0.66	384,658.63	3.126E+00	Pulse	0.30	3
Fe			2	503655.009	ug/l	1.16	50,052,016.90	4.068E+02	Analog	0.30	3
Co			2	625.267	ug/l	1.54	123,795.53	1.006E+00	Pulse	0.30	3
Ni			2	2074.564	ug/l	1.54	108,111.37	8.787E-01	Pulse	0.30	3
Cu			2	296.098	ug/l	0.96	45,321.20	3.683E-01	Pulse	0.30	3
Zn			2	1666.720	ug/l	1.20	38,062.00	3.093E-01	Pulse	0.30	3
As			2	49.956	ug/l	4.16	655.35	5.327E-03	Pulse	1.00	3
Cd			2	2.322	ug/l	19.00	106.52	1.291E-04	Pulse	0.30	3
Sn			2	47.106	ug/l	1.79	4,470.68	5.409E-03	Pulse	0.30	3
Se			3	6.351	ug/l	12.94	25.67	1.705E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,055,139.03	0.65	96.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,082,309.24	0.33	99.3	Pulse	0.10	3
1	Ge		447,981.32	0.62	102.0	Pulse	0.10	3
1	Ge		621,185.67	0.48	101.0	Pulse	0.10	3
1	Rh		3,188,826.93	0.16	103.0	Pulse	0.10	3
1	In		3,416,406.32	0.26	105.8	Pulse	0.10	3
1	Tb		4,974,356.70	0.30	107.7	Pulse	0.10	3
1	Ho		497,704.31	0.21	108.6	Pulse	0.10	3
1	Bi		3,079,215.79	0.88	108.1	Pulse	0.10	3
2	Sc		123,049.38	0.89	100.9	Pulse	0.30	3
2	Ge		80,301.82	1.70	101.8	Pulse	0.30	3
2	Ge		120,530.88	1.53	100.5	Pulse	0.30	3
2	Rh		1,984,019.29	0.53	103.2	Pulse	0.30	3
2	In		826,543.62	1.60	102.8	Pulse	0.30	3
2	Tb		2,849,305.44	1.44	106.3	Pulse	0.30	3
2	Ho		294,002.33	1.14	107.4	Pulse	0.30	3
2	Bi		1,976,298.25	0.19	105.9	Pulse	0.30	3
3	Sc		145,702.56	1.87	99.0	Pulse	0.30	3
3	Ge		100,399.06	0.60	98.8	Pulse	0.30	3
3	Ge		150,604.40	0.80	98.3	Pulse	0.30	3
3	Rh		1,757,907.85	0.28	101.3	Pulse	0.30	3
3	Tb		3,315,139.45	0.33	104.2	Pulse	0.30	3

Quantitation Report

File Name	058SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:11
Sample Name	mp17229-ps1
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	9/12/2019 13:37
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	200.489	ug/l	1.53	193,670.53	1.806E-01	Pulse	0.25	3
B			1	224.005	ug/l	1.07	162,989.86	1.520E-01	Pulse	0.15	3
Ca			1	30720.245	ug/l	0.96	4,674,523.37	2.085E+00	Pulse	0.10	3
Sr			1	367.870	ug/l	0.82	3,068,183.81	9.613E-01	Pulse	0.10	3
Mo			1	215.861	ug/l	0.66	336,258.51	1.054E-01	Pulse	0.10	3
Ag			1	99.213	ug/l	0.99	409,301.62	1.183E-01	Pulse	0.10	3
Sn			1	227.746	ug/l	0.74	611,627.61	1.768E-01	Pulse	0.10	3
Sb			1	205.555	ug/l	0.40	660,604.03	1.306E-01	Pulse	0.10	3
Ba			1	913.143	ug/l	0.49	1,233,078.34	2.437E-01	Pulse	0.10	3
Tl			1	195.654	ug/l	0.34	1,605,240.76	5.226E-01	Pulse	0.10	3
Pb			1	695.552	ug/l	0.75	1,962,216.01	6.389E-01	Pulse	0.10	3
Pb			1	673.662	ug/l	0.68	1,672,822.11	5.446E-01	Pulse	0.10	3
Pb			1	682.055	ug/l	0.72	7,802,910.56	2.540E+00	Pulse	0.10	3
Na			2	10481.438	ug/l	0.14	2,338,880.67	1.753E+01	Pulse	0.30	3
Mg			2	17794.831	ug/l	0.38	1,840,704.16	1.379E+01	Pulse	0.30	3
Al			2	57698.157	ug/l	0.20	2,053,204.71	1.539E+01	Pulse	0.30	3
K			2	13844.617	ug/l	0.52	1,203,993.11	9.023E+00	Pulse	0.30	3
Ca			2	31042.557	ug/l	0.18	139,820.14	1.048E+00	Pulse	0.30	3
Ti			2	2116.179	ug/l	1.40	69,357.11	5.198E-01	Pulse	0.30	3
V			2	378.918	ug/l	0.67	404,964.31	3.035E+00	Pulse	0.30	3
Cr			2	330.782	ug/l	1.17	446,415.31	3.345E+00	Pulse	0.30	3
Mn			2	861.577	ug/l	0.49	639,826.33	4.795E+00	Pulse	0.30	3
Fe			2	181900.130	ug/l	0.56	196,024,009.99	1.469E+03	Analog	0.30	3
Co			2	237.096	ug/l	0.40	508,990.92	3.814E+00	Pulse	0.30	3
Ni			2	1187.235	ug/l	0.52	670,247.30	5.023E+00	Pulse	0.30	3
Cu			2	231356.763	ug/l	0.71	352,811,843.76	2.644E+03	Analog	0.30	3
Zn			2	775.420	ug/l	1.27	187,439.06	1.405E+00	Pulse	0.30	3
As			2	296.946	ug/l	0.21	41,438.26	3.105E-01	Pulse	1.00	3
Cd			2	199.524	ug/l	1.40	75,044.84	8.930E-02	Pulse	0.30	3
Sn			2	228.402	ug/l	0.82	191,719.84	2.281E-01	Pulse	0.30	3
Se			3	541.723	ug/l	1.52	17,260.87	1.113E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,072,402.80	0.85	98.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,242,567.16	1.07	106.9	Pulse	0.10	3
1	Ge		464,631.54	0.93	105.8	Pulse	0.10	3
1	Ge		642,879.80	1.04	104.5	Pulse	0.10	3
1	Rh		3,191,605.37	0.74	103.1	Pulse	0.10	3
1	In		3,459,321.28	0.86	107.2	Pulse	0.10	3
1	Tb		5,059,522.73	0.31	109.5	Pulse	0.10	3
1	Ho		544,973.61	0.41	118.9	Pulse	0.10	3
1	Bi		3,071,480.37	0.32	107.8	Pulse	0.10	3
2	Sc		133,436.83	0.31	109.4	Pulse	0.30	3
2	Ge		84,040.46	0.14	106.5	Pulse	0.30	3
2	Ge		125,042.14	0.99	104.2	Pulse	0.30	3
2	Rh		1,989,334.09	1.00	103.5	Pulse	0.30	3
2	In		840,466.69	1.00	104.5	Pulse	0.30	3
2	Tb		2,905,064.05	0.15	108.3	Pulse	0.30	3
2	Ho		321,291.21	0.58	117.4	Pulse	0.30	3
2	Bi		1,958,355.62	0.71	104.9	Pulse	0.30	3
3	Sc		156,845.54	1.27	106.5	Pulse	0.30	3
3	Ge		104,863.53	0.21	103.2	Pulse	0.30	3
3	Ge		155,068.89	1.40	101.2	Pulse	0.30	3
3	Rh		1,774,413.05	0.17	102.2	Pulse	0.30	3
3	Tb		3,384,204.59	0.60	106.4	Pulse	0.30	3

Quantitation Report

File Name	059SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:16
Sample Name	mp17232a-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	9/12/2019 13:37
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	0.020	ug/l	45.62	53.33	5.695E-05	Pulse	0.25	3
B			1	6.570	ug/l	2.96	19,918.65	2.124E-02	Pulse	0.15	3
Ca			1	27.546	ug/l	2.00	14,229.89	7.813E-03	Pulse	0.10	3
Sr			1	0.068	ug/l	17.84	1,680.15	5.680E-04	Pulse	0.10	3
Mo			1	0.299	ug/l	12.26	1,096.75	3.708E-04	Pulse	0.10	3
Ag			1	0.021	ug/l	19.11	223.34	6.926E-05	Pulse	0.10	3
Sn			1	0.872	ug/l	1.01	7,281.99	2.258E-03	Pulse	0.10	3
Sb			1	0.264	ug/l	0.40	2,193.57	4.520E-04	Pulse	0.10	3
Ba			1	0.424	ug/l	8.12	1,476.79	3.041E-04	Pulse	0.10	3
Tl			1	0.030	ug/l	16.88	850.06	2.722E-04	Pulse	0.10	3
Pb			1	0.162	ug/l	3.35	1,390.12	4.451E-04	Pulse	0.10	3
Pb			1	0.151	ug/l	10.84	1,163.42	3.725E-04	Pulse	0.10	3
Pb			1	0.157	ug/l	5.93	5,507.31	1.763E-03	Pulse	0.10	3
Na			2	9.704	ug/l	10.65	14,123.80	1.279E-01	Pulse	0.30	3
Mg			2	4.978	ug/l	3.19	1,300.06	1.177E-02	Pulse	0.30	3
Al			2	9.031	ug/l	22.45	1,471.19	1.333E-02	Pulse	0.30	3
K			2	-1.116	ug/l	-140.77	9,182.62	8.316E-02	Pulse	0.30	3
Ca			2	23.663	ug/l	10.99	340.01	3.080E-03	Pulse	0.30	3
Ti			2	0.870	ug/l	68.38	60.00	5.427E-04	Pulse	0.30	3
V			2	0.100	ug/l	2.96	502.24	4.549E-03	Pulse	0.30	3
Cr			2	0.685	ug/l	6.59	2,345.75	2.125E-02	Pulse	0.30	3
Mn			2	0.292	ug/l	12.26	571.13	5.172E-03	Pulse	0.30	3
Fe			2	18.900	ug/l	2.47	44,697.59	4.048E-01	Pulse	0.30	3
Co			2	0.030	ug/l	26.34	159.88	1.447E-03	Pulse	0.30	3
Ni			2	0.186	ug/l	22.17	347.79	3.149E-03	Pulse	0.30	3
Cu			2	21.548	ug/l	13.64	71,295.02	6.456E-01	Pulse	0.30	3
Zn			2	2.975	ug/l	3.09	2,518.00	2.281E-02	Pulse	0.30	3
As			2	0.137	ug/l	20.30	51.00	4.617E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.015	ug/l	-44.14	6.57	8.422E-06	Pulse	0.30	3
Sn			2	1.006	ug/l	4.87	2,518.01	3.222E-03	Pulse	0.30	3
Se			3	0.098	ug/l	25.26	14.07	9.059E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		937,700.24	0.62	86.0	Pulse	0.10	3
1	Sc		1,821,239.09	0.46	86.8	Pulse	0.10	3
1	Ge		445,371.32	0.71	101.4	Pulse	0.10	3
1	Ge		626,896.61	0.79	101.9	Pulse	0.10	3
1	Rh		2,957,642.04	0.21	95.6	Pulse	0.10	3
1	In		3,224,668.11	0.30	99.9	Pulse	0.10	3
1	Tb		4,853,272.43	1.14	105.1	Pulse	0.10	3
1	Ho		484,239.11	1.16	105.6	Pulse	0.10	3
1	Bi		3,123,113.08	0.21	109.6	Pulse	0.10	3
2	Sc		110,413.13	0.37	90.5	Pulse	0.30	3
2	Ge		81,782.17	0.35	103.7	Pulse	0.30	3
2	Ge		122,792.88	0.22	102.4	Pulse	0.30	3
2	Rh		1,897,575.06	0.35	98.7	Pulse	0.30	3
2	In		781,360.46	0.36	97.1	Pulse	0.30	3
2	Tb		2,767,534.96	0.50	103.2	Pulse	0.30	3
2	Ho		286,375.50	0.80	104.6	Pulse	0.30	3
2	Bi		1,985,235.06	0.59	106.4	Pulse	0.30	3
3	Sc		140,368.96	1.03	95.3	Pulse	0.30	3
3	Ge		101,784.30	0.96	100.2	Pulse	0.30	3
3	Ge		155,211.12	0.41	101.3	Pulse	0.30	3
3	Rh		1,786,132.92	0.73	102.9	Pulse	0.30	3
3	Tb		3,359,940.77	0.62	105.6	Pulse	0.30	3

Quantitation Report

File Name	060SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:21
Sample Name	mp17232a-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	9/12/2019 13:37
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	68.643	ug/l	0.81	145,908.42	1.546E-01	Pulse	0.25	3
B			1	74.691	ug/l	0.84	121,297.38	1.285E-01	Pulse	0.15	3
Ca			1	3828.601	ug/l	0.58	1,201,217.59	6.517E-01	Pulse	0.10	3
Sr			1	73.523	ug/l	0.52	1,424,528.73	4.804E-01	Pulse	0.10	3
Mo			1	74.222	ug/l	0.43	268,573.12	9.057E-02	Pulse	0.10	3
Ag			1	70.976	ug/l	0.36	687,007.59	2.116E-01	Pulse	0.10	3
Sn			1	74.920	ug/l	0.76	472,437.93	1.455E-01	Pulse	0.10	3
Sb			1	71.084	ug/l	1.55	555,730.89	1.129E-01	Pulse	0.10	3
Ba			1	69.418	ug/l	0.77	228,117.22	4.634E-02	Pulse	0.10	3
Tl			1	70.664	ug/l	0.64	1,443,541.65	4.719E-01	Pulse	0.10	3
Pb			1	73.556	ug/l	0.16	516,836.72	1.690E-01	Pulse	0.10	3
Pb			1	74.280	ug/l	0.18	459,413.07	1.502E-01	Pulse	0.10	3
Pb			1	73.653	ug/l	0.30	2,098,679.88	6.861E-01	Pulse	0.10	3
Na			2	3692.106	ug/l	0.53	1,724,791.88	1.545E+01	Pulse	0.30	3
Mg			2	3692.548	ug/l	0.62	799,196.11	7.157E+00	Pulse	0.30	3
Al			2	3612.157	ug/l	0.65	269,602.95	2.414E+00	Pulse	0.30	3
K			2	3723.508	ug/l	0.88	680,553.46	6.095E+00	Pulse	0.30	3
Ca			2	3988.097	ug/l	1.41	37,667.07	3.373E-01	Pulse	0.30	3
Ti			2	74.510	ug/l	3.99	5,108.62	4.576E-02	Pulse	0.30	3
V			2	74.035	ug/l	1.28	165,669.86	1.484E+00	Pulse	0.30	3
Cr			2	74.640	ug/l	1.50	210,914.34	1.889E+00	Pulse	0.30	3
Mn			2	74.250	ug/l	1.09	115,450.95	1.034E+00	Pulse	0.30	3
Fe			2	4052.173	ug/l	1.70	9,138,053.53	8.184E+01	Analog	0.30	3
Co			2	74.346	ug/l	0.40	333,921.34	2.990E+00	Pulse	0.30	3
Ni			2	73.943	ug/l	0.74	87,443.25	7.831E-01	Pulse	0.30	3
Cu			2	79.123	ug/l	0.60	255,777.07	2.291E+00	Pulse	0.30	3
Zn			2	67.277	ug/l	2.51	34,847.12	3.121E-01	Pulse	0.30	3
As			2	70.384	ug/l	1.40	20,552.90	1.841E-01	Pulse	1.00	3
Cd			2	69.972	ug/l	0.21	61,153.46	7.829E-02	Pulse	0.30	3
Sn			2	74.166	ug/l	1.13	144,749.51	1.853E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	323.631	ug/l	0.69	25,757.71	1.662E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		943,869.13	0.89	86.6	Pulse	0.10	3
1	Sc		1,843,331.59	0.34	87.9	Pulse	0.10	3
1	Ge		436,959.53	0.92	99.5	Pulse	0.10	3
1	Ge		618,058.44	1.87	100.5	Pulse	0.10	3
1	Rh		2,965,427.87	0.78	95.8	Pulse	0.10	3
1	In		3,246,826.04	0.78	100.6	Pulse	0.10	3
1	Tb		4,923,291.90	0.56	106.6	Pulse	0.10	3
1	Ho		491,647.82	0.50	107.3	Pulse	0.10	3
1	Bi		3,059,017.76	0.04	107.3	Pulse	0.10	3
2	Sc		111,669.19	1.08	91.6	Pulse	0.30	3
2	Ge		81,142.24	1.26	102.8	Pulse	0.30	3
2	Ge		122,419.35	0.77	102.0	Pulse	0.30	3
2	Rh		1,886,637.42	0.11	98.1	Pulse	0.30	3
2	In		781,088.57	0.50	97.1	Pulse	0.30	3
2	Tb		2,790,322.25	0.28	104.1	Pulse	0.30	3
2	Ho		287,633.36	0.57	105.1	Pulse	0.30	3
2	Bi		1,927,652.98	0.93	103.3	Pulse	0.30	3
3	Sc		143,581.17	0.06	97.5	Pulse	0.30	3
3	Ge		101,565.26	0.95	100.0	Pulse	0.30	3
3	Ge		154,940.15	0.36	101.1	Pulse	0.30	3
3	Rh		1,767,975.63	0.62	101.8	Pulse	0.30	3
3	Tb		3,374,015.28	0.44	106.1	Pulse	0.30	3

Quantitation Report

File Name	061SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:26
Sample Name	mp17232a-s3 5
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	73.283	ug/l	1.21	13,556.22	1.321E-02	Pulse	0.25	3
B			1	240.342	ug/l	1.26	42,237.13	4.117E-02	Pulse	0.15	3
Ca			1	53442.168	ug/l	0.35	1,437,055.55	7.273E-01	Pulse	0.10	3
Sr			1	452.416	ug/l	0.93	733,462.69	2.365E-01	Pulse	0.10	3
Mo			1	77.584	ug/l	2.12	23,501.24	7.580E-03	Pulse	0.10	3
Ag			1	73.603	ug/l	0.16	58,398.35	1.756E-02	Pulse	0.10	3
Sn			1	77.957	ug/l	2.19	42,024.01	1.264E-02	Pulse	0.10	3
Sb			1	77.616	ug/l	1.65	48,850.36	9.891E-03	Pulse	0.10	3
Ba			1	124.160	ug/l	3.60	32,842.28	6.648E-03	Pulse	0.10	3
Tl			1	74.672	ug/l	0.38	122,060.89	3.996E-02	Pulse	0.10	3
Pb			1	78.392	ug/l	1.00	44,210.42	1.447E-02	Pulse	0.10	3
Pb			1	78.983	ug/l	1.02	39,213.06	1.284E-02	Pulse	0.10	3
Pb			1	77.864	ug/l	0.28	178,086.04	5.830E-02	Pulse	0.10	3
Na			2	16822.242	ug/l	0.40	679,163.48	5.686E+00	Pulse	0.30	3
Mg			2	10712.841	ug/l	0.48	198,616.48	1.663E+00	Pulse	0.30	3
Al			2	3725.516	ug/l	0.80	24,596.85	2.059E-01	Pulse	0.30	3
K			2	12753.925	ug/l	0.85	206,852.59	1.732E+00	Pulse	0.30	3
Ca			2	54614.186	ug/l	0.50	44,124.93	3.694E-01	Pulse	0.30	3
Ti			2	71.225	ug/l	12.41	418.90	3.508E-03	Pulse	0.30	3
V			2	75.126	ug/l	1.42	14,667.71	1.228E-01	Pulse	0.30	3
Cr			2	76.616	ug/l	1.69	18,959.87	1.587E-01	Pulse	0.30	3
Mn			2	2175.761	ug/l	0.63	289,344.06	2.422E+00	Pulse	0.30	3
Fe			2	73840.147	ug/l	0.34	14,249,017.77	1.193E+02	Analog	0.30	3
Co			2	93.803	ug/l	0.45	36,081.11	3.021E-01	Pulse	0.30	3
Ni			2	83.900	ug/l	2.96	8,620.12	7.216E-02	Pulse	0.30	3
Cu			2	86.587	ug/l	1.00	27,217.05	2.279E-01	Pulse	0.30	3
Zn			2	73.647	ug/l	3.44	4,291.72	3.593E-02	Pulse	0.30	3
As			2	1713.788	ug/l	0.42	42,815.43	3.584E-01	Pulse	1.00	3
Cd			2	76.202	ug/l	1.75	5,588.12	6.844E-03	Pulse	0.30	3
Sn			2	79.250	ug/l	2.26	13,470.31	1.650E-02	Pulse	0.30	3
Se			3	391.800	ug/l	1.32	2,445.32	1.614E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,025,859.43	0.64	94.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,975,805.28	0.88	94.2	Pulse	0.10	3
1	Ge		433,761.82	0.96	98.8	Pulse	0.10	3
1	Ge		603,116.19	0.62	98.1	Pulse	0.10	3
1	Rh		3,100,929.95	1.30	100.2	Pulse	0.10	3
1	In		3,325,357.96	0.46	103.0	Pulse	0.10	3
1	Tb		4,939,272.53	0.62	106.9	Pulse	0.10	3
1	Ho		490,186.37	0.34	106.9	Pulse	0.10	3
1	Bi		3,054,795.16	0.88	107.2	Pulse	0.10	3
2	Sc		119,449.12	0.22	98.0	Pulse	0.30	3
2	Ge		78,508.61	0.94	99.5	Pulse	0.30	3
2	Ge		118,884.66	0.84	99.1	Pulse	0.30	3
2	Rh		1,946,607.91	0.33	101.3	Pulse	0.30	3
2	In		816,446.55	0.60	101.5	Pulse	0.30	3
2	Tb		2,830,228.22	0.56	105.6	Pulse	0.30	3
2	Ho		290,361.34	0.15	106.1	Pulse	0.30	3
2	Bi		1,969,097.84	0.88	105.5	Pulse	0.30	3
3	Sc		142,654.25	0.48	96.9	Pulse	0.30	3
3	Ge		99,208.65	0.32	97.6	Pulse	0.30	3
3	Ge		151,545.77	1.21	98.9	Pulse	0.30	3
3	Rh		1,766,626.04	0.41	101.8	Pulse	0.30	3
3	Tb		3,299,949.45	0.20	103.7	Pulse	0.30	3

Quantitation Report

File Name	062SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:31
Sample Name	mp17232a-s4
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	75.361	ug/l	2.37	13,832.38	1.359E-02	Pulse	0.25	3
B			1	237.952	ug/l	2.03	41,602.38	4.087E-02	Pulse	0.15	3
Ca			1	55551.296	ug/l	0.23	1,498,394.14	7.559E-01	Pulse	0.10	3
Sr			1	466.924	ug/l	0.37	751,610.74	2.441E-01	Pulse	0.10	3
Mo			1	82.885	ug/l	2.85	24,930.19	8.097E-03	Pulse	0.10	3
Ag			1	2457.969	ug/l	0.98	1,951,334.97	5.862E-01	Pulse	0.10	3
Sn			1	103.304	ug/l	1.79	55,127.34	1.656E-02	Pulse	0.10	3
Sb			1	140.453	ug/l	1.57	87,339.89	1.787E-02	Pulse	0.10	3
Ba			1	126.220	ug/l	2.52	33,029.42	6.758E-03	Pulse	0.10	3
Tl			1	76.010	ug/l	0.63	123,106.16	4.067E-02	Pulse	0.10	3
Pb			1	78.869	ug/l	2.04	44,070.08	1.456E-02	Pulse	0.10	3
Pb			1	79.022	ug/l	0.94	38,871.98	1.284E-02	Pulse	0.10	3
Pb			1	78.680	ug/l	0.72	178,296.18	5.891E-02	Pulse	0.10	3
Na			2	17183.298	ug/l	0.32	701,569.42	5.806E+00	Pulse	0.30	3
Mg			2	10971.981	ug/l	0.60	205,776.16	1.703E+00	Pulse	0.30	3
Al			2	3827.251	ug/l	1.07	25,537.16	2.113E-01	Pulse	0.30	3
K			2	12876.500	ug/l	0.60	211,168.05	1.748E+00	Pulse	0.30	3
Ca			2	55958.558	ug/l	0.86	45,732.52	3.785E-01	Pulse	0.30	3
Ti			2	87.412	ug/l	9.78	520.02	4.303E-03	Pulse	0.30	3
V			2	77.136	ug/l	1.20	15,226.00	1.260E-01	Pulse	0.30	3
Cr			2	78.789	ug/l	1.20	19,710.74	1.631E-01	Pulse	0.30	3
Mn			2	2235.396	ug/l	0.67	300,721.98	2.489E+00	Pulse	0.30	3
Fe			2	74517.244	ug/l	1.06	14,546,245.53	1.204E+02	Analog	0.30	3
Co			2	95.436	ug/l	1.78	37,132.67	3.073E-01	Pulse	0.30	3
Ni			2	83.511	ug/l	0.53	8,680.15	7.183E-02	Pulse	0.30	3
Cu			2	84.422	ug/l	1.62	26,935.50	2.229E-01	Pulse	0.30	3
Zn			2	88.619	ug/l	3.86	4,993.05	4.132E-02	Pulse	0.30	3
As			2	1769.197	ug/l	0.38	44,712.49	3.700E-01	Pulse	1.00	3
Cd			2	77.606	ug/l	4.90	5,693.61	6.970E-03	Pulse	0.30	3
Sn			2	105.161	ug/l	0.50	17,696.73	2.166E-02	Pulse	0.30	3
Se			3	408.184	ug/l	0.78	2,528.06	1.681E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,017,750.06	1.45	93.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,982,212.94	1.01	94.5	Pulse	0.10	3
1	Ge		432,023.26	0.76	98.4	Pulse	0.10	3
1	Ge		600,034.68	0.99	97.6	Pulse	0.10	3
1	Rh		3,078,759.33	0.49	99.5	Pulse	0.10	3
1	In		3,328,686.05	0.65	103.1	Pulse	0.10	3
1	Tb		4,887,261.07	0.42	105.8	Pulse	0.10	3
1	Ho		486,992.20	0.50	106.2	Pulse	0.10	3
1	Bi		3,026,804.12	0.36	106.2	Pulse	0.10	3
2	Sc		120,838.36	0.68	99.1	Pulse	0.30	3
2	Ge		78,967.29	1.44	100.1	Pulse	0.30	3
2	Ge		119,656.16	1.09	99.7	Pulse	0.30	3
2	Rh		1,958,521.38	0.50	101.9	Pulse	0.30	3
2	In		817,045.41	0.60	101.6	Pulse	0.30	3
2	Tb		2,817,084.26	0.76	105.1	Pulse	0.30	3
2	Ho		289,169.44	0.53	105.6	Pulse	0.30	3
2	Bi		1,967,134.92	0.88	105.4	Pulse	0.30	3
3	Sc		143,880.32	0.69	97.7	Pulse	0.30	3
3	Ge		98,603.85	0.19	97.1	Pulse	0.30	3
3	Ge		150,388.67	0.40	98.2	Pulse	0.30	3
3	Rh		1,763,768.40	0.40	101.6	Pulse	0.30	3
3	Tb		3,286,895.91	0.59	103.3	Pulse	0.30	3

Quantitation Report

File Name	063SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:36
Sample Name	jc94613-1
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	713.07	13.33	1.298E-05	Pulse	0.25	3
B			1	156.447	ug/l	4.81	31,360.36	3.060E-02	Pulse	0.15	3
Ca			1	50351.556	ug/l	1.04	1,354,729.46	6.855E-01	Pulse	0.10	3
Sr			1	383.723	ug/l	0.27	614,100.00	2.007E-01	Pulse	0.10	3
Mo			1	2.577	ug/l	6.69	790.05	2.581E-04	Pulse	0.10	3
Ag			1	0.498	ug/l	13.68	420.02	1.267E-04	Pulse	0.10	3
Sn			1	2.123	ug/l	30.28	2,987.11	9.005E-04	Pulse	0.10	3
Sb			1	2.319	ug/l	13.60	1,590.14	3.276E-04	Pulse	0.10	3
Ba			1	50.589	ug/l	2.89	13,192.83	2.722E-03	Pulse	0.10	3
Tl			1	0.078	ug/l	45.05	340.02	1.121E-04	Pulse	0.10	3
Pb			1	0.793	ug/l	8.62	663.38	2.186E-04	Pulse	0.10	3
Pb			1	0.904	ug/l	6.70	646.71	2.131E-04	Pulse	0.10	3
Pb			1	0.820	ug/l	3.57	2,763.55	9.107E-04	Pulse	0.10	3
Na			2	12992.983	ug/l	0.77	532,503.89	4.411E+00	Pulse	0.30	3
Mg			2	6920.132	ug/l	0.40	129,744.64	1.075E+00	Pulse	0.30	3
Al			2	-38.130	ug/l	-30.03	636.69	5.275E-03	Pulse	0.30	3
K			2	8855.419	ug/l	1.07	148,277.75	1.228E+00	Pulse	0.30	3
Ca			2	51092.055	ug/l	0.31	41,723.35	3.457E-01	Pulse	0.30	3
Ti			2	5.622	ug/l	118.17	34.45	2.850E-04	Pulse	0.30	3
V			2	-0.261	ug/l	-17.49	257.78	2.136E-03	Pulse	0.30	3
Cr			2	0.579	ug/l	56.80	616.69	5.108E-03	Pulse	0.30	3
Mn			2	2129.093	ug/l	0.96	286,134.57	2.370E+00	Pulse	0.30	3
Fe			2	69679.603	ug/l	0.28	13,588,309.74	1.126E+02	Analog	0.30	3
Co			2	18.169	ug/l	1.57	7,087.17	5.871E-02	Pulse	0.30	3
Ni			2	6.800	ug/l	13.98	837.81	6.940E-03	Pulse	0.30	3
Cu			2	3.246	ug/l	11.06	4,510.68	3.737E-02	Pulse	0.30	3
Zn			2	3.101	ug/l	56.24	1,272.29	1.054E-02	Pulse	0.30	3
As			2	1630.243	ug/l	0.21	41,158.53	3.410E-01	Pulse	1.00	3
Cd			2	-0.160	ug/l	-44.13	8.81	1.085E-05	Pulse	0.30	3
Sn			2	1.928	ug/l	16.49	898.93	1.103E-03	Pulse	0.30	3
Se			3	1.197	ug/l	29.23	13.47	8.923E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,024,865.95	0.88	94.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,976,444.71	0.70	94.2	Pulse	0.10	3
1	Ge		432,725.96	1.10	98.6	Pulse	0.10	3
1	Ge		602,979.52	0.37	98.0	Pulse	0.10	3
1	Rh		3,060,528.39	1.01	98.9	Pulse	0.10	3
1	In		3,315,015.65	1.11	102.7	Pulse	0.10	3
1	Tb		4,848,843.68	1.47	105.0	Pulse	0.10	3
1	Ho		479,044.65	0.55	104.5	Pulse	0.10	3
1	Bi		3,034,626.93	0.40	106.5	Pulse	0.10	3
2	Sc		120,709.71	0.18	99.0	Pulse	0.30	3
2	Ge		78,979.71	1.50	100.1	Pulse	0.30	3
2	Ge		118,827.15	1.07	99.0	Pulse	0.30	3
2	Rh		1,953,120.48	0.51	101.6	Pulse	0.30	3
2	In		814,410.67	0.96	101.3	Pulse	0.30	3
2	Tb		2,812,764.68	1.24	104.9	Pulse	0.30	3
2	Ho		287,553.90	1.03	105.0	Pulse	0.30	3
2	Bi		1,968,323.88	0.76	105.5	Pulse	0.30	3
3	Sc		146,415.12	14.62	99.4	Pulse	0.30	3
3	Ge		100,883.36	11.18	99.3	Pulse	0.30	3
3	Ge		152,880.72	12.19	99.8	Pulse	0.30	3
3	Rh		1,793,072.91	14.23	103.3	Pulse	0.30	3
3	Tb		3,384,192.92	16.00	106.4	Mix	0.30	3

Quantitation Report

File Name	064SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:41
Sample Name	mp17232a-sd1
Sample Type	Sample
Comment	
Prep Dilution	125.000
Auto Dilution	N/A
Total Dilution	125.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	0.237	ug/l	95.62	21.33	2.068E-05	Pulse	0.25	3
B			1	187.715	ug/l	11.15	16,136.93	1.563E-02	Pulse	0.15	3
Ca			1	45995.974	ug/l	0.81	256,751.93	1.278E-01	Pulse	0.10	3
Sr			1	347.349	ug/l	2.20	113,207.32	3.643E-02	Pulse	0.10	3
Mo			1	6.692	ug/l	19.82	426.69	1.372E-04	Pulse	0.10	3
Ag			1	0.835	ug/l	20.20	160.01	4.782E-05	Pulse	0.10	3
Sn			1	1.665	ug/l	89.90	2,086.90	6.234E-04	Pulse	0.10	3
Sb			1	5.782	ug/l	6.69	883.39	1.799E-04	Pulse	0.10	3
Ba			1	47.858	ug/l	5.15	2,613.66	5.323E-04	Pulse	0.10	3
Tl			1	0.058	ug/l	328.39	233.35	7.661E-05	Pulse	0.10	3
Pb			1	2.494	ug/l	17.24	500.03	1.645E-04	Pulse	0.10	3
Pb			1	1.522	ug/l	21.31	353.35	1.162E-04	Pulse	0.10	3
Pb			1	2.210	ug/l	21.57	1,913.46	6.293E-04	Pulse	0.10	3
Na			2	11738.936	ug/l	0.93	106,138.12	8.689E-01	Pulse	0.30	3
Mg			2	6450.943	ug/l	1.51	24,690.32	2.021E-01	Pulse	0.30	3
Al			2	379.413	ug/l	24.68	1,386.83	1.135E-02	Pulse	0.30	3
K			2	7983.415	ug/l	0.55	35,563.37	2.911E-01	Pulse	0.30	3
Ca			2	44947.065	ug/l	0.29	7,538.45	6.171E-02	Pulse	0.30	3
Ti			2	5.565	ug/l	75.49	7.78	6.349E-05	Pulse	0.30	3
V			2	-3.342	ug/l	-8.41	181.11	1.483E-03	Pulse	0.30	3
Cr			2	-0.560	ug/l	-153.82	453.35	3.713E-03	Pulse	0.30	3
Mn			2	1933.883	ug/l	1.05	52,712.74	4.315E-01	Pulse	0.30	3
Fe			2	61177.610	ug/l	1.29	2,416,950.18	1.979E+01	Pulse	0.30	3
Co			2	16.429	ug/l	1.75	1,322.43	1.083E-02	Pulse	0.30	3
Ni			2	7.379	ug/l	35.47	297.78	2.436E-03	Pulse	0.30	3
Cu			2	93.092	ug/l	5.05	8,856.92	7.250E-02	Pulse	0.30	3
Zn			2	-14.648	ug/l	-47.71	1,022.27	8.370E-03	Pulse	0.30	3
As			2	1506.599	ug/l	0.31	7,709.17	6.311E-02	Pulse	1.00	3
Cd			2	-0.959	ug/l	-46.93	6.64	8.005E-06	Pulse	0.30	3
Sn			2	2.387	ug/l	54.88	676.69	8.145E-04	Pulse	0.30	3
Se			3	0.736	ug/l	3.08	6.93	4.609E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,032,695.22	0.52	94.8	Pulse	0.10	3
1	Sc		2,008,911.27	0.25	95.8	Pulse	0.10	3
1	Ge		436,981.01	1.99	99.5	Pulse	0.10	3

Quantitation Report

1	Ge		608,649.07	0.98	99.0	Pulse	0.10	3
1	Rh		3,107,499.02	0.64	100.4	Pulse	0.10	3
1	In		3,347,408.86	0.28	103.7	Pulse	0.10	3
1	Tb		4,911,204.19	0.75	106.3	Pulse	0.10	3
1	Ho		484,856.73	0.92	105.8	Pulse	0.10	3
1	Bi		3,041,980.06	0.96	106.7	Pulse	0.10	3
2	Sc		122,160.69	0.69	100.2	Pulse	0.30	3
2	Ge		79,980.22	1.03	101.4	Pulse	0.30	3
2	Ge		120,391.37	1.10	100.4	Pulse	0.30	3
2	Rh		1,971,468.88	0.11	102.5	Pulse	0.30	3
2	In		830,810.75	0.37	103.3	Pulse	0.30	3
2	Tb		2,806,669.68	0.94	104.7	Pulse	0.30	3
2	Ho		288,588.41	1.03	105.4	Pulse	0.30	3
2	Bi		1,965,344.85	0.87	105.3	Pulse	0.30	3
3	Sc		142,706.07	1.88	96.9	Pulse	0.30	3
3	Ge		99,458.10	1.07	97.9	Pulse	0.30	3
3	Ge		150,442.57	1.50	98.2	Pulse	0.30	3
3	Rh		1,748,955.94	1.28	100.7	Pulse	0.30	3
3	Tb		3,245,432.58	0.87	102.0	Pulse	0.30	3

Quantitation Report

File Name	065_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:46
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	9/12/2019 13:37
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	50.224	ug/l	0.92	240,590.73	2.262E-01	Pulse	0.25	3
B			1	96.060	ug/l	1.44	333,347.23	3.134E-01	Pulse	0.15	3
Ca			1	5073.281	ug/l	0.56	3,577,185.78	1.722E+00	Pulse	0.10	3
Sr			1	51.565	ug/l	1.27	2,119,036.84	6.738E-01	Pulse	0.10	3
Mo			1	51.117	ug/l	0.77	392,318.73	1.247E-01	Pulse	0.10	3
Ag			1	49.537	ug/l	0.46	992,211.50	2.954E-01	Pulse	0.10	3
Sn			1	50.617	ug/l	1.17	659,831.49	1.964E-01	Pulse	0.10	3
Sb			1	51.097	ug/l	0.98	795,153.09	1.623E-01	Pulse	0.10	3
Ba			1	49.849	ug/l	0.27	326,038.67	6.654E-02	Pulse	0.10	3
Tl			1	50.418	ug/l	0.20	2,005,265.44	6.734E-01	Pulse	0.10	3
Pb			1	50.476	ug/l	0.55	690,461.34	2.319E-01	Pulse	0.10	3
Pb			1	50.548	ug/l	0.34	608,631.64	2.044E-01	Pulse	0.10	3
Pb			1	50.357	ug/l	0.40	2,793,388.69	9.380E-01	Pulse	0.10	3
Na			2	5038.590	ug/l	1.69	5,329,397.57	4.201E+01	Analog	0.30	3
Mg			2	4876.217	ug/l	0.50	2,397,736.78	1.890E+01	Pulse	0.30	3
Al			2	4893.426	ug/l	0.42	828,344.88	6.529E+00	Pulse	0.30	3
K			2	4989.648	ug/l	0.65	2,054,177.97	1.619E+01	Pulse	0.30	3
Ca			2	5139.637	ug/l	0.38	110,073.92	8.676E-01	Pulse	0.30	3
Ti			2	49.459	ug/l	3.01	7,707.43	6.075E-02	Pulse	0.30	3
V			2	50.311	ug/l	0.31	255,721.67	2.016E+00	Pulse	0.30	3
Cr			2	49.944	ug/l	0.84	320,545.39	2.527E+00	Pulse	0.30	3
Mn			2	49.828	ug/l	0.20	176,012.03	1.387E+00	Pulse	0.30	3
Fe			2	5154.644	ug/l	0.41	26,409,877.84	2.082E+02	Analog	0.30	3
Co			2	49.691	ug/l	0.49	507,113.60	3.997E+00	Pulse	0.30	3
Ni			2	49.476	ug/l	0.63	132,902.20	1.048E+00	Pulse	0.30	3
Cu			2	49.869	ug/l	0.47	365,324.63	2.880E+00	Pulse	0.30	3
Zn			2	49.729	ug/l	0.53	57,957.56	4.568E-01	Pulse	0.30	3
As			2	50.345	ug/l	0.61	33,400.30	2.633E-01	Pulse	1.00	3
Cd			2	50.108	ug/l	1.47	93,551.42	1.121E-01	Pulse	0.30	3
Sn			2	50.268	ug/l	0.48	209,392.78	2.510E-01	Pulse	0.30	3
Se			3	194.363	ug/l	0.47	30,492.06	1.997E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,063,563.52	0.35	97.6	Pulse	0.10	3
1	Sc		2,077,540.86	0.73	99.1	Pulse	0.10	3
1	Ge		441,666.44	0.24	100.6	Pulse	0.10	3

Quantitation Report

1	Ge		627,516.70	0.39	102.0	Pulse	0.10	3
1	Rh		3,145,099.64	0.67	101.6	Pulse	0.10	3
1	In		3,359,343.77	0.36	104.1	Pulse	0.10	3
1	Tb		4,900,164.30	0.54	106.1	Pulse	0.10	3
1	Ho		486,363.03	0.63	106.1	Pulse	0.10	3
1	Bi		2,977,978.71	0.19	104.5	Pulse	0.10	3
2	Sc		126,868.31	0.30	104.0	Pulse	0.30	3
2	Ge		82,262.47	1.33	104.3	Pulse	0.30	3
2	Ge		123,793.82	0.68	103.2	Pulse	0.30	3
2	Rh		1,980,029.36	0.53	103.0	Pulse	0.30	3
2	In		834,384.46	0.31	103.7	Pulse	0.30	3
2	Tb		2,869,061.34	0.32	107.0	Pulse	0.30	3
2	Ho		295,300.07	0.74	107.9	Pulse	0.30	3
2	Bi		1,947,240.48	0.33	104.3	Pulse	0.30	3
3	Sc		147,002.70	1.61	99.8	Pulse	0.30	3
3	Ge		100,115.06	1.02	98.5	Pulse	0.30	3
3	Ge		152,709.43	0.57	99.7	Pulse	0.30	3
3	Rh		1,746,883.82	1.14	100.6	Pulse	0.30	3
3	Tb		3,279,610.08	1.50	103.1	Pulse	0.30	3

Quantitation Report

File Name	066_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:51
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	9/12/2019 13:37
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	21.82	56.00	5.210E-05	Pulse	0.25	3
B			1	2.930	ug/l	8.00	21,567.31	2.012E-02	Pulse	0.15	3
Ca			1	1.153	ug/l	81.01	7,185.17	3.537E-03	Pulse	0.10	3
Sr			1	0.007	ug/l	30.19	700.04	2.226E-04	Pulse	0.10	3
Mo			1	0.062	ug/l	24.84	503.36	1.586E-04	Pulse	0.10	3
Ag			1	0.011	ug/l	23.16	236.68	7.149E-05	Pulse	0.10	3
Sn			1	0.090	ug/l	15.28	3,055.44	9.186E-04	Pulse	0.10	3
Sb			1	0.124	ug/l	12.32	2,073.56	4.276E-04	Pulse	0.10	3
Ba			1	0.002	ug/l	74.56	116.67	2.393E-05	Pulse	0.10	3
Tl			1	0.017	ug/l	15.84	896.72	2.975E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	18.68	470.03	1.554E-04	Pulse	0.10	3
Pb			1	0.025	ug/l	27.48	506.69	1.686E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	10.51	2,213.51	7.347E-04	Pulse	0.10	3
Na			2	-0.906	ug/l	-22.97	9,963.02	8.002E-02	Pulse	0.30	3
Mg			2	0.623	ug/l	25.01	565.58	4.542E-03	Pulse	0.30	3
Al			2	-2.483	ug/l	-4.60	497.79	3.998E-03	Pulse	0.30	3
K			2	-0.370	ug/l	-161.95	10,428.92	8.377E-02	Pulse	0.30	3
Ca			2	-0.294	ug/l	-352.71	128.89	1.036E-03	Pulse	0.30	3
Ti			2	0.000	ug/l	16909.56	1.11	8.908E-06	Pulse	0.30	3
V			2	-0.023	ug/l	-31.46	205.56	1.651E-03	Pulse	0.30	3
Cr			2	-0.011	ug/l	-70.25	418.90	3.364E-03	Pulse	0.30	3
Mn			2	-0.008	ug/l	-89.94	108.89	8.743E-04	Pulse	0.30	3
Fe			2	0.852	ug/l	6.34	7,171.64	5.760E-02	Pulse	0.30	3
Co			2	0.005	ug/l	45.82	78.87	6.335E-04	Pulse	0.30	3
Ni			2	0.010	ug/l	115.64	174.45	1.401E-03	Pulse	0.30	3
Cu			2	-0.078	ug/l	-20.64	3,175.90	2.551E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.227	ug/l	-24.40	918.93	7.381E-03	Pulse	0.30	3
As			2	0.013	ug/l	68.81	21.33	1.714E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	86.41	25.50	3.035E-05	Pulse	0.30	3
Sn			2	0.128	ug/l	4.62	1,140.06	1.358E-03	Pulse	0.30	3
Se			3	0.088	ug/l	18.45	19.73	1.309E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,072,572.41	3.51	98.4	Pulse	0.10	3
1	Sc		2,036,347.83	5.17	97.1	Pulse	0.10	3
1	Ge		438,899.60	3.79	100.0	Pulse	0.10	3
1	Ge		610,312.16	3.71	99.2	Pulse	0.10	3
1	Rh		3,156,280.79	5.26	102.0	Pulse	0.10	3
1	In		3,329,613.28	4.23	103.2	Pulse	0.10	3
1	Tb		4,861,175.76	5.35	105.2	Pulse	0.10	3
1	Ho		481,078.95	5.37	104.9	Pulse	0.10	3
1	Bi		3,017,868.60	4.39	105.9	Pulse	0.10	3
2	Sc		124,499.92	0.22	102.1	Pulse	0.30	3
2	Ge		80,955.76	0.62	102.6	Pulse	0.30	3
2	Ge		122,599.34	0.42	102.2	Pulse	0.30	3
2	Rh		2,006,265.20	0.54	104.4	Pulse	0.30	3
2	In		839,702.47	0.48	104.4	Pulse	0.30	3
2	Tb		2,820,682.04	0.34	105.2	Pulse	0.30	3
2	Ho		287,750.07	0.47	105.1	Pulse	0.30	3
2	Bi		1,957,837.14	0.37	104.9	Pulse	0.30	3
3	Sc		143,204.94	1.58	97.3	Pulse	0.30	3
3	Ge		99,260.06	0.46	97.7	Pulse	0.30	3
3	Ge		150,757.29	1.28	98.4	Pulse	0.30	3
3	Rh		1,780,504.02	0.29	102.6	Pulse	0.30	3
3	Tb		3,237,505.29	0.50	101.8	Pulse	0.30	3

Quantitation Report

File Name	067SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 15:56
Sample Name	mp17232a-ps1
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/12/2019 13:37
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	78.927	ug/l	1.37	14,918.65	1.423E-02	Pulse	0.25	3
B			1	222.431	ug/l	1.50	40,796.08	3.892E-02	Pulse	0.15	3
Ca			1	48047.390	ug/l	0.94	1,332,213.99	6.542E-01	Pulse	0.10	3
Sr			1	411.205	ug/l	0.96	676,905.14	2.150E-01	Pulse	0.10	3
Mo			1	82.034	ug/l	1.65	25,230.65	8.014E-03	Pulse	0.10	3
Ag			1	77.341	ug/l	1.21	61,875.41	1.845E-02	Pulse	0.10	3
Sn			1	80.483	ug/l	1.46	43,685.02	1.303E-02	Pulse	0.10	3
Sb			1	82.259	ug/l	0.46	50,910.18	1.048E-02	Pulse	0.10	3
Ba			1	125.070	ug/l	1.49	32,528.28	6.697E-03	Pulse	0.10	3
Tl			1	78.347	ug/l	1.50	126,242.50	4.192E-02	Pulse	0.10	3
Pb			1	79.437	ug/l	0.71	44,157.13	1.466E-02	Pulse	0.10	3
Pb			1	77.554	ug/l	1.54	37,959.64	1.261E-02	Pulse	0.10	3
Pb			1	78.311	ug/l	0.72	176,558.20	5.863E-02	Pulse	0.10	3
Na			2	15294.647	ug/l	1.00	641,978.22	5.177E+00	Pulse	0.30	3
Mg			2	10091.116	ug/l	0.81	194,230.25	1.566E+00	Pulse	0.30	3
Al			2	4028.823	ug/l	2.55	27,535.88	2.221E-01	Pulse	0.30	3
K			2	11949.089	ug/l	1.35	201,839.93	1.628E+00	Pulse	0.30	3
Ca			2	48743.179	ug/l	0.94	40,895.55	3.298E-01	Pulse	0.30	3
Ti			2	76.981	ug/l	1.90	470.01	3.790E-03	Pulse	0.30	3
V			2	80.040	ug/l	1.07	16,201.37	1.307E-01	Pulse	0.30	3
Cr			2	80.828	ug/l	1.16	20,737.52	1.672E-01	Pulse	0.30	3
Mn			2	1940.061	ug/l	0.32	267,847.25	2.160E+00	Pulse	0.30	3
Fe			2	64646.236	ug/l	1.89	12,949,621.99	1.044E+02	Analog	0.30	3
Co			2	96.624	ug/l	0.24	38,581.41	3.111E-01	Pulse	0.30	3
Ni			2	84.369	ug/l	5.14	8,998.12	7.256E-02	Pulse	0.30	3
Cu			2	81.659	ug/l	0.47	26,858.71	2.166E-01	Pulse	0.30	3
Zn			2	83.628	ug/l	4.54	4,899.68	3.952E-02	Pulse	0.30	3
As			2	1508.267	ug/l	1.70	39,117.26	3.155E-01	Pulse	1.00	3
Cd			2	77.127	ug/l	1.83	5,771.35	6.927E-03	Pulse	0.30	3
Sn			2	82.783	ug/l	1.53	14,335.53	1.720E-02	Pulse	0.30	3
Se			3	407.255	ug/l	1.34	2,544.00	1.677E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,048,270.60	0.47	96.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,036,346.58	0.84	97.1	Pulse	0.10	3
1	Ge		443,300.37	1.28	101.0	Pulse	0.10	3
1	Ge		615,153.49	1.74	100.0	Pulse	0.10	3
1	Rh		3,148,349.02	0.62	101.7	Pulse	0.10	3
1	In		3,353,101.54	0.34	103.9	Pulse	0.10	3
1	Tb		4,857,731.18	1.19	105.2	Pulse	0.10	3
1	Ho		484,605.63	0.63	105.7	Pulse	0.10	3
1	Bi		3,011,283.50	0.85	105.7	Pulse	0.10	3
2	Sc		124,002.83	0.86	101.7	Pulse	0.30	3
2	Ge		81,289.59	1.44	103.0	Pulse	0.30	3
2	Ge		121,138.73	0.68	101.0	Pulse	0.30	3
2	Rh		1,974,024.64	0.04	102.7	Pulse	0.30	3
2	In		833,279.89	1.19	103.6	Pulse	0.30	3
2	Tb		2,834,709.82	0.37	105.7	Pulse	0.30	3
2	Ho		289,475.32	0.41	105.7	Pulse	0.30	3
2	Bi		1,962,345.27	0.12	105.1	Pulse	0.30	3
3	Sc		145,319.10	0.97	98.7	Pulse	0.30	3
3	Ge		99,256.64	1.53	97.7	Pulse	0.30	3
3	Ge		151,684.01	0.64	99.0	Pulse	0.30	3
3	Rh		1,752,469.83	1.15	100.9	Pulse	0.30	3
3	Tb		3,248,740.64	0.54	102.1	Pulse	0.30	3

Quantitation Report

File Name	068SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 16:01
Sample Name	jc94613-2
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	9/12/2019 13:37
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	0.279	ug/l	38.92	38.67	3.729E-05	Pulse	0.25	3
B			1	65.760	ug/l	11.44	15,598.61	1.504E-02	Pulse	0.15	3
Ca			1	25327.482	ug/l	0.87	351,792.33	1.748E-01	Pulse	0.10	3
Sr			1	171.127	ug/l	0.53	140,243.65	4.484E-02	Pulse	0.10	3
Mo			1	7.423	ug/l	8.90	1,153.43	3.688E-04	Pulse	0.10	3
Ag			1	0.258	ug/l	35.32	130.01	3.871E-05	Pulse	0.10	3
Sn			1	1.764	ug/l	24.88	2,380.28	7.084E-04	Pulse	0.10	3
Sb			1	2.493	ug/l	11.99	923.39	1.913E-04	Pulse	0.10	3
Ba			1	14.673	ug/l	11.03	1,993.54	4.130E-04	Pulse	0.10	3
Tl			1	0.063	ug/l	129.96	263.35	8.728E-05	Pulse	0.10	3
Pb			1	0.701	ug/l	29.72	413.35	1.372E-04	Pulse	0.10	3
Pb			1	0.662	ug/l	14.30	363.35	1.205E-04	Pulse	0.10	3
Pb			1	0.706	ug/l	18.76	1,696.77	5.630E-04	Pulse	0.10	3
Na			2	5838.342	ug/l	9.80	131,591.60	1.059E+00	Pulse	0.30	3
Mg			2	2844.195	ug/l	8.70	27,662.74	2.226E-01	Pulse	0.30	3
Al			2	-90.106	ug/l	-15.99	610.02	4.905E-03	Pulse	0.30	3
K			2	3533.282	ug/l	14.07	38,870.60	3.131E-01	Pulse	0.30	3
Ca			2	25411.920	ug/l	11.25	10,768.05	8.677E-02	Pulse	0.30	3
Ti			2	2.520	ug/l	17.46	8.89	7.070E-05	Pulse	0.30	3
V			2	-1.115	ug/l	-37.59	206.67	1.661E-03	Pulse	0.30	3
Cr			2	-0.014	ug/l	-1539.84	488.90	3.925E-03	Pulse	0.30	3
Mn			2	2163.087	ug/l	10.05	149,590.89	1.205E+00	Pulse	0.30	3
Fe			2	39059.786	ug/l	9.74	3,920,701.65	3.157E+01	Pulse	0.30	3
Co			2	13.600	ug/l	3.22	2,760.79	2.213E-02	Pulse	0.30	3
Ni			2	5.322	ug/l	35.25	424.45	3.438E-03	Pulse	0.30	3
Cu			2	9.668	ug/l	26.63	5,100.85	4.100E-02	Pulse	0.30	3
Zn			2	-6.847	ug/l	-62.20	1,017.83	8.192E-03	Pulse	0.30	3
As			2	3068.888	ug/l	10.64	39,837.95	3.209E-01	Pulse	1.00	3
Cd			2	-0.334	ug/l	-38.67	8.79	1.023E-05	Pulse	0.30	3
Sn			2	2.529	ug/l	13.98	818.92	9.713E-04	Pulse	0.30	3
Se			3	1.421	ug/l	9.02	10.47	6.923E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,037,326.75	0.23	95.2	Pulse	0.10	3
1	Sc		2,013,108.82	0.25	96.0	Pulse	0.10	3
1	Ge		441,265.67	0.97	100.5	Pulse	0.10	3

Quantitation Report

1	Ge		608,486.77	0.36	98.9	Pulse	0.10	3
1	Rh		3,127,700.37	0.20	101.1	Pulse	0.10	3
1	In		3,359,903.44	0.34	104.1	Pulse	0.10	3
1	Tb		4,826,020.66	0.87	104.5	Pulse	0.10	3
1	Ho		477,670.89	0.67	104.2	Pulse	0.10	3
1	Bi		3,014,326.73	0.89	105.8	Pulse	0.10	3
2	Sc		124,949.13	9.26	102.5	Pulse	0.30	3
2	Ge		81,750.43	6.81	103.6	Pulse	0.30	3
2	Ge		122,665.67	6.90	102.2	Pulse	0.30	3
2	Rh		1,981,454.30	9.03	103.1	Pulse	0.30	3
2	In		844,132.16	8.79	104.9	Pulse	0.30	3
2	Tb		2,847,218.64	9.51	106.2	Pulse	0.30	3
2	Ho		291,896.04	9.33	106.6	Pulse	0.30	3
2	Bi		1,974,784.16	7.98	105.8	Pulse	0.30	3
3	Sc		143,861.26	1.44	97.7	Pulse	0.30	3
3	Ge		99,613.41	0.57	98.0	Pulse	0.30	3
3	Ge		151,153.04	1.01	98.7	Pulse	0.30	3
3	Rh		1,755,812.50	0.87	101.1	Pulse	0.30	3
3	Tb		3,245,585.98	0.87	102.0	Pulse	0.30	3

Quantitation Report

File Name	069SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 16:06
Sample Name	mp17244-mb1 1
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	9/12/2019 13:37
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	26.65	21.33	1.993E-05	Pulse	0.25	3
B			1	0.254	ug/l	48.80	12,518.28	1.170E-02	Pulse	0.15	3
Ca			1	4.359	ug/l	28.34	9,486.48	4.624E-03	Pulse	0.10	3
Sr			1	0.011	ug/l	7.29	843.39	2.662E-04	Pulse	0.10	3
Mo			1	0.027	ug/l	17.61	233.34	7.363E-05	Pulse	0.10	3
Ag			1	0.005	ug/l	45.06	130.00	3.842E-05	Pulse	0.10	3
Sn			1	0.067	ug/l	17.30	2,817.05	8.316E-04	Pulse	0.10	3
Sb			1	0.038	ug/l	12.68	746.72	1.541E-04	Pulse	0.10	3
Ba			1	0.037	ug/l	38.18	340.02	7.017E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	3874.62	216.68	7.119E-05	Pulse	0.10	3
Pb			1	0.010	ug/l	31.86	356.69	1.167E-04	Pulse	0.10	3
Pb			1	0.009	ug/l	81.92	310.02	1.015E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	28.14	1,566.77	5.126E-04	Pulse	0.10	3
Na			2	-0.020	ug/l	-543.46	10,977.01	8.739E-02	Pulse	0.30	3
Mg			2	0.757	ug/l	14.26	635.58	5.063E-03	Pulse	0.30	3
Al			2	-1.917	ug/l	-8.58	596.68	4.752E-03	Pulse	0.30	3
K			2	-1.311	ug/l	-55.01	10,138.75	8.073E-02	Pulse	0.30	3
Ca			2	2.811	ug/l	68.18	195.56	1.559E-03	Pulse	0.30	3
Ti			2	0.202	ug/l	44.17	32.22	2.573E-04	Pulse	0.30	3
V			2	-0.027	ug/l	-18.16	185.56	1.476E-03	Pulse	0.30	3
Cr			2	0.056	ug/l	20.65	853.37	6.792E-03	Pulse	0.30	3
Mn			2	0.021	ug/l	49.16	212.23	1.692E-03	Pulse	0.30	3
Fe			2	2.331	ug/l	1.45	14,736.80	1.173E-01	Pulse	0.30	3
Co			2	0.002	ug/l	106.41	53.29	4.228E-04	Pulse	0.30	3
Ni			2	0.031	ug/l	9.89	231.12	1.840E-03	Pulse	0.30	3
Cu			2	-0.026	ug/l	-97.89	3,572.65	2.845E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	3.273	ug/l	2.51	4,883.01	3.887E-02	Pulse	0.30	3
As			2	0.060	ug/l	9.14	52.33	4.166E-04	Pulse	1.00	3
Cd			2	-0.006	ug/l	-52.47	9.98	1.190E-05	Pulse	0.30	3
Sn			2	0.080	ug/l	13.40	941.15	1.120E-03	Pulse	0.30	3
Se			3	0.003	ug/l	476.10	6.53	4.299E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,070,293.97	0.42	98.2	Pulse	0.10	3
1	Sc		2,051,319.19	1.02	97.8	Pulse	0.10	3
1	Ge		440,308.12	1.36	100.3	Pulse	0.10	3
1	Ge		615,167.57	1.76	100.0	Pulse	0.10	3
1	Rh		3,168,515.68	0.32	102.4	Pulse	0.10	3
1	In		3,388,087.77	0.54	105.0	Pulse	0.10	3
1	Tb		4,846,099.10	0.11	104.9	Pulse	0.10	3
1	Ho		483,696.76	0.67	105.5	Pulse	0.10	3
1	Bi		3,053,921.10	1.25	107.2	Pulse	0.10	3
2	Sc		125,617.06	1.21	103.0	Pulse	0.30	3
2	Ge		80,486.76	0.93	102.0	Pulse	0.30	3
2	Ge		122,130.52	0.70	101.8	Pulse	0.30	3
2	Rh		1,993,973.25	0.60	103.7	Pulse	0.30	3
2	In		840,183.98	0.60	104.5	Pulse	0.30	3
2	Tb		2,824,940.44	0.26	105.4	Pulse	0.30	3
2	Ho		289,579.37	0.78	105.8	Pulse	0.30	3
2	Bi		1,986,322.77	0.34	106.4	Pulse	0.30	3
3	Sc		144,965.14	1.07	98.5	Pulse	0.30	3
3	Ge		100,579.21	0.72	99.0	Pulse	0.30	3
3	Ge		151,686.31	0.91	99.0	Pulse	0.30	3
3	Rh		1,773,086.87	0.23	102.1	Pulse	0.30	3
3	Tb		3,248,469.52	0.24	102.1	Pulse	0.30	3

Quantitation Report

File Name	070SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 16:11
Sample Name	mp17244-b1
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	9/12/2019 13:37
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	71.369	ug/l	0.98	349,445.74	3.214E-01	Pulse	0.25	3
B			1	67.235	ug/l	1.43	242,035.20	2.226E-01	Pulse	0.15	3
Ca			1	1909.475	ug/l	0.53	1,366,921.85	6.500E-01	Pulse	0.10	3
Sr			1	73.555	ug/l	0.71	3,042,174.75	9.611E-01	Pulse	0.10	3
Mo			1	74.926	ug/l	0.35	578,772.57	1.828E-01	Pulse	0.10	3
Ag			1	72.378	ug/l	1.14	1,455,565.29	4.315E-01	Pulse	0.10	3
Sn			1	74.150	ug/l	0.75	969,664.07	2.875E-01	Pulse	0.10	3
Sb			1	77.361	ug/l	0.37	1,199,244.51	2.457E-01	Pulse	0.10	3
Ba			1	71.995	ug/l	0.94	469,059.32	9.609E-02	Pulse	0.10	3
Tl			1	72.313	ug/l	0.19	2,882,979.33	9.658E-01	Pulse	0.10	3
Pb			1	74.286	ug/l	0.72	1,018,505.09	3.412E-01	Pulse	0.10	3
Pb			1	74.624	ug/l	0.82	900,576.37	3.017E-01	Pulse	0.10	3
Pb			1	74.484	ug/l	0.81	4,141,267.62	1.387E+00	Pulse	0.10	3
Na			2	1804.836	ug/l	0.83	1,953,566.52	1.510E+01	Pulse	0.30	3
Mg			2	1812.536	ug/l	0.81	908,846.32	7.026E+00	Pulse	0.30	3
Al			2	1841.237	ug/l	1.15	318,354.87	2.461E+00	Pulse	0.30	3
K			2	1860.977	ug/l	0.53	788,024.31	6.092E+00	Pulse	0.30	3
Ca			2	2088.669	ug/l	0.20	45,691.30	3.532E-01	Pulse	0.30	3
Ti			2	71.953	ug/l	2.31	11,431.85	8.837E-02	Pulse	0.30	3
V			2	72.458	ug/l	0.49	375,357.21	2.902E+00	Pulse	0.30	3
Cr			2	70.935	ug/l	0.49	463,951.41	3.587E+00	Pulse	0.30	3
Mn			2	71.667	ug/l	1.29	258,033.78	1.995E+00	Pulse	0.30	3
Fe			2	1930.809	ug/l	0.99	10,087,638.21	7.799E+01	Analog	0.30	3
Co			2	70.996	ug/l	0.98	738,686.27	5.711E+00	Pulse	0.30	3
Ni			2	70.694	ug/l	1.47	193,539.05	1.496E+00	Pulse	0.30	3
Cu			2	71.184	ug/l	1.17	529,989.89	4.097E+00	Pulse	0.30	3
Zn			2	74.021	ug/l	0.41	87,360.90	6.754E-01	Pulse	0.30	3
As			2	74.140	ug/l	0.22	50,143.44	3.877E-01	Pulse	1.00	3
Cd			2	70.975	ug/l	0.56	134,446.13	1.588E-01	Pulse	0.30	3
Sn			2	73.797	ug/l	0.79	311,625.29	3.681E-01	Pulse	0.30	3
Se			3	188.233	ug/l	0.64	29,765.00	1.934E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,087,182.92	1.18	99.8	Pulse	0.10	3
1	Sc		2,102,860.96	0.38	100.3	Pulse	0.10	3
1	Ge		450,432.49	0.99	102.6	Pulse	0.10	3

Quantitation Report

1	Ge		627,829.00	1.16	102.1	Pulse	0.10	3
1	Rh		3,165,397.87	0.13	102.3	Pulse	0.10	3
1	In		3,373,163.94	0.82	104.5	Pulse	0.10	3
1	Tb		4,881,601.70	0.22	105.7	Pulse	0.10	3
1	Ho		484,793.47	0.07	105.8	Pulse	0.10	3
1	Bi		2,985,202.87	0.50	104.8	Pulse	0.10	3
2	Sc		129,351.81	0.65	106.1	Pulse	0.30	3
2	Ge		83,145.83	1.00	105.4	Pulse	0.30	3
2	Ge		125,178.89	0.49	104.3	Pulse	0.30	3
2	Rh		2,006,879.78	0.43	104.4	Pulse	0.30	3
2	In		846,615.85	0.33	105.3	Pulse	0.30	3
2	Tb		2,881,044.26	0.39	107.4	Pulse	0.30	3
2	Ho		293,855.40	0.55	107.3	Pulse	0.30	3
2	Bi		1,953,415.34	0.23	104.7	Pulse	0.30	3
3	Sc		149,042.95	0.27	101.2	Pulse	0.30	3
3	Ge		101,500.31	0.75	99.9	Pulse	0.30	3
3	Ge		153,918.58	0.37	100.5	Pulse	0.30	3
3	Rh		1,763,569.72	0.52	101.6	Pulse	0.30	3
3	Tb		3,269,230.29	0.50	102.8	Pulse	0.30	3

Quantitation Report

File Name	071SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 16:16
Sample Name	mp17244-s1
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	9/12/2019 13:37
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	73.217	ug/l	0.17	337,801.44	3.298E-01	Pulse	0.25	3
B			1	602.853	ug/l	1.04	1,955,966.24	1.910E+00	Pulse	0.15	3
Ca			1	134822.661	ug/l	0.70	94,956,008.58	4.568E+01	Analog	0.10	3
Sr			1	643.218	ug/l	1.46	23,499,412.98	8.403E+00	Analog	0.10	3
Mo			1	112.972	ug/l	0.99	770,949.52	2.757E-01	Pulse	0.10	3
Ag			1	67.028	ug/l	0.55	1,257,258.55	3.996E-01	Pulse	0.10	3
Sn			1	75.647	ug/l	0.46	922,627.43	2.933E-01	Pulse	0.10	3
Sb			1	76.608	ug/l	0.40	1,159,098.55	2.433E-01	Pulse	0.10	3
Ba			1	167.572	ug/l	1.45	1,065,487.38	2.236E-01	Pulse	0.10	3
Tl			1	76.651	ug/l	0.95	2,731,707.04	1.024E+00	Pulse	0.10	3
Pb			1	79.010	ug/l	0.67	968,356.55	3.629E-01	Pulse	0.10	3
Pb			1	79.096	ug/l	0.52	853,305.77	3.198E-01	Pulse	0.10	3
Pb			1	78.709	ug/l	0.23	3,912,048.23	1.466E+00	Pulse	0.10	3
Na			2	171103.634	ug/l	1.60	183,356,828.27	1.424E+03	Analog	0.30	3
Mg			2	18097.063	ug/l	1.12	9,033,444.09	7.014E+01	Analog	0.30	3
Al			2	1866.541	ug/l	1.35	321,350.75	2.495E+00	Pulse	0.30	3
K			2	19091.877	ug/l	1.17	7,948,685.52	6.171E+01	Analog	0.30	3
Ca			2	136174.038	ug/l	0.65	2,957,331.13	2.296E+01	Pulse	0.30	3
Ti			2	77.369	ug/l	1.37	12,240.17	9.502E-02	Pulse	0.30	3
V			2	75.612	ug/l	0.72	390,010.84	3.028E+00	Pulse	0.30	3
Cr			2	73.813	ug/l	0.82	480,713.12	3.732E+00	Pulse	0.30	3
Mn			2	439.732	ug/l	1.00	1,575,838.24	1.223E+01	Pulse	0.30	3
Fe			2	3600.019	ug/l	1.19	18,726,764.81	1.454E+02	Analog	0.30	3
Co			2	68.347	ug/l	1.21	708,120.64	5.498E+00	Pulse	0.30	3
Ni			2	66.327	ug/l	0.60	180,830.49	1.404E+00	Pulse	0.30	3
Cu			2	66.615	ug/l	0.85	494,139.08	3.836E+00	Pulse	0.30	3
Zn			2	64.495	ug/l	2.73	75,945.86	5.897E-01	Pulse	0.30	3
As			2	80.095	ug/l	1.73	53,937.08	4.188E-01	Pulse	1.00	3
Cd			2	67.161	ug/l	0.81	120,527.21	1.503E-01	Pulse	0.30	3
Sn			2	75.135	ug/l	0.50	300,569.50	3.747E-01	Pulse	0.30	3
Se			3	178.267	ug/l	0.51	26,457.83	1.831E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,024,368.72	1.09	94.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,078,902.62	0.77	99.1	Pulse	0.10	3
1	Ge		422,405.29	0.98	96.2	Pulse	0.10	3
1	Ge		590,476.80	1.22	96.0	Pulse	0.10	3
1	Rh		2,796,547.25	0.58	90.4	Pulse	0.10	3
1	In		3,146,023.22	0.63	97.5	Pulse	0.10	3
1	Tb		4,764,650.55	1.21	103.1	Pulse	0.10	3
1	Ho		473,407.81	1.23	103.3	Pulse	0.10	3
1	Bi		2,668,530.69	0.71	93.6	Pulse	0.10	3
2	Sc		128,806.64	0.72	105.6	Pulse	0.30	3
2	Ge		78,454.87	0.70	99.4	Pulse	0.30	3
2	Ge		117,774.52	0.58	98.2	Pulse	0.30	3
2	Rh		1,787,442.22	0.23	93.0	Pulse	0.30	3
2	In		802,060.04	0.25	99.7	Pulse	0.30	3
2	Tb		2,797,553.92	0.77	104.3	Pulse	0.30	3
2	Ho		286,665.43	0.65	104.7	Pulse	0.30	3
2	Bi		1,737,789.10	0.46	93.1	Pulse	0.30	3
3	Sc		146,219.57	1.26	99.3	Pulse	0.30	3
3	Ge		94,345.64	1.14	92.9	Pulse	0.30	3
3	Ge		144,466.05	0.52	94.3	Pulse	0.30	3
3	Rh		1,541,479.66	0.55	88.8	Pulse	0.30	3
3	Tb		3,083,110.71	0.51	96.9	Pulse	0.30	3

Quantitation Report

File Name	072SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 16:21
Sample Name	mp17244-s1
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	9/12/2019 13:37
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	72.112	ug/l	0.64	67,140.33	6.497E-02	Pulse	0.25	3
B			1	649.779	ug/l	0.87	434,252.24	4.202E-01	Pulse	0.15	3
Ca			1	136878.841	ug/l	1.46	18,521,636.39	9.277E+00	Analog	0.10	3
Sr			1	590.149	ug/l	1.34	4,569,445.14	1.542E+00	Pulse	0.10	3
Mo			1	106.753	ug/l	1.13	154,414.75	5.211E-02	Pulse	0.10	3
Ag			1	69.613	ug/l	1.19	269,054.70	8.302E-02	Pulse	0.10	3
Sn			1	74.543	ug/l	0.85	188,827.84	5.826E-02	Pulse	0.10	3
Sb			1	79.364	ug/l	0.95	239,228.83	5.043E-02	Pulse	0.10	3
Ba			1	167.883	ug/l	0.77	212,618.90	4.482E-02	Pulse	0.10	3
Tl			1	74.488	ug/l	0.25	567,014.73	1.990E-01	Pulse	0.10	3
Pb			1	76.709	ug/l	1.80	200,930.21	7.052E-02	Pulse	0.10	3
Pb			1	77.063	ug/l	0.72	177,678.06	6.236E-02	Pulse	0.10	3
Pb			1	76.447	ug/l	0.83	812,031.28	2.850E-01	Pulse	0.10	3
Na			2	174522.437	ug/l	0.60	35,664,554.14	2.905E+02	Analog	0.30	3
Mg			2	17751.865	ug/l	0.70	1,689,536.60	1.376E+01	Pulse	0.30	3
Al			2	1882.082	ug/l	0.78	62,493.65	5.090E-01	Pulse	0.30	3
K			2	18355.365	ug/l	1.01	1,465,368.90	1.194E+01	Pulse	0.30	3
Ca			2	136838.335	ug/l	0.97	566,623.90	4.615E+00	Pulse	0.30	3
Ti			2	74.742	ug/l	5.89	2,254.63	1.837E-02	Pulse	0.30	3
V			2	76.026	ug/l	0.42	75,011.73	6.110E-01	Pulse	0.30	3
Cr			2	75.764	ug/l	0.09	94,451.28	7.693E-01	Pulse	0.30	3
Mn			2	453.542	ug/l	0.80	309,962.64	2.525E+00	Pulse	0.30	3
Fe			2	3630.913	ug/l	0.43	3,603,039.72	2.935E+01	Pulse	0.30	3
Co			2	72.027	ug/l	1.22	142,285.88	1.159E+00	Pulse	0.30	3
Ni			2	71.555	ug/l	0.98	37,304.43	3.038E-01	Pulse	0.30	3
Cu			2	71.725	ug/l	0.82	104,314.26	8.496E-01	Pulse	0.30	3
Zn			2	72.579	ug/l	1.73	17,192.47	1.400E-01	Pulse	0.30	3
As			2	85.286	ug/l	0.52	10,959.69	8.927E-02	Pulse	1.00	3
Cd			2	71.900	ug/l	0.85	25,982.79	3.219E-02	Pulse	0.30	3
Sn			2	75.530	ug/l	0.28	61,270.63	7.592E-02	Pulse	0.30	3
Se			3	187.008	ug/l	1.02	5,571.01	3.846E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,033,459.51	0.58	94.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,996,553.15	0.87	95.2	Pulse	0.10	3
1	Ge		423,366.31	0.53	96.4	Pulse	0.10	3
1	Ge		595,769.15	0.41	96.9	Pulse	0.10	3
1	Rh		2,963,285.89	0.72	95.8	Pulse	0.10	3
1	In		3,241,138.71	0.87	100.4	Pulse	0.10	3
1	Tb		4,743,628.06	1.09	102.7	Pulse	0.10	3
1	Ho		471,912.95	1.93	102.9	Pulse	0.10	3
1	Bi		2,849,087.14	0.56	100.0	Pulse	0.10	3
2	Sc		122,777.38	0.80	100.7	Pulse	0.30	3
2	Ge		78,704.78	1.11	99.8	Pulse	0.30	3
2	Ge		118,976.07	1.21	99.2	Pulse	0.30	3
2	Rh		1,868,846.87	0.43	97.2	Pulse	0.30	3
2	In		807,056.10	0.45	100.3	Pulse	0.30	3
2	Tb		2,764,607.60	1.50	103.1	Pulse	0.30	3
2	Ho		286,183.81	1.36	104.5	Pulse	0.30	3
2	Bi		1,862,548.19	0.57	99.8	Pulse	0.30	3
3	Sc		140,550.37	1.08	95.5	Pulse	0.30	3
3	Ge		95,277.79	0.88	93.8	Pulse	0.30	3
3	Ge		144,868.24	0.33	94.6	Pulse	0.30	3
3	Rh		1,616,225.91	0.87	93.1	Pulse	0.30	3
3	Tb		3,112,265.30	0.74	97.8	Pulse	0.30	3

Quantitation Report

File Name	073SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 16:26
Sample Name	mp17244-s2
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	9/12/2019 13:37
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	70.510	ug/l	1.38	313,779.17	3.176E-01	Pulse	0.25	3
B			1	592.106	ug/l	0.49	1,853,354.65	1.876E+00	Pulse	0.15	3
Ca			1	131157.919	ug/l	1.04	89,157,578.67	4.444E+01	Analog	0.10	3
Sr			1	623.737	ug/l	0.74	22,318,483.84	8.149E+00	Analog	0.10	3
Mo			1	110.073	ug/l	0.93	735,681.24	2.686E-01	Pulse	0.10	3
Ag			1	65.185	ug/l	1.27	1,199,606.52	3.887E-01	Pulse	0.10	3
Sn			1	74.000	ug/l	1.23	885,530.56	2.869E-01	Pulse	0.10	3
Sb			1	74.915	ug/l	0.68	1,111,060.97	2.379E-01	Pulse	0.10	3
Ba			1	164.115	ug/l	0.72	1,022,826.05	2.190E-01	Pulse	0.10	3
Tl			1	74.644	ug/l	1.10	2,615,491.89	9.969E-01	Pulse	0.10	3
Pb			1	77.041	ug/l	1.52	928,353.87	3.538E-01	Pulse	0.10	3
Pb			1	77.231	ug/l	0.57	819,189.10	3.122E-01	Pulse	0.10	3
Pb			1	76.648	ug/l	0.53	3,745,602.36	1.428E+00	Pulse	0.10	3
Na			2	164869.299	ug/l	1.01	170,373,059.90	1.372E+03	Analog	0.30	3
Mg			2	17593.646	ug/l	1.09	8,468,596.61	6.818E+01	Analog	0.30	3
Al			2	1811.485	ug/l	1.02	300,768.41	2.422E+00	Pulse	0.30	3
K			2	18660.791	ug/l	2.12	7,491,748.87	6.032E+01	Analog	0.30	3
Ca			2	132671.189	ug/l	1.20	2,778,345.45	2.237E+01	Pulse	0.30	3
Ti			2	74.876	ug/l	1.57	11,421.80	9.196E-02	Pulse	0.30	3
V			2	73.203	ug/l	1.02	364,107.47	2.932E+00	Pulse	0.30	3
Cr			2	72.083	ug/l	0.37	452,715.17	3.645E+00	Pulse	0.30	3
Mn			2	430.994	ug/l	0.46	1,489,414.18	1.199E+01	Pulse	0.30	3
Fe			2	3539.560	ug/l	1.18	17,756,153.18	1.430E+02	Analog	0.30	3
Co			2	66.502	ug/l	0.61	664,419.27	5.349E+00	Pulse	0.30	3
Ni			2	64.225	ug/l	0.44	168,851.69	1.359E+00	Pulse	0.30	3
Cu			2	64.488	ug/l	0.57	461,404.72	3.715E+00	Pulse	0.30	3
Zn			2	62.926	ug/l	0.74	71,487.01	5.756E-01	Pulse	0.30	3
As			2	77.485	ug/l	0.72	50,319.60	4.051E-01	Pulse	1.00	3
Cd			2	66.277	ug/l	0.53	115,773.18	1.483E-01	Pulse	0.30	3
Sn			2	73.114	ug/l	0.33	284,715.02	3.647E-01	Pulse	0.30	3
Se			3	174.933	ug/l	0.21	25,203.39	1.797E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		988,095.28	0.65	90.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,006,369.92	0.38	95.7	Pulse	0.10	3
1	Ge		404,744.46	1.53	92.2	Pulse	0.10	3
1	Ge		567,563.69	0.91	92.3	Pulse	0.10	3
1	Rh		2,738,920.27	0.58	88.5	Pulse	0.10	3
1	In		3,086,854.72	1.11	95.6	Pulse	0.10	3
1	Tb		4,670,254.10	0.44	101.1	Pulse	0.10	3
1	Ho		465,769.76	0.74	101.6	Pulse	0.10	3
1	Bi		2,623,745.07	0.37	92.1	Pulse	0.10	3
2	Sc		124,207.07	0.69	101.9	Pulse	0.30	3
2	Ge		75,555.68	1.30	95.8	Pulse	0.30	3
2	Ge		114,505.70	1.40	95.4	Pulse	0.30	3
2	Rh		1,741,619.24	0.80	90.6	Pulse	0.30	3
2	In		780,712.05	0.67	97.1	Pulse	0.30	3
2	Tb		2,723,901.91	0.93	101.6	Pulse	0.30	3
2	Ho		280,330.45	1.39	102.4	Pulse	0.30	3
2	Bi		1,714,774.17	0.74	91.9	Pulse	0.30	3
3	Sc		141,088.02	0.62	95.8	Pulse	0.30	3
3	Ge		91,836.24	0.79	90.4	Pulse	0.30	3
3	Ge		140,237.89	0.05	91.5	Pulse	0.30	3
3	Rh		1,503,839.77	0.35	86.6	Pulse	0.30	3
3	Tb		3,046,957.73	0.39	95.8	Pulse	0.30	3

Quantitation Report

File Name	074SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 16:31
Sample Name	mp17244-s2
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	9/12/2019 13:37
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	72.294	ug/l	1.00	63,855.76	6.513E-02	Pulse	0.25	3
B			1	676.901	ug/l	0.49	428,695.23	4.373E-01	Pulse	0.15	3
Ca			1	134772.103	ug/l	1.09	17,502,430.16	9.135E+00	Analog	0.10	3
Sr			1	582.531	ug/l	0.38	4,370,130.25	1.522E+00	Pulse	0.10	3
Mo			1	104.478	ug/l	0.43	146,410.22	5.100E-02	Pulse	0.10	3
Ag			1	68.160	ug/l	0.41	257,451.39	8.128E-02	Pulse	0.10	3
Sn			1	74.426	ug/l	0.49	184,227.37	5.817E-02	Pulse	0.10	3
Sb			1	78.646	ug/l	1.29	233,841.73	4.998E-02	Pulse	0.10	3
Ba			1	166.639	ug/l	1.71	208,185.20	4.449E-02	Pulse	0.10	3
Tl			1	72.359	ug/l	2.09	543,901.62	1.933E-01	Pulse	0.10	3
Pb			1	75.562	ug/l	2.29	195,433.25	6.947E-02	Pulse	0.10	3
Pb			1	75.439	ug/l	2.83	171,745.79	6.105E-02	Pulse	0.10	3
Pb			1	74.884	ug/l	1.34	785,480.73	2.792E-01	Pulse	0.10	3
Na			2	169748.721	ug/l	0.33	33,405,764.23	2.825E+02	Analog	0.30	3
Mg			2	17469.618	ug/l	0.81	1,601,143.89	1.354E+01	Pulse	0.30	3
Al			2	1836.167	ug/l	0.31	58,732.68	4.967E-01	Pulse	0.30	3
K			2	18042.514	ug/l	1.13	1,387,226.89	1.173E+01	Pulse	0.30	3
Ca			2	133442.751	ug/l	1.09	532,135.03	4.501E+00	Pulse	0.30	3
Ti			2	75.194	ug/l	3.63	2,184.62	1.848E-02	Pulse	0.30	3
V			2	74.274	ug/l	0.28	70,578.08	5.969E-01	Pulse	0.30	3
Cr			2	74.813	ug/l	0.98	89,819.24	7.597E-01	Pulse	0.30	3
Mn			2	446.202	ug/l	1.67	293,658.69	2.484E+00	Pulse	0.30	3
Fe			2	3581.780	ug/l	1.35	3,422,715.28	2.895E+01	Pulse	0.30	3
Co			2	70.899	ug/l	0.69	134,887.20	1.141E+00	Pulse	0.30	3
Ni			2	69.835	ug/l	0.27	35,065.19	2.966E-01	Pulse	0.30	3
Cu			2	70.899	ug/l	0.97	99,337.74	8.402E-01	Pulse	0.30	3
Zn			2	72.893	ug/l	0.88	16,621.89	1.406E-01	Pulse	0.30	3
As			2	82.370	ug/l	1.96	10,193.20	8.622E-02	Pulse	1.00	3
Cd			2	70.291	ug/l	2.55	24,770.12	3.148E-02	Pulse	0.30	3
Sn			2	74.079	ug/l	1.19	58,606.02	7.447E-02	Pulse	0.30	3
Se			3	193.035	ug/l	4.48	5,373.48	3.969E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		980,399.79	0.47	90.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,916,073.88	0.28	91.4	Pulse	0.10	3
1	Ge		412,539.01	0.58	94.0	Pulse	0.10	3
1	Ge		581,121.63	0.44	94.5	Pulse	0.10	3
1	Rh		2,870,925.89	0.23	92.8	Pulse	0.10	3
1	In		3,167,289.03	0.21	98.1	Pulse	0.10	3
1	Tb		4,679,073.06	0.15	101.3	Pulse	0.10	3
1	Ho		467,792.77	0.09	102.0	Pulse	0.10	3
1	Bi		2,813,663.40	0.87	98.7	Pulse	0.10	3
2	Sc		118,235.53	0.62	97.0	Pulse	0.30	3
2	Ge		75,843.75	0.20	96.1	Pulse	0.30	3
2	Ge		115,387.87	0.59	96.2	Pulse	0.30	3
2	Rh		1,813,514.93	0.92	94.3	Pulse	0.30	3
2	In		786,992.29	0.82	97.8	Pulse	0.30	3
2	Tb		2,729,664.82	0.51	101.8	Pulse	0.30	3
2	Ho		280,722.48	0.22	102.5	Pulse	0.30	3
2	Bi		1,841,406.18	0.33	98.7	Pulse	0.30	3
3	Sc		128,447.61	4.47	87.2	Pulse	0.30	3
3	Ge		89,738.36	3.36	88.3	Pulse	0.30	3
3	Ge		135,494.63	3.34	88.4	Pulse	0.30	3
3	Rh		1,500,833.17	4.68	86.4	Pulse	0.30	3
3	Tb		2,919,940.03	5.36	91.8	Pulse	0.30	3

Quantitation Report

File Name	075_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 16:36
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	9/12/2019 13:37
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	51.158	ug/l	4.29	218,556.00	2.304E-01	Pulse	0.25	3
B			1	112.772	ug/l	4.50	347,206.93	3.661E-01	Pulse	0.15	3
Ca			1	5091.486	ug/l	0.61	3,240,379.85	1.728E+00	Pulse	0.10	3
Sr			1	51.766	ug/l	1.54	1,944,192.26	6.764E-01	Pulse	0.10	3
Mo			1	51.327	ug/l	0.83	360,067.83	1.253E-01	Pulse	0.10	3
Ag			1	48.809	ug/l	1.64	910,690.53	2.910E-01	Pulse	0.10	3
Sn			1	50.493	ug/l	0.86	613,250.94	1.959E-01	Pulse	0.10	3
Sb			1	50.062	ug/l	1.09	742,357.77	1.590E-01	Pulse	0.10	3
Ba			1	49.357	ug/l	2.76	307,580.86	6.588E-02	Pulse	0.10	3
Tl			1	51.261	ug/l	3.94	1,897,558.51	6.846E-01	Pulse	0.10	3
Pb			1	51.015	ug/l	4.28	649,421.37	2.343E-01	Pulse	0.10	3
Pb			1	51.571	ug/l	4.09	577,927.41	2.085E-01	Pulse	0.10	3
Pb			1	51.132	ug/l	3.60	2,640,097.15	9.525E-01	Pulse	0.10	3
Na			2	5016.321	ug/l	0.89	4,847,285.36	4.182E+01	Analog	0.30	3
Mg			2	4912.210	ug/l	0.56	2,206,651.23	1.904E+01	Pulse	0.30	3
Al			2	4922.832	ug/l	1.35	761,284.36	6.568E+00	Pulse	0.30	3
K			2	4957.494	ug/l	0.65	1,864,608.40	1.609E+01	Pulse	0.30	3
Ca			2	5150.982	ug/l	1.00	100,781.72	8.695E-01	Pulse	0.30	3
Ti			2	50.434	ug/l	2.24	7,179.41	6.194E-02	Pulse	0.30	3
V			2	50.636	ug/l	0.30	235,123.73	2.029E+00	Pulse	0.30	3
Cr			2	50.160	ug/l	0.66	294,100.65	2.537E+00	Pulse	0.30	3
Mn			2	50.660	ug/l	1.08	163,481.17	1.411E+00	Pulse	0.30	3
Fe			2	5204.147	ug/l	1.12	24,358,903.48	2.102E+02	Analog	0.30	3
Co			2	49.895	ug/l	0.75	465,191.58	4.014E+00	Pulse	0.30	3
Ni			2	49.482	ug/l	0.99	121,427.19	1.048E+00	Pulse	0.30	3
Cu			2	49.942	ug/l	0.42	334,230.97	2.884E+00	Pulse	0.30	3
Zn			2	50.433	ug/l	0.59	53,682.92	4.632E-01	Pulse	0.30	3
As			2	50.640	ug/l	1.48	30,692.02	2.648E-01	Pulse	1.00	3
Cd			2	49.781	ug/l	1.15	87,236.59	1.114E-01	Pulse	0.30	3
Sn			2	50.468	ug/l	0.46	197,318.46	2.520E-01	Pulse	0.30	3
Se			3	194.165	ug/l	0.99	28,450.29	1.995E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		949,795.18	4.87	87.2	Pulse	0.10	3
1	Sc		1,875,317.21	1.48	89.4	Pulse	0.10	3
1	Ge		397,642.63	6.14	90.6	Pulse	0.10	3

Quantitation Report

1	Ge		556,727.58	4.81	90.5	Pulse	0.10	3
1	Rh		2,874,770.17	1.78	92.9	Pulse	0.10	3
1	In		3,129,997.41	1.86	97.0	Pulse	0.10	3
1	Tb		4,669,613.26	1.13	101.1	Mix	0.10	3
1	Ho		457,153.94	1.35	99.7	Pulse	0.10	3
1	Bi		2,774,596.94	4.12	97.4	Pulse	0.10	3
2	Sc		115,903.39	0.17	95.0	Pulse	0.30	3
2	Ge		75,024.64	0.16	95.1	Pulse	0.30	3
2	Ge		113,843.51	0.91	94.9	Pulse	0.30	3
2	Rh		1,832,701.73	0.41	95.3	Pulse	0.30	3
2	In		783,150.81	0.31	97.4	Pulse	0.30	3
2	Tb		2,702,774.41	0.50	100.8	Pulse	0.30	3
2	Ho		279,683.82	0.53	102.2	Pulse	0.30	3
2	Bi		1,837,641.10	0.45	98.5	Pulse	0.30	3
3	Sc		136,677.33	0.10	92.8	Pulse	0.30	3
3	Ge		93,667.35	0.56	92.2	Pulse	0.30	3
3	Ge		142,633.63	0.68	93.1	Pulse	0.30	3
3	Rh		1,636,610.00	0.60	94.3	Pulse	0.30	3
3	Tb		3,113,008.07	0.75	97.9	Pulse	0.30	3

Quantitation Report

File Name	076_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 16:41
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	9/12/2019 13:37
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	0.013	ug/l	16.89	70.67	7.046E-05	Pulse	0.25	3
B			1	12.927	ug/l	1.22	51,743.25	5.161E-02	Pulse	0.15	3
Ca			1	2.433	ug/l	23.38	7,712.13	3.971E-03	Pulse	0.10	3
Sr			1	0.017	ug/l	9.01	1,080.09	3.541E-04	Pulse	0.10	3
Mo			1	0.086	ug/l	17.55	663.37	2.175E-04	Pulse	0.10	3
Ag			1	0.018	ug/l	10.87	370.02	1.134E-04	Pulse	0.10	3
Sn			1	0.119	ug/l	13.42	3,370.54	1.033E-03	Pulse	0.10	3
Sb			1	0.170	ug/l	8.92	2,697.01	5.739E-04	Pulse	0.10	3
Ba			1	0.010	ug/l	7.96	163.34	3.476E-05	Pulse	0.10	3
Tl			1	0.017	ug/l	8.70	860.06	2.932E-04	Pulse	0.10	3
Pb			1	0.040	ug/l	12.50	750.05	2.557E-04	Pulse	0.10	3
Pb			1	0.041	ug/l	22.57	686.71	2.344E-04	Pulse	0.10	3
Pb			1	0.038	ug/l	6.53	2,956.91	1.008E-03	Pulse	0.10	3
Na			2	5.342	ug/l	4.77	15,770.81	1.320E-01	Pulse	0.30	3
Mg			2	0.730	ug/l	12.22	592.24	4.958E-03	Pulse	0.30	3
Al			2	-2.782	ug/l	-5.45	430.01	3.600E-03	Pulse	0.30	3
K			2	0.379	ug/l	47.27	10,296.60	8.619E-02	Pulse	0.30	3
Ca			2	1.236	ug/l	111.48	154.45	1.293E-03	Pulse	0.30	3
Ti			2	0.000	ug/l	3753.37	1.11	9.243E-06	Pulse	0.30	3
V			2	-0.018	ug/l	-22.40	218.90	1.832E-03	Pulse	0.30	3
Cr			2	-0.011	ug/l	-70.11	406.68	3.404E-03	Pulse	0.30	3
Mn			2	0.002	ug/l	404.01	138.89	1.162E-03	Pulse	0.30	3
Fe			2	0.860	ug/l	6.74	6,922.64	5.794E-02	Pulse	0.30	3
Co			2	0.006	ug/l	41.55	91.09	7.628E-04	Pulse	0.30	3
Ni			2	0.023	ug/l	180.08	198.91	1.666E-03	Pulse	0.30	3
Cu			2	-0.076	ug/l	-8.48	3,061.44	2.562E-02	Pulse	0.30	3
Zn			2	-0.151	ug/l	-29.01	963.37	8.065E-03	Pulse	0.30	3
As			2	0.010	ug/l	69.55	19.00	1.589E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.005	ug/l	22.60	28.83	3.538E-05	Pulse	0.30	3
Sn			2	0.180	ug/l	9.30	1,317.85	1.618E-03	Pulse	0.30	3
Se			3	0.091	ug/l	23.06	19.67	1.338E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,002,585.75	0.61	92.0	Pulse	0.10	3
1	Sc		1,942,001.38	0.26	92.6	Pulse	0.10	3
1	Ge		420,613.34	1.23	95.8	Pulse	0.10	3
1	Ge		585,569.30	1.09	95.2	Pulse	0.10	3
1	Rh		3,050,319.02	0.33	98.6	Pulse	0.10	3
1	In		3,261,876.19	0.90	101.1	Pulse	0.10	3
1	Tb		4,699,122.64	0.82	101.7	Pulse	0.10	3
1	Ho		465,927.69	0.38	101.6	Pulse	0.10	3
1	Bi		2,933,337.46	1.14	102.9	Pulse	0.10	3
2	Sc		119,472.15	0.45	98.0	Pulse	0.30	3
2	Ge		78,556.43	0.92	99.6	Pulse	0.30	3
2	Ge		119,319.92	0.74	99.5	Pulse	0.30	3
2	Rh		1,931,432.36	0.36	100.5	Pulse	0.30	3
2	In		814,810.81	0.39	101.3	Pulse	0.30	3
2	Tb		2,756,886.14	0.33	102.8	Pulse	0.30	3
2	Ho		281,202.81	0.60	102.7	Pulse	0.30	3
2	Bi		1,920,518.68	0.07	102.9	Pulse	0.30	3
3	Sc		140,418.09	0.38	95.4	Pulse	0.30	3
3	Ge		96,395.40	0.91	94.9	Pulse	0.30	3
3	Ge		147,015.87	0.39	96.0	Pulse	0.30	3
3	Rh		1,717,435.38	0.71	98.9	Pulse	0.30	3
3	Tb		3,162,623.62	0.63	99.4	Pulse	0.30	3

Quantitation Report

File Name	077SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Method File	
Method Path	
Acq Time	9/12/2019 16:46
Sample Name	jc94442-1
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	9/12/2019 13:37
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	0.012	ug/l	50.40	64.00	6.599E-05	Pulse	0.25	3
B			1	523.866	ug/l	1.23	1,611,260.04	1.661E+00	Pulse	0.15	3
Ca			1	132991.766	ug/l	1.21	87,902,092.03	4.506E+01	Analog	0.10	3
Sr			1	555.594	ug/l	1.06	19,707,773.04	7.259E+00	Analog	0.10	3
Mo			1	30.740	ug/l	0.77	203,690.18	7.502E-02	Pulse	0.10	3
Ag			1	0.017	ug/l	23.10	333.35	1.087E-04	Pulse	0.10	3
Sn			1	0.087	ug/l	9.63	2,783.68	9.091E-04	Pulse	0.10	3
Sb			1	2.505	ug/l	2.61	36,770.43	7.986E-03	Pulse	0.10	3
Ba			1	94.524	ug/l	0.68	580,814.51	1.261E-01	Pulse	0.10	3
Tl			1	0.021	ug/l	20.04	916.73	3.504E-04	Pulse	0.10	3
Pb			1	0.475	ug/l	5.71	5,904.76	2.256E-03	Pulse	0.10	3
Pb			1	0.456	ug/l	5.92	4,997.74	1.909E-03	Pulse	0.10	3
Pb			1	0.462	ug/l	3.52	23,294.77	8.899E-03	Pulse	0.10	3
Na			2	169240.398	ug/l	1.88	170,847,850.99	1.408E+03	Analog	0.30	3
Mg			2	16279.791	ug/l	1.49	7,655,145.25	6.309E+01	Analog	0.30	3
Al			2	52.128	ug/l	1.20	9,315.99	7.678E-02	Pulse	0.30	3
K			2	17088.471	ug/l	1.83	6,702,991.26	5.525E+01	Analog	0.30	3
Ca			2	133074.062	ug/l	0.18	2,722,413.85	2.244E+01	Pulse	0.30	3
Ti			2	3.327	ug/l	9.14	496.68	4.094E-03	Pulse	0.30	3
V			2	1.208	ug/l	2.53	6,173.45	5.088E-02	Pulse	0.30	3
Cr			2	3.442	ug/l	1.49	21,575.30	1.778E-01	Pulse	0.30	3
Mn			2	366.680	ug/l	0.53	1,237,873.74	1.020E+01	Pulse	0.30	3
Fe			2	1785.126	ug/l	1.25	8,749,202.98	7.211E+01	Analog	0.30	3
Co			2	0.316	ug/l	4.10	3,110.05	2.563E-02	Pulse	0.30	3
Ni			2	0.790	ug/l	4.13	2,170.17	1.788E-02	Pulse	0.30	3
Cu			2	0.845	ug/l	4.20	9,492.85	7.824E-02	Pulse	0.30	3
Zn			2	7.058	ug/l	3.54	8,848.03	7.293E-02	Pulse	0.30	3
As			2	9.624	ug/l	2.43	6,116.16	5.041E-02	Pulse	1.00	3
Cd			2	0.012	ug/l	68.32	39.45	5.100E-05	Pulse	0.30	3
Sn			2	0.117	ug/l	22.39	1,005.60	1.301E-03	Pulse	0.30	3
Se			3	0.134	ug/l	10.35	24.20	1.780E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		970,185.88	0.16	89.0	Pulse	0.10	3

Current Signal

[1]

Mass	Range	Count	Avg. Count	RSD [%]
7	5000	1990	1999.5	3.18
59	5000	2682	2699.8	2.72
89	10000	5300	5091.1	2.56
140	10000	5424	5441.9	2.83
205	5000	3827	3799.5	2.28
156/140	2	0.627 %	0.735 %	19.02
70/140	10	6.435 %	5.956 %	11.39
9	20	1	1.5	115.26
11	5000	1922	2006.5	3.29
88	200	81	75.8	12.88
95	20	10	5.2	53.55
107	20	0	2.6	73.46
121	100	42	43.8	19.84
137	50	24	17.2	25.57
208	100	36	33.4	20.68
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	-26	V
Extract 2	-140.0	V	Cell Exit	-60	V
Omega Bias	-60	V	Deflect	15.0	V
Omega Lens	7.5	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	2.58E+2	Pa	Internal Temp	26.4	℃
Water RF/WC/IF	1.24	L/min	S/C Temp (L)	1.9	℃
Carrier Gas(BP)	1.44E+2	kPa			

US EPA Tune Check Sample Report

Batch Folder C:\Agilent\ICPMH\1\DATA\xa091219m1.b
Report Comment
Instrument Name G3281A JP10340551

[1]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	61565	0.60	5.00	
24	254035	0.60	5.00	
25	33328	0.59	5.00	
26	38995	0.98	5.00	
59	325615	0.63	5.00	
115	548934	0.41	5.00	
206	146313	0.73	5.00	
207	134400	0.87	5.00	
208	317951	0.31	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	61453	62129	61102	61516	61625
24	252420	253163	254126	253977	256487
25	33031	33480	33383	33239	33510
26	38503	39164	39183	38693	39434
59	324770	329067	325794	324622	323822
115	546987	550490	549920	546089	551185
206	145254	147087	145034	146982	147207
207	133066	135095	136049	133796	133995
208	316905	318650	319097	318175	316927

Integration Time [sec] = 0.1

Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	9940	8.95	8.9 - 9.1		0.781	0.900	
24	41196	23.95	23.9 - 24.1		0.760	0.900	
25	5525	24.90	24.9 - 25.1		0.733	0.900	
26	6310	25.90	25.9 - 26.1		0.761	0.900	
59	55762	58.95	58.9 - 59.1		0.721	0.900	
115	100734	115.00	114.9 - 115.1		0.711	0.900	
206	25651	206.00	205.9 - 206.1		0.753	0.900	
207	23231	206.95	206.9 - 207.1		0.721	0.900	
208	55660	207.95	207.9 - 208.1		0.729	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	7.5	V			
Extract 2	-140.0	V	Cell Entrance	-26	V			
Omega Bias	-60	V	Cell Exit	-60	V			
Deflect	15.0	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\xa091219m1.b\084SMPL.d

9 Be [1] / ISTD: 6 Li
y = 4.504E-3 x + 1.216E-5

R	1.0000
DL	0.004993
BEC	0.0027

11 B [1] / ISTD: 6 Li
y = 3.149E-3 x + 1.090E-2

R	0.9996
DL	0.4018
BEC	3.459

23 Na [2] / ISTD: 45 Sc
y = 8.320E-3 x + 8.756E-2

R	1.0000
DL	2.084
BEC	10.52

24 Mg [2] / ISTD: 45 Sc
y = 3.875E-3 x + 2.128E-3

R	1.0000
DL	0.2429
BEC	0.5492

27 Al [2] / ISTD: 45 Sc
y = 1.333E-3 x + 7.307E-3

R	1.0000
DL	0.5909
BEC	5.483

39 K [2] / ISTD: 45 Sc
y = 3.228E-3 x + 8.496E-2

R	1.0000
DL	3.114
BEC	26.32

44 Ca [1] / ISTD: 45 Sc
y = 3.388E-4 x + 3.147E-3

R	0.9999
DL	0.9906
BEC	9.289

44 Ca [2] / ISTD: 45 Sc
y = 1.686E-4 x + 1.085E-3

R	1.0000
DL	2.678
BEC	6.435

47 Ti [2] / ISTD: 45 Sc
y = 1.228E-3 x + 8.817E-6

R	0.9999
DL	0.03731
BEC	0.007179

51 V [2] / ISTD: 45 Sc
y = 4.001E-2 x + 2.553E-3

R	1.0000
DL	0.03653
BEC	0.0638

Calibration for C:\Agilent\ICPMH\1\DATA\xa091219m1.b\084SMPL.d

52 Cr [2] / ISTD: 45 Sc
y = 5.051E-2 x + 3.939E-3

R	1.0000
DL	0.03184
BEC	0.07799

55 Mn [2] / ISTD: 45 Sc
y = 2.782E-2 x + 1.104E-3

R	1.0000
DL	0.02235
BEC	0.03968

56 Fe [2] / ISTD: 45 Sc
y = 4.038E-2 x + 2.321E-2

R	1.0000
DL	0.06041
BEC	0.5748

59 Co [2] / ISTD: 45 Sc
y = 8.044E-2 x + 2.541E-4

R	1.0000
DL	0.002968
BEC	0.00316

60 Ni [2] / ISTD: 45 Sc
y = 2.115E-2 x + 1.187E-3

R	1.0000
DL	0.02567
BEC	0.05613

63 Cu [2] / ISTD: 45 Sc
y = 5.714E-2 x + 2.995E-2

R	1.0000
DL	0.0821
BEC	0.5241

66 Zn [2] / ISTD: 45 Sc
y = 8.997E-3 x + 9.424E-3

R	1.0000
DL	0.07461
BEC	1.047

75 As [2] / ISTD: 45 Sc
y = 5.227E-3 x + 1.046E-4

R	1.0000
DL	0.009614
BEC	0.02001

78 Se [3] / ISTD: 74 Ge
y = 1.027E-3 x + 4.004E-5

R	0.9997
DL	0.03049
BEC	0.03898

88 Sr [1] / ISTD: 103 Rh
y = 1.306E-2 x + 1.259E-4

R	1.0000
DL	0.004235
BEC	0.009639

Calibration for C:\Agilent\ICPMH\1\DATA\xa091219m1.b\084SMPL.d

95 Mo [1] / ISTD: 103 Rh
y = 2.440E-3 x + 6.560E-6

R	1.0000
DL	0.007901
BEC	0.002688

107 Ag [1] / ISTD: 115 In
y = 5.962E-3 x + 7.979E-6

R	1.0000
DL	0.003285
BEC	0.001338

111 Cd [2] / ISTD: 115 In
y = 2.237E-3 x + 2.517E-5

R	1.0000
DL	0.01091
BEC	0.01125

118 Sn [1] / ISTD: 115 In
y = 3.869E-3 x + 5.718E-4

R	1.0000
DL	0.02669
BEC	0.1478

118 Sn [2] / ISTD: 115 In
y = 4.978E-3 x + 7.194E-4

R	1.0000
DL	0.06579
BEC	0.1445

121 Sb [1] / ISTD: 159 Tb
y = 3.175E-3 x + 3.300E-5

R	1.0000
DL	0.001234
BEC	0.01039

137 Ba [1] / ISTD: 159 Tb
y = 1.334E-3 x + 2.139E-5

R	1.0000
DL	0.01448
BEC	0.01603

205 Tl [1] / ISTD: 209 Bi
y = 1.335E-2 x + 7.040E-5

R	1.0000
DL	0.002498
BEC	0.005271

206 Pb [1] / ISTD: 209 Bi
y = 4.592E-3 x + 7.286E-5

R	1.0000
DL	0.01531
BEC	0.01587

207 Pb [1] / ISTD: 209 Bi
y = 4.042E-3 x + 6.701E-5

R	1.0000
DL	0.01605
BEC	0.01658

208 Pb [1] / ISTD: 209 Bi

y = 1.862E-2 x + 3.002E-4

R	1.0000
DL	0.009046
BEC	0.01612

Quantitation Report

File Name	001CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 9:47
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	9/13/2019 11:35
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	96.10	46.67	4.249E-05	Pulse	0.25	3
B			1	0.364	ug/l	7.45	7,626.34	6.944E-03	Pulse	0.15	3
Ca			1	-0.086	ug/l	-629.20	4,920.94	2.493E-03	Pulse	0.10	3
Sr			1	0.002	ug/l	149.66	343.35	1.201E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	-559.67	43.33	1.517E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	500.82	40.00	1.318E-05	Pulse	0.10	3
Sn			1	0.019	ug/l	24.87	1,896.89	6.254E-04	Pulse	0.10	3
Sb			1	0.006	ug/l	71.85	276.68	6.312E-05	Pulse	0.10	3
Ba			1	-0.001	ug/l	-696.59	76.67	1.748E-05	Pulse	0.10	3
Tl			1	0.001	ug/l	95.59	286.68	1.040E-04	Pulse	0.10	3
Pb			1	-0.005	ug/l	-67.65	336.68	1.220E-04	Pulse	0.10	3
Pb			1	-0.012	ug/l	-24.63	243.34	8.830E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-679.52	1,460.09	5.296E-04	Pulse	0.10	3
Na			2	0.156	ug/l	35.95	8,900.22	7.545E-02	Pulse	0.30	3
Mg			2	0.053	ug/l	290.58	268.89	2.276E-03	Pulse	0.30	3
Al			2	-0.252	ug/l	-151.72	354.45	3.005E-03	Pulse	0.30	3
K			2	0.127	ug/l	328.01	10,084.24	8.550E-02	Pulse	0.30	3
Ca			2	-0.986	ug/l	-123.20	57.78	4.900E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	66575.12	3.33	2.839E-05	Pulse	0.30	3
V			2	-0.007	ug/l	-64.43	288.90	2.449E-03	Pulse	0.30	3
Cr			2	0.004	ug/l	72.27	454.46	3.853E-03	Pulse	0.30	3
Mn			2	-0.002	ug/l	-459.40	126.67	1.075E-03	Pulse	0.30	3
Fe			2	-0.043	ug/l	-89.74	2,542.46	2.155E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-347.26	39.99	3.398E-04	Pulse	0.30	3
Ni			2	-0.011	ug/l	-53.85	111.11	9.427E-04	Pulse	0.30	3
Cu			2	-0.271	ug/l	-7.05	1,696.78	1.439E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.284	ug/l	-8.52	702.25	5.955E-03	Pulse	0.30	3
As			2	0.016	ug/l	37.86	26.33	2.234E-04	Pulse	1.00	3
Cd			2	0.005	ug/l	36.97	16.66	2.049E-05	Pulse	0.30	3
Sn			2	0.013	ug/l	45.57	693.36	8.527E-04	Pulse	0.30	3
Se			3	0.002	ug/l	251.00	3.93	2.788E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,098,274.94	1.02	100.0	Pulse	0.10	3
1	Sc		1,973,897.73	0.59	100.0	Pulse	0.10	3
1	Ge		414,961.70	0.67	100.0	Pulse	0.10	3
1	Ge		572,086.66	1.27	100.0	Pulse	0.10	3
1	Rh		2,857,465.48	0.12	100.0	Pulse	0.10	3
1	In		3,033,033.46	0.16	100.0	Pulse	0.10	3
1	Tb		4,383,109.00	0.63	100.0	Pulse	0.10	3
1	Ho		439,171.11	0.77	100.0	Pulse	0.10	3
1	Bi		2,758,458.29	1.03	100.0	Pulse	0.10	3
2	Sc		117,956.75	0.98	100.0	Pulse	0.30	3
2	Ge		75,374.92	0.32	100.0	Pulse	0.30	3
2	Ge		115,120.19	1.31	100.0	Pulse	0.30	3
2	Rh		1,836,755.48	0.43	100.0	Pulse	0.30	3
2	In		813,131.72	0.33	100.0	Pulse	0.30	3
2	Tb		2,727,287.74	0.88	100.0	Pulse	0.30	3
2	Ho		279,443.52	1.27	100.0	Pulse	0.30	3
2	Bi		1,883,909.02	0.84	100.0	Pulse	0.30	3
3	Sc		140,039.43	0.56	100.0	Pulse	0.30	3
3	Ge		94,007.20	0.58	100.0	Pulse	0.30	3
3	Ge		140,995.64	0.71	100.0	Pulse	0.30	3
3	Rh		1,499,703.73	0.65	100.0	Pulse	0.30	3
3	Tb		2,788,938.71	0.22	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 9:52
Sample Name	STDA
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	9/13/2019 11:35
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	31.25	69.33	6.329E-05	Pulse	0.25	3
B			1	0.108	ug/l	95.34	6,754.85	6.163E-03	Pulse	0.15	3
Ca			1	1.572	ug/l	13.98	6,054.69	3.075E-03	Pulse	0.10	3
Sr			1	0.006	ug/l	37.11	480.03	1.705E-04	Pulse	0.10	3
Mo			1	0.004	ug/l	80.51	73.34	2.598E-05	Pulse	0.10	3
Ag			1	0.001	ug/l	63.54	60.00	1.983E-05	Pulse	0.10	3
Sn			1	0.025	ug/l	35.02	1,963.54	6.488E-04	Pulse	0.10	3
Sb			1	0.002	ug/l	30.73	226.68	5.158E-05	Pulse	0.10	3
Ba			1	0.003	ug/l	234.80	100.00	2.279E-05	Pulse	0.10	3
Tl			1	0.001	ug/l	62.05	290.01	1.050E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	-1603.72	396.69	1.438E-04	Pulse	0.10	3
Pb			1	0.001	ug/l	969.17	383.36	1.389E-04	Pulse	0.10	3
Pb			1	0.005	ug/l	39.07	1,763.45	6.389E-04	Pulse	0.10	3
Na			2	1.134	ug/l	25.95	9,866.30	8.351E-02	Pulse	0.30	3
Mg			2	0.265	ug/l	44.95	365.56	3.095E-03	Pulse	0.30	3
Al			2	0.167	ug/l	214.62	423.34	3.582E-03	Pulse	0.30	3
K			2	-0.056	ug/l	-1539.38	10,026.44	8.488E-02	Pulse	0.30	3
Ca			2	1.561	ug/l	57.78	111.11	9.411E-04	Pulse	0.30	3
Ti			2	0.007	ug/l	694.31	4.44	3.777E-05	Pulse	0.30	3
V			2	0.001	ug/l	604.07	326.67	2.765E-03	Pulse	0.30	3
Cr			2	0.020	ug/l	30.33	546.69	4.628E-03	Pulse	0.30	3
Mn			2	0.004	ug/l	239.40	147.78	1.252E-03	Pulse	0.30	3
Fe			2	0.152	ug/l	21.85	3,480.41	2.946E-02	Pulse	0.30	3
Co			2	0.002	ug/l	71.57	65.55	5.549E-04	Pulse	0.30	3
Ni			2	0.004	ug/l	210.23	148.89	1.261E-03	Pulse	0.30	3
Cu			2	-0.247	ug/l	-2.47	1,860.13	1.575E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.065	ug/l	-67.59	941.15	7.966E-03	Pulse	0.30	3
As			2	0.010	ug/l	35.82	22.67	1.919E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	152.54	12.22	1.496E-05	Pulse	0.30	3
Sn			2	0.000	ug/l	3149.55	641.13	7.854E-04	Pulse	0.30	3
Se			3	0.004	ug/l	77.79	4.33	3.081E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,095,928.05	0.25	100.0	Pulse	0.10	3
1	Sc		1,968,762.58	0.60	100.0	Pulse	0.10	3
1	Ge		407,940.15	0.25	100.0	Pulse	0.10	3
1	Ge		568,500.94	0.51	100.0	Pulse	0.10	3
1	Rh		2,817,650.79	0.86	100.0	Pulse	0.10	3
1	In		3,026,154.76	0.30	100.0	Pulse	0.10	3
1	Tb		4,394,479.21	0.93	100.0	Pulse	0.10	3
1	Ho		435,944.41	2.58	100.0	Pulse	0.10	3
1	Bi		2,761,567.98	1.16	100.0	Pulse	0.10	3
2	Sc		118,133.00	0.51	100.0	Pulse	0.30	3
2	Ge		76,009.99	1.33	100.0	Pulse	0.30	3
2	Ge		114,762.37	1.22	100.0	Pulse	0.30	3
2	Rh		1,844,905.07	0.06	100.0	Pulse	0.30	3
2	In		816,356.65	0.80	100.0	Pulse	0.30	3
2	Tb		2,737,294.62	1.01	100.0	Pulse	0.30	3
2	Ho		281,212.65	0.81	100.0	Pulse	0.30	3
2	Bi		1,879,263.60	0.46	100.0	Pulse	0.30	3
3	Sc		138,241.89	1.22	100.0	Pulse	0.30	3
3	Ge		92,772.17	0.56	100.0	Pulse	0.30	3
3	Ge		140,653.78	0.05	100.0	Pulse	0.30	3
3	Rh		1,506,987.89	0.53	100.0	Pulse	0.30	3
3	Tb		2,797,115.86	0.34	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 9:57
Sample Name	STDA
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	9/13/2019 11:35
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	---	24.00	2.175E-05	Pulse	0.25	3
B			1	0.000	ug/l	---	6,425.84	5.834E-03	Pulse	0.15	3
Ca			1	0.000	ug/l	---	4,927.60	2.523E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	228.25	290.02	1.023E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	-1599.83	43.33	1.535E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	1707.79	33.33	1.122E-05	Pulse	0.10	3
Sn			1	0.005	ug/l	249.59	1,690.17	5.676E-04	Pulse	0.10	3
Sb			1	-0.001	ug/l	-423.28	176.68	4.085E-05	Pulse	0.10	3
Ba			1	-0.001	ug/l	-913.92	76.67	1.774E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	1985.91	250.01	9.165E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-978.86	390.02	1.429E-04	Pulse	0.10	3
Pb			1	0.001	ug/l	562.40	390.02	1.429E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	4034.46	1,466.75	5.376E-04	Pulse	0.10	3
Na			2	0.000	ug/l	---	8,752.36	7.416E-02	Pulse	0.30	3
Mg			2	0.000	ug/l	---	244.45	2.071E-03	Pulse	0.30	3
Al			2	0.000	ug/l	---	395.57	3.352E-03	Pulse	0.30	3
K			2	-0.158	ug/l	-611.69	9,976.42	8.454E-02	Pulse	0.30	3
Ca			2	-0.349	ug/l	-228.15	71.11	6.028E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	3.33	2.834E-05	Pulse	0.30	3
V			2	0.000	ug/l	---	320.01	2.710E-03	Pulse	0.30	3
Cr			2	0.000	ug/l	---	430.01	3.642E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	---	133.34	1.130E-03	Pulse	0.30	3
Fe			2	-0.091	ug/l	-33.94	2,311.31	1.959E-02	Pulse	0.30	3
Co			2	0.000	ug/l	---	44.43	3.759E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	---	138.89	1.177E-03	Pulse	0.30	3
Cu			2	-0.276	ug/l	-4.60	1,669.00	1.414E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.336	ug/l	-12.25	646.69	5.479E-03	Pulse	0.30	3
As			2	0.000	ug/l	---	16.67	1.413E-04	Pulse	1.00	3
Cd			2	0.001	ug/l	375.91	9.99	1.230E-05	Pulse	0.30	3
Sn			2	0.000	ug/l	---	640.02	7.846E-04	Pulse	0.30	3
Se			3	-0.001	ug/l	-878.64	3.53	2.538E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,101,773.40	0.91	100.0	Pulse	0.10	3
1	Sc		1,952,936.32	1.32	100.0	Pulse	0.10	3
1	Ge		407,731.82	0.25	100.0	Pulse	0.10	3
1	Ge		567,049.22	1.09	100.0	Pulse	0.10	3
1	Rh		2,827,127.46	1.46	100.0	Pulse	0.10	3
1	In		2,979,577.58	1.16	100.0	Pulse	0.10	3
1	Tb		4,330,277.02	0.64	100.0	Pulse	0.10	3
1	Ho		433,172.45	0.89	100.0	Pulse	0.10	3
1	Bi		2,728,335.48	0.87	100.0	Pulse	0.10	3
2	Sc		118,021.22	0.61	100.0	Pulse	0.30	3
2	Ge		76,839.48	0.31	100.0	Pulse	0.30	3
2	Ge		116,046.55	0.90	100.0	Pulse	0.30	3
2	Rh		1,829,830.62	0.30	100.0	Pulse	0.30	3
2	In		815,500.64	0.62	100.0	Pulse	0.30	3
2	Tb		2,730,116.28	0.35	100.0	Pulse	0.30	3
2	Ho		280,969.51	0.26	100.0	Pulse	0.30	3
2	Bi		1,885,787.42	1.01	100.0	Pulse	0.30	3
3	Sc		136,006.04	0.22	100.0	Pulse	0.30	3
3	Ge		92,394.80	1.32	100.0	Pulse	0.30	3
3	Ge		139,394.49	0.64	100.0	Pulse	0.30	3
3	Rh		1,520,221.01	0.56	100.0	Pulse	0.30	3
3	Tb		2,806,798.85	0.41	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:03
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	9/13/2019 11:35
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	0.473	ug/l	3.92	2,368.20	2.160E-03	Pulse	0.25	3
B			1	23.898	ug/l	1.07	86,315.85	7.873E-02	Pulse	0.15	3
Ca			1	269.619	ug/l	0.37	191,963.82	9.724E-02	Pulse	0.10	3
Sr			1	4.988	ug/l	0.14	192,127.86	6.776E-02	Pulse	0.10	3
Mo			1	1.031	ug/l	2.64	7,652.11	2.699E-03	Pulse	0.10	3
Ag			1	0.465	ug/l	4.95	8,662.69	2.877E-03	Pulse	0.10	3
Sn			1	4.903	ug/l	1.06	61,695.16	2.048E-02	Pulse	0.10	3
Sb			1	2.084	ug/l	0.87	29,314.63	6.736E-03	Pulse	0.10	3
Ba			1	1.027	ug/l	9.28	6,241.50	1.435E-03	Pulse	0.10	3
Tl			1	0.499	ug/l	1.35	18,896.05	6.923E-03	Pulse	0.10	3
Pb			1	0.504	ug/l	7.45	6,908.63	2.531E-03	Pulse	0.10	3
Pb			1	0.486	ug/l	7.38	5,961.47	2.184E-03	Pulse	0.10	3
Pb			1	0.499	ug/l	3.76	27,701.45	1.015E-02	Pulse	0.10	3
Na			2	260.854	ug/l	0.36	264,332.97	2.225E+00	Pulse	0.30	3
Mg			2	264.892	ug/l	1.10	122,142.38	1.028E+00	Pulse	0.30	3
Al			2	27.107	ug/l	1.30	4,842.97	4.076E-02	Pulse	0.30	3
K			2	254.732	ug/l	0.91	112,341.10	9.454E-01	Pulse	0.30	3
Ca			2	283.474	ug/l	2.94	6,045.61	5.088E-02	Pulse	0.30	3
Ti			2	0.965	ug/l	22.20	147.78	1.243E-03	Pulse	0.30	3
V			2	1.029	ug/l	4.20	5,183.09	4.362E-02	Pulse	0.30	3
Cr			2	1.040	ug/l	3.46	6,594.71	5.550E-02	Pulse	0.30	3
Mn			2	1.038	ug/l	1.73	3,644.90	3.068E-02	Pulse	0.30	3
Fe			2	26.725	ug/l	0.87	132,021.42	1.111E+00	Pulse	0.30	3
Co			2	0.509	ug/l	1.87	4,823.74	4.060E-02	Pulse	0.30	3
Ni			2	0.997	ug/l	5.92	2,553.56	2.149E-02	Pulse	0.30	3
Cu			2	1.767	ug/l	1.21	15,067.02	1.268E-01	Pulse	0.30	3
Zn			2	5.274	ug/l	1.86	6,747.02	5.678E-02	Pulse	0.30	3
As			2	0.502	ug/l	7.32	330.67	2.783E-03	Pulse	1.00	3
Cd			2	0.479	ug/l	4.63	897.21	1.089E-03	Pulse	0.30	3
Sn			2	4.961	ug/l	1.34	21,584.93	2.620E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.504	ug/l	8.60	78.33	5.548E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,096,339.01	0.76	99.5	Pulse	0.10	3
1	Sc		1,974,267.89	1.17	101.1	Pulse	0.10	3
1	Ge		411,853.12	0.43	101.0	Pulse	0.10	3
1	Ge		564,762.75	0.59	99.6	Pulse	0.10	3
1	Rh		2,835,503.08	0.51	100.3	Pulse	0.10	3
1	In		3,012,034.55	0.76	101.1	Pulse	0.10	3
1	Tb		4,351,900.98	0.43	100.5	Pulse	0.10	3
1	Ho		432,092.54	0.47	99.8	Pulse	0.10	3
1	Bi		2,729,343.29	0.23	100.0	Pulse	0.10	3
2	Sc		118,823.57	0.26	100.7	Pulse	0.30	3
2	Ge		76,677.84	1.30	99.8	Pulse	0.30	3
2	Ge		115,803.79	0.53	99.8	Pulse	0.30	3
2	Rh		1,836,711.59	0.67	100.4	Pulse	0.30	3
2	In		823,836.21	0.77	101.0	Pulse	0.30	3
2	Tb		2,724,752.46	0.33	99.8	Pulse	0.30	3
2	Ho		280,198.23	0.23	99.7	Pulse	0.30	3
2	Bi		1,881,184.79	0.38	99.8	Pulse	0.30	3
3	Sc		137,094.95	0.54	100.8	Pulse	0.30	3
3	Ge		92,004.76	0.84	99.6	Pulse	0.30	3
3	Ge		141,212.93	0.87	101.3	Pulse	0.30	3
3	Rh		1,508,051.78	0.33	99.2	Pulse	0.30	3
3	Tb		2,816,159.12	0.24	100.3	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:08
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	9/13/2019 11:35
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	5.047	ug/l	1.83	25,098.55	2.282E-02	Pulse	0.25	3
B			1	5.616	ug/l	4.32	25,259.20	2.297E-02	Pulse	0.15	3
Ca			1	12.967	ug/l	4.36	13,882.93	7.078E-03	Pulse	0.10	3
Sr			1	5.069	ug/l	1.05	193,978.91	6.885E-02	Pulse	0.10	3
Mo			1	5.060	ug/l	1.07	37,140.44	1.318E-02	Pulse	0.10	3
Ag			1	5.019	ug/l	0.72	92,587.49	3.092E-02	Pulse	0.10	3
Sn			1	5.206	ug/l	3.11	65,002.17	2.171E-02	Pulse	0.10	3
Sb			1	5.078	ug/l	1.35	70,937.27	1.635E-02	Pulse	0.10	3
Ba			1	5.000	ug/l	0.88	29,979.89	6.909E-03	Pulse	0.10	3
Tl			1	4.958	ug/l	0.31	186,828.94	6.803E-02	Pulse	0.10	3
Pb			1	5.030	ug/l	1.13	65,837.34	2.397E-02	Pulse	0.10	3
Pb			1	4.964	ug/l	1.05	57,753.85	2.103E-02	Pulse	0.10	3
Pb			1	5.000	ug/l	0.12	266,153.22	9.691E-02	Pulse	0.10	3
Na			2	7.088	ug/l	6.55	15,943.19	1.326E-01	Pulse	0.30	3
Mg			2	5.910	ug/l	3.77	3,001.42	2.496E-02	Pulse	0.30	3
Al			2	6.016	ug/l	3.67	1,401.19	1.165E-02	Pulse	0.30	3
K			2	5.141	ug/l	13.13	12,315.75	1.024E-01	Pulse	0.30	3
Ca			2	26.139	ug/l	15.63	636.69	5.295E-03	Pulse	0.30	3
Ti			2	5.227	ug/l	8.67	795.59	6.613E-03	Pulse	0.30	3
V			2	5.076	ug/l	2.68	24,590.58	2.045E-01	Pulse	0.30	3
Cr			2	5.116	ug/l	2.14	31,107.13	2.587E-01	Pulse	0.30	3
Mn			2	5.128	ug/l	2.45	17,691.80	1.472E-01	Pulse	0.30	3
Fe			2	6.236	ug/l	2.50	33,318.07	2.771E-01	Pulse	0.30	3
Co			2	5.061	ug/l	1.20	48,127.58	4.003E-01	Pulse	0.30	3
Ni			2	5.039	ug/l	1.70	12,490.38	1.039E-01	Pulse	0.30	3
Cu			2	4.821	ug/l	0.58	35,502.77	2.953E-01	Pulse	0.30	3
Zn			2	5.036	ug/l	3.37	6,565.84	5.461E-02	Pulse	0.30	3
As			2	5.108	ug/l	1.84	3,251.00	2.704E-02	Pulse	1.00	3
Cd			2	4.992	ug/l	0.45	9,303.22	1.126E-02	Pulse	0.30	3
Sn			2	5.320	ug/l	1.24	23,172.71	2.804E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	5.119	ug/l	3.36	761.02	5.398E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,099,996.27	0.68	99.8	Pulse	0.10	3
1	Sc		1,961,259.40	0.24	100.4	Pulse	0.10	3
1	Ge		405,803.27	0.11	99.5	Pulse	0.10	3
1	Ge		571,418.64	1.14	100.8	Pulse	0.10	3
1	Rh		2,817,379.02	0.63	99.7	Pulse	0.10	3
1	In		2,994,277.16	0.91	100.5	Pulse	0.10	3
1	Tb		4,339,364.31	0.51	100.2	Pulse	0.10	3
1	Ho		430,414.08	1.83	99.4	Pulse	0.10	3
1	Bi		2,746,332.04	0.81	100.7	Pulse	0.10	3
2	Sc		120,244.79	1.05	101.9	Pulse	0.30	3
2	Ge		77,321.87	0.82	100.6	Pulse	0.30	3
2	Ge		116,023.09	0.63	100.0	Pulse	0.30	3
2	Rh		1,832,508.05	0.28	100.1	Pulse	0.30	3
2	In		826,392.16	0.34	101.3	Pulse	0.30	3
2	Tb		2,748,691.07	0.97	100.7	Pulse	0.30	3
2	Ho		282,935.35	0.73	100.7	Pulse	0.30	3
2	Bi		1,901,743.67	0.99	100.8	Pulse	0.30	3
3	Sc		137,719.18	0.86	101.3	Pulse	0.30	3
3	Ge		92,967.80	0.84	100.6	Pulse	0.30	3
3	Ge		140,972.78	0.51	101.1	Pulse	0.30	3
3	Rh		1,519,627.37	0.12	100.0	Pulse	0.30	3
3	Tb		2,819,849.68	0.51	100.5	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:13
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	9/13/2019 11:35
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	25.291	ug/l	1.94	125,915.06	1.142E-01	Pulse	0.25	3
B			1	24.491	ug/l	1.97	88,766.46	8.054E-02	Pulse	0.15	3
Ca			1	37.064	ug/l	3.24	29,790.84	1.554E-02	Pulse	0.10	3
Sr			1	25.785	ug/l	3.81	961,830.56	3.499E-01	Pulse	0.10	3
Mo			1	25.323	ug/l	3.63	181,201.93	6.591E-02	Pulse	0.10	3
Ag			1	25.405	ug/l	2.76	459,666.96	1.565E-01	Pulse	0.10	3
Sn			1	25.990	ug/l	3.29	311,995.78	1.062E-01	Pulse	0.10	3
Sb			1	25.721	ug/l	3.18	350,318.49	8.262E-02	Pulse	0.10	3
Ba			1	25.617	ug/l	2.99	149,791.06	3.532E-02	Pulse	0.10	3
Tl			1	25.200	ug/l	2.18	937,162.93	3.454E-01	Pulse	0.10	3
Pb			1	25.556	ug/l	1.17	328,921.73	1.212E-01	Pulse	0.10	3
Pb			1	25.418	ug/l	1.74	290,683.28	1.071E-01	Pulse	0.10	3
Pb			1	25.503	ug/l	1.79	1,335,376.48	4.921E-01	Pulse	0.10	3
Na			2	40.495	ug/l	51.57	48,880.69	4.080E-01	Pulse	0.30	3
Mg			2	26.180	ug/l	1.09	12,400.22	1.035E-01	Pulse	0.30	3
Al			2	26.877	ug/l	4.90	4,847.42	4.044E-02	Pulse	0.30	3
K			2	25.469	ug/l	5.18	20,506.07	1.711E-01	Pulse	0.30	3
Ca			2	103.267	ug/l	2.40	2,272.41	1.896E-02	Pulse	0.30	3
Ti			2	25.522	ug/l	3.87	3,856.05	3.218E-02	Pulse	0.30	3
V			2	25.585	ug/l	1.11	122,270.65	1.020E+00	Pulse	0.30	3
Cr			2	25.436	ug/l	0.46	152,451.68	1.272E+00	Pulse	0.30	3
Mn			2	25.515	ug/l	0.74	87,224.89	7.277E-01	Pulse	0.30	3
Fe			2	27.164	ug/l	1.38	135,314.68	1.129E+00	Pulse	0.30	3
Co			2	25.378	ug/l	1.50	240,377.26	2.006E+00	Pulse	0.30	3
Ni			2	25.237	ug/l	0.51	61,794.19	5.155E-01	Pulse	0.30	3
Cu			2	25.216	ug/l	1.19	170,218.76	1.420E+00	Pulse	0.30	3
Zn			2	25.149	ug/l	2.59	28,589.48	2.385E-01	Pulse	0.30	3
As			2	25.258	ug/l	0.74	15,958.46	1.331E-01	Pulse	1.00	3
Cd			2	25.046	ug/l	0.47	46,642.78	5.645E-02	Pulse	0.30	3
Sn			2	25.239	ug/l	0.56	107,490.47	1.301E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	25.328	ug/l	0.87	3,714.89	2.660E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,102,358.71	1.66	100.1	Pulse	0.10	3
1	Sc		1,917,435.60	2.71	98.2	Pulse	0.10	3
1	Ge		403,064.43	1.49	98.9	Pulse	0.10	3
1	Ge		561,732.59	2.35	99.1	Pulse	0.10	3
1	Rh		2,750,746.42	2.52	97.3	Pulse	0.10	3
1	In		2,938,841.95	2.41	98.6	Pulse	0.10	3
1	Tb		4,242,380.25	2.66	98.0	Pulse	0.10	3
1	Ho		422,872.77	3.71	97.6	Pulse	0.10	3
1	Bi		2,713,874.96	1.61	99.5	Pulse	0.10	3
2	Sc		119,864.52	0.64	101.6	Pulse	0.30	3
2	Ge		76,620.71	0.58	99.7	Pulse	0.30	3
2	Ge		116,559.09	1.28	100.4	Pulse	0.30	3
2	Rh		1,834,653.82	0.23	100.3	Pulse	0.30	3
2	In		826,281.75	0.58	101.3	Pulse	0.30	3
2	Tb		2,752,682.32	0.47	100.8	Pulse	0.30	3
2	Ho		283,625.26	1.07	100.9	Pulse	0.30	3
2	Bi		1,902,308.81	0.43	100.9	Pulse	0.30	3
3	Sc		137,143.19	0.78	100.8	Pulse	0.30	3
3	Ge		92,579.01	0.39	100.2	Pulse	0.30	3
3	Ge		139,637.70	0.57	100.2	Pulse	0.30	3
3	Rh		1,509,359.63	0.54	99.3	Pulse	0.30	3
3	Tb		2,806,728.92	0.07	100.0	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:18
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	9/13/2019 11:35
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	49.613	ug/l	0.80	247,164.93	2.241E-01	Pulse	0.25	3
B			1	48.195	ug/l	0.82	168,594.37	1.528E-01	Pulse	0.15	3
Ca			1	67.129	ug/l	0.38	50,685.13	2.610E-02	Pulse	0.10	3
Sr			1	50.631	ug/l	0.36	1,911,837.57	6.869E-01	Pulse	0.10	3
Mo			1	50.003	ug/l	0.73	362,206.32	1.301E-01	Pulse	0.10	3
Ag			1	49.446	ug/l	1.36	906,241.76	3.045E-01	Pulse	0.10	3
Sn			1	50.512	ug/l	0.96	612,765.39	2.059E-01	Pulse	0.10	3
Sb			1	50.016	ug/l	0.85	693,612.88	1.606E-01	Pulse	0.10	3
Ba			1	50.018	ug/l	1.21	297,746.80	6.895E-02	Pulse	0.10	3
Tl			1	50.069	ug/l	0.57	1,872,395.39	6.862E-01	Pulse	0.10	3
Pb			1	50.281	ug/l	0.46	650,452.36	2.383E-01	Pulse	0.10	3
Pb			1	50.151	ug/l	1.01	576,407.23	2.112E-01	Pulse	0.10	3
Pb			1	50.006	ug/l	0.19	2,631,901.81	9.645E-01	Pulse	0.10	3
Na			2	53.578	ug/l	0.83	61,662.56	5.158E-01	Pulse	0.30	3
Mg			2	51.174	ug/l	1.25	23,935.94	2.003E-01	Pulse	0.30	3
Al			2	53.267	ug/l	3.52	9,187.03	7.686E-02	Pulse	0.30	3
K			2	48.802	ug/l	1.26	29,872.23	2.499E-01	Pulse	0.30	3
Ca			2	202.514	ug/l	2.86	4,367.30	3.654E-02	Pulse	0.30	3
Ti			2	50.527	ug/l	2.26	7,610.72	6.367E-02	Pulse	0.30	3
V			2	50.371	ug/l	0.71	239,749.35	2.006E+00	Pulse	0.30	3
Cr			2	50.464	ug/l	0.97	301,193.09	2.520E+00	Pulse	0.30	3
Mn			2	50.611	ug/l	0.27	172,409.06	1.442E+00	Pulse	0.30	3
Fe			2	51.871	ug/l	0.45	255,162.46	2.135E+00	Pulse	0.30	3
Co			2	50.326	ug/l	0.40	475,350.21	3.977E+00	Pulse	0.30	3
Ni			2	50.289	ug/l	0.63	122,659.04	1.026E+00	Pulse	0.30	3
Cu			2	50.567	ug/l	0.06	336,883.94	2.818E+00	Pulse	0.30	3
Zn			2	49.930	ug/l	0.62	55,603.76	4.652E-01	Pulse	0.30	3
As			2	50.897	ug/l	0.86	32,052.27	2.681E-01	Pulse	1.00	3
Cd			2	50.133	ug/l	0.94	92,474.36	1.130E-01	Pulse	0.30	3
Sn			2	50.147	ug/l	0.59	210,944.81	2.577E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	50.055	ug/l	0.25	7,352.58	5.255E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,103,019.77	1.63	100.1	Pulse	0.10	3
1	Sc		1,941,664.56	0.97	99.4	Pulse	0.10	3
1	Ge		407,986.57	0.74	100.1	Pulse	0.10	3
1	Ge		566,054.93	0.53	99.8	Pulse	0.10	3
1	Rh		2,783,259.12	0.36	98.4	Pulse	0.10	3
1	In		2,975,691.11	0.55	99.9	Pulse	0.10	3
1	Tb		4,318,341.60	0.55	99.7	Pulse	0.10	3
1	Ho		431,012.16	1.48	99.5	Pulse	0.10	3
1	Bi		2,728,904.34	1.37	100.0	Pulse	0.10	3
2	Sc		119,533.55	0.49	101.3	Pulse	0.30	3
2	Ge		76,586.08	0.85	99.7	Pulse	0.30	3
2	Ge		116,899.05	0.89	100.7	Pulse	0.30	3
2	Rh		1,819,548.47	0.34	99.4	Pulse	0.30	3
2	In		818,537.52	0.31	100.4	Pulse	0.30	3
2	Tb		2,724,209.13	0.51	99.8	Pulse	0.30	3
2	Ho		279,603.44	0.12	99.5	Pulse	0.30	3
2	Bi		1,893,416.87	0.90	100.4	Pulse	0.30	3
3	Sc		135,776.79	0.71	99.8	Pulse	0.30	3
3	Ge		91,101.70	0.80	98.6	Pulse	0.30	3
3	Ge		139,920.99	0.58	100.4	Pulse	0.30	3
3	Rh		1,498,367.03	0.53	98.6	Pulse	0.30	3
3	Tb		2,795,712.74	0.87	99.6	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:23
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	9/13/2019 11:35
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	100.118	ug/l	0.88	491,702.59	4.522E-01	Pulse	0.25	3
B			1	96.035	ug/l	1.98	324,858.29	2.988E-01	Pulse	0.15	3
Ca			1	128.830	ug/l	0.77	91,799.90	4.778E-02	Pulse	0.10	3
Sr			1	101.436	ug/l	0.69	3,821,928.90	1.376E+00	Pulse	0.10	3
Mo			1	99.591	ug/l	0.56	719,827.99	2.592E-01	Pulse	0.10	3
Ag			1	100.014	ug/l	0.82	1,823,377.99	6.160E-01	Pulse	0.10	3
Sn			1	100.276	ug/l	0.87	1,208,520.29	4.083E-01	Pulse	0.10	3
Sb			1	99.134	ug/l	1.05	1,372,388.21	3.183E-01	Pulse	0.10	3
Ba			1	99.358	ug/l	1.00	590,438.49	1.369E-01	Pulse	0.10	3
Tl			1	99.777	ug/l	0.08	3,730,111.72	1.367E+00	Pulse	0.10	3
Pb			1	99.956	ug/l	0.10	1,292,286.44	4.737E-01	Pulse	0.10	3
Pb			1	99.971	ug/l	0.53	1,148,447.90	4.209E-01	Pulse	0.10	3
Pb			1	99.923	ug/l	0.42	5,256,433.15	1.927E+00	Pulse	0.10	3
Na			2	100.997	ug/l	1.31	108,715.24	9.068E-01	Pulse	0.30	3
Mg			2	100.189	ug/l	0.78	46,767.76	3.901E-01	Pulse	0.30	3
Al			2	101.186	ug/l	0.28	17,143.27	1.430E-01	Pulse	0.30	3
K			2	97.403	ug/l	1.49	49,643.31	4.141E-01	Pulse	0.30	3
Ca			2	404.671	ug/l	0.57	8,674.60	7.235E-02	Pulse	0.30	3
Ti			2	99.595	ug/l	0.30	15,044.69	1.255E-01	Pulse	0.30	3
V			2	99.664	ug/l	1.65	475,469.38	3.966E+00	Pulse	0.30	3
Cr			2	99.653	ug/l	0.87	596,146.26	4.972E+00	Pulse	0.30	3
Mn			2	99.559	ug/l	1.25	340,037.74	2.836E+00	Pulse	0.30	3
Fe			2	102.448	ug/l	1.39	502,733.54	4.193E+00	Pulse	0.30	3
Co			2	99.740	ug/l	1.20	944,865.83	7.881E+00	Pulse	0.30	3
Ni			2	99.794	ug/l	0.77	244,010.52	2.035E+00	Pulse	0.30	3
Cu			2	99.672	ug/l	1.23	662,605.11	5.527E+00	Pulse	0.30	3
Zn			2	99.984	ug/l	1.49	110,647.25	9.229E-01	Pulse	0.30	3
As			2	99.482	ug/l	0.69	62,823.86	5.240E-01	Pulse	1.00	3
Cd			2	99.658	ug/l	1.86	183,759.52	2.246E-01	Pulse	0.30	3
Sn			2	99.869	ug/l	1.78	419,317.25	5.124E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	101.470	ug/l	0.96	14,580.54	1.065E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,087,420.24	1.34	98.7	Pulse	0.10	3
1	Sc		1,921,366.07	0.34	98.4	Pulse	0.10	3
1	Ge		402,997.39	1.10	98.8	Pulse	0.10	3
1	Ge		560,772.86	0.42	98.9	Pulse	0.10	3
1	Rh		2,777,355.58	0.42	98.2	Pulse	0.10	3
1	In		2,960,132.80	0.55	99.3	Pulse	0.10	3
1	Tb		4,311,501.92	0.68	99.6	Pulse	0.10	3
1	Ho		429,709.47	1.48	99.2	Pulse	0.10	3
1	Bi		2,728,132.88	1.21	100.0	Pulse	0.10	3
2	Sc		119,902.40	1.10	101.6	Pulse	0.30	3
2	Ge		76,558.22	0.87	99.6	Pulse	0.30	3
2	Ge		116,121.54	0.11	100.1	Pulse	0.30	3
2	Rh		1,819,480.62	1.25	99.4	Pulse	0.30	3
2	In		818,381.88	1.31	100.4	Pulse	0.30	3
2	Tb		2,756,628.43	1.75	101.0	Pulse	0.30	3
2	Ho		282,529.49	1.63	100.6	Pulse	0.30	3
2	Bi		1,904,810.90	1.05	101.0	Pulse	0.30	3
3	Sc		133,132.98	1.78	97.9	Pulse	0.30	3
3	Ge		90,372.61	1.34	97.8	Pulse	0.30	3
3	Ge		136,922.00	1.58	98.2	Pulse	0.30	3
3	Rh		1,461,373.28	1.59	96.1	Pulse	0.30	3
3	Tb		2,728,679.54	1.75	97.2	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:28
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	9/13/2019 11:35
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	0.021	ug/l	42.68	128.00	1.172E-04	Pulse	0.25	3
B			1	202.620	ug/l	1.51	680,420.30	6.239E-01	Pulse	0.15	3
Ca			1	512.324	ug/l	0.37	353,140.24	1.825E-01	Pulse	0.10	3
Sr			1	0.024	ug/l	11.42	1,136.76	4.115E-04	Pulse	0.10	3
Mo			1	0.126	ug/l	11.78	950.08	3.435E-04	Pulse	0.10	3
Ag			1	0.016	ug/l	28.57	326.68	1.111E-04	Pulse	0.10	3
Sn			1	0.224	ug/l	6.56	4,294.08	1.460E-03	Pulse	0.10	3
Sb			1	0.726	ug/l	6.49	10,237.13	2.374E-03	Pulse	0.10	3
Ba			1	0.021	ug/l	31.23	203.34	4.713E-05	Pulse	0.10	3
Tl			1	0.035	ug/l	7.83	1,566.82	5.776E-04	Pulse	0.10	3
Pb			1	0.032	ug/l	34.27	810.06	2.987E-04	Pulse	0.10	3
Pb			1	0.030	ug/l	20.07	716.72	2.641E-04	Pulse	0.10	3
Pb			1	0.037	ug/l	13.15	3,366.98	1.241E-03	Pulse	0.10	3
Na			2	507.694	ug/l	1.43	508,657.55	4.259E+00	Pulse	0.30	3
Mg			2	510.271	ug/l	1.09	236,235.68	1.978E+00	Pulse	0.30	3
Al			2	516.431	ug/l	0.58	85,505.44	7.160E-01	Pulse	0.30	3
K			2	501.039	ug/l	0.41	212,260.46	1.777E+00	Pulse	0.30	3
Ca			2	509.647	ug/l	2.79	10,861.45	9.094E-02	Pulse	0.30	3
Ti			2	0.096	ug/l	53.22	17.78	1.488E-04	Pulse	0.30	3
V			2	-0.017	ug/l	-39.10	243.34	2.036E-03	Pulse	0.30	3
Cr			2	0.034	ug/l	43.70	634.47	5.314E-03	Pulse	0.30	3
Mn			2	0.019	ug/l	39.39	201.12	1.685E-03	Pulse	0.30	3
Fe			2	514.252	ug/l	1.22	2,502,431.64	2.096E+01	Pulse	0.30	3
Co			2	0.030	ug/l	9.08	331.03	2.773E-03	Pulse	0.30	3
Ni			2	0.136	ug/l	10.04	472.23	3.953E-03	Pulse	0.30	3
Cu			2	0.269	ug/l	3.64	5,277.57	4.419E-02	Pulse	0.30	3
Zn			2	2.215	ug/l	4.33	3,441.51	2.882E-02	Pulse	0.30	3
As			2	0.028	ug/l	33.68	34.67	2.904E-04	Pulse	1.00	3
Cd			2	0.019	ug/l	62.61	42.10	5.115E-05	Pulse	0.30	3
Sn			2	0.280	ug/l	14.34	1,824.58	2.220E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	195.998	ug/l	1.35	28,742.78	2.057E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,090,671.20	0.72	99.0	Pulse	0.10	3
1	Sc		1,935,085.38	0.41	99.1	Pulse	0.10	3
1	Ge		400,660.57	0.77	98.3	Pulse	0.10	3
1	Ge		563,236.83	1.56	99.3	Pulse	0.10	3
1	Rh		2,764,041.10	0.94	97.8	Pulse	0.10	3
1	In		2,941,038.26	0.51	98.7	Pulse	0.10	3
1	Tb		4,310,056.29	1.22	99.5	Pulse	0.10	3
1	Ho		428,410.27	0.28	98.9	Pulse	0.10	3
1	Bi		2,712,968.71	0.44	99.4	Pulse	0.10	3
2	Sc		119,426.69	0.81	101.2	Pulse	0.30	3
2	Ge		76,868.66	1.29	100.0	Pulse	0.30	3
2	Ge		116,274.95	0.73	100.2	Pulse	0.30	3
2	Rh		1,816,389.44	0.28	99.3	Pulse	0.30	3
2	In		821,816.95	0.53	100.8	Pulse	0.30	3
2	Tb		2,743,993.29	0.40	100.5	Pulse	0.30	3
2	Ho		279,683.61	0.53	99.5	Pulse	0.30	3
2	Bi		1,884,824.02	0.67	99.9	Pulse	0.30	3
3	Sc		136,686.03	0.59	100.5	Pulse	0.30	3
3	Ge		91,898.43	0.62	99.5	Pulse	0.30	3
3	Ge		139,749.67	0.83	100.3	Pulse	0.30	3
3	Rh		1,501,560.63	0.40	98.8	Pulse	0.30	3
3	Tb		2,817,441.55	0.05	100.4	Pulse	0.30	3

Quantitation Report

File Name	010CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:33
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	9/13/2019 11:35
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	9.84	60.00	5.442E-05	Pulse	0.25	3
B			1	8.328	ug/l	5.30	34,439.68	3.124E-02	Pulse	0.15	3
Ca			1	1017.202	ug/l	0.73	704,458.51	3.598E-01	Pulse	0.10	3
Sr			1	0.024	ug/l	23.11	1,180.09	4.223E-04	Pulse	0.10	3
Mo			1	0.036	ug/l	29.65	303.35	1.086E-04	Pulse	0.10	3
Ag			1	0.004	ug/l	33.94	106.67	3.583E-05	Pulse	0.10	3
Sn			1	0.090	ug/l	23.07	2,717.02	9.126E-04	Pulse	0.10	3
Sb			1	0.253	ug/l	5.20	3,670.58	8.570E-04	Pulse	0.10	3
Ba			1	0.011	ug/l	85.32	143.34	3.341E-05	Pulse	0.10	3
Tl			1	0.006	ug/l	14.04	483.36	1.774E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	36.91	503.36	1.847E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	34.68	580.04	2.129E-04	Pulse	0.10	3
Pb			1	0.016	ug/l	11.76	2,283.50	8.380E-04	Pulse	0.10	3
Na			2	1019.470	ug/l	0.53	1,011,910.48	8.478E+00	Pulse	0.30	3
Mg			2	1019.533	ug/l	1.46	471,464.83	3.950E+00	Pulse	0.30	3
Al			2	1032.467	ug/l	0.79	170,437.65	1.428E+00	Pulse	0.30	3
K			2	1005.299	ug/l	0.35	415,407.34	3.481E+00	Pulse	0.30	3
Ca			2	1028.901	ug/l	2.22	21,834.50	1.829E-01	Pulse	0.30	3
Ti			2	-0.008	ug/l	-340.04	2.22	1.878E-05	Pulse	0.30	3
V			2	-0.010	ug/l	-45.64	276.67	2.318E-03	Pulse	0.30	3
Cr			2	0.010	ug/l	56.98	493.35	4.134E-03	Pulse	0.30	3
Mn			2	0.026	ug/l	48.37	222.23	1.860E-03	Pulse	0.30	3
Fe			2	1030.805	ug/l	0.74	5,010,331.75	4.198E+01	Pulse	0.30	3
Co			2	0.053	ug/l	10.09	542.04	4.543E-03	Pulse	0.30	3
Ni			2	0.049	ug/l	46.44	258.89	2.168E-03	Pulse	0.30	3
Cu			2	-0.254	ug/l	-10.88	1,830.13	1.533E-02	Pulse	0.30	3
Zn			2	0.118	ug/l	62.94	1,150.05	9.634E-03	Pulse	0.30	3
As			2	0.057	ug/l	97.93	52.34	4.399E-04	Pulse	1.00	3
Cd			2	0.005	ug/l	100.63	16.62	2.002E-05	Pulse	0.30	3
Sn			2	0.089	ug/l	26.42	1,031.16	1.240E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	383.017	ug/l	1.07	56,777.02	4.019E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,102,288.99	1.27	100.0	Pulse	0.10	3
1	Sc		1,957,723.36	0.80	100.2	Pulse	0.10	3
1	Ge		403,654.58	0.19	99.0	Pulse	0.10	3
1	Ge		571,101.25	0.78	100.7	Pulse	0.10	3
1	Rh		2,793,095.27	0.54	98.8	Pulse	0.10	3
1	In		2,977,192.91	0.41	99.9	Pulse	0.10	3
1	Tb		4,283,936.19	0.79	98.9	Pulse	0.10	3
1	Ho		433,067.15	0.36	100.0	Pulse	0.10	3
1	Bi		2,724,896.21	0.60	99.9	Pulse	0.10	3
2	Sc		119,353.29	0.70	101.1	Pulse	0.30	3
2	Ge		77,189.06	0.19	100.5	Pulse	0.30	3
2	Ge		118,037.32	1.59	101.7	Pulse	0.30	3
2	Rh		1,820,105.35	0.23	99.5	Pulse	0.30	3
2	In		831,508.58	0.68	102.0	Pulse	0.30	3
2	Tb		2,754,797.67	0.10	100.9	Pulse	0.30	3
2	Ho		282,267.03	0.12	100.5	Pulse	0.30	3
2	Bi		1,898,247.01	0.67	100.7	Pulse	0.30	3
3	Sc		137,527.27	0.28	101.1	Pulse	0.30	3
3	Ge		92,179.94	0.52	99.8	Pulse	0.30	3
3	Ge		141,269.64	0.83	101.3	Pulse	0.30	3
3	Rh		1,501,842.09	0.40	98.8	Pulse	0.30	3
3	Tb		2,818,510.10	0.65	100.4	Pulse	0.30	3

Quantitation Report

File Name	011CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:38
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	9/13/2019 11:35
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	131.96	49.33	4.520E-05	Pulse	0.25	3
B			1	4.278	ug/l	2.72	20,652.90	1.888E-02	Pulse	0.15	3
Ca			1	5063.873	ug/l	0.54	3,448,610.68	1.781E+00	Pulse	0.10	3
Sr			1	0.049	ug/l	7.03	2,070.22	7.559E-04	Pulse	0.10	3
Mo			1	0.020	ug/l	24.22	186.68	6.815E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	36.36	73.33	2.501E-05	Pulse	0.10	3
Sn			1	0.096	ug/l	55.58	2,748.40	9.376E-04	Pulse	0.10	3
Sb			1	0.148	ug/l	6.20	2,236.90	5.195E-04	Pulse	0.10	3
Ba			1	0.002	ug/l	390.54	90.00	2.093E-05	Pulse	0.10	3
Tl			1	0.003	ug/l	72.03	346.69	1.292E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	43.58	526.70	1.964E-04	Pulse	0.10	3
Pb			1	-0.001	ug/l	-444.66	350.02	1.306E-04	Pulse	0.10	3
Pb			1	0.009	ug/l	52.01	1,903.46	7.099E-04	Pulse	0.10	3
Na			2	5090.467	ug/l	1.05	5,026,579.52	4.204E+01	Analog	0.30	3
Mg			2	5086.750	ug/l	1.13	2,355,694.91	1.970E+01	Pulse	0.30	3
Al			2	5069.898	ug/l	0.81	836,912.81	6.999E+00	Pulse	0.30	3
K			2	5043.542	ug/l	0.65	2,047,078.04	1.712E+01	Pulse	0.30	3
Ca			2	4969.121	ug/l	0.68	105,332.87	8.809E-01	Pulse	0.30	3
Ti			2	0.014	ug/l	319.65	5.55	4.649E-05	Pulse	0.30	3
V			2	-0.019	ug/l	-18.59	235.56	1.970E-03	Pulse	0.30	3
Cr			2	0.027	ug/l	55.34	596.69	4.988E-03	Pulse	0.30	3
Mn			2	0.075	ug/l	23.56	388.90	3.252E-03	Pulse	0.30	3
Fe			2	5139.857	ug/l	0.15	25,018,722.89	2.092E+02	Analog	0.30	3
Co			2	0.229	ug/l	2.89	2,211.52	1.850E-02	Pulse	0.30	3
Ni			2	0.172	ug/l	14.21	560.02	4.682E-03	Pulse	0.30	3
Cu			2	-0.236	ug/l	-1.43	1,952.36	1.633E-02	Pulse	0.30	3
Zn			2	-0.038	ug/l	-146.49	981.16	8.207E-03	Pulse	0.30	3
As			2	0.041	ug/l	11.67	42.67	3.568E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	51397.06	7.75	9.407E-06	Pulse	0.30	3
Sn			2	0.059	ug/l	22.91	892.26	1.085E-03	Pulse	0.30	3
Se			3	0.153	ug/l	7.80	26.07	1.872E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,093,818.57	0.71	99.3	Pulse	0.10	3
1	Sc		1,935,967.68	0.48	99.1	Pulse	0.10	3
1	Ge		401,410.87	0.40	98.4	Pulse	0.10	3

Quantitation Report

1	Ge		560,405.45	0.33	98.8	Pulse	0.10	3
1	Rh		2,738,186.94	0.60	96.9	Pulse	0.10	3
1	In		2,931,843.38	0.22	98.4	Pulse	0.10	3
1	Tb		4,304,048.27	0.94	99.4	Pulse	0.10	3
1	Ho		429,380.63	0.86	99.1	Pulse	0.10	3
1	Bi		2,681,962.56	0.36	98.3	Pulse	0.10	3
2	Sc		119,573.35	0.46	101.3	Pulse	0.30	3
2	Ge		77,259.25	0.55	100.5	Pulse	0.30	3
2	Ge		117,351.50	0.64	101.1	Pulse	0.30	3
2	Rh		1,798,545.90	0.30	98.3	Pulse	0.30	3
2	In		822,332.92	0.58	100.8	Pulse	0.30	3
2	Tb		2,761,139.96	0.57	101.1	Pulse	0.30	3
2	Ho		283,319.92	0.50	100.8	Pulse	0.30	3
2	Bi		1,863,267.63	0.36	98.8	Pulse	0.30	3
3	Sc		137,151.17	0.54	100.8	Pulse	0.30	3
3	Ge		92,485.28	0.41	100.1	Pulse	0.30	3
3	Ge		139,293.44	0.71	99.9	Pulse	0.30	3
3	Rh		1,471,111.54	0.48	96.8	Pulse	0.30	3
3	Tb		2,817,867.04	0.39	100.4	Pulse	0.30	3

Quantitation Report

File Name	012CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:43
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	9/13/2019 11:35
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	0.011	ug/l	54.28	77.33	7.022E-05	Pulse	0.25	3
B			1	3.064	ug/l	3.71	16,748.59	1.518E-02	Pulse	0.15	3
Ca			1	9965.236	ug/l	1.81	6,860,623.44	3.503E+00	Analog	0.10	3
Sr			1	0.092	ug/l	3.87	3,677.24	1.341E-03	Pulse	0.10	3
Mo			1	0.040	ug/l	36.75	330.02	1.204E-04	Pulse	0.10	3
Ag			1	0.002	ug/l	62.06	60.00	2.034E-05	Pulse	0.10	3
Sn			1	0.508	ug/l	6.37	7,708.86	2.612E-03	Pulse	0.10	3
Sb			1	0.117	ug/l	4.98	1,816.85	4.183E-04	Pulse	0.10	3
Ba			1	0.013	ug/l	19.13	156.68	3.605E-05	Pulse	0.10	3
Tl			1	0.001	ug/l	39.77	276.68	1.045E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	15.22	676.71	2.556E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	31.74	603.37	2.278E-04	Pulse	0.10	3
Pb			1	0.027	ug/l	2.81	2,786.91	1.053E-03	Pulse	0.10	3
Na			2	9952.163	ug/l	1.56	10,139,908.48	8.212E+01	Analog	0.30	3
Mg			2	9953.786	ug/l	1.58	4,760,166.34	3.855E+01	Pulse	0.30	3
Al			2	9960.949	ug/l	1.17	1,697,750.11	1.375E+01	Pulse	0.30	3
K			2	9948.943	ug/l	1.14	4,160,030.53	3.369E+01	Pulse	0.30	3
Ca			2	9889.020	ug/l	1.32	216,393.31	1.752E+00	Pulse	0.30	3
Ti			2	0.028	ug/l	120.46	7.78	6.311E-05	Pulse	0.30	3
V			2	-0.019	ug/l	-59.57	240.01	1.948E-03	Pulse	0.30	3
Cr			2	0.073	ug/l	1.36	897.81	7.269E-03	Pulse	0.30	3
Mn			2	0.153	ug/l	0.61	678.91	5.498E-03	Pulse	0.30	3
Fe			2	9817.882	ug/l	1.12	49,351,208.04	3.996E+02	Analog	0.30	3
Co			2	0.432	ug/l	2.81	4,262.95	3.452E-02	Pulse	0.30	3
Ni			2	0.430	ug/l	7.45	1,227.84	9.946E-03	Pulse	0.30	3
Cu			2	-0.123	ug/l	-20.91	2,786.94	2.258E-02	Pulse	0.30	3
Zn			2	2.011	ug/l	2.28	3,327.04	2.694E-02	Pulse	0.30	3
As			2	0.057	ug/l	10.43	54.33	4.397E-04	Pulse	1.00	3
Cd			2	0.006	ug/l	45.39	18.86	2.278E-05	Pulse	0.30	3
Sn			2	0.509	ug/l	0.53	2,805.84	3.391E-03	Pulse	0.30	3
Se			3	0.066	ug/l	15.13	13.40	9.524E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,103,528.86	0.86	100.2	Pulse	0.10	3
1	Sc		1,958,648.93	0.96	100.3	Pulse	0.10	3
1	Ge		406,071.03	0.82	99.6	Pulse	0.10	3

Quantitation Report

1	Ge		561,896.10	0.67	99.1	Pulse	0.10	3
1	Rh		2,740,964.65	0.47	97.0	Pulse	0.10	3
1	In		2,950,765.93	0.64	99.0	Pulse	0.10	3
1	Tb		4,344,675.25	0.82	100.3	Pulse	0.10	3
1	Ho		434,371.17	1.29	100.3	Pulse	0.10	3
1	Bi		2,647,874.13	0.55	97.1	Pulse	0.10	3
2	Sc		123,499.32	1.49	104.6	Pulse	0.30	3
2	Ge		78,304.18	0.73	101.9	Pulse	0.30	3
2	Ge		117,978.40	0.79	101.7	Pulse	0.30	3
2	Rh		1,807,892.50	0.44	98.8	Pulse	0.30	3
2	In		827,535.37	0.47	101.5	Pulse	0.30	3
2	Tb		2,774,432.32	0.71	101.6	Pulse	0.30	3
2	Ho		285,619.93	0.43	101.7	Pulse	0.30	3
2	Bi		1,846,189.51	0.50	97.9	Pulse	0.30	3
3	Sc		139,819.03	0.09	102.8	Pulse	0.30	3
3	Ge		93,839.41	0.54	101.6	Pulse	0.30	3
3	Ge		140,764.44	0.80	101.0	Pulse	0.30	3
3	Rh		1,471,465.50	0.47	96.8	Pulse	0.30	3
3	Tb		2,810,190.38	0.62	100.1	Pulse	0.30	3

Quantitation Report

File Name	013SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:48
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	9/13/2019 11:35
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	100.17	52.00	4.605E-05	Pulse	0.25	3
B			1	2.013	ug/l	13.77	13,467.87	1.197E-02	Pulse	0.15	3
Ca			1	0.884	ug/l	36.90	5,581.15	2.834E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	59.73	283.35	9.976E-05	Pulse	0.10	3
Mo			1	0.007	ug/l	40.32	96.67	3.402E-05	Pulse	0.10	3
Ag			1	0.001	ug/l	190.27	43.33	1.449E-05	Pulse	0.10	3
Sn			1	0.034	ug/l	34.44	2,056.87	6.869E-04	Pulse	0.10	3
Sb			1	0.049	ug/l	19.62	880.06	2.020E-04	Pulse	0.10	3
Ba			1	-0.003	ug/l	-87.18	63.33	1.455E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	-1260.50	243.35	8.885E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-255.32	380.02	1.388E-04	Pulse	0.10	3
Pb			1	-0.005	ug/l	-93.18	313.35	1.144E-04	Pulse	0.10	3
Pb			1	-0.002	ug/l	-152.92	1,380.08	5.041E-04	Pulse	0.10	3
Na			2	0.645	ug/l	33.13	9,665.07	7.948E-02	Pulse	0.30	3
Mg			2	0.720	ug/l	11.91	591.13	4.860E-03	Pulse	0.30	3
Al			2	0.378	ug/l	94.07	471.12	3.873E-03	Pulse	0.30	3
K			2	0.508	ug/l	198.97	10,553.41	8.679E-02	Pulse	0.30	3
Ca			2	0.579	ug/l	200.36	93.34	7.673E-04	Pulse	0.30	3
Ti			2	-0.001	ug/l	-2832.73	3.33	2.738E-05	Pulse	0.30	3
V			2	-0.013	ug/l	-24.26	266.67	2.193E-03	Pulse	0.30	3
Cr			2	-0.001	ug/l	-439.26	435.57	3.582E-03	Pulse	0.30	3
Mn			2	-0.007	ug/l	-128.33	112.22	9.232E-04	Pulse	0.30	3
Fe			2	1.191	ug/l	8.17	8,725.73	7.175E-02	Pulse	0.30	3
Co			2	-0.003	ug/l	-25.68	18.87	1.551E-04	Pulse	0.30	3
Ni			2	-0.011	ug/l	-56.24	115.56	9.501E-04	Pulse	0.30	3
Cu			2	-0.281	ug/l	-2.84	1,686.78	1.387E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.367	ug/l	-18.68	632.24	5.200E-03	Pulse	0.30	3
As			2	-0.004	ug/l	-258.53	14.67	1.207E-04	Pulse	1.00	3
Cd			2	-0.001	ug/l	-165.15	5.54	6.607E-06	Pulse	0.30	3
Sn			2	-0.002	ug/l	-245.13	650.02	7.744E-04	Pulse	0.30	3
Se			3	0.028	ug/l	28.51	7.87	5.558E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,125,353.11	1.15	102.1	Pulse	0.10	3
1	Sc		1,969,671.33	0.83	100.9	Pulse	0.10	3
1	Ge		413,283.26	1.59	101.4	Pulse	0.10	3
1	Ge		573,688.09	0.99	101.2	Pulse	0.10	3
1	Rh		2,840,434.65	0.67	100.5	Pulse	0.10	3
1	In		2,994,335.87	0.54	100.5	Pulse	0.10	3
1	Tb		4,351,658.06	1.36	100.5	Pulse	0.10	3
1	Ho		435,053.67	0.91	100.4	Pulse	0.10	3
1	Bi		2,738,267.25	0.66	100.4	Pulse	0.10	3
2	Sc		121,605.93	0.27	103.0	Pulse	0.30	3
2	Ge		78,570.93	1.08	102.3	Pulse	0.30	3
2	Ge		118,922.75	0.42	102.5	Pulse	0.30	3
2	Rh		1,860,249.65	0.31	101.7	Pulse	0.30	3
2	In		839,427.64	0.33	102.9	Pulse	0.30	3
2	Tb		2,762,178.85	0.16	101.2	Pulse	0.30	3
2	Ho		283,989.08	0.58	101.1	Pulse	0.30	3
2	Bi		1,920,045.83	0.43	101.8	Pulse	0.30	3
3	Sc		139,816.64	2.12	102.8	Pulse	0.30	3
3	Ge		93,922.16	1.42	101.7	Pulse	0.30	3
3	Ge		141,696.31	1.51	101.7	Pulse	0.30	3
3	Rh		1,535,253.00	0.49	101.0	Pulse	0.30	3
3	Tb		2,839,169.26	0.76	101.2	Pulse	0.30	3

Quantitation Report

File Name	014_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:53
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	9/13/2019 11:35
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	59.573	ug/l	0.40	297,828.32	2.691E-01	Pulse	0.25	3
B			1	119.930	ug/l	1.66	411,342.48	3.717E-01	Pulse	0.15	3
Ca			1	5534.358	ug/l	0.51	3,860,492.55	1.947E+00	Pulse	0.10	3
Sr			1	61.923	ug/l	0.42	2,315,407.83	8.401E-01	Pulse	0.10	3
Mo			1	59.455	ug/l	1.13	426,452.38	1.547E-01	Pulse	0.10	3
Ag			1	59.337	ug/l	1.20	1,088,266.55	3.655E-01	Pulse	0.10	3
Sn			1	59.434	ug/l	1.68	721,182.18	2.422E-01	Pulse	0.10	3
Sb			1	64.209	ug/l	0.46	887,169.31	2.062E-01	Pulse	0.10	3
Ba			1	61.458	ug/l	0.13	364,508.26	8.472E-02	Pulse	0.10	3
Tl			1	62.889	ug/l	1.01	2,306,584.70	8.618E-01	Pulse	0.10	3
Pb			1	62.111	ug/l	0.54	787,920.74	2.944E-01	Pulse	0.10	3
Pb			1	58.639	ug/l	0.36	660,991.94	2.470E-01	Pulse	0.10	3
Pb			1	60.236	ug/l	0.50	3,109,129.07	1.162E+00	Pulse	0.10	3
Na			2	5575.276	ug/l	1.91	5,597,496.58	4.604E+01	Analog	0.30	3
Mg			2	5496.973	ug/l	0.66	2,588,857.40	2.129E+01	Pulse	0.30	3
Al			2	5545.266	ug/l	0.51	930,892.95	7.655E+00	Pulse	0.30	3
K			2	5463.865	ug/l	1.17	2,254,328.38	1.854E+01	Pulse	0.30	3
Ca			2	5638.955	ug/l	0.39	121,544.63	9.995E-01	Pulse	0.30	3
Ti			2	60.979	ug/l	1.39	9,343.82	7.683E-02	Pulse	0.30	3
V			2	61.882	ug/l	0.36	299,558.56	2.463E+00	Pulse	0.30	3
Cr			2	60.365	ug/l	0.52	366,445.83	3.013E+00	Pulse	0.30	3
Mn			2	61.090	ug/l	0.73	211,671.08	1.741E+00	Pulse	0.30	3
Fe			2	5570.599	ug/l	0.38	27,574,707.79	2.268E+02	Analog	0.30	3
Co			2	60.284	ug/l	0.53	579,245.14	4.764E+00	Pulse	0.30	3
Ni			2	59.763	ug/l	1.04	148,259.00	1.219E+00	Pulse	0.30	3
Cu			2	59.107	ug/l	0.45	399,985.66	3.289E+00	Pulse	0.30	3
Zn			2	59.011	ug/l	0.93	66,663.64	5.482E-01	Pulse	0.30	3
As			2	62.968	ug/l	0.88	40,335.49	3.317E-01	Pulse	1.00	3
Cd			2	59.532	ug/l	1.18	110,585.82	1.342E-01	Pulse	0.30	3
Sn			2	59.855	ug/l	0.54	253,414.04	3.074E-01	Pulse	0.30	3
Se			3	259.926	ug/l	0.55	38,424.13	2.728E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,106,864.17	0.94	100.5	Pulse	0.10	3
1	Sc		1,983,139.61	0.28	101.5	Pulse	0.10	3
1	Ge		411,565.71	0.39	100.9	Pulse	0.10	3

Quantitation Report

1	Ge		582,262.51	0.32	102.7	Pulse	0.10	3
1	Rh		2,756,197.66	0.89	97.5	Pulse	0.10	3
1	In		2,977,747.78	0.32	99.9	Pulse	0.10	3
1	Tb		4,302,615.25	0.49	99.4	Pulse	0.10	3
1	Ho		425,470.49	0.91	98.2	Pulse	0.10	3
1	Bi		2,676,418.61	0.26	98.1	Pulse	0.10	3
2	Sc		121,603.24	0.99	103.0	Pulse	0.30	3
2	Ge		78,184.62	1.22	101.8	Pulse	0.30	3
2	Ge		118,712.32	1.07	102.3	Pulse	0.30	3
2	Rh		1,805,289.51	1.12	98.7	Pulse	0.30	3
2	In		824,263.42	0.75	101.1	Pulse	0.30	3
2	Tb		2,763,859.89	0.38	101.2	Pulse	0.30	3
2	Ho		284,547.22	0.34	101.3	Pulse	0.30	3
2	Bi		1,873,769.30	0.35	99.4	Pulse	0.30	3
3	Sc		137,227.27	0.35	100.9	Pulse	0.30	3
3	Ge		91,584.54	0.58	99.1	Pulse	0.30	3
3	Ge		140,866.76	0.23	101.1	Pulse	0.30	3
3	Rh		1,472,394.98	0.19	96.9	Pulse	0.30	3
3	Tb		2,812,934.20	0.68	100.2	Pulse	0.30	3

Quantitation Report

File Name	015_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 10:58
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	9/13/2019 11:35
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	0.015	ug/l	7.34	101.33	9.169E-05	Pulse	0.25	3
B			1	5.012	ug/l	2.17	23,343.06	2.112E-02	Pulse	0.15	3
Ca			1	3.322	ug/l	17.44	7,181.86	3.690E-03	Pulse	0.10	3
Sr			1	0.013	ug/l	6.97	756.72	2.695E-04	Pulse	0.10	3
Mo			1	0.097	ug/l	8.67	756.72	2.696E-04	Pulse	0.10	3
Ag			1	0.073	ug/l	11.41	1,373.45	4.599E-04	Pulse	0.10	3
Sn			1	0.174	ug/l	11.95	3,747.24	1.255E-03	Pulse	0.10	3
Sb			1	0.139	ug/l	6.30	2,110.24	4.901E-04	Pulse	0.10	3
Ba			1	0.013	ug/l	20.30	156.68	3.640E-05	Pulse	0.10	3
Tl			1	0.033	ug/l	5.57	1,483.47	5.427E-04	Pulse	0.10	3
Pb			1	0.016	ug/l	12.78	600.04	2.195E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	32.51	543.37	1.988E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	26.43	2,486.85	9.098E-04	Pulse	0.10	3
Na			2	1.012	ug/l	18.26	10,061.01	8.251E-02	Pulse	0.30	3
Mg			2	0.701	ug/l	33.97	583.35	4.785E-03	Pulse	0.30	3
Al			2	64.320	ug/l	3.27	11,227.17	9.211E-02	Pulse	0.30	3
K			2	0.037	ug/l	2376.92	10,384.44	8.520E-02	Pulse	0.30	3
Ca			2	3.907	ug/l	26.04	165.56	1.357E-03	Pulse	0.30	3
Ti			2	0.021	ug/l	207.64	6.67	5.428E-05	Pulse	0.30	3
V			2	-0.021	ug/l	-38.49	226.67	1.856E-03	Pulse	0.30	3
Cr			2	0.051	ug/l	23.67	754.47	6.192E-03	Pulse	0.30	3
Mn			2	0.013	ug/l	66.05	184.45	1.515E-03	Pulse	0.30	3
Fe			2	1.620	ug/l	1.34	10,875.95	8.921E-02	Pulse	0.30	3
Co			2	0.004	ug/l	33.87	88.86	7.278E-04	Pulse	0.30	3
Ni			2	0.016	ug/l	47.82	184.45	1.512E-03	Pulse	0.30	3
Cu			2	-0.268	ug/l	-6.11	1,772.34	1.454E-02	Pulse	0.30	3
Zn			2	-0.062	ug/l	-37.76	973.38	7.985E-03	Pulse	0.30	3
As			2	0.006	ug/l	181.07	21.00	1.718E-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	87.79	22.14	2.655E-05	Pulse	0.30	3
Sn			2	0.185	ug/l	6.12	1,442.31	1.731E-03	Pulse	0.30	3
Se			3	0.113	ug/l	32.63	20.80	1.451E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,105,034.09	0.78	100.3	Pulse	0.10	3
1	Sc		1,946,090.80	0.50	99.6	Pulse	0.10	3
1	Ge		406,185.63	0.51	99.6	Pulse	0.10	3
1	Ge		566,840.69	0.43	100.0	Pulse	0.10	3
1	Rh		2,808,081.63	0.67	99.3	Pulse	0.10	3
1	In		2,986,885.16	0.64	100.2	Pulse	0.10	3
1	Tb		4,305,073.37	0.60	99.4	Pulse	0.10	3
1	Ho		426,329.50	0.67	98.4	Pulse	0.10	3
1	Bi		2,733,338.19	0.43	100.2	Pulse	0.10	3
2	Sc		121,922.71	1.31	103.3	Pulse	0.30	3
2	Ge		78,109.92	0.87	101.7	Pulse	0.30	3
2	Ge		118,040.55	0.99	101.7	Pulse	0.30	3
2	Rh		1,844,082.22	0.87	100.8	Pulse	0.30	3
2	In		833,055.33	0.76	102.2	Pulse	0.30	3
2	Tb		2,765,531.21	0.78	101.3	Pulse	0.30	3
2	Ho		282,811.61	1.12	100.7	Pulse	0.30	3
2	Bi		1,905,887.42	0.87	101.1	Pulse	0.30	3
3	Sc		145,369.87	20.02	106.9	Pulse	0.30	3
3	Ge		97,344.80	13.92	105.4	Pulse	0.30	3
3	Ge		146,929.01	14.62	105.4	Pulse	0.30	3
3	Rh		1,606,558.03	18.71	105.7	Pulse	0.30	3
3	Tb		2,968,994.12	19.14	105.8	Pulse	0.30	3

Quantitation Report

File Name	016_ICB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 11:03
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	9/13/2019 11:35
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	51.54	41.33	3.744E-05	Pulse	0.25	3
B			1	2.669	ug/l	3.41	15,413.95	1.398E-02	Pulse	0.15	3
Ca			1	0.059	ug/l	1411.75	5,037.68	2.544E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	258.28	276.68	9.702E-05	Pulse	0.10	3
Mo			1	0.010	ug/l	58.48	116.67	4.109E-05	Pulse	0.10	3
Ag			1	0.002	ug/l	77.67	73.33	2.429E-05	Pulse	0.10	3
Sn			1	0.035	ug/l	51.80	2,076.90	6.889E-04	Pulse	0.10	3
Sb			1	0.026	ug/l	13.11	550.03	1.269E-04	Pulse	0.10	3
Ba			1	-0.002	ug/l	-111.50	66.67	1.538E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	36.34	390.02	1.425E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	-940.08	393.35	1.437E-04	Pulse	0.10	3
Pb			1	-0.009	ug/l	-40.73	266.68	9.738E-05	Pulse	0.10	3
Pb			1	-0.002	ug/l	-133.28	1,346.74	4.919E-04	Pulse	0.10	3
Na			2	-0.155	ug/l	-82.32	8,955.79	7.288E-02	Pulse	0.30	3
Mg			2	0.149	ug/l	19.13	325.56	2.650E-03	Pulse	0.30	3
Al			2	-0.509	ug/l	-5.23	325.56	2.650E-03	Pulse	0.30	3
K			2	-0.581	ug/l	-67.08	10,210.99	8.311E-02	Pulse	0.30	3
Ca			2	-0.074	ug/l	-789.27	80.00	6.516E-04	Pulse	0.30	3
Ti			2	-0.015	ug/l	-82.32	1.11	9.131E-06	Pulse	0.30	3
V			2	-0.027	ug/l	-20.24	203.34	1.653E-03	Pulse	0.30	3
Cr			2	-0.003	ug/l	-218.56	426.68	3.474E-03	Pulse	0.30	3
Mn			2	-0.010	ug/l	-44.59	102.22	8.330E-04	Pulse	0.30	3
Fe			2	0.298	ug/l	3.69	4,353.97	3.543E-02	Pulse	0.30	3
Co			2	-0.001	ug/l	-52.14	35.55	2.897E-04	Pulse	0.30	3
Ni			2	-0.011	ug/l	-54.82	116.67	9.495E-04	Pulse	0.30	3
Cu			2	-0.291	ug/l	-2.99	1,636.77	1.332E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.370	ug/l	-6.36	635.58	5.173E-03	Pulse	0.30	3
As			2	-0.007	ug/l	-63.95	13.00	1.060E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	64.42	11.09	1.312E-05	Pulse	0.30	3
Sn			2	0.022	ug/l	18.09	761.14	8.996E-04	Pulse	0.30	3
Se			3	0.043	ug/l	8.58	10.00	7.082E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,102,904.47	0.74	100.1	Pulse	0.10	3
1	Sc		1,980,172.68	0.92	101.4	Pulse	0.10	3
1	Ge		408,618.83	0.75	100.2	Pulse	0.10	3
1	Ge		573,403.81	0.78	101.1	Pulse	0.10	3
1	Rh		2,847,632.35	1.46	100.7	Pulse	0.10	3
1	In		3,013,009.42	0.89	101.1	Pulse	0.10	3
1	Tb		4,334,800.15	0.46	100.1	Pulse	0.10	3
1	Ho		432,300.93	1.66	99.8	Pulse	0.10	3
1	Bi		2,737,086.21	0.59	100.3	Pulse	0.10	3
2	Sc		122,879.49	1.29	104.1	Pulse	0.30	3
2	Ge		78,938.56	1.44	102.7	Pulse	0.30	3
2	Ge		119,960.95	0.52	103.4	Pulse	0.30	3
2	Rh		1,874,117.29	0.59	102.4	Pulse	0.30	3
2	In		846,138.69	0.91	103.8	Pulse	0.30	3
2	Tb		2,776,184.96	0.83	101.7	Pulse	0.30	3
2	Ho		283,417.91	0.24	100.9	Pulse	0.30	3
2	Bi		1,913,872.91	0.23	101.5	Pulse	0.30	3
3	Sc		138,107.97	0.96	101.5	Pulse	0.30	3
3	Ge		94,638.43	0.90	102.4	Pulse	0.30	3
3	Ge		141,117.86	1.66	101.2	Pulse	0.30	3
3	Rh		1,533,591.22	0.74	100.9	Pulse	0.30	3
3	Tb		2,831,139.12	0.28	100.9	Pulse	0.30	3

Quantitation Report

File Name	017_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 11:08
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	9/13/2019 11:35
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	50.315	ug/l	0.82	253,975.89	2.273E-01	Pulse	0.25	3
B			1	99.581	ug/l	1.76	345,991.23	3.096E-01	Pulse	0.15	3
Ca			1	5036.996	ug/l	0.52	3,533,160.57	1.772E+00	Pulse	0.10	3
Sr			1	52.269	ug/l	0.97	1,977,081.63	7.091E-01	Pulse	0.10	3
Mo			1	50.746	ug/l	0.77	368,222.21	1.321E-01	Pulse	0.10	3
Ag			1	49.707	ug/l	0.82	914,854.57	3.062E-01	Pulse	0.10	3
Sn			1	49.595	ug/l	0.75	604,205.32	2.022E-01	Pulse	0.10	3
Sb			1	51.641	ug/l	1.01	718,811.63	1.658E-01	Pulse	0.10	3
Ba			1	50.168	ug/l	1.24	299,769.31	6.916E-02	Pulse	0.10	3
Tl			1	50.283	ug/l	0.14	1,867,286.95	6.891E-01	Pulse	0.10	3
Pb			1	50.199	ug/l	0.79	644,838.80	2.380E-01	Pulse	0.10	3
Pb			1	50.153	ug/l	1.02	572,447.66	2.113E-01	Pulse	0.10	3
Pb			1	50.091	ug/l	0.48	2,617,979.57	9.661E-01	Pulse	0.10	3
Na			2	5061.755	ug/l	0.81	5,210,419.93	4.180E+01	Analog	0.30	3
Mg			2	5031.053	ug/l	0.42	2,428,693.37	1.949E+01	Pulse	0.30	3
Al			2	5023.796	ug/l	0.83	864,442.76	6.936E+00	Pulse	0.30	3
K			2	4978.576	ug/l	0.71	2,106,463.95	1.690E+01	Pulse	0.30	3
Ca			2	5119.501	ug/l	0.40	113,113.11	9.075E-01	Pulse	0.30	3
Ti			2	49.348	ug/l	1.43	7,750.79	6.218E-02	Pulse	0.30	3
V			2	50.400	ug/l	0.44	250,147.31	2.007E+00	Pulse	0.30	3
Cr			2	50.016	ug/l	0.33	311,280.08	2.497E+00	Pulse	0.30	3
Mn			2	50.580	ug/l	0.31	179,662.51	1.441E+00	Pulse	0.30	3
Fe			2	5057.116	ug/l	0.14	25,659,273.98	2.059E+02	Analog	0.30	3
Co			2	49.654	ug/l	0.85	489,027.96	3.924E+00	Pulse	0.30	3
Ni			2	49.524	ug/l	1.09	125,952.06	1.011E+00	Pulse	0.30	3
Cu			2	49.211	ug/l	0.77	341,951.19	2.744E+00	Pulse	0.30	3
Zn			2	48.787	ug/l	0.61	56,677.51	4.547E-01	Pulse	0.30	3
As			2	50.483	ug/l	1.25	33,150.13	2.660E-01	Pulse	1.00	3
Cd			2	49.337	ug/l	0.78	93,474.86	1.112E-01	Pulse	0.30	3
Sn			2	50.065	ug/l	0.72	216,306.22	2.573E-01	Pulse	0.30	3
Se			3	195.387	ug/l	0.33	28,941.20	2.050E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,117,524.53	0.30	101.4	Pulse	0.10	3
1	Sc		1,993,974.08	0.24	102.1	Pulse	0.10	3
1	Ge		410,302.28	0.24	100.6	Pulse	0.10	3

Quantitation Report

1	Ge		582,160.41	0.41	102.7	Pulse	0.10	3
1	Rh		2,788,106.42	0.62	98.6	Pulse	0.10	3
1	In		2,988,297.92	0.37	100.3	Pulse	0.10	3
1	Tb		4,334,622.95	0.99	100.1	Pulse	0.10	3
1	Ho		433,094.13	1.66	100.0	Pulse	0.10	3
1	Bi		2,709,740.79	0.64	99.3	Pulse	0.10	3
2	Sc		124,641.04	0.68	105.6	Pulse	0.30	3
2	Ge		79,247.40	1.12	103.1	Pulse	0.30	3
2	Ge		120,084.32	0.75	103.5	Pulse	0.30	3
2	Rh		1,832,840.48	0.10	100.2	Pulse	0.30	3
2	In		840,732.30	0.43	103.1	Pulse	0.30	3
2	Tb		2,797,475.58	0.84	102.5	Pulse	0.30	3
2	Ho		286,518.34	0.79	102.0	Pulse	0.30	3
2	Bi		1,893,822.35	1.12	100.4	Pulse	0.30	3
3	Sc		139,759.03	0.94	102.8	Pulse	0.30	3
3	Ge		93,293.05	0.81	101.0	Pulse	0.30	3
3	Ge		141,144.75	0.40	101.3	Pulse	0.30	3
3	Rh		1,484,835.88	0.25	97.7	Pulse	0.30	3
3	Tb		2,812,697.04	1.34	100.2	Pulse	0.30	3

Quantitation Report

File Name	018_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 11:13
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	9/13/2019 11:35
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	0.011	ug/l	26.97	77.33	6.933E-05	Pulse	0.25	3
B			1	4.529	ug/l	2.64	21,925.59	1.965E-02	Pulse	0.15	3
Ca			1	-0.140	ug/l	-118.00	4,897.60	2.474E-03	Pulse	0.10	3
Sr			1	0.006	ug/l	59.14	476.69	1.690E-04	Pulse	0.10	3
Mo			1	0.070	ug/l	27.30	563.36	1.992E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	28.16	260.01	8.635E-05	Pulse	0.10	3
Sn			1	0.092	ug/l	14.20	2,777.03	9.229E-04	Pulse	0.10	3
Sb			1	0.148	ug/l	6.94	2,230.24	5.190E-04	Pulse	0.10	3
Ba			1	0.006	ug/l	193.29	113.34	2.641E-05	Pulse	0.10	3
Tl			1	0.020	ug/l	17.75	983.41	3.611E-04	Pulse	0.10	3
Pb			1	0.007	ug/l	49.95	483.36	1.776E-04	Pulse	0.10	3
Pb			1	0.007	ug/l	139.83	453.36	1.667E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	17.80	2,100.15	7.711E-04	Pulse	0.10	3
Na			2	0.088	ug/l	135.81	9,197.03	7.488E-02	Pulse	0.30	3
Mg			2	0.353	ug/l	13.93	422.23	3.438E-03	Pulse	0.30	3
Al			2	0.114	ug/l	233.09	431.12	3.510E-03	Pulse	0.30	3
K			2	-0.476	ug/l	-20.67	10,251.00	8.347E-02	Pulse	0.30	3
Ca			2	0.742	ug/l	200.43	97.78	7.961E-04	Pulse	0.30	3
Ti			2	0.006	ug/l	398.84	4.45	3.621E-05	Pulse	0.30	3
V			2	-0.027	ug/l	-15.65	200.01	1.628E-03	Pulse	0.30	3
Cr			2	-0.010	ug/l	-131.49	383.34	3.121E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-38.51	125.56	1.022E-03	Pulse	0.30	3
Fe			2	0.675	ug/l	5.92	6,233.47	5.075E-02	Pulse	0.30	3
Co			2	0.003	ug/l	56.82	76.65	6.241E-04	Pulse	0.30	3
Ni			2	-0.005	ug/l	-274.64	131.12	1.068E-03	Pulse	0.30	3
Cu			2	-0.299	ug/l	-4.01	1,580.09	1.287E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.366	ug/l	-12.68	640.02	5.211E-03	Pulse	0.30	3
As			2	0.019	ug/l	30.72	29.67	2.415E-04	Pulse	1.00	3
Cd			2	0.006	ug/l	47.59	19.92	2.367E-05	Pulse	0.30	3
Sn			2	0.122	ug/l	25.71	1,186.73	1.411E-03	Pulse	0.30	3
Se			3	0.108	ug/l	24.71	19.67	1.390E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,115,768.49	0.66	101.3	Pulse	0.10	3
1	Sc		1,979,437.47	0.20	101.4	Pulse	0.10	3
1	Ge		413,341.00	0.68	101.4	Pulse	0.10	3
1	Ge		574,724.08	0.49	101.4	Pulse	0.10	3
1	Rh		2,824,266.62	1.18	99.9	Pulse	0.10	3
1	In		3,008,069.31	0.75	101.0	Pulse	0.10	3
1	Tb		4,297,136.60	0.35	99.2	Pulse	0.10	3
1	Ho		431,152.78	0.31	99.5	Pulse	0.10	3
1	Bi		2,723,147.25	0.74	99.8	Pulse	0.10	3
2	Sc		122,817.76	0.01	104.1	Pulse	0.30	3
2	Ge		78,959.60	0.55	102.8	Pulse	0.30	3
2	Ge		119,368.01	0.93	102.9	Pulse	0.30	3
2	Rh		1,857,568.61	0.46	101.5	Pulse	0.30	3
2	In		840,957.21	0.78	103.1	Pulse	0.30	3
2	Tb		2,777,380.52	0.38	101.7	Pulse	0.30	3
2	Ho		284,442.93	0.66	101.2	Pulse	0.30	3
2	Bi		1,924,770.48	0.12	102.1	Pulse	0.30	3
3	Sc		138,139.40	0.35	101.6	Pulse	0.30	3
3	Ge		93,632.72	0.46	101.3	Pulse	0.30	3
3	Ge		141,492.60	0.19	101.5	Pulse	0.30	3
3	Rh		1,528,582.37	0.82	100.6	Pulse	0.30	3
3	Tb		2,831,369.61	0.30	100.9	Pulse	0.30	3

Quantitation Report

File Name	019LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 11:18
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	9/13/2019 11:35
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	0.480	ug/l	1.19	2,469.55	2.191E-03	Pulse	0.25	3
B			1	26.045	ug/l	1.04	96,145.65	8.528E-02	Pulse	0.15	3
Ca			1	259.829	ug/l	0.58	189,308.81	9.380E-02	Pulse	0.10	3
Sr			1	4.942	ug/l	1.08	192,116.29	6.713E-02	Pulse	0.10	3
Mo			1	0.992	ug/l	2.22	7,435.37	2.598E-03	Pulse	0.10	3
Ag			1	0.464	ug/l	3.81	8,719.42	2.867E-03	Pulse	0.10	3
Sn			1	4.917	ug/l	0.18	62,471.44	2.054E-02	Pulse	0.10	3
Sb			1	2.163	ug/l	0.90	30,470.37	6.988E-03	Pulse	0.10	3
Ba			1	0.976	ug/l	2.91	5,948.06	1.364E-03	Pulse	0.10	3
Tl			1	0.508	ug/l	3.34	19,259.87	7.049E-03	Pulse	0.10	3
Pb			1	0.484	ug/l	4.29	6,658.42	2.437E-03	Pulse	0.10	3
Pb			1	0.488	ug/l	2.93	5,991.46	2.193E-03	Pulse	0.10	3
Pb			1	0.488	ug/l	1.42	27,150.88	9.937E-03	Pulse	0.10	3
Na			2	255.127	ug/l	0.68	269,595.56	2.177E+00	Pulse	0.30	3
Mg			2	257.900	ug/l	0.30	123,919.60	1.001E+00	Pulse	0.30	3
Al			2	27.558	ug/l	3.23	5,123.06	4.138E-02	Pulse	0.30	3
K			2	255.024	ug/l	0.09	117,182.69	9.464E-01	Pulse	0.30	3
Ca			2	270.334	ug/l	1.54	6,011.15	4.855E-02	Pulse	0.30	3
Ti			2	1.053	ug/l	12.87	167.78	1.355E-03	Pulse	0.30	3
V			2	0.994	ug/l	2.25	5,228.67	4.223E-02	Pulse	0.30	3
Cr			2	1.041	ug/l	2.34	6,878.19	5.556E-02	Pulse	0.30	3
Mn			2	0.987	ug/l	4.92	3,620.44	2.924E-02	Pulse	0.30	3
Fe			2	26.620	ug/l	1.47	137,038.50	1.107E+00	Pulse	0.30	3
Co			2	0.486	ug/l	1.06	4,804.84	3.881E-02	Pulse	0.30	3
Ni			2	1.002	ug/l	2.16	2,674.70	2.160E-02	Pulse	0.30	3
Cu			2	1.751	ug/l	2.25	15,590.85	1.259E-01	Pulse	0.30	3
Zn			2	5.196	ug/l	2.73	6,942.65	5.607E-02	Pulse	0.30	3
As			2	0.522	ug/l	5.04	357.67	2.889E-03	Pulse	1.00	3
Cd			2	0.498	ug/l	8.35	970.53	1.132E-03	Pulse	0.30	3
Sn			2	4.982	ug/l	0.60	22,555.16	2.631E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.521	ug/l	5.01	82.73	5.727E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,127,402.19	0.55	102.3	Pulse	0.10	3
1	Sc		2,018,295.91	0.49	103.3	Pulse	0.10	3
1	Ge		420,331.50	0.97	103.1	Pulse	0.10	3
1	Ge		580,819.17	1.39	102.4	Pulse	0.10	3
1	Rh		2,861,700.38	0.35	101.2	Pulse	0.10	3
1	In		3,041,763.61	0.77	102.1	Pulse	0.10	3
1	Tb		4,360,384.00	0.77	100.7	Pulse	0.10	3
1	Ho		432,061.27	0.25	99.7	Pulse	0.10	3
1	Bi		2,732,426.42	0.07	100.1	Pulse	0.10	3
2	Sc		123,814.97	0.38	104.9	Pulse	0.30	3
2	Ge		79,877.08	0.75	104.0	Pulse	0.30	3
2	Ge		119,968.92	0.47	103.4	Pulse	0.30	3
2	Rh		1,875,040.76	0.98	102.5	Pulse	0.30	3
2	In		857,278.67	0.81	105.1	Pulse	0.30	3
2	Tb		2,792,571.21	0.76	102.3	Pulse	0.30	3
2	Ho		286,242.95	0.21	101.9	Pulse	0.30	3
2	Bi		1,921,824.23	0.32	101.9	Pulse	0.30	3
3	Sc		139,847.63	0.14	102.8	Pulse	0.30	3
3	Ge		94,941.23	0.89	102.8	Pulse	0.30	3
3	Ge		144,439.85	0.41	103.6	Pulse	0.30	3
3	Rh		1,540,627.75	0.82	101.3	Pulse	0.30	3
3	Tb		2,847,602.39	1.02	101.5	Pulse	0.30	3

Quantitation Report

File Name	020ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 11:25
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	9/13/2019 11:35
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	155.46	44.00	4.622E-05	Pulse	0.25	3
B			1	3.553	ug/l	2.97	15,925.53	1.667E-02	Pulse	0.15	3
Ca			1	94547.150	ug/l	0.61	62,359,234.07	3.322E+01	Analog	0.10	3
Sr			1	1938.625	ug/l	0.40	65,334,094.02	2.630E+01	Analog	0.10	3
Mo			1	2031.266	ug/l	0.93	13,132,310.64	5.286E+00	Analog	0.10	3
Ag			1	0.023	ug/l	14.75	420.02	1.513E-04	Pulse	0.10	3
Sn			1	1780.124	ug/l	1.44	20,072,689.70	7.238E+00	Analog	0.10	3
Sb			1	0.220	ug/l	1.83	3,150.45	7.504E-04	Pulse	0.10	3
Ba			1	0.245	ug/l	3.82	1,493.46	3.557E-04	Pulse	0.10	3
Tl			1	0.004	ug/l	81.37	370.02	1.497E-04	Pulse	0.10	3
Pb			1	0.084	ug/l	10.99	1,346.78	5.438E-04	Pulse	0.10	3
Pb			1	0.091	ug/l	4.35	1,286.77	5.197E-04	Pulse	0.10	3
Pb			1	0.092	ug/l	7.50	5,727.35	2.313E-03	Pulse	0.10	3
Na			2	93402.520	ug/l	0.62	91,270,360.82	7.701E+02	Analog	0.30	3
Mg			2	93664.728	ug/l	1.23	42,989,130.52	3.627E+02	Analog	0.30	3
Al			2	95821.743	ug/l	1.23	15,671,794.93	1.322E+02	Analog	0.30	3
K			2	96061.678	ug/l	0.36	38,464,662.92	3.245E+02	Analog	0.30	3
Ca			2	99345.221	ug/l	0.67	2,085,904.08	1.760E+01	Pulse	0.30	3
Ti			2	1863.129	ug/l	1.45	278,124.86	2.347E+00	Pulse	0.30	3
V			2	-0.014	ug/l	-61.86	257.78	2.172E-03	Pulse	0.30	3
Cr			2	0.282	ug/l	6.14	2,097.94	1.771E-02	Pulse	0.30	3
Mn			2	0.623	ug/l	7.97	2,236.85	1.887E-02	Pulse	0.30	3
Fe			2	91849.807	ug/l	1.35	443,097,680.17	3.739E+03	Analog	0.30	3
Co			2	0.165	ug/l	3.28	1,588.35	1.340E-02	Pulse	0.30	3
Ni			2	0.496	ug/l	4.98	1,338.96	1.129E-02	Pulse	0.30	3
Cu			2	1.942	ug/l	1.99	16,170.32	1.364E-01	Pulse	0.30	3
Zn			2	0.074	ug/l	71.35	1,093.39	9.229E-03	Pulse	0.30	3
As			2	0.067	ug/l	8.62	58.67	4.951E-04	Pulse	1.00	3
Cd			2	-0.256	ug/l	-15.13	-435.70	-5.683E-04	Pulse	0.30	3
Sn			2	1847.206	ug/l	0.62	7,258,398.60	9.465E+00	Analog	0.30	3
Se			3	0.130	ug/l	14.70	21.47	1.625E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		955,130.46	0.69	86.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,877,454.55	0.74	96.1	Pulse	0.10	3
1	Ge		393,280.47	0.87	96.5	Pulse	0.10	3
1	Ge		528,008.81	1.40	93.1	Pulse	0.10	3
1	Rh		2,484,368.04	0.39	87.9	Pulse	0.10	3
1	In		2,772,970.21	1.14	93.1	Pulse	0.10	3
1	Tb		4,197,612.85	1.56	96.9	Pulse	0.10	3
1	Ho		417,754.98	1.81	96.4	Pulse	0.10	3
1	Bi		2,476,109.91	0.74	90.8	Pulse	0.10	3
2	Sc		118,523.79	1.16	100.4	Pulse	0.30	3
2	Ge		74,935.07	1.32	97.5	Pulse	0.30	3
2	Ge		109,747.92	0.90	94.6	Pulse	0.30	3
2	Rh		1,645,938.41	0.76	90.0	Pulse	0.30	3
2	In		766,921.25	1.01	94.0	Pulse	0.30	3
2	Tb		2,651,902.95	0.72	97.1	Pulse	0.30	3
2	Ho		272,734.60	0.49	97.1	Pulse	0.30	3
2	Bi		1,695,145.77	0.25	89.9	Pulse	0.30	3
3	Sc		139,169.59	0.72	102.3	Pulse	0.30	3
3	Ge		90,336.64	1.20	97.8	Pulse	0.30	3
3	Ge		131,990.29	0.74	94.7	Pulse	0.30	3
3	Rh		1,344,087.55	0.82	88.4	Pulse	0.30	3
3	Tb		2,707,343.64	0.35	96.5	Pulse	0.30	3

Quantitation Report

File Name	021ICSB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 11:30
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	9/13/2019 11:35
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	1049.29	20.00	2.289E-05	Pulse	0.25	3
B			1	54.853	ug/l	0.44	151,037.67	1.732E-01	Pulse	0.15	3
Ca			1	92493.983	ug/l	0.17	57,744,460.81	3.249E+01	Analog	0.10	3
Sr			1	1930.458	ug/l	0.43	63,608,110.72	2.619E+01	Analog	0.10	3
Mo			1	2014.965	ug/l	0.41	12,736,535.64	5.243E+00	Analog	0.10	3
Ag			1	19.938	ug/l	0.81	333,479.10	1.228E-01	Pulse	0.10	3
Sn			1	1801.362	ug/l	0.54	19,889,675.95	7.325E+00	Analog	0.10	3
Sb			1	0.174	ug/l	15.07	2,516.97	6.014E-04	Pulse	0.10	3
Ba			1	0.214	ug/l	4.98	1,313.44	3.137E-04	Pulse	0.10	3
Tl			1	0.003	ug/l	84.96	340.01	1.374E-04	Pulse	0.10	3
Pb			1	0.076	ug/l	2.15	1,250.11	5.049E-04	Pulse	0.10	3
Pb			1	0.072	ug/l	18.37	1,083.42	4.378E-04	Pulse	0.10	3
Pb			1	0.078	ug/l	3.65	5,070.56	2.048E-03	Pulse	0.10	3
Na			2	92239.446	ug/l	0.81	84,453,183.31	7.605E+02	Analog	0.30	3
Mg			2	92728.267	ug/l	1.36	39,879,448.41	3.591E+02	Analog	0.30	3
Al			2	93745.342	ug/l	1.46	14,365,740.54	1.294E+02	Analog	0.30	3
K			2	95756.886	ug/l	1.06	35,926,396.35	3.235E+02	Analog	0.30	3
Ca			2	98535.040	ug/l	0.49	1,938,451.66	1.746E+01	Pulse	0.30	3
Ti			2	1836.760	ug/l	1.03	256,923.78	2.314E+00	Pulse	0.30	3
V			2	20.586	ug/l	0.48	91,211.80	8.213E-01	Pulse	0.30	3
Cr			2	21.193	ug/l	1.04	117,749.22	1.060E+00	Pulse	0.30	3
Mn			2	21.637	ug/l	1.15	68,550.04	6.173E-01	Pulse	0.30	3
Fe			2	92042.443	ug/l	0.74	416,059,263.47	3.746E+03	Analog	0.30	3
Co			2	20.735	ug/l	1.18	181,978.06	1.639E+00	Pulse	0.30	3
Ni			2	20.616	ug/l	1.10	46,795.18	4.214E-01	Pulse	0.30	3
Cu			2	19.195	ug/l	0.98	120,826.87	1.088E+00	Pulse	0.30	3
Zn			2	18.613	ug/l	1.54	19,853.25	1.788E-01	Pulse	0.30	3
As			2	21.045	ug/l	0.92	12,322.67	1.110E-01	Pulse	1.00	3
Cd			2	19.885	ug/l	1.75	33,081.96	4.482E-02	Pulse	0.30	3
Sn			2	1880.360	ug/l	0.81	7,111,823.33	9.635E+00	Analog	0.30	3
Se			3	19.852	ug/l	1.54	2,686.69	2.086E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		872,261.65	0.63	79.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,777,085.39	0.07	91.0	Pulse	0.10	3
1	Ge		378,584.98	0.88	92.9	Pulse	0.10	3
1	Ge		504,848.83	0.87	89.0	Pulse	0.10	3
1	Rh		2,429,014.81	0.68	85.9	Pulse	0.10	3
1	In		2,715,473.05	0.18	91.1	Pulse	0.10	3
1	Tb		4,186,400.04	0.32	96.7	Pulse	0.10	3
1	Ho		418,608.35	0.32	96.6	Pulse	0.10	3
1	Bi		2,476,100.69	0.77	90.8	Pulse	0.10	3
2	Sc		111,056.07	0.57	94.1	Pulse	0.30	3
2	Ge		70,551.22	0.47	91.8	Pulse	0.30	3
2	Ge		104,846.00	0.88	90.3	Pulse	0.30	3
2	Rh		1,571,180.49	0.17	85.9	Pulse	0.30	3
2	In		738,170.35	0.34	90.5	Pulse	0.30	3
2	Tb		2,596,305.52	0.32	95.1	Pulse	0.30	3
2	Ho		265,751.27	0.36	94.6	Pulse	0.30	3
2	Bi		1,651,924.93	0.33	87.6	Pulse	0.30	3
3	Sc		135,319.47	1.09	99.5	Pulse	0.30	3
3	Ge		87,387.61	1.16	94.6	Pulse	0.30	3
3	Ge		128,827.26	1.05	92.4	Pulse	0.30	3
3	Rh		1,307,540.33	0.30	86.0	Pulse	0.30	3
3	Tb		2,677,680.80	0.19	95.4	Pulse	0.30	3

Quantitation Report

File Name	022SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 11:35
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	9/13/2019 11:35
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	22.21	30.67	3.446E-05	Pulse	0.25	3
B			1	1.417	ug/l	5.91	9,040.40	1.015E-02	Pulse	0.15	3
Ca			1	13.038	ug/l	8.79	11,898.09	7.103E-03	Pulse	0.10	3
Sr			1	0.221	ug/l	15.88	8,222.59	3.088E-03	Pulse	0.10	3
Mo			1	0.815	ug/l	2.52	5,687.90	2.136E-03	Pulse	0.10	3
Ag			1	0.008	ug/l	44.67	170.01	5.869E-05	Pulse	0.10	3
Sn			1	0.469	ug/l	11.76	7,105.27	2.456E-03	Pulse	0.10	3
Sb			1	0.022	ug/l	25.85	483.37	1.141E-04	Pulse	0.10	3
Ba			1	0.000	ug/l	-1664.81	76.67	1.811E-05	Pulse	0.10	3
Tl			1	0.001	ug/l	140.61	296.68	1.096E-04	Pulse	0.10	3
Pb			1	-0.005	ug/l	-68.51	333.35	1.233E-04	Pulse	0.10	3
Pb			1	-0.010	ug/l	-44.01	260.01	9.608E-05	Pulse	0.10	3
Pb			1	-0.003	ug/l	-65.60	1,313.41	4.856E-04	Pulse	0.10	3
Na			2	10.945	ug/l	14.55	17,434.68	1.644E-01	Pulse	0.30	3
Mg			2	7.558	ug/l	17.90	3,323.71	3.134E-02	Pulse	0.30	3
Al			2	8.078	ug/l	6.67	1,537.87	1.450E-02	Pulse	0.30	3
K			2	8.083	ug/l	10.95	11,921.02	1.124E-01	Pulse	0.30	3
Ca			2	7.543	ug/l	18.31	212.23	2.001E-03	Pulse	0.30	3
Ti			2	0.285	ug/l	22.24	41.11	3.876E-04	Pulse	0.30	3
V			2	-0.027	ug/l	-23.96	173.34	1.635E-03	Pulse	0.30	3
Cr			2	0.009	ug/l	88.32	435.57	4.108E-03	Pulse	0.30	3
Mn			2	-0.002	ug/l	-38.99	113.34	1.068E-03	Pulse	0.30	3
Fe			2	10.370	ug/l	7.15	47,250.01	4.454E-01	Pulse	0.30	3
Co			2	0.001	ug/l	283.06	48.76	4.609E-04	Pulse	0.30	3
Ni			2	-0.006	ug/l	-299.67	112.23	1.057E-03	Pulse	0.30	3
Cu			2	-0.265	ug/l	-3.68	1,560.09	1.470E-02	Pulse	0.30	3
Zn			2	-0.132	ug/l	-27.01	780.03	7.352E-03	Pulse	0.30	3
As			2	0.005	ug/l	148.20	18.00	1.695E-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	136.61	17.23	2.199E-05	Pulse	0.30	3
Sn			2	0.327	ug/l	4.15	1,927.92	2.458E-03	Pulse	0.30	3
Se			3	0.010	ug/l	70.06	5.00	3.704E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		890,191.96	0.87	80.8	Pulse	0.10	3
1	Sc		1,674,943.41	0.36	85.8	Pulse	0.10	3
1	Ge		366,920.63	0.65	90.0	Pulse	0.10	3
1	Ge		511,646.20	1.05	90.2	Pulse	0.10	3
1	Rh		2,662,180.48	0.40	94.2	Pulse	0.10	3
1	In		2,893,904.61	0.42	97.1	Pulse	0.10	3
1	Tb		4,237,608.06	0.66	97.9	Pulse	0.10	3
1	Ho		422,369.54	0.36	97.5	Pulse	0.10	3
1	Bi		2,704,272.25	0.88	99.1	Pulse	0.10	3
2	Sc		106,085.39	0.82	89.9	Pulse	0.30	3
2	Ge		69,999.06	0.63	91.1	Pulse	0.30	3
2	Ge		105,744.10	0.86	91.1	Pulse	0.30	3
2	Rh		1,727,355.00	0.96	94.4	Pulse	0.30	3
2	In		784,296.25	0.21	96.2	Pulse	0.30	3
2	Tb		2,677,720.94	0.45	98.1	Pulse	0.30	3
2	Ho		275,461.53	0.68	98.0	Pulse	0.30	3
2	Bi		1,878,449.58	0.48	99.6	Pulse	0.30	3
3	Sc		131,555.70	0.89	96.7	Pulse	0.30	3
3	Ge		88,922.36	0.56	96.2	Pulse	0.30	3
3	Ge		135,086.75	0.75	96.9	Pulse	0.30	3
3	Rh		1,473,134.63	0.32	96.9	Pulse	0.30	3
3	Tb		2,769,791.63	0.28	98.7	Pulse	0.30	3

Quantitation Report

File Name	023_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 11:40
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	9/13/2019 11:35
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	50.119	ug/l	0.76	206,679.39	2.264E-01	Pulse	0.25	3
B			1	98.939	ug/l	0.65	280,867.97	3.076E-01	Pulse	0.15	3
Ca			1	5059.633	ug/l	0.57	3,109,166.94	1.780E+00	Pulse	0.10	3
Sr			1	52.045	ug/l	0.97	1,861,123.36	7.061E-01	Pulse	0.10	3
Mo			1	50.678	ug/l	0.55	347,643.07	1.319E-01	Pulse	0.10	3
Ag			1	48.711	ug/l	0.19	868,565.41	3.000E-01	Pulse	0.10	3
Sn			1	49.989	ug/l	0.42	589,995.92	2.038E-01	Pulse	0.10	3
Sb			1	50.585	ug/l	0.68	704,582.70	1.624E-01	Pulse	0.10	3
Ba			1	48.853	ug/l	0.87	292,098.83	6.735E-02	Pulse	0.10	3
Tl			1	50.475	ug/l	0.43	1,864,546.17	6.917E-01	Pulse	0.10	3
Pb			1	50.722	ug/l	0.22	648,116.75	2.404E-01	Pulse	0.10	3
Pb			1	50.468	ug/l	0.64	573,018.51	2.126E-01	Pulse	0.10	3
Pb			1	50.395	ug/l	0.21	2,619,960.02	9.720E-01	Pulse	0.10	3
Na			2	4928.625	ug/l	0.98	4,471,066.49	4.070E+01	Pulse	0.30	3
Mg			2	4905.082	ug/l	1.04	2,086,781.10	1.900E+01	Pulse	0.30	3
Al			2	4888.496	ug/l	0.75	741,333.70	6.749E+00	Pulse	0.30	3
K			2	4946.418	ug/l	0.72	1,844,497.78	1.679E+01	Pulse	0.30	3
Ca			2	5104.221	ug/l	0.52	99,390.04	9.048E-01	Pulse	0.30	3
Ti			2	49.790	ug/l	3.49	6,891.52	6.274E-02	Pulse	0.30	3
V			2	51.287	ug/l	0.94	224,317.75	2.042E+00	Pulse	0.30	3
Cr			2	50.805	ug/l	0.84	278,645.05	2.537E+00	Pulse	0.30	3
Mn			2	51.430	ug/l	0.62	160,995.55	1.466E+00	Pulse	0.30	3
Fe			2	5198.123	ug/l	1.82	23,241,503.52	2.116E+02	Analog	0.30	3
Co			2	50.599	ug/l	0.83	439,180.27	3.998E+00	Pulse	0.30	3
Ni			2	50.599	ug/l	0.86	113,408.80	1.032E+00	Pulse	0.30	3
Cu			2	50.615	ug/l	1.28	309,855.41	2.821E+00	Pulse	0.30	3
Zn			2	50.681	ug/l	1.24	51,853.95	4.720E-01	Pulse	0.30	3
As			2	51.768	ug/l	0.18	29,959.34	2.727E-01	Pulse	1.00	3
Cd			2	49.625	ug/l	0.73	88,468.07	1.118E-01	Pulse	0.30	3
Sn			2	50.538	ug/l	0.23	205,455.61	2.597E-01	Pulse	0.30	3
Se			3	195.917	ug/l	0.76	27,952.62	2.056E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		912,971.59	0.62	82.9	Pulse	0.10	3
1	Sc		1,746,872.53	0.65	89.4	Pulse	0.10	3
1	Ge		376,666.54	0.72	92.4	Pulse	0.10	3

Quantitation Report

1	Ge		526,556.83	0.89	92.9	Pulse	0.10	3
1	Rh		2,635,848.30	0.87	93.2	Pulse	0.10	3
1	In		2,895,021.73	0.60	97.2	Pulse	0.10	3
1	Tb		4,337,195.87	0.41	100.2	Pulse	0.10	3
1	Ho		434,893.93	0.77	100.4	Pulse	0.10	3
1	Bi		2,695,490.90	1.43	98.8	Pulse	0.10	3
2	Sc		109,849.51	1.13	93.1	Pulse	0.30	3
2	Ge		72,216.48	0.48	94.0	Pulse	0.30	3
2	Ge		109,921.26	0.41	94.7	Pulse	0.30	3
2	Rh		1,731,345.04	0.77	94.6	Pulse	0.30	3
2	In		791,094.36	0.57	97.0	Pulse	0.30	3
2	Tb		2,705,944.34	0.47	99.1	Pulse	0.30	3
2	Ho		279,024.73	0.19	99.3	Pulse	0.30	3
2	Bi		1,847,527.70	0.32	98.0	Pulse	0.30	3
3	Sc		133,779.71	0.20	98.4	Pulse	0.30	3
3	Ge		90,408.17	0.69	97.8	Pulse	0.30	3
3	Ge		135,961.76	1.06	97.5	Pulse	0.30	3
3	Rh		1,446,375.64	0.06	95.1	Pulse	0.30	3
3	Tb		2,795,384.40	0.50	99.6	Pulse	0.30	3

Quantitation Report

File Name	024_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 11:45
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	9/13/2019 11:35
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	54.33	42.67	4.576E-05	Pulse	0.25	3
B			1	3.464	ug/l	2.41	15,287.19	1.640E-02	Pulse	0.15	3
Ca			1	0.424	ug/l	143.00	4,720.89	2.672E-03	Pulse	0.10	3
Sr			1	0.031	ug/l	8.46	1,393.45	5.109E-04	Pulse	0.10	3
Mo			1	0.159	ug/l	6.13	1,170.09	4.290E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	17.84	240.01	8.182E-05	Pulse	0.10	3
Sn			1	0.176	ug/l	10.49	3,710.66	1.264E-03	Pulse	0.10	3
Sb			1	0.157	ug/l	11.11	2,370.27	5.482E-04	Pulse	0.10	3
Ba			1	0.002	ug/l	169.48	90.00	2.077E-05	Pulse	0.10	3
Tl			1	0.014	ug/l	10.98	763.38	2.769E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	8.97	473.36	1.717E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	58.35	450.03	1.632E-04	Pulse	0.10	3
Pb			1	0.009	ug/l	42.92	1,953.46	7.085E-04	Pulse	0.10	3
Na			2	2.614	ug/l	6.34	10,597.87	9.571E-02	Pulse	0.30	3
Mg			2	1.424	ug/l	1.32	840.04	7.585E-03	Pulse	0.30	3
Al			2	1.105	ug/l	25.81	540.02	4.877E-03	Pulse	0.30	3
K			2	1.359	ug/l	3.62	9,928.61	8.966E-02	Pulse	0.30	3
Ca			2	1.127	ug/l	95.03	95.56	8.643E-04	Pulse	0.30	3
Ti			2	0.042	ug/l	120.99	8.89	8.064E-05	Pulse	0.30	3
V			2	-0.021	ug/l	-13.62	205.56	1.856E-03	Pulse	0.30	3
Cr			2	-0.007	ug/l	-118.56	363.34	3.278E-03	Pulse	0.30	3
Mn			2	0.001	ug/l	1023.33	126.67	1.145E-03	Pulse	0.30	3
Fe			2	1.961	ug/l	2.65	11,417.39	1.031E-01	Pulse	0.30	3
Co			2	0.003	ug/l	89.01	65.53	5.898E-04	Pulse	0.30	3
Ni			2	0.007	ug/l	46.47	145.56	1.314E-03	Pulse	0.30	3
Cu			2	-0.285	ug/l	-10.76	1,508.98	1.363E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.296	ug/l	-20.36	646.69	5.845E-03	Pulse	0.30	3
As			2	0.000	ug/l	2872.96	15.67	1.416E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	225.70	12.08	1.505E-05	Pulse	0.30	3
Sn			2	0.178	ug/l	1.91	1,364.52	1.695E-03	Pulse	0.30	3
Se			3	0.070	ug/l	2.64	13.73	9.921E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		932,167.85	0.18	84.6	Pulse	0.10	3
1	Sc		1,766,402.47	0.52	90.4	Pulse	0.10	3
1	Ge		377,314.26	0.36	92.5	Pulse	0.10	3
1	Ge		531,334.85	1.16	93.7	Pulse	0.10	3
1	Rh		2,727,234.75	0.36	96.5	Pulse	0.10	3
1	In		2,934,517.79	0.62	98.5	Pulse	0.10	3
1	Tb		4,327,049.73	1.37	99.9	Pulse	0.10	3
1	Ho		430,816.36	0.28	99.5	Pulse	0.10	3
1	Bi		2,756,915.27	0.32	101.0	Pulse	0.10	3
2	Sc		110,733.25	1.52	93.8	Pulse	0.30	3
2	Ge		73,086.03	1.09	95.1	Pulse	0.30	3
2	Ge		111,006.33	0.59	95.7	Pulse	0.30	3
2	Rh		1,780,794.24	0.56	97.3	Pulse	0.30	3
2	In		804,876.79	0.54	98.7	Pulse	0.30	3
2	Tb		2,716,800.59	0.06	99.5	Pulse	0.30	3
2	Ho		279,176.23	0.83	99.4	Pulse	0.30	3
2	Bi		1,907,827.77	0.49	101.2	Pulse	0.30	3
3	Sc		133,449.00	0.74	98.1	Pulse	0.30	3
3	Ge		90,703.00	0.70	98.2	Pulse	0.30	3
3	Ge		138,418.42	0.35	99.3	Pulse	0.30	3
3	Rh		1,501,650.84	0.27	98.8	Pulse	0.30	3
3	Tb		2,810,665.93	0.33	100.1	Pulse	0.30	3

Quantitation Report

File Name	025SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 11:50
Sample Name	mp17239-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	9/13/2019 11:35
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	104.81	36.00	4.205E-05	Pulse	0.25	3
B			1	5.714	ug/l	6.08	12,435.91	1.455E-02	Pulse	0.15	3
Ca			1	13.671	ug/l	7.67	8,132.27	4.925E-03	Pulse	0.10	3
Sr			1	0.127	ug/l	12.06	2,520.29	9.514E-04	Pulse	0.10	3
Mo			1	0.330	ug/l	19.15	1,180.09	4.456E-04	Pulse	0.10	3
Ag			1	0.026	ug/l	18.72	263.35	9.095E-05	Pulse	0.10	3
Sn			1	1.269	ug/l	3.71	9,059.64	3.127E-03	Pulse	0.10	3
Sb			1	0.329	ug/l	11.99	2,473.63	5.727E-04	Pulse	0.10	3
Ba			1	0.023	ug/l	115.94	146.67	3.405E-05	Pulse	0.10	3
Tl			1	0.011	ug/l	26.97	483.37	1.644E-04	Pulse	0.10	3
Pb			1	0.034	ug/l	60.80	666.71	2.266E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	36.37	493.36	1.678E-04	Pulse	0.10	3
Pb			1	0.034	ug/l	14.32	2,553.53	8.685E-04	Pulse	0.10	3
Na			2	23.213	ug/l	3.49	17,667.10	1.698E-01	Pulse	0.30	3
Mg			2	5.551	ug/l	2.75	1,333.40	1.282E-02	Pulse	0.30	3
Al			2	6.133	ug/l	14.06	788.92	7.584E-03	Pulse	0.30	3
K			2	3.678	ug/l	20.80	9,495.00	9.128E-02	Pulse	0.30	3
Ca			2	12.883	ug/l	17.36	187.78	1.806E-03	Pulse	0.30	3
Ti			2	0.430	ug/l	65.08	31.11	2.989E-04	Pulse	0.30	3
V			2	0.234	ug/l	16.30	765.59	7.359E-03	Pulse	0.30	3
Cr			2	0.621	ug/l	6.01	1,990.15	1.913E-02	Pulse	0.30	3
Mn			2	0.143	ug/l	7.02	330.01	3.173E-03	Pulse	0.30	3
Fe			2	11.315	ug/l	2.32	26,376.70	2.536E-01	Pulse	0.30	3
Co			2	0.017	ug/l	27.85	108.82	1.046E-03	Pulse	0.30	3
Ni			2	0.078	ug/l	58.65	205.56	1.976E-03	Pulse	0.30	3
Cu			2	0.449	ug/l	7.49	4,340.62	4.173E-02	Pulse	0.30	3
Zn			2	3.470	ug/l	1.88	2,540.23	2.442E-02	Pulse	0.30	3
As			2	0.089	ug/l	43.96	39.00	3.752E-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	262.71	8.77	1.128E-05	Pulse	0.30	3
Sn			2	1.302	ug/l	0.50	3,204.81	4.120E-03	Pulse	0.30	3
Se			3	0.099	ug/l	4.66	11.33	7.831E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		854,785.80	0.50	77.6	Pulse	0.10	3
1	Sc		1,651,681.43	0.82	84.6	Pulse	0.10	3
1	Ge		397,492.09	0.38	97.5	Pulse	0.10	3
1	Ge		548,338.26	1.48	96.7	Pulse	0.10	3
1	Rh		2,648,906.63	0.11	93.7	Pulse	0.10	3
1	In		2,897,351.53	1.22	97.2	Pulse	0.10	3
1	Tb		4,317,810.46	0.90	99.7	Pulse	0.10	3
1	Ho		435,420.04	1.33	100.5	Pulse	0.10	3
1	Bi		2,939,850.48	0.45	107.8	Pulse	0.10	3
2	Sc		104,015.17	0.33	88.1	Pulse	0.30	3
2	Ge		75,991.06	1.69	98.9	Pulse	0.30	3
2	Ge		114,969.97	0.60	99.1	Pulse	0.30	3
2	Rh		1,728,730.35	0.46	94.5	Pulse	0.30	3
2	In		777,808.75	0.41	95.4	Pulse	0.30	3
2	Tb		2,688,620.24	0.19	98.5	Pulse	0.30	3
2	Ho		278,341.87	0.58	99.1	Pulse	0.30	3
2	Bi		1,981,463.81	1.32	105.1	Pulse	0.30	3
3	Sc		133,220.84	0.74	98.0	Pulse	0.30	3
3	Ge		95,569.10	1.21	103.4	Pulse	0.30	3
3	Ge		144,730.16	0.85	103.8	Pulse	0.30	3
3	Rh		1,500,794.53	0.94	98.7	Pulse	0.30	3
3	Tb		2,856,200.44	0.19	101.8	Pulse	0.30	3

Quantitation Report

File Name	026SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 11:55
Sample Name	mp17239-b1conf
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	9/13/2019 11:35
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	73.295	ug/l	1.92	139,217.69	1.655E-01	Pulse	0.25	3
B			1	81.817	ug/l	1.65	109,853.97	1.306E-01	Pulse	0.15	3
Ca			1	3976.622	ug/l	0.83	1,173,840.06	7.010E-01	Pulse	0.10	3
Sr			1	77.214	ug/l	0.54	1,388,163.52	5.238E-01	Pulse	0.10	3
Mo			1	75.772	ug/l	1.61	261,306.13	9.860E-02	Pulse	0.10	3
Ag			1	74.370	ug/l	0.88	671,161.53	2.290E-01	Pulse	0.10	3
Sn			1	76.230	ug/l	0.95	455,732.68	1.555E-01	Pulse	0.10	3
Sb			1	74.410	ug/l	0.48	530,640.85	1.195E-01	Pulse	0.10	3
Ba			1	72.723	ug/l	1.13	222,620.20	5.013E-02	Pulse	0.10	3
Tl			1	74.508	ug/l	0.89	1,434,186.13	5.106E-01	Pulse	0.10	3
Pb			1	77.144	ug/l	1.30	513,708.14	1.829E-01	Pulse	0.10	3
Pb			1	76.653	ug/l	0.84	453,562.55	1.615E-01	Pulse	0.10	3
Pb			1	76.738	ug/l	1.11	2,079,111.43	7.402E-01	Pulse	0.10	3
Na			2	3893.231	ug/l	0.75	1,699,632.75	1.612E+01	Pulse	0.30	3
Mg			2	3831.539	ug/l	0.89	782,385.19	7.421E+00	Pulse	0.30	3
Al			2	3742.213	ug/l	1.15	272,568.31	2.585E+00	Pulse	0.30	3
K			2	3837.587	ug/l	0.89	692,245.79	6.566E+00	Pulse	0.30	3
Ca			2	4072.602	ug/l	1.40	38,096.92	3.614E-01	Pulse	0.30	3
Ti			2	74.540	ug/l	2.75	4,951.91	4.697E-02	Pulse	0.30	3
V			2	78.748	ug/l	0.47	165,362.29	1.568E+00	Pulse	0.30	3
Cr			2	77.796	ug/l	0.96	204,858.85	1.943E+00	Pulse	0.30	3
Mn			2	77.775	ug/l	0.52	116,866.78	1.109E+00	Pulse	0.30	3
Fe			2	4126.642	ug/l	0.47	8,856,627.98	8.401E+01	Analog	0.30	3
Co			2	77.827	ug/l	1.11	324,179.16	3.075E+00	Pulse	0.30	3
Ni			2	76.981	ug/l	2.45	82,826.61	7.857E-01	Pulse	0.30	3
Cu			2	78.088	ug/l	1.35	230,116.62	2.183E+00	Pulse	0.30	3
Zn			2	71.012	ug/l	1.54	35,133.24	3.333E-01	Pulse	0.30	3
As			2	73.748	ug/l	0.47	20,485.48	1.943E-01	Pulse	1.00	3
Cd			2	72.271	ug/l	0.32	63,477.62	8.144E-02	Pulse	0.30	3
Sn			2	78.485	ug/l	0.85	157,320.45	2.018E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	335.693	ug/l	1.86	25,513.66	1.761E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		841,075.35	0.79	76.3	Pulse	0.10	3
1	Sc		1,674,631.23	0.94	85.7	Pulse	0.10	3
1	Ge		392,107.08	0.38	96.2	Pulse	0.10	3
1	Ge		550,074.41	0.50	97.0	Pulse	0.10	3
1	Rh		2,650,144.44	0.40	93.7	Pulse	0.10	3
1	In		2,930,462.03	0.24	98.4	Pulse	0.10	3
1	Tb		4,440,859.62	0.26	102.6	Pulse	0.10	3
1	Ho		442,169.82	0.85	102.1	Pulse	0.10	3
1	Bi		2,809,081.21	0.36	103.0	Pulse	0.10	3
2	Sc		105,429.33	0.70	89.3	Pulse	0.30	3
2	Ge		74,950.97	1.71	97.5	Pulse	0.30	3
2	Ge		114,128.55	0.10	98.3	Pulse	0.30	3
2	Rh		1,721,979.41	0.27	94.1	Pulse	0.30	3
2	In		779,463.65	0.58	95.6	Pulse	0.30	3
2	Tb		2,729,158.16	0.07	100.0	Pulse	0.30	3
2	Ho		282,669.18	0.53	100.6	Pulse	0.30	3
2	Bi		1,915,519.23	0.53	101.6	Pulse	0.30	3
3	Sc		138,349.55	0.78	101.7	Pulse	0.30	3
3	Ge		95,055.33	2.67	102.9	Pulse	0.30	3
3	Ge		144,878.63	2.05	103.9	Pulse	0.30	3
3	Rh		1,506,682.61	1.15	99.1	Pulse	0.30	3
3	Tb		2,923,705.93	0.82	104.2	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:00
Sample Name	sampleconf
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	75.232	ug/l	3.11	12,333.93	1.361E-02	Pulse	0.25	3
B			1	3002.904	ug/l	2.10	337,263.82	3.722E-01	Pulse	0.15	3
Ca			1	260854.554	ug/l	0.93	7,219,891.98	3.668E+00	Analog	0.10	3
Sr			1	5034.273	ug/l	0.89	7,435,371.56	2.732E+00	Analog	0.10	3
Mo			1	86.847	ug/l	1.59	24,646.41	9.056E-03	Pulse	0.10	3
Ag			1	4.546	ug/l	0.60	51,558.16	1.131E-03	Pulse	0.10	3
Sn			1	1.844	ug/l	6.00	38,631.44	8.472E-04	Pulse	0.10	3
Sb			1	77.389	ug/l	2.61	45,577.05	9.982E-03	Pulse	0.10	3
Ba			1	109.822	ug/l	2.71	27,722.30	6.073E-03	Pulse	0.10	3
Tl			1	75.086	ug/l	0.95	109,017.11	4.125E-02	Pulse	0.10	3
Pb			1	81.879	ug/l	0.67	41,395.50	1.566E-02	Pulse	0.10	3
Pb			1	82.610	ug/l	1.85	37,124.35	1.405E-02	Pulse	0.10	3
Pb			1	81.914	ug/l	0.99	168,359.92	6.370E-02	Pulse	0.10	3
Na			2	6321162.887	ug/l	0.36	265,919,189.43	2.084E+03	Analog	0.30	3
Mg			2	759802.353	ug/l	0.84	15,015,156.07	1.177E+02	Analog	0.30	3
Al			2	4172.583	ug/l	0.90	29,808.67	2.337E-01	Pulse	0.30	3
K			2	238690.966	ug/l	0.10	4,124,731.09	3.233E+01	Pulse	0.30	3
Ca			2	270550.266	ug/l	0.37	244,638.19	1.918E+00	Pulse	0.30	3
Ti			2	83.635	ug/l	6.51	541.13	4.242E-03	Pulse	0.30	3
V			2	81.921	ug/l	2.85	16,968.80	1.330E-01	Pulse	0.30	3
Cr			2	75.262	ug/l	1.61	19,612.89	1.537E-01	Pulse	0.30	3
Mn			2	191.839	ug/l	0.85	28,020.54	2.196E-01	Pulse	0.30	3
Fe			2	4718.916	ug/l	0.18	983,101.45	7.706E+00	Pulse	0.30	3
Co			2	71.171	ug/l	1.46	28,743.62	2.253E-01	Pulse	0.30	3
Ni			2	68.194	ug/l	2.06	7,242.78	5.677E-02	Pulse	0.30	3
Cu			2	68.362	ug/l	0.73	22,983.96	1.802E-01	Pulse	0.30	3
Zn			2	70.768	ug/l	7.48	4,394.06	3.444E-02	Pulse	0.30	3
As			2	74.621	ug/l	4.13	2,023.13	1.586E-02	Pulse	1.00	3
Cd			2	4.324	ug/l	4.53	5,171.09	3.992E-04	Pulse	0.30	3
Sn			2	1.347	ug/l	6.57	13,745.03	1.061E-03	Pulse	0.30	3
Se			3	353.126	ug/l	0.65	2,158.41	1.485E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		906,174.05	0.97	82.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,968,433.62	0.89	100.8	Pulse	0.10	3
1	Ge		408,183.99	1.24	100.1	Pulse	0.10	3
1	Ge		569,974.74	0.50	100.5	Pulse	0.10	3
1	Rh		2,721,798.50	0.78	96.3	Pulse	0.10	3
1	In		45,595,237.05	0.62	1530.3	Analog	0.10	3
1	Tb		4,565,867.22	1.04	105.4	Pulse	0.10	3
1	Ho		458,565.74	1.51	105.9	Pulse	0.10	3
1	Bi		2,643,081.73	0.41	96.9	Pulse	0.10	3
2	Sc		127,570.91	0.24	108.1	Pulse	0.30	3
2	Ge		80,635.41	0.73	104.9	Pulse	0.30	3
2	Ge		120,966.43	0.82	104.2	Pulse	0.30	3
2	Rh		1,809,801.60	0.38	98.9	Pulse	0.30	3
2	In		12,959,236.90	1.10	1589.1	Analog	0.30	3
2	Tb		2,899,700.51	0.35	106.2	Pulse	0.30	3
2	Ho		297,688.90	0.20	106.0	Pulse	0.30	3
2	Bi		1,828,603.26	0.09	97.0	Pulse	0.30	3
3	Sc		150,382.12	0.84	110.6	Pulse	0.30	3
3	Ge		95,853.25	1.26	103.7	Pulse	0.30	3
3	Ge		145,370.29	1.05	104.3	Pulse	0.30	3
3	Rh		1,458,106.44	0.86	95.9	Pulse	0.30	3
3	Tb		2,857,564.05	1.00	101.8	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:05
Sample Name	sampleconf
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	76.886	ug/l	2.13	13,135.86	1.391E-02	Pulse	0.25	3
B			1	3015.508	ug/l	0.47	352,913.28	3.738E-01	Pulse	0.15	3
Ca			1	256479.969	ug/l	0.93	7,422,792.18	3.606E+00	Analog	0.10	3
Sr			1	5018.726	ug/l	1.28	7,629,640.30	2.723E+00	Analog	0.10	3
Mo			1	86.989	ug/l	3.70	25,410.93	9.071E-03	Pulse	0.10	3
Ag			1	4.544	ug/l	0.91	52,876.13	1.130E-03	Pulse	0.10	3
Sn			1	1.781	ug/l	7.88	39,153.01	8.370E-04	Pulse	0.10	3
Sb			1	76.252	ug/l	2.95	45,777.79	9.836E-03	Pulse	0.10	3
Ba			1	109.753	ug/l	1.96	28,243.12	6.069E-03	Pulse	0.10	3
Tl			1	74.062	ug/l	1.15	108,714.01	4.068E-02	Pulse	0.10	3
Pb			1	80.642	ug/l	0.83	41,218.70	1.543E-02	Pulse	0.10	3
Pb			1	82.274	ug/l	1.07	37,378.26	1.399E-02	Pulse	0.10	3
Pb			1	81.167	ug/l	0.79	168,647.88	6.312E-02	Pulse	0.10	3
Na			2	6189229.425	ug/l	1.88	267,557,536.04	2.041E+03	Analog	0.30	3
Mg			2	747611.571	ug/l	0.43	15,183,662.18	1.158E+02	Analog	0.30	3
Al			2	4167.495	ug/l	1.27	30,595.55	2.334E-01	Pulse	0.30	3
K			2	234759.792	ug/l	1.25	4,169,100.53	3.180E+01	Pulse	0.30	3
Ca			2	267594.117	ug/l	0.63	248,662.41	1.897E+00	Pulse	0.30	3
Ti			2	94.508	ug/l	9.99	627.80	4.790E-03	Pulse	0.30	3
V			2	82.480	ug/l	0.77	17,554.98	1.339E-01	Pulse	0.30	3
Cr			2	74.096	ug/l	1.83	19,850.94	1.514E-01	Pulse	0.30	3
Mn			2	189.537	ug/l	1.47	28,451.33	2.170E-01	Pulse	0.30	3
Fe			2	4666.523	ug/l	1.36	999,084.27	7.621E+00	Pulse	0.30	3
Co			2	70.495	ug/l	0.96	29,261.10	2.232E-01	Pulse	0.30	3
Ni			2	69.483	ug/l	4.03	7,579.61	5.782E-02	Pulse	0.30	3
Cu			2	68.046	ug/l	2.13	23,526.94	1.795E-01	Pulse	0.30	3
Zn			2	81.012	ug/l	3.53	5,006.39	3.819E-02	Pulse	0.30	3
As			2	74.748	ug/l	2.76	2,082.48	1.589E-02	Pulse	1.00	3
Cd			2	4.315	ug/l	1.27	5,223.33	3.983E-04	Pulse	0.30	3
Sn			2	1.248	ug/l	5.97	13,641.60	1.040E-03	Pulse	0.30	3
Se			3	357.970	ug/l	1.48	2,207.28	1.505E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		944,210.30	0.47	85.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,058,201.01	0.29	105.4	Pulse	0.10	3
1	Ge		421,542.13	0.84	103.4	Pulse	0.10	3
1	Ge		594,617.81	0.43	104.9	Pulse	0.10	3
1	Rh		2,801,823.81	0.92	99.1	Pulse	0.10	3
1	In		46,784,557.59	1.31	1570.2	Analog	0.10	3
1	Tb		4,653,446.50	0.74	107.5	Pulse	0.10	3
1	Ho		462,884.34	1.27	106.9	Pulse	0.10	3
1	Bi		2,671,935.79	0.82	97.9	Pulse	0.10	3
2	Sc		131,106.59	0.93	111.1	Pulse	0.30	3
2	Ge		82,105.09	0.25	106.9	Pulse	0.30	3
2	Ge		124,984.88	0.53	107.7	Pulse	0.30	3
2	Rh		1,833,863.54	0.49	100.2	Pulse	0.30	3
2	In		13,114,145.67	1.32	1608.1	Analog	0.30	3
2	Tb		2,911,419.68	0.81	106.6	Pulse	0.30	3
2	Ho		299,176.85	0.13	106.5	Pulse	0.30	3
2	Bi		1,822,021.04	0.25	96.6	Pulse	0.30	3
3	Sc		151,823.92	0.78	111.6	Pulse	0.30	3
3	Ge		96,932.72	1.43	104.9	Pulse	0.30	3
3	Ge		146,651.51	0.96	105.2	Pulse	0.30	3
3	Rh		1,469,148.14	0.81	96.6	Pulse	0.30	3
3	Tb		2,865,831.20	1.19	102.1	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:10
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	9/13/2019 11:35
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	51.29	45.33	4.489E-05	Pulse	0.25	3
B			1	4.239	ug/l	5.30	18,933.13	1.876E-02	Pulse	0.15	3
Ca			1	3.007	ug/l	5.10	7,098.45	3.580E-03	Pulse	0.10	3
Sr			1	0.034	ug/l	9.79	1,663.48	5.519E-04	Pulse	0.10	3
Mo			1	0.023	ug/l	3.92	230.01	7.623E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	71.36	103.34	3.187E-05	Pulse	0.10	3
Sn			1	0.030	ug/l	16.15	2,166.90	6.687E-04	Pulse	0.10	3
Sb			1	0.017	ug/l	13.73	463.36	9.925E-05	Pulse	0.10	3
Ba			1	0.003	ug/l	166.04	106.67	2.292E-05	Pulse	0.10	3
Tl			1	0.003	ug/l	58.96	390.02	1.331E-04	Pulse	0.10	3
Pb			1	-0.010	ug/l	-48.92	293.35	1.001E-04	Pulse	0.10	3
Pb			1	-0.005	ug/l	-87.34	343.35	1.171E-04	Pulse	0.10	3
Pb			1	-0.005	ug/l	-14.85	1,270.07	4.330E-04	Pulse	0.10	3
Na			2	34.249	ug/l	18.13	43,849.63	3.565E-01	Pulse	0.30	3
Mg			2	3.346	ug/l	18.82	1,849.02	1.503E-02	Pulse	0.30	3
Al			2	0.662	ug/l	16.80	525.57	4.266E-03	Pulse	0.30	3
K			2	2.349	ug/l	15.15	11,454.02	9.301E-02	Pulse	0.30	3
Ca			2	2.160	ug/l	25.34	128.89	1.047E-03	Pulse	0.30	3
Ti			2	0.006	ug/l	200.60	4.44	3.602E-05	Pulse	0.30	3
V			2	0.054	ug/l	39.32	601.13	4.873E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	188.14	461.12	3.746E-03	Pulse	0.30	3
Mn			2	-0.001	ug/l	-261.13	134.45	1.093E-03	Pulse	0.30	3
Fe			2	0.716	ug/l	7.57	6,458.02	5.245E-02	Pulse	0.30	3
Co			2	0.000	ug/l	2997.85	46.64	3.791E-04	Pulse	0.30	3
Ni			2	0.007	ug/l	206.17	163.34	1.326E-03	Pulse	0.30	3
Cu			2	-0.293	ug/l	-1.07	1,623.43	1.318E-02	Pulse	0.30	3
Zn			2	-0.089	ug/l	-34.52	953.37	7.739E-03	Pulse	0.30	3
As			2	0.012	ug/l	45.94	25.33	2.060E-04	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	207.30	15.54	1.793E-05	Pulse	0.30	3
Sn			2	0.015	ug/l	142.27	752.25	8.597E-04	Pulse	0.30	3
Se			3	0.062	ug/l	85.19	13.80	9.157E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,009,200.28	1.18	91.6	Pulse	0.10	3
1	Sc		1,983,209.29	2.07	101.6	Pulse	0.10	3
1	Ge		423,743.34	0.91	103.9	Pulse	0.10	3
1	Ge		596,785.35	1.71	105.2	Pulse	0.10	3
1	Rh		3,016,617.87	1.91	106.7	Pulse	0.10	3
1	In		3,239,213.91	2.03	108.7	Pulse	0.10	3
1	Tb		4,674,924.72	2.58	108.0	Pulse	0.10	3
1	Ho		463,676.95	1.59	107.0	Pulse	0.10	3
1	Bi		2,933,882.77	1.43	107.5	Pulse	0.10	3
2	Sc		123,167.44	1.64	104.4	Pulse	0.30	3
2	Ge		82,169.79	1.51	106.9	Pulse	0.30	3
2	Ge		123,330.42	1.97	106.3	Pulse	0.30	3
2	Rh		1,950,440.62	2.51	106.6	Pulse	0.30	3
2	In		877,174.57	3.10	107.6	Pulse	0.30	3
2	Tb		2,891,406.55	2.62	105.9	Pulse	0.30	3
2	Ho		296,635.59	3.10	105.6	Pulse	0.30	3
2	Bi		2,014,316.10	1.92	106.8	Pulse	0.30	3
3	Sc		147,768.43	0.30	108.6	Pulse	0.30	3
3	Ge		98,792.62	0.66	106.9	Pulse	0.30	3
3	Ge		151,464.00	1.33	108.7	Pulse	0.30	3
3	Rh		1,619,211.84	1.01	106.5	Pulse	0.30	3
3	Tb		2,967,467.45	0.57	105.7	Pulse	0.30	3

Quantitation Report

File Name	030SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:15
Sample Name	mp17239-s1 4
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	77.088	ug/l	3.16	13,258.63	1.395E-02	Pulse	0.25	3
B			1	2975.047	ug/l	2.63	350,603.55	3.688E-01	Pulse	0.15	3
Ca			1	257704.303	ug/l	1.17	7,539,026.97	3.624E+00	Analog	0.10	3
Sr			1	4962.952	ug/l	1.57	7,581,565.10	2.693E+00	Analog	0.10	3
Mo			1	85.966	ug/l	2.66	25,237.29	8.964E-03	Pulse	0.10	3
Ag			1	66.142	ug/l	1.11	51,755.36	1.631E-02	Pulse	0.10	3
Sn			1	71.409	ug/l	1.51	38,608.26	1.216E-02	Pulse	0.10	3
Sb			1	75.556	ug/l	0.69	45,263.18	9.747E-03	Pulse	0.10	3
Ba			1	106.869	ug/l	1.75	27,445.07	5.910E-03	Pulse	0.10	3
Tl			1	73.689	ug/l	2.46	107,797.59	4.048E-02	Pulse	0.10	3
Pb			1	82.256	ug/l	0.96	41,900.35	1.573E-02	Pulse	0.10	3
Pb			1	78.380	ug/l	0.96	35,510.45	1.333E-02	Pulse	0.10	3
Pb			1	82.527	ug/l	3.89	170,849.87	6.417E-02	Pulse	0.10	3
Na			2	6141944.824	ug/l	0.45	270,293,189.26	2.025E+03	Analog	0.30	3
Mg			2	750222.518	ug/l	0.32	15,509,743.83	1.162E+02	Analog	0.30	3
Al			2	4033.636	ug/l	1.57	30,160.29	2.260E-01	Pulse	0.30	3
K			2	235269.167	ug/l	0.26	4,253,293.03	3.187E+01	Pulse	0.30	3
Ca			2	265467.765	ug/l	0.59	251,110.21	1.882E+00	Pulse	0.30	3
Ti			2	81.089	ug/l	4.88	548.91	4.114E-03	Pulse	0.30	3
V			2	79.986	ug/l	0.78	17,341.44	1.299E-01	Pulse	0.30	3
Cr			2	72.728	ug/l	0.88	19,843.15	1.487E-01	Pulse	0.30	3
Mn			2	188.165	ug/l	0.13	28,755.16	2.155E-01	Pulse	0.30	3
Fe			2	4596.171	ug/l	0.87	1,001,724.72	7.506E+00	Pulse	0.30	3
Co			2	69.817	ug/l	0.89	29,496.01	2.210E-01	Pulse	0.30	3
Ni			2	69.582	ug/l	2.96	7,726.33	5.790E-02	Pulse	0.30	3
Cu			2	65.756	ug/l	1.36	23,275.49	1.744E-01	Pulse	0.30	3
Zn			2	66.193	ug/l	4.14	4,373.98	3.277E-02	Pulse	0.30	3
As			2	74.221	ug/l	2.03	2,105.14	1.577E-02	Pulse	1.00	3
Cd			2	64.576	ug/l	1.22	5,166.69	5.830E-03	Pulse	0.30	3
Sn			2	71.787	ug/l	1.61	13,732.77	1.550E-02	Pulse	0.30	3
Se			3	347.153	ug/l	0.86	2,171.61	1.460E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		950,683.65	0.88	86.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,080,717.16	1.13	106.5	Pulse	0.10	3
1	Ge		427,728.50	0.96	104.9	Pulse	0.10	3
1	Ge		596,380.07	1.66	105.2	Pulse	0.10	3
1	Rh		2,815,489.02	0.89	99.6	Pulse	0.10	3
1	In		3,174,435.00	1.34	106.5	Pulse	0.10	3
1	Tb		4,643,962.53	0.99	107.2	Pulse	0.10	3
1	Ho		465,104.54	1.55	107.4	Pulse	0.10	3
1	Bi		2,663,069.65	0.88	97.6	Pulse	0.10	3
2	Sc		133,457.28	1.15	113.1	Pulse	0.30	3
2	Ge		83,500.69	0.18	108.7	Pulse	0.30	3
2	Ge		126,913.06	0.47	109.4	Pulse	0.30	3
2	Rh		1,861,581.59	0.43	101.7	Pulse	0.30	3
2	In		886,197.50	0.52	108.7	Pulse	0.30	3
2	Tb		2,956,935.51	0.11	108.3	Pulse	0.30	3
2	Ho		304,363.90	0.66	108.3	Pulse	0.30	3
2	Bi		1,842,323.67	0.42	97.7	Pulse	0.30	3
3	Sc		154,470.63	0.68	113.6	Pulse	0.30	3
3	Ge		97,820.39	0.34	105.9	Pulse	0.30	3
3	Ge		148,774.99	0.46	106.7	Pulse	0.30	3
3	Rh		1,486,006.71	0.14	97.7	Pulse	0.30	3
3	Tb		2,902,638.91	0.04	103.4	Pulse	0.30	3

Quantitation Report

File Name	031_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:20
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	9/13/2019 11:35
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	50.163	ug/l	1.14	217,302.01	2.266E-01	Pulse	0.25	3
B			1	105.579	ug/l	0.65	314,497.60	3.279E-01	Pulse	0.15	3
Ca			1	5034.962	ug/l	0.06	3,280,896.62	1.771E+00	Pulse	0.10	3
Sr			1	51.649	ug/l	0.82	1,964,618.67	7.007E-01	Pulse	0.10	3
Mo			1	50.327	ug/l	0.56	367,230.84	1.310E-01	Pulse	0.10	3
Ag			1	48.911	ug/l	0.54	927,343.84	3.012E-01	Pulse	0.10	3
Sn			1	49.597	ug/l	0.32	622,435.97	2.022E-01	Pulse	0.10	3
Sb			1	51.071	ug/l	0.78	747,008.76	1.640E-01	Pulse	0.10	3
Ba			1	49.323	ug/l	1.08	309,681.96	6.799E-02	Pulse	0.10	3
Tl			1	50.483	ug/l	0.50	1,956,672.89	6.918E-01	Pulse	0.10	3
Pb			1	50.635	ug/l	0.41	678,857.88	2.400E-01	Pulse	0.10	3
Pb			1	50.328	ug/l	0.43	599,546.03	2.120E-01	Pulse	0.10	3
Pb			1	50.382	ug/l	0.09	2,748,290.97	9.717E-01	Pulse	0.10	3
Na			2	5077.449	ug/l	2.13	5,000,673.97	4.193E+01	Analog	0.30	3
Mg			2	4886.597	ug/l	0.29	2,257,152.55	1.893E+01	Pulse	0.30	3
Al			2	4833.193	ug/l	0.16	795,786.34	6.673E+00	Pulse	0.30	3
K			2	4897.028	ug/l	0.36	1,982,704.50	1.663E+01	Pulse	0.30	3
Ca			2	5024.835	ug/l	0.63	106,231.76	8.908E-01	Pulse	0.30	3
Ti			2	50.340	ug/l	0.66	7,565.13	6.343E-02	Pulse	0.30	3
V			2	50.425	ug/l	0.60	239,461.28	2.008E+00	Pulse	0.30	3
Cr			2	49.874	ug/l	0.89	296,991.59	2.490E+00	Pulse	0.30	3
Mn			2	50.330	ug/l	0.93	171,061.33	1.434E+00	Pulse	0.30	3
Fe			2	5116.332	ug/l	1.83	24,838,877.35	2.083E+02	Analog	0.30	3
Co			2	49.971	ug/l	0.28	470,915.11	3.949E+00	Pulse	0.30	3
Ni			2	49.945	ug/l	0.93	121,541.64	1.019E+00	Pulse	0.30	3
Cu			2	49.941	ug/l	0.54	331,995.26	2.784E+00	Pulse	0.30	3
Zn			2	50.149	ug/l	0.77	55,714.19	4.672E-01	Pulse	0.30	3
As			2	50.451	ug/l	0.29	31,699.26	2.658E-01	Pulse	1.00	3
Cd			2	49.606	ug/l	0.94	93,947.54	1.118E-01	Pulse	0.30	3
Sn			2	50.554	ug/l	0.24	218,331.77	2.598E-01	Pulse	0.30	3
Se			3	194.024	ug/l	1.09	29,284.47	2.036E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		959,122.58	1.08	87.1	Pulse	0.10	3
1	Sc		1,852,346.59	0.48	94.8	Pulse	0.10	3
1	Ge		398,696.02	0.40	97.8	Pulse	0.10	3

Quantitation Report

1	Ge		561,903.09	0.65	99.1	Pulse	0.10	3
1	Rh		2,803,734.96	0.38	99.2	Pulse	0.10	3
1	In		3,078,340.45	0.27	103.3	Pulse	0.10	3
1	Tb		4,554,768.16	0.57	105.2	Pulse	0.10	3
1	Ho		455,343.31	0.65	105.1	Pulse	0.10	3
1	Bi		2,828,236.52	0.17	103.7	Pulse	0.10	3
2	Sc		119,259.97	0.14	101.0	Pulse	0.30	3
2	Ge		77,272.71	1.01	100.6	Pulse	0.30	3
2	Ge		116,899.16	0.87	100.7	Pulse	0.30	3
2	Rh		1,841,127.98	0.49	100.6	Pulse	0.30	3
2	In		840,415.05	0.53	103.1	Pulse	0.30	3
2	Tb		2,876,796.55	0.81	105.4	Pulse	0.30	3
2	Ho		297,044.75	0.70	105.7	Pulse	0.30	3
2	Bi		1,957,903.12	0.76	103.8	Pulse	0.30	3
3	Sc		142,244.94	0.62	104.6	Pulse	0.30	3
3	Ge		94,501.98	0.62	102.3	Pulse	0.30	3
3	Ge		143,824.40	0.28	103.2	Pulse	0.30	3
3	Rh		1,517,622.68	0.79	99.8	Pulse	0.30	3
3	Tb		2,899,391.97	0.99	103.3	Pulse	0.30	3

Quantitation Report

File Name	032_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:25
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	9/13/2019 11:35
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	28.59	62.67	6.473E-05	Pulse	0.25	3
B			1	5.243	ug/l	4.66	21,117.90	2.183E-02	Pulse	0.15	3
Ca			1	1.274	ug/l	9.06	5,547.79	2.971E-03	Pulse	0.10	3
Sr			1	0.017	ug/l	14.77	926.74	3.193E-04	Pulse	0.10	3
Mo			1	0.071	ug/l	16.44	580.03	1.998E-04	Pulse	0.10	3
Ag			1	0.011	ug/l	8.36	240.01	7.633E-05	Pulse	0.10	3
Sn			1	0.080	ug/l	17.49	2,740.36	8.717E-04	Pulse	0.10	3
Sb			1	0.133	ug/l	10.73	2,166.89	4.705E-04	Pulse	0.10	3
Ba			1	0.011	ug/l	80.57	156.67	3.401E-05	Pulse	0.10	3
Tl			1	0.014	ug/l	8.45	843.39	2.886E-04	Pulse	0.10	3
Pb			1	0.007	ug/l	68.19	523.36	1.791E-04	Pulse	0.10	3
Pb			1	0.002	ug/l	339.37	420.03	1.437E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	28.87	2,103.48	7.198E-04	Pulse	0.10	3
Na			2	14.545	ug/l	8.10	23,041.36	1.941E-01	Pulse	0.30	3
Mg			2	1.379	ug/l	9.94	880.03	7.412E-03	Pulse	0.30	3
Al			2	0.262	ug/l	74.98	441.12	3.714E-03	Pulse	0.30	3
K			2	0.048	ug/l	916.93	10,120.93	8.523E-02	Pulse	0.30	3
Ca			2	0.792	ug/l	53.18	95.56	8.049E-04	Pulse	0.30	3
Ti			2	0.007	ug/l	478.72	4.44	3.723E-05	Pulse	0.30	3
V			2	-0.014	ug/l	-9.87	256.67	2.162E-03	Pulse	0.30	3
Cr			2	-0.003	ug/l	-260.03	417.79	3.517E-03	Pulse	0.30	3
Mn			2	-0.005	ug/l	-236.20	115.56	9.745E-04	Pulse	0.30	3
Fe			2	0.901	ug/l	6.66	7,120.50	5.996E-02	Pulse	0.30	3
Co			2	0.002	ug/l	180.32	64.43	5.433E-04	Pulse	0.30	3
Ni			2	-0.010	ug/l	-34.85	115.56	9.734E-04	Pulse	0.30	3
Cu			2	-0.277	ug/l	-1.65	1,670.11	1.406E-02	Pulse	0.30	3
Zn			2	-0.217	ug/l	-6.36	780.03	6.569E-03	Pulse	0.30	3
As			2	0.010	ug/l	2.43	23.00	1.937E-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	130.29	22.15	2.584E-05	Pulse	0.30	3
Sn			2	0.101	ug/l	11.44	1,117.83	1.303E-03	Pulse	0.30	3
Se			3	0.074	ug/l	12.35	15.07	1.042E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		967,570.89	0.71	87.8	Pulse	0.10	3
1	Sc		1,867,390.70	0.20	95.6	Pulse	0.10	3
1	Ge		409,160.44	1.12	100.4	Pulse	0.10	3
1	Ge		567,779.05	0.75	100.1	Pulse	0.10	3
1	Rh		2,904,026.52	0.69	102.7	Pulse	0.10	3
1	In		3,144,367.66	0.41	105.5	Pulse	0.10	3
1	Tb		4,604,426.91	0.51	106.3	Pulse	0.10	3
1	Ho		459,344.29	1.10	106.0	Pulse	0.10	3
1	Bi		2,922,553.08	0.36	107.1	Pulse	0.10	3
2	Sc		118,752.13	0.66	100.6	Pulse	0.30	3
2	Ge		78,264.02	0.56	101.9	Pulse	0.30	3
2	Ge		118,723.56	0.64	102.3	Pulse	0.30	3
2	Rh		1,904,085.34	0.58	104.1	Pulse	0.30	3
2	In		857,759.89	0.27	105.2	Pulse	0.30	3
2	Tb		2,898,409.82	0.08	106.2	Pulse	0.30	3
2	Ho		297,679.01	0.31	105.9	Pulse	0.30	3
2	Bi		2,026,332.21	0.46	107.5	Pulse	0.30	3
3	Sc		143,675.35	0.60	105.6	Pulse	0.30	3
3	Ge		95,721.45	0.45	103.6	Pulse	0.30	3
3	Ge		144,592.19	0.20	103.7	Pulse	0.30	3
3	Rh		1,576,529.83	0.17	103.7	Pulse	0.30	3
3	Tb		2,928,755.44	0.78	104.3	Pulse	0.30	3

Quantitation Report

File Name	033SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:30
Sample Name	mp17239-s2
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	77.216	ug/l	1.48	13,382.71	1.397E-02	Pulse	0.25	3
B			1	3031.146	ug/l	2.83	359,868.01	3.757E-01	Pulse	0.15	3
Ca			1	256083.756	ug/l	0.81	7,612,607.59	3.601E+00	Analog	0.10	3
Sr			1	4982.629	ug/l	0.68	7,750,978.84	2.704E+00	Analog	0.10	3
Mo			1	85.426	ug/l	2.43	25,534.59	8.908E-03	Pulse	0.10	3
Ag			1	67.718	ug/l	0.94	53,323.77	1.669E-02	Pulse	0.10	3
Sn			1	73.148	ug/l	1.11	39,744.34	1.244E-02	Pulse	0.10	3
Sb			1	76.518	ug/l	0.54	46,533.30	9.871E-03	Pulse	0.10	3
Ba			1	105.519	ug/l	2.01	27,508.62	5.835E-03	Pulse	0.10	3
Tl			1	75.419	ug/l	1.54	111,418.35	4.143E-02	Pulse	0.10	3
Pb			1	80.833	ug/l	1.21	41,586.37	1.546E-02	Pulse	0.10	3
Pb			1	81.164	ug/l	2.72	37,110.90	1.380E-02	Pulse	0.10	3
Pb			1	80.479	ug/l	0.26	168,319.28	6.259E-02	Pulse	0.10	3
Na			2	6220989.506	ug/l	1.25	275,713,624.60	2.051E+03	Analog	0.30	3
Mg			2	752517.162	ug/l	2.42	15,666,237.71	1.166E+02	Analog	0.30	3
Al			2	4104.411	ug/l	1.49	30,900.55	2.299E-01	Pulse	0.30	3
K			2	236554.194	ug/l	0.84	4,306,848.86	3.204E+01	Pulse	0.30	3
Ca			2	268791.166	ug/l	1.70	256,045.68	1.905E+00	Pulse	0.30	3
Ti			2	89.238	ug/l	7.44	607.80	4.524E-03	Pulse	0.30	3
V			2	81.519	ug/l	2.04	17,791.91	1.324E-01	Pulse	0.30	3
Cr			2	74.395	ug/l	1.95	20,430.53	1.520E-01	Pulse	0.30	3
Mn			2	190.299	ug/l	1.24	29,285.01	2.179E-01	Pulse	0.30	3
Fe			2	4647.225	ug/l	1.21	1,020,033.57	7.590E+00	Pulse	0.30	3
Co			2	70.752	ug/l	2.13	30,101.52	2.240E-01	Pulse	0.30	3
Ni			2	71.531	ug/l	3.77	7,994.25	5.949E-02	Pulse	0.30	3
Cu			2	66.478	ug/l	3.06	23,652.73	1.760E-01	Pulse	0.30	3
Zn			2	69.957	ug/l	8.09	4,587.37	3.415E-02	Pulse	0.30	3
As			2	74.724	ug/l	1.84	2,134.48	1.588E-02	Pulse	1.00	3
Cd			2	66.542	ug/l	2.63	5,347.73	6.007E-03	Pulse	0.30	3
Sn			2	73.902	ug/l	1.64	14,179.81	1.593E-02	Pulse	0.30	3
Se			3	355.295	ug/l	0.74	2,217.95	1.494E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		957,915.84	0.72	86.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,114,129.55	1.01	108.3	Pulse	0.10	3
1	Ge		435,071.32	1.89	106.7	Pulse	0.10	3
1	Ge		603,996.54	0.39	106.5	Pulse	0.10	3
1	Rh		2,866,817.77	0.81	101.4	Pulse	0.10	3
1	In		3,194,067.45	1.28	107.2	Pulse	0.10	3
1	Tb		4,714,383.37	1.01	108.9	Pulse	0.10	3
1	Ho		469,539.84	1.15	108.4	Pulse	0.10	3
1	Bi		2,689,215.38	1.31	98.6	Pulse	0.10	3
2	Sc		134,412.26	1.25	113.9	Pulse	0.30	3
2	Ge		83,450.59	0.42	108.6	Pulse	0.30	3
2	Ge		126,952.20	1.21	109.4	Pulse	0.30	3
2	Rh		1,881,383.95	0.72	102.8	Pulse	0.30	3
2	In		890,166.81	0.34	109.2	Pulse	0.30	3
2	Tb		2,978,374.05	0.53	109.1	Pulse	0.30	3
2	Ho		305,427.18	0.50	108.7	Pulse	0.30	3
2	Bi		1,849,356.66	1.54	98.1	Pulse	0.30	3
3	Sc		154,417.54	0.91	113.5	Pulse	0.30	3
3	Ge		98,041.56	0.70	106.1	Pulse	0.30	3
3	Ge		148,465.59	0.77	106.5	Pulse	0.30	3
3	Rh		1,490,467.79	0.88	98.0	Pulse	0.30	3
3	Tb		2,891,080.51	0.93	103.0	Pulse	0.30	3

Quantitation Report

File Name	034SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:35
Sample Name	jc94499-17
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	0.374	ug/l	63.54	86.67	8.922E-05	Pulse	0.25	3
B			1	2880.911	ug/l	1.98	346,214.99	3.573E-01	Pulse	0.15	3
Ca			1	244944.603	ug/l	0.97	7,345,708.85	3.444E+00	Analog	0.10	3
Sr			1	4733.052	ug/l	1.72	7,403,940.93	2.568E+00	Analog	0.10	3
Mo			1	7.711	ug/l	5.21	2,360.26	8.187E-04	Pulse	0.10	3
Ag			1	0.276	ug/l	40.62	250.01	7.870E-05	Pulse	0.10	3
Sn			1	1.373	ug/l	16.43	2,453.65	7.707E-04	Pulse	0.10	3
Sb			1	1.777	ug/l	5.96	1,276.78	2.721E-04	Pulse	0.10	3
Ba			1	34.694	ug/l	2.14	9,059.58	1.931E-03	Pulse	0.10	3
Tl			1	0.068	ug/l	63.72	343.35	1.287E-04	Pulse	0.10	3
Pb			1	3.741	ug/l	8.84	2,276.94	8.545E-04	Pulse	0.10	3
Pb			1	3.760	ug/l	9.12	2,050.23	7.698E-04	Pulse	0.10	3
Pb			1	3.982	ug/l	1.71	9,608.29	3.607E-03	Pulse	0.10	3
Na			2	6042810.557	ug/l	2.25	274,249,384.66	1.993E+03	Analog	0.30	3
Mg			2	732674.208	ug/l	1.66	15,621,489.38	1.135E+02	Analog	0.30	3
Al			2	387.134	ug/l	2.16	3,402.61	2.472E-02	Pulse	0.30	3
K			2	225809.372	ug/l	1.68	4,210,587.89	3.059E+01	Pulse	0.30	3
Ca			2	255325.100	ug/l	1.38	249,095.15	1.810E+00	Pulse	0.30	3
Ti			2	11.954	ug/l	18.97	86.67	6.306E-04	Pulse	0.30	3
V			2	5.386	ug/l	3.67	1,552.32	1.128E-02	Pulse	0.30	3
Cr			2	1.498	ug/l	8.55	912.26	6.629E-03	Pulse	0.30	3
Mn			2	114.764	ug/l	2.28	18,146.77	1.319E-01	Pulse	0.30	3
Fe			2	905.131	ug/l	1.76	206,032.43	1.497E+00	Pulse	0.30	3
Co			2	0.395	ug/l	34.32	223.89	1.624E-03	Pulse	0.30	3
Ni			2	2.072	ug/l	20.89	394.45	2.866E-03	Pulse	0.30	3
Cu			2	-1.435	ug/l	-7.07	3,603.77	2.618E-02	Pulse	0.30	3
Zn			2	6.624	ug/l	6.09	1,511.20	1.098E-02	Pulse	0.30	3
As			2	4.206	ug/l	7.76	141.33	1.027E-03	Pulse	1.00	3
Cd			2	0.137	ug/l	156.27	19.79	2.177E-05	Pulse	0.30	3
Sn			2	1.081	ug/l	11.57	914.49	1.006E-03	Pulse	0.30	3
Se			3	1.116	ug/l	31.71	11.13	7.307E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		968,908.72	0.91	87.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,132,749.19	0.54	109.2	Pulse	0.10	3
1	Ge		435,410.53	0.46	106.8	Pulse	0.10	3
1	Ge		609,746.92	0.68	107.5	Pulse	0.10	3
1	Rh		2,882,785.89	0.28	102.0	Pulse	0.10	3
1	In		3,183,302.04	0.88	106.8	Pulse	0.10	3
1	Tb		4,691,753.37	0.42	108.3	Pulse	0.10	3
1	Ho		465,801.95	0.55	107.5	Pulse	0.10	3
1	Bi		2,664,251.21	0.81	97.7	Pulse	0.10	3
2	Sc		137,656.13	1.41	116.6	Pulse	0.30	3
2	Ge		86,033.94	0.61	112.0	Pulse	0.30	3
2	Ge		129,697.66	0.91	111.8	Pulse	0.30	3
2	Rh		1,910,651.45	0.20	104.4	Pulse	0.30	3
2	In		908,899.08	0.44	111.5	Pulse	0.30	3
2	Tb		3,005,579.88	0.70	110.1	Pulse	0.30	3
2	Ho		308,970.64	0.51	110.0	Pulse	0.30	3
2	Bi		1,857,419.65	0.59	98.5	Pulse	0.30	3
3	Sc		157,563.18	0.87	115.9	Pulse	0.30	3
3	Ge		100,597.01	0.51	108.9	Pulse	0.30	3
3	Ge		152,258.78	0.48	109.2	Pulse	0.30	3
3	Rh		1,512,751.92	0.37	99.5	Pulse	0.30	3
3	Tb		2,921,510.51	1.33	104.1	Pulse	0.30	3

Quantitation Report

File Name	035SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:40
Sample Name	mp17239-sd1
Sample Type	Sample
Comment	
Prep Dilution	125.000
Auto Dilution	N/A
Total Dilution	125.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	0.389	ug/l	167.68	37.33	3.581E-05	Pulse	0.25	3
B			1	3195.101	ug/l	1.47	87,521.46	8.380E-02	Pulse	0.15	3
Ca			1	239729.176	ug/l	1.08	1,462,684.20	6.762E-01	Pulse	0.10	3
Sr			1	4377.425	ug/l	0.61	1,462,281.91	4.751E-01	Pulse	0.10	3
Mo			1	9.785	ug/l	15.20	676.71	2.198E-04	Pulse	0.10	3
Ag			1	0.402	ug/l	73.29	103.34	3.061E-05	Pulse	0.10	3
Sn			1	1.710	ug/l	70.65	2,033.55	6.029E-04	Pulse	0.10	3
Sb			1	2.770	ug/l	12.63	553.37	1.151E-04	Pulse	0.10	3
Ba			1	35.010	ug/l	9.86	1,946.87	4.045E-04	Pulse	0.10	3
Tl			1	0.114	ug/l	263.40	300.01	1.037E-04	Pulse	0.10	3
Pb			1	3.309	ug/l	7.65	783.38	2.710E-04	Pulse	0.10	3
Pb			1	2.379	ug/l	16.80	626.70	2.168E-04	Pulse	0.10	3
Pb			1	2.938	ug/l	6.49	2,860.21	9.896E-04	Pulse	0.10	3
Na			2	5870006.720	ug/l	1.31	53,051,679.00	3.872E+02	Analog	0.30	3
Mg			2	701419.771	ug/l	0.80	2,977,841.06	2.173E+01	Pulse	0.30	3
Al			2	430.489	ug/l	22.50	1,110.05	8.105E-03	Pulse	0.30	3
K			2	218854.384	ug/l	1.26	821,894.33	5.999E+00	Pulse	0.30	3
Ca			2	249752.006	ug/l	1.34	48,583.80	3.546E-01	Pulse	0.30	3
Ti			2	10.130	ug/l	85.33	17.78	1.304E-04	Pulse	0.30	3
V			2	11.219	ug/l	12.12	860.03	6.279E-03	Pulse	0.30	3
Cr			2	1.105	ug/l	114.65	560.02	4.083E-03	Pulse	0.30	3
Mn			2	112.488	ug/l	5.20	3,666.01	2.676E-02	Pulse	0.30	3
Fe			2	933.390	ug/l	0.48	44,837.09	3.272E-01	Pulse	0.30	3
Co			2	-0.031	ug/l	-402.85	48.77	3.561E-04	Pulse	0.30	3
Ni			2	-0.057	ug/l	-1089.07	160.01	1.167E-03	Pulse	0.30	3
Cu			2	-28.146	ug/l	-5.16	2,320.19	1.693E-02	Pulse	0.30	3
Zn			2	-27.064	ug/l	-10.38	901.15	6.576E-03	Pulse	0.30	3
As			2	4.842	ug/l	13.15	47.33	3.453E-04	Pulse	1.00	3
Cd			2	-0.065	ug/l	-761.37	7.72	8.223E-06	Pulse	0.30	3
Sn			2	1.237	ug/l	132.73	782.25	8.353E-04	Pulse	0.30	3
Se			3	2.599	ug/l	32.32	7.47	4.803E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,044,359.60	0.41	94.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,163,127.62	0.97	110.8	Pulse	0.10	3
1	Ge		455,431.05	0.75	111.7	Pulse	0.10	3
1	Ge		631,258.70	1.03	111.3	Pulse	0.10	3
1	Rh		3,077,679.85	0.80	108.9	Pulse	0.10	3
1	In		3,372,787.98	0.49	113.2	Pulse	0.10	3
1	Tb		4,811,032.43	1.06	111.1	Pulse	0.10	3
1	Ho		482,441.67	1.30	111.4	Pulse	0.10	3
1	Bi		2,890,572.98	0.57	105.9	Pulse	0.10	3
2	Sc		137,026.34	1.14	116.1	Pulse	0.30	3
2	Ge		87,778.29	1.28	114.2	Pulse	0.30	3
2	Ge		131,469.36	0.74	113.3	Pulse	0.30	3
2	Rh		2,015,958.25	0.31	110.2	Pulse	0.30	3
2	In		936,618.93	0.39	114.9	Pulse	0.30	3
2	Tb		3,068,246.33	0.41	112.4	Pulse	0.30	3
2	Ho		312,937.86	0.71	111.4	Pulse	0.30	3
2	Bi		2,010,883.32	1.09	106.6	Pulse	0.30	3
3	Sc		156,403.65	0.96	115.0	Pulse	0.30	3
3	Ge		102,264.62	0.47	110.7	Pulse	0.30	3
3	Ge		155,440.63	0.26	111.5	Pulse	0.30	3
3	Rh		1,589,346.02	0.43	104.5	Pulse	0.30	3
3	Tb		2,964,933.98	0.18	105.6	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:46
Sample Name	jc94365-9
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	86.35	29.33	2.839E-05	Pulse	0.25	3
B			1	94.710	ug/l	2.40	17,949.77	1.739E-02	Pulse	0.15	3
Ca			1	16.641	ug/l	77.19	5,634.68	2.757E-03	Pulse	0.10	3
Sr			1	0.788	ug/l	9.54	1,613.47	5.183E-04	Pulse	0.10	3
Mo			1	0.329	ug/l	80.25	156.67	5.036E-05	Pulse	0.10	3
Ag			1	0.069	ug/l	20.60	93.33	2.778E-05	Pulse	0.10	3
Sn			1	0.806	ug/l	14.52	2,280.25	6.784E-04	Pulse	0.10	3
Sb			1	0.527	ug/l	28.10	536.70	1.116E-04	Pulse	0.10	3
Ba			1	0.996	ug/l	27.25	353.35	7.344E-05	Pulse	0.10	3
Tl			1	0.018	ug/l	83.02	303.35	1.011E-04	Pulse	0.10	3
Pb			1	-0.334	ug/l	-28.49	246.68	8.219E-05	Pulse	0.10	3
Pb			1	-0.343	ug/l	-2.86	236.68	7.889E-05	Pulse	0.10	3
Pb			1	-0.213	ug/l	-38.39	1,116.72	3.723E-04	Pulse	0.10	3
Na			2	520.825	ug/l	3.52	31,560.57	2.459E-01	Pulse	0.30	3
Mg			2	30.670	ug/l	7.21	875.59	6.822E-03	Pulse	0.30	3
Al			2	37.725	ug/l	25.01	697.80	5.435E-03	Pulse	0.30	3
K			2	-1.058	ug/l	-1318.54	10,899.22	8.493E-02	Pulse	0.30	3
Ca			2	30.728	ug/l	139.68	113.34	8.823E-04	Pulse	0.30	3
Ti			2	-0.045	ug/l	-1160.02	3.33	2.610E-05	Pulse	0.30	3
V			2	2.370	ug/l	23.58	831.14	6.480E-03	Pulse	0.30	3
Cr			2	0.423	ug/l	24.88	575.57	4.486E-03	Pulse	0.30	3
Mn			2	0.148	ug/l	132.17	166.67	1.299E-03	Pulse	0.30	3
Fe			2	11.983	ug/l	1.21	5,492.09	4.280E-02	Pulse	0.30	3
Co			2	-0.018	ug/l	-110.72	41.10	3.199E-04	Pulse	0.30	3
Ni			2	-0.147	ug/l	-85.73	135.56	1.057E-03	Pulse	0.30	3
Cu			2	-6.798	ug/l	-0.95	1,841.24	1.435E-02	Pulse	0.30	3
Zn			2	-3.284	ug/l	-52.19	943.37	7.355E-03	Pulse	0.30	3
As			2	0.228	ug/l	79.04	24.33	1.894E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	-0.051	ug/l	-121.85	4.42	4.836E-06	Pulse	0.30	3
Sn			2	0.108	ug/l	424.97	738.92	8.067E-04	Pulse	0.30	3
Se			3	0.199	ug/l	65.75	5.20	3.457E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,032,258.28	0.60	93.7	Pulse	0.10	3
1	Sc		2,044,193.88	0.79	104.7	Pulse	0.10	3
1	Ge		442,220.23	0.69	108.5	Pulse	0.10	3
1	Ge		614,516.14	0.53	108.4	Pulse	0.10	3
1	Rh		3,112,566.83	0.55	110.1	Pulse	0.10	3
1	In		3,360,903.79	0.23	112.8	Pulse	0.10	3
1	Tb		4,805,194.93	0.98	111.0	Pulse	0.10	3
1	Ho		474,614.60	1.24	109.6	Pulse	0.10	3
1	Bi		2,999,823.08	0.39	110.0	Pulse	0.10	3
2	Sc		128,324.81	0.98	108.7	Pulse	0.30	3
2	Ge		83,993.06	1.45	109.3	Pulse	0.30	3
2	Ge		127,541.45	0.86	109.9	Pulse	0.30	3
2	Rh		2,019,294.16	0.50	110.4	Pulse	0.30	3
2	In		915,991.28	0.60	112.3	Pulse	0.30	3
2	Tb		2,990,963.07	0.71	109.6	Pulse	0.30	3
2	Ho		305,555.95	0.99	108.8	Pulse	0.30	3
2	Bi		2,078,293.32	0.42	110.2	Pulse	0.30	3
3	Sc		150,146.80	1.14	110.4	Pulse	0.30	3
3	Ge		100,703.34	0.57	109.0	Pulse	0.30	3
3	Ge		150,289.43	0.82	107.8	Pulse	0.30	3
3	Rh		1,614,734.38	0.24	106.2	Pulse	0.30	3
3	Tb		2,993,178.15	0.72	106.6	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:51
Sample Name	jc94365-10
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	0.062	ug/l	96.95	32.00	3.290E-05	Pulse	0.25	3
B			1	3096.649	ug/l	2.18	373,030.36	3.837E-01	Pulse	0.15	3
Ca			1	264512.678	ug/l	0.40	8,042,629.88	3.719E+00	Analog	0.10	3
Sr			1	5127.223	ug/l	0.39	8,019,912.59	2.782E+00	Analog	0.10	3
Mo			1	8.380	ug/l	5.22	2,560.30	8.884E-04	Pulse	0.10	3
Ag			1	0.057	ug/l	45.44	80.00	2.479E-05	Pulse	0.10	3
Sn			1	0.479	ug/l	62.34	2,020.21	6.253E-04	Pulse	0.10	3
Sb			1	0.773	ug/l	22.29	670.04	1.432E-04	Pulse	0.10	3
Ba			1	29.559	ug/l	4.28	7,712.20	1.648E-03	Pulse	0.10	3
Tl			1	-0.061	ug/l	-12.67	153.34	5.785E-05	Pulse	0.10	3
Pb			1	0.959	ug/l	25.96	866.73	3.272E-04	Pulse	0.10	3
Pb			1	0.942	ug/l	28.87	783.40	2.954E-04	Pulse	0.10	3
Pb			1	1.006	ug/l	2.58	3,476.97	1.312E-03	Pulse	0.10	3
Na			2	6589803.263	ug/l	0.56	303,421,392.39	2.173E+03	Analog	0.30	3
Mg			2	793608.715	ug/l	1.40	17,165,608.21	1.229E+02	Analog	0.30	3
Al			2	90.043	ug/l	14.32	1,162.38	8.322E-03	Pulse	0.30	3
K			2	246344.985	ug/l	0.55	4,658,953.70	3.337E+01	Pulse	0.30	3
Ca			2	278940.161	ug/l	0.65	276,063.90	1.977E+00	Pulse	0.30	3
Ti			2	3.859	ug/l	6.56	31.11	2.228E-04	Pulse	0.30	3
V			2	3.284	ug/l	1.50	1,107.83	7.934E-03	Pulse	0.30	3
Cr			2	0.523	ug/l	44.56	654.47	4.686E-03	Pulse	0.30	3
Mn			2	87.601	ug/l	1.04	14,090.57	1.009E-01	Pulse	0.30	3
Fe			2	140.205	ug/l	2.04	35,125.20	2.516E-01	Pulse	0.30	3
Co			2	0.183	ug/l	31.60	133.24	9.546E-04	Pulse	0.30	3
Ni			2	1.475	ug/l	21.05	332.23	2.379E-03	Pulse	0.30	3
Cu			2	-4.396	ug/l	-9.07	2,743.61	1.965E-02	Pulse	0.30	3
Zn			2	-1.792	ug/l	-89.19	1,103.39	7.901E-03	Pulse	0.30	3
As			2	2.786	ug/l	8.30	101.67	7.282E-04	Pulse	1.00	3
Cd			2	0.110	ug/l	42.83	17.56	1.927E-05	Pulse	0.30	3
Sn			2	-0.111	ug/l	-245.36	694.47	7.618E-04	Pulse	0.30	3
Se			3	0.298	ug/l	113.62	5.93	3.874E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		972,333.25	0.77	88.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,162,501.53	1.46	110.7	Pulse	0.10	3
1	Ge		439,924.62	1.23	107.9	Pulse	0.10	3
1	Ge		613,007.90	1.50	108.1	Pulse	0.10	3
1	Rh		2,882,542.77	0.98	102.0	Pulse	0.10	3
1	In		3,230,754.02	0.66	108.4	Pulse	0.10	3
1	Tb		4,678,730.97	1.17	108.0	Pulse	0.10	3
1	Ho		470,089.67	1.28	108.5	Pulse	0.10	3
1	Bi		2,650,375.69	0.71	97.1	Pulse	0.10	3
2	Sc		139,630.37	0.50	118.3	Pulse	0.30	3
2	Ge		86,633.54	0.37	112.7	Pulse	0.30	3
2	Ge		129,551.16	0.63	111.6	Pulse	0.30	3
2	Rh		1,918,161.80	0.50	104.8	Pulse	0.30	3
2	In		911,488.19	0.42	111.8	Pulse	0.30	3
2	Tb		2,999,110.99	0.60	109.9	Pulse	0.30	3
2	Ho		309,046.20	0.43	110.0	Pulse	0.30	3
2	Bi		1,860,107.91	0.69	98.6	Pulse	0.30	3
3	Sc		159,375.01	1.27	117.2	Pulse	0.30	3
3	Ge		101,299.99	0.50	109.6	Pulse	0.30	3
3	Ge		153,293.50	0.33	110.0	Pulse	0.30	3
3	Rh		1,509,465.15	1.43	99.3	Pulse	0.30	3
3	Tb		2,905,304.88	1.40	103.5	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 12:56
Sample Name	jc94365-11
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	-276.16	18.67	1.868E-05	Pulse	0.25	3
B			1	3054.270	ug/l	0.94	379,101.03	3.785E-01	Pulse	0.15	3
Ca			1	259363.909	ug/l	0.92	8,039,675.51	3.647E+00	Analog	0.10	3
Sr			1	5017.345	ug/l	1.28	7,968,494.05	2.723E+00	Analog	0.10	3
Mo			1	7.844	ug/l	6.02	2,436.95	8.326E-04	Pulse	0.10	3
Ag			1	0.093	ug/l	95.11	110.00	3.364E-05	Pulse	0.10	3
Sn			1	0.675	ug/l	20.80	2,156.90	6.571E-04	Pulse	0.10	3
Sb			1	0.799	ug/l	25.69	693.37	1.465E-04	Pulse	0.10	3
Ba			1	29.312	ug/l	0.54	7,722.23	1.634E-03	Pulse	0.10	3
Tl			1	-0.067	ug/l	-39.54	146.68	5.469E-05	Pulse	0.10	3
Pb			1	1.251	ug/l	11.52	1,026.74	3.826E-04	Pulse	0.10	3
Pb			1	1.167	ug/l	38.21	893.40	3.331E-04	Pulse	0.10	3
Pb			1	1.228	ug/l	16.85	3,980.37	1.483E-03	Pulse	0.10	3
Na			2	6339510.545	ug/l	0.31	292,589,081.70	2.091E+03	Analog	0.30	3
Mg			2	771854.805	ug/l	1.05	16,734,372.11	1.196E+02	Analog	0.30	3
Al			2	94.047	ug/l	11.19	1,195.61	8.543E-03	Pulse	0.30	3
K			2	237438.012	ug/l	0.57	4,501,545.38	3.216E+01	Pulse	0.30	3
Ca			2	267181.571	ug/l	0.22	265,052.45	1.894E+00	Pulse	0.30	3
Ti			2	3.379	ug/l	42.97	27.78	1.986E-04	Pulse	0.30	3
V			2	3.073	ug/l	23.53	1,063.38	7.599E-03	Pulse	0.30	3
Cr			2	0.753	ug/l	33.32	720.02	5.144E-03	Pulse	0.30	3
Mn			2	84.487	ug/l	3.30	13,627.99	9.737E-02	Pulse	0.30	3
Fe			2	164.074	ug/l	1.31	40,647.95	2.904E-01	Pulse	0.30	3
Co			2	0.240	ug/l	16.09	158.78	1.135E-03	Pulse	0.30	3
Ni			2	1.391	ug/l	36.30	323.34	2.311E-03	Pulse	0.30	3
Cu			2	-4.873	ug/l	-4.91	2,602.46	1.860E-02	Pulse	0.30	3
Zn			2	-1.859	ug/l	-41.91	1,102.27	7.876E-03	Pulse	0.30	3
As			2	2.801	ug/l	9.13	102.33	7.312E-04	Pulse	1.00	3
Cd			2	0.191	ug/l	80.43	24.21	2.664E-05	Pulse	0.30	3
Sn			2	0.342	ug/l	105.33	776.70	8.547E-04	Pulse	0.30	3
Se			3	0.536	ug/l	7.61	7.27	4.871E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,001,543.28	0.80	90.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,204,469.13	0.61	112.9	Pulse	0.10	3
1	Ge		449,818.41	1.41	110.3	Pulse	0.10	3
1	Ge		625,153.36	1.42	110.2	Pulse	0.10	3
1	Rh		2,927,123.60	1.27	103.5	Pulse	0.10	3
1	In		3,283,070.52	0.98	110.2	Pulse	0.10	3
1	Tb		4,725,122.85	1.70	109.1	Pulse	0.10	3
1	Ho		472,625.39	1.11	109.1	Pulse	0.10	3
1	Bi		2,684,928.92	0.95	98.4	Pulse	0.10	3
2	Sc		139,959.03	0.25	118.6	Pulse	0.30	3
2	Ge		86,623.57	1.66	112.7	Pulse	0.30	3
2	Ge		130,462.82	0.68	112.4	Pulse	0.30	3
2	Rh		1,927,051.31	0.19	105.3	Pulse	0.30	3
2	In		908,769.47	0.13	111.4	Pulse	0.30	3
2	Tb		3,000,546.55	0.12	109.9	Pulse	0.30	3
2	Ho		308,010.21	0.75	109.6	Pulse	0.30	3
2	Bi		1,849,304.44	0.82	98.1	Pulse	0.30	3
3	Sc		156,604.16	0.25	115.1	Pulse	0.30	3
3	Ge		98,447.41	0.85	106.6	Pulse	0.30	3
3	Ge		149,193.92	0.60	107.0	Pulse	0.30	3
3	Rh		1,496,304.70	0.28	98.4	Pulse	0.30	3
3	Tb		2,873,333.01	1.52	102.4	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:01
Sample Name	jc94365-12
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	0.090	ug/l	48.34	38.67	3.792E-05	Pulse	0.25	3
B			1	2999.912	ug/l	0.22	378,795.54	3.719E-01	Pulse	0.15	3
Ca			1	252106.426	ug/l	0.13	7,837,044.88	3.545E+00	Analog	0.10	3
Sr			1	4894.491	ug/l	1.00	7,758,781.76	2.656E+00	Analog	0.10	3
Mo			1	7.781	ug/l	5.49	2,413.61	8.260E-04	Pulse	0.10	3
Ag			1	0.044	ug/l	56.26	70.00	2.158E-05	Pulse	0.10	3
Sn			1	0.277	ug/l	111.31	1,920.19	5.924E-04	Pulse	0.10	3
Sb			1	0.741	ug/l	5.46	653.37	1.391E-04	Pulse	0.10	3
Ba			1	27.957	ug/l	3.64	7,328.72	1.560E-03	Pulse	0.10	3
Tl			1	-0.054	ug/l	-59.86	163.34	6.149E-05	Pulse	0.10	3
Pb			1	1.016	ug/l	31.30	900.06	3.380E-04	Pulse	0.10	3
Pb			1	0.964	ug/l	42.68	796.72	2.990E-04	Pulse	0.10	3
Pb			1	1.076	ug/l	8.92	3,636.98	1.366E-03	Pulse	0.10	3
Na			2	6250928.004	ug/l	1.10	289,771,552.93	2.061E+03	Analog	0.30	3
Mg			2	755628.075	ug/l	2.26	16,452,448.23	1.171E+02	Analog	0.30	3
Al			2	73.906	ug/l	23.54	1,043.38	7.432E-03	Pulse	0.30	3
K			2	233796.276	ug/l	1.82	4,451,758.71	3.167E+01	Pulse	0.30	3
Ca			2	265171.466	ug/l	2.02	264,185.46	1.880E+00	Pulse	0.30	3
Ti			2	5.700	ug/l	41.63	44.44	3.155E-04	Pulse	0.30	3
V			2	3.113	ug/l	15.01	1,077.83	7.661E-03	Pulse	0.30	3
Cr			2	0.743	ug/l	28.46	720.03	5.124E-03	Pulse	0.30	3
Mn			2	91.552	ug/l	2.20	14,816.78	1.054E-01	Pulse	0.30	3
Fe			2	182.840	ug/l	0.79	45,121.57	3.210E-01	Pulse	0.30	3
Co			2	0.294	ug/l	14.80	183.22	1.304E-03	Pulse	0.30	3
Ni			2	1.078	ug/l	25.75	288.90	2.055E-03	Pulse	0.30	3
Cu			2	-1.794	ug/l	-33.95	3,568.20	2.539E-02	Pulse	0.30	3
Zn			2	-0.531	ug/l	-329.96	1,175.61	8.362E-03	Pulse	0.30	3
As			2	2.956	ug/l	11.82	107.33	7.639E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	3598.27	8.69	9.547E-06	Pulse	0.30	3
Sn			2	-0.092	ug/l	-356.89	694.47	7.657E-04	Pulse	0.30	3
Se			3	0.244	ug/l	92.60	5.53	3.646E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,018,615.80	0.92	92.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,210,762.00	0.64	113.2	Pulse	0.10	3
1	Ge		444,588.76	0.88	109.0	Pulse	0.10	3
1	Ge		622,365.03	0.32	109.8	Pulse	0.10	3
1	Rh		2,921,429.02	0.50	103.3	Pulse	0.10	3
1	In		3,240,285.41	0.54	108.7	Pulse	0.10	3
1	Tb		4,698,690.03	0.64	108.5	Pulse	0.10	3
1	Ho		471,427.92	1.01	108.8	Pulse	0.10	3
1	Bi		2,661,120.79	0.92	97.5	Pulse	0.10	3
2	Sc		140,586.64	1.56	119.1	Pulse	0.30	3
2	Ge		86,723.96	0.75	112.9	Pulse	0.30	3
2	Ge		131,384.25	0.59	113.2	Pulse	0.30	3
2	Rh		1,910,408.39	0.83	104.4	Pulse	0.30	3
2	In		907,158.82	1.25	111.2	Pulse	0.30	3
2	Tb		2,985,517.31	0.72	109.4	Pulse	0.30	3
2	Ho		305,220.74	0.50	108.6	Pulse	0.30	3
2	Bi		1,835,932.08	0.06	97.4	Pulse	0.30	3
3	Sc		157,321.02	0.67	115.7	Pulse	0.30	3
3	Ge		99,520.25	0.61	107.7	Pulse	0.30	3
3	Ge		151,964.93	1.15	109.0	Pulse	0.30	3
3	Rh		1,508,453.07	0.28	99.2	Pulse	0.30	3
3	Tb		2,877,942.87	0.56	102.5	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:06
Sample Name	jc94499-27
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	295.97	28.00	2.774E-05	Pulse	0.25	3
B			1	3225.951	ug/l	0.75	400,732.98	3.994E-01	Pulse	0.15	3
Ca			1	265889.868	ug/l	0.21	8,299,482.79	3.739E+00	Analog	0.10	3
Sr			1	5236.198	ug/l	0.54	8,297,072.38	2.841E+00	Analog	0.10	3
Mo			1	7.700	ug/l	7.58	2,386.93	8.176E-04	Pulse	0.10	3
Ag			1	0.044	ug/l	57.50	70.00	2.170E-05	Pulse	0.10	3
Sn			1	1.817	ug/l	9.78	2,720.33	8.428E-04	Pulse	0.10	3
Sb			1	0.800	ug/l	33.99	686.71	1.466E-04	Pulse	0.10	3
Ba			1	27.944	ug/l	1.88	7,298.69	1.559E-03	Pulse	0.10	3
Tl			1	-0.056	ug/l	-95.51	160.00	6.057E-05	Pulse	0.10	3
Pb			1	1.339	ug/l	20.46	1,053.41	3.993E-04	Pulse	0.10	3
Pb			1	1.147	ug/l	17.61	870.06	3.299E-04	Pulse	0.10	3
Pb			1	1.278	ug/l	11.91	4,013.71	1.522E-03	Pulse	0.10	3
Na			2	6656480.043	ug/l	0.95	310,355,658.78	2.195E+03	Analog	0.30	3
Mg			2	813733.103	ug/l	2.19	17,821,379.85	1.261E+02	Analog	0.30	3
Al			2	198.157	ug/l	4.41	2,020.17	1.429E-02	Pulse	0.30	3
K			2	249203.771	ug/l	0.40	4,772,412.31	3.375E+01	Pulse	0.30	3
Ca			2	278301.448	ug/l	0.45	278,906.50	1.973E+00	Pulse	0.30	3
Ti			2	9.430	ug/l	26.06	71.12	5.035E-04	Pulse	0.30	3
V			2	2.999	ug/l	4.34	1,057.83	7.480E-03	Pulse	0.30	3
Cr			2	0.948	ug/l	4.08	782.25	5.533E-03	Pulse	0.30	3
Mn			2	107.810	ug/l	0.74	17,523.86	1.239E-01	Pulse	0.30	3
Fe			2	375.527	ug/l	0.59	89,739.29	6.347E-01	Pulse	0.30	3
Co			2	0.348	ug/l	30.54	208.65	1.477E-03	Pulse	0.30	3
Ni			2	1.257	ug/l	24.69	311.12	2.201E-03	Pulse	0.30	3
Cu			2	-2.582	ug/l	-11.15	3,343.71	2.365E-02	Pulse	0.30	3
Zn			2	-3.328	ug/l	-45.90	1,037.82	7.339E-03	Pulse	0.30	3
As			2	3.222	ug/l	13.73	116.00	8.199E-04	Pulse	1.00	3
Cd			2	0.111	ug/l	85.49	17.59	1.937E-05	Pulse	0.30	3
Sn			2	1.070	ug/l	37.51	912.26	1.004E-03	Pulse	0.30	3
Se			3	0.585	ug/l	41.06	7.60	5.079E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,003,282.00	1.58	91.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,219,961.42	0.74	113.7	Pulse	0.10	3
1	Ge		447,904.31	1.09	109.9	Pulse	0.10	3
1	Ge		623,151.01	1.57	109.9	Pulse	0.10	3
1	Rh		2,920,192.77	0.93	103.3	Pulse	0.10	3
1	In		3,227,272.23	0.48	108.3	Pulse	0.10	3
1	Tb		4,681,407.43	0.65	108.1	Pulse	0.10	3
1	Ho		464,942.48	0.82	107.3	Pulse	0.10	3
1	Bi		2,638,214.75	0.59	96.7	Pulse	0.10	3
2	Sc		141,394.09	0.83	119.8	Pulse	0.30	3
2	Ge		86,777.49	0.88	112.9	Pulse	0.30	3
2	Ge		131,567.88	0.57	113.4	Pulse	0.30	3
2	Rh		1,935,856.38	0.35	105.8	Pulse	0.30	3
2	In		908,860.22	0.54	111.4	Pulse	0.30	3
2	Tb		3,001,816.48	0.65	110.0	Pulse	0.30	3
2	Ho		307,247.28	0.20	109.4	Pulse	0.30	3
2	Bi		1,833,479.72	0.56	97.2	Pulse	0.30	3
3	Sc		157,134.61	0.64	115.5	Pulse	0.30	3
3	Ge		99,308.09	0.21	107.5	Pulse	0.30	3
3	Ge		149,406.20	1.17	107.2	Pulse	0.30	3
3	Rh		1,497,063.41	0.48	98.5	Pulse	0.30	3
3	Tb		2,883,955.23	0.65	102.7	Pulse	0.30	3

Quantitation Report

File Name	041_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:11
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	9/13/2019 11:35
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	50.098	ug/l	1.20	225,319.07	2.263E-01	Pulse	0.25	3
B			1	107.505	ug/l	2.09	332,306.91	3.338E-01	Pulse	0.15	3
Ca			1	5005.008	ug/l	0.59	3,391,528.70	1.761E+00	Pulse	0.10	3
Sr			1	51.928	ug/l	0.47	1,995,518.98	7.045E-01	Pulse	0.10	3
Mo			1	50.430	ug/l	0.42	371,756.74	1.312E-01	Pulse	0.10	3
Ag			1	48.869	ug/l	0.56	932,238.42	3.010E-01	Pulse	0.10	3
Sn			1	49.434	ug/l	1.10	624,205.77	2.015E-01	Pulse	0.10	3
Sb			1	50.859	ug/l	1.18	745,261.84	1.633E-01	Pulse	0.10	3
Ba			1	49.285	ug/l	0.52	310,034.33	6.794E-02	Pulse	0.10	3
Tl			1	50.338	ug/l	0.27	1,936,442.11	6.899E-01	Pulse	0.10	3
Pb			1	50.550	ug/l	0.33	672,639.49	2.396E-01	Pulse	0.10	3
Pb			1	50.494	ug/l	0.31	597,014.39	2.127E-01	Pulse	0.10	3
Pb			1	50.327	ug/l	0.14	2,724,668.34	9.707E-01	Pulse	0.10	3
Na			2	4996.023	ug/l	1.71	5,036,862.44	4.126E+01	Analog	0.30	3
Mg			2	4846.223	ug/l	0.85	2,291,386.16	1.877E+01	Pulse	0.30	3
Al			2	4815.965	ug/l	0.88	811,678.65	6.649E+00	Pulse	0.30	3
K			2	4884.214	ug/l	1.46	2,024,145.89	1.658E+01	Pulse	0.30	3
Ca			2	5061.018	ug/l	1.54	109,516.99	8.972E-01	Pulse	0.30	3
Ti			2	48.174	ug/l	4.35	7,408.41	6.071E-02	Pulse	0.30	3
V			2	50.313	ug/l	1.88	244,550.66	2.003E+00	Pulse	0.30	3
Cr			2	49.760	ug/l	1.16	303,305.68	2.485E+00	Pulse	0.30	3
Mn			2	50.315	ug/l	1.68	175,038.15	1.434E+00	Pulse	0.30	3
Fe			2	5064.527	ug/l	1.24	25,167,478.44	2.062E+02	Analog	0.30	3
Co			2	49.758	ug/l	1.53	479,964.50	3.932E+00	Pulse	0.30	3
Ni			2	49.414	ug/l	1.80	123,081.64	1.008E+00	Pulse	0.30	3
Cu			2	49.706	ug/l	1.84	338,230.93	2.771E+00	Pulse	0.30	3
Zn			2	49.958	ug/l	2.33	56,810.06	4.654E-01	Pulse	0.30	3
As			2	50.614	ug/l	1.38	32,552.97	2.667E-01	Pulse	1.00	3
Cd			2	50.242	ug/l	0.79	95,491.61	1.132E-01	Pulse	0.30	3
Sn			2	50.400	ug/l	0.31	218,443.47	2.590E-01	Pulse	0.30	3
Se			3	193.466	ug/l	0.42	29,472.34	2.030E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		995,727.23	0.69	90.4	Pulse	0.10	3
1	Sc		1,926,266.22	0.20	98.6	Pulse	0.10	3
1	Ge		408,648.86	0.91	100.2	Pulse	0.10	3

Quantitation Report

1	Ge		574,937.24	0.17	101.4	Pulse	0.10	3
1	Rh		2,832,536.52	0.48	100.2	Pulse	0.10	3
1	In		3,097,227.72	0.33	103.9	Pulse	0.10	3
1	Tb		4,563,190.77	0.68	105.4	Pulse	0.10	3
1	Ho		454,899.60	0.32	105.0	Pulse	0.10	3
1	Bi		2,807,040.59	0.07	102.9	Pulse	0.10	3
2	Sc		122,087.02	1.46	103.4	Pulse	0.30	3
2	Ge		79,516.76	1.96	103.5	Pulse	0.30	3
2	Ge		118,471.80	1.13	102.1	Pulse	0.30	3
2	Rh		1,876,136.25	0.41	102.5	Pulse	0.30	3
2	In		843,405.96	0.42	103.4	Pulse	0.30	3
2	Tb		2,880,284.61	0.75	105.5	Pulse	0.30	3
2	Ho		297,045.55	0.25	105.7	Pulse	0.30	3
2	Bi		1,960,495.83	0.78	104.0	Pulse	0.30	3
3	Sc		143,009.70	1.53	105.1	Pulse	0.30	3
3	Ge		95,684.65	1.20	103.6	Pulse	0.30	3
3	Ge		145,165.07	0.77	104.1	Pulse	0.30	3
3	Rh		1,522,974.42	0.90	100.2	Pulse	0.30	3
3	Tb		2,904,939.68	0.47	103.5	Pulse	0.30	3

Quantitation Report

File Name	042_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:16
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	9/13/2019 11:35
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	49.00	66.67	6.636E-05	Pulse	0.25	3
B			1	6.881	ug/l	2.15	26,950.61	2.682E-02	Pulse	0.15	3
Ca			1	0.734	ug/l	42.52	5,377.75	2.781E-03	Pulse	0.10	3
Sr			1	0.016	ug/l	12.48	910.06	3.102E-04	Pulse	0.10	3
Mo			1	0.066	ug/l	1.99	550.04	1.875E-04	Pulse	0.10	3
Ag			1	0.013	ug/l	43.14	283.35	8.961E-05	Pulse	0.10	3
Sn			1	0.090	ug/l	4.22	2,893.72	9.147E-04	Pulse	0.10	3
Sb			1	0.132	ug/l	8.27	2,153.56	4.662E-04	Pulse	0.10	3
Ba			1	0.014	ug/l	17.02	173.34	3.752E-05	Pulse	0.10	3
Tl			1	0.013	ug/l	8.61	766.71	2.641E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	67.45	503.36	1.734E-04	Pulse	0.10	3
Pb			1	0.001	ug/l	307.41	403.35	1.389E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	8.29	1,916.79	6.602E-04	Pulse	0.10	3
Na			2	28.047	ug/l	2.84	37,275.37	3.054E-01	Pulse	0.30	3
Mg			2	1.552	ug/l	14.71	986.71	8.080E-03	Pulse	0.30	3
Al			2	0.302	ug/l	31.52	460.01	3.769E-03	Pulse	0.30	3
K			2	-0.265	ug/l	-237.75	10,274.35	8.418E-02	Pulse	0.30	3
Ca			2	0.667	ug/l	35.56	95.56	7.828E-04	Pulse	0.30	3
Ti			2	0.020	ug/l	363.88	6.67	5.409E-05	Pulse	0.30	3
V			2	-0.010	ug/l	-27.16	280.01	2.294E-03	Pulse	0.30	3
Cr			2	-0.004	ug/l	-286.25	417.79	3.420E-03	Pulse	0.30	3
Mn			2	-0.009	ug/l	-98.25	106.67	8.740E-04	Pulse	0.30	3
Fe			2	0.785	ug/l	8.11	6,742.56	5.524E-02	Pulse	0.30	3
Co			2	0.003	ug/l	78.57	74.42	6.100E-04	Pulse	0.30	3
Ni			2	-0.009	ug/l	-71.06	121.11	9.928E-04	Pulse	0.30	3
Cu			2	-0.300	ug/l	-1.63	1,563.42	1.281E-02	Pulse	0.30	3
Zn			2	-0.154	ug/l	-52.81	872.26	7.146E-03	Pulse	0.30	3
As			2	0.013	ug/l	65.72	25.33	2.073E-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	39.88	21.04	2.409E-05	Pulse	0.30	3
Sn			2	0.088	ug/l	36.74	1,077.83	1.233E-03	Pulse	0.30	3
Se			3	0.103	ug/l	9.54	19.40	1.338E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,004,715.24	0.59	91.2	Pulse	0.10	3
1	Sc		1,933,549.24	0.71	99.0	Pulse	0.10	3
1	Ge		414,192.41	1.12	101.6	Pulse	0.10	3
1	Ge		579,203.95	0.48	102.1	Pulse	0.10	3
1	Rh		2,934,217.46	0.54	103.8	Pulse	0.10	3
1	In		3,163,636.63	0.21	106.2	Pulse	0.10	3
1	Tb		4,619,270.77	0.19	106.7	Pulse	0.10	3
1	Ho		461,486.54	1.12	106.5	Pulse	0.10	3
1	Bi		2,903,079.54	0.43	106.4	Pulse	0.10	3
2	Sc		122,067.58	0.84	103.4	Pulse	0.30	3
2	Ge		80,027.01	1.55	104.1	Pulse	0.30	3
2	Ge		120,847.76	0.90	104.1	Pulse	0.30	3
2	Rh		1,951,614.16	0.68	106.7	Pulse	0.30	3
2	In		873,805.57	0.43	107.1	Pulse	0.30	3
2	Tb		2,921,017.17	0.46	107.0	Pulse	0.30	3
2	Ho		299,566.75	0.60	106.6	Pulse	0.30	3
2	Bi		2,026,659.43	0.21	107.5	Pulse	0.30	3
3	Sc		142,423.64	0.78	104.7	Pulse	0.30	3
3	Ge		96,245.38	1.44	104.2	Pulse	0.30	3
3	Ge		145,014.02	1.91	104.0	Pulse	0.30	3
3	Rh		1,574,059.69	0.97	103.5	Pulse	0.30	3
3	Tb		2,907,416.27	0.80	103.6	Pulse	0.30	3

Quantitation Report

File Name	043SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:21
Sample Name	jc94499-28
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	9/13/2019 11:35
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	0.063	ug/l	72.43	33.33	3.314E-05	Pulse	0.25	3
B			1	115.844	ug/l	4.03	20,083.41	1.997E-02	Pulse	0.15	3
Ca			1	50.743	ug/l	29.92	6,328.12	3.236E-03	Pulse	0.10	3
Sr			1	1.054	ug/l	12.12	1,980.21	6.629E-04	Pulse	0.10	3
Mo			1	0.960	ug/l	6.39	346.69	1.161E-04	Pulse	0.10	3
Ag			1	0.214	ug/l	22.40	206.68	6.354E-05	Pulse	0.10	3
Sn			1	7.673	ug/l	7.19	5,841.30	1.795E-03	Pulse	0.10	3
Sb			1	1.606	ug/l	10.26	1,173.42	2.501E-04	Pulse	0.10	3
Ba			1	1.391	ug/l	9.76	446.69	9.522E-05	Pulse	0.10	3
Tl			1	0.100	ug/l	22.34	433.36	1.463E-04	Pulse	0.10	3
Pb			1	-0.026	ug/l	-113.00	416.69	1.407E-04	Pulse	0.10	3
Pb			1	-0.090	ug/l	-2.57	360.02	1.215E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	390.20	1,603.43	5.413E-04	Pulse	0.10	3
Na			2	499.981	ug/l	0.60	29,775.15	2.390E-01	Pulse	0.30	3
Mg			2	18.699	ug/l	6.58	618.91	4.967E-03	Pulse	0.30	3
Al			2	59.963	ug/l	21.77	830.03	6.662E-03	Pulse	0.30	3
K			2	-22.829	ug/l	-67.96	10,214.35	8.199E-02	Pulse	0.30	3
Ca			2	67.319	ug/l	66.96	142.22	1.142E-03	Pulse	0.30	3
Ti			2	1.023	ug/l	185.38	10.00	7.987E-05	Pulse	0.30	3
V			2	0.047	ug/l	567.04	346.67	2.784E-03	Pulse	0.30	3
Cr			2	3.214	ug/l	5.25	1,252.28	1.005E-02	Pulse	0.30	3
Mn			2	0.026	ug/l	517.22	144.45	1.160E-03	Pulse	0.30	3
Fe			2	29.212	ug/l	3.52	8,824.67	7.085E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-9569.54	46.65	3.745E-04	Pulse	0.30	3
Ni			2	0.112	ug/l	437.20	157.78	1.268E-03	Pulse	0.30	3
Cu			2	-5.967	ug/l	-3.21	2,015.71	1.618E-02	Pulse	0.30	3
Zn			2	-5.371	ug/l	-5.66	821.14	6.591E-03	Pulse	0.30	3
As			2	0.791	ug/l	20.50	38.33	3.079E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.019	ug/l	214.09	9.97	1.115E-05	Pulse	0.30	3
Sn			2	7.214	ug/l	4.86	2,024.60	2.263E-03	Pulse	0.30	3
Se			3	0.995	ug/l	20.48	10.00	6.800E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,005,941.28	1.17	91.3	Pulse	0.10	3
1	Sc		1,955,432.21	0.57	100.1	Pulse	0.10	3
1	Ge		421,818.69	0.43	103.5	Pulse	0.10	3
1	Ge		581,714.34	1.14	102.6	Pulse	0.10	3
1	Rh		2,988,151.62	1.12	105.7	Pulse	0.10	3
1	In		3,253,679.69	0.28	109.2	Pulse	0.10	3
1	Tb		4,691,257.01	0.10	108.3	Pulse	0.10	3
1	Ho		466,099.77	1.37	107.6	Pulse	0.10	3
1	Bi		2,962,088.71	0.32	108.6	Pulse	0.10	3
2	Sc		124,568.35	0.80	105.5	Pulse	0.30	3
2	Ge		81,415.77	0.56	106.0	Pulse	0.30	3
2	Ge		122,210.74	0.21	105.3	Pulse	0.30	3
2	Rh		1,962,949.51	0.22	107.3	Pulse	0.30	3
2	In		894,648.27	0.21	109.7	Pulse	0.30	3
2	Tb		2,951,849.54	0.28	108.1	Pulse	0.30	3
2	Ho		304,231.05	0.64	108.3	Pulse	0.30	3
2	Bi		2,065,616.24	0.14	109.5	Pulse	0.30	3
3	Sc		146,717.01	0.57	107.9	Pulse	0.30	3
3	Ge		97,761.37	1.24	105.8	Pulse	0.30	3
3	Ge		147,075.74	0.61	105.5	Pulse	0.30	3
3	Rh		1,597,435.87	0.23	105.1	Pulse	0.30	3
3	Tb		2,968,132.31	0.76	105.7	Pulse	0.30	3

Quantitation Report

File Name	044SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:26
Sample Name	mp17232a-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	9/13/2019 11:35
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	56.12	40.00	4.289E-05	Pulse	0.25	3
B			1	9.886	ug/l	4.10	19,535.95	2.091E-02	Pulse	0.15	3
Ca			1	11.991	ug/l	11.43	8,462.52	4.630E-03	Pulse	0.10	3
Sr			1	0.051	ug/l	10.76	1,266.77	4.397E-04	Pulse	0.10	3
Mo			1	0.103	ug/l	25.23	433.36	1.504E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	76.99	113.34	3.635E-05	Pulse	0.10	3
Sn			1	0.473	ug/l	2.02	4,710.88	1.510E-03	Pulse	0.10	3
Sb			1	0.168	ug/l	7.70	1,453.46	3.135E-04	Pulse	0.10	3
Ba			1	0.080	ug/l	12.75	340.02	7.334E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	138.79	356.69	1.190E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	15742.12	436.69	1.458E-04	Pulse	0.10	3
Pb			1	-0.011	ug/l	-99.11	343.35	1.146E-04	Pulse	0.10	3
Pb			1	-0.001	ug/l	-176.64	1,580.10	5.275E-04	Pulse	0.10	3
Na			2	51.338	ug/l	0.44	33,153.52	2.858E-01	Pulse	0.30	3
Mg			2	5.895	ug/l	3.33	1,564.54	1.349E-02	Pulse	0.30	3
Al			2	5.872	ug/l	10.59	858.92	7.404E-03	Pulse	0.30	3
K			2	-0.828	ug/l	-47.04	9,707.37	8.367E-02	Pulse	0.30	3
Ca			2	13.897	ug/l	17.64	220.00	1.895E-03	Pulse	0.30	3
Ti			2	0.366	ug/l	54.92	30.00	2.589E-04	Pulse	0.30	3
V			2	0.262	ug/l	9.48	918.93	7.921E-03	Pulse	0.30	3
Cr			2	0.610	ug/l	6.93	2,186.84	1.885E-02	Pulse	0.30	3
Mn			2	0.074	ug/l	35.25	253.34	2.185E-03	Pulse	0.30	3
Fe			2	8.305	ug/l	0.32	22,310.77	1.923E-01	Pulse	0.30	3
Co			2	0.009	ug/l	69.84	85.50	7.358E-04	Pulse	0.30	3
Ni			2	0.054	ug/l	48.42	200.01	1.724E-03	Pulse	0.30	3
Cu			2	0.186	ug/l	30.27	4,000.53	3.449E-02	Pulse	0.30	3
Zn			2	2.852	ug/l	6.00	2,505.77	2.160E-02	Pulse	0.30	3
As			2	0.105	ug/l	11.37	48.33	4.166E-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	60.89	13.30	1.584E-05	Pulse	0.30	3
Sn			2	0.488	ug/l	3.67	1,707.89	2.035E-03	Pulse	0.30	3
Se			3	0.067	ug/l	25.05	9.27	6.158E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		934,437.16	1.33	84.8	Pulse	0.10	3
1	Sc		1,828,189.09	0.41	93.6	Pulse	0.10	3
1	Ge		429,852.95	0.64	105.4	Pulse	0.10	3
1	Ge		593,224.27	0.65	104.6	Pulse	0.10	3
1	Rh		2,880,985.48	0.65	101.9	Pulse	0.10	3
1	In		3,120,170.18	0.25	104.7	Pulse	0.10	3
1	Tb		4,638,840.76	1.06	107.1	Pulse	0.10	3
1	Ho		462,467.55	0.75	106.8	Pulse	0.10	3
1	Bi		2,995,376.21	0.42	109.8	Pulse	0.10	3
2	Sc		116,013.21	0.71	98.3	Pulse	0.30	3
2	Ge		80,439.89	0.68	104.7	Pulse	0.30	3
2	Ge		122,337.26	0.43	105.4	Pulse	0.30	3
2	Rh		1,891,293.46	0.17	103.4	Pulse	0.30	3
2	In		839,155.14	0.72	102.9	Pulse	0.30	3
2	Tb		2,910,271.83	0.61	106.6	Pulse	0.30	3
2	Ho		300,197.20	0.57	106.8	Pulse	0.30	3
2	Bi		2,061,204.99	0.30	109.3	Pulse	0.30	3
3	Sc		142,063.87	0.66	104.5	Pulse	0.30	3
3	Ge		101,244.38	2.63	109.6	Pulse	0.30	3
3	Ge		150,674.40	1.91	108.1	Pulse	0.30	3
3	Rh		1,564,067.37	0.75	102.9	Pulse	0.30	3
3	Tb		2,968,524.74	0.94	105.8	Pulse	0.30	3

Quantitation Report

File Name	045SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:31
Sample Name	mp17232a-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	9/13/2019 11:35
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	70.997	ug/l	0.20	143,230.58	1.604E-01	Pulse	0.25	3
B			1	84.639	ug/l	1.15	120,516.26	1.349E-01	Pulse	0.15	3
Ca			1	3831.418	ug/l	1.32	1,207,617.22	6.755E-01	Pulse	0.10	3
Sr			1	73.570	ug/l	0.64	1,400,085.24	4.991E-01	Pulse	0.10	3
Mo			1	72.118	ug/l	1.01	263,270.85	9.385E-02	Pulse	0.10	3
Ag			1	70.128	ug/l	0.45	671,680.64	2.160E-01	Pulse	0.10	3
Sn			1	73.183	ug/l	1.15	464,422.82	1.493E-01	Pulse	0.10	3
Sb			1	72.118	ug/l	0.82	538,035.00	1.158E-01	Pulse	0.10	3
Ba			1	69.660	ug/l	0.82	223,079.17	4.802E-02	Pulse	0.10	3
Tl			1	70.649	ug/l	0.74	1,410,450.45	4.841E-01	Pulse	0.10	3
Pb			1	73.899	ug/l	0.57	510,406.19	1.752E-01	Pulse	0.10	3
Pb			1	73.006	ug/l	0.63	448,057.90	1.538E-01	Pulse	0.10	3
Pb			1	73.436	ug/l	0.33	2,063,642.92	7.083E-01	Pulse	0.10	3
Na			2	3709.785	ug/l	0.18	1,754,723.23	1.537E+01	Pulse	0.30	3
Mg			2	3645.365	ug/l	0.48	806,317.67	7.061E+00	Pulse	0.30	3
Al			2	3551.191	ug/l	1.36	280,177.86	2.454E+00	Pulse	0.30	3
K			2	3637.113	ug/l	0.88	711,145.16	6.227E+00	Pulse	0.30	3
Ca			2	3911.370	ug/l	0.13	39,637.13	3.471E-01	Pulse	0.30	3
Ti			2	71.733	ug/l	3.94	5,163.09	4.520E-02	Pulse	0.30	3
V			2	72.906	ug/l	0.33	165,847.12	1.452E+00	Pulse	0.30	3
Cr			2	72.703	ug/l	0.48	207,391.77	1.816E+00	Pulse	0.30	3
Mn			2	73.040	ug/l	1.16	118,885.99	1.041E+00	Pulse	0.30	3
Fe			2	3961.432	ug/l	1.26	9,208,973.80	8.064E+01	Analog	0.30	3
Co			2	73.342	ug/l	1.27	330,906.55	2.898E+00	Pulse	0.30	3
Ni			2	72.761	ug/l	0.64	84,812.36	7.427E-01	Pulse	0.30	3
Cu			2	73.277	ug/l	0.19	234,120.12	2.050E+00	Pulse	0.30	3
Zn			2	68.955	ug/l	1.17	36,981.76	3.239E-01	Pulse	0.30	3
As			2	70.424	ug/l	1.02	21,189.71	1.856E-01	Pulse	1.00	3
Cd			2	69.058	ug/l	1.41	64,177.99	7.782E-02	Pulse	0.30	3
Sn			2	74.281	ug/l	0.83	157,589.28	1.911E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	322.964	ug/l	2.54	25,121.72	1.695E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		893,237.81	0.42	81.1	Pulse	0.10	3
1	Sc		1,787,856.02	0.37	91.5	Pulse	0.10	3
1	Ge		420,189.77	0.33	103.1	Pulse	0.10	3
1	Ge		583,536.51	0.07	102.9	Pulse	0.10	3
1	Rh		2,805,438.39	1.47	99.2	Pulse	0.10	3
1	In		3,110,022.14	0.82	104.4	Pulse	0.10	3
1	Tb		4,645,833.78	1.37	107.3	Pulse	0.10	3
1	Ho		463,766.37	0.48	107.1	Pulse	0.10	3
1	Bi		2,913,433.60	0.46	106.8	Pulse	0.10	3
2	Sc		114,198.18	0.79	96.8	Pulse	0.30	3
2	Ge		79,895.04	0.83	104.0	Pulse	0.30	3
2	Ge		120,724.23	0.39	104.0	Pulse	0.30	3
2	Rh		1,850,479.79	0.27	101.1	Pulse	0.30	3
2	In		824,830.03	1.28	101.1	Pulse	0.30	3
2	Tb		2,903,307.39	0.06	106.3	Pulse	0.30	3
2	Ho		297,066.14	1.13	105.7	Pulse	0.30	3
2	Bi		2,008,850.54	0.85	106.5	Pulse	0.30	3
3	Sc		141,204.29	1.15	103.8	Pulse	0.30	3
3	Ge		96,661.35	2.05	104.6	Pulse	0.30	3
3	Ge		148,303.48	2.67	106.4	Pulse	0.30	3
3	Rh		1,538,807.96	1.16	101.2	Pulse	0.30	3
3	Tb		2,952,192.45	0.88	105.2	Pulse	0.30	3

Quantitation Report

File Name	046SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:36
Sample Name	jc94613-2 5
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	9/13/2019 11:35
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	0.476	ug/l	42.48	64.00	6.476E-05	Pulse	0.25	3
B			1	210.487	ug/l	3.18	18,490.32	1.868E-02	Pulse	0.15	3
Ca			1	25012.148	ug/l	0.16	346,355.15	1.782E-01	Pulse	0.10	3
Sr			1	173.537	ug/l	0.85	140,324.81	4.717E-02	Pulse	0.10	3
Mo			1	12.016	ug/l	19.48	1,906.86	6.415E-04	Pulse	0.10	3
Ag			1	0.546	ug/l	2.34	253.34	7.810E-05	Pulse	0.10	3
Sn			1	4.277	ug/l	18.04	2,903.71	8.951E-04	Pulse	0.10	3
Sb			1	5.620	ug/l	2.97	1,920.19	4.048E-04	Pulse	0.10	3
Ba			1	14.829	ug/l	3.97	2,026.88	4.273E-04	Pulse	0.10	3
Tl			1	0.681	ug/l	24.34	830.05	2.778E-04	Pulse	0.10	3
Pb			1	0.395	ug/l	56.82	546.70	1.830E-04	Pulse	0.10	3
Pb			1	0.060	ug/l	501.44	423.35	1.418E-04	Pulse	0.10	3
Pb			1	0.351	ug/l	63.67	2,006.80	6.719E-04	Pulse	0.10	3
Na			2	6583.291	ug/l	0.14	141,239.33	1.160E+00	Pulse	0.30	3
Mg			2	2947.993	ug/l	1.16	28,064.50	2.304E-01	Pulse	0.30	3
Al			2	265.588	ug/l	2.03	1,301.18	1.068E-02	Pulse	0.30	3
K			2	3504.831	ug/l	1.48	39,196.90	3.218E-01	Pulse	0.30	3
Ca			2	25401.489	ug/l	2.68	11,041.52	9.066E-02	Pulse	0.30	3
Ti			2	5.749	ug/l	21.06	21.11	1.732E-04	Pulse	0.30	3
V			2	-0.219	ug/l	-105.88	308.90	2.536E-03	Pulse	0.30	3
Cr			2	0.583	ug/l	15.19	514.46	4.224E-03	Pulse	0.30	3
Mn			2	2208.991	ug/l	0.73	153,368.83	1.259E+00	Pulse	0.30	3
Fe			2	40158.294	ug/l	0.70	3,984,558.73	3.271E+01	Pulse	0.30	3
Co			2	13.626	ug/l	1.13	2,668.39	2.191E-02	Pulse	0.30	3
Ni			2	6.422	ug/l	4.15	462.23	3.794E-03	Pulse	0.30	3
Cu			2	1.429	ug/l	48.49	3,766.04	3.092E-02	Pulse	0.30	3
Zn			2	6.450	ug/l	67.76	1,185.61	9.736E-03	Pulse	0.30	3
As			2	3108.970	ug/l	1.55	39,895.41	3.276E-01	Pulse	1.00	3
Cd			2	0.350	ug/l	112.95	22.09	2.516E-05	Pulse	0.30	3
Sn			2	3.989	ug/l	28.59	1,045.61	1.193E-03	Pulse	0.30	3
Se			3	4.753	ug/l	8.59	18.53	1.260E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		990,160.19	1.94	89.9	Pulse	0.10	3
1	Sc		1,943,102.16	0.77	99.5	Pulse	0.10	3
1	Ge		422,489.27	0.33	103.6	Pulse	0.10	3

Quantitation Report

1	Ge		586,108.14	0.53	103.4	Pulse	0.10	3
1	Rh		2,974,689.33	0.60	105.2	Pulse	0.10	3
1	In		3,243,541.89	0.37	108.9	Pulse	0.10	3
1	Tb		4,744,145.87	0.50	109.6	Pulse	0.10	3
1	Ho		473,180.11	0.18	109.2	Pulse	0.10	3
1	Bi		2,989,312.04	1.03	109.6	Pulse	0.10	3
2	Sc		121,801.43	0.79	103.2	Pulse	0.30	3
2	Ge		80,560.52	0.33	104.8	Pulse	0.30	3
2	Ge		120,869.29	0.68	104.2	Pulse	0.30	3
2	Rh		1,943,790.69	0.11	106.2	Pulse	0.30	3
2	In		876,044.61	0.48	107.4	Pulse	0.30	3
2	Tb		2,965,995.99	0.14	108.6	Pulse	0.30	3
2	Ho		305,022.54	0.56	108.6	Pulse	0.30	3
2	Bi		2,060,320.13	0.17	109.3	Pulse	0.30	3
3	Sc		143,558.23	1.27	105.6	Pulse	0.30	3
3	Ge		97,050.19	0.68	105.0	Pulse	0.30	3
3	Ge		147,129.38	0.35	105.5	Pulse	0.30	3
3	Rh		1,578,526.08	0.60	103.8	Pulse	0.30	3
3	Tb		2,966,231.34	0.46	105.7	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:41
Sample Name	mp17277-mb1 1
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	9/13/2019 11:35
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	39.83	40.00	3.874E-05	Pulse	0.25	3
B			1	3.194	ug/l	3.11	16,087.93	1.558E-02	Pulse	0.15	3
Ca			1	2.696	ug/l	22.78	6,928.39	3.470E-03	Pulse	0.10	3
Sr			1	0.008	ug/l	19.96	593.37	1.971E-04	Pulse	0.10	3
Mo			1	0.025	ug/l	36.28	246.68	8.202E-05	Pulse	0.10	3
Ag			1	0.004	ug/l	51.31	120.01	3.683E-05	Pulse	0.10	3
Sn			1	0.101	ug/l	16.63	3,123.76	9.591E-04	Pulse	0.10	3
Sb			1	0.018	ug/l	21.53	476.69	1.006E-04	Pulse	0.10	3
Ba			1	0.006	ug/l	240.87	123.35	2.611E-05	Pulse	0.10	3
Tl			1	0.009	ug/l	12.32	666.71	2.203E-04	Pulse	0.10	3
Pb			1	-0.005	ug/l	-8.48	366.69	1.212E-04	Pulse	0.10	3
Pb			1	-0.010	ug/l	-52.70	290.01	9.580E-05	Pulse	0.10	3
Pb			1	-0.002	ug/l	-97.66	1,523.43	5.033E-04	Pulse	0.10	3
Na			2	9.916	ug/l	4.06	19,523.56	1.559E-01	Pulse	0.30	3
Mg			2	0.746	ug/l	14.62	621.13	4.959E-03	Pulse	0.30	3
Al			2	1.218	ug/l	33.72	630.02	5.034E-03	Pulse	0.30	3
K			2	-1.071	ug/l	-54.47	10,199.90	8.145E-02	Pulse	0.30	3
Ca			2	2.510	ug/l	8.08	138.89	1.109E-03	Pulse	0.30	3
Ti			2	0.055	ug/l	97.30	12.22	9.765E-05	Pulse	0.30	3
V			2	-0.016	ug/l	-31.36	261.12	2.084E-03	Pulse	0.30	3
Cr			2	0.044	ug/l	22.33	732.25	5.851E-03	Pulse	0.30	3
Mn			2	0.005	ug/l	138.03	157.78	1.261E-03	Pulse	0.30	3
Fe			2	0.968	ug/l	3.20	7,849.74	6.269E-02	Pulse	0.30	3
Co			2	0.001	ug/l	321.53	53.31	4.267E-04	Pulse	0.30	3
Ni			2	-0.007	ug/l	-220.54	130.00	1.040E-03	Pulse	0.30	3
Cu			2	-0.199	ug/l	-35.72	2,302.02	1.836E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	3.169	ug/l	2.64	4,700.74	3.754E-02	Pulse	0.30	3
As			2	0.025	ug/l	31.91	34.33	2.744E-04	Pulse	1.00	3
Cd			2	0.001	ug/l	926.67	9.98	1.114E-05	Pulse	0.30	3
Sn			2	0.098	ug/l	8.98	1,148.95	1.287E-03	Pulse	0.30	3
Se			3	0.117	ug/l	3.45	21.93	1.485E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,032,804.74	0.26	93.7	Pulse	0.10	3
1	Sc		1,996,495.13	0.42	102.2	Pulse	0.10	3
1	Ge		426,582.70	0.77	104.6	Pulse	0.10	3
1	Ge		590,224.69	0.92	104.1	Pulse	0.10	3
1	Rh		3,012,554.23	1.33	106.6	Pulse	0.10	3
1	In		3,257,298.09	0.34	109.3	Pulse	0.10	3
1	Tb		4,735,254.20	0.64	109.4	Pulse	0.10	3
1	Ho		469,179.60	1.02	108.3	Pulse	0.10	3
1	Bi		3,026,582.56	0.19	110.9	Pulse	0.10	3
2	Sc		125,215.27	0.88	106.1	Pulse	0.30	3
2	Ge		81,930.38	0.73	106.6	Pulse	0.30	3
2	Ge		123,624.49	0.48	106.5	Pulse	0.30	3
2	Rh		1,975,457.70	0.74	108.0	Pulse	0.30	3
2	In		892,721.60	0.39	109.5	Pulse	0.30	3
2	Tb		2,974,730.57	0.90	109.0	Pulse	0.30	3
2	Ho		306,738.54	0.20	109.2	Pulse	0.30	3
2	Bi		2,089,684.15	0.48	110.8	Pulse	0.30	3
3	Sc		145,077.20	0.57	106.7	Pulse	0.30	3
3	Ge		97,030.04	0.83	105.0	Pulse	0.30	3
3	Ge		147,668.04	1.09	105.9	Pulse	0.30	3
3	Rh		1,587,311.85	0.94	104.4	Pulse	0.30	3
3	Tb		2,932,527.94	1.04	104.5	Pulse	0.30	3

Quantitation Report

File Name	048SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:46
Sample Name	mp17277-b1
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	9/13/2019 11:35
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	74.628	ug/l	0.38	346,110.23	3.371E-01	Pulse	0.25	3
B			1	75.826	ug/l	1.18	243,484.60	2.371E-01	Pulse	0.15	3
Ca			1	2003.636	ug/l	0.49	1,380,214.51	7.064E-01	Pulse	0.10	3
Sr			1	77.640	ug/l	1.91	3,082,840.48	1.053E+00	Pulse	0.10	3
Mo			1	74.485	ug/l	1.48	567,365.21	1.938E-01	Pulse	0.10	3
Ag			1	73.159	ug/l	0.85	1,439,653.10	4.506E-01	Pulse	0.10	3
Sn			1	74.039	ug/l	0.24	963,614.44	3.016E-01	Pulse	0.10	3
Sb			1	78.401	ug/l	0.84	1,178,319.18	2.518E-01	Pulse	0.10	3
Ba			1	74.025	ug/l	1.05	477,576.27	1.020E-01	Pulse	0.10	3
Tl			1	76.018	ug/l	0.67	3,036,123.18	1.042E+00	Pulse	0.10	3
Pb			1	78.661	ug/l	0.42	1,086,535.69	3.728E-01	Pulse	0.10	3
Pb			1	78.036	ug/l	0.55	957,762.44	3.286E-01	Pulse	0.10	3
Pb			1	78.212	ug/l	0.59	4,395,647.46	1.508E+00	Pulse	0.10	3
Na			2	1943.437	ug/l	1.28	2,011,539.50	1.610E+01	Pulse	0.30	3
Mg			2	1939.770	ug/l	1.14	939,091.63	7.514E+00	Pulse	0.30	3
Al			2	1929.708	ug/l	1.10	333,206.60	2.666E+00	Pulse	0.30	3
K			2	1958.564	ug/l	0.79	837,390.85	6.700E+00	Pulse	0.30	3
Ca			2	2169.106	ug/l	0.64	48,104.76	3.849E-01	Pulse	0.30	3
Ti			2	76.219	ug/l	1.79	12,001.12	9.603E-02	Pulse	0.30	3
V			2	77.053	ug/l	1.03	383,270.32	3.067E+00	Pulse	0.30	3
Cr			2	76.169	ug/l	1.17	475,074.84	3.801E+00	Pulse	0.30	3
Mn			2	77.670	ug/l	1.28	276,555.09	2.213E+00	Pulse	0.30	3
Fe			2	2068.558	ug/l	0.51	10,525,979.86	8.422E+01	Analog	0.30	3
Co			2	75.426	ug/l	0.76	744,855.30	5.960E+00	Pulse	0.30	3
Ni			2	75.368	ug/l	0.89	192,129.22	1.537E+00	Pulse	0.30	3
Cu			2	75.687	ug/l	0.24	525,395.22	4.204E+00	Pulse	0.30	3
Zn			2	78.826	ug/l	1.24	91,161.44	7.294E-01	Pulse	0.30	3
As			2	76.638	ug/l	1.01	50,452.67	4.037E-01	Pulse	1.00	3
Cd			2	75.339	ug/l	0.75	147,625.41	1.698E-01	Pulse	0.30	3
Sn			2	75.846	ug/l	1.18	338,557.94	3.894E-01	Pulse	0.30	3
Se			3	191.392	ug/l	1.35	29,424.53	2.009E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,026,820.60	0.76	93.2	Pulse	0.10	3
1	Sc		1,953,973.83	0.52	100.1	Pulse	0.10	3
1	Ge		418,017.80	1.77	102.5	Pulse	0.10	3

Quantitation Report

1	Ge		584,231.60	0.38	103.0	Pulse	0.10	3
1	Rh		2,927,383.08	1.58	103.5	Pulse	0.10	3
1	In		3,195,208.56	1.15	107.2	Pulse	0.10	3
1	Tb		4,680,590.03	1.04	108.1	Pulse	0.10	3
1	Ho		465,816.79	0.29	107.5	Pulse	0.10	3
1	Bi		2,914,498.50	0.27	106.8	Pulse	0.10	3
2	Sc		124,982.23	0.78	105.9	Pulse	0.30	3
2	Ge		81,294.19	1.74	105.8	Pulse	0.30	3
2	Ge		122,565.89	0.83	105.6	Pulse	0.30	3
2	Rh		1,922,168.95	1.16	105.0	Pulse	0.30	3
2	In		869,566.32	1.05	106.6	Pulse	0.30	3
2	Tb		2,956,016.13	0.89	108.3	Pulse	0.30	3
2	Ho		301,412.10	1.89	107.3	Pulse	0.30	3
2	Bi		2,011,537.84	0.80	106.7	Pulse	0.30	3
3	Sc		145,499.84	0.68	107.0	Pulse	0.30	3
3	Ge		95,919.20	1.32	103.8	Pulse	0.30	3
3	Ge		146,514.85	1.41	105.1	Pulse	0.30	3
3	Rh		1,553,237.16	0.47	102.2	Pulse	0.30	3
3	Tb		2,921,383.01	0.54	104.1	Pulse	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:51
Sample Name	mp17277-s1
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	9/13/2019 11:35
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	74.689	ug/l	1.34	335,205.80	3.374E-01	Pulse	0.25	3
B			1	104.685	ug/l	1.69	323,093.49	3.252E-01	Pulse	0.15	3
Ca			1	25154.455	ug/l	2.73	16,979,025.58	8.839E+00	Analog	0.10	3
Sr			1	179.147	ug/l	0.84	6,673,790.32	2.430E+00	Analog	0.10	3
Mo			1	78.269	ug/l	0.45	559,378.94	2.037E-01	Pulse	0.10	3
Ag			1	71.454	ug/l	0.85	1,344,349.98	4.401E-01	Pulse	0.10	3
Sn			1	76.106	ug/l	0.16	946,886.50	3.100E-01	Pulse	0.10	3
Sb			1	78.171	ug/l	0.63	1,141,094.15	2.510E-01	Pulse	0.10	3
Ba			1	106.683	ug/l	0.57	668,457.70	1.470E-01	Pulse	0.10	3
Tl			1	77.572	ug/l	0.31	2,885,208.50	1.063E+00	Pulse	0.10	3
Pb			1	79.940	ug/l	0.47	1,028,266.36	3.789E-01	Pulse	0.10	3
Pb			1	79.283	ug/l	0.30	906,163.37	3.339E-01	Pulse	0.10	3
Pb			1	79.394	ug/l	0.19	4,155,213.03	1.531E+00	Pulse	0.10	3
Na			2	58155.868	ug/l	1.30	58,219,964.36	4.795E+02	Analog	0.30	3
Mg			2	11713.444	ug/l	1.31	5,507,804.09	4.536E+01	Analog	0.30	3
Al			2	1921.082	ug/l	1.06	322,264.66	2.654E+00	Pulse	0.30	3
K			2	5599.333	ug/l	0.91	2,306,536.43	1.900E+01	Pulse	0.30	3
Ca			2	25302.658	ug/l	0.63	544,282.62	4.483E+00	Pulse	0.30	3
Ti			2	74.191	ug/l	3.60	11,347.31	9.348E-02	Pulse	0.30	3
V			2	76.733	ug/l	0.66	370,811.19	3.054E+00	Pulse	0.30	3
Cr			2	74.501	ug/l	0.92	451,444.91	3.718E+00	Pulse	0.30	3
Mn			2	129.865	ug/l	0.62	449,149.85	3.699E+00	Pulse	0.30	3
Fe			2	2525.513	ug/l	1.28	12,483,804.78	1.028E+02	Analog	0.30	3
Co			2	73.513	ug/l	0.69	705,280.76	5.809E+00	Pulse	0.30	3
Ni			2	72.646	ug/l	0.49	179,922.09	1.482E+00	Pulse	0.30	3
Cu			2	73.575	ug/l	0.42	496,283.14	4.087E+00	Pulse	0.30	3
Zn			2	77.144	ug/l	0.43	86,701.90	7.140E-01	Pulse	0.30	3
As			2	76.114	ug/l	0.98	48,679.03	4.009E-01	Pulse	1.00	3
Cd			2	73.106	ug/l	1.84	136,703.52	1.647E-01	Pulse	0.30	3
Sn			2	77.582	ug/l	0.50	330,493.89	3.983E-01	Pulse	0.30	3
Se			3	184.609	ug/l	0.89	26,779.81	1.937E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		993,647.43	0.68	90.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,921,259.50	0.85	98.4	Pulse	0.10	3
1	Ge		401,063.94	1.13	98.4	Pulse	0.10	3
1	Ge		564,140.47	0.26	99.5	Pulse	0.10	3
1	Rh		2,746,215.69	0.82	97.1	Pulse	0.10	3
1	In		3,054,687.28	0.54	102.5	Pulse	0.10	3
1	Tb		4,546,041.18	0.81	105.0	Pulse	0.10	3
1	Ho		457,055.76	0.99	105.5	Pulse	0.10	3
1	Bi		2,714,118.91	0.48	99.5	Pulse	0.10	3
2	Sc		121,422.25	1.07	102.9	Pulse	0.30	3
2	Ge		76,609.68	1.21	99.7	Pulse	0.30	3
2	Ge		116,519.91	0.75	100.4	Pulse	0.30	3
2	Rh		1,791,455.28	0.42	97.9	Pulse	0.30	3
2	In		829,844.57	0.61	101.8	Pulse	0.30	3
2	Tb		2,861,966.41	0.27	104.8	Pulse	0.30	3
2	Ho		294,605.76	0.86	104.9	Pulse	0.30	3
2	Bi		1,879,248.54	0.30	99.7	Pulse	0.30	3
3	Sc		140,109.29	0.76	103.0	Pulse	0.30	3
3	Ge		90,666.38	0.67	98.1	Pulse	0.30	3
3	Ge		138,233.23	0.68	99.2	Pulse	0.30	3
3	Rh		1,433,657.37	0.21	94.3	Pulse	0.30	3
3	Tb		2,835,329.47	0.69	101.0	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 13:56
Sample Name	mp17277-s2
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	9/13/2019 11:35
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	75.008	ug/l	0.14	334,461.42	3.388E-01	Pulse	0.25	3
B			1	105.056	ug/l	1.42	322,134.01	3.263E-01	Pulse	0.15	3
Ca			1	25071.563	ug/l	0.80	16,901,176.42	8.810E+00	Analog	0.10	3
Sr			1	178.843	ug/l	1.32	6,626,829.07	2.426E+00	Analog	0.10	3
Mo			1	78.674	ug/l	1.05	559,248.52	2.047E-01	Pulse	0.10	3
Ag			1	71.276	ug/l	0.42	1,329,203.26	4.390E-01	Pulse	0.10	3
Sn			1	76.318	ug/l	1.01	941,157.41	3.108E-01	Pulse	0.10	3
Sb			1	77.620	ug/l	0.63	1,131,448.94	2.492E-01	Pulse	0.10	3
Ba			1	107.063	ug/l	1.41	669,870.48	1.476E-01	Pulse	0.10	3
Tl			1	78.401	ug/l	0.76	2,895,161.41	1.074E+00	Pulse	0.10	3
Pb			1	80.544	ug/l	0.63	1,028,623.94	3.817E-01	Pulse	0.10	3
Pb			1	80.305	ug/l	0.87	911,253.42	3.382E-01	Pulse	0.10	3
Pb			1	80.284	ug/l	0.61	4,171,721.40	1.548E+00	Pulse	0.10	3
Na			2	59715.575	ug/l	4.97	58,302,233.24	4.924E+02	Analog	0.30	3
Mg			2	12085.993	ug/l	5.12	5,542,227.28	4.681E+01	Analog	0.30	3
Al			2	1977.775	ug/l	5.77	323,461.12	2.732E+00	Pulse	0.30	3
K			2	5755.342	ug/l	5.29	2,311,623.17	1.952E+01	Pulse	0.30	3
Ca			2	26049.800	ug/l	5.76	546,313.17	4.615E+00	Pulse	0.30	3
Ti			2	77.768	ug/l	8.21	11,587.50	9.798E-02	Pulse	0.30	3
V			2	78.844	ug/l	5.72	371,467.09	3.138E+00	Pulse	0.30	3
Cr			2	76.559	ug/l	5.64	452,317.06	3.821E+00	Pulse	0.30	3
Mn			2	134.573	ug/l	6.08	453,708.43	3.833E+00	Pulse	0.30	3
Fe			2	2606.476	ug/l	6.14	12,559,997.83	1.061E+02	Analog	0.30	3
Co			2	75.552	ug/l	6.63	706,452.01	5.970E+00	Pulse	0.30	3
Ni			2	73.733	ug/l	5.59	178,048.63	1.504E+00	Pulse	0.30	3
Cu			2	75.465	ug/l	5.87	496,166.44	4.192E+00	Pulse	0.30	3
Zn			2	79.055	ug/l	5.15	86,615.71	7.315E-01	Pulse	0.30	3
As			2	77.004	ug/l	5.86	48,014.07	4.056E-01	Pulse	1.00	3
Cd			2	74.633	ug/l	5.55	135,999.26	1.682E-01	Pulse	0.30	3
Sn			2	78.960	ug/l	6.19	327,677.79	4.053E-01	Pulse	0.30	3
Se			3	186.607	ug/l	0.65	26,991.01	1.958E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		987,217.94	0.59	89.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		1,918,506.33	0.44	98.2	Pulse	0.10	3
1	Ge		399,609.80	0.94	98.0	Pulse	0.10	3
1	Ge		558,308.90	0.79	98.5	Pulse	0.10	3
1	Rh		2,731,560.58	0.68	96.6	Pulse	0.10	3
1	In		3,027,866.29	0.61	101.6	Pulse	0.10	3
1	Tb		4,539,675.87	0.91	104.8	Pulse	0.10	3
1	Ho		452,839.37	0.56	104.5	Pulse	0.10	3
1	Bi		2,694,701.10	0.31	98.8	Pulse	0.10	3
2	Sc		118,642.58	5.87	100.5	Pulse	0.30	3
2	Ge		76,187.48	5.76	99.2	Pulse	0.30	3
2	Ge		114,102.19	4.62	98.3	Pulse	0.30	3
2	Rh		1,750,172.40	6.22	95.6	Pulse	0.30	3
2	In		810,360.34	5.83	99.4	Pulse	0.30	3
2	Tb		2,803,384.61	6.13	102.7	Pulse	0.30	3
2	Ho		289,351.07	5.80	103.0	Pulse	0.30	3
2	Bi		1,840,135.21	5.36	97.6	Pulse	0.30	3
3	Sc		139,636.44	1.03	102.7	Pulse	0.30	3
3	Ge		90,244.95	0.91	97.7	Pulse	0.30	3
3	Ge		137,831.34	0.92	98.9	Pulse	0.30	3
3	Rh		1,428,008.93	0.49	93.9	Pulse	0.30	3
3	Tb		2,817,221.90	0.95	100.4	Pulse	0.30	3

Quantitation Report

File Name	051_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 14:01
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	9/13/2019 11:35
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	49.238	ug/l	0.85	224,893.52	2.224E-01	Pulse	0.25	3
B			1	104.695	ug/l	1.45	328,836.25	3.252E-01	Pulse	0.15	3
Ca			1	5012.528	ug/l	0.38	3,373,058.70	1.763E+00	Pulse	0.10	3
Sr			1	51.282	ug/l	1.02	1,967,042.00	6.957E-01	Pulse	0.10	3
Mo			1	50.420	ug/l	0.93	370,998.04	1.312E-01	Pulse	0.10	3
Ag			1	48.684	ug/l	0.64	927,337.12	2.999E-01	Pulse	0.10	3
Sn			1	49.475	ug/l	0.34	623,807.53	2.017E-01	Pulse	0.10	3
Sb			1	51.067	ug/l	0.63	740,520.61	1.640E-01	Pulse	0.10	3
Ba			1	49.162	ug/l	0.40	306,035.78	6.777E-02	Pulse	0.10	3
Tl			1	49.669	ug/l	0.14	1,920,176.90	6.807E-01	Pulse	0.10	3
Pb			1	50.372	ug/l	0.46	673,611.79	2.388E-01	Pulse	0.10	3
Pb			1	49.823	ug/l	0.18	592,005.87	2.099E-01	Pulse	0.10	3
Pb			1	50.142	ug/l	0.45	2,728,247.01	9.671E-01	Pulse	0.10	3
Na			2	4995.241	ug/l	1.37	4,962,838.69	4.125E+01	Analog	0.30	3
Mg			2	4883.966	ug/l	0.67	2,275,572.69	1.892E+01	Pulse	0.30	3
Al			2	4851.981	ug/l	0.39	805,834.06	6.699E+00	Pulse	0.30	3
K			2	4905.681	ug/l	0.15	2,003,467.00	1.665E+01	Pulse	0.30	3
Ca			2	5036.913	ug/l	0.66	107,411.40	8.929E-01	Pulse	0.30	3
Ti			2	49.576	ug/l	1.66	7,515.12	6.247E-02	Pulse	0.30	3
V			2	49.973	ug/l	0.43	239,379.14	1.990E+00	Pulse	0.30	3
Cr			2	49.711	ug/l	0.80	298,598.51	2.482E+00	Pulse	0.30	3
Mn			2	50.456	ug/l	0.89	172,975.07	1.438E+00	Pulse	0.30	3
Fe			2	5089.375	ug/l	0.56	24,922,545.12	2.072E+02	Analog	0.30	3
Co			2	49.443	ug/l	0.87	469,982.94	3.907E+00	Pulse	0.30	3
Ni			2	49.239	ug/l	1.43	120,866.12	1.005E+00	Pulse	0.30	3
Cu			2	49.508	ug/l	2.04	331,994.68	2.760E+00	Pulse	0.30	3
Zn			2	49.593	ug/l	1.28	55,586.08	4.621E-01	Pulse	0.30	3
As			2	50.755	ug/l	1.14	32,167.18	2.674E-01	Pulse	1.00	3
Cd			2	49.191	ug/l	0.99	93,551.65	1.109E-01	Pulse	0.30	3
Sn			2	50.063	ug/l	0.51	217,115.08	2.573E-01	Pulse	0.30	3
Se			3	195.404	ug/l	2.08	28,513.05	2.051E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,011,252.54	1.01	91.8	Pulse	0.10	3
1	Sc		1,912,908.77	0.65	98.0	Pulse	0.10	3
1	Ge		402,790.96	1.38	98.8	Pulse	0.10	3

Quantitation Report

1	Ge		569,368.90	0.90	100.4	Pulse	0.10	3
1	Rh		2,827,280.48	0.24	100.0	Pulse	0.10	3
1	In		3,092,670.95	0.29	103.8	Pulse	0.10	3
1	Tb		4,515,612.01	0.89	104.3	Pulse	0.10	3
1	Ho		450,294.94	0.13	104.0	Pulse	0.10	3
1	Bi		2,820,957.87	1.19	103.4	Pulse	0.10	3
2	Sc		120,297.40	0.41	101.9	Pulse	0.30	3
2	Ge		78,269.69	1.24	101.9	Pulse	0.30	3
2	Ge		118,486.15	0.56	102.1	Pulse	0.30	3
2	Rh		1,848,861.66	0.46	101.0	Pulse	0.30	3
2	In		843,903.58	0.20	103.5	Pulse	0.30	3
2	Tb		2,856,468.91	0.39	104.6	Pulse	0.30	3
2	Ho		293,245.67	0.59	104.4	Pulse	0.30	3
2	Bi		1,952,794.72	0.25	103.6	Pulse	0.30	3
3	Sc		137,166.94	2.97	100.9	Pulse	0.30	3
3	Ge		91,321.15	1.55	98.8	Pulse	0.30	3
3	Ge		139,085.55	2.16	99.8	Pulse	0.30	3
3	Rh		1,468,456.95	2.24	96.6	Pulse	0.30	3
3	Tb		2,819,116.14	2.44	100.4	Pulse	0.30	3

Quantitation Report

File Name	052_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 14:06
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	9/13/2019 11:35
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	0.012	ug/l	19.58	76.00	7.535E-05	Pulse	0.25	3
B			1	6.212	ug/l	4.74	24,992.04	2.478E-02	Pulse	0.15	3
Ca			1	2.118	ug/l	24.79	6,258.10	3.268E-03	Pulse	0.10	3
Sr			1	0.016	ug/l	28.36	890.06	3.058E-04	Pulse	0.10	3
Mo			1	0.079	ug/l	8.05	643.38	2.209E-04	Pulse	0.10	3
Ag			1	0.022	ug/l	21.43	460.03	1.463E-04	Pulse	0.10	3
Sn			1	0.134	ug/l	4.89	3,430.54	1.091E-03	Pulse	0.10	3
Sb			1	0.163	ug/l	13.33	2,600.32	5.672E-04	Pulse	0.10	3
Ba			1	0.010	ug/l	94.79	146.68	3.185E-05	Pulse	0.10	3
Tl			1	0.020	ug/l	20.25	1,046.75	3.612E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	30.57	723.37	2.498E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	29.79	663.37	2.291E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	19.44	2,790.21	9.636E-04	Pulse	0.10	3
Na			2	10.093	ug/l	0.78	19,214.33	1.574E-01	Pulse	0.30	3
Mg			2	0.911	ug/l	13.77	683.36	5.598E-03	Pulse	0.30	3
Al			2	0.241	ug/l	24.75	450.01	3.686E-03	Pulse	0.30	3
K			2	0.474	ug/l	93.25	10,582.35	8.667E-02	Pulse	0.30	3
Ca			2	1.692	ug/l	72.90	117.78	9.643E-04	Pulse	0.30	3
Ti			2	0.021	ug/l	360.65	6.67	5.454E-05	Pulse	0.30	3
V			2	-0.016	ug/l	-81.05	254.45	2.086E-03	Pulse	0.30	3
Cr			2	-0.002	ug/l	-207.99	432.23	3.540E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-65.49	124.45	1.019E-03	Pulse	0.30	3
Fe			2	0.821	ug/l	2.33	6,922.65	5.670E-02	Pulse	0.30	3
Co			2	0.006	ug/l	29.53	101.09	8.278E-04	Pulse	0.30	3
Ni			2	0.007	ug/l	208.78	162.22	1.329E-03	Pulse	0.30	3
Cu			2	-0.269	ug/l	-0.38	1,773.45	1.452E-02	Pulse	0.30	3
Zn			2	0.001	ug/l	5258.47	1,045.60	8.565E-03	Pulse	0.30	3
As			2	0.011	ug/l	78.57	24.33	1.994E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.009	ug/l	31.82	26.60	3.056E-05	Pulse	0.30	3
Sn			2	0.159	ug/l	11.11	1,391.19	1.597E-03	Pulse	0.30	3
Se			3	0.101	ug/l	9.35	19.00	1.321E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,008,575.81	0.31	91.5	Pulse	0.10	3
1	Sc		1,915,135.91	0.46	98.1	Pulse	0.10	3
1	Ge		409,687.48	1.17	100.5	Pulse	0.10	3
1	Ge		569,409.38	0.40	100.4	Pulse	0.10	3
1	Rh		2,912,255.69	0.49	103.0	Pulse	0.10	3
1	In		3,144,266.13	0.11	105.5	Pulse	0.10	3
1	Tb		4,587,140.87	1.51	105.9	Pulse	0.10	3
1	Ho		457,022.97	0.18	105.5	Pulse	0.10	3
1	Bi		2,896,500.90	0.55	106.2	Pulse	0.10	3
2	Sc		122,097.81	0.47	103.5	Pulse	0.30	3
2	Ge		80,304.91	1.26	104.5	Pulse	0.30	3
2	Ge		120,066.36	1.50	103.5	Pulse	0.30	3
2	Rh		1,926,173.47	0.53	105.3	Pulse	0.30	3
2	In		871,012.31	0.42	106.8	Pulse	0.30	3
2	Tb		2,896,489.54	0.50	106.1	Pulse	0.30	3
2	Ho		297,296.93	0.26	105.8	Pulse	0.30	3
2	Bi		2,015,719.64	0.51	106.9	Pulse	0.30	3
3	Sc		142,696.89	0.98	104.9	Pulse	0.30	3
3	Ge		95,276.71	1.45	103.1	Pulse	0.30	3
3	Ge		143,891.71	1.15	103.2	Pulse	0.30	3
3	Rh		1,554,310.77	0.25	102.2	Pulse	0.30	3
3	Tb		2,878,528.50	0.73	102.6	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Method File	
Method Path	
Acq Time	9/13/2019 14:11
Sample Name	jc94557-1
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	9/13/2019 11:35
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	0.015	ug/l	24.45	90.67	9.073E-05	Pulse	0.25	3
B			1	27.771	ug/l	0.73	90,507.80	9.054E-02	Pulse	0.15	3
Ca			1	23179.364	ug/l	0.96	15,700,276.85	8.145E+00	Analog	0.10	3
Sr			1	96.261	ug/l	1.05	3,589,875.78	1.306E+00	Pulse	0.10	3
Mo			1	0.148	ug/l	3.85	1,106.75	4.025E-04	Pulse	0.10	3
Ag			1	0.067	ug/l	0.63	1,290.11	4.250E-04	Pulse	0.10	3
Sn			1	0.090	ug/l	18.26	2,767.02	9.117E-04	Pulse	0.10	3
Sb			1	0.122	ug/l	12.58	1,980.21	4.354E-04	Pulse	0.10	3
Ba			1	32.715	ug/l	1.16	205,122.58	4.511E-02	Pulse	0.10	3
Tl			1	0.009	ug/l	38.48	570.03	2.085E-04	Pulse	0.10	3
Pb			1	0.155	ug/l	4.27	2,400.30	8.778E-04	Pulse	0.10	3
Pb			1	0.148	ug/l	10.63	2,073.56	7.581E-04	Pulse	0.10	3
Pb			1	0.149	ug/l	2.52	9,334.88	3.414E-03	Pulse	0.10	3
Na			2	55971.296	ug/l	8.55	56,617,375.53	4.615E+02	Analog	0.30	3
Mg			2	9427.370	ug/l	7.56	4,481,604.54	3.651E+01	Pulse	0.30	3
Al			2	16.241	ug/l	5.95	3,167.01	2.576E-02	Pulse	0.30	3
K			2	3713.591	ug/l	7.45	1,550,148.07	1.263E+01	Pulse	0.30	3
Ca			2	23266.354	ug/l	7.46	506,011.30	4.122E+00	Pulse	0.30	3
Ti			2	0.641	ug/l	28.36	103.34	8.360E-04	Pulse	0.30	3
V			2	0.202	ug/l	15.04	1,316.74	1.074E-02	Pulse	0.30	3
Cr			2	0.496	ug/l	11.68	3,479.30	2.838E-02	Pulse	0.30	3
Mn			2	56.154	ug/l	8.28	196,350.89	1.600E+00	Pulse	0.30	3
Fe			2	522.854	ug/l	8.23	2,614,263.23	2.131E+01	Pulse	0.30	3
Co			2	0.117	ug/l	12.27	1,180.78	9.623E-03	Pulse	0.30	3
Ni			2	0.472	ug/l	6.52	1,325.63	1.079E-02	Pulse	0.30	3
Cu			2	1.092	ug/l	11.48	10,997.10	8.960E-02	Pulse	0.30	3
Zn			2	9.200	ug/l	5.98	11,389.62	9.269E-02	Pulse	0.30	3
As			2	0.297	ug/l	8.53	209.67	1.708E-03	Pulse	1.00	3
Cd			2	0.039	ug/l	18.50	82.11	9.751E-05	Pulse	0.30	3
Sn			2	0.113	ug/l	37.56	1,147.84	1.365E-03	Pulse	0.30	3
Se			3	0.125	ug/l	5.43	22.00	1.573E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		999,606.52	0.33	90.7	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	5000	2247	2199.6	3.26
59	5000	2870	2867.6	2.95
89	10000	5703	5383.7	2.47
140	10000	5854	5697.0	2.30
205	5000	4202	4072.7	2.88
156/140	1	0.871 %	0.727 %	16.20
70/140	10	3.861 %	4.703 %	9.47
9	20	2	1.9	95.40
11	2000	1291	1254.1	3.64
88	200	78	80.1	14.87
95	20	8	5.3	47.84
107	20	2	3.2	70.49
121	100	67	48.9	16.83
137	50	27	21.2	25.74
208	100	36	36.2	22.61
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	-30	V
Extract 2	-125.0	V	Cell Exit	-60	V
Omega Bias	-60	V	Deflect	14.6	V
Omega Lens	8.5	V	Plate Bias	-45	V

Cell Parameters

Use Gas	false		OctP Bias	-8.0	V
He Flow	0.0	mL/min	OctP RF	190	V
H2 Flow	0.0	mL/min	Energy Discrimination	5.0	V
3rd Gas Flow	0	%			

Meters

Water RF/WC/IF	1.24	L/min	S/C Temp (L)	1.4	℃
Internal Temp	27.2	℃	Carrier Gas(BP)	1.44E+2	kPa
Reflected Power	2	W			

US EPA Tune Check Sample Report

Batch Folder C:\Agilent\ICPMH\1\DATA\xa091319m1.b
Report Comment
Instrument Name G3281A JP10340551

[1]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	60105	0.72	5.00	
24	240941	0.77	5.00	
25	31752	0.52	5.00	
26	37146	0.83	5.00	
59	300563	0.46	5.00	
115	507839	0.33	5.00	
206	144223	0.44	5.00	
207	133873	0.28	5.00	
208	314542	0.33	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	59543	60386	59887	60042	60665
24	237708	241239	241760	242337	241661
25	31507	31938	31853	31760	31701
26	36731	37395	37328	36904	37373
59	298843	301460	299311	302005	301197
115	507435	509830	507971	505319	508641
206	143374	144692	144981	143901	144170
207	133520	134246	133437	134211	133953
208	313591	315298	315631	314918	313271

Integration Time [sec] = 0.1

Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	9779	9.00	8.9 - 9.1		0.757	0.900	
24	39263	23.95	23.9 - 24.1		0.762	0.900	
25	5202	24.95	24.9 - 25.1		0.732	0.900	
26	6092	25.95	25.9 - 26.1		0.764	0.900	
59	52489	59.00	58.9 - 59.1		0.741	0.900	
115	95375	115.00	114.9 - 115.1		0.676	0.900	
206	25251	206.00	205.9 - 206.1		0.755	0.900	
207	22972	206.95	206.9 - 207.1		0.723	0.900	
208	54887	207.95	207.9 - 208.1		0.731	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	8.5	V			
Extract 2	-125.0	V	Cell Entrance	-30	V			
Omega Bias	-60	V	Cell Exit	-60	V			
Deflect	14.6	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	190	V			
Energy Discrimination	5.0	V						

Calibration for C:\Agilent\ICPMH\1\DATA\xa091319m1.b\032_CCB.d

9 Be [1] / ISTD: 6 Li
y = 4.516E-3 x + 2.175E-5

R	1.0000
DL	0.01103
BEC	0.004815

11 B [1] / ISTD: 6 Li
y = 3.050E-3 x + 5.834E-3

R	0.9996
DL	0.3056
BEC	1.912

23 Na [2] / ISTD: 45 Sc
y = 8.244E-3 x + 7.416E-2

R	0.9999
DL	0.7338
BEC	8.996

24 Mg [2] / ISTD: 45 Sc
y = 3.873E-3 x + 2.071E-3

R	0.9999
DL	0.2301
BEC	0.5347

27 Al [2] / ISTD: 45 Sc
y = 1.380E-3 x + 3.352E-3

R	1.0000
DL	0.4059
BEC	2.429

39 K [2] / ISTD: 45 Sc
y = 3.378E-3 x + 8.507E-2

R	1.0000
DL	2.898
BEC	25.19

44 Ca [1] / ISTD: 45 Sc
y = 3.513E-4 x + 2.523E-3

R	1.0000
DL	1.381
BEC	7.183

44 Ca [2] / ISTD: 45 Sc
y = 1.771E-4 x + 6.646E-4

R	1.0000
DL	2.39
BEC	3.752

47 Ti [2] / ISTD: 45 Sc
y = 1.260E-3 x + 2.834E-5

R	1.0000
DL	0.1169
BEC	0.0225

51 V [2] / ISTD: 45 Sc
y = 3.977E-2 x + 2.710E-3

R	1.0000
DL	0.03045
BEC	0.06816

Calibration for C:\Agilent\ICPMH\1\DATA\xa091319m1.b\032_CCB.d

52 Cr [2] / ISTD: 45 Sc
y = 4.986E-2 x + 3.642E-3

R	1.0000
DL	0.01929
BEC	0.07305

55 Mn [2] / ISTD: 45 Sc
y = 2.848E-2 x + 1.130E-3

R	1.0000
DL	0.02619
BEC	0.03969

56 Fe [2] / ISTD: 45 Sc
y = 4.070E-2 x + 2.329E-2

R	0.9998
DL	0.09253
BEC	0.5721

59 Co [2] / ISTD: 45 Sc
y = 7.901E-2 x + 3.759E-4

R	1.0000
DL	0.005186
BEC	0.004758

60 Ni [2] / ISTD: 45 Sc
y = 2.038E-2 x + 1.177E-3

R	1.0000
DL	0.01993
BEC	0.05772

63 Cu [2] / ISTD: 45 Sc
y = 5.515E-2 x + 2.935E-2

R	1.0000
DL	0.03803
BEC	0.5321

66 Zn [2] / ISTD: 45 Sc
y = 9.145E-3 x + 8.556E-3

R	1.0000
DL	0.1237
BEC	0.9356

75 As [2] / ISTD: 45 Sc
y = 5.266E-3 x + 1.413E-4

R	0.9999
DL	0.0186
BEC	0.02683

78 Se [3] / ISTD: 74 Ge
y = 1.049E-3 x + 2.622E-5

R	0.9999
DL	0.0211
BEC	0.02499

88 Sr [1] / ISTD: 103 Rh
y = 1.357E-2 x + 9.078E-5

R	1.0000
DL	0.005833
BEC	0.006692

Calibration for C:\Agilent\ICPMH\1\DATA\xa091319m1.b\032_CCB.d

95 Mo [1] / ISTD: 103 Rh
y = 2.602E-3 x + 1.613E-5

R	1.0000
DL	0.01427
BEC	0.006197

107 Ag [1] / ISTD: 115 In
y = 6.159E-3 x + 1.081E-5

R	1.0000
DL	0.003417
BEC	0.001755

111 Cd [2] / ISTD: 115 In
y = 2.253E-3 x + 9.395E-6

R	1.0000
DL	0.01453
BEC	0.004169

118 Sn [1] / ISTD: 115 In
y = 4.066E-3 x + 5.473E-4

R	0.9999
DL	0.03744
BEC	0.1346

118 Sn [2] / ISTD: 115 In
y = 5.123E-3 x + 7.846E-4

R	1.0000
DL	0.03327
BEC	0.1531

121 Sb [1] / ISTD: 159 Tb
y = 3.211E-3 x + 4.392E-5

R	1.0000
DL	0.01215
BEC	0.01368

137 Ba [1] / ISTD: 159 Tb
y = 1.378E-3 x + 1.852E-5

R	1.0000
DL	0.01564
BEC	0.01344

205 Tl [1] / ISTD: 209 Bi
y = 1.370E-2 x + 9.127E-5

R	1.0000
DL	0.001657
BEC	0.006661

206 Pb [1] / ISTD: 209 Bi
y = 4.737E-3 x + 1.456E-4

R	1.0000
DL	0.0165
BEC	0.03072

207 Pb [1] / ISTD: 209 Bi
y = 4.209E-3 x + 1.367E-4

R	1.0000
DL	0.02495
BEC	0.03248

208 Pb [1] / ISTD: 209 Bi

y = 1.928E-2 x + 5.365E-4

R	1.0000
DL	0.00718
BEC	0.02783

SGS North America Inc.

Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP17232	9/10/2019	12:55	9/10/2019	18:25	JC94613-1A	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	2	3124598	91	-1	90
1	End	2	3124598	91	-1	90
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-74	1902243	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP17232-MB1	N/A	N	50	50	AB		
MP17232-B1	N/A	N	50	50	AB	ABCD	
MP17232-S1	1	Y	50	50	AB	ABCD	
MP17232-S2	1	Y	50	50	AB	ABCD	
MP17232-SD1	1	Y	50	50	AB		
JC94537-1A	1	Y	50	50	AB		
JC94613-1A	1	Y	50	50	AB		
JC94613-2A	1	Y	50	50	AB		
MP17232-B2	N/A	N	50	50	AB	EFGHI	
MP17232-S3	1	Y	50	50	AB	EFGHI	
MP17232-S4	1	Y	50	50	AB	EFGHI	

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 20PPM	0.625
E	ACCUTEST 13B REV1	0.2
F	ACCUTEST 14B REV1	0.2
G	MINERALS 1000PPM	0.2
H	AG 20PPM	0.2

Comments: _____

Analyst MOUSTAFR **Approved by** RAKESHP **Approved on** 9/10/2019

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

3S N... merica Inc

Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP17232	9/10/2019	12:55	9/10/2019	18:25	JC94613-1A	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	2	3124598	91	-1	90
1	End	2	3124598	91	-1	90
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-74	1902243	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP17232-MB1	N/A	N	50	50	AB		
MP17232-B1	N/A	N	50	50	AB	ABCD	
MP17232-S1	1	Y	50	50	AB	ABCD	
MP17232-S2	1	Y	50	50	AB	ABCD	
MP17232-SD1	1	Y	50	50	AB		
JC94537-1A	1	Y	50	50	AB		
JC94613-1A	1	Y	50	50	AB		
JC94613-2A	1	Y	50	50	AB		
MP17232-B2	N/A	N	50	50	AB	EFGHI	
MP17232-S3	1	Y	50	50	AB	EFGHI	
MP17232-S4	1	Y	50	50	AB	EFGHI	

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 20PPM	0.625
E	ACCUTEST 13B REV1	0.2
F	ACCUTEST 14B REV1	0.2
G	MINERALS 1000PPM	0.2
H	AG 20PPM	0.2
I	SE 20ppm	0.8

Comments:

Analyst MOUSTAFR Approved by Rakesh P Approved on 9/10/19

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

Document Control #: NJ-MET-PREP-AQ-01 (2456468 4378704432) Validated by: Validated on:

11.5.1 11

SGS

Metals Digestion Reagents Information Log

Digestion Batch ID: MP 17232 Date: 9/10/19

Matrix: ALL

Standard/Reagent Type	Exp. Date	Standard/Reagent ID
Spiking Solution - (ACCUTEST-13A REV1)	2/29/2020	MP-015-1214
Spiking Solution - (ACCUTEST-14A REV1)	2/29/2020	MP-015-1215
Spiking Solution - 5000 mg/l Minerals	8/21/2020	P2-MEB681527 MFG: INO. VENT.
Spiking Solution - Sulfur 1000ppm	9/25/2021	LOT: 092518 MFG: ABS. STANDARDS
Spiking Solution - Si 1000ppm	5/30/2020	P2-SI676242 MFG: INO. VENT.
Spiking Solution - Bi 1000ppm	8/29/2020	N2-BI669548 MFG: INO. VENT.
Spiking Solution - Se 20ppm	3/5/2020	MP-015-1220
Spiking Solution - Li 1000ppm	8/23/2020	P2-LI675235 MFG: INO. VENT.
Spiking Solution- Ag 20 ppm	2/29/2020	MP-015-1219
Spiking Solution - (ACCUTEST-13B REV1)	1/23/2020	MP-015-1203
Spiking Solution - (ACCUTEST-14B REV1)	1/23/2020	MP-015-1204
Spiking Solution - 1000ppm Minerals	10/29/2019	MP-015-1164
Spiking Solution- P		
Nitric Acid	9/9/2021	LOT: 234822 MFG: J.T. BAKER
Nitric Acid (1:1)	3/4/2020	MP-018-42-295 1:1 HNO3
Hydrochloric Acid	9/6/2021	LOT:229504 MFG: J.T. BAKER
Hydrochloric Acid (1:1)	3/5/2020	MP-018-42-296 1:1 HCL
Hydrogen Peroxide	8/31/2021	LOT: 191365 MFG: FISHER
Soil Lab Control/Soil LC	10/31/2021	LOT: D101-540 MFG: ERA
Teflon Chips(For Soil MB and Blank Spike)	N/A	LOT: 24635764 MFG: SAINT-GOBAIN
Digestion Tubes	N/A	LOT: 1812117 MFG: ENV. EXPRESS
pH Paper	6/15/2021	LOT: 217518 MFG: HYDRION
Filter paper Q8	N/A	LOT: 16939084 MFG: FISHER
Filter paper 0.45µm	N/A	LOT: F9BA55973E MFG: FISHER

Spike witnessed By: EAL

Validated By:

Validated On:

Metals Prep Reagent
1/17/18

11.5.1 11

Date 9/11/19 Analyst CT MP # 17250 17232 17228

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	MA-18-354-153	11/28/19	200	0.2	19.25	20	2
Mixed ICP intermediate Metals Solution (ACCUTEST-14A-REV1)	Sb,As,Mo,Sn,Ti, W,Zr	Yes	Inhouse	MA-18-354-154	11/28/19	200	0.2			2
Ag Spike Intermediate	Ag	Yes	Inhouse	MA-18-354-152	11/28/19	20	0.25			0.25
Metals Mix	Ca,Al,Fe,Mg,K, Na	Yes	Inorganic Ventures	P2-MEB 678659	4/25/20	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

SGS North America Inc.

Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP17232	9/10/2019	12:55	9/10/2019	18:25	JC94613-1A	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	2	3124598	91	-1	90
1	End	2	3124598	91	-1	90
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-74	1902243	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP17232-MB1	N/A	N	50	50	AB		
MP17232-B1	N/A	N	50	50	AB	ABCD	
MP17232-S1	1	Y	50	50	AB	ABCD	
MP17232-S2	1	Y	50	50	AB	ABCD	
MP17232-SD1	1	Y	50	50	AB		
JC94537-1A	1	Y	50	50	AB		
JC94613-1A	1	Y	50	50	AB		
JC94613-2A	1	Y	50	50	AB		
MP17232-B2	N/A	N	50	50	AB	EFGHI	
MP17232-S3	1	Y	50	50	AB	EFGHI	
MP17232-S4	1	Y	50	50	AB	EFGHI	

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 20PPM	0.625
E	ACCUTEST 13B REV1	0.2
F	ACCUTEST 14B REV1	0.2
G	MINERALS 1000PPM	0.2
H	AG 20PPM	0.2

Comments: _____

Analyst MOUSTAFR **Approved by** RAKESHP **Approved on** 9/10/2019

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

11.5.2

11

Document Control #: NJ-MET-PREP-AQ-01 (2456468.4378704432) Validated by: Validated on:

3S N... merica Inc

Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP17232	9/10/2019	12:55	9/10/2019	18:25	JC94613-1A	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	2	3124598	91	-1	90
1	End	2	3124598	91	-1	90
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-74	1902243	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP17232-MB1	N/A	N	50	50	AB		
MP17232-B1	N/A	N	50	50	AB	ABCD	
MP17232-S1	1	Y	50	50	AB	ABCD	
MP17232-S2	1	Y	50	50	AB	ABCD	
MP17232-SD1	1	Y	50	50	AB		
JC94537-1A	1	Y	50	50	AB		
JC94613-1A	1	Y	50	50	AB		
JC94613-2A	1	Y	50	50	AB		
MP17232-B2	N/A	N	50	50	AB	EFGHI	
MP17232-S3	1	Y	50	50	AB	EFGHI	
MP17232-S4	1	Y	50	50	AB	EFGHI	

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 20PPM	0.625
E	ACCUTEST 13B REV1	0.2
F	ACCUTEST 14B REV1	0.2
G	MINERALS 1000PPM	0.2
H	AG 20PPM	0.2
I	SE 20ppm	0.8

Comments:

Analyst MOUSTAFR Approved by Rakesh P Approved on 9/10/19

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

Document Control #: NJ-MET-PREP-AQ-01 (2456468 4378704432) Validated by: Validated on:

11.5.2 11

SGS

Metals Digestion Reagents Information Log

Digestion Batch ID: MP 17232 Date: 9/10/19

Matrix: ALL

Standard/Reagent Type	Exp. Date	Standard/Reagent ID
Spiking Solution - (ACCUTEST-13A REV1)	2/29/2020	MP-015-1214
Spiking Solution - (ACCUTEST-14A REV1)	2/29/2020	MP-015-1215
Spiking Solution - 5000 mg/l Minerals	8/21/2020	P2-MEB681527 MFG: INO. VENT.
Spiking Solution - Sulfur 1000ppm	9/25/2021	LOT: 092518 MFG: ABS. STANDARDS
Spiking Solution - Si 1000ppm	5/30/2020	P2-SI676242 MFG: INO. VENT.
Spiking Solution - Bi 1000ppm	8/29/2020	N2-BI669548 MFG: INO. VENT.
Spiking Solution - Se 20ppm	3/5/2020	MP-015-1220
Spiking Solution - Li 1000ppm	8/23/2020	P2-LI675235 MFG: INO. VENT.
Spiking Solution- Ag 20 ppm	2/29/2020	MP-015-1219
Spiking Solution - (ACCUTEST-13B REV1)	1/23/2020	MP-015-1203
Spiking Solution - (ACCUTEST-14B REV1)	1/23/2020	MP-015-1204
Spiking Solution - 1000ppm Minerals	10/29/2019	MP-015-1164
Spiking Solution- P		
Nitric Acid	9/9/2021	LOT: 234822 MFG: J.T. BAKER
Nitric Acid (1:1)	3/4/2020	MP-018-42-295 1:1 HNO3
Hydrochloric Acid	9/6/2021	LOT:229504 MFG: J.T. BAKER
Hydrochloric Acid (1:1)	3/5/2020	MP-018-42-296 1:1 HCL
Hydrogen Peroxide	8/31/2021	LOT: 191365 MFG: FISHER
Soil Lab Control/Soil LC	10/31/2021	LOT: D101-540 MFG: ERA
Teflon Chips(For Soil MB and Blank Spike)	N/A	LOT: 24635764 MFG: SAINT-GOBAIN
Digestion Tubes	N/A	LOT: 1812117 MFG: ENV. EXPRESS
pH Paper	6/15/2021	LOT: 217518 MFG: HYDRION
Filter paper Q8	N/A	LOT: 16939084 MFG: FISHER
Filter paper 0.45µm	N/A	LOT: F9BA55973E MFG: FISHER

Spike witnessed By: EAL

Validated By:

Validated On:

Metals Prep Reagent
1/17/18

11.5.2 11

Date 9/11/19 Analyst CT MP # 17250 17232 17228

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	MA-18-354-153	11/28/19	200	0.2	19.25	20	2
Mixed ICP intermediate Metals Solution (ACCUTEST-14A-REV1)	Sb,As,Mo,Sn,Ti, W,Zr	Yes	Inhouse	MA-18-354-154	11/28/19	200	0.2			2
Ag Spike Intermediate	Ag	Yes	Inhouse	MA-18-354-152	11/28/19	20	0.25			0.25
Metals Mix	Ca,Al,Fe,Mg,K, Na	Yes	Inorganic Venture	P2-MEB 678659	4/25/20	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

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Sovereign Consulting

Shepley's Hill (SHL), Devens, MA

AC001.M01.05

SGS Job Number: JC96281

Sampling Date: 10/04/19

Report to:

Sovereign Consulting
9 Payson Road Suite 150
Foxborough, MA 02035
SPassafaro@SovCon.com

ATTN: Steve Passafaro

Total number of pages in report: **174**

Laura Degenhardt
General Manager

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.

Client Service contact: Victoria Pushkova 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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Test results relate only to samples analyzed.

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Please share your ideas about
how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Summary of Hits **5**
Section 4: Sample Results **6**
4.1: JC96281-1: EFFLUENT 7
Section 5: Misc. Forms **8**
5.1: Chain of Custody 9
5.2: Sample Tracking Chronicle 11
5.3: Internal Chain of Custody 12
5.4: QC Evaluation: DOD QSM5.x Limits 13
Section 6: Metals Analysis - QC Data Summaries **14**
6.1: Inst QC MA47592: As 15
6.2: Prep QC MP17745: As 42
6.3: IDL and Linear Range Summaries 48
Section 7: Metals Analysis - Raw Data **52**
7.1: Raw Data MA47592 53
7.2: Prep Logs 172

SGS North America Inc.

Sample Summary

Sovereign Consulting

Job No: JC96281

Shepley's Hill (SHL), Devens, MA
Project No: AC001.M01.05

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC96281-1	10/04/19	08:02	SS	10/04/19	AQ	Effluent	EFFLUENT

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Sovereign Consulting	**Job No**	JC96281
Site:	Shepley's Hill (SHL), Devens, MA	**Report Date**	10/10/2019 11:01:31 A

On 10/04/2019, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.7 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC96281 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.

Metals Analysis By Method SW846 6020B

Matrix: AQ **Batch ID:** MP17745

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC95642-1MS, JC95642-1MSD, JC95642-1PS, JC95642-1SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Arsenic are outside control limits. Probable cause due to sample homogeneity.

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: JC96281
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 10/04/19

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
JC96281-1	**EFFLUENT**					
Arsenic		24.9	3.0	2.0	ug/l	SW846 6020B

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	EFFLUENT		
Lab Sample ID:	JC96281-1	**Date Sampled:**	10/04/19
Matrix:	AQ - Effluent	**Date Received:**	10/04/19
		Percent Solids:	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	24.9	3.0	2.0	0.94	ug/l	2	10/07/19	10/08/19	SN	SW846 6020B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA47592
(2) Prep QC Batch: MP17745

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

SGS

GW

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

FED-EX Tracking # 1063 6339 4554
Bottle Order Control #
SGS Quote #
SGS Job # JC96281

Client / Reporting Information

Company Name: Sovereign Consulting Inc.
Street Address: 9 Payson Road, Suite 150
City: Foxborough State: MA Zip: 02035
Project Contact: Steve Passafaro E-mail: (spassafaro@sovcon.com)
Phone #: (508) 339-3200 Fax #: (
Sampler(s) Name(s): Sovereign Staff Phone #:

Project Information

Project Name: Shepley's Hill (SHL), Devens, MA
Street:
City: Devens State: MA
Project #: AC001.M01
Client Purchase Order #:
Project Manager: Steve Passafaro

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	Total As - 6020A	LAB USE ONLY
1	Effluent		10/4/19	8:02	LAP	GW	1									X	A29

Turnaround Time (Business days)
- [ ] Std. 10 Business Days
- [x] 5 Day RUSH - Arsenic Only
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available via LabLink

Approved by (SGS Project Manager)/Date:
Initial Assessment 2 BHW
Label Verification

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

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

Comments / Special Instructions
See Project QAPP for all specfic project requirements
5 - Day rush on Arsenic
SGS-ACCUTEST MARLBOR 1/4

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 Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
Thomas M. Pesante	10/4/19 12:30	1 [signature]	2 [signature]	10-7-19 17:00	2 FedEx
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4 [signature]	Date Time: 10/8/19 9:45	Received By: 4 [signature]
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 28780 ☐ Intact ☐ Not intact	Preserved where applicable ☐	On Ice Cooler Temp. 3.1 [illegible]

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

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

JC96281: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JC96281 **Client:** _____ **Project:** _____

Date / Time Received: 10/4/2019 12:30:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (3.7);

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: 229517 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

5.1

5

JC96281: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Sovereign Consulting

Job No: JC96281

Shepley's Hill (SHL), Devens, MA
Project No: AC001.M01.05

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC96281-1	Collected: 04-OCT-19 08:02 By: SS		Received: 04-OCT-19 By: DDH			
EFFLUENT						
JC96281-1	SW846 6020B	08-OCT-19 15:34	SN	07-OCT-19	MR	ASMS

SGS Internal Chain of Custody

Job Number: JC96281
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Received: 10/04/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC96281-1.1	Secured Storage	Todd Shoemaker	10/07/19 11:49	Retrieve from Storage
JC96281-1.1	Todd Shoemaker	Secured Staging Area	10/07/19 11:50	Return to Storage
JC96281-1.1	Secured Staging Area	Moustafa Ramadan	10/07/19 16:05	Retrieve from Storage
JC96281-1.1	Moustafa Ramadan	Secured Storage	10/07/19 16:54	Return to Storage
JC96281-1.1.1	Moustafa Ramadan	Metals Digestion	10/07/19 16:06	Digestate from JC96281-1.1
JC96281-1.1.1	Metals Digestion	Moustafa Ramadan	10/07/19 16:10	Digestate from JC96281-1.1
JC96281-1.1.1	Moustafa Ramadan	Metals Digestate Storage	10/07/19 16:10	Return to Storage
JC96281-1.1.1	Metals Digestate Storage	Nancy Duan	10/08/19 15:11	Retrieve from Storage
JC96281-1.1.1	Nancy Duan	Metals Digestate Storage	10/08/19 15:12	Return to Storage

QC Evaluation: DOD QSM5.x Limits

Job Number: JC96281
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 10/04/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP17745	SW846 6020B						
MP17745-B2	7440-38-2	Arsenic	BSP	REC	93.6	%	84-116
MP17745-S3*	7440-38-2	Arsenic	MS	REC	90.8	%	84-116
MP17745-S4*	7440-38-2	Arsenic	MSD	REC	90.3	%	84-116
MP17745-S4*	7440-38-2	Arsenic	MSD	RPD	.5	%	20

* Sample used for QC is not from job JC96281

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: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:23	MA47592-STD1	1		See rerun, sample intro not stable.
11:28	MA47592-STD2	1		See rerun, sample intro not stable.
11:33	MA47592-STD3	1		STDA
11:38	MA47592-STD4	1		STDB
11:44	MA47592-STD5	1		STDC
11:49	MA47592-STD6	1		STDD
11:54	MA47592-STD7	1		STDE
12:00	MA47592-STD8	1		STDF
12:05	MA47592-STD9	1		STDG
12:10	MA47592-STD10	1		STDH
12:15	MA47592-STD11	1		STDI
12:20	MA47592-STD12	1		STDJ
12:25	ZZZZZZ	1		
12:30	MA47592-ICVA1	1		See rerun, analytical problems
12:35	MA47592-ICV1	1		
12:41	MA47592-ICVA2	1		
12:49	MA47592-ICB1	1		
12:54	MA47592-CCVA1	1		
12:59	MA47592-CCB1	1		
13:04	MA47592-CRI1	1		
13:09	MA47592-ICSA1	1		
13:14	MA47592-ICSAB1	1		
13:19	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:29	MA47592-CCVA2	1		
13:34	MA47592-CCB2	1		
13:39	MP17720A-MB1	5		
13:44	MP17720A-B2	5		
13:49	MP17720A-S3	5		Overrange. (Ni and V slightly overrange.)
13:54	MP17720A-S4	5		Overrange. (Ni and V slightly overrange.)
13:59	JC95615-1	5		(sample used for QC only; not part of login JC96281)
14:04	MP17720A-SD1	25		Overrange.
14:09	MP17720A-PS1	5		(Ni slightly overrange) Overrange.

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	14:14	ZZZZZZ	5		
	14:19	MA47592-CCVA3	1		
	14:24	MA47592-CCB3	1		
	14:29	ZZZZZZ	5		
	14:34	ZZZZZZ	5		
	14:39	MP17745-MB1	2		
	14:44	MP17745-B2	2		
	14:49	MP17745-S3	2		Mn overrange
	14:54	MP17745-S4	2		Mn overrange
	14:59	JC95642-1	2		(sample used for QC only; not part of login JC96281)
	15:04	MP17745-SD1	10		Mn overrange
	15:09	MA47592-CCVA4	1		
	15:14	MA47592-CCB4	1		
	15:19	MP17745-PS1	2		Mn overrange
	15:24	ZZZZZZ	2		
	15:29	ZZZZZZ	2		
	15:34	JC96281-1	2		
---------->	Last reportable sample/prep for job JC96281				
	15:39	MP17725-MB1	2		
	15:44	ZZZZZZ	2		
	15:49	MP17725-B2	2		
	15:54	MP17725-S3	2		
	15:59	MA47592-CCVA5	1		
	16:04	MA47592-CCB5	1		
---------->	Last reportable CCB for job JC96281				
	16:09	MP17725-S4	2		Need PS for Se
	16:14	JC96034-1	2		(sample used for QC only; not part of login JC96281)
	16:19	MP17725-SD1	10		
	16:24	ZZZZZZ	2		
	16:29	ZZZZZZ	2		
	16:34	ZZZZZZ	2		
	16:39	ZZZZZZ	2		
	16:44	ZZZZZZ	2		
	16:49	MA47592-CCVA6	1		
	16:54	MA47592-CCB6	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:59	ZZZZZZ	2		
17:04	ZZZZZZ	2		
17:09	ZZZZZZ	2		
17:14	ZZZZZZ	2		
17:19	ZZZZZZ	2		
17:24	ZZZZZZ	2		
17:29	ZZZZZZ	2		
17:34	ZZZZZZ	2		
17:39	MA47592-CCVA7	1		
17:44	MA47592-CCB7	1		
17:49	ZZZZZZ	2		
17:54	ZZZZZZ	2		
17:59	ZZZZZZ	2		
18:04	ZZZZZZ	2		
18:09	MP17747A-MB1	5		
18:14	MP17747A-B2	5		
18:19	MP17747A-S3	5		
18:24	MP17747A-S4	5		
18:29	MA47592-CCVA8	1		
18:34	MA47592-CCB8	1		
18:39	JC96164-13	5		(sample used for QC only; not part of login JC96281)
18:44	MP17747A-SD1	25		
18:49	MP17747A-PS1	5		
18:54	ZZZZZZ	5		
18:59	ZZZZZZ	5		
19:04	ZZZZZZ	5		
19:09	ZZZZZZ	5		
19:15	ZZZZZZ	5		
19:19	MA47592-CCVA9	1		
19:24	MA47592-CCB9	1		
19:29	ZZZZZZ	5		
19:34	ZZZZZZ	5		
19:39	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:44	ZZZZZZ	5		
19:50	ZZZZZZ	5		
19:54	ZZZZZZ	5		
20:00	ZZZZZZ	5		
20:05	ZZZZZZ	5		
20:10	MA47592-CCVA10	1		
20:15	MA47592-CCB10	1		
20:20	ZZZZZZ	5		
20:25	ZZZZZZ	5		
20:30	ZZZZZZ	5		
20:35	ZZZZZZ	5		
20:40	ZZZZZZ	1		
20:45	ZZZZZZ	1		
20:50	MA47592-CCVA11	1		
20:55	MA47592-CCB11	1		
21:00	ZZZZZZ	1		
21:05	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Element: Dilution	As	
12:25	ZZZZZZ	1		
12:30	MA47592-ICVA1	1	See rerun, analytical problems	
12:35	MA47592-ICV1	1		
12:41	MA47592-ICVA2	1	X	
12:49	MA47592-ICB1	1	X	
12:54	MA47592-CCVA1	1	X	
12:59	MA47592-CCB1	1	X	
13:04	MA47592-CRI1	1	X	
13:09	MA47592-ICSA1	1	X	
13:14	MA47592-ICSAB1	1	X	
13:19	ZZZZZZ	1		
13:24	ZZZZZZ	1		
13:29	MA47592-CCVA2	1	X	
13:34	MA47592-CCB2	1	X	
13:39	MP17720A-MB1	5	X	
13:44	MP17720A-B2	5	X	
13:49	MP17720A-S3	5	X	
13:54	MP17720A-S4	5	X	
13:59	JC95615-1	5	X	(a)
14:04	MP17720A-SD1	25	X	
14:09	MP17720A-PS1	5	X	
14:14	ZZZZZZ	5		
14:19	MA47592-CCVA3	1	X	
14:24	MA47592-CCB3	1	X	
14:29	ZZZZZZ	5		
14:34	ZZZZZZ	5		
14:39	MP17745-MB1	2	X	
14:44	MP17745-B2	2	X	
14:49	MP17745-S3	2	X	
14:54	MP17745-S4	2	X	
14:59	JC95642-1	2	X	(a)
15:04	MP17745-SD1	10	X	
15:09	MA47592-CCVA4	1	X	
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Element: Dilution	As	
15:14	MA47592-CCB4	1	X	
15:19	MP17745-PS1	2	X	
15:24	ZZZZZZ	2		
15:29	ZZZZZZ	2		
15:34	JC96281-1	2	X	
15:39	MP17725-MB1	2	X	
15:44	ZZZZZZ	2		
15:49	MP17725-B2	2	X	
15:54	MP17725-S3	2	X	
15:59	MA47592-CCVA5	1	X	
16:04	MA47592-CCB5	1	X	
16:09	MP17725-S4	2	X	
16:14	JC96034-1	2		(a)
16:19	MP17725-SD1	10	X	
16:24	ZZZZZZ	2		
16:29	ZZZZZZ	2		
16:34	ZZZZZZ	2		
16:39	ZZZZZZ	2		
16:44	ZZZZZZ	2		
16:49	MA47592-CCVA6	1	X	
16:54	MA47592-CCB6	1	X	
16:59	ZZZZZZ	2		
17:04	ZZZZZZ	2		
17:09	ZZZZZZ	2		
17:14	ZZZZZZ	2		
17:19	ZZZZZZ	2		
17:24	ZZZZZZ	2		
17:29	ZZZZZZ	2		
17:34	ZZZZZZ	2		
17:39	MA47592-CCVA7	1	X	
17:44	MA47592-CCB7	1	X	
17:49	ZZZZZZ	2		
17:54	ZZZZZZ	2		
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Element: Dilution	As	
17:59	ZZZZZZ	2		
18:04	ZZZZZZ	2		
18:09	MP17747A-MB1	5		
18:14	MP17747A-B2	5		
18:19	MP17747A-S3	5		
18:24	MP17747A-S4	5		
18:29	MA47592-CCVA8	1	X	
18:34	MA47592-CCB8	1	X	
18:39	JC96164-13	5		(a)
18:44	MP17747A-SD1	25		
18:49	MP17747A-PS1	5		
18:54	ZZZZZZ	5		
18:59	ZZZZZZ	5		
19:04	ZZZZZZ	5		
19:09	ZZZZZZ	5		
19:15	ZZZZZZ	5		
19:19	MA47592-CCVA9	1	X	
19:24	MA47592-CCB9	1	X	
19:29	ZZZZZZ	5		
19:34	ZZZZZZ	5		
19:39	ZZZZZZ	5		
19:44	ZZZZZZ	5		
19:50	ZZZZZZ	5		
19:54	ZZZZZZ	5		
20:00	ZZZZZZ	5		
20:05	ZZZZZZ	5		
20:10	MA47592-CCVA10	1	X	
20:15	MA47592-CCB10	1	X	
20:20	ZZZZZZ	5		
20:25	ZZZZZZ	5		
20:30	ZZZZZZ	5		
20:35	ZZZZZZ	5		
20:40	ZZZZZZ	1		
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Element: Dilution	As
20:45	ZZZZZZ	1	
20:50	MA47592-CCVA11	1	X
20:55	MA47592-CCB11	1	X
21:00	ZZZZZZ	1	
21:05	ZZZZZZ	1	

(a) Sample used for QC only; not part of login JC96281.

Element: As

INTERNAL STANDARD SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
11:23	MA47592-STD1	No results reported for the elements associated with this internal standard.							
11:28	MA47592-STD2	No results reported for the elements associated with this internal standard.							
11:33	MA47592-STD3	100	100	100	100	100	100	100	100
11:38	MA47592-STD4	100.344	99.419	100.379	100.37	99.487	101.752	101.133	99.656
11:44	MA47592-STD5	100.776	100.412	101.566	100.859	100.606	102.838	101.649	100.486
11:49	MA47592-STD6	100.52	100.225	101.366	100.354	100.448	103.013	101.066	100.092
11:54	MA47592-STD7	100.263	99.389	101.13	99.895	99.83	102.662	100.749	99.86
12:00	MA47592-STD8	100.64	99.515	101.999	100.811	98.92	100.813	99.653	99.488
12:05	MA47592-STD9	100.011	98.495	98.839	98.699	97.857	100.321	99.206	98.92
12:10	MA47592-STD10	99.692	98.112	100.275	98.636	98.361	100.29	100.026	99.982
12:15	MA47592-STD11	99.379	95.671	100.473	99.107	95.855	100.804	99.924	96.132
12:20	MA47592-STD12	99.015	96.161	99.011	98.093	95.195	99.01	98.312	95.138
12:25	ZZZZZZ	101.35	97.872	101.568	101.012	97.404	101.602	101.168	97.657
12:30	MA47592-ICVA1	No results reported for the elements associated with this internal standard.							
12:35	MA47592-ICV1	100.326	96.191	98.966	96.662	95.383	99.258	98.636	95.966
12:41	MA47592-ICVA2	100.689	95.503	98.598	95.686	95.121	98.186	96.707	96.349
12:49	MA47592-ICB1	99.326	96.882	101.254	101.828	97.407	102.449	102.516	97.632
12:54	MA47592-CCVA1	99.744	96.086	99.941	98.202	95.728	99.936	96.794	96.847
12:59	MA47592-CCB1	99.377	95.822	99.141	97.369	95.858	100.876	99.422	96.5
13:04	MA47592-CRI1	101.352	97.352	100.65	97.576	96.33	101.146	98.382	97.214
13:09	MA47592-ICSA1	87.885	96.427	103.347	105.189	95.997	101.753	101.822	91.772
13:14	MA47592-ICSAB1	82.251	96.311	103.394	105.246	95.876	103.063	101.722	92.447
13:19	ZZZZZZ	88.32	94.05	94.494	98.476	96.315	99.816	101.367	96.522
13:24	ZZZZZZ	84.692	91.58	93.529	99.185	93.577	98.353	101.254	93.827
13:29	MA47592-CCVA2	83.493	90.993	95.365	100.798	93.913	99.328	101.741	94.994
13:34	MA47592-CCB2	85.458	92.338	93.88	100.137	94.922	99.147	102.437	95.288
13:39	MP17720A-MB1	82.05	91.452	93.255	101.278	94.839	97.943	103.086	95.353
13:44	MP17720A-B2	83.401	91.333	94.454	101.276	94.536	97.998	102.667	93.989
13:49	MP17720A-S3	79.086	114.414	119.651	125.088	98.158	106.351	107.616	95.588
13:54	MP17720A-S4	79.341	114.601	117.837	124.365	97.692	104.371	105.773	95.256
13:59	JC95615-1	80.323	113.987	116.544	122.727	98.504	103.996	106.086	94.969
14:04	MP17720A-SD1	91.8	100.037	101.017	102.14	98.096	102.02	101.15	98.282
14:09	MP17720A-PS1	83.228	111.058	112.155	119.352	97.429	101.645	103.097	93.881

INTERNAL STANDARD SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
14:14	ZZZZZZ	82.349	112.87	115.351	120.448	97.751	102.888	104.125	94.244
14:19	MA47592-CCVA3	88.439	92.965	94.478	98.774	95.315	98.04	99.187	96.034
14:24	MA47592-CCB3	91.513	94.169	93.965	96.89	96.093	98.626	99.225	95.867
14:29	ZZZZZZ	83.49	113.375	113.477	119.823	97.093	102.205	102.783	93.337
14:34	ZZZZZZ	83.835	112.012	114.764	118.252	97.386	102.074	102.254	93.475
14:39	MP17745-MB1	87.64	96.71	95.151	103.055	102.538	104.55	103.898	102.286
14:44	MP17745-B2	85.014	92.993	92.529	101.384	98.363	101.135	101.54	98.919
14:49	MP17745-S3	51.493 !a	91.349	92.808	99.263	95.023	99.471	97.128	95.329
14:54	MP17745-S4	53.314 !a	91.851	94.561	100.889	95.064	100.104	98.459	95.446
14:59	JC95642-1	51.12 !a	92.372	95.252	104.063	95.983	100.413	101.31	94.712
15:04	MP17745-SD1	81.37	98.713	101.717	105.236	101.158	106.908	106.809	100.996
15:09	MA47592-CCVA4	84.255	96.4	99.879	104.873	98.884	104.813	104.508	99.375
15:14	MA47592-CCB4	86.348	95.534	97.943	103.3	98.365	103.088	104.491	98.338
15:19	MP17745-PS1	53.231 !a	92.409	96.005	102.375	94.844	100.717	99.294	95.153
15:24	ZZZZZZ	41.41 !a	91.061	94.573	101.022	95.571	99.761	97.123	94.278
15:29	ZZZZZZ	40.362 !a	90.099	93.86	97.225	94.226	99.231	95.525	92.965
15:34	JC96281-1	77.52	89.094	89.755	102.149	98.617	100.198	103.55	97.536
15:39	MP17725-MB1	74.118	87.206	90.849	103.492	98.256	102.574	106.114	95.817
15:44	ZZZZZZ	76.731	88.716	89.953	103.464	99.588	101.828	106.207	98.62
15:49	MP17725-B2	75.138	85.626	87.191	100.13	94.412	96.766	101.35	93.424
15:54	MP17725-S3	75.346	89.567	91.32	101.114	91.867	95.383	97.379	91.65
15:59	MA47592-CCVA5	85.568	92.892	95.747	108.9	95.685	99.392	107.255	96.328
16:04	MA47592-CCB5	87.047	92.711	93.554	100.019	95.027	99.429	101.535	95.067
16:09	MP17725-S4	77.605	90.931	91.951	101.789	91.756	96.169	96.609	91.81
16:14	JC96034-1	77.706	91.095	92.047	101.254	91.291	96.257	97.022	91.654
16:19	MP17725-SD1	88.398	92.937	95.28	99.375	93.242	99.783	98.411	94.187
16:24	ZZZZZZ	81.197	89.181	90.531	97.927	98.473	97.654	96.547	94.341
16:29	ZZZZZZ	78.413	85.289	86.977	94.298	90.098	91.686	91.849	88.537
16:34	ZZZZZZ	82.969	87.735	89.894	90.188	93.01	92.398	85.484	87.907
16:39	ZZZZZZ	81.267	84.896	85.652	89.234	83.693	88.164	85.303	82.944
16:44	ZZZZZZ	82.984	87.573	82.401	89.122	86.389	86.012	84.428	86.265
16:49	MA47592-CCVA6	86.769	83.204	86.331	87.826	85.408	91.126	89.021	86.278
16:54	MA47592-CCB6	86.981	83.231	84.91	87.74	85.919	90.456	89.6	86.613

INTERNAL STANDARD SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
16:59	ZZZZZZ	84.145	86.52	81.99	90.79	92.254	92.477	93.224	92.412
17:04	ZZZZZZ	79.842	81.492	82.256	92.029	89.638	92.831	94.119	89.415
17:09	ZZZZZZ	79.275	82.014	82.635	92.499	90.081	93.873	94.939	90.209
17:14	ZZZZZZ	81.18	86.504	86.844	95.372	93.678	97.242	97.076	94.037
17:19	ZZZZZZ	80.661	84.707	85.199	94.548	93.178	95.558	96.936	92.512
17:24	ZZZZZZ	79.967	84.916	87.272	100.501	94.334	97.838	101.003	94.01
17:29	ZZZZZZ	82.958	86.28	86.778	93.827	95.908	97.543	96.116	95.984
17:34	ZZZZZZ	80.126	83.286	82.713	93.023	90.635	92.685	94.481	90.565
17:39	MA47592-CCVA7	87.995	87.203	89.828	91.665	90.827	92.918	92.559	91.852
17:44	MA47592-CCB7	90.026	86.225	87.346	88.541	88.92	92.074	90.862	89.42
17:49	ZZZZZZ	85.571	85.492	86.466	92.666	94.201	97.326	94.129	93.748
17:54	ZZZZZZ	84.472	84.959	84.017	91.886	94.318	94.833	93.773	93.356
17:59	ZZZZZZ	79.823	83.105	83.631	89.255	87.124	88.738	87.415	87.153
18:04	ZZZZZZ	83.757	81.821	81.693	89.076	91.366	91.904	90.897	90.691
18:09	MP17747A-MB1	88.101	84.026	86.307	86.013	87.892	90.438	88.704	87.536
18:14	MP17747A-B2	87.004	81.541	81.537	82.254	84.595	85.998	84.848	84.723
18:19	MP17747A-S3	86.045	88.294	89.584	92.27	86.154	89.979	87.609	84.991
18:24	MP17747A-S4	86.056	88.08	89.037	91.637	86.868	89.333	88.481	84.684
18:29	MA47592-CCVA8	87.04	81.416	83.209	88.628	84.521	87.047	87.988	84.663
18:34	MA47592-CCB8	87.025	79.536	83.7	83.718	83.811	88.75	86.314	84.48
18:39	JC96164-13	86.794	87.509	88.593	89.708	86.063	87.297	85.915	84.69
18:44	MP17747A-SD1	82.417	71.883	84.862	83.084	77.912	88.718	84.274	78.163
18:49	MP17747A-PS1	86.288	84.899	86.125	88.043	83.679	86.717	84.307	83.007
18:54	ZZZZZZ	85.836	83.894	85.42	87.837	84.077	86.589	85.729	83.409
18:59	ZZZZZZ	86.04	83.671	85.823	87.087	83.837	87.316	85.894	82.516
19:04	ZZZZZZ	85.672	87.481	88.028	88.969	85.709	88.802	86.487	84.76
19:09	ZZZZZZ	86.776	85.8	86.621	88.386	84.736	88.538	86.421	84.571
19:15	ZZZZZZ	84.876	85.129	86.992	88.706	84.274	88.585	85.263	84.321
19:19	MA47592-CCVA9	85.622	81.423	82.495	83.262	84.463	85.102	84.285	84.885
19:24	MA47592-CCB9	87.167	81.486	82.622	85.458	83.835	86.78	86.255	85.425
19:29	ZZZZZZ	86.642	86.33	87.645	89.066	85.374	88.056	86.079	84.197
19:34	ZZZZZZ	86.113	89.688	90.536	92.621	85.619	88.231	86.595	84.033
19:39	ZZZZZZ	86.949	86.962	89.095	88.083	85.025	89.579	84.912	84.534

INTERNAL STANDARD SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
19:44	ZZZZZZ	87.441	86.195	87.88	89.047	85.444	88.912	86.739	84.667
19:50	ZZZZZZ	87.924	86.007	86.857	88.053	85.365	88.737	86.669	85.118
19:54	ZZZZZZ	86.329	88.786	89.603	91.433	85.56	88.244	85.804	84.136
20:00	ZZZZZZ	88.702	88.422	92.362	95.714	87.084	91.125	91.618	86.267
20:05	ZZZZZZ	90.451	91.118	94.298	89.691	88.512	93.312	86.95	88.566
20:10	MA47592-CCVA10	88.577	84.029	85.803	86.633	86.746	89.819	87.195	87.575
20:15	MA47592-CCB10	91.571	86.692	88.059	83.881	88.779	90.879	86.221	89.215
20:20	ZZZZZZ	88.832	88.23	91.032	91.764	86.496	89.995	88.297	85.763
20:25	ZZZZZZ	88.185	93.327	92.504	92.657	89.221	91.813	88.85	87.241
20:30	ZZZZZZ	87.94	91.835	92.066	93.731	88.073	90.587	87.992	86.537
20:35	ZZZZZZ	90.479	90.801	89.421	91.988	88.384	90.603	89.368	88.419
20:40	ZZZZZZ	90.219	86.227	87.231	86.795	89.158	90.978	88.383	88.884
20:45	ZZZZZZ	89.132	86.377	86.845	87.666	88.393	91.843	89.055	88.605
20:50	MA47592-CCVA11	89.383	85.875	86.181	85.384	88.19	88.773	86.772	89.059
20:55	MA47592-CCB11	91.384	85.906	86.865	86.024	87.618	91.059	88.061	88.326
21:00	ZZZZZZ	91.983	86.118	85.96	85.955	88.316	89.659	87.309	88.695
21:05	ZZZZZZ	90.483	86.155	86.504	86.239	87.878	90.18	87.392	87.745

! = 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 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
11:23	MA47592-STD1	No results reported for the elements associated with this internal standard.							
11:28	MA47592-STD2	No results reported for the elements associated with this internal standard.							
11:33	MA47592-STD3	100	100	100	100	100	100	100	100
11:38	MA47592-STD4	100.175	100.825	99.248	100.068	101.978	100.6	101.53	100.122
11:44	MA47592-STD5	102.703	100.705	100.673	101.614	101.825	101.178	101.656	100.106
11:49	MA47592-STD6	102.77	100.471	100.046	101.138	101.451	100.109	102.352	99.876
11:54	MA47592-STD7	101.468	99.794	99.592	101.126	100.759	99.88	100.988	99.693
12:00	MA47592-STD8	101.266	99.065	98.591	99.582	100.108	100.35	101.103	100.36
12:05	MA47592-STD9	100.274	98.766	97.977	98.623	100.18	99.633	99.951	99.062
12:10	MA47592-STD10	101.268	99.597	97.743	98.75	100.242	99.01	100.466	99.063
12:15	MA47592-STD11	100.34	97.601	94.712	97.004	97.72	96.041	99.073	97.425
12:20	MA47592-STD12	97.927	96.972	93.072	94.328	95.855	95.426	97.182	96.188
12:25	ZZZZZZ	102.372	99.917	97.875	99.926	102.188	99.051	100.947	99.845
12:30	MA47592-ICVA1	No results reported for the elements associated with this internal standard.							
12:35	MA47592-ICV1	99.722	97.38	96.503	98.538	100.876	97.866	99.47	97
12:41	MA47592-ICVA2	97.814	96.247	93.887	94.752	96.332	96.232	97.099	97.945
12:49	MA47592-ICB1	102.241	101.471	97.452	99.506	103.963	98.652	101.289	99.279
12:54	MA47592-CCVA1	99.469	96.422	94.306	95.591	96.787	96.564	97.624	97.244
12:59	MA47592-CCB1	100.161	97.674	96.536	97.735	100.062	97.71	100.056	96.99
13:04	MA47592-CRI1	101.029	98.451	96.22	98.741	101.032	98.17	101.042	99.408
13:09	MA47592-ICSA1	98.315	97.444	85.658	88.837	92.319	91.128	92.802	94.488
13:14	MA47592-ICSAB1	99.966	97.239	86.239	89.626	91.824	91.459	92.821	95.105
13:19	ZZZZZZ	98.913	99.755	97.16	98.06	102.207	99.892	97.915	102.195
13:24	ZZZZZZ	97.82	100.754	95.678	98.019	103.047	98.485	97.174	101.682
13:29	MA47592-CCVA2	99.209	101.591	93.73	96.495	101.887	97.373	96.531	101.181
13:34	MA47592-CCB2	98.723	101.873	95.669	98.1	104.575	99.652	97.319	101.846
13:39	MP17720A-MB1	97.979	102.155	96.002	97.789	104.396	99.356	96.533	104.067
13:44	MP17720A-B2	98.763	101.848	94.445	97.326	103.428	97.893	96.385	102.334
13:49	MP17720A-S3	101.843	101.912	93.095	96.556	99.7	97.993	97.29	105.978
13:54	MP17720A-S4	99.572	100.382	92.868	95.023	98.969	97.844	95.777	104.847
13:59	JC95615-1	99.351	100.667	93.102	95.104	98.172	97.632	95.475	104.785
14:04	MP17720A-SD1	101.747	99.705	97.514	98.385	99.462	100.286	99.143	102.68
14:09	MP17720A-PS1	97.25	97.749	92.885	93.362	97.439	97.085	93.971	103.585

INTERNAL STANDARD SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
14:14	ZZZZZZ	98.35	97.543	92.415	93.159	96.66	96.246	94.591	104.581
14:19	MA47592-CCVA3	99.066	99.046	93.929	94.863	99.366	96.803	96.086	100.208
14:24	MA47592-CCB3	98.858	97.702	97.526	97.654	101.245	99.743	96.936	103.643
14:29	ZZZZZZ	97.078	97.1	91.707	92.168	96.468	95.985	93.339	104.15
14:34	ZZZZZZ	97.494	97.505	92.385	92.791	96.293	96.023	94.34	102.41
14:39	MP17745-MB1	103.367	103.073	100.487	99.229	105.511	101.897	96.795	105.289
14:44	MP17745-B2	101.612	101.639	94.911	95.839	102.235	97.538	93.882	103.186
14:49	MP17745-S3	99.489	96.538	84.993	86.447	91.672	91.526	89.693	99.039
14:54	MP17745-S4	98.78	98.242	86.091	86.945	92.762	92.54	90.391	100.959
14:59	JC95642-1	100.655	100.469	86.227	87.851	95.1	93.174	91.612	97.165
15:04	MP17745-SD1	106.471	106.532	97.016	98.605	102.146	102.25	101.733	106.256
15:09	MA47592-CCVA4	104.519	104.653	97.631	98.832	102.746	101.631	99.85	105.778
15:14	MA47592-CCB4	103.259	104.167	98.494	100.53	105.539	101.138	99.913	107.049
15:19	MP17745-PS1	99.854	97.711	86.164	88.467	92.717	93.141	91.975	100.24
15:24	ZZZZZZ	99.154	96.835	84.734	86.249	90.71	91.515	89.954	97.406
15:29	ZZZZZZ	98.811	94.914	83.803	85.763	88.003	90.653	89.282	96.754
15:34	JC96281-1	99.981	102.805	90.773	93.046	101.003	96.487	93.622	102.781
15:39	MP17725-MB1	103.653	105.225	92.505	96.757	106.029	98.764	94.555	102.691
15:44	ZZZZZZ	101.802	104.095	93.579	95.861	105.093	96.794	93.641	104.038
15:49	MP17725-B2	96.749	100.925	89.033	91.562	101.951	94.652	90.307	101.82
15:54	MP17725-S3	95.445	96.163	82.832	85.119	92.145	89.695	87.419	96.827
15:59	MA47592-CCVA5	100.102	106.873	94.457	95.158	107.578	98.922	95.965	105.811
16:04	MA47592-CCB5	99.859	100.656	95.418	96.835	102.875	99.112	97.169	104.206
16:09	MP17725-S4	95.893	96.829	83.168	85.521	92.276	89.481	88.413	96.736
16:14	JC96034-1	95.371	95.474	83.457	85.553	91.843	89.442	88.243	98.636
16:19	MP17725-SD1	99.166	98.272	91.595	92.333	96.738	96.052	95.629	102.459
16:24	ZZZZZZ	97.019	95.89	85.802	87.3	92.027	90.723	89.294	100.653
16:29	ZZZZZZ	91.565	91.776	80.307	81.482	87.133	86.325	84.607	93.607
16:34	ZZZZZZ	91.972	85.453	78.335	79.056	79.039	84.863	83.626	89.195
16:39	ZZZZZZ	87.133	83.235	75.307	75.389	78.436	81.96	80.169	86.338
16:44	ZZZZZZ	85.552	82.653	78.428	73.604	79.074	84.749	78.503	92.318
16:49	MA47592-CCVA6	90.023	89.059	85.147	86.136	89.066	88.243	88.608	88.896
16:54	MA47592-CCB6	89.452	89.407	86.816	86.344	91.263	89.102	89.333	87.773

INTERNAL STANDARD SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
16:59	ZZZZZZ	92.01	91.11	92.46	85.08	92.186	96.831	86.991	100.533
17:04	ZZZZZZ	93.212	92.77	85.419	85.936	92.995	89.442	87.324	91.351
17:09	ZZZZZZ	93.883	94.447	85.111	85.858	92.928	90.019	87.721	96.105
17:14	ZZZZZZ	96.93	96.435	88.631	89.719	95.638	93.006	91.158	96.176
17:19	ZZZZZZ	95.674	95.293	88.236	88.894	96.701	92.525	89.96	101.033
17:24	ZZZZZZ	98.186	99.608	88.422	90.393	101.532	92.892	91.866	101.541
17:29	ZZZZZZ	97.535	95.515	90.456	90.397	96.973	94.273	91.375	101.528
17:34	ZZZZZZ	92.718	92.96	85.894	87.161	94.255	90.82	87.603	95.373
17:39	MA47592-CCVA7	93.158	91.179	89.876	89.099	91.869	93.824	92.251	96.644
17:44	MA47592-CCB7	92.325	89.429	90.359	90.109	92.347	92.749	91.866	91.939
17:49	ZZZZZZ	95.963	93.621	90.2	89.598	95.159	93.931	90.858	95.961
17:54	ZZZZZZ	94.662	92.662	88.504	87.484	93.879	92.977	89.654	98.072
17:59	ZZZZZZ	88.761	86.551	80.523	81.213	84.653	86.626	84.519	91.043
18:04	ZZZZZZ	92.224	90.724	87.499	87.325	93.601	91.524	87.984	92.943
18:09	MP17747A-MB1	90.521	87.35	88.452	88.991	90.671	92.094	90.118	91.91
18:14	MP17747A-B2	86.909	84.125	84.764	84.267	86.64	88.421	85.576	89.605
18:19	MP17747A-S3	86.939	86.006	82.936	83.808	86.079	87.321	86.146	91.613
18:24	MP17747A-S4	85.866	85.56	83.155	82.917	86.239	87.429	85.436	90.007
18:29	MA47592-CCVA8	86.593	88.13	84.072	83.798	90.541	87.576	86.762	89.878
18:34	MA47592-CCB8	87.995	84.989	83.685	86.395	88.499	86.061	88.76	86.825
18:39	JC96164-13	85.383	83.47	84.206	82.731	85.128	87.254	86.769	88.867
18:44	MP17747A-SD1	87.435	82.897	74.348	84.38	85.159	75.933	88.429	75.309
18:49	MP17747A-PS1	85.147	82.332	82.31	81.262	83.111	86.06	84.53	87.485
18:54	ZZZZZZ	85.924	84.021	83.624	82.535	85.828	86.71	85.87	87.955
18:59	ZZZZZZ	85.604	83.316	83.176	82.92	84.83	86.321	85.141	87.903
19:04	ZZZZZZ	86.385	83.201	83.668	82.699	84.773	86.842	86.444	88.45
19:09	ZZZZZZ	87.139	83.987	84.017	83.502	85.853	87.358	86.726	88.035
19:15	ZZZZZZ	85.871	83.767	82.871	82.639	84.017	86.725	86.076	90.615
19:19	MA47592-CCVA9	86.205	83.302	83.782	82.35	84.867	87.084	85.546	87.549
19:24	MA47592-CCB9	87.439	85.301	86.78	84.794	89.511	88.103	87.258	87.692
19:29	ZZZZZZ	86.327	84.24	83.862	82.279	85.269	86.238	85.834	87.657
19:34	ZZZZZZ	85.762	83.857	82.132	81.822	84.381	86.473	85.35	88.62
19:39	ZZZZZZ	86.901	82.118	85.053	84.089	83.537	88.199	87.259	89.343

INTERNAL STANDARD SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
19:44	ZZZZZZ	86.712	84.557	84.193	83.789	85.816	88.137	86.453	89.364
19:50	ZZZZZZ	86.127	84.297	85.873	84.326	86.702	89.063	87.071	92.348
19:54	ZZZZZZ	85.499	83.063	83.459	82.708	84.343	86.489	85.126	88.669
20:00	ZZZZZZ	89.615	89.457	86.158	86.411	91.11	89.405	89.381	90.053
20:05	ZZZZZZ	92.046	85.318	88.136	88.328	85.196	90.633	91.181	97.117
20:10	MA47592-CCVA10	88.411	86.317	86.04	85.442	86.887	88.214	88.112	88.593
20:15	MA47592-CCB10	91.857	85.793	89.137	89.735	87.486	91.497	90.693	89.089
20:20	ZZZZZZ	88.882	85.415	83.589	84.4	86.712	86.727	86.807	87.166
20:25	ZZZZZZ	88.56	84.712	85.896	84.418	86.073	88.592	86.895	96.182
20:30	ZZZZZZ	88.515	85.148	84.71	83.049	85.034	88.391	87.255	91.763
20:35	ZZZZZZ	88.98	86.7	87.914	85.326	88.486	90.486	88.042	94.989
20:40	ZZZZZZ	90.853	87.081	89.044	88.92	90.158	90.546	90.499	89.679
20:45	ZZZZZZ	91.796	88.01	89.057	88.347	91.02	89.889	90.248	92.072
20:50	MA47592-CCVA11	89.92	87.088	86.831	85.262	87.362	90.022	87.761	91.956
20:55	MA47592-CCB11	90.01	87.144	88.35	87.902	89.115	89.87	89.506	87.266
21:00	ZZZZZZ	89.958	86.7	89.074	87.273	89.401	89.994	89.47	91.066
21:05	ZZZZZZ	89.991	87.654	88.125	88.153	89.366	89.555	89.242	88.359

! = 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 %

INTERNAL STANDARD SUMMARY

Login Number: JC96281
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File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
11:23	MA47592-STD1	No results reported for the elements associated with this internal standard.					
11:28	MA47592-STD2	No results reported for the elements associated with this internal standard.					
11:33	MA47592-STD3	100	100	100	100	100	100
11:38	MA47592-STD4	100.649	101.468	100.326	100.085	99.63	99.76
11:44	MA47592-STD5	101.022	101.255	100.004	101.254	100.606	101.104
11:49	MA47592-STD6	100.618	101.779	101.538	100.752	100.247	101.142
11:54	MA47592-STD7	100.882	101.308	99.952	100.199	100.342	101.16
12:00	MA47592-STD8	100.138	101.708	100.948	100.234	100.733	101.001
12:05	MA47592-STD9	99.94	101.504	99.662	99.131	98.644	99.427
12:10	MA47592-STD10	99.689	101.607	98.857	99.262	98.751	99.383
12:15	MA47592-STD11	99.186	99.945	98.411	98.871	96.38	96.901
12:20	MA47592-STD12	98.469	100.306	97.335	98.906	93.792	94.891
12:25	ZZZZZZ	100.115	102.683	99.617	99.882	98.772	100.265
12:30	MA47592-ICVA1	No results reported for the elements associated with this internal standard.					
12:35	MA47592-ICV1	98.71	101.608	98.048	98.028	98.134	99.244
12:41	MA47592-ICVA2	97.438	99.152	98.295	97.509	95.841	95.437
12:49	MA47592-ICB1	100.2	104.721	99.244	100.108	98.133	100.012
12:54	MA47592-CCVA1	97.639	99.674	98.237	98.248	95.543	96.121
12:59	MA47592-CCB1	98.593	100.661	97.652	97.862	97.686	98.567
13:04	MA47592-CRI1	99.367	101.384	98.314	99.368	98.365	98.908
13:09	MA47592-ICSA1	94.668	98.717	95.712	95.502	86.322	85.92
13:14	MA47592-ICSAB1	94.902	98.579	96.153	95.191	86.11	85.09
13:19	ZZZZZZ	97.776	102.845	99.628	98.329	100.231	98.057
13:24	ZZZZZZ	97.448	103.199	100.671	97.839	99.976	99.053
13:29	MA47592-CCVA2	98.626	105.112	100.625	99.616	97.502	97.451
13:34	MA47592-CCB2	97.224	104.909	101.153	98.174	100.56	99.238
13:39	MP17720A-MB1	98.105	104.922	101.464	98.489	102.88	101.404
13:44	MP17720A-B2	97.873	105.573	100.448	99.068	100.124	98.485
13:49	MP17720A-S3	101.33	105.421	118.547	116.77	97.523	96.955
13:54	MP17720A-S4	100.365	105.384	117.353	115.588	97.806	96.656
13:59	JC95615-1	98.815	104.205	117.636	114.593	97.343	96.425
14:04	MP17720A-SD1	98.33	101.955	104.61	101.641	100.534	98.72
14:09	MP17720A-PS1	97.48	103.435	116.137	111.171	95.719	94.172

INTERNAL STANDARD SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
14:14	ZZZZZZ	97.81	103.514	116.651	112.819	96.162	94.321
14:19	MA47592-CCVA3	96.247	101.865	100.11	96.504	95.767	94.032
14:24	MA47592-CCB3	96.656	101.478	100.438	97.761	99.141	97.511
14:29	ZZZZZZ	96.773	103.032	116.894	112.11	94.908	92.957
14:34	ZZZZZZ	97.246	102.412	116.105	112.03	95.758	93.724
14:39	MP17745-MB1	96.826	104.039	102.883	97.088	105.341	100.059
14:44	MP17745-B2	96.218	103.669	100.464	97.042	99.574	96.235
14:49	MP17745-S3	92.291	98.624	98.001	93.464	87.639	85.158
14:54	MP17745-S4	93.601	99.566	98.439	94.573	87.61	85.018
14:59	JC95642-1	93.799	102.063	98.115	94.273	87.089	85.547
15:04	MP17745-SD1	100.688	104.516	102.325	100.553	98.251	97.12
15:09	MA47592-CCVA4	98.451	104.198	103.033	99.708	98.358	96.565
15:14	MA47592-CCB4	98.789	104.11	101.478	99.217	100.125	98.624
15:19	MP17745-PS1	94.004	99.417	97.379	94.531	89.062	85.906
15:24	ZZZZZZ	91.919	98.123	97.466	92.737	86.332	83.283
15:29	ZZZZZZ	92.337	95.484	96.499	93.221	84.583	82.86
15:34	JC96281-1	95.243	106.01	100.036	96.395	96.322	93.087
15:39	MP17725-MB1	96.58	106.572	99.711	97.182	97.872	96.268
15:44	ZZZZZZ	95.476	106.889	100.689	96.288	98.622	95.524
15:49	MP17725-B2	93.854	104.983	98.793	94.539	96.424	92.621
15:54	MP17725-S3	91.917	99.415	101.241	97.522	86.613	84.359
15:59	MA47592-CCVA5	97.151	110.129	101.879	97.502	98.057	94.581
16:04	MA47592-CCB5	96.211	102.152	99.213	96.768	98.474	96.378
16:09	MP17725-S4	92.676	100.141	100.91	97.199	87.089	84.364
16:14	JC96034-1	92.036	100.022	100.906	97.47	87.199	84.328
16:19	MP17725-SD1	95.218	99.682	98.662	96.743	94.602	92.791
16:24	ZZZZZZ	91.874	97.647	96.425	92.603	87.794	85.549
16:29	ZZZZZZ	89.015	95.197	93.399	89.747	82.713	80.214
16:34	ZZZZZZ	86.503	86.819	90.306	86.855	76.547	74.712
16:39	ZZZZZZ	84.246	88.172	89.552	86.757	75.762	74.057
16:44	ZZZZZZ	82.2	89.099	93.59	85.065	78.476	72.72
16:49	MA47592-CCVA6	88.598	93.674	89.841	89.436	86.707	87.052
16:54	MA47592-CCB6	87.905	93.596	89.518	87.968	88.303	88.057

INTERNAL STANDARD SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
16:59	ZZZZZZ	88.725	96.766	97.491	89.141	94.43	88.455
17:04	ZZZZZZ	89.046	98.25	92.671	90.161	90.505	89.668
17:09	ZZZZZZ	90.562	97.716	93.718	91.412	90.29	88.222
17:14	ZZZZZZ	92.812	99.539	96.512	94.393	92.837	91
17:19	ZZZZZZ	92.308	99.968	96.229	92.847	93.377	91.055
17:24	ZZZZZZ	93.401	105.025	95.762	93.851	93.048	91.865
17:29	ZZZZZZ	92.76	99.336	96.82	93.531	94.025	91.431
17:34	ZZZZZZ	90.376	98.561	94.956	90.704	91.977	88.968
17:39	MA47592-CCVA7	92.511	95.315	94.635	92.792	91.406	90.046
17:44	MA47592-CCB7	90.298	93.679	94.075	90.87	91.671	90.931
17:49	ZZZZZZ	91.525	97.257	94.74	91.714	92.83	91.52
17:54	ZZZZZZ	91.469	97.979	95.3	91.111	93.121	89.66
17:59	ZZZZZZ	87.82	93.206	92.894	88.775	83.766	80.865
18:04	ZZZZZZ	90.436	96.921	94.049	90.787	91.945	89.933
18:09	MP17747A-MB1	90.94	92.893	93.6	91.4	94.024	92.601
18:14	MP17747A-B2	87.24	90.01	90.363	88.453	88.487	87.159
18:19	MP17747A-S3	88.198	92.595	97.906	96.543	86.393	85.709
18:24	MP17747A-S4	87.513	92.504	97.386	94.178	85.915	84.444
18:29	MA47592-CCVA8	87.226	94.977	88.891	87.896	86.241	86.194
18:34	MA47592-CCB8	87.345	90.266	85.365	87.139	86.356	88.307
18:39	JC96164-13	87.083	90.368	96.682	94.652	86.597	85.46
18:44	MP17747A-SD1	87.657	88.762	76.857	89.232	77.829	87.767
18:49	MP17747A-PS1	85.535	89.422	95.328	92.457	85.313	83.911
18:54	ZZZZZZ	87.097	90.783	94.253	93.023	87.23	86.018
18:59	ZZZZZZ	87.228	90.11	93.778	92.184	85.875	85.51
19:04	ZZZZZZ	87.328	90.348	97.261	95.73	85.307	84.773
19:09	ZZZZZZ	86.612	90.167	95.4	92.753	86.815	86.391
19:15	ZZZZZZ	87.08	89.65	94.941	92.748	85.651	85.342
19:19	MA47592-CCVA9	86.067	88.899	88.554	86.336	85.433	84.595
19:24	MA47592-CCB9	86.176	90.573	87.929	86.14	87.362	86.42
19:29	ZZZZZZ	86.026	89.767	95.578	92.264	86.24	84.67
19:34	ZZZZZZ	86.359	90.657	98.716	95.56	84.551	83.583
19:39	ZZZZZZ	88.113	88.468	98.365	96.32	87.691	86.493

INTERNAL STANDARD SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
Analyst: SN Run ID: MA47592
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19	Istd#20	Istd#21	Istd#22
19:44	ZZZZZZ	86.975	90.534	96.816	93.618	86.439	86.299
19:50	ZZZZZZ	87.213	90.722	94.903	92.12	86.994	86.792
19:54	ZZZZZZ	86.756	89.718	97.61	94.575	85.083	83.866
20:00	ZZZZZZ	89.132	96.2	98.283	96.969	87.443	87.783
20:05	ZZZZZZ	91.454	88.861	99.428	98.905	89.34	89.432
20:10	MA47592-CCVA10	87.772	89.681	89.926	87.942	85.811	85.434
20:15	MA47592-CCB10	89.187	87.119	90.105	88.783	87.921	88.775
20:20	ZZZZZZ	86.744	90.649	95.481	94.065	85.412	85.342
20:25	ZZZZZZ	87.513	90.287	96.76	93.646	85.187	84.252
20:30	ZZZZZZ	87.808	90.655	96.657	95.323	84.445	83.592
20:35	ZZZZZZ	86.922	91.102	96.626	93.551	88.375	86.061
20:40	ZZZZZZ	87.76	90.619	90.412	88.341	87.733	87.419
20:45	ZZZZZZ	87.213	90.531	89.315	87.123	87.699	86.942
20:50	MA47592-CCVA11	86.832	90.379	89.823	87.392	86.021	84.917
20:55	MA47592-CCB11	87.032	89.555	89.273	86.952	87.713	86.345
21:00	ZZZZZZ	86.747	89.595	88.881	86.86	87.507	86.673
21:05	ZZZZZZ	86.939	90.198	88.885	87.017	87.159	86.736

! = 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 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47592 Units: ug/l

Time:				12:49		12:59		13:34	
Sample ID:				ICB1		CCB1		CCB2	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28	20						
Antimony	2.0	.094	1.5						
Arsenic	0.50	.013	1.0	0.00423	<1.5	0.0116	<1.5	0.0113	<1.5
Barium	1.0	.008	0.50						
Beryllium	0.50	.004	0.25						
Boron	25	.65	20						
Cadmium	0.50	.004	2.0						
Calcium	250	6.1	50						
Chromium	1.0	.014	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.021	4.0						
Iron	25	.43	13						
Lead	0.50	.009	1.0						
Magnesium	250	.15	130						
Manganese	1.0	.007	1.0						
Molybdenum	1.0	.015	0.50						
Nickel	1.0	.017	3.0						
Potassium	250	.71	50						
Selenium	0.50	.072	0.50						
Silver	0.50	.004	0.50						
Sodium	250	1	100						
Strontium	5.0	.003	5.0						
Thallium	0.50	.004	0.50						
Tin	5.0	.071	2.5						
Titanium	1.0	.035	1.0						
Vanadium	1.0	.009	1.0						
Zinc	5.0	.029	7.5						

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
QC Limits: result < 1/2 RL Run ID: MA47592 Units: ug/l

Time:				14:24		15:14		16:04	
Sample ID:				CCB3		CCB4		CCB5	
Metal	RL	IDL	LOD	raw	final	raw	final	raw	final
Aluminum	25	.28	20						
Antimony	2.0	.094	1.5						
Arsenic	0.50	.013	1.0	0.0168	<1.5	0.0129	<1.5	0.00505	<0.50
Barium	1.0	.008	0.50						
Beryllium	0.50	.004	0.25						
Boron	25	.65	20						
Cadmium	0.50	.004	2.0						
Calcium	250	6.1	50						
Chromium	1.0	.014	3.0						
Cobalt	0.50	.002	0.25						
Copper	2.0	.021	4.0						
Iron	25	.43	13						
Lead	0.50	.009	1.0						
Magnesium	250	.15	130						
Manganese	1.0	.007	1.0						
Molybdenum	1.0	.015	0.50						
Nickel	1.0	.017	3.0						
Potassium	250	.71	50						
Selenium	0.50	.072	0.50						
Silver	0.50	.004	0.50						
Sodium	250	1	100						
Strontium	5.0	.003	5.0						
Thallium	0.50	.004	0.50						
Tin	5.0	.071	2.5						
Titanium	1.0	.035	1.0						
Vanadium	1.0	.009	1.0						
Zinc	5.0	.029	7.5						

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47592 Units: ug/l

Time:		12:35			12:41			12:54	
Sample ID:	ICV	ICV1		ICVA	ICVA2		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony									
Arsenic				60	62.5	104.2	50	49.4	98.8
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc									

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47592 Units: ug/l

Time:		13:29			14:19			15:09	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	50	50.5	101.0	50	51.1	102.2	50	50.9	101.8
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium									
Chromium									
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								

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47592 Units: ug/l

Time:		15:59	
Sample ID:	CCVA	CCVA5	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	50	50.8	101.6
Barium	anr		
Beryllium	anr		
Boron			
Cadmium	anr		
Calcium			
Chromium			
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		

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

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA47592 Units: ug/l

Time:			13:04	
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	0.500	100.0
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		
Cobalt	0.50	0.25	anr	
Copper	2.0	2.0		
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: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XA100819M1L.CSV Date Analyzed: 10/08/19 Methods: SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA47592 Units: ug/l

Time:			13:09		13:14	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	97800	97.8	94500	94.5
Antimony			0.268		0.208	
Arsenic		20	0.0866		18.5	92.5
Barium			0.223		0.198	
Beryllium			0.00419		0.000234	
Boron		50	3.07		55.7	111.4
Cadmium		20	-0.303		17.8	89.0
Calcium	100000	100000	96800	96.8	96300	96.3
Chromium		20	0.248		18.5	92.5
Cobalt		20	0.190		18.0	90.0
Copper		20	-0.0244		16.5	82.5
Iron	100000	100000	92400	92.4	89300	89.3
Lead			0.0866		0.0795	
Magnesium	100000	100000	94400	94.4	91700	91.7
Manganese		20	0.401		18.8	94.0
Molybdenum	2000	2000	2170	108.5	2120	106.0
Nickel		20	0.632		17.5	87.5
Potassium	100000	100000	98600	98.6	95600	95.6
Selenium		20	0.124		20.1	100.5
Silver		20	0.0173		17.9	89.5
Sodium	100000	100000	94400	94.4	91900	91.9
Strontium	2000	2000	2010	100.5	1980	99.0
Thallium			0.00769		0.00524	
Tin	2000	2000	1950	97.5	1900	95.0
Titanium	2000	2000	1860	93.0	1800	90.0
Vanadium		20	-0.0480		20.4	102.0
Zinc		20	0.712		16.1	80.5

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17745
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 10/07/19

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.55	32		
Antimony	4.0	.19	1.7		
Arsenic	3.0	.026	.94	0.16	<3.0
Barium	2.0	.016	.73		
Beryllium	1.0	.008	.15		
Boron	50	1.3	14		
Cadmium	6.0	.008	.17		
Calcium	500	12	64		
Chromium	8.0	.028	.62		
Cobalt	1.0	.004	.17		
Copper	10	.042	1.9		
Iron	50	.86	19		
Lead	3.0	.018	.52		
Magnesium	500	.3	46		
Manganese	4.0	.014	.63		
Molybdenum	2.0	.03	.45		
Nickel	8.0	.034	.95		
Potassium	500	1.4	68		
Selenium	2.0	.14	.55		
Silver	2.0	.008	.16		
Sodium	500	2.1	140		
Strontium	20	.006	2.4		
Thallium	2.0	.008	.17		
Tin	10	.14	2.6		
Titanium	4.0	.07	1.6		
Vanadium	3.0	.018	1.8		
Zinc	20	.058	5.4		

Associated samples MP17745: JC96281-1

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: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17745 Methods: SW846 6020B
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/07/19

Metal	JC95642-1 Original	MS	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum					
Antimony					
Arsenic	6.6	79.2	80	90.8	75-125
Barium					
Beryllium					
Boron					
Cadmium					
Calcium					
Chromium					
Cobalt					
Copper					
Iron	anr				
Lead	anr				
Magnesium					
Manganese	anr				
Molybdenum					
Nickel					
Potassium					
Selenium					
Silver					
Sodium					
Strontium					
Thallium	anr				
Tin					
Titanium					
Vanadium					
Zinc					

Associated samples MP17745: JC96281-1

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: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17745 Methods: SW846 6020B
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/07/19

Metal	JC95642-1 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	6.6	78.8	80	90.3	0.5	20
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron	anr					
Lead	anr					
Magnesium						
Manganese	anr					
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium						
Zinc						

Associated samples MP17745: JC96281-1

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: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17745
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 10/07/19

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum				
Antimony				
Arsenic	74.9	80	93.6	80-120
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP17745: JC96281-1

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17745
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 10/07/19

Metal	JC95642-1 Original	SDL 2:10	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	6.60	7.54	14.3*(a)	0-10
Barium				
Beryllium				
Boron				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	anr			
Lead	anr			
Magnesium				
Manganese	anr			
Molybdenum				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium				
Zinc				

Associated samples MP17745: JC96281-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Serial dilution indicates possible matrix interference.

POST DIGESTATE SPIKE SUMMARY

Login Number: JC96281
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP17745
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 10/07/19

Metal	Sample ml	Final ml	JC95642-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.14	10	6.599085	6.031563	82.18736	0.2	4	80	95.2	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 MP17745: JC96281-1

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: JC96281
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: AGICPMS1 **Effective Date:** 01/31/19

Analyte	IDL ug/l
Aluminum	.045
Aluminum	.276
Antimony	.094
Arsenic	.12
Arsenic	.013
Barium	.008
Beryllium	.004
Boron	.648
Cadmium	.007
Cadmium	.004
Calcium	6.11
Chromium	.036
Chromium	.014
Cobalt	.0041
Cobalt	.002
Copper	.1044
Copper	.021
Iron	1.21
Iron	.432
Lead	.009
Magnesium	.033
Magnesium	.152
Manganese	.006
Manganese	.007
Molybdenum	.015
Nickel	.046
Nickel	.017
Potassium	.506
Potassium	.707
Selenium	.503
Selenium	.072
Silver	.004
Sodium	.357
Sodium	1.037
Strontium	.003
Thallium	.004
Tin	.025
Tin	.071
Titanium	.035
Titanium	.035
Vanadium	.112
Vanadium	.009
Zinc	.041
Zinc	.029

Instrument Detection Limits

Job Number: JC96281
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: AGICPMS1 **Effective Date:** 01/31/19

Analyte	IDL ug/l

The above applies to the following instrument runs:
MA47592

Instrument Linear Ranges

Job Number: JC96281
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

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: JC96281
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: AGICPMS1 **Effective Date:** 09/10/18

Analyte	Linear Range ug/l
Zinc	100

The above applies to the following instrument runs:
MA47592

Metals Analysis

Raw Data

Quantitation Report

File Name	001CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 11:23
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	10/8/2019 13:38
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	163.33	24.00	9.038E-06	Pulse	0.25	3
B			1	0.018	ug/l	221.94	4,823.02	1.816E-03	Pulse	0.15	3
Ca			1	0.280	ug/l	125.60	11,991.38	3.445E-03	Pulse	0.10	3
Sr			1	-0.001	ug/l	-56.83	416.69	1.078E-04	Pulse	0.10	3
Mo			1	-0.001	ug/l	-184.57	50.00	1.294E-05	Pulse	0.10	3
Ag			1	-0.001	ug/l	-208.01	30.00	7.829E-06	Pulse	0.10	3
Sn			1	-0.013	ug/l	-135.90	1,863.55	4.839E-04	Pulse	0.10	3
Sb			1	0.002	ug/l	94.17	266.68	4.929E-05	Pulse	0.10	3
Ba			1	-0.006	ug/l	-55.57	36.67	6.783E-06	Pulse	0.10	3
Tl			1	0.000	ug/l	247.80	26.67	8.260E-06	Pulse	0.10	3
Pb			1	0.003	ug/l	161.62	250.01	7.745E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	95.07	220.01	6.806E-05	Pulse	0.10	3
Pb			1	0.002	ug/l	171.51	1,000.06	3.096E-04	Pulse	0.10	3
Na			2	0.053	ug/l	171.82	10,527.81	5.690E-02	Pulse	0.30	3
Mg			2	0.003	ug/l	229.20	153.34	8.287E-04	Pulse	0.30	3
Al			2	-0.389	ug/l	-8.23	223.34	1.207E-03	Pulse	0.30	3
K			2	1.545	ug/l	34.51	18,756.22	1.014E-01	Pulse	0.30	3
Ca			2	-0.813	ug/l	-33.71	123.34	6.665E-04	Pulse	0.30	3
Ti			2	0.097	ug/l	14.82	3.33	1.804E-05	Pulse	0.30	3
V			2	-0.004	ug/l	-170.11	786.70	4.252E-03	Pulse	0.30	3
Cr			2	0.009	ug/l	38.91	865.59	4.678E-03	Pulse	0.30	3
Mn			2	0.005	ug/l	88.01	115.56	6.243E-04	Pulse	0.30	3
Fe			2	0.036	ug/l	145.28	4,460.66	2.410E-02	Pulse	0.30	3
Co			2	-0.002	ug/l	-51.62	52.21	2.822E-04	Pulse	0.30	3
Ni			2	-0.013	ug/l	-29.87	145.56	7.868E-04	Pulse	0.30	3
Cu			2	-0.223	ug/l	-6.58	1,889.02	1.021E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.099	ug/l	54.28	491.13	2.655E-03	Pulse	0.30	3
As			2	0.007	ug/l	56.55	23.33	1.261E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	-196.55	1.11	1.192E-06	Pulse	0.30	3
Sn			2	0.015	ug/l	21.37	612.24	6.612E-04	Pulse	0.30	3
Se			3	0.004	ug/l	92.37	3.00	1.545E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,654,955.40	0.24	100.0	Pulse	0.10	3
1	Sc		3,480,810.05	0.50	100.0	Pulse	0.10	3
1	Ge		591,034.31	0.66	100.0	Pulse	0.10	3
1	Ge		820,676.06	0.86	100.0	Pulse	0.10	3
1	Rh		3,868,354.63	0.65	100.0	Pulse	0.10	3
1	In		3,852,186.34	1.03	100.0	Pulse	0.10	3
1	Tb		5,410,135.96	0.73	100.0	Analog	0.10	3
1	Ho		525,227.96	1.08	100.0	Pulse	0.10	3
1	Bi		3,227,012.87	0.55	100.0	Pulse	0.10	3
2	Sc		185,032.91	0.29	100.0	Pulse	0.30	3
2	Ge		95,527.21	0.60	100.0	Pulse	0.30	3
2	Ge		143,639.01	1.23	100.0	Pulse	0.30	3
2	Rh		2,306,536.99	0.65	100.0	Pulse	0.30	3
2	In		926,060.87	0.33	100.0	Pulse	0.30	3
2	Tb		3,045,116.48	0.22	100.0	Pulse	0.30	3
2	Ho		301,731.73	0.64	100.0	Pulse	0.30	3
2	Bi		2,008,803.74	0.64	100.0	Pulse	0.30	3
3	Sc		227,262.99	0.69	100.0	Pulse	0.30	3
3	Ge		127,875.37	1.77	100.0	Pulse	0.30	3
3	Ge		193,774.82	1.64	100.0	Pulse	0.30	3
3	Rh		1,900,178.67	0.77	100.0	Pulse	0.30	3
3	Tb		3,129,445.01	0.34	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 11:28
Sample Name	STDA
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	10/8/2019 13:38
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	0.020	ug/l	15.83	288.01	1.094E-04	Pulse	0.25	3
B			1	0.012	ug/l	107.78	4,725.23	1.795E-03	Pulse	0.15	3
Ca			1	0.646	ug/l	33.59	12,281.67	3.568E-03	Pulse	0.10	3
Sr			1	0.004	ug/l	69.29	656.70	1.715E-04	Pulse	0.10	3
Mo			1	0.011	ug/l	15.01	156.67	4.097E-05	Pulse	0.10	3
Ag			1	-0.001	ug/l	-55.98	23.33	6.157E-06	Pulse	0.10	3
Sn			1	0.006	ug/l	148.92	2,106.93	5.557E-04	Pulse	0.10	3
Sb			1	0.016	ug/l	21.36	496.70	9.151E-05	Pulse	0.10	3
Ba			1	0.003	ug/l	354.90	96.67	1.785E-05	Pulse	0.10	3
Tl			1	0.007	ug/l	10.65	336.69	1.043E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	28.90	356.69	1.105E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	14.90	313.35	9.702E-05	Pulse	0.10	3
Pb			1	0.011	ug/l	13.01	1,530.10	4.739E-04	Pulse	0.10	3
Na			2	0.097	ug/l	78.64	10,547.81	5.735E-02	Pulse	0.30	3
Mg			2	0.086	ug/l	89.40	224.46	1.221E-03	Pulse	0.30	3
Al			2	-0.267	ug/l	-61.02	257.78	1.401E-03	Pulse	0.30	3
K			2	1.899	ug/l	34.54	18,870.76	1.026E-01	Pulse	0.30	3
Ca			2	-0.142	ug/l	-205.94	143.34	7.794E-04	Pulse	0.30	3
Ti			2	0.116	ug/l	18.95	7.78	4.232E-05	Pulse	0.30	3
V			2	0.010	ug/l	52.73	874.48	4.754E-03	Pulse	0.30	3
Cr			2	0.013	ug/l	74.27	897.81	4.881E-03	Pulse	0.30	3
Mn			2	0.010	ug/l	24.31	140.00	7.610E-04	Pulse	0.30	3
Fe			2	0.000	ug/l	159161.41	4,182.80	2.274E-02	Pulse	0.30	3
Co			2	0.006	ug/l	25.15	163.33	8.880E-04	Pulse	0.30	3
Ni			2	-0.005	ug/l	-88.17	172.22	9.362E-04	Pulse	0.30	3
Cu			2	-0.217	ug/l	-3.56	1,939.03	1.054E-02	Pulse	0.30	3
Zn			2	0.090	ug/l	38.67	475.57	2.586E-03	Pulse	0.30	3
As			2	0.025	ug/l	37.36	37.67	2.047E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.024	ug/l	38.69	52.21	5.653E-05	Pulse	0.30	3
Sn			2	0.021	ug/l	70.03	640.02	6.913E-04	Pulse	0.30	3
Se			3	0.005	ug/l	134.09	3.27	1.691E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,631,993.28	1.21	100.0	Pulse	0.10	3
1	Sc		3,441,412.87	0.72	100.0	Pulse	0.10	3
1	Ge		583,687.50	0.36	100.0	Pulse	0.10	3
1	Ge		807,663.09	0.52	100.0	Pulse	0.10	3
1	Rh		3,824,116.40	1.10	100.0	Pulse	0.10	3
1	In		3,793,243.97	1.14	100.0	Pulse	0.10	3
1	Tb		5,422,162.63	1.51	100.0	Analog	0.10	3
1	Ho		519,472.73	0.85	100.0	Pulse	0.10	3
1	Bi		3,229,087.25	0.53	100.0	Pulse	0.10	3
2	Sc		183,919.26	0.48	100.0	Pulse	0.30	3
2	Ge		95,207.37	1.32	100.0	Pulse	0.30	3
2	Ge		142,854.17	0.55	100.0	Pulse	0.30	3
2	Rh		2,304,130.88	0.35	100.0	Pulse	0.30	3
2	In		925,383.87	0.81	100.0	Pulse	0.30	3
2	Tb		3,072,304.25	0.64	100.0	Pulse	0.30	3
2	Ho		303,623.25	1.09	100.0	Pulse	0.30	3
2	Bi		2,006,762.84	1.13	100.0	Pulse	0.30	3
3	Sc		223,139.86	0.67	100.0	Pulse	0.30	3
3	Ge		128,339.02	0.42	100.0	Pulse	0.30	3
3	Ge		193,394.00	0.34	100.0	Pulse	0.30	3
3	Rh		1,911,091.17	0.74	100.0	Pulse	0.30	3
3	Tb		3,128,479.88	0.72	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 11:33
Sample Name	STDA
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	10/8/2019 13:38
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	---	21.33	8.127E-06	Pulse	0.25	3
B			1	0.000	ug/l	---	4,594.08	1.751E-03	Pulse	0.15	3
Ca			1	0.000	ug/l	---	11,441.08	3.352E-03	Pulse	0.10	3
Sr			1	0.000	ug/l	---	476.70	1.249E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	1156.86	56.67	1.486E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	711.35	50.00	1.335E-05	Pulse	0.10	3
Sn			1	0.001	ug/l	1291.70	2,010.23	5.344E-04	Pulse	0.10	3
Sb			1	0.000	ug/l	---	226.68	4.249E-05	Pulse	0.10	3
Ba			1	0.000	ug/l	603.69	80.00	1.500E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	346.16	23.33	7.325E-06	Pulse	0.10	3
Pb			1	0.000	ug/l	591.12	216.68	6.817E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	61.08	170.01	5.341E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	1240.90	843.37	2.652E-04	Pulse	0.10	3
Na			2	0.000	ug/l	---	10,396.61	5.635E-02	Pulse	0.30	3
Mg			2	0.000	ug/l	---	150.00	8.133E-04	Pulse	0.30	3
Al			2	-0.377	ug/l	-35.31	226.67	1.227E-03	Pulse	0.30	3
K			2	1.658	ug/l	12.20	18,777.36	1.018E-01	Pulse	0.30	3
Ca			2	-0.085	ug/l	-515.77	145.56	7.889E-04	Pulse	0.30	3
Ti			2	0.082	ug/l	0.00	0.00		Pulse	0.30	3
V			2	0.000	ug/l	---	811.14	4.394E-03	Pulse	0.30	3
Cr			2	0.004	ug/l	177.21	816.70	4.424E-03	Pulse	0.30	3
Mn			2	0.000	ug/l	---	93.33	5.062E-04	Pulse	0.30	3
Fe			2	-0.023	ug/l	-86.44	4,033.87	2.186E-02	Pulse	0.30	3
Co			2	0.000	ug/l	---	81.10	4.400E-04	Pulse	0.30	3
Ni			2	0.000	ug/l	---	191.11	1.036E-03	Pulse	0.30	3
Cu			2	-0.142	ug/l	-12.69	2,670.25	1.448E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.033	ug/l	71.07	395.56	2.145E-03	Pulse	0.30	3
As			2	0.001	ug/l	845.75	18.67	1.013E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	1285.03	2.22	2.409E-06	Pulse	0.30	3
Sn			2	0.015	ug/l	62.70	613.36	6.636E-04	Pulse	0.30	3
Se			3	0.000	ug/l	9178.22	2.27	1.186E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,622,939.91	0.56	100.0	Pulse	0.10	3
1	Sc		3,413,653.70	0.48	100.0	Pulse	0.10	3
1	Ge		584,548.55	0.67	100.0	Pulse	0.10	3
1	Ge		807,294.96	0.94	100.0	Pulse	0.10	3
1	Rh		3,816,891.82	0.45	100.0	Pulse	0.10	3
1	In		3,760,893.85	0.76	100.0	Pulse	0.10	3
1	Tb		5,329,523.04	1.70	100.0	Mix	0.10	3
1	Ho		515,108.64	0.14	100.0	Pulse	0.10	3
1	Bi		3,180,910.78	1.23	100.0	Pulse	0.10	3
2	Sc		184,529.89	0.94	100.0	Pulse	0.30	3
2	Ge		94,473.18	1.15	100.0	Pulse	0.30	3
2	Ge		141,968.83	0.99	100.0	Pulse	0.30	3
2	Rh		2,293,501.51	0.44	100.0	Pulse	0.30	3
2	In		924,094.12	0.53	100.0	Pulse	0.30	3
2	Tb		3,053,946.41	0.56	100.0	Pulse	0.30	3
2	Ho		303,905.61	0.58	100.0	Pulse	0.30	3
2	Bi		2,011,746.87	0.62	100.0	Pulse	0.30	3
3	Sc		219,822.00	0.80	100.0	Pulse	0.30	3
3	Ge		125,651.81	0.91	100.0	Pulse	0.30	3
3	Ge		191,190.59	0.71	100.0	Pulse	0.30	3
3	Rh		1,898,146.73	0.53	100.0	Pulse	0.30	3
3	Tb		3,127,790.29	0.42	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 11:38
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	10/8/2019 13:38
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	0.466	ug/l	5.33	6,107.84	2.321E-03	Pulse	0.25	3
B			1	23.181	ug/l	0.68	224,397.28	8.526E-02	Pulse	0.15	3
Ca			1	253.439	ug/l	1.04	299,988.62	8.839E-02	Pulse	0.10	3
Sr			1	4.828	ug/l	0.60	242,693.40	6.406E-02	Pulse	0.10	3
Mo			1	0.958	ug/l	3.82	9,096.24	2.402E-03	Pulse	0.10	3
Ag			1	0.476	ug/l	3.53	11,047.62	2.920E-03	Pulse	0.10	3
Sn			1	4.812	ug/l	3.29	71,379.26	1.887E-02	Pulse	0.10	3
Sb			1	1.883	ug/l	1.44	31,278.73	5.862E-03	Pulse	0.10	3
Ba			1	0.974	ug/l	2.36	6,858.43	1.285E-03	Pulse	0.10	3
Tl			1	0.485	ug/l	2.25	20,494.80	6.468E-03	Pulse	0.10	3
Pb			1	0.490	ug/l	2.99	7,328.76	2.313E-03	Pulse	0.10	3
Pb			1	0.488	ug/l	0.90	6,374.92	2.011E-03	Pulse	0.10	3
Pb			1	0.490	ug/l	1.82	29,345.83	9.261E-03	Pulse	0.10	3
Na			2	244.481	ug/l	0.62	478,048.17	2.581E+00	Pulse	0.30	3
Mg			2	250.604	ug/l	1.06	220,131.02	1.188E+00	Pulse	0.30	3
Al			2	27.561	ug/l	1.27	8,426.64	4.549E-02	Pulse	0.30	3
K			2	248.497	ug/l	0.23	177,338.74	9.574E-01	Pulse	0.30	3
Ca			2	269.491	ug/l	2.59	8,542.29	4.611E-02	Pulse	0.30	3
Ti			2	1.062	ug/l	4.81	228.89	1.235E-03	Pulse	0.30	3
V			2	0.957	ug/l	1.81	7,423.98	4.008E-02	Pulse	0.30	3
Cr			2	0.951	ug/l	2.35	9,205.99	4.970E-02	Pulse	0.30	3
Mn			2	0.971	ug/l	3.14	4,706.28	2.540E-02	Pulse	0.30	3
Fe			2	25.088	ug/l	0.65	181,377.19	9.792E-01	Pulse	0.30	3
Co			2	0.494	ug/l	1.90	6,723.18	3.630E-02	Pulse	0.30	3
Ni			2	1.021	ug/l	1.11	3,871.62	2.090E-02	Pulse	0.30	3
Cu			2	1.869	ug/l	1.60	22,201.72	1.199E-01	Pulse	0.30	3
Zn			2	4.839	ug/l	1.00	7,280.59	3.931E-02	Pulse	0.30	3
As			2	0.491	ug/l	3.76	405.34	2.189E-03	Pulse	1.00	3
Cd			2	0.466	ug/l	4.37	977.16	1.042E-03	Pulse	0.30	3
Sn			2	4.849	ug/l	0.59	21,913.16	2.336E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.489	ug/l	3.73	98.33	5.101E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,631,954.77	0.31	100.3	Pulse	0.10	3
1	Sc		3,393,811.93	0.39	99.4	Pulse	0.10	3
1	Ge		581,552.03	0.82	99.5	Pulse	0.10	3
1	Ge		804,516.50	1.54	99.7	Pulse	0.10	3
1	Rh		3,788,188.38	0.66	99.2	Pulse	0.10	3
1	In		3,783,440.66	0.46	100.6	Pulse	0.10	3
1	Tb		5,336,044.30	0.63	100.1	Mix	0.10	3
1	Ho		516,788.86	0.89	100.3	Pulse	0.10	3
1	Bi		3,169,137.77	0.65	99.6	Pulse	0.10	3
2	Sc		185,228.99	1.03	100.4	Pulse	0.30	3
2	Ge		96,128.26	0.14	101.8	Pulse	0.30	3
2	Ge		142,217.65	0.18	100.2	Pulse	0.30	3
2	Rh		2,295,061.99	0.76	100.1	Pulse	0.30	3
2	In		938,229.98	0.67	101.5	Pulse	0.30	3
2	Tb		3,073,767.38	0.59	100.6	Pulse	0.30	3
2	Ho		304,164.14	0.43	100.1	Pulse	0.30	3
2	Bi		2,006,924.57	0.50	99.8	Pulse	0.30	3
3	Sc		220,634.50	0.18	100.4	Pulse	0.30	3
3	Ge		127,075.57	1.02	101.1	Pulse	0.30	3
3	Ge		192,768.64	0.11	100.8	Pulse	0.30	3
3	Rh		1,935,693.88	0.14	102.0	Pulse	0.30	3
3	Tb		3,173,697.10	0.59	101.5	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 11:44
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	10/8/2019 13:38
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	5.004	ug/l	1.34	65,677.31	2.485E-02	Pulse	0.25	3
B			1	5.211	ug/l	1.39	54,246.92	2.052E-02	Pulse	0.15	3
Ca			1	13.472	ug/l	2.51	26,982.66	7.872E-03	Pulse	0.10	3
Sr			1	4.911	ug/l	0.56	250,416.90	6.517E-02	Pulse	0.10	3
Mo			1	4.948	ug/l	1.78	47,441.05	1.235E-02	Pulse	0.10	3
Ag			1	5.005	ug/l	0.31	116,466.75	3.061E-02	Pulse	0.10	3
Sn			1	4.940	ug/l	0.73	73,653.23	1.936E-02	Pulse	0.10	3
Sb			1	4.844	ug/l	1.43	80,108.18	1.502E-02	Pulse	0.10	3
Ba			1	4.959	ug/l	3.95	34,592.70	6.486E-03	Pulse	0.10	3
Tl			1	4.877	ug/l	1.84	207,870.89	6.496E-02	Pulse	0.10	3
Pb			1	4.944	ug/l	1.36	72,739.35	2.273E-02	Pulse	0.10	3
Pb			1	5.023	ug/l	0.73	65,201.04	2.037E-02	Pulse	0.10	3
Pb			1	4.981	ug/l	0.55	293,675.32	9.177E-02	Pulse	0.10	3
Na			2	5.933	ug/l	1.99	22,042.25	1.176E-01	Pulse	0.30	3
Mg			2	5.514	ug/l	5.68	5,048.59	2.694E-02	Pulse	0.30	3
Al			2	5.538	ug/l	8.99	1,986.81	1.060E-02	Pulse	0.30	3
K			2	7.006	ug/l	10.21	22,544.20	1.203E-01	Pulse	0.30	3
Ca			2	34.007	ug/l	5.01	1,222.29	6.520E-03	Pulse	0.30	3
Ti			2	5.164	ug/l	8.59	1,201.17	6.411E-03	Pulse	0.30	3
V			2	5.025	ug/l	1.32	35,937.81	1.917E-01	Pulse	0.30	3
Cr			2	5.030	ug/l	1.90	45,825.36	2.445E-01	Pulse	0.30	3
Mn			2	5.058	ug/l	2.22	24,389.21	1.301E-01	Pulse	0.30	3
Fe			2	5.421	ug/l	1.27	42,994.67	2.294E-01	Pulse	0.30	3
Co			2	5.055	ug/l	1.94	68,794.67	3.671E-01	Pulse	0.30	3
Ni			2	5.207	ug/l	3.30	19,176.86	1.023E-01	Pulse	0.30	3
Cu			2	5.136	ug/l	1.33	54,560.26	2.911E-01	Pulse	0.30	3
Zn			2	5.182	ug/l	2.02	7,864.20	4.196E-02	Pulse	0.30	3
As			2	5.082	ug/l	2.32	4,072.85	2.173E-02	Pulse	1.00	3
Cd			2	5.091	ug/l	1.79	10,669.06	1.136E-02	Pulse	0.30	3
Sn			2	5.003	ug/l	0.75	22,618.57	2.408E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	5.058	ug/l	2.12	995.50	5.171E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,643,305.14	0.82	100.8	Pulse	0.10	3
1	Sc		3,427,715.99	0.20	100.4	Pulse	0.10	3
1	Ge		588,089.16	0.42	100.6	Pulse	0.10	3
1	Ge		811,218.71	0.71	100.5	Pulse	0.10	3
1	Rh		3,842,596.51	1.35	100.7	Pulse	0.10	3
1	In		3,805,210.11	0.40	101.2	Pulse	0.10	3
1	Tb		5,335,166.17	1.34	100.1	Mix	0.10	3
1	Ho		515,127.12	0.88	100.0	Pulse	0.10	3
1	Bi		3,200,183.08	0.99	100.6	Pulse	0.10	3
2	Sc		187,420.47	0.64	101.6	Pulse	0.30	3
2	Ge		97,154.13	0.35	102.8	Pulse	0.30	3
2	Ge		145,805.70	0.70	102.7	Pulse	0.30	3
2	Rh		2,330,525.67	1.00	101.6	Pulse	0.30	3
2	In		939,396.94	0.79	101.7	Pulse	0.30	3
2	Tb		3,085,143.35	0.57	101.0	Pulse	0.30	3
2	Ho		307,716.44	0.57	101.3	Pulse	0.30	3
2	Bi		2,033,964.50	0.20	101.1	Pulse	0.30	3
3	Sc		221,709.68	1.97	100.9	Pulse	0.30	3
3	Ge		127,723.35	0.91	101.6	Pulse	0.30	3
3	Ge		192,539.35	1.22	100.7	Pulse	0.30	3
3	Rh		1,932,793.95	0.48	101.8	Pulse	0.30	3
3	Tb		3,167,056.13	0.33	101.3	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 11:49
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	10/8/2019 13:38
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	24.921	ug/l	1.33	326,122.04	1.237E-01	Pulse	0.25	3
B			1	24.564	ug/l	0.34	237,929.50	9.024E-02	Pulse	0.15	3
Ca			1	39.226	ug/l	2.40	56,493.11	1.651E-02	Pulse	0.10	3
Sr			1	24.454	ug/l	1.58	1,237,243.00	3.240E-01	Pulse	0.10	3
Mo			1	24.896	ug/l	0.89	237,044.84	6.208E-02	Pulse	0.10	3
Ag			1	24.915	ug/l	0.45	573,429.34	1.523E-01	Pulse	0.10	3
Sn			1	24.930	ug/l	0.56	359,642.06	9.552E-02	Pulse	0.10	3
Sb			1	24.886	ug/l	0.86	409,696.57	7.697E-02	Pulse	0.10	3
Ba			1	24.895	ug/l	0.71	172,989.68	3.250E-02	Pulse	0.10	3
Tl			1	24.699	ug/l	0.66	1,048,921.10	3.290E-01	Pulse	0.10	3
Pb			1	25.090	ug/l	0.76	366,939.19	1.151E-01	Pulse	0.10	3
Pb			1	24.800	ug/l	1.44	320,345.54	1.005E-01	Pulse	0.10	3
Pb			1	25.023	ug/l	0.73	1,466,899.66	4.600E-01	Pulse	0.10	3
Na			2	25.706	ug/l	0.99	60,189.65	3.218E-01	Pulse	0.30	3
Mg			2	25.156	ug/l	2.62	22,448.44	1.200E-01	Pulse	0.30	3
Al			2	32.039	ug/l	2.48	9,836.31	5.259E-02	Pulse	0.30	3
K			2	27.214	ug/l	1.49	35,603.36	1.903E-01	Pulse	0.30	3
Ca			2	133.102	ug/l	3.39	4,335.07	2.318E-02	Pulse	0.30	3
Ti			2	24.917	ug/l	1.42	5,861.10	3.133E-02	Pulse	0.30	3
V			2	25.065	ug/l	0.73	175,615.57	9.389E-01	Pulse	0.30	3
Cr			2	25.128	ug/l	0.84	225,285.13	1.204E+00	Pulse	0.30	3
Mn			2	25.066	ug/l	0.68	120,253.68	6.429E-01	Pulse	0.30	3
Fe			2	25.668	ug/l	1.10	187,293.76	1.001E+00	Pulse	0.30	3
Co			2	25.138	ug/l	0.86	341,100.04	1.824E+00	Pulse	0.30	3
Ni			2	25.159	ug/l	1.04	91,724.44	4.904E-01	Pulse	0.30	3
Cu			2	25.179	ug/l	1.06	250,951.92	1.342E+00	Pulse	0.30	3
Zn			2	26.862	ug/l	1.91	39,203.49	2.096E-01	Pulse	0.30	3
As			2	25.202	ug/l	1.29	20,082.33	1.074E-01	Pulse	1.00	3
Cd			2	24.602	ug/l	0.60	51,905.79	5.488E-02	Pulse	0.30	3
Sn			2	25.272	ug/l	0.66	112,780.41	1.192E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	25.530	ug/l	0.87	5,004.10	2.605E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,636,588.30	0.94	100.5	Pulse	0.10	3
1	Sc		3,421,329.12	0.92	100.2	Pulse	0.10	3
1	Ge		587,167.65	1.21	100.4	Pulse	0.10	3
1	Ge		808,034.34	1.52	100.1	Pulse	0.10	3
1	Rh		3,818,631.61	0.30	100.0	Pulse	0.10	3
1	In		3,764,994.19	0.38	100.1	Pulse	0.10	3
1	Tb		5,322,914.71	0.52	99.9	Mix	0.10	3
1	Ho		523,028.47	0.16	101.5	Pulse	0.10	3
1	Bi		3,188,771.31	0.94	100.2	Pulse	0.10	3
2	Sc		187,051.18	0.89	101.4	Pulse	0.30	3
2	Ge		97,319.70	0.96	103.0	Pulse	0.30	3
2	Ge		145,900.84	1.07	102.8	Pulse	0.30	3
2	Rh		2,319,609.77	0.60	101.1	Pulse	0.30	3
2	In		945,827.80	0.57	102.4	Pulse	0.30	3
2	Tb		3,072,816.34	0.78	100.6	Pulse	0.30	3
2	Ho		306,190.65	1.06	100.8	Pulse	0.30	3
2	Bi		2,034,727.28	0.38	101.1	Pulse	0.30	3
3	Sc		220,600.71	0.92	100.4	Pulse	0.30	3
3	Ge		126,991.27	1.64	101.1	Pulse	0.30	3
3	Ge		192,090.57	0.87	100.5	Pulse	0.30	3
3	Rh		1,925,696.73	0.93	101.5	Pulse	0.30	3
3	Tb		3,183,441.96	0.61	101.8	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 11:54
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	10/8/2019 13:38
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	49.884	ug/l	0.35	651,158.37	2.476E-01	Pulse	0.25	3
B			1	48.206	ug/l	0.75	461,292.78	1.754E-01	Pulse	0.15	3
Ca			1	72.425	ug/l	0.72	93,824.36	2.765E-02	Pulse	0.10	3
Sr			1	49.364	ug/l	1.36	2,485,562.36	6.539E-01	Pulse	0.10	3
Mo			1	50.389	ug/l	2.01	477,486.41	1.256E-01	Pulse	0.10	3
Ag			1	49.996	ug/l	0.47	1,147,993.21	3.056E-01	Pulse	0.10	3
Sn			1	50.010	ug/l	0.34	717,773.71	1.911E-01	Pulse	0.10	3
Sb			1	49.807	ug/l	0.15	818,263.37	1.540E-01	Pulse	0.10	3
Ba			1	50.258	ug/l	0.48	348,512.92	6.560E-02	Pulse	0.10	3
Tl			1	49.494	ug/l	0.44	2,103,976.06	6.592E-01	Pulse	0.10	3
Pb			1	49.661	ug/l	0.60	726,787.83	2.277E-01	Pulse	0.10	3
Pb			1	49.611	ug/l	0.52	641,283.82	2.009E-01	Pulse	0.10	3
Pb			1	49.973	ug/l	0.18	2,931,355.58	9.184E-01	Pulse	0.10	3
Na			2	51.481	ug/l	1.40	109,714.65	5.879E-01	Pulse	0.30	3
Mg			2	50.602	ug/l	0.17	44,902.71	2.406E-01	Pulse	0.30	3
Al			2	50.538	ug/l	1.46	15,283.71	8.190E-02	Pulse	0.30	3
K			2	51.084	ug/l	0.76	50,961.67	2.731E-01	Pulse	0.30	3
Ca			2	269.872	ug/l	1.96	8,616.77	4.617E-02	Pulse	0.30	3
Ti			2	49.526	ug/l	0.71	11,640.83	6.238E-02	Pulse	0.30	3
V			2	50.122	ug/l	1.46	349,556.29	1.873E+00	Pulse	0.30	3
Cr			2	50.385	ug/l	1.32	449,906.56	2.411E+00	Pulse	0.30	3
Mn			2	50.301	ug/l	1.36	240,667.34	1.290E+00	Pulse	0.30	3
Fe			2	51.023	ug/l	1.46	367,260.91	1.968E+00	Pulse	0.30	3
Co			2	50.391	ug/l	0.62	682,086.32	3.655E+00	Pulse	0.30	3
Ni			2	50.344	ug/l	0.98	182,932.04	9.803E-01	Pulse	0.30	3
Cu			2	50.014	ug/l	1.07	493,305.28	2.643E+00	Pulse	0.30	3
Zn			2	50.416	ug/l	0.46	73,108.58	3.918E-01	Pulse	0.30	3
As			2	50.085	ug/l	0.71	39,800.56	2.133E-01	Pulse	1.00	3
Cd			2	50.429	ug/l	0.69	104,974.50	1.125E-01	Pulse	0.30	3
Sn			2	50.728	ug/l	0.83	222,801.68	2.388E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	50.220	ug/l	0.87	9,774.58	5.123E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,629,841.79	0.79	100.3	Pulse	0.10	3
1	Sc		3,392,793.91	0.32	99.4	Pulse	0.10	3
1	Ge		583,557.49	1.02	99.8	Pulse	0.10	3
1	Ge		806,165.64	1.23	99.9	Pulse	0.10	3
1	Rh		3,801,312.23	0.92	99.6	Pulse	0.10	3
1	In		3,756,366.36	0.22	99.9	Pulse	0.10	3
1	Tb		5,313,182.22	0.82	99.7	Mix	0.10	3
1	Ho		514,863.81	0.41	100.0	Pulse	0.10	3
1	Bi		3,191,797.24	0.43	100.3	Pulse	0.10	3
2	Sc		186,615.87	0.54	101.1	Pulse	0.30	3
2	Ge		96,987.74	1.22	102.7	Pulse	0.30	3
2	Ge		144,052.30	0.56	101.5	Pulse	0.30	3
2	Rh		2,319,326.78	1.03	101.1	Pulse	0.30	3
2	In		933,226.50	0.80	101.0	Pulse	0.30	3
2	Tb		3,080,890.15	0.49	100.9	Pulse	0.30	3
2	Ho		304,511.73	0.63	100.2	Pulse	0.30	3
2	Bi		2,035,082.42	0.41	101.2	Pulse	0.30	3
3	Sc		219,590.47	0.61	99.9	Pulse	0.30	3
3	Ge		126,593.51	1.30	100.7	Pulse	0.30	3
3	Ge		190,796.90	1.16	99.8	Pulse	0.30	3
3	Rh		1,912,557.98	0.34	100.8	Pulse	0.30	3
3	Tb		3,168,693.55	0.37	101.3	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:00
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	10/8/2019 13:38
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	100.078	ug/l	0.70	1,311,229.33	4.967E-01	Pulse	0.25	3
B			1	97.000	ug/l	1.73	927,027.57	3.512E-01	Pulse	0.15	3
Ca			1	139.017	ug/l	0.78	169,855.41	5.000E-02	Pulse	0.10	3
Sr			1	100.463	ug/l	0.68	5,007,541.59	1.331E+00	Mix	0.10	3
Mo			1	101.499	ug/l	1.21	952,128.97	2.530E-01	Pulse	0.10	3
Ag			1	101.606	ug/l	1.20	2,343,939.44	6.211E-01	Pulse	0.10	3
Sn			1	100.703	ug/l	0.79	1,450,095.55	3.842E-01	Pulse	0.10	3
Sb			1	100.135	ug/l	0.47	1,655,815.76	3.096E-01	Pulse	0.10	3
Ba			1	99.916	ug/l	0.87	697,426.11	1.304E-01	Pulse	0.10	3
Tl			1	100.966	ug/l	0.39	4,308,704.42	1.345E+00	Pulse	0.10	3
Pb			1	100.910	ug/l	0.65	1,482,391.23	4.626E-01	Pulse	0.10	3
Pb			1	100.366	ug/l	0.26	1,302,280.92	4.064E-01	Pulse	0.10	3
Pb			1	101.776	ug/l	0.71	5,992,546.68	1.870E+00	Pulse	0.10	3
Na			2	98.208	ug/l	0.38	201,477.33	1.070E+00	Pulse	0.30	3
Mg			2	98.609	ug/l	0.39	88,108.59	4.681E-01	Pulse	0.30	3
Al			2	99.562	ug/l	1.14	30,034.55	1.596E-01	Pulse	0.30	3
K			2	98.949	ug/l	1.66	82,631.32	4.390E-01	Pulse	0.30	3
Ca			2	532.197	ug/l	1.94	16,992.17	9.028E-02	Pulse	0.30	3
Ti			2	100.249	ug/l	0.80	23,786.03	1.264E-01	Pulse	0.30	3
V			2	99.922	ug/l	0.63	702,002.58	3.730E+00	Pulse	0.30	3
Cr			2	99.899	ug/l	0.54	898,891.25	4.776E+00	Pulse	0.30	3
Mn			2	99.830	ug/l	0.51	481,652.10	2.559E+00	Pulse	0.30	3
Fe			2	100.002	ug/l	0.72	721,881.48	3.835E+00	Pulse	0.30	3
Co			2	99.767	ug/l	0.44	1,361,961.95	7.236E+00	Pulse	0.30	3
Ni			2	99.778	ug/l	1.23	365,480.06	1.942E+00	Pulse	0.30	3
Cu			2	99.944	ug/l	1.17	990,115.34	5.261E+00	Pulse	0.30	3
Zn			2	100.476	ug/l	0.53	146,596.19	7.789E-01	Pulse	0.30	3
As			2	99.303	ug/l	0.85	79,573.16	4.228E-01	Pulse	1.00	3
Cd			2	100.808	ug/l	0.55	210,081.35	2.249E-01	Pulse	0.30	3
Sn			2	102.264	ug/l	0.67	449,116.49	4.807E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	102.860	ug/l	1.94	19,869.61	1.049E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,639,730.20	0.31	100.6	Pulse	0.10	3
1	Sc		3,397,106.41	0.40	99.5	Pulse	0.10	3
1	Ge		578,233.59	0.39	98.9	Pulse	0.10	3
1	Ge		803,164.83	0.74	99.5	Pulse	0.10	3
1	Rh		3,763,122.97	0.86	98.6	Pulse	0.10	3
1	In		3,774,038.52	0.59	100.3	Pulse	0.10	3
1	Tb		5,348,689.51	0.31	100.4	Mix	0.10	3
1	Ho		519,993.26	1.83	100.9	Pulse	0.10	3
1	Bi		3,204,214.43	0.99	100.7	Pulse	0.10	3
2	Sc		188,217.91	0.38	102.0	Pulse	0.30	3
2	Ge		95,240.91	0.46	100.8	Pulse	0.30	3
2	Ge		143,766.54	0.09	101.3	Pulse	0.30	3
2	Rh		2,283,916.09	0.24	99.6	Pulse	0.30	3
2	In		934,283.44	0.99	101.1	Pulse	0.30	3
2	Tb		3,058,161.82	0.32	100.1	Pulse	0.30	3
2	Ho		304,615.58	0.32	100.2	Pulse	0.30	3
2	Bi		2,031,882.70	0.66	101.0	Pulse	0.30	3
3	Sc		221,604.31	0.50	100.8	Pulse	0.30	3
3	Ge		125,216.14	0.69	99.7	Pulse	0.30	3
3	Ge		189,402.79	1.22	99.1	Pulse	0.30	3
3	Rh		1,900,187.56	0.45	100.1	Pulse	0.30	3
3	Tb		3,181,227.72	0.60	101.7	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:05
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	10/8/2019 13:38
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	23.48	118.67	4.527E-05	Pulse	0.25	3
B			1	202.225	ug/l	0.41	1,915,709.99	7.303E-01	Pulse	0.15	3
Ca			1	505.263	ug/l	0.93	581,336.08	1.729E-01	Pulse	0.10	3
Sr			1	0.038	ug/l	10.86	2,360.27	6.315E-04	Pulse	0.10	3
Mo			1	0.153	ug/l	15.06	1,476.80	3.945E-04	Pulse	0.10	3
Ag			1	0.012	ug/l	8.84	310.02	8.270E-05	Pulse	0.10	3
Sn			1	0.227	ug/l	12.31	5,237.76	1.398E-03	Pulse	0.10	3
Sb			1	0.765	ug/l	4.68	12,712.31	2.408E-03	Pulse	0.10	3
Ba			1	0.295	ug/l	6.24	2,110.22	3.997E-04	Pulse	0.10	3
Tl			1	0.025	ug/l	13.50	1,063.45	3.391E-04	Pulse	0.10	3
Pb			1	0.039	ug/l	19.32	763.38	2.434E-04	Pulse	0.10	3
Pb			1	0.046	ug/l	9.58	690.04	2.198E-04	Pulse	0.10	3
Pb			1	0.038	ug/l	9.07	3,030.23	9.656E-04	Pulse	0.10	3
Na			2	500.008	ug/l	0.68	951,915.62	5.219E+00	Pulse	0.30	3
Mg			2	497.591	ug/l	0.80	430,210.39	2.359E+00	Pulse	0.30	3
Al			2	501.061	ug/l	0.24	145,123.57	7.957E-01	Pulse	0.30	3
K			2	498.202	ug/l	1.27	332,460.34	1.823E+00	Pulse	0.30	3
Ca			2	509.002	ug/l	1.52	15,755.37	8.638E-02	Pulse	0.30	3
Ti			2	0.285	ug/l	21.41	46.67	2.554E-04	Pulse	0.30	3
V			2	-0.027	ug/l	-32.04	615.58	3.373E-03	Pulse	0.30	3
Cr			2	0.018	ug/l	44.02	932.26	5.111E-03	Pulse	0.30	3
Mn			2	0.082	ug/l	14.57	476.68	2.612E-03	Pulse	0.30	3
Fe			2	507.022	ug/l	1.15	3,529,545.83	1.935E+01	Pulse	0.30	3
Co			2	0.026	ug/l	13.95	421.59	2.310E-03	Pulse	0.30	3
Ni			2	0.061	ug/l	16.62	406.68	2.230E-03	Pulse	0.30	3
Cu			2	0.175	ug/l	13.64	5,669.93	3.109E-02	Pulse	0.30	3
Zn			2	5.600	ug/l	2.39	8,243.26	4.519E-02	Pulse	0.30	3
As			2	0.039	ug/l	18.86	48.33	2.649E-04	Pulse	1.00	3
Cd			2	0.011	ug/l	16.29	25.41	2.751E-05	Pulse	0.30	3
Sn			2	0.354	ug/l	4.61	2,081.29	2.253E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	197.083	ug/l	1.14	37,958.05	2.010E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,623,231.71	0.70	100.0	Pulse	0.10	3
1	Sc		3,362,269.01	0.66	98.5	Pulse	0.10	3
1	Ge		572,019.66	1.14	97.9	Pulse	0.10	3
1	Ge		798,578.09	1.39	98.9	Pulse	0.10	3
1	Rh		3,739,676.61	1.05	98.0	Pulse	0.10	3
1	In		3,747,101.69	0.99	99.6	Pulse	0.10	3
1	Tb		5,279,546.80	0.40	99.1	Pulse	0.10	3
1	Ho		513,367.01	0.59	99.7	Pulse	0.10	3
1	Bi		3,137,773.91	0.66	98.6	Pulse	0.10	3
2	Sc		182,387.27	0.98	98.8	Pulse	0.30	3
2	Ge		94,776.14	0.46	100.3	Pulse	0.30	3
2	Ge		142,357.81	1.21	100.3	Pulse	0.30	3
2	Rh		2,261,917.13	0.17	98.6	Pulse	0.30	3
2	In		923,640.65	0.64	100.0	Pulse	0.30	3
2	Tb		3,052,123.84	0.56	99.9	Pulse	0.30	3
2	Ho		301,263.26	0.38	99.1	Pulse	0.30	3
2	Bi		2,000,220.33	0.67	99.4	Pulse	0.30	3
3	Sc		216,961.30	0.83	98.7	Pulse	0.30	3
3	Ge		124,653.90	0.66	99.2	Pulse	0.30	3
3	Ge		188,832.00	0.76	98.8	Pulse	0.30	3
3	Rh		1,901,560.27	0.40	100.2	Pulse	0.30	3
3	Tb		3,174,837.23	0.64	101.5	Pulse	0.30	3

Quantitation Report

File Name	010CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:10
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	10/8/2019 13:38
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	18.12	34.67	1.326E-05	Pulse	0.25	3
B			1	4.259	ug/l	2.18	44,692.49	1.709E-02	Pulse	0.15	3
Ca			1	994.238	ug/l	1.00	1,128,551.47	3.370E-01	Pulse	0.10	3
Sr			1	0.011	ug/l	24.89	1,030.08	2.762E-04	Pulse	0.10	3
Mo			1	0.038	ug/l	23.42	406.68	1.089E-04	Pulse	0.10	3
Ag			1	0.002	ug/l	37.12	86.67	2.331E-05	Pulse	0.10	3
Sn			1	0.104	ug/l	19.33	3,450.51	9.266E-04	Pulse	0.10	3
Sb			1	0.250	ug/l	6.80	4,314.09	8.167E-04	Pulse	0.10	3
Ba			1	0.020	ug/l	63.66	216.68	4.120E-05	Pulse	0.10	3
Tl			1	0.007	ug/l	32.96	306.68	9.741E-05	Pulse	0.10	3
Pb			1	0.012	ug/l	27.20	380.02	1.209E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	15.88	283.35	9.014E-05	Pulse	0.10	3
Pb			1	0.010	ug/l	10.90	1,433.42	4.562E-04	Pulse	0.10	3
Na			2	969.378	ug/l	0.57	1,862,595.62	1.007E+01	Pulse	0.30	3
Mg			2	972.178	ug/l	0.35	852,631.96	4.608E+00	Pulse	0.30	3
Al			2	984.905	ug/l	0.43	289,082.00	1.562E+00	Pulse	0.30	3
K			2	967.500	ug/l	0.63	638,325.72	3.450E+00	Pulse	0.30	3
Ca			2	992.188	ug/l	0.94	31,013.37	1.676E-01	Pulse	0.30	3
Ti			2	0.154	ug/l	24.49	16.67	9.000E-05	Pulse	0.30	3
V			2	-0.022	ug/l	-43.31	661.13	3.573E-03	Pulse	0.30	3
Cr			2	0.013	ug/l	8.39	903.37	4.882E-03	Pulse	0.30	3
Mn			2	0.033	ug/l	19.04	248.89	1.345E-03	Pulse	0.30	3
Fe			2	1001.903	ug/l	0.29	7,072,246.11	3.822E+01	Analog	0.30	3
Co			2	0.048	ug/l	11.30	729.82	3.944E-03	Pulse	0.30	3
Ni			2	0.073	ug/l	9.03	455.57	2.462E-03	Pulse	0.30	3
Cu			2	0.267	ug/l	8.51	6,649.21	3.594E-02	Pulse	0.30	3
Zn			2	0.189	ug/l	13.07	620.02	3.351E-03	Pulse	0.30	3
As			2	0.021	ug/l	47.31	34.33	1.856E-04	Pulse	1.00	3
Cd			2	0.005	ug/l	50.25	12.18	1.312E-05	Pulse	0.30	3
Sn			2	0.143	ug/l	12.06	1,172.28	1.263E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	390.927	ug/l	0.90	75,924.46	3.987E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,614,848.63	0.40	99.7	Pulse	0.10	3
1	Sc		3,349,189.74	0.79	98.1	Pulse	0.10	3
1	Ge		574,968.99	0.93	98.4	Pulse	0.10	3
1	Ge		807,146.16	0.35	100.0	Pulse	0.10	3
1	Rh		3,730,752.34	0.86	97.7	Pulse	0.10	3
1	In		3,723,673.74	1.07	99.0	Pulse	0.10	3
1	Tb		5,279,606.49	1.45	99.1	Mix	0.10	3
1	Ho		509,219.06	0.61	98.9	Pulse	0.10	3
1	Bi		3,141,171.10	1.28	98.8	Pulse	0.10	3
2	Sc		185,036.53	0.24	100.3	Pulse	0.30	3
2	Ge		94,747.05	0.36	100.3	Pulse	0.30	3
2	Ge		143,769.67	0.42	101.3	Pulse	0.30	3
2	Rh		2,264,824.70	0.93	98.7	Pulse	0.30	3
2	In		928,404.96	0.41	100.5	Pulse	0.30	3
2	Tb		3,044,460.22	0.71	99.7	Pulse	0.30	3
2	Ho		301,663.41	0.17	99.3	Pulse	0.30	3
2	Bi		1,999,333.12	0.21	99.4	Pulse	0.30	3
3	Sc		216,822.65	0.62	98.6	Pulse	0.30	3
3	Ge		125,684.85	0.78	100.0	Pulse	0.30	3
3	Ge		190,420.52	0.71	99.6	Pulse	0.30	3
3	Rh		1,902,749.09	0.25	100.2	Pulse	0.30	3
3	Tb		3,178,051.33	0.48	101.6	Pulse	0.30	3

Quantitation Report

File Name	011CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:15
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	10/8/2019 13:38
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	5406.18	21.33	8.186E-06	Pulse	0.25	3
B			1	2.830	ug/l	2.20	31,140.00	1.195E-02	Pulse	0.15	3
Ca			1	5030.244	ug/l	1.15	5,523,765.13	1.691E+00	Analog	0.10	3
Sr			1	0.062	ug/l	12.92	3,437.17	9.518E-04	Pulse	0.10	3
Mo			1	0.023	ug/l	33.45	260.01	7.176E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	91.39	113.34	3.124E-05	Pulse	0.10	3
Sn			1	0.054	ug/l	12.14	2,667.04	7.386E-04	Pulse	0.10	3
Sb			1	0.141	ug/l	15.51	2,490.30	4.793E-04	Pulse	0.10	3
Ba			1	0.082	ug/l	26.47	633.37	1.217E-04	Pulse	0.10	3
Tl			1	0.004	ug/l	26.52	180.01	5.863E-05	Pulse	0.10	3
Pb			1	0.013	ug/l	20.59	386.69	1.262E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	22.89	360.02	1.173E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	11.66	1,586.76	5.176E-04	Pulse	0.10	3
Na			2	4948.010	ug/l	0.98	9,482,640.46	5.115E+01	Analog	0.30	3
Mg			2	4899.046	ug/l	0.77	4,304,372.47	2.322E+01	Pulse	0.30	3
Al			2	4960.556	ug/l	1.05	1,457,398.49	7.861E+00	Pulse	0.30	3
K			2	4898.473	ug/l	0.88	3,165,748.69	1.708E+01	Pulse	0.30	3
Ca			2	4960.160	ug/l	0.90	154,747.70	8.347E-01	Pulse	0.30	3
Ti			2	0.164	ug/l	35.71	18.89	1.024E-04	Pulse	0.30	3
V			2	-0.028	ug/l	-20.77	623.35	3.363E-03	Pulse	0.30	3
Cr			2	0.030	ug/l	21.24	1,052.27	5.676E-03	Pulse	0.30	3
Mn			2	0.121	ug/l	9.99	670.02	3.612E-03	Pulse	0.30	3
Fe			2	5024.594	ug/l	0.86	35,519,294.15	1.916E+02	Analog	0.30	3
Co			2	0.213	ug/l	4.57	2,946.64	1.590E-02	Pulse	0.30	3
Ni			2	0.596	ug/l	1.26	2,341.30	1.263E-02	Pulse	0.30	3
Cu			2	0.027	ug/l	46.18	4,322.83	2.332E-02	Pulse	0.30	3
Zn			2	0.642	ug/l	3.51	1,270.06	6.850E-03	Pulse	0.30	3
As			2	0.033	ug/l	31.63	44.33	2.393E-04	Pulse	1.00	3
Cd			2	0.004	ug/l	56.50	11.08	1.211E-05	Pulse	0.30	3
Sn			2	0.082	ug/l	4.42	893.37	9.758E-04	Pulse	0.30	3
Se			3	0.171	ug/l	8.46	34.67	1.859E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,606,656.60	0.60	99.4	Pulse	0.10	3
1	Sc		3,265,881.72	0.74	95.7	Pulse	0.10	3
1	Ge		560,316.79	0.45	95.9	Pulse	0.10	3

Quantitation Report

1	Ge		776,070.28	0.61	96.1	Pulse	0.10	3
1	Rh		3,615,037.14	1.51	94.7	Pulse	0.10	3
1	In		3,611,995.84	1.60	96.0	Pulse	0.10	3
1	Tb		5,192,300.03	1.36	97.4	Pulse	0.10	3
1	Ho		506,922.49	1.25	98.4	Pulse	0.10	3
1	Bi		3,065,754.02	1.01	96.4	Pulse	0.10	3
2	Sc		185,402.68	1.00	100.5	Pulse	0.30	3
2	Ge		95,233.16	0.11	100.8	Pulse	0.30	3
2	Ge		142,451.77	0.46	100.3	Pulse	0.30	3
2	Rh		2,224,785.88	0.51	97.0	Pulse	0.30	3
2	In		915,529.23	0.62	99.1	Pulse	0.30	3
2	Tb		3,029,102.52	0.63	99.2	Pulse	0.30	3
2	Ho		300,474.50	0.85	98.9	Pulse	0.30	3
2	Bi		1,949,411.24	0.79	96.9	Pulse	0.30	3
3	Sc		217,857.94	1.50	99.1	Pulse	0.30	3
3	Ge		125,556.82	1.43	99.9	Pulse	0.30	3
3	Ge		186,603.62	1.63	97.6	Pulse	0.30	3
3	Rh		1,854,859.99	0.76	97.7	Pulse	0.30	3
3	Tb		3,126,079.94	0.31	99.9	Pulse	0.30	3

Quantitation Report

File Name	012CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:20
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	10/8/2019 13:38
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	78.88	48.00	1.849E-05	Pulse	0.25	3
B			1	2.338	ug/l	0.27	26,421.02	1.017E-02	Pulse	0.15	3
Ca			1	9985.105	ug/l	0.58	11,009,574.42	3.354E+00	Analog	0.10	3
Sr			1	0.094	ug/l	3.25	4,880.92	1.374E-03	Pulse	0.10	3
Mo			1	0.018	ug/l	35.66	206.68	5.820E-05	Pulse	0.10	3
Ag			1	0.003	ug/l	91.77	113.34	3.150E-05	Pulse	0.10	3
Sn			1	0.050	ug/l	38.96	2,593.63	7.231E-04	Pulse	0.10	3
Sb			1	0.120	ug/l	11.12	2,126.91	4.149E-04	Pulse	0.10	3
Ba			1	0.078	ug/l	35.23	593.37	1.159E-04	Pulse	0.10	3
Tl			1	0.003	ug/l	33.55	150.00	5.027E-05	Pulse	0.10	3
Pb			1	0.013	ug/l	23.70	376.69	1.263E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	10.54	370.02	1.240E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	13.69	1,610.10	5.397E-04	Pulse	0.10	3
Na			2	10029.195	ug/l	0.71	18,930,998.14	1.036E+02	Analog	0.30	3
Mg			2	10053.364	ug/l	0.13	8,704,665.49	4.764E+01	Analog	0.30	3
Al			2	10003.291	ug/l	0.30	2,896,028.29	1.585E+01	Pulse	0.30	3
K			2	10141.974	ug/l	0.17	6,440,726.83	3.525E+01	Analog	0.30	3
Ca			2	10003.833	ug/l	0.51	307,426.99	1.683E+00	Pulse	0.30	3
Ti			2	0.116	ug/l	18.83	7.78	4.248E-05	Pulse	0.30	3
V			2	-0.031	ug/l	-3.72	594.46	3.254E-03	Pulse	0.30	3
Cr			2	0.038	ug/l	8.68	1,112.28	6.087E-03	Pulse	0.30	3
Mn			2	0.196	ug/l	4.16	1,012.27	5.540E-03	Pulse	0.30	3
Fe			2	9965.753	ug/l	1.00	69,420,508.35	3.800E+02	Analog	0.30	3
Co			2	0.437	ug/l	0.99	5,868.18	3.212E-02	Pulse	0.30	3
Ni			2	0.403	ug/l	1.91	1,622.33	8.880E-03	Pulse	0.30	3
Cu			2	0.045	ug/l	40.04	4,432.88	2.426E-02	Pulse	0.30	3
Zn			2	0.784	ug/l	0.54	1,452.30	7.949E-03	Pulse	0.30	3
As			2	0.068	ug/l	16.22	71.00	3.884E-04	Pulse	1.00	3
Cd			2	0.008	ug/l	40.93	18.86	2.099E-05	Pulse	0.30	3
Sn			2	0.077	ug/l	37.71	856.70	9.540E-04	Pulse	0.30	3
Se			3	0.107	ug/l	18.13	22.47	1.212E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,597,092.93	0.22	99.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,282,620.37	0.28	96.2	Pulse	0.10	3
1	Ge		556,460.08	1.52	95.2	Pulse	0.10	3
1	Ge		768,043.56	0.74	95.1	Pulse	0.10	3
1	Rh		3,552,447.03	0.59	93.1	Pulse	0.10	3
1	In		3,588,884.53	1.17	95.4	Pulse	0.10	3
1	Tb		5,126,353.26	0.76	96.2	Pulse	0.10	3
1	Ho		501,381.49	0.37	97.3	Pulse	0.10	3
1	Bi		2,983,429.43	0.46	93.8	Pulse	0.10	3
2	Sc		182,704.75	0.57	99.0	Pulse	0.30	3
2	Ge		93,537.94	0.81	99.0	Pulse	0.30	3
2	Ge		139,025.47	0.84	97.9	Pulse	0.30	3
2	Rh		2,163,404.36	0.97	94.3	Pulse	0.30	3
2	In		898,054.39	0.40	97.2	Pulse	0.30	3
2	Tb		3,007,195.85	0.08	98.5	Pulse	0.30	3
2	Ho		300,581.85	0.64	98.9	Pulse	0.30	3
2	Bi		1,908,970.90	0.55	94.9	Pulse	0.30	3
3	Sc		215,629.68	0.80	98.1	Pulse	0.30	3
3	Ge		123,531.38	0.18	98.3	Pulse	0.30	3
3	Ge		185,401.99	0.41	97.0	Pulse	0.30	3
3	Rh		1,819,463.75	0.31	95.9	Pulse	0.30	3
3	Tb		3,137,356.20	0.62	100.3	Pulse	0.30	3

Quantitation Report

File Name	013SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:25
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	10/8/2019 13:38
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	7.99	325.34	1.224E-04	Pulse	0.25	3
B			1	1.779	ug/l	3.62	21,694.17	8.160E-03	Pulse	0.15	3
Ca			1	2.482	ug/l	20.23	13,979.78	4.184E-03	Pulse	0.10	3
Sr			1	0.006	ug/l	23.06	756.71	2.026E-04	Pulse	0.10	3
Mo			1	0.016	ug/l	38.88	206.68	5.529E-05	Pulse	0.10	3
Ag			1	0.000	ug/l	450.04	46.67	1.252E-05	Pulse	0.10	3
Sn			1	0.012	ug/l	21.75	2,146.95	5.763E-04	Pulse	0.10	3
Sb			1	0.067	ug/l	22.32	1,330.11	2.491E-04	Pulse	0.10	3
Ba			1	0.005	ug/l	100.43	110.01	2.055E-05	Pulse	0.10	3
Tl			1	0.008	ug/l	7.85	340.02	1.082E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	44.18	366.68	1.168E-04	Pulse	0.10	3
Pb			1	0.021	ug/l	20.88	380.02	1.210E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	6.82	1,513.42	4.817E-04	Pulse	0.10	3
Na			2	0.756	ug/l	34.06	12,016.63	6.416E-02	Pulse	0.30	3
Mg			2	0.448	ug/l	28.01	552.24	2.937E-03	Pulse	0.30	3
Al			2	0.209	ug/l	37.23	404.46	2.156E-03	Pulse	0.30	3
K			2	1.676	ug/l	55.50	19,074.33	1.018E-01	Pulse	0.30	3
Ca			2	2.143	ug/l	45.65	217.78	1.164E-03	Pulse	0.30	3
Ti			2	0.217	ug/l	33.65	32.22	1.704E-04	Pulse	0.30	3
V			2	-0.024	ug/l	-10.59	657.80	3.511E-03	Pulse	0.30	3
Cr			2	0.007	ug/l	96.94	860.03	4.589E-03	Pulse	0.30	3
Mn			2	0.012	ug/l	45.36	151.12	8.063E-04	Pulse	0.30	3
Fe			2	1.004	ug/l	7.16	11,436.64	6.101E-02	Pulse	0.30	3
Co			2	0.004	ug/l	45.74	139.97	7.492E-04	Pulse	0.30	3
Ni			2	0.019	ug/l	89.30	264.45	1.411E-03	Pulse	0.30	3
Cu			2	-0.105	ug/l	-8.82	3,078.10	1.643E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.113	ug/l	12.83	517.79	2.761E-03	Pulse	0.30	3
As			2	0.035	ug/l	14.80	46.33	2.469E-04	Pulse	1.00	3
Cd			2	0.031	ug/l	17.88	67.76	7.244E-05	Pulse	0.30	3
Sn			2	0.056	ug/l	41.96	797.81	8.555E-04	Pulse	0.30	3
Se			3	0.107	ug/l	17.96	23.07	1.209E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,658,350.59	0.36	101.4	Pulse	0.10	3
1	Sc		3,341,000.99	0.55	97.9	Pulse	0.10	3
1	Ge		569,375.69	0.59	97.4	Pulse	0.10	3
1	Ge		788,378.38	0.26	97.7	Pulse	0.10	3
1	Rh		3,735,768.38	0.77	97.9	Pulse	0.10	3
1	In		3,725,221.71	0.38	99.1	Pulse	0.10	3
1	Tb		5,321,248.26	2.95	99.8	Mix	0.10	3
1	Ho		513,135.01	2.50	99.6	Pulse	0.10	3
1	Bi		3,141,862.35	0.80	98.8	Pulse	0.10	3
2	Sc		187,422.59	2.53	101.6	Pulse	0.30	3
2	Ge		95,986.63	1.52	101.6	Pulse	0.30	3
2	Ge		145,335.78	1.59	102.4	Pulse	0.30	3
2	Rh		2,291,810.05	1.43	99.9	Pulse	0.30	3
2	In		932,845.33	2.38	100.9	Pulse	0.30	3
2	Tb		3,057,450.58	1.23	100.1	Pulse	0.30	3
2	Ho		303,545.78	1.22	99.9	Pulse	0.30	3
2	Bi		2,017,069.57	0.48	100.3	Pulse	0.30	3
3	Sc		222,046.64	1.98	101.0	Pulse	0.30	3
3	Ge		127,119.60	1.38	101.2	Pulse	0.30	3
3	Ge		191,031.64	1.94	99.9	Pulse	0.30	3
3	Rh		1,939,681.03	1.19	102.2	Pulse	0.30	3
3	Tb		3,211,693.62	1.43	102.7	Pulse	0.30	3

Quantitation Report

File Name	014_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:30
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	10/8/2019 13:38
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	61.494	ug/l	5.63	773,227.25	3.052E-01	Pulse	0.25	3
B			1	122.802	ug/l	5.01	1,125,406.03	4.441E-01	Pulse	0.15	3
Ca			1	5869.426	ug/l	10.56	6,061,622.20	1.973E+00	Analog	0.10	3
Sr			1	64.078	ug/l	8.64	2,874,854.75	8.488E-01	Pulse	0.10	3
Mo			1	64.275	ug/l	9.49	542,463.45	1.602E-01	Pulse	0.10	3
Ag			1	64.612	ug/l	9.36	1,346,212.11	3.950E-01	Pulse	0.10	3
Sn			1	63.518	ug/l	9.89	826,492.46	2.426E-01	Pulse	0.10	3
Sb			1	68.312	ug/l	10.09	1,028,957.72	2.112E-01	Pulse	0.10	3
Ba			1	65.977	ug/l	10.45	419,398.14	8.611E-02	Pulse	0.10	3
Tl			1	67.369	ug/l	6.33	2,598,166.94	8.972E-01	Pulse	0.10	3
Pb			1	66.215	ug/l	7.36	878,709.88	3.036E-01	Pulse	0.10	3
Pb			1	62.476	ug/l	6.60	732,556.84	2.530E-01	Pulse	0.10	3
Pb			1	64.712	ug/l	6.94	3,442,658.20	1.189E+00	Pulse	0.10	3
Na			2	5455.863	ug/l	0.29	10,298,240.98	5.639E+01	Analog	0.30	3
Mg			2	5365.126	ug/l	0.44	4,643,046.34	2.543E+01	Pulse	0.30	3
Al			2	5530.612	ug/l	0.66	1,600,439.52	8.764E+00	Pulse	0.30	3
K			2	5351.360	ug/l	1.20	3,404,712.29	1.865E+01	Pulse	0.30	3
Ca			2	5648.266	ug/l	1.51	173,537.93	9.504E-01	Pulse	0.30	3
Ti			2	59.277	ug/l	2.25	13,635.70	7.468E-02	Pulse	0.30	3
V			2	61.812	ug/l	0.66	421,626.06	2.309E+00	Pulse	0.30	3
Cr			2	59.966	ug/l	1.31	523,764.58	2.868E+00	Pulse	0.30	3
Mn			2	61.183	ug/l	0.72	286,426.34	1.569E+00	Pulse	0.30	3
Fe			2	5498.213	ug/l	1.23	38,280,980.70	2.096E+02	Analog	0.30	3
Co			2	59.981	ug/l	1.04	794,416.80	4.351E+00	Pulse	0.30	3
Ni			2	58.909	ug/l	1.43	209,414.70	1.147E+00	Pulse	0.30	3
Cu			2	58.651	ug/l	1.25	565,356.47	3.096E+00	Pulse	0.30	3
Zn			2	59.167	ug/l	0.31	83,897.43	4.594E-01	Pulse	0.30	3
As			2	62.685	ug/l	0.92	48,738.94	2.669E-01	Pulse	1.00	3
Cd			2	60.983	ug/l	0.60	122,365.18	1.360E-01	Pulse	0.30	3
Sn			2	60.619	ug/l	0.19	256,559.96	2.852E-01	Pulse	0.30	3
Se			3	267.590	ug/l	0.76	50,573.21	2.729E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,538,004.03	4.95	96.8	Pulse	0.10	3
1	Sc		3,093,147.25	9.50	90.6	Pulse	0.10	3
1	Ge		544,024.26	6.52	93.1	Pulse	0.10	3

Quantitation Report

1	Ge		755,529.34	5.91	93.6	Pulse	0.10	3
1	Rh		3,404,138.80	8.73	89.2	Pulse	0.10	3
1	In		3,427,680.42	8.97	91.1	Pulse	0.10	3
1	Tb		4,902,643.89	9.39	92.0	Pulse	0.10	3
1	Ho		481,422.44	8.16	93.5	Pulse	0.10	3
1	Bi		2,904,031.52	6.77	91.3	Pulse	0.10	3
2	Sc		182,614.76	1.16	99.0	Pulse	0.30	3
2	Ge		93,652.91	0.92	99.1	Pulse	0.30	3
2	Ge		141,615.06	0.99	99.8	Pulse	0.30	3
2	Rh		2,184,482.06	0.50	95.2	Pulse	0.30	3
2	In		899,613.89	0.84	97.4	Pulse	0.30	3
2	Tb		2,994,740.58	0.71	98.1	Pulse	0.30	3
2	Ho		298,990.51	0.63	98.4	Pulse	0.30	3
2	Bi		1,934,532.77	0.67	96.2	Pulse	0.30	3
3	Sc		214,003.63	1.35	97.4	Pulse	0.30	3
3	Ge		122,293.88	0.07	97.3	Pulse	0.30	3
3	Ge		185,290.69	0.35	96.9	Pulse	0.30	3
3	Rh		1,829,211.18	0.43	96.4	Pulse	0.30	3
3	Tb		3,136,795.15	0.64	100.3	Pulse	0.30	3

Quantitation Report

File Name	015_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:35
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	10/8/2019 13:38
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	26.44	102.67	3.907E-05	Pulse	0.25	3
B			1	3.207	ug/l	1.26	35,009.73	1.330E-02	Pulse	0.15	3
Ca			1	4.235	ug/l	16.13	15,667.97	4.773E-03	Pulse	0.10	3
Sr			1	0.005	ug/l	35.15	726.71	1.974E-04	Pulse	0.10	3
Mo			1	0.119	ug/l	15.20	1,146.75	3.112E-04	Pulse	0.10	3
Ag			1	0.018	ug/l	24.77	440.05	1.195E-04	Pulse	0.10	3
Sn			1	0.207	ug/l	9.10	4,860.95	1.320E-03	Pulse	0.10	3
Sb			1	0.115	ug/l	5.32	2,056.88	3.977E-04	Pulse	0.10	3
Ba			1	0.017	ug/l	42.14	190.01	3.665E-05	Pulse	0.10	3
Tl			1	0.020	ug/l	5.19	843.39	2.702E-04	Pulse	0.10	3
Pb			1	0.014	ug/l	31.30	406.69	1.302E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	17.94	406.69	1.304E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	11.95	1,886.80	6.041E-04	Pulse	0.10	3
Na			2	1.409	ug/l	21.09	12,946.18	7.090E-02	Pulse	0.30	3
Mg			2	0.955	ug/l	7.85	975.60	5.341E-03	Pulse	0.30	3
Al			2	63.998	ug/l	1.89	18,849.54	1.032E-01	Pulse	0.30	3
K			2	2.621	ug/l	7.18	19,193.36	1.051E-01	Pulse	0.30	3
Ca			2	3.220	ug/l	21.79	245.56	1.344E-03	Pulse	0.30	3
Ti			2	0.198	ug/l	25.36	26.66	1.461E-04	Pulse	0.30	3
V			2	-0.035	ug/l	-20.30	563.35	3.085E-03	Pulse	0.30	3
Cr			2	0.016	ug/l	42.21	921.15	5.044E-03	Pulse	0.30	3
Mn			2	0.015	ug/l	6.02	163.34	8.945E-04	Pulse	0.30	3
Fe			2	1.837	ug/l	1.63	16,944.38	9.279E-02	Pulse	0.30	3
Co			2	0.004	ug/l	54.07	131.07	7.183E-04	Pulse	0.30	3
Ni			2	0.085	ug/l	14.29	491.12	2.689E-03	Pulse	0.30	3
Cu			2	-0.095	ug/l	-27.50	3,095.89	1.695E-02	Pulse	0.30	3
Zn			2	0.427	ug/l	3.10	947.81	5.190E-03	Pulse	0.30	3
As			2	0.136	ug/l	13.03	123.67	6.770E-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	43.96	28.79	3.135E-05	Pulse	0.30	3
Sn			2	0.277	ug/l	0.45	1,737.90	1.891E-03	Pulse	0.30	3
Se			3	0.144	ug/l	25.23	29.53	1.586E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,631,501.29	1.05	100.3	Pulse	0.10	3
1	Sc		3,283,642.97	0.80	96.2	Pulse	0.10	3
1	Ge		557,558.04	1.62	95.4	Pulse	0.10	3
1	Ge		774,728.53	1.23	96.0	Pulse	0.10	3
1	Rh		3,683,421.20	0.58	96.5	Pulse	0.10	3
1	In		3,680,648.77	1.65	97.9	Pulse	0.10	3
1	Tb		5,169,655.97	1.76	97.0	Pulse	0.10	3
1	Ho		505,054.34	0.69	98.0	Pulse	0.10	3
1	Bi		3,121,570.37	1.30	98.1	Pulse	0.10	3
2	Sc		182,621.14	0.59	99.0	Pulse	0.30	3
2	Ge		93,772.49	1.39	99.3	Pulse	0.30	3
2	Ge		141,574.12	0.39	99.7	Pulse	0.30	3
2	Rh		2,259,967.27	0.20	98.5	Pulse	0.30	3
2	In		919,197.61	0.68	99.5	Pulse	0.30	3
2	Tb		3,014,537.45	0.34	98.7	Pulse	0.30	3
2	Ho		297,911.74	0.92	98.0	Pulse	0.30	3
2	Bi		1,996,545.34	0.56	99.2	Pulse	0.30	3
3	Sc		212,483.59	0.25	96.7	Pulse	0.30	3
3	Ge		123,937.86	0.58	98.6	Pulse	0.30	3
3	Ge		186,181.66	0.06	97.4	Pulse	0.30	3
3	Rh		1,914,779.23	0.69	100.9	Pulse	0.30	3
3	Tb		3,178,087.02	0.62	101.6	Pulse	0.30	3

Quantitation Report

File Name	016_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:41
Sample Name	ICVA 5
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	10/8/2019 13:38
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	58.380	ug/l	0.41	765,273.06	2.898E-01	Pulse	0.25	3
B			1	117.240	ug/l	0.25	1,120,084.09	4.241E-01	Pulse	0.15	3
Ca			1	5524.882	ug/l	0.31	6,054,893.66	1.857E+00	Analog	0.10	3
Sr			1	59.868	ug/l	0.58	2,841,833.08	7.930E-01	Pulse	0.10	3
Mo			1	60.577	ug/l	0.93	541,169.39	1.510E-01	Pulse	0.10	3
Ag			1	59.905	ug/l	0.56	1,325,274.51	3.662E-01	Pulse	0.10	3
Sn			1	59.480	ug/l	0.53	822,138.45	2.272E-01	Pulse	0.10	3
Sb			1	63.059	ug/l	0.83	1,017,724.07	1.950E-01	Pulse	0.10	3
Ba			1	60.948	ug/l	0.73	415,198.93	7.954E-02	Pulse	0.10	3
Tl			1	64.194	ug/l	0.13	2,606,395.27	8.549E-01	Pulse	0.10	3
Pb			1	63.533	ug/l	0.20	888,039.42	2.913E-01	Pulse	0.10	3
Pb			1	59.921	ug/l	0.40	739,793.11	2.427E-01	Pulse	0.10	3
Pb			1	61.900	ug/l	0.14	3,467,864.54	1.138E+00	Pulse	0.10	3
Na			2	5414.828	ug/l	0.64	10,183,167.09	5.597E+01	Analog	0.30	3
Mg			2	5347.164	ug/l	0.56	4,610,483.01	2.534E+01	Pulse	0.30	3
Al			2	5470.547	ug/l	0.03	1,577,315.94	8.669E+00	Pulse	0.30	3
K			2	5322.481	ug/l	0.82	3,374,300.21	1.855E+01	Pulse	0.30	3
Ca			2	5633.363	ug/l	0.31	172,459.32	9.479E-01	Pulse	0.30	3
Ti			2	57.808	ug/l	1.86	13,249.83	7.283E-02	Pulse	0.30	3
V			2	61.484	ug/l	1.23	417,895.04	2.297E+00	Pulse	0.30	3
Cr			2	59.729	ug/l	0.21	519,836.63	2.857E+00	Pulse	0.30	3
Mn			2	60.611	ug/l	0.49	282,707.55	1.554E+00	Pulse	0.30	3
Fe			2	5421.509	ug/l	0.12	37,611,639.62	2.067E+02	Analog	0.30	3
Co			2	59.563	ug/l	0.40	786,046.96	4.320E+00	Pulse	0.30	3
Ni			2	59.164	ug/l	0.40	209,563.59	1.152E+00	Pulse	0.30	3
Cu			2	58.539	ug/l	0.89	562,235.19	3.090E+00	Pulse	0.30	3
Zn			2	58.837	ug/l	0.32	83,127.15	4.569E-01	Pulse	0.30	3
As			2	62.525	ug/l	0.23	48,438.32	2.662E-01	Pulse	1.00	3
Cd			2	61.248	ug/l	0.70	122,583.29	1.366E-01	Pulse	0.30	3
Sn			2	60.383	ug/l	0.45	254,900.48	2.841E-01	Pulse	0.30	3
Se			3	266.675	ug/l	0.25	50,052.91	2.720E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,641,018.90	0.92	100.7	Pulse	0.10	3
1	Sc		3,260,130.68	0.44	95.5	Pulse	0.10	3
1	Ge		556,028.27	0.57	95.1	Pulse	0.10	3

Quantitation Report

1	Ge		777,820.25	0.17	96.3	Pulse	0.10	3
1	Rh		3,583,564.95	0.57	93.9	Pulse	0.10	3
1	In		3,619,184.56	0.87	96.2	Pulse	0.10	3
1	Tb		5,220,005.96	1.19	97.9	Mix	0.10	3
1	Ho		506,324.90	1.03	98.3	Pulse	0.10	3
1	Bi		3,048,606.83	0.32	95.8	Pulse	0.10	3
2	Sc		181,942.78	0.64	98.6	Pulse	0.30	3
2	Ge		92,759.33	0.46	98.2	Pulse	0.30	3
2	Ge		138,865.77	0.51	97.8	Pulse	0.30	3
2	Rh		2,173,128.87	0.51	94.8	Pulse	0.30	3
2	In		897,289.24	0.27	97.1	Pulse	0.30	3
2	Tb		2,975,719.12	1.44	97.4	Pulse	0.30	3
2	Ho		296,333.88	1.40	97.5	Pulse	0.30	3
2	Bi		1,919,949.16	0.94	95.4	Pulse	0.30	3
3	Sc		210,337.82	0.94	95.7	Pulse	0.30	3
3	Ge		121,513.92	0.79	96.7	Pulse	0.30	3
3	Ge		184,014.47	0.38	96.2	Pulse	0.30	3
3	Rh		1,828,522.36	0.35	96.3	Pulse	0.30	3
3	Tb		3,101,254.46	0.56	99.2	Pulse	0.30	3

Quantitation Report

File Name	017_ICB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:49
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	10/8/2019 13:38
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	59.97	48.00	1.843E-05	Pulse	0.25	3
B			1	2.739	ug/l	1.78	30,267.29	1.162E-02	Pulse	0.15	3
Ca			1	1.178	ug/l	23.74	12,391.80	3.747E-03	Pulse	0.10	3
Sr			1	-0.001	ug/l	-241.87	430.02	1.155E-04	Pulse	0.10	3
Mo			1	0.030	ug/l	33.81	330.02	8.863E-05	Pulse	0.10	3
Ag			1	0.004	ug/l	30.36	126.67	3.416E-05	Pulse	0.10	3
Sn			1	0.037	ug/l	12.57	2,503.67	6.749E-04	Pulse	0.10	3
Sb			1	0.032	ug/l	8.06	756.71	1.429E-04	Pulse	0.10	3
Ba			1	-0.001	ug/l	-551.94	70.00	1.328E-05	Pulse	0.10	3
Tl			1	0.006	ug/l	17.59	256.68	8.226E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	89.09	256.68	8.220E-05	Pulse	0.10	3
Pb			1	0.014	ug/l	41.21	286.68	9.179E-05	Pulse	0.10	3
Pb			1	0.006	ug/l	26.48	1,166.73	3.737E-04	Pulse	0.10	3
Na			2	0.290	ug/l	51.08	11,087.07	5.934E-02	Pulse	0.30	3
Mg			2	0.143	ug/l	4.21	278.89	1.493E-03	Pulse	0.30	3
Al			2	-0.130	ug/l	-49.75	302.23	1.618E-03	Pulse	0.30	3
K			2	1.854	ug/l	17.57	19,139.98	1.024E-01	Pulse	0.30	3
Ca			2	0.105	ug/l	1004.69	153.34	8.208E-04	Pulse	0.30	3
Ti			2	0.115	ug/l	30.67	7.78	4.146E-05	Pulse	0.30	3
V			2	-0.041	ug/l	-37.78	537.79	2.880E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	351.71	813.36	4.352E-03	Pulse	0.30	3
Mn			2	0.031	ug/l	59.22	242.23	1.297E-03	Pulse	0.30	3
Fe			2	0.235	ug/l	24.49	5,921.20	3.169E-02	Pulse	0.30	3
Co			2	-0.002	ug/l	-32.78	57.76	3.090E-04	Pulse	0.30	3
Ni			2	0.012	ug/l	26.24	237.78	1.273E-03	Pulse	0.30	3
Cu			2	-0.068	ug/l	-5.28	3,425.95	1.834E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.066	ug/l	87.00	447.79	2.395E-03	Pulse	0.30	3
As			2	0.004	ug/l	153.59	21.67	1.161E-04	Pulse	1.00	3
Cd			2	0.003	ug/l	147.69	7.74	8.268E-06	Pulse	0.30	3
Sn			2	0.069	ug/l	12.62	855.59	9.144E-04	Pulse	0.30	3
Se			3	0.054	ug/l	19.67	12.87	6.662E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,605,273.05	0.27	99.3	Pulse	0.10	3
1	Sc		3,307,228.70	0.62	96.9	Pulse	0.10	3
1	Ge		569,392.69	1.04	97.4	Pulse	0.10	3
1	Ge		788,174.83	1.64	97.6	Pulse	0.10	3
1	Rh		3,719,638.90	0.67	97.5	Pulse	0.10	3
1	In		3,710,185.03	1.37	98.7	Pulse	0.10	3
1	Tb		5,291,079.51	1.92	99.3	Mix	0.10	3
1	Ho		511,215.67	0.36	99.2	Pulse	0.10	3
1	Bi		3,121,511.94	0.43	98.1	Pulse	0.10	3
2	Sc		186,843.04	0.61	101.3	Pulse	0.30	3
2	Ge		96,786.65	0.40	102.4	Pulse	0.30	3
2	Ge		145,150.01	0.40	102.2	Pulse	0.30	3
2	Rh		2,282,179.01	1.41	99.5	Pulse	0.30	3
2	In		936,001.52	1.27	101.3	Pulse	0.30	3
2	Tb		3,060,053.84	0.47	100.2	Pulse	0.30	3
2	Ho		304,232.51	0.57	100.1	Pulse	0.30	3
2	Bi		2,011,985.62	0.47	100.0	Pulse	0.30	3
3	Sc		223,840.52	11.03	101.8	Pulse	0.30	3
3	Ge		128,812.63	7.50	102.5	Pulse	0.30	3
3	Ge		194,002.51	7.29	101.5	Pulse	0.30	3
3	Rh		1,973,377.77	10.35	104.0	Pulse	0.30	3
3	Tb		3,275,450.36	10.88	104.7	Pulse	0.30	3

Quantitation Report

File Name	018_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:54
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	10/8/2019 13:38
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	49.247	ug/l	0.81	639,514.67	2.444E-01	Pulse	0.25	3
B			1	99.242	ug/l	1.39	939,884.96	3.593E-01	Pulse	0.15	3
Ca			1	4980.621	ug/l	0.77	5,492,921.17	1.675E+00	Analog	0.10	3
Sr			1	50.671	ug/l	0.53	2,416,037.46	6.712E-01	Pulse	0.10	3
Mo			1	51.735	ug/l	0.55	464,279.43	1.290E-01	Pulse	0.10	3
Ag			1	49.788	ug/l	0.23	1,105,288.63	3.043E-01	Pulse	0.10	3
Sn			1	49.378	ug/l	0.38	685,210.02	1.887E-01	Pulse	0.10	3
Sb			1	50.508	ug/l	0.09	809,390.40	1.562E-01	Pulse	0.10	3
Ba			1	50.010	ug/l	1.13	338,271.41	6.527E-02	Pulse	0.10	3
Tl			1	50.587	ug/l	0.21	2,047,584.71	6.737E-01	Pulse	0.10	3
Pb			1	50.970	ug/l	1.17	710,259.99	2.337E-01	Pulse	0.10	3
Pb			1	50.730	ug/l	0.61	624,398.34	2.054E-01	Pulse	0.10	3
Pb			1	50.880	ug/l	0.50	2,841,834.92	9.351E-01	Pulse	0.10	3
Na			2	4933.690	ug/l	0.82	9,405,508.24	5.100E+01	Analog	0.30	3
Mg			2	4823.110	ug/l	1.56	4,215,232.19	2.286E+01	Pulse	0.30	3
Al			2	4905.043	ug/l	1.44	1,433,526.99	7.773E+00	Pulse	0.30	3
K			2	4811.676	ug/l	0.76	3,093,647.17	1.678E+01	Pulse	0.30	3
Ca			2	5062.457	ug/l	0.69	157,107.72	8.519E-01	Pulse	0.30	3
Ti			2	49.982	ug/l	4.34	11,608.64	6.295E-02	Pulse	0.30	3
V			2	49.873	ug/l	1.30	343,713.34	1.864E+00	Pulse	0.30	3
Cr			2	49.266	ug/l	1.60	434,721.61	2.357E+00	Pulse	0.30	3
Mn			2	49.524	ug/l	1.58	234,151.35	1.270E+00	Pulse	0.30	3
Fe			2	4918.876	ug/l	1.68	34,587,777.51	1.876E+02	Analog	0.30	3
Co			2	49.063	ug/l	1.66	656,290.41	3.559E+00	Pulse	0.30	3
Ni			2	48.942	ug/l	0.69	175,752.54	9.530E-01	Pulse	0.30	3
Cu			2	48.483	ug/l	0.77	472,698.98	2.563E+00	Pulse	0.30	3
Zn			2	48.521	ug/l	1.43	69,543.34	3.771E-01	Pulse	0.30	3
As			2	49.425	ug/l	0.13	38,815.16	2.105E-01	Pulse	1.00	3
Cd			2	49.754	ug/l	0.41	100,118.42	1.110E-01	Pulse	0.30	3
Sn			2	50.653	ug/l	0.46	215,065.90	2.384E-01	Pulse	0.30	3
Se			3	196.810	ug/l	0.50	37,007.55	2.007E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,616,228.68	0.72	99.7	Pulse	0.10	3
1	Sc		3,280,037.24	0.46	96.1	Pulse	0.10	3
1	Ge		559,576.92	0.54	95.7	Pulse	0.10	3

Quantitation Report

1	Ge		781,842.98	0.68	96.8	Pulse	0.10	3
1	Rh		3,599,568.07	0.92	94.3	Pulse	0.10	3
1	In		3,631,670.42	0.26	96.6	Pulse	0.10	3
1	Tb		5,182,647.94	0.50	97.2	Mix	0.10	3
1	Ho		506,028.44	1.45	98.2	Pulse	0.10	3
1	Bi		3,039,133.70	0.68	95.5	Pulse	0.10	3
2	Sc		184,421.46	0.55	99.9	Pulse	0.30	3
2	Ge		94,412.77	0.09	99.9	Pulse	0.30	3
2	Ge		141,214.85	0.70	99.5	Pulse	0.30	3
2	Rh		2,192,372.62	1.02	95.6	Pulse	0.30	3
2	In		902,139.48	0.62	97.6	Pulse	0.30	3
2	Tb		2,981,839.46	0.32	97.6	Pulse	0.30	3
2	Ho		298,581.25	0.76	98.2	Pulse	0.30	3
2	Bi		1,933,707.28	0.55	96.1	Pulse	0.30	3
3	Sc		215,868.52	1.05	98.2	Pulse	0.30	3
3	Ge		121,623.65	0.28	96.8	Pulse	0.30	3
3	Ge		184,350.68	0.47	96.4	Pulse	0.30	3
3	Rh		1,837,149.93	0.09	96.8	Pulse	0.30	3
3	Tb		3,117,598.69	0.80	99.7	Pulse	0.30	3

Quantitation Report

File Name	019_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 12:59
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	10/8/2019 13:38
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	54.03	52.00	1.989E-05	Pulse	0.25	3
B			1	3.169	ug/l	2.08	34,319.41	1.317E-02	Pulse	0.15	3
Ca			1	0.907	ug/l	82.69	11,951.38	3.656E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	179.29	516.70	1.404E-04	Pulse	0.10	3
Mo			1	0.099	ug/l	3.56	963.40	2.615E-04	Pulse	0.10	3
Ag			1	0.007	ug/l	39.67	206.68	5.626E-05	Pulse	0.10	3
Sn			1	0.094	ug/l	17.90	3,273.84	8.911E-04	Pulse	0.10	3
Sb			1	0.194	ug/l	7.26	3,320.48	6.424E-04	Pulse	0.10	3
Ba			1	-0.002	ug/l	-187.71	60.00	1.167E-05	Pulse	0.10	3
Tl			1	0.012	ug/l	24.82	533.37	1.717E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	62.20	393.35	1.266E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	45.45	393.36	1.266E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	23.07	1,480.08	4.763E-04	Pulse	0.10	3
Na			2	0.411	ug/l	52.14	11,084.87	6.059E-02	Pulse	0.30	3
Mg			2	0.273	ug/l	30.20	385.57	2.106E-03	Pulse	0.30	3
Al			2	0.611	ug/l	49.04	511.13	2.792E-03	Pulse	0.30	3
K			2	1.869	ug/l	18.83	18,749.52	1.025E-01	Pulse	0.30	3
Ca			2	-0.113	ug/l	-854.61	143.34	7.841E-04	Pulse	0.30	3
Ti			2	0.097	ug/l	25.90	3.33	1.828E-05	Pulse	0.30	3
V			2	-0.040	ug/l	-34.95	531.13	2.902E-03	Pulse	0.30	3
Cr			2	0.003	ug/l	250.50	805.59	4.402E-03	Pulse	0.30	3
Mn			2	0.033	ug/l	33.38	246.67	1.349E-03	Pulse	0.30	3
Fe			2	0.583	ug/l	6.89	8,227.32	4.497E-02	Pulse	0.30	3
Co			2	0.001	ug/l	21.81	95.53	5.221E-04	Pulse	0.30	3
Ni			2	0.007	ug/l	49.25	215.56	1.179E-03	Pulse	0.30	3
Cu			2	-0.072	ug/l	-16.81	3,317.04	1.813E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.070	ug/l	25.60	444.46	2.430E-03	Pulse	0.30	3
As			2	0.012	ug/l	109.37	27.00	1.476E-04	Pulse	1.00	3
Cd			2	0.006	ug/l	86.53	14.34	1.545E-05	Pulse	0.30	3
Sn			2	0.131	ug/l	3.55	1,116.73	1.208E-03	Pulse	0.30	3
Se			3	0.095	ug/l	8.97	20.40	1.092E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,606,593.44	1.44	99.4	Pulse	0.10	3
1	Sc		3,271,034.12	1.37	95.8	Pulse	0.10	3
1	Ge		560,337.86	1.61	95.9	Pulse	0.10	3
1	Ge		779,043.38	1.25	96.5	Pulse	0.10	3
1	Rh		3,684,682.86	0.75	96.5	Pulse	0.10	3
1	In		3,674,782.62	0.81	97.7	Pulse	0.10	3
1	Tb		5,169,090.34	1.73	97.0	Mix	0.10	3
1	Ho		503,011.44	1.13	97.7	Pulse	0.10	3
1	Bi		3,107,296.20	0.09	97.7	Pulse	0.10	3
2	Sc		182,945.44	0.59	99.1	Pulse	0.30	3
2	Ge		95,301.06	0.47	100.9	Pulse	0.30	3
2	Ge		142,197.66	0.78	100.2	Pulse	0.30	3
2	Rh		2,241,542.83	0.26	97.7	Pulse	0.30	3
2	In		924,609.92	0.80	100.1	Pulse	0.30	3
2	Tb		3,010,966.89	0.19	98.6	Pulse	0.30	3
2	Ho		297,407.60	0.46	97.9	Pulse	0.30	3
2	Bi		1,982,919.15	0.41	98.6	Pulse	0.30	3
3	Sc		214,038.19	0.25	97.4	Pulse	0.30	3
3	Ge		124,925.23	1.09	99.4	Pulse	0.30	3
3	Ge		186,743.90	0.79	97.7	Pulse	0.30	3
3	Rh		1,899,320.06	0.35	100.1	Pulse	0.30	3
3	Tb		3,148,461.13	0.58	100.7	Pulse	0.30	3

Quantitation Report

File Name	020LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:04
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	10/8/2019 13:38
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	0.479	ug/l	1.96	6,339.94	2.385E-03	Pulse	0.25	3
B			1	24.799	ug/l	1.83	242,147.39	9.109E-02	Pulse	0.15	3
Ca			1	254.755	ug/l	1.01	295,221.70	8.884E-02	Pulse	0.10	3
Sr			1	4.831	ug/l	0.70	235,444.08	6.411E-02	Pulse	0.10	3
Mo			1	1.008	ug/l	5.75	9,279.71	2.527E-03	Pulse	0.10	3
Ag			1	0.479	ug/l	2.55	10,847.43	2.938E-03	Pulse	0.10	3
Sn			1	4.825	ug/l	2.41	69,839.23	1.892E-02	Pulse	0.10	3
Sb			1	1.927	ug/l	1.59	31,786.34	6.000E-03	Pulse	0.10	3
Ba			1	0.977	ug/l	5.41	6,828.38	1.290E-03	Pulse	0.10	3
Tl			1	0.484	ug/l	2.74	20,184.38	6.450E-03	Pulse	0.10	3
Pb			1	0.495	ug/l	2.48	7,312.08	2.337E-03	Pulse	0.10	3
Pb			1	0.492	ug/l	6.26	6,338.25	2.026E-03	Pulse	0.10	3
Pb			1	0.489	ug/l	2.54	28,942.11	9.250E-03	Pulse	0.10	3
Na			2	243.535	ug/l	1.32	477,502.29	2.571E+00	Pulse	0.30	3
Mg			2	249.158	ug/l	1.03	219,443.68	1.182E+00	Pulse	0.30	3
Al			2	27.944	ug/l	1.37	8,562.25	4.610E-02	Pulse	0.30	3
K			2	247.272	ug/l	1.04	177,022.13	9.532E-01	Pulse	0.30	3
Ca			2	272.628	ug/l	1.81	8,661.21	4.664E-02	Pulse	0.30	3
Ti			2	1.097	ug/l	11.87	237.79	1.280E-03	Pulse	0.30	3
V			2	0.909	ug/l	2.75	7,111.60	3.829E-02	Pulse	0.30	3
Cr			2	0.954	ug/l	2.59	9,250.43	4.981E-02	Pulse	0.30	3
Mn			2	0.979	ug/l	6.22	4,751.85	2.559E-02	Pulse	0.30	3
Fe			2	25.296	ug/l	0.95	183,339.93	9.872E-01	Pulse	0.30	3
Co			2	0.482	ug/l	1.37	6,568.66	3.536E-02	Pulse	0.30	3
Ni			2	0.958	ug/l	5.20	3,653.78	1.968E-02	Pulse	0.30	3
Cu			2	1.822	ug/l	1.96	21,811.21	1.174E-01	Pulse	0.30	3
Zn			2	4.994	ug/l	1.93	7,524.02	4.051E-02	Pulse	0.30	3
As			2	0.500	ug/l	4.26	413.68	2.227E-03	Pulse	1.00	3
Cd			2	0.509	ug/l	5.13	1,061.54	1.137E-03	Pulse	0.30	3
Sn			2	4.912	ug/l	1.24	22,085.59	2.365E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.546	ug/l	3.84	107.00	5.685E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,658,403.20	0.54	101.4	Pulse	0.10	3
1	Sc		3,323,268.39	0.10	97.4	Pulse	0.10	3
1	Ge		563,097.96	0.73	96.3	Pulse	0.10	3
1	Ge		784,803.14	0.68	97.2	Pulse	0.10	3
1	Rh		3,672,615.16	0.30	96.2	Pulse	0.10	3
1	In		3,692,062.05	0.39	98.2	Pulse	0.10	3
1	Tb		5,297,991.38	2.00	99.4	Mix	0.10	3
1	Ho		506,425.62	0.30	98.3	Pulse	0.10	3
1	Bi		3,128,916.62	0.49	98.4	Pulse	0.10	3
2	Sc		185,728.83	0.70	100.6	Pulse	0.30	3
2	Ge		95,556.21	0.46	101.1	Pulse	0.30	3
2	Ge		143,429.15	1.52	101.0	Pulse	0.30	3
2	Rh		2,264,615.12	0.35	98.7	Pulse	0.30	3
2	In		933,719.95	0.37	101.0	Pulse	0.30	3
2	Tb		3,034,604.95	0.18	99.4	Pulse	0.30	3
2	Ho		301,985.05	0.69	99.4	Pulse	0.30	3
2	Bi		1,989,782.70	0.70	98.9	Pulse	0.30	3
3	Sc		214,492.43	0.92	97.6	Pulse	0.30	3
3	Ge		123,618.20	0.58	98.4	Pulse	0.30	3
3	Ge		188,228.44	0.38	98.5	Pulse	0.30	3
3	Rh		1,917,743.74	0.33	101.0	Pulse	0.30	3
3	Tb		3,171,069.66	0.25	101.4	Pulse	0.30	3

Quantitation Report

File Name	021ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:09
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	10/8/2019 13:38
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	3.48	66.67	2.892E-05	Pulse	0.25	3
B			1	3.068	ug/l	2.04	29,508.32	1.280E-02	Pulse	0.15	3
Ca			1	96834.621	ug/l	1.73	106,937,205.07	3.250E+01	Analog	0.10	3
Sr			1	2008.032	ug/l	2.68	86,913,252.04	2.659E+01	Analog	0.10	3
Mo			1	2174.225	ug/l	2.89	17,709,704.74	5.420E+00	Analog	0.10	3
Ag			1	0.017	ug/l	18.66	403.36	1.175E-04	Pulse	0.10	3
Sn			1	1850.585	ug/l	1.08	24,165,163.81	7.052E+00	Analog	0.10	3
Sb			1	0.268	ug/l	6.55	4,394.11	8.721E-04	Pulse	0.10	3
Ba			1	0.223	ug/l	3.79	1,536.80	3.053E-04	Pulse	0.10	3
Tl			1	0.008	ug/l	6.10	300.01	1.092E-04	Pulse	0.10	3
Pb			1	0.088	ug/l	12.55	1,290.10	4.706E-04	Pulse	0.10	3
Pb			1	0.097	ug/l	0.58	1,170.09	4.261E-04	Pulse	0.10	3
Pb			1	0.087	ug/l	3.34	5,093.86	1.855E-03	Pulse	0.10	3
Na			2	94357.642	ug/l	0.40	185,821,805.95	9.744E+02	Analog	0.30	3
Mg			2	94391.187	ug/l	0.70	85,305,049.95	4.473E+02	Analog	0.30	3
Al			2	97761.583	ug/l	0.68	29,538,501.05	1.549E+02	Analog	0.30	3
K			2	98567.578	ug/l	1.36	65,175,004.08	3.418E+02	Analog	0.30	3
Ca			2	104299.042	ug/l	1.15	3,343,962.65	1.754E+01	Pulse	0.30	3
Ti			2	1857.068	ug/l	0.72	446,776.56	2.343E+00	Pulse	0.30	3
V			2	-0.048	ug/l	-1.86	496.68	2.605E-03	Pulse	0.30	3
Cr			2	0.248	ug/l	4.82	3,070.33	1.610E-02	Pulse	0.30	3
Mn			2	0.401	ug/l	10.28	2,056.82	1.078E-02	Pulse	0.30	3
Fe			2	92370.730	ug/l	0.16	671,610,106.64	3.522E+03	Analog	0.30	3
Co			2	0.190	ug/l	2.18	2,708.44	1.420E-02	Pulse	0.30	3
Ni			2	0.632	ug/l	6.20	2,543.56	1.334E-02	Pulse	0.30	3
Cu			2	-0.024	ug/l	-54.52	3,934.97	2.064E-02	Pulse	0.30	3
Zn			2	0.712	ug/l	2.47	1,410.08	7.394E-03	Pulse	0.30	3
As			2	0.087	ug/l	8.07	89.00	4.666E-04	Pulse	1.00	3
Cd			2	-0.303	ug/l	-11.04	-578.70	-6.744E-04	Pulse	0.30	3
Sn			2	1952.786	ug/l	1.44	7,861,428.86	9.169E+00	Analog	0.30	3
Se			3	0.124	ug/l	13.54	25.87	1.386E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,305,157.95	1.01	87.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,291,689.12	2.66	96.4	Pulse	0.10	3
1	Ge		561,147.09	1.69	96.0	Pulse	0.10	3
1	Ge		740,871.89	1.22	91.8	Pulse	0.10	3
1	Rh		3,269,492.03	3.30	85.7	Pulse	0.10	3
1	In		3,427,215.57	2.35	91.1	Pulse	0.10	3
1	Tb		5,035,735.03	2.13	94.5	Pulse	0.10	3
1	Ho		493,021.65	2.86	95.7	Pulse	0.10	3
1	Bi		2,745,812.04	2.13	86.3	Pulse	0.10	3
2	Sc		190,706.56	0.79	103.3	Pulse	0.30	3
2	Ge		96,129.35	1.25	101.8	Pulse	0.30	3
2	Ge		139,576.35	0.47	98.3	Pulse	0.30	3
2	Rh		2,037,475.26	0.56	88.8	Pulse	0.30	3
2	In		857,573.35	1.73	92.8	Pulse	0.30	3
2	Tb		2,891,096.41	0.99	94.7	Pulse	0.30	3
2	Ho		290,235.27	0.64	95.5	Pulse	0.30	3
2	Bi		1,728,487.64	0.65	85.9	Pulse	0.30	3
3	Sc		231,228.03	2.45	105.2	Pulse	0.30	3
3	Ge		127,941.62	2.05	101.8	Pulse	0.30	3
3	Ge		186,303.02	2.34	97.4	Pulse	0.30	3
3	Rh		1,752,353.58	2.22	92.3	Pulse	0.30	3
3	Tb		3,087,668.35	1.92	98.7	Pulse	0.30	3

Quantitation Report

File Name	022ICSB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:14
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	10/8/2019 13:38
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	557.15	20.00	9.290E-06	Pulse	0.25	3
B			1	55.722	ug/l	1.90	436,830.49	2.025E-01	Pulse	0.15	3
Ca			1	96325.131	ug/l	0.28	106,276,701.75	3.233E+01	Analog	0.10	3
Sr			1	1978.234	ug/l	0.47	86,239,045.38	2.620E+01	Analog	0.10	3
Mo			1	2119.934	ug/l	0.49	17,395,379.74	5.285E+00	Analog	0.10	3
Ag			1	17.873	ug/l	0.42	375,822.35	1.093E-01	Pulse	0.10	3
Sn			1	1832.315	ug/l	1.10	24,015,377.98	6.982E+00	Analog	0.10	3
Sb			1	0.208	ug/l	3.74	3,473.84	6.855E-04	Pulse	0.10	3
Ba			1	0.198	ug/l	1.86	1,380.12	2.723E-04	Pulse	0.10	3
Tl			1	0.005	ug/l	18.54	210.01	7.665E-05	Pulse	0.10	3
Pb			1	0.075	ug/l	10.87	1,116.75	4.078E-04	Pulse	0.10	3
Pb			1	0.086	ug/l	8.96	1,050.08	3.833E-04	Pulse	0.10	3
Pb			1	0.079	ug/l	3.47	4,723.82	1.724E-03	Pulse	0.10	3
Na			2	91906.738	ug/l	1.09	181,080,832.80	9.491E+02	Analog	0.30	3
Mg			2	91692.085	ug/l	1.03	82,900,423.37	4.345E+02	Analog	0.30	3
Al			2	94516.953	ug/l	1.59	28,569,416.64	1.498E+02	Analog	0.30	3
K			2	95630.535	ug/l	1.67	63,258,737.49	3.316E+02	Analog	0.30	3
Ca			2	100962.309	ug/l	0.79	3,238,491.40	1.697E+01	Pulse	0.30	3
Ti			2	1798.616	ug/l	0.41	432,921.58	2.269E+00	Pulse	0.30	3
V			2	20.441	ug/l	1.08	146,235.88	7.665E-01	Pulse	0.30	3
Cr			2	18.484	ug/l	0.38	169,258.39	8.871E-01	Pulse	0.30	3
Mn			2	18.768	ug/l	1.10	91,862.84	4.815E-01	Pulse	0.30	3
Fe			2	89347.664	ug/l	0.72	649,916,223.06	3.406E+03	Analog	0.30	3
Co			2	17.962	ug/l	0.87	248,616.89	1.303E+00	Pulse	0.30	3
Ni			2	17.511	ug/l	0.94	65,180.46	3.416E-01	Pulse	0.30	3
Cu			2	16.452	ug/l	0.79	168,708.23	8.843E-01	Pulse	0.30	3
Zn			2	16.067	ug/l	2.98	24,062.26	1.261E-01	Pulse	0.30	3
As			2	18.483	ug/l	1.65	15,028.26	7.877E-02	Pulse	1.00	3
Cd			2	17.849	ug/l	0.49	34,150.52	3.981E-02	Pulse	0.30	3
Sn			2	1899.468	ug/l	0.69	7,649,505.81	8.918E+00	Analog	0.30	3
Se			3	20.073	ug/l	0.78	3,808.24	2.049E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,157,399.90	0.51	82.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,287,715.89	0.43	96.3	Pulse	0.10	3
1	Ge		560,438.86	1.14	95.9	Pulse	0.10	3
1	Ge		746,319.70	0.86	92.4	Pulse	0.10	3
1	Rh		3,291,657.24	1.39	86.2	Pulse	0.10	3
1	In		3,439,672.37	1.30	91.5	Pulse	0.10	3
1	Tb		5,068,650.65	1.49	95.1	Pulse	0.10	3
1	Ho		495,291.23	1.07	96.2	Pulse	0.10	3
1	Bi		2,739,077.67	0.99	86.1	Pulse	0.10	3
2	Sc		190,792.90	0.83	103.4	Pulse	0.30	3
2	Ge		97,366.61	0.35	103.1	Pulse	0.30	3
2	Ge		141,920.09	0.89	100.0	Pulse	0.30	3
2	Rh		2,055,575.89	0.35	89.6	Pulse	0.30	3
2	In		857,753.64	0.59	92.8	Pulse	0.30	3
2	Tb		2,898,244.68	0.40	94.9	Pulse	0.30	3
2	Ho		289,289.88	0.22	95.2	Pulse	0.30	3
2	Bi		1,711,805.38	0.49	85.1	Pulse	0.30	3
3	Sc		231,353.12	1.10	105.2	Pulse	0.30	3
3	Ge		127,816.04	0.50	101.7	Pulse	0.30	3
3	Ge		185,912.48	1.61	97.2	Pulse	0.30	3
3	Rh		1,742,950.21	0.66	91.8	Pulse	0.30	3
3	Tb		3,083,348.42	0.33	98.6	Pulse	0.30	3

Quantitation Report

File Name	023SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:19
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	10/8/2019 13:38
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	8.67	236.01	1.018E-04	Pulse	0.25	3
B			1	2.083	ug/l	0.84	21,438.28	9.254E-03	Pulse	0.15	3
Ca			1	8.385	ug/l	23.79	19,780.61	6.165E-03	Pulse	0.10	3
Sr			1	0.133	ug/l	22.95	6,979.40	1.884E-03	Pulse	0.10	3
Mo			1	0.927	ug/l	5.37	8,622.68	2.325E-03	Pulse	0.10	3
Ag			1	0.007	ug/l	21.88	196.68	5.240E-05	Pulse	0.10	3
Sn			1	0.374	ug/l	10.19	7,358.69	1.958E-03	Pulse	0.10	3
Sb			1	0.047	ug/l	39.99	1,020.08	1.871E-04	Pulse	0.10	3
Ba			1	0.003	ug/l	139.39	100.00	1.833E-05	Pulse	0.10	3
Tl			1	0.007	ug/l	21.97	310.01	9.737E-05	Pulse	0.10	3
Pb			1	0.014	ug/l	14.72	410.02	1.287E-04	Pulse	0.10	3
Pb			1	0.017	ug/l	36.32	326.68	1.023E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	19.48	1,513.42	4.745E-04	Pulse	0.10	3
Na			2	7.545	ug/l	13.70	23,419.80	1.343E-01	Pulse	0.30	3
Mg			2	3.428	ug/l	17.55	2,976.98	1.706E-02	Pulse	0.30	3
Al			2	3.399	ug/l	18.00	1,257.84	7.209E-03	Pulse	0.30	3
K			2	5.371	ug/l	21.96	19,992.10	1.146E-01	Pulse	0.30	3
Ca			2	4.282	ug/l	43.37	265.56	1.523E-03	Pulse	0.30	3
Ti			2	0.502	ug/l	22.56	92.22	5.287E-04	Pulse	0.30	3
V			2	-0.022	ug/l	-6.78	620.02	3.556E-03	Pulse	0.30	3
Cr			2	0.012	ug/l	105.32	837.81	4.807E-03	Pulse	0.30	3
Mn			2	0.005	ug/l	79.71	112.23	6.435E-04	Pulse	0.30	3
Fe			2	6.832	ug/l	7.39	49,402.09	2.832E-01	Pulse	0.30	3
Co			2	0.007	ug/l	43.88	159.87	9.157E-04	Pulse	0.30	3
Ni			2	0.030	ug/l	15.82	283.34	1.625E-03	Pulse	0.30	3
Cu			2	-0.062	ug/l	-14.47	3,250.39	1.864E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.160	ug/l	16.64	545.57	3.128E-03	Pulse	0.30	3
As			2	0.028	ug/l	11.13	38.00	2.179E-04	Pulse	1.00	3
Cd			2	0.022	ug/l	25.30	46.96	5.184E-05	Pulse	0.30	3
Sn			2	0.336	ug/l	10.42	1,964.59	2.170E-03	Pulse	0.30	3
Se			3	0.018	ug/l	15.13	5.73	3.007E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,316,575.77	0.98	88.3	Pulse	0.10	3
1	Sc		3,210,551.82	0.99	94.1	Pulse	0.10	3
1	Ge		563,007.90	1.18	96.3	Pulse	0.10	3
1	Ge		779,216.29	0.46	96.5	Pulse	0.10	3
1	Rh		3,708,479.63	0.99	97.2	Pulse	0.10	3
1	In		3,756,827.69	0.95	99.9	Pulse	0.10	3
1	Tb		5,446,492.21	0.93	102.2	Analog	0.10	3
1	Ho		513,192.90	1.47	99.6	Pulse	0.10	3
1	Bi		3,188,273.91	1.31	100.2	Pulse	0.10	3
2	Sc		174,369.32	0.83	94.5	Pulse	0.30	3
2	Ge		94,299.14	1.19	99.8	Pulse	0.30	3
2	Ge		140,426.10	0.68	98.9	Pulse	0.30	3
2	Rh		2,249,003.59	0.86	98.1	Pulse	0.30	3
2	In		904,825.14	0.75	97.9	Pulse	0.30	3
2	Tb		2,986,013.49	0.08	97.8	Pulse	0.30	3
2	Ho		298,826.21	0.90	98.3	Pulse	0.30	3
2	Bi		1,972,668.53	1.08	98.1	Pulse	0.30	3
3	Sc		216,472.21	0.21	98.5	Pulse	0.30	3
3	Ge		127,369.43	0.14	101.4	Pulse	0.30	3
3	Ge		190,722.90	0.47	99.8	Pulse	0.30	3
3	Rh		1,940,040.27	0.30	102.2	Pulse	0.30	3
3	Tb		3,216,768.83	0.22	102.8	Pulse	0.30	3

Quantitation Report

File Name	024SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:24
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	10/8/2019 13:38
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	15.05	281.34	1.266E-04	Pulse	0.25	3
B			1	1.724	ug/l	3.48	17,682.89	7.960E-03	Pulse	0.15	3
Ca			1	1.071	ug/l	37.28	11,601.19	3.711E-03	Pulse	0.10	3
Sr			1	0.013	ug/l	17.22	1,100.09	3.014E-04	Pulse	0.10	3
Mo			1	0.166	ug/l	9.19	1,563.47	4.278E-04	Pulse	0.10	3
Ag			1	0.004	ug/l	39.34	123.34	3.328E-05	Pulse	0.10	3
Sn			1	0.081	ug/l	14.89	3,117.13	8.417E-04	Pulse	0.10	3
Sb			1	0.043	ug/l	23.23	943.40	1.745E-04	Pulse	0.10	3
Ba			1	0.002	ug/l	152.93	90.00	1.662E-05	Pulse	0.10	3
Tl			1	0.008	ug/l	9.16	350.02	1.101E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	47.96	330.01	1.037E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	3.89	253.34	7.967E-05	Pulse	0.10	3
Pb			1	0.008	ug/l	6.92	1,313.40	4.129E-04	Pulse	0.10	3
Na			2	3.689	ug/l	7.24	16,301.29	9.444E-02	Pulse	0.30	3
Mg			2	0.507	ug/l	12.74	554.46	3.215E-03	Pulse	0.30	3
Al			2	-0.035	ug/l	-549.92	305.56	1.769E-03	Pulse	0.30	3
K			2	2.724	ug/l	7.61	18,201.11	1.055E-01	Pulse	0.30	3
Ca			2	0.240	ug/l	252.25	145.56	8.436E-04	Pulse	0.30	3
Ti			2	0.195	ug/l	38.89	24.44	1.417E-04	Pulse	0.30	3
V			2	-0.030	ug/l	-12.88	563.35	3.264E-03	Pulse	0.30	3
Cr			2	0.004	ug/l	289.92	770.03	4.459E-03	Pulse	0.30	3
Mn			2	0.011	ug/l	57.06	137.78	7.972E-04	Pulse	0.30	3
Fe			2	1.034	ug/l	5.44	10,729.44	6.218E-02	Pulse	0.30	3
Co			2	0.005	ug/l	39.09	139.97	8.098E-04	Pulse	0.30	3
Ni			2	0.029	ug/l	28.18	274.45	1.591E-03	Pulse	0.30	3
Cu			2	-0.065	ug/l	-16.73	3,192.57	1.850E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.136	ug/l	24.59	507.79	2.942E-03	Pulse	0.30	3
As			2	0.031	ug/l	63.15	39.67	2.305E-04	Pulse	1.00	3
Cd			2	0.026	ug/l	34.36	53.17	5.919E-05	Pulse	0.30	3
Sn			2	0.124	ug/l	4.92	1,053.38	1.173E-03	Pulse	0.30	3
Se			3	0.017	ug/l	31.34	5.60	2.906E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,221,429.04	0.17	84.7	Pulse	0.10	3
1	Sc		3,126,232.35	0.19	91.6	Pulse	0.10	3
1	Ge		547,000.29	1.40	93.6	Pulse	0.10	3
1	Ge		757,459.70	0.60	93.8	Pulse	0.10	3
1	Rh		3,651,921.40	1.13	95.7	Pulse	0.10	3
1	In		3,703,904.23	0.42	98.5	Pulse	0.10	3
1	Tb		5,419,170.75	2.17	101.7	Mix	0.10	3
1	Ho		518,565.47	0.95	100.7	Pulse	0.10	3
1	Bi		3,180,144.43	1.06	100.0	Pulse	0.10	3
2	Sc		172,589.76	1.23	93.5	Pulse	0.30	3
2	Ge		92,917.62	1.29	98.4	Pulse	0.30	3
2	Ge		138,874.03	0.71	97.8	Pulse	0.30	3
2	Rh		2,248,074.91	0.38	98.0	Pulse	0.30	3
2	In		897,982.43	1.03	97.2	Pulse	0.30	3
2	Tb		2,975,999.39	0.95	97.4	Pulse	0.30	3
2	Ho		297,339.09	1.10	97.8	Pulse	0.30	3
2	Bi		1,992,693.46	0.69	99.1	Pulse	0.30	3
3	Sc		218,030.24	1.18	99.2	Pulse	0.30	3
3	Ge		127,227.00	0.83	101.3	Pulse	0.30	3
3	Ge		192,632.68	0.39	100.8	Pulse	0.30	3
3	Rh		1,955,977.63	0.25	103.0	Pulse	0.30	3
3	Tb		3,227,860.50	0.39	103.2	Pulse	0.30	3

Quantitation Report

File Name	025_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:29
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	10/8/2019 13:38
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	49.737	ug/l	0.17	540,653.91	2.469E-01	Pulse	0.25	3
B			1	101.306	ug/l	0.68	803,086.18	3.667E-01	Pulse	0.15	3
Ca			1	5070.448	ug/l	1.97	5,294,285.76	1.705E+00	Analog	0.10	3
Sr			1	51.620	ug/l	1.60	2,445,644.60	6.838E-01	Pulse	0.10	3
Mo			1	51.495	ug/l	1.85	459,155.20	1.284E-01	Pulse	0.10	3
Ag			1	49.638	ug/l	0.30	1,111,178.39	3.034E-01	Pulse	0.10	3
Sn			1	50.863	ug/l	0.74	711,658.24	1.943E-01	Pulse	0.10	3
Sb			1	50.615	ug/l	2.30	843,721.47	1.565E-01	Pulse	0.10	3
Ba			1	48.961	ug/l	2.07	344,521.30	6.390E-02	Pulse	0.10	3
Tl			1	50.919	ug/l	1.26	2,103,015.07	6.782E-01	Pulse	0.10	3
Pb			1	51.299	ug/l	0.99	729,437.10	2.352E-01	Pulse	0.10	3
Pb			1	51.055	ug/l	1.13	641,190.66	2.068E-01	Pulse	0.10	3
Pb			1	51.373	ug/l	0.98	2,927,894.30	9.441E-01	Pulse	0.10	3
Na			2	4810.278	ug/l	3.00	8,747,316.60	4.973E+01	Analog	0.30	3
Mg			2	4618.427	ug/l	2.57	3,850,336.10	2.189E+01	Pulse	0.30	3
Al			2	4565.828	ug/l	1.87	1,273,024.08	7.236E+00	Pulse	0.30	3
K			2	4677.099	ug/l	1.50	2,869,374.89	1.631E+01	Pulse	0.30	3
Ca			2	4950.660	ug/l	1.54	146,576.50	8.331E-01	Pulse	0.30	3
Ti			2	47.963	ug/l	3.81	10,630.16	6.041E-02	Pulse	0.30	3
V			2	50.797	ug/l	2.09	333,956.74	1.898E+00	Pulse	0.30	3
Cr			2	49.421	ug/l	2.04	416,030.99	2.365E+00	Pulse	0.30	3
Mn			2	49.059	ug/l	2.29	221,276.94	1.258E+00	Pulse	0.30	3
Fe			2	4925.944	ug/l	2.58	33,042,099.80	1.878E+02	Analog	0.30	3
Co			2	49.918	ug/l	1.53	637,048.58	3.621E+00	Pulse	0.30	3
Ni			2	49.499	ug/l	0.98	169,593.65	9.638E-01	Pulse	0.30	3
Cu			2	49.792	ug/l	1.75	463,034.55	2.632E+00	Pulse	0.30	3
Zn			2	49.265	ug/l	2.75	67,349.81	3.829E-01	Pulse	0.30	3
As			2	50.485	ug/l	1.63	37,823.85	2.150E-01	Pulse	1.00	3
Cd			2	50.168	ug/l	1.67	99,808.93	1.119E-01	Pulse	0.30	3
Sn			2	51.401	ug/l	1.80	215,770.46	2.419E-01	Pulse	0.30	3
Se			3	191.058	ug/l	1.06	37,848.60	1.949E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,189,982.50	0.33	83.5	Pulse	0.10	3
1	Sc		3,106,181.00	1.63	91.0	Pulse	0.10	3
1	Ge		548,966.18	1.83	93.9	Pulse	0.10	3

Quantitation Report

1	Ge		766,882.78	1.38	95.0	Pulse	0.10	3
1	Rh		3,577,570.57	2.48	93.7	Pulse	0.10	3
1	In		3,662,091.03	1.44	97.4	Pulse	0.10	3
1	Tb		5,392,470.34	1.63	101.2	Mix	0.10	3
1	Ho		518,328.62	1.89	100.6	Pulse	0.10	3
1	Bi		3,101,436.62	1.45	97.5	Pulse	0.10	3
2	Sc		175,976.13	2.01	95.4	Pulse	0.30	3
2	Ge		93,838.66	1.49	99.3	Pulse	0.30	3
2	Ge		140,846.09	1.63	99.2	Pulse	0.30	3
2	Rh		2,213,112.90	1.73	96.5	Pulse	0.30	3
2	In		892,038.73	1.02	96.5	Pulse	0.30	3
2	Tb		3,011,999.19	0.77	98.6	Pulse	0.30	3
2	Ho		302,739.43	1.72	99.6	Pulse	0.30	3
2	Bi		1,960,464.92	1.64	97.5	Pulse	0.30	3
3	Sc		221,575.84	1.81	100.8	Pulse	0.30	3
3	Ge		127,839.89	1.61	101.7	Pulse	0.30	3
3	Ge		194,232.78	1.50	101.6	Pulse	0.30	3
3	Rh		1,933,965.90	1.82	101.9	Pulse	0.30	3
3	Tb		3,287,697.44	2.14	105.1	Pulse	0.30	3

Quantitation Report

File Name	026_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:34
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	10/8/2019 13:38
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	54.30	54.67	2.440E-05	Pulse	0.25	3
B			1	2.716	ug/l	0.41	25,857.90	1.154E-02	Pulse	0.15	3
Ca			1	0.729	ug/l	50.80	11,334.28	3.596E-03	Pulse	0.10	3
Sr			1	0.003	ug/l	67.99	623.37	1.709E-04	Pulse	0.10	3
Mo			1	0.127	ug/l	7.96	1,213.42	3.321E-04	Pulse	0.10	3
Ag			1	0.009	ug/l	2.37	240.01	6.406E-05	Pulse	0.10	3
Sn			1	0.126	ug/l	12.36	3,800.61	1.014E-03	Pulse	0.10	3
Sb			1	0.215	ug/l	1.79	3,833.95	7.062E-04	Pulse	0.10	3
Ba			1	-0.005	ug/l	-77.04	40.00	7.376E-06	Pulse	0.10	3
Tl			1	0.010	ug/l	26.03	450.02	1.406E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	28.86	403.36	1.261E-04	Pulse	0.10	3
Pb			1	0.021	ug/l	33.27	380.02	1.188E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	23.08	1,520.09	4.752E-04	Pulse	0.10	3
Na			2	2.459	ug/l	7.49	14,161.59	8.174E-02	Pulse	0.30	3
Mg			2	0.444	ug/l	2.89	505.57	2.918E-03	Pulse	0.30	3
Al			2	6.380	ug/l	22.19	2,067.93	1.193E-02	Pulse	0.30	3
K			2	2.657	ug/l	15.89	18,228.97	1.052E-01	Pulse	0.30	3
Ca			2	0.490	ug/l	263.03	153.33	8.856E-04	Pulse	0.30	3
Ti			2	0.154	ug/l	20.48	15.55	8.969E-05	Pulse	0.30	3
V			2	-0.053	ug/l	-3.24	416.68	2.405E-03	Pulse	0.30	3
Cr			2	0.004	ug/l	137.37	770.03	4.446E-03	Pulse	0.30	3
Mn			2	0.074	ug/l	12.11	416.68	2.405E-03	Pulse	0.30	3
Fe			2	0.828	ug/l	1.55	9,410.67	5.432E-02	Pulse	0.30	3
Co			2	-0.001	ug/l	-179.90	62.19	3.593E-04	Pulse	0.30	3
Ni			2	0.014	ug/l	59.79	225.56	1.302E-03	Pulse	0.30	3
Cu			2	0.033	ug/l	82.31	4,095.00	2.364E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.065	ug/l	37.27	414.46	2.392E-03	Pulse	0.30	3
As			2	0.011	ug/l	35.57	25.33	1.463E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	73.52	6.54	7.279E-06	Pulse	0.30	3
Sn			2	0.198	ug/l	16.55	1,368.97	1.522E-03	Pulse	0.30	3
Se			3	0.084	ug/l	21.60	19.07	9.783E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,241,507.98	0.76	85.5	Pulse	0.10	3
1	Sc		3,152,098.39	0.34	92.3	Pulse	0.10	3
1	Ge		554,866.31	0.74	94.9	Pulse	0.10	3
1	Ge		769,256.00	0.64	95.3	Pulse	0.10	3
1	Rh		3,651,583.59	1.20	95.7	Pulse	0.10	3
1	In		3,747,805.82	1.92	99.7	Pulse	0.10	3
1	Tb		5,427,883.88	2.06	101.8	Mix	0.10	3
1	Ho		521,048.95	1.43	101.2	Pulse	0.10	3
1	Bi		3,198,716.93	0.34	100.6	Pulse	0.10	3
2	Sc		173,236.73	0.36	93.9	Pulse	0.30	3
2	Ge		93,667.47	0.95	99.1	Pulse	0.30	3
2	Ge		140,155.42	0.58	98.7	Pulse	0.30	3
2	Rh		2,249,918.04	0.71	98.1	Pulse	0.30	3
2	In		899,319.25	0.16	97.3	Pulse	0.30	3
2	Tb		2,969,157.38	0.71	97.2	Pulse	0.30	3
2	Ho		298,354.89	0.79	98.2	Pulse	0.30	3
2	Bi		1,996,411.24	0.59	99.2	Pulse	0.30	3
3	Sc		220,122.97	1.34	100.1	Pulse	0.30	3
3	Ge		128,714.09	0.77	102.4	Pulse	0.30	3
3	Ge		194,771.60	0.49	101.9	Pulse	0.30	3
3	Rh		1,984,980.61	0.36	104.6	Pulse	0.30	3
3	Tb		3,281,337.30	0.37	104.9	Pulse	0.30	3

Quantitation Report

File Name	027SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:39
Sample Name	mp17720a-mb1 5
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	10/8/2019 13:38
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	-5616.91	17.33	8.051E-06	Pulse	0.25	3
B			1	11.257	ug/l	4.40	21,222.58	9.862E-03	Pulse	0.15	3
Ca			1	152.296	ug/l	1.66	42,368.25	1.357E-02	Pulse	0.10	3
Sr			1	0.369	ug/l	4.81	4,034.00	1.101E-03	Pulse	0.10	3
Mo			1	0.590	ug/l	19.28	1,130.08	3.084E-04	Pulse	0.10	3
Ag			1	0.045	ug/l	43.26	250.01	6.695E-05	Pulse	0.10	3
Sn			1	15.875	ug/l	4.67	47,190.26	1.263E-02	Pulse	0.10	3
Sb			1	0.619	ug/l	4.93	2,356.92	4.251E-04	Pulse	0.10	3
Ba			1	0.191	ug/l	9.78	356.69	6.433E-05	Pulse	0.10	3
Tl			1	0.020	ug/l	15.24	196.68	6.014E-05	Pulse	0.10	3
Pb			1	0.100	ug/l	27.49	516.69	1.578E-04	Pulse	0.10	3
Pb			1	0.104	ug/l	21.89	390.02	1.192E-04	Pulse	0.10	3
Pb			1	0.099	ug/l	17.98	2,056.81	6.281E-04	Pulse	0.10	3
Na			2	82.166	ug/l	2.58	38,896.84	2.260E-01	Pulse	0.30	3
Mg			2	16.853	ug/l	12.90	2,888.26	1.679E-02	Pulse	0.30	3
Al			2	9.423	ug/l	12.37	827.81	4.810E-03	Pulse	0.30	3
K			2	30.260	ug/l	3.84	20,132.20	1.170E-01	Pulse	0.30	3
Ca			2	147.991	ug/l	5.93	994.49	5.779E-03	Pulse	0.30	3
Ti			2	1.666	ug/l	17.52	54.44	3.164E-04	Pulse	0.30	3
V			2	0.045	ug/l	50.93	814.48	4.733E-03	Pulse	0.30	3
Cr			2	1.029	ug/l	9.97	2,423.54	1.408E-02	Pulse	0.30	3
Mn			2	0.767	ug/l	12.39	763.36	4.436E-03	Pulse	0.30	3
Fe			2	22.825	ug/l	3.16	33,864.04	1.968E-01	Pulse	0.30	3
Co			2	-0.006	ug/l	-69.03	61.02	3.546E-04	Pulse	0.30	3
Ni			2	0.364	ug/l	5.43	422.23	2.454E-03	Pulse	0.30	3
Cu			2	0.422	ug/l	15.82	4,532.90	2.634E-02	Pulse	0.30	3
Zn			2	28.599	ug/l	1.43	7,936.43	4.612E-02	Pulse	0.30	3
As			2	0.206	ug/l	40.02	47.00	2.731E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.014	ug/l	32.09	7.67	8.582E-06	Pulse	0.30	3
Sn			2	16.403	ug/l	3.73	14,265.66	1.599E-02	Pulse	0.30	3
Se			3	0.210	ug/l	6.13	10.67	5.460E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,152,133.93	0.72	82.1	Pulse	0.10	3
1	Sc		3,121,845.16	0.56	91.5	Pulse	0.10	3
1	Ge		554,377.08	0.84	94.8	Pulse	0.10	3
1	Ge		769,779.05	0.83	95.4	Pulse	0.10	3
1	Rh		3,664,283.80	0.75	96.0	Pulse	0.10	3
1	In		3,736,677.85	0.27	99.4	Pulse	0.10	3
1	Tb		5,546,283.87	0.90	104.1	Analog	0.10	3
1	Ho		522,649.82	0.88	101.5	Pulse	0.10	3
1	Bi		3,272,520.47	0.90	102.9	Pulse	0.10	3
2	Sc		172,083.51	0.15	93.3	Pulse	0.30	3
2	Ge		92,529.75	1.02	97.9	Pulse	0.30	3
2	Ge		139,099.21	1.70	98.0	Pulse	0.30	3
2	Rh		2,242,802.76	0.47	97.8	Pulse	0.30	3
2	In		892,052.02	1.16	96.5	Pulse	0.30	3
2	Tb		2,996,087.52	0.25	98.1	Pulse	0.30	3
2	Ho		299,312.74	0.66	98.5	Pulse	0.30	3
2	Bi		2,039,983.05	0.29	101.4	Pulse	0.30	3
3	Sc		222,631.90	1.07	101.3	Pulse	0.30	3
3	Ge		129,529.66	0.45	103.1	Pulse	0.30	3
3	Ge		195,310.21	1.06	102.2	Pulse	0.30	3
3	Rh		1,981,592.70	1.01	104.4	Pulse	0.30	3
3	Tb		3,281,728.62	0.94	104.9	Pulse	0.30	3

Quantitation Report

File Name	028SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:44
Sample Name	mp17720a-b2
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	10/8/2019 13:38
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	186.524	ug/l	1.45	405,046.98	1.852E-01	Pulse	0.25	3
B			1	194.197	ug/l	0.43	309,918.34	1.417E-01	Pulse	0.15	3
Ca			1	10166.880	ug/l	0.99	2,137,595.44	6.857E-01	Pulse	0.10	3
Sr			1	192.558	ug/l	0.52	1,839,095.65	5.102E-01	Pulse	0.10	3
Mo			1	194.132	ug/l	1.28	348,914.12	9.680E-02	Pulse	0.10	3
Ag			1	93.871	ug/l	0.52	422,551.46	1.148E-01	Pulse	0.10	3
Sn			1	207.832	ug/l	0.73	585,046.28	1.589E-01	Pulse	0.10	3
Sb			1	194.555	ug/l	1.12	656,198.69	1.203E-01	Pulse	0.10	3
Ba			1	185.459	ug/l	0.74	264,040.86	4.842E-02	Pulse	0.10	3
Tl			1	188.972	ug/l	1.36	1,603,148.73	5.034E-01	Pulse	0.10	3
Pb			1	198.246	ug/l	1.20	579,053.65	1.818E-01	Pulse	0.10	3
Pb			1	196.857	ug/l	0.92	507,847.10	1.595E-01	Pulse	0.10	3
Pb			1	198.005	ug/l	0.69	2,318,082.58	7.278E-01	Pulse	0.10	3
Na			2	9618.572	ug/l	0.51	3,471,965.28	1.992E+01	Pulse	0.30	3
Mg			2	9413.021	ug/l	0.34	1,555,112.30	8.922E+00	Pulse	0.30	3
Al			2	9284.711	ug/l	0.83	513,085.13	2.944E+00	Pulse	0.30	3
K			2	9597.863	ug/l	1.09	1,176,400.23	6.750E+00	Pulse	0.30	3
Ca			2	10524.779	ug/l	1.22	61,816.35	3.547E-01	Pulse	0.30	3
Ti			2	186.043	ug/l	0.98	8,164.31	4.684E-02	Pulse	0.30	3
V			2	196.131	ug/l	1.28	255,644.84	1.467E+00	Pulse	0.30	3
Cr			2	192.300	ug/l	1.63	320,884.42	1.841E+00	Pulse	0.30	3
Mn			2	190.585	ug/l	1.35	170,337.03	9.774E-01	Pulse	0.30	3
Fe			2	10172.486	ug/l	1.66	13,521,807.24	7.759E+01	Analog	0.30	3
Co			2	194.635	ug/l	0.46	492,135.68	2.824E+00	Pulse	0.30	3
Ni			2	192.050	ug/l	0.78	130,396.15	7.481E-01	Pulse	0.30	3
Cu			2	191.500	ug/l	0.63	353,719.81	2.029E+00	Pulse	0.30	3
Zn			2	195.917	ug/l	2.18	53,133.42	3.049E-01	Pulse	0.30	3
As			2	198.395	ug/l	1.13	29,451.74	1.690E-01	Pulse	1.00	3
Cd			2	193.323	ug/l	0.73	76,817.61	8.624E-02	Pulse	0.30	3
Sn			2	213.527	ug/l	0.66	179,103.91	2.011E-01	Pulse	0.30	3
Se			3	472.122	ug/l	1.00	18,754.76	9.632E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,187,568.92	0.49	83.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,117,795.16	1.00	91.3	Pulse	0.10	3
1	Ge		552,609.13	0.37	94.5	Pulse	0.10	3
1	Ge		758,770.51	0.61	94.0	Pulse	0.10	3
1	Rh		3,604,877.96	1.24	94.4	Pulse	0.10	3
1	In		3,681,638.90	0.71	97.9	Pulse	0.10	3
1	Tb		5,453,934.29	1.04	102.3	Analog	0.10	3
1	Ho		517,417.36	1.85	100.4	Pulse	0.10	3
1	Bi		3,184,853.50	0.21	100.1	Pulse	0.10	3
2	Sc		174,296.77	1.20	94.5	Pulse	0.30	3
2	Ge		92,581.41	1.58	98.0	Pulse	0.30	3
2	Ge		140,212.85	0.62	98.8	Pulse	0.30	3
2	Rh		2,232,165.40	0.87	97.3	Pulse	0.30	3
2	In		890,688.96	0.42	96.4	Pulse	0.30	3
2	Tb		2,988,986.96	0.76	97.9	Pulse	0.30	3
2	Ho		301,074.11	1.06	99.1	Pulse	0.30	3
2	Bi		1,981,268.18	0.94	98.5	Pulse	0.30	3
3	Sc		222,625.88	1.30	101.3	Pulse	0.30	3
3	Ge		129,003.51	1.10	102.7	Pulse	0.30	3
3	Ge		194,723.32	0.77	101.8	Pulse	0.30	3
3	Rh		1,963,216.73	0.41	103.4	Pulse	0.30	3
3	Tb		3,302,113.69	1.44	105.6	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:49
Sample Name	mp17720a-s3
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	10/8/2019 13:38
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	212.794	ug/l	1.42	438,158.17	2.112E-01	Pulse	0.25	3
B			1	300.521	ug/l	1.38	452,745.26	2.183E-01	Pulse	0.15	3
Ca			1	37068.439	ug/l	1.47	9,727,859.02	2.491E+00	Analog	0.10	3
Sr			1	374.804	ug/l	1.52	3,528,027.45	9.929E-01	Pulse	0.10	3
Mo			1	217.031	ug/l	1.51	384,494.14	1.082E-01	Pulse	0.10	3
Ag			1	107.459	ug/l	0.98	484,155.08	1.314E-01	Pulse	0.10	3
Sn			1	270.709	ug/l	1.55	762,141.63	2.068E-01	Pulse	0.10	3
Sb			1	79.248	ug/l	1.26	276,936.16	4.904E-02	Pulse	0.10	3
Ba			1	1756.572	ug/l	1.85	2,588,723.03	4.584E-01	Pulse	0.10	3
Tl			1	188.546	ug/l	1.11	1,557,879.66	5.022E-01	Pulse	0.10	3
Pb			1	988.109	ug/l	1.34	2,809,980.58	9.059E-01	Pulse	0.10	3
Pb			1	943.368	ug/l	1.07	2,369,775.64	7.640E-01	Pulse	0.10	3
Pb			1	984.798	ug/l	1.01	11,225,482.18	3.619E+00	Analog	0.10	3
Na			2	8938.191	ug/l	1.60	4,087,472.62	1.852E+01	Pulse	0.30	3
Mg			2	68854.749	ug/l	2.45	14,405,802.21	6.526E+01	Analog	0.30	3
Al			2	201210.127	ug/l	2.54	14,074,560.55	6.376E+01	Analog	0.30	3
K			2	35036.265	ug/l	2.23	5,383,124.23	2.439E+01	Analog	0.30	3
Ca			2	36666.621	ug/l	1.90	272,338.10	1.234E+00	Pulse	0.30	3
Ti			2	589.031	ug/l	3.27	32,782.67	1.485E-01	Pulse	0.30	3
V			2	518.630	ug/l	1.84	854,679.57	3.872E+00	Pulse	0.30	3
Cr			2	568.578	ug/l	1.80	1,199,958.08	5.436E+00	Pulse	0.30	3
Mn			2	6430.971	ug/l	1.70	7,276,901.38	3.296E+01	Analog	0.30	3
Fe			2	379812.167	ug/l	1.74	639,340,650.15	2.896E+03	Analog	0.30	3
Co			2	329.788	ug/l	1.72	1,056,117.70	4.784E+00	Pulse	0.30	3
Ni			2	590.222	ug/l	2.35	507,071.33	2.297E+00	Pulse	0.30	3
Cu			2	3924.375	ug/l	1.80	9,086,690.47	4.116E+01	Analog	0.30	3
Zn			2	6142.079	ug/l	1.24	2,097,569.92	9.501E+00	Pulse	0.30	3
As			2	233.312	ug/l	0.96	43,870.24	1.987E-01	Pulse	1.00	3
Cd			2	262.434	ug/l	2.62	105,210.28	1.171E-01	Pulse	0.30	3
Sn			2	276.580	ug/l	3.33	233,891.00	2.603E-01	Pulse	0.30	3
Se			3	451.115	ug/l	0.44	17,932.25	9.203E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,074,375.09	1.07	79.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,905,687.44	1.42	114.4	Pulse	0.10	3
1	Ge		573,779.00	1.35	98.2	Pulse	0.10	3
1	Ge		771,676.50	1.45	95.6	Pulse	0.10	3
1	Rh		3,553,320.88	1.40	93.1	Pulse	0.10	3
1	In		3,685,407.47	1.44	98.0	Pulse	0.10	3
1	Tb		5,648,123.67	2.12	106.0	Analog	0.10	3
1	Ho		610,644.77	1.34	118.5	Pulse	0.10	3
1	Bi		3,102,128.39	1.63	97.5	Pulse	0.10	3
2	Sc		220,791.80	1.43	119.7	Pulse	0.30	3
2	Ge		100,473.15	1.71	106.4	Pulse	0.30	3
2	Ge		144,584.73	2.12	101.8	Pulse	0.30	3
2	Rh		2,214,523.04	1.97	96.6	Pulse	0.30	3
2	In		899,048.81	2.44	97.3	Pulse	0.30	3
2	Tb		3,094,563.35	1.30	101.3	Pulse	0.30	3
2	Ho		354,870.88	1.27	116.8	Pulse	0.30	3
2	Bi		1,950,479.92	1.47	97.0	Pulse	0.30	3
3	Sc		274,970.08	1.23	125.1	Pulse	0.30	3
3	Ge		135,221.63	1.08	107.6	Pulse	0.30	3
3	Ge		194,845.94	0.80	101.9	Pulse	0.30	3
3	Rh		1,892,449.64	0.34	99.7	Pulse	0.30	3
3	Tb		3,297,353.83	0.08	105.4	Pulse	0.30	3

Quantitation Report

File Name	030SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:54
Sample Name	mp17720a-s4
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	10/8/2019 13:38
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	212.703	ug/l	0.23	439,424.86	2.112E-01	Pulse	0.25	3
B			1	297.932	ug/l	1.75	450,353.42	2.164E-01	Pulse	0.15	3
Ca			1	35499.832	ug/l	1.03	9,333,193.40	2.386E+00	Analog	0.10	3
Sr			1	380.421	ug/l	0.58	3,572,334.11	1.008E+00	Pulse	0.10	3
Mo			1	216.680	ug/l	0.57	382,956.58	1.080E-01	Pulse	0.10	3
Ag			1	110.155	ug/l	1.50	495,616.86	1.347E-01	Pulse	0.10	3
Sn			1	284.788	ug/l	1.09	800,568.58	2.176E-01	Pulse	0.10	3
Sb			1	79.488	ug/l	0.75	274,843.00	4.918E-02	Pulse	0.10	3
Ba			1	1869.012	ug/l	0.74	2,725,668.29	4.878E-01	Pulse	0.10	3
Tl			1	187.189	ug/l	0.12	1,551,239.56	4.986E-01	Pulse	0.10	3
Pb			1	1015.013	ug/l	0.39	2,895,232.98	9.306E-01	Pulse	0.10	3
Pb			1	961.397	ug/l	0.48	2,422,310.07	7.786E-01	Pulse	0.10	3
Pb			1	1004.448	ug/l	0.23	11,483,700.66	3.691E+00	Analog	0.10	3
Na			2	9128.931	ug/l	0.92	4,111,658.86	1.891E+01	Pulse	0.30	3
Mg			2	68538.340	ug/l	1.33	14,124,994.99	6.496E+01	Analog	0.30	3
Al			2	207467.982	ug/l	0.97	14,295,333.88	6.574E+01	Analog	0.30	3
K			2	35439.787	ug/l	1.02	5,363,330.34	2.467E+01	Analog	0.30	3
Ca			2	35119.206	ug/l	0.13	256,944.06	1.182E+00	Pulse	0.30	3
Ti			2	621.197	ug/l	1.53	34,059.33	1.566E-01	Pulse	0.30	3
V			2	531.563	ug/l	0.53	862,830.95	3.968E+00	Pulse	0.30	3
Cr			2	588.085	ug/l	0.22	1,222,482.66	5.622E+00	Pulse	0.30	3
Mn			2	6694.360	ug/l	0.54	7,461,398.32	3.431E+01	Analog	0.30	3
Fe			2	395151.559	ug/l	0.92	655,189,200.63	3.013E+03	Analog	0.30	3
Co			2	348.812	ug/l	1.09	1,100,251.29	5.060E+00	Pulse	0.30	3
Ni			2	613.036	ug/l	0.45	518,790.33	2.386E+00	Pulse	0.30	3
Cu			2	4218.058	ug/l	0.91	9,619,897.12	4.424E+01	Analog	0.30	3
Zn			2	6510.729	ug/l	0.73	2,189,954.22	1.007E+01	Pulse	0.30	3
As			2	238.558	ug/l	0.18	44,180.01	2.032E-01	Pulse	1.00	3
Cd			2	273.529	ug/l	0.44	107,999.19	1.220E-01	Pulse	0.30	3
Sn			2	292.395	ug/l	0.59	243,517.54	2.751E-01	Pulse	0.30	3
Se			3	451.308	ug/l	0.52	17,670.77	9.207E-02	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,081,066.90	0.44	79.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,912,097.65	1.13	114.6	Pulse	0.10	3
1	Ge		571,056.00	0.84	97.7	Pulse	0.10	3
1	Ge		769,000.38	1.67	95.3	Pulse	0.10	3
1	Rh		3,544,653.28	1.58	92.9	Pulse	0.10	3
1	In		3,679,810.43	0.95	97.8	Pulse	0.10	3
1	Tb		5,587,829.71	0.53	104.8	Analog	0.10	3
1	Ho		604,494.00	0.54	117.4	Pulse	0.10	3
1	Bi		3,111,131.10	0.54	97.8	Pulse	0.10	3
2	Sc		217,444.99	0.38	117.8	Pulse	0.30	3
2	Ge		98,602.96	0.63	104.4	Pulse	0.30	3
2	Ge		141,361.15	0.68	99.6	Pulse	0.30	3
2	Rh		2,179,345.60	0.56	95.0	Pulse	0.30	3
2	In		885,070.17	0.12	95.8	Pulse	0.30	3
2	Tb		3,065,104.32	0.29	100.4	Pulse	0.30	3
2	Ho		351,279.49	0.21	115.6	Pulse	0.30	3
2	Bi		1,944,465.41	0.73	96.7	Pulse	0.30	3
3	Sc		273,382.40	0.99	124.4	Pulse	0.30	3
3	Ge		132,906.29	1.27	105.8	Pulse	0.30	3
3	Ge		191,921.43	0.44	100.4	Pulse	0.30	3
3	Rh		1,878,580.14	0.09	99.0	Pulse	0.30	3
3	Tb		3,296,197.71	0.35	105.4	Pulse	0.30	3

Quantitation Report

File Name	031SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 13:59
Sample Name	jc95615-1
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	10/8/2019 13:38
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	12.696	ug/l	0.55	26,568.78	1.261E-02	Pulse	0.25	3
B			1	109.501	ug/l	0.54	169,909.55	8.065E-02	Pulse	0.15	3
Ca			1	29926.702	ug/l	0.41	7,827,926.13	2.012E+00	Analog	0.10	3
Sr			1	180.517	ug/l	0.36	1,699,662.32	4.783E-01	Pulse	0.10	3
Mo			1	22.405	ug/l	2.68	39,743.48	1.118E-02	Pulse	0.10	3
Ag			1	19.294	ug/l	1.08	86,653.46	2.360E-02	Pulse	0.10	3
Sn			1	96.874	ug/l	1.19	273,034.89	7.436E-02	Pulse	0.10	3
Sb			1	8.385	ug/l	1.30	29,187.88	5.227E-03	Pulse	0.10	3
Ba			1	1596.711	ug/l	1.13	2,327,103.46	4.167E-01	Pulse	0.10	3
Tl			1	1.996	ug/l	2.56	16,479.74	5.322E-03	Pulse	0.10	3
Pb			1	814.922	ug/l	0.47	2,313,454.91	7.472E-01	Pulse	0.10	3
Pb			1	765.504	ug/l	0.43	1,919,684.14	6.200E-01	Pulse	0.10	3
Pb			1	793.959	ug/l	0.32	9,034,208.77	2.918E+00	Pulse	0.10	3
Na			2	1190.604	ug/l	0.71	540,899.60	2.515E+00	Pulse	0.30	3
Mg			2	60667.406	ug/l	0.76	12,365,908.12	5.750E+01	Analog	0.30	3
Al			2	193295.960	ug/l	0.66	13,172,796.14	6.125E+01	Analog	0.30	3
K			2	25561.691	ug/l	0.90	3,831,630.12	1.782E+01	Pulse	0.30	3
Ca			2	29517.048	ug/l	0.22	213,612.26	9.933E-01	Pulse	0.30	3
Ti			2	484.357	ug/l	3.74	26,264.46	1.221E-01	Pulse	0.30	3
V			2	353.937	ug/l	0.20	568,524.91	2.644E+00	Pulse	0.30	3
Cr			2	426.076	ug/l	0.80	876,213.05	4.074E+00	Pulse	0.30	3
Mn			2	6320.594	ug/l	0.66	6,967,311.81	3.240E+01	Analog	0.30	3
Fe			2	380168.402	ug/l	1.64	623,403,993.01	2.899E+03	Analog	0.30	3
Co			2	185.265	ug/l	1.13	577,993.05	2.688E+00	Pulse	0.30	3
Ni			2	456.344	ug/l	0.86	381,997.25	1.776E+00	Pulse	0.30	3
Cu			2	4117.152	ug/l	0.55	9,286,877.13	4.318E+01	Analog	0.30	3
Zn			2	6695.391	ug/l	0.86	2,227,301.72	1.036E+01	Pulse	0.30	3
As			2	80.613	ug/l	1.26	14,779.03	6.872E-02	Pulse	1.00	3
Cd			2	82.124	ug/l	2.32	32,321.19	3.664E-02	Pulse	0.30	3
Sn			2	100.029	ug/l	0.81	83,387.62	9.452E-02	Pulse	0.30	3
Se			3	9.851	ug/l	4.77	389.07	2.021E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,106,820.10	0.44	80.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,891,130.36	0.25	114.0	Pulse	0.10	3
1	Ge		575,801.83	0.61	98.5	Pulse	0.10	3
1	Ge		766,679.54	1.32	95.0	Pulse	0.10	3
1	Rh		3,553,619.01	0.79	93.1	Pulse	0.10	3
1	In		3,671,852.25	0.77	97.6	Pulse	0.10	3
1	Tb		5,584,565.96	0.88	104.8	Analog	0.10	3
1	Ho		605,953.10	0.90	117.6	Pulse	0.10	3
1	Bi		3,096,391.41	0.83	97.3	Pulse	0.10	3
2	Sc		215,059.20	0.67	116.5	Pulse	0.30	3
2	Ge		98,248.38	0.72	104.0	Pulse	0.30	3
2	Ge		141,047.59	0.40	99.4	Pulse	0.30	3
2	Rh		2,181,202.83	0.25	95.1	Pulse	0.30	3
2	In		882,276.03	0.64	95.5	Pulse	0.30	3
2	Tb		3,017,761.62	0.71	98.8	Pulse	0.30	3
2	Ho		348,253.28	0.98	114.6	Pulse	0.30	3
2	Bi		1,939,836.66	0.18	96.4	Pulse	0.30	3
3	Sc		269,781.90	1.21	122.7	Pulse	0.30	3
3	Ge		133,299.20	0.58	106.1	Pulse	0.30	3
3	Ge		192,464.94	0.46	100.7	Pulse	0.30	3
3	Rh		1,863,448.68	0.31	98.2	Pulse	0.30	3
3	Tb		3,259,321.12	0.73	104.2	Pulse	0.30	3

Quantitation Report

File Name	032SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:04
Sample Name	mp17720a-sd1
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	admin
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	10/8/2019 13:38
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	11.722	ug/l	3.30	5,622.34	2.335E-03	Pulse	0.25	3
B			1	130.340	ug/l	1.24	49,436.62	2.053E-02	Pulse	0.15	3
Ca			1	33402.830	ug/l	0.18	1,542,467.27	4.517E-01	Pulse	0.10	3
Sr			1	169.230	ug/l	0.69	334,155.86	8.978E-02	Pulse	0.10	3
Mo			1	21.332	ug/l	3.80	7,968.97	2.141E-03	Pulse	0.10	3
Ag			1	18.896	ug/l	2.73	17,466.97	4.632E-03	Pulse	0.10	3
Sn			1	87.902	ug/l	0.89	52,535.44	1.393E-02	Pulse	0.10	3
Sb			1	8.303	ug/l	10.30	5,847.98	1.069E-03	Pulse	0.10	3
Ba			1	1611.301	ug/l	3.23	459,994.19	8.412E-02	Pulse	0.10	3
Tl			1	1.920	ug/l	7.22	3,293.83	1.030E-03	Pulse	0.10	3
Pb			1	781.169	ug/l	0.78	458,269.72	1.433E-01	Pulse	0.10	3
Pb			1	741.685	ug/l	1.44	384,294.51	1.202E-01	Pulse	0.10	3
Pb			1	758.872	ug/l	0.96	1,784,365.58	5.580E-01	Pulse	0.10	3
Na			2	1366.151	ug/l	0.88	115,689.70	6.206E-01	Pulse	0.30	3
Mg			2	66947.837	ug/l	0.49	2,365,739.21	1.269E+01	Pulse	0.30	3
Al			2	213055.556	ug/l	0.29	2,517,292.75	1.350E+01	Pulse	0.30	3
K			2	29275.830	ug/l	0.30	774,575.16	4.155E+00	Pulse	0.30	3
Ca			2	33480.323	ug/l	0.39	42,118.62	2.260E-01	Pulse	0.30	3
Ti			2	581.629	ug/l	9.29	5,453.71	2.925E-02	Pulse	0.30	3
V			2	394.576	ug/l	0.59	110,508.99	5.928E-01	Pulse	0.30	3
Cr			2	478.793	ug/l	0.20	171,310.63	9.190E-01	Pulse	0.30	3
Mn			2	6929.306	ug/l	0.06	1,324,227.58	7.104E+00	Pulse	0.30	3
Fe			2	431639.731	ug/l	0.75	122,711,101.79	6.583E+02	Analog	0.30	3
Co			2	210.274	ug/l	1.39	113,787.13	6.104E-01	Pulse	0.30	3
Ni			2	528.845	ug/l	0.57	76,892.55	4.125E-01	Pulse	0.30	3
Cu			2	4710.092	ug/l	0.43	1,844,950.83	9.897E+00	Pulse	0.30	3
Zn			2	8523.698	ug/l	0.11	491,827.03	2.638E+00	Pulse	0.30	3
As			2	99.100	ug/l	1.44	3,163.31	1.697E-02	Pulse	1.00	3
Cd			2	83.881	ug/l	0.58	6,858.75	7.486E-03	Pulse	0.30	3
Sn			2	87.541	ug/l	2.28	15,604.48	1.703E-02	Pulse	0.30	3
Se			3	10.056	ug/l	5.46	80.47	4.221E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,407,861.58	1.47	91.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,414,904.22	0.23	100.0	Pulse	0.10	3
1	Ge		573,417.30	0.50	98.1	Pulse	0.10	3
1	Ge		793,424.52	1.16	98.3	Pulse	0.10	3
1	Rh		3,721,995.15	1.02	97.5	Pulse	0.10	3
1	In		3,771,645.81	0.78	100.3	Pulse	0.10	3
1	Tb		5,472,380.34	3.36	102.7	Mix	0.10	3
1	Ho		538,854.30	1.13	104.6	Pulse	0.10	3
1	Bi		3,197,894.54	1.20	100.5	Pulse	0.10	3
2	Sc		186,407.26	0.49	101.0	Pulse	0.30	3
2	Ge		96,382.00	1.19	102.0	Pulse	0.30	3
2	Ge		144,448.66	0.20	101.7	Pulse	0.30	3
2	Rh		2,256,451.58	0.23	98.4	Pulse	0.30	3
2	In		916,174.02	0.75	99.1	Pulse	0.30	3
2	Tb		3,002,941.83	1.13	98.3	Pulse	0.30	3
2	Ho		308,894.13	0.87	101.6	Pulse	0.30	3
2	Bi		1,986,000.48	0.71	98.7	Pulse	0.30	3
3	Sc		224,525.43	1.04	102.1	Pulse	0.30	3
3	Ge		127,097.21	0.16	101.2	Pulse	0.30	3
3	Ge		190,627.44	0.34	99.7	Pulse	0.30	3
3	Rh		1,887,933.12	0.34	99.5	Pulse	0.30	3
3	Tb		3,188,943.28	0.66	102.0	Pulse	0.30	3

Quantitation Report

File Name	033SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:09
Sample Name	mp17720a-ps1
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	10/8/2019 13:38
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	217.361	ug/l	0.87	471,025.15	2.158E-01	Pulse	0.25	3
B			1	298.605	ug/l	0.54	473,487.12	2.169E-01	Pulse	0.15	3
Ca			1	36721.047	ug/l	0.85	9,355,528.61	2.468E+00	Analog	0.10	3
Sr			1	375.061	ug/l	0.78	3,522,553.91	9.936E-01	Pulse	0.10	3
Mo			1	231.734	ug/l	0.54	409,658.40	1.155E-01	Pulse	0.10	3
Ag			1	110.369	ug/l	1.18	492,659.43	1.349E-01	Pulse	0.10	3
Sn			1	290.987	ug/l	0.32	811,593.76	2.223E-01	Pulse	0.10	3
Sb			1	198.036	ug/l	0.73	676,128.04	1.225E-01	Pulse	0.10	3
Ba			1	1661.922	ug/l	0.87	2,394,462.88	4.337E-01	Pulse	0.10	3
Tl			1	204.786	ug/l	0.67	1,660,823.83	5.455E-01	Pulse	0.10	3
Pb			1	967.347	ug/l	1.32	2,700,279.86	8.869E-01	Pulse	0.10	3
Pb			1	919.991	ug/l	0.91	2,268,573.56	7.451E-01	Pulse	0.10	3
Pb			1	962.231	ug/l	0.48	10,765,983.33	3.536E+00	Analog	0.10	3
Na			2	9502.272	ug/l	0.17	4,073,048.59	1.968E+01	Pulse	0.30	3
Mg			2	66060.791	ug/l	0.75	12,958,237.54	6.261E+01	Analog	0.30	3
Al			2	192302.185	ug/l	0.48	12,611,652.83	6.094E+01	Analog	0.30	3
K			2	32617.468	ug/l	0.41	4,699,844.40	2.271E+01	Pulse	0.30	3
Ca			2	36933.463	ug/l	0.59	257,176.94	1.243E+00	Pulse	0.30	3
Ti			2	611.377	ug/l	0.80	31,905.24	1.542E-01	Pulse	0.30	3
V			2	510.751	ug/l	0.28	789,112.54	3.813E+00	Pulse	0.30	3
Cr			2	568.079	ug/l	0.69	1,123,990.33	5.431E+00	Pulse	0.30	3
Mn			2	6102.707	ug/l	1.08	6,473,873.35	3.128E+01	Analog	0.30	3
Fe			2	363609.748	ug/l	0.61	573,818,821.64	2.773E+03	Analog	0.30	3
Co			2	342.365	ug/l	0.10	1,027,864.50	4.966E+00	Pulse	0.30	3
Ni			2	593.638	ug/l	0.64	478,163.00	2.310E+00	Pulse	0.30	3
Cu			2	4050.676	ug/l	1.09	8,792,794.37	4.249E+01	Analog	0.30	3
Zn			2	6455.089	ug/l	0.64	2,066,566.93	9.985E+00	Pulse	0.30	3
As			2	249.426	ug/l	0.65	43,964.46	2.124E-01	Pulse	1.00	3
Cd			2	278.551	ug/l	0.81	107,908.32	1.243E-01	Pulse	0.30	3
Sn			2	303.913	ug/l	0.55	248,316.93	2.860E-01	Pulse	0.30	3
Se			3	516.500	ug/l	1.18	19,691.73	1.054E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,183,015.12	0.83	83.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,791,134.74	0.60	111.1	Pulse	0.10	3
1	Ge		569,521.41	0.95	97.4	Pulse	0.10	3
1	Ge		757,897.44	0.96	93.9	Pulse	0.10	3
1	Rh		3,545,323.49	0.62	92.9	Pulse	0.10	3
1	In		3,651,245.54	1.02	97.1	Pulse	0.10	3
1	Tb		5,520,600.12	0.95	103.6	Analog	0.10	3
1	Ho		598,230.71	1.58	116.1	Pulse	0.10	3
1	Bi		3,044,737.25	1.15	95.7	Pulse	0.10	3
2	Sc		206,959.53	0.16	112.2	Pulse	0.30	3
2	Ge		96,026.86	1.01	101.6	Pulse	0.30	3
2	Ge		138,064.71	1.17	97.3	Pulse	0.30	3
2	Rh		2,141,265.68	0.77	93.4	Pulse	0.30	3
2	In		868,380.79	0.20	94.0	Pulse	0.30	3
2	Tb		2,976,983.07	0.15	97.5	Pulse	0.30	3
2	Ho		337,853.46	0.63	111.2	Pulse	0.30	3
2	Bi		1,894,509.79	0.28	94.2	Pulse	0.30	3
3	Sc		262,362.91	1.14	119.4	Pulse	0.30	3
3	Ge		129,542.93	0.13	103.1	Pulse	0.30	3
3	Ge		186,886.30	0.59	97.7	Pulse	0.30	3
3	Rh		1,849,539.30	0.17	97.4	Pulse	0.30	3
3	Tb		3,235,239.45	0.32	103.4	Pulse	0.30	3

Quantitation Report

File Name	034SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:14
Sample Name	jc95615-2
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	10/8/2019 13:38
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	12.422	ug/l	0.39	26,651.58	1.234E-02	Pulse	0.25	3
B			1	114.633	ug/l	0.78	182,178.52	8.434E-02	Pulse	0.15	3
Ca			1	40255.503	ug/l	0.65	10,421,839.01	2.705E+00	Analog	0.10	3
Sr			1	202.184	ug/l	0.25	1,889,513.15	5.357E-01	Pulse	0.10	3
Mo			1	22.902	ug/l	1.52	40,321.78	1.143E-02	Pulse	0.10	3
Ag			1	19.596	ug/l	1.81	86,746.51	2.397E-02	Pulse	0.10	3
Sn			1	113.442	ug/l	1.10	314,831.72	8.698E-02	Pulse	0.10	3
Sb			1	9.970	ug/l	1.86	34,585.42	6.206E-03	Pulse	0.10	3
Ba			1	1503.468	ug/l	0.30	2,186,995.12	3.924E-01	Pulse	0.10	3
Tl			1	1.640	ug/l	2.40	13,376.60	4.374E-03	Pulse	0.10	3
Pb			1	887.070	ug/l	0.92	2,487,554.86	8.133E-01	Pulse	0.10	3
Pb			1	830.098	ug/l	1.28	2,056,140.70	6.723E-01	Pulse	0.10	3
Pb			1	874.511	ug/l	1.26	9,829,064.85	3.214E+00	Analog	0.10	3
Na			2	1370.852	ug/l	1.00	614,583.03	2.887E+00	Pulse	0.30	3
Mg			2	67557.661	ug/l	1.00	13,628,956.96	6.403E+01	Analog	0.30	3
Al			2	191276.277	ug/l	0.84	12,901,418.65	6.061E+01	Analog	0.30	3
K			2	25974.064	ug/l	0.63	3,853,383.74	1.810E+01	Pulse	0.30	3
Ca			2	39313.028	ug/l	0.25	281,541.01	1.323E+00	Pulse	0.30	3
Ti			2	483.285	ug/l	2.58	25,932.54	1.218E-01	Pulse	0.30	3
V			2	356.768	ug/l	0.71	567,184.23	2.665E+00	Pulse	0.30	3
Cr			2	462.910	ug/l	0.55	942,174.79	4.426E+00	Pulse	0.30	3
Mn			2	6067.052	ug/l	0.88	6,619,697.23	3.110E+01	Analog	0.30	3
Fe			2	394250.039	ug/l	0.58	639,892,685.69	3.006E+03	Analog	0.30	3
Co			2	178.441	ug/l	0.28	551,032.24	2.589E+00	Pulse	0.30	3
Ni			2	487.061	ug/l	0.69	403,545.41	1.896E+00	Pulse	0.30	3
Cu			2	4810.924	ug/l	0.61	10,739,571.52	5.046E+01	Analog	0.30	3
Zn			2	7774.743	ug/l	0.60	2,559,843.30	1.203E+01	Pulse	0.30	3
As			2	80.720	ug/l	0.06	14,647.57	6.881E-02	Pulse	1.00	3
Cd			2	91.353	ug/l	1.05	35,623.66	4.075E-02	Pulse	0.30	3
Sn			2	116.102	ug/l	1.12	95,802.98	1.096E-01	Pulse	0.30	3
Se			3	9.431	ug/l	1.33	360.93	1.936E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,159,955.20	0.22	82.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,852,994.84	0.51	112.9	Pulse	0.10	3
1	Ge		571,401.89	0.59	97.8	Pulse	0.10	3
1	Ge		760,828.22	0.86	94.2	Pulse	0.10	3
1	Rh		3,527,391.92	0.99	92.4	Pulse	0.10	3
1	In		3,619,717.70	1.14	96.2	Pulse	0.10	3
1	Tb		5,573,684.50	1.27	104.6	Analog	0.10	3
1	Ho		600,880.32	0.71	116.7	Pulse	0.10	3
1	Bi		3,058,812.45	1.28	96.2	Pulse	0.10	3
2	Sc		212,857.19	0.74	115.4	Pulse	0.30	3
2	Ge		97,201.11	0.93	102.9	Pulse	0.30	3
2	Ge		139,626.82	0.96	98.4	Pulse	0.30	3
2	Rh		2,136,593.32	0.57	93.2	Pulse	0.30	3
2	In		874,111.09	0.99	94.6	Pulse	0.30	3
2	Tb		2,987,080.16	0.11	97.8	Pulse	0.30	3
2	Ho		342,862.28	0.06	112.8	Pulse	0.30	3
2	Bi		1,897,497.36	0.64	94.3	Pulse	0.30	3
3	Sc		264,770.18	0.66	120.4	Pulse	0.30	3
3	Ge		130,835.06	0.93	104.1	Pulse	0.30	3
3	Ge		186,493.57	1.41	97.5	Pulse	0.30	3
3	Rh		1,834,743.88	0.46	96.7	Pulse	0.30	3
3	Tb		3,237,701.75	0.54	103.5	Pulse	0.30	3

Quantitation Report

File Name	035_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:19
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	10/8/2019 13:38
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	48.391	ug/l	0.97	557,131.00	2.402E-01	Pulse	0.25	3
B			1	98.493	ug/l	0.74	827,092.94	3.566E-01	Pulse	0.15	3
Ca			1	5056.509	ug/l	1.59	5,394,938.04	1.700E+00	Analog	0.10	3
Sr			1	51.412	ug/l	1.17	2,441,638.56	6.810E-01	Pulse	0.10	3
Mo			1	51.734	ug/l	0.71	462,392.17	1.290E-01	Pulse	0.10	3
Ag			1	50.388	ug/l	0.86	1,121,311.02	3.080E-01	Pulse	0.10	3
Sn			1	51.144	ug/l	1.40	711,375.30	1.954E-01	Pulse	0.10	3
Sb			1	51.282	ug/l	2.36	846,465.43	1.586E-01	Pulse	0.10	3
Ba			1	49.842	ug/l	2.05	347,291.27	6.505E-02	Pulse	0.10	3
Tl			1	51.160	ug/l	1.08	2,075,614.71	6.814E-01	Pulse	0.10	3
Pb			1	51.335	ug/l	1.43	717,011.06	2.354E-01	Pulse	0.10	3
Pb			1	51.017	ug/l	1.34	629,386.04	2.066E-01	Pulse	0.10	3
Pb			1	51.415	ug/l	0.97	2,878,390.15	9.449E-01	Pulse	0.10	3
Na			2	4880.436	ug/l	0.91	8,795,722.15	5.045E+01	Analog	0.30	3
Mg			2	4695.695	ug/l	0.29	3,879,681.10	2.225E+01	Pulse	0.30	3
Al			2	4682.906	ug/l	0.15	1,293,837.07	7.421E+00	Pulse	0.30	3
K			2	4804.385	ug/l	0.38	2,920,166.34	1.675E+01	Pulse	0.30	3
Ca			2	5087.755	ug/l	1.13	149,263.08	8.562E-01	Pulse	0.30	3
Ti			2	49.734	ug/l	2.73	10,921.48	6.264E-02	Pulse	0.30	3
V			2	51.777	ug/l	0.74	337,307.40	1.935E+00	Pulse	0.30	3
Cr			2	50.573	ug/l	0.47	421,861.88	2.420E+00	Pulse	0.30	3
Mn			2	50.055	ug/l	0.81	223,735.81	1.283E+00	Pulse	0.30	3
Fe			2	5094.991	ug/l	0.70	33,869,099.76	1.943E+02	Analog	0.30	3
Co			2	50.792	ug/l	0.19	642,302.66	3.684E+00	Pulse	0.30	3
Ni			2	50.582	ug/l	0.32	171,708.64	9.849E-01	Pulse	0.30	3
Cu			2	50.179	ug/l	0.69	462,359.06	2.652E+00	Pulse	0.30	3
Zn			2	50.524	ug/l	0.72	68,445.15	3.926E-01	Pulse	0.30	3
As			2	51.122	ug/l	0.63	37,952.19	2.177E-01	Pulse	1.00	3
Cd			2	50.346	ug/l	0.11	99,712.81	1.123E-01	Pulse	0.30	3
Sn			2	51.678	ug/l	0.72	215,948.36	2.432E-01	Pulse	0.30	3
Se			3	193.877	ug/l	0.49	37,447.75	1.978E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,319,691.16	1.34	88.4	Pulse	0.10	3
1	Sc		3,173,508.29	0.48	93.0	Pulse	0.10	3
1	Ge		557,164.55	0.62	95.3	Pulse	0.10	3

Quantitation Report

1	Ge		775,275.85	0.20	96.0	Pulse	0.10	3
1	Rh		3,585,166.72	0.62	93.9	Pulse	0.10	3
1	In		3,640,654.62	0.90	96.8	Pulse	0.10	3
1	Tb		5,340,630.02	2.83	100.2	Mix	0.10	3
1	Ho		515,676.70	0.71	100.1	Pulse	0.10	3
1	Bi		3,046,257.35	0.33	95.8	Pulse	0.10	3
2	Sc		174,339.82	0.24	94.5	Pulse	0.30	3
2	Ge		92,621.52	0.40	98.0	Pulse	0.30	3
2	Ge		140,642.76	0.12	99.1	Pulse	0.30	3
2	Rh		2,175,683.52	0.66	94.9	Pulse	0.30	3
2	In		887,921.16	0.67	96.1	Pulse	0.30	3
2	Tb		2,939,337.45	0.45	96.2	Pulse	0.30	3
2	Ho		293,282.21	0.82	96.5	Pulse	0.30	3
2	Bi		1,891,690.41	0.85	94.0	Pulse	0.30	3
3	Sc		217,127.04	1.08	98.8	Pulse	0.30	3
3	Ge		124,630.32	0.56	99.2	Pulse	0.30	3
3	Ge		189,365.67	0.47	99.0	Pulse	0.30	3
3	Rh		1,886,116.59	0.43	99.4	Pulse	0.30	3
3	Tb		3,186,111.96	0.52	101.9	Pulse	0.30	3

Quantitation Report

File Name	036_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:24
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	10/8/2019 13:38
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	68.76	70.67	2.954E-05	Pulse	0.25	3
B			1	3.184	ug/l	4.15	31,730.04	1.322E-02	Pulse	0.15	3
Ca			1	-0.779	ug/l	-10.40	9,933.45	3.090E-03	Pulse	0.10	3
Sr			1	0.002	ug/l	121.03	553.36	1.487E-04	Pulse	0.10	3
Mo			1	0.093	ug/l	14.66	916.72	2.462E-04	Pulse	0.10	3
Ag			1	0.008	ug/l	29.13	230.01	6.139E-05	Pulse	0.10	3
Sn			1	0.105	ug/l	0.55	3,500.53	9.332E-04	Pulse	0.10	3
Sb			1	0.229	ug/l	10.82	4,140.68	7.497E-04	Pulse	0.10	3
Ba			1	0.006	ug/l	49.65	123.34	2.230E-05	Pulse	0.10	3
Tl			1	0.013	ug/l	20.72	563.37	1.786E-04	Pulse	0.10	3
Pb			1	0.055	ug/l	20.61	996.74	3.165E-04	Pulse	0.10	3
Pb			1	0.059	ug/l	9.84	866.72	2.746E-04	Pulse	0.10	3
Pb			1	0.052	ug/l	3.72	3,870.35	1.228E-03	Pulse	0.10	3
Na			2	1.091	ug/l	33.24	11,719.73	6.761E-02	Pulse	0.30	3
Mg			2	0.482	ug/l	18.92	536.68	3.099E-03	Pulse	0.30	3
Al			2	5.502	ug/l	8.16	1,826.79	1.054E-02	Pulse	0.30	3
K			2	1.562	ug/l	37.08	17,583.83	1.014E-01	Pulse	0.30	3
Ca			2	-0.020	ug/l	-5749.17	138.89	7.998E-04	Pulse	0.30	3
Ti			2	0.123	ug/l	18.62	8.89	5.108E-05	Pulse	0.30	3
V			2	-0.015	ug/l	-109.65	667.80	3.847E-03	Pulse	0.30	3
Cr			2	0.008	ug/l	107.13	804.48	4.641E-03	Pulse	0.30	3
Mn			2	0.087	ug/l	4.50	474.46	2.737E-03	Pulse	0.30	3
Fe			2	1.648	ug/l	15.12	14,831.30	8.558E-02	Pulse	0.30	3
Co			2	0.001	ug/l	56.09	86.63	4.994E-04	Pulse	0.30	3
Ni			2	0.014	ug/l	100.36	226.67	1.306E-03	Pulse	0.30	3
Cu			2	0.085	ug/l	21.83	4,570.68	2.636E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.203	ug/l	8.15	600.02	3.460E-03	Pulse	0.30	3
As			2	0.017	ug/l	48.46	29.33	1.694E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	145.70	5.48	6.170E-06	Pulse	0.30	3
Sn			2	0.195	ug/l	12.67	1,350.08	1.508E-03	Pulse	0.30	3
Se			3	0.075	ug/l	12.39	16.60	8.883E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,400,328.31	1.03	91.5	Pulse	0.10	3
1	Sc		3,214,609.33	1.12	94.2	Pulse	0.10	3
1	Ge		561,711.50	0.37	96.1	Pulse	0.10	3
1	Ge		773,926.32	0.63	95.9	Pulse	0.10	3
1	Rh		3,722,453.17	0.27	97.5	Pulse	0.10	3
1	In		3,751,239.24	0.93	99.7	Pulse	0.10	3
1	Tb		5,523,693.88	1.72	103.6	Analog	0.10	3
1	Ho		517,362.36	1.11	100.4	Pulse	0.10	3
1	Bi		3,153,597.56	1.57	99.1	Pulse	0.10	3
2	Sc		173,393.25	1.25	94.0	Pulse	0.30	3
2	Ge		93,174.82	2.40	98.6	Pulse	0.30	3
2	Ge		140,346.87	1.08	98.9	Pulse	0.30	3
2	Rh		2,239,696.99	1.99	97.7	Pulse	0.30	3
2	In		895,776.83	1.59	96.9	Pulse	0.30	3
2	Tb		2,951,830.09	1.56	96.7	Pulse	0.30	3
2	Ho		297,101.74	2.03	97.8	Pulse	0.30	3
2	Bi		1,961,665.27	1.31	97.5	Pulse	0.30	3
3	Sc		212,985.16	1.24	96.9	Pulse	0.30	3
3	Ge		124,677.51	0.81	99.2	Pulse	0.30	3
3	Ge		186,797.94	1.82	97.7	Pulse	0.30	3
3	Rh		1,921,782.15	0.72	101.2	Pulse	0.30	3
3	Tb		3,174,007.03	1.12	101.5	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:29
Sample Name	jc95615-3
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	10/8/2019 13:38
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	12.517	ug/l	2.19	27,228.51	1.243E-02	Pulse	0.25	3
B			1	117.551	ug/l	0.22	189,311.14	8.645E-02	Pulse	0.15	3
Ca			1	36909.341	ug/l	0.69	9,599,609.44	2.480E+00	Analog	0.10	3
Sr			1	233.507	ug/l	0.56	2,165,445.64	6.186E-01	Pulse	0.10	3
Mo			1	25.765	ug/l	1.71	45,014.18	1.286E-02	Pulse	0.10	3
Ag			1	18.581	ug/l	3.63	82,038.75	2.273E-02	Pulse	0.10	3
Sn			1	125.953	ug/l	0.48	348,409.37	9.652E-02	Pulse	0.10	3
Sb			1	9.265	ug/l	2.62	32,026.62	5.770E-03	Pulse	0.10	3
Ba			1	1500.648	ug/l	1.42	2,173,679.19	3.917E-01	Pulse	0.10	3
Tl			1	1.626	ug/l	2.76	13,096.23	4.338E-03	Pulse	0.10	3
Pb			1	1138.911	ug/l	0.73	3,152,352.25	1.044E+00	Pulse	0.10	3
Pb			1	1061.202	ug/l	0.13	2,594,556.89	8.594E-01	Pulse	0.10	3
Pb			1	1114.698	ug/l	0.35	12,366,439.25	4.096E+00	Analog	0.10	3
Na			2	1354.975	ug/l	1.06	597,754.30	2.855E+00	Pulse	0.30	3
Mg			2	69160.839	ug/l	0.43	13,726,376.95	6.555E+01	Analog	0.30	3
Al			2	199035.809	ug/l	1.04	13,207,330.59	6.307E+01	Analog	0.30	3
K			2	27303.742	ug/l	0.46	3,983,839.01	1.903E+01	Pulse	0.30	3
Ca			2	36468.708	ug/l	0.32	256,936.58	1.227E+00	Pulse	0.30	3
Ti			2	496.569	ug/l	0.57	26,215.24	1.252E-01	Pulse	0.30	3
V			2	366.709	ug/l	0.76	573,500.27	2.739E+00	Pulse	0.30	3
Cr			2	489.384	ug/l	0.44	979,815.06	4.679E+00	Pulse	0.30	3
Mn			2	7729.286	ug/l	0.50	8,296,052.45	3.962E+01	Analog	0.30	3
Fe			2	414338.619	ug/l	0.29	661,580,347.04	3.159E+03	Analog	0.30	3
Co			2	198.783	ug/l	0.62	603,864.37	2.884E+00	Pulse	0.30	3
Ni			2	513.367	ug/l	0.99	418,402.97	1.998E+00	Pulse	0.30	3
Cu			2	5132.604	ug/l	0.17	11,271,526.78	5.383E+01	Analog	0.30	3
Zn			2	8351.358	ug/l	0.59	2,705,047.12	1.292E+01	Pulse	0.30	3
As			2	85.071	ug/l	0.52	15,185.07	7.252E-02	Pulse	1.00	3
Cd			2	100.700	ug/l	0.87	38,749.47	4.492E-02	Pulse	0.30	3
Sn			2	129.317	ug/l	1.22	105,244.36	1.220E-01	Pulse	0.30	3
Se			3	9.714	ug/l	0.74	370.07	1.993E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,189,901.35	0.15	83.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,870,215.78	1.27	113.4	Pulse	0.10	3
1	Ge		567,552.82	1.50	97.1	Pulse	0.10	3
1	Ge		753,502.70	1.60	93.3	Pulse	0.10	3
1	Rh		3,500,338.91	1.16	91.7	Pulse	0.10	3
1	In		3,609,881.35	0.37	96.0	Pulse	0.10	3
1	Tb		5,550,713.25	1.55	104.2	Analog	0.10	3
1	Ho		602,132.15	0.24	116.9	Pulse	0.10	3
1	Bi		3,018,934.54	0.32	94.9	Pulse	0.10	3
2	Sc		209,399.15	0.17	113.5	Pulse	0.30	3
2	Ge		96,556.30	0.22	102.2	Pulse	0.30	3
2	Ge		137,820.32	0.75	97.1	Pulse	0.30	3
2	Rh		2,113,865.19	0.76	92.2	Pulse	0.30	3
2	In		862,536.51	0.20	93.3	Pulse	0.30	3
2	Tb		2,955,391.48	0.46	96.8	Pulse	0.30	3
2	Ho		340,709.08	0.87	112.1	Pulse	0.30	3
2	Bi		1,870,055.20	0.54	93.0	Pulse	0.30	3
3	Sc		263,396.50	0.83	119.8	Pulse	0.30	3
3	Ge		129,149.33	0.85	102.8	Pulse	0.30	3
3	Ge		185,646.04	1.17	97.1	Pulse	0.30	3
3	Rh		1,831,100.83	0.93	96.5	Pulse	0.30	3
3	Tb		3,222,625.22	1.17	103.0	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:34
Sample Name	jc95615-4
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	10/8/2019 13:38
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	11.734	ug/l	0.93	25,630.04	1.166E-02	Pulse	0.25	3
B			1	107.925	ug/l	0.92	174,836.61	7.951E-02	Pulse	0.15	3
Ca			1	43490.950	ug/l	0.63	11,173,174.83	2.922E+00	Analog	0.10	3
Sr			1	228.003	ug/l	1.19	2,129,775.33	6.041E-01	Pulse	0.10	3
Mo			1	31.781	ug/l	0.90	55,928.69	1.586E-02	Pulse	0.10	3
Ag			1	16.965	ug/l	2.49	74,920.52	2.075E-02	Pulse	0.10	3
Sn			1	103.607	ug/l	0.50	287,037.04	7.949E-02	Pulse	0.10	3
Sb			1	8.765	ug/l	1.39	29,815.68	5.462E-03	Pulse	0.10	3
Ba			1	1411.004	ug/l	0.92	2,009,573.15	3.683E-01	Pulse	0.10	3
Tl			1	1.500	ug/l	0.99	12,195.45	4.003E-03	Pulse	0.10	3
Pb			1	865.586	ug/l	0.81	2,417,127.20	7.936E-01	Pulse	0.10	3
Pb			1	805.415	ug/l	0.79	1,986,701.90	6.523E-01	Pulse	0.10	3
Pb			1	834.339	ug/l	0.79	9,338,506.42	3.066E+00	Pulse	0.10	3
Na			2	1278.333	ug/l	0.87	570,982.72	2.696E+00	Pulse	0.30	3
Mg			2	64970.910	ug/l	1.06	13,040,162.26	6.158E+01	Analog	0.30	3
Al			2	182053.801	ug/l	1.81	12,215,613.12	5.769E+01	Analog	0.30	3
K			2	25379.369	ug/l	1.42	3,746,044.99	1.769E+01	Pulse	0.30	3
Ca			2	41936.631	ug/l	0.84	298,768.59	1.411E+00	Pulse	0.30	3
Ti			2	476.674	ug/l	2.87	25,453.01	1.202E-01	Pulse	0.30	3
V			2	340.314	ug/l	1.13	538,277.72	2.542E+00	Pulse	0.30	3
Cr			2	438.223	ug/l	1.14	887,350.97	4.190E+00	Pulse	0.30	3
Mn			2	6074.173	ug/l	1.07	6,592,941.68	3.113E+01	Analog	0.30	3
Fe			2	382049.339	ug/l	2.10	616,838,126.60	2.913E+03	Analog	0.30	3
Co			2	169.220	ug/l	1.39	519,846.31	2.455E+00	Pulse	0.30	3
Ni			2	486.539	ug/l	1.37	401,006.95	1.894E+00	Pulse	0.30	3
Cu			2	4429.493	ug/l	1.15	9,837,695.72	4.646E+01	Analog	0.30	3
Zn			2	7650.169	ug/l	1.23	2,505,846.43	1.183E+01	Pulse	0.30	3
As			2	80.294	ug/l	1.62	14,494.44	6.845E-02	Pulse	1.00	3
Cd			2	91.055	ug/l	2.08	35,413.26	4.062E-02	Pulse	0.30	3
Sn			2	107.002	ug/l	0.89	88,102.89	1.011E-01	Pulse	0.30	3
Se			3	9.076	ug/l	0.82	347.33	1.863E-03	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,198,928.64	0.58	83.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,823,704.11	0.79	112.0	Pulse	0.10	3
1	Ge		569,267.01	0.07	97.4	Pulse	0.10	3
1	Ge		754,622.54	0.49	93.5	Pulse	0.10	3
1	Rh		3,526,227.65	1.91	92.4	Pulse	0.10	3
1	In		3,611,322.89	1.97	96.0	Pulse	0.10	3
1	Tb		5,457,945.33	2.81	102.4	Mix	0.10	3
1	Ho		598,069.23	0.54	116.1	Pulse	0.10	3
1	Bi		3,045,961.00	1.36	95.8	Pulse	0.10	3
2	Sc		211,773.33	1.19	114.8	Pulse	0.30	3
2	Ge		96,432.25	0.72	102.1	Pulse	0.30	3
2	Ge		138,411.77	0.58	97.5	Pulse	0.30	3
2	Rh		2,128,172.48	0.73	92.8	Pulse	0.30	3
2	In		871,793.26	1.00	94.3	Pulse	0.30	3
2	Tb		2,969,830.58	0.90	97.2	Pulse	0.30	3
2	Ho		340,464.76	0.77	112.0	Pulse	0.30	3
2	Bi		1,885,489.37	0.67	93.7	Pulse	0.30	3
3	Sc		259,943.30	0.76	118.3	Pulse	0.30	3
3	Ge		128,483.46	1.22	102.3	Pulse	0.30	3
3	Ge		186,420.18	1.40	97.5	Pulse	0.30	3
3	Rh		1,827,778.40	0.55	96.3	Pulse	0.30	3
3	Tb		3,203,221.68	0.50	102.4	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:39
Sample Name	mp17745-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	10/8/2019 13:38
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	183.03	29.33	1.268E-05	Pulse	0.25	3
B			1	5.721	ug/l	1.50	27,718.69	1.206E-02	Pulse	0.15	3
Ca			1	48.227	ug/l	4.47	37,750.20	1.144E-02	Pulse	0.10	3
Sr			1	0.046	ug/l	11.71	1,640.15	4.284E-04	Pulse	0.10	3
Mo			1	0.139	ug/l	11.25	723.38	1.881E-04	Pulse	0.10	3
Ag			1	0.022	ug/l	4.05	300.01	7.835E-05	Pulse	0.10	3
Sn			1	0.684	ug/l	8.31	7,045.16	1.836E-03	Pulse	0.10	3
Sb			1	0.281	ug/l	6.35	2,677.00	4.773E-04	Pulse	0.10	3
Ba			1	0.048	ug/l	5.44	256.68	4.573E-05	Pulse	0.10	3
Tl			1	0.009	ug/l	22.14	213.34	6.387E-05	Pulse	0.10	3
Pb			1	0.208	ug/l	16.72	1,820.18	5.434E-04	Pulse	0.10	3
Pb			1	0.208	ug/l	8.44	1,533.47	4.571E-04	Pulse	0.10	3
Pb			1	0.211	ug/l	2.35	7,387.70	2.205E-03	Pulse	0.10	3
Na			2	10.330	ug/l	5.37	19,258.85	1.097E-01	Pulse	0.30	3
Mg			2	3.110	ug/l	6.01	1,436.76	8.182E-03	Pulse	0.30	3
Al			2	5.004	ug/l	13.54	1,016.71	5.788E-03	Pulse	0.30	3
K			2	8.829	ug/l	6.45	19,544.86	1.113E-01	Pulse	0.30	3
Ca			2	50.343	ug/l	13.97	884.48	5.035E-03	Pulse	0.30	3
Ti			2	1.330	ug/l	24.72	128.89	7.352E-04	Pulse	0.30	3
V			2	0.246	ug/l	9.14	1,576.76	8.982E-03	Pulse	0.30	3
Cr			2	0.560	ug/l	4.59	3,093.66	1.762E-02	Pulse	0.30	3
Mn			2	0.169	ug/l	26.94	468.91	2.669E-03	Pulse	0.30	3
Fe			2	17.320	ug/l	6.60	61,959.16	3.529E-01	Pulse	0.30	3
Co			2	0.008	ug/l	19.30	127.62	7.269E-04	Pulse	0.30	3
Ni			2	0.064	ug/l	25.74	291.12	1.658E-03	Pulse	0.30	3
Cu			2	0.550	ug/l	9.06	6,379.08	3.634E-02	Pulse	0.30	3
Zn			2	6.978	ug/l	4.86	5,067.51	2.887E-02	Pulse	0.30	3
As			2	0.157	ug/l	13.09	76.00	4.327E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.005	ug/l	145.25	6.60	7.347E-06	Pulse	0.30	3
Sn			2	0.900	ug/l	3.96	2,419.11	2.704E-03	Pulse	0.30	3
Se			3	0.066	ug/l	7.60	9.00	4.567E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,298,754.40	1.50	87.6	Pulse	0.10	3
1	Sc		3,301,337.45	3.46	96.7	Pulse	0.10	3
1	Ge		599,382.18	1.71	102.5	Pulse	0.10	3
1	Ge		825,748.16	1.72	102.3	Pulse	0.10	3
1	Rh		3,835,472.34	3.87	100.5	Pulse	0.10	3
1	In		3,832,248.51	3.52	101.9	Pulse	0.10	3
1	Tb		5,611,385.54	3.87	105.3	Analog	0.10	3
1	Ho		529,960.18	3.06	102.9	Pulse	0.10	3
1	Bi		3,350,788.39	2.48	105.3	Pulse	0.10	3
2	Sc		175,581.40	0.81	95.2	Pulse	0.30	3
2	Ge		98,771.75	1.02	104.6	Pulse	0.30	3
2	Ge		146,749.09	0.37	103.4	Pulse	0.30	3
2	Rh		2,275,826.09	0.72	99.2	Pulse	0.30	3
2	In		894,481.53	0.73	96.8	Pulse	0.30	3
2	Tb		2,957,014.05	0.52	96.8	Pulse	0.30	3
2	Ho		295,056.65	0.76	97.1	Pulse	0.30	3
2	Bi		2,012,939.71	1.10	100.1	Pulse	0.30	3
3	Sc		226,537.75	1.16	103.1	Pulse	0.30	3
3	Ge		130,549.84	0.89	103.9	Pulse	0.30	3
3	Ge		197,066.77	0.56	103.1	Pulse	0.30	3
3	Rh		2,002,753.95	0.25	105.5	Pulse	0.30	3
3	Tb		3,254,120.91	0.15	104.0	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:44
Sample Name	mp17745-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	10/8/2019 13:38
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	73.124	ug/l	1.27	404,656.69	1.815E-01	Pulse	0.25	3
B			1	82.040	ug/l	2.10	333,398.47	1.495E-01	Pulse	0.15	3
Ca			1	4037.363	ug/l	0.66	2,160,983.09	6.807E-01	Pulse	0.10	3
Sr			1	77.048	ug/l	1.33	1,848,848.67	5.103E-01	Pulse	0.10	3
Mo			1	79.160	ug/l	1.47	357,485.35	9.868E-02	Pulse	0.10	3
Ag			1	77.720	ug/l	0.61	871,410.25	2.375E-01	Pulse	0.10	3
Sn			1	78.847	ug/l	0.07	552,984.07	1.507E-01	Pulse	0.10	3
Sb			1	76.179	ug/l	1.48	647,726.96	1.178E-01	Pulse	0.10	3
Ba			1	73.076	ug/l	1.72	262,274.77	4.769E-02	Pulse	0.10	3
Tl			1	75.195	ug/l	0.60	1,585,959.93	5.007E-01	Pulse	0.10	3
Pb			1	78.406	ug/l	0.73	569,382.17	1.798E-01	Pulse	0.10	3
Pb			1	77.757	ug/l	0.72	498,708.43	1.575E-01	Pulse	0.10	3
Pb			1	78.507	ug/l	0.26	2,285,108.73	7.215E-01	Pulse	0.10	3
Na			2	3843.577	ug/l	1.40	3,397,862.44	1.990E+01	Pulse	0.30	3
Mg			2	3811.794	ug/l	1.09	1,542,263.65	9.033E+00	Pulse	0.30	3
Al			2	3747.981	ug/l	1.20	507,255.14	2.971E+00	Pulse	0.30	3
K			2	3890.514	ug/l	0.63	1,167,703.39	6.839E+00	Pulse	0.30	3
Ca			2	4246.638	ug/l	1.03	61,085.56	3.578E-01	Pulse	0.30	3
Ti			2	76.800	ug/l	1.33	8,254.35	4.834E-02	Pulse	0.30	3
V			2	80.131	ug/l	0.50	255,798.62	1.498E+00	Pulse	0.30	3
Cr			2	78.487	ug/l	0.42	320,770.93	1.879E+00	Pulse	0.30	3
Mn			2	76.823	ug/l	1.21	168,164.05	9.849E-01	Pulse	0.30	3
Fe			2	4206.320	ug/l	0.90	13,694,669.73	8.021E+01	Analog	0.30	3
Co			2	79.283	ug/l	0.75	490,958.87	2.875E+00	Pulse	0.30	3
Ni			2	78.020	ug/l	0.75	129,731.04	7.598E-01	Pulse	0.30	3
Cu			2	78.068	ug/l	1.29	353,087.21	2.068E+00	Pulse	0.30	3
Zn			2	83.027	ug/l	1.25	55,134.47	3.229E-01	Pulse	0.30	3
As			2	74.905	ug/l	1.15	27,234.94	1.595E-01	Pulse	1.00	3
Cd			2	74.152	ug/l	1.19	71,745.18	8.270E-02	Pulse	0.30	3
Sn			2	81.417	ug/l	0.37	166,318.75	1.917E-01	Pulse	0.30	3
Se			3	335.091	ug/l	0.63	33,209.58	1.709E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,229,854.00	0.56	85.0	Pulse	0.10	3
1	Sc		3,174,450.37	1.33	93.0	Pulse	0.10	3
1	Ge		574,976.88	0.68	98.4	Pulse	0.10	3

Quantitation Report

1	Ge		798,570.77	0.63	98.9	Pulse	0.10	3
1	Rh		3,622,668.17	0.40	94.9	Pulse	0.10	3
1	In		3,668,293.09	0.77	97.5	Pulse	0.10	3
1	Tb		5,499,312.42	0.08	103.2	Analog	0.10	3
1	Ho		517,498.26	0.55	100.5	Pulse	0.10	3
1	Bi		3,167,360.05	1.03	99.6	Pulse	0.10	3
2	Sc		170,744.51	0.62	92.5	Pulse	0.30	3
2	Ge		95,545.08	1.92	101.1	Pulse	0.30	3
2	Ge		144,256.81	1.24	101.6	Pulse	0.30	3
2	Rh		2,198,061.65	0.51	95.8	Pulse	0.30	3
2	In		867,554.77	0.65	93.9	Pulse	0.30	3
2	Tb		2,938,432.87	0.89	96.2	Pulse	0.30	3
2	Ho		294,916.39	0.90	97.0	Pulse	0.30	3
2	Bi		1,935,997.84	0.61	96.2	Pulse	0.30	3
3	Sc		222,863.86	0.76	101.4	Pulse	0.30	3
3	Ge		127,586.76	1.08	101.5	Pulse	0.30	3
3	Ge		194,324.67	0.25	101.6	Pulse	0.30	3
3	Rh		1,940,573.74	0.29	102.2	Pulse	0.30	3
3	Tb		3,242,542.65	0.08	103.7	Pulse	0.30	3

Quantitation Report

File Name	041SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:49
Sample Name	mp17745-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	10/8/2019 13:38
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	112.605	ug/l	3.20	377,289.85	2.795E-01	Pulse	0.25	3
B			1	456.314	ug/l	1.98	1,112,213.81	8.237E-01	Pulse	0.15	3
Ca			1	122874.762	ug/l	0.21	64,296,460.71	2.062E+01	Analog	0.10	3
Sr			1	423.816	ug/l	0.71	9,105,084.87	2.807E+00	Analog	0.10	3
Mo			1	86.905	ug/l	0.26	351,435.40	1.083E-01	Pulse	0.10	3
Ag			1	70.524	ug/l	0.44	741,997.28	2.156E-01	Pulse	0.10	3
Sn			1	79.192	ug/l	0.73	521,188.64	1.514E-01	Pulse	0.10	3
Sb			1	75.351	ug/l	2.16	614,613.03	1.165E-01	Pulse	0.10	3
Ba			1	134.410	ug/l	1.59	462,791.65	8.771E-02	Pulse	0.10	3
Tl			1	78.202	ug/l	0.64	1,451,716.70	5.208E-01	Pulse	0.10	3
Pb			1	81.917	ug/l	0.97	523,568.48	1.878E-01	Pulse	0.10	3
Pb			1	81.479	ug/l	0.12	459,955.98	1.650E-01	Pulse	0.10	3
Pb			1	82.151	ug/l	0.53	2,104,522.60	7.549E-01	Pulse	0.10	3
Na			2	275981.105	ug/l	1.04	244,015,768.08	1.425E+03	Analog	0.30	3
Mg			2	28518.537	ug/l	2.34	11,571,048.15	6.758E+01	Analog	0.30	3
Al			2	3658.869	ug/l	1.07	496,670.73	2.900E+00	Pulse	0.30	3
K			2	211488.871	ug/l	0.56	62,788,581.95	3.666E+02	Analog	0.30	3
Ca			2	121226.297	ug/l	0.66	1,745,221.74	1.019E+01	Pulse	0.30	3
Ti			2	76.276	ug/l	1.04	8,222.13	4.801E-02	Pulse	0.30	3
V			2	83.004	ug/l	0.67	265,730.84	1.552E+00	Pulse	0.30	3
Cr			2	75.609	ug/l	0.90	309,946.67	1.810E+00	Pulse	0.30	3
Mn			2	729.712	ug/l	1.11	1,601,331.39	9.351E+00	Pulse	0.30	3
Fe			2	3994.294	ug/l	1.48	13,042,904.48	7.617E+01	Analog	0.30	3
Co			2	73.664	ug/l	0.25	457,547.98	2.672E+00	Pulse	0.30	3
Ni			2	71.245	ug/l	0.50	118,843.18	6.939E-01	Pulse	0.30	3
Cu			2	73.163	ug/l	1.01	332,111.68	1.939E+00	Pulse	0.30	3
Zn			2	79.057	ug/l	2.27	52,665.14	3.076E-01	Pulse	0.30	3
As			2	79.216	ug/l	0.56	28,887.77	1.687E-01	Pulse	1.00	3
Cd			2	70.018	ug/l	0.83	64,723.91	7.809E-02	Pulse	0.30	3
Sn			2	81.588	ug/l	0.69	159,233.09	1.921E-01	Pulse	0.30	3
Se			3	330.091	ug/l	0.40	31,071.95	1.683E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,350,627.63	2.43	51.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,118,326.83	1.07	91.3	Pulse	0.10	3
1	Ge		555,454.51	1.61	95.0	Pulse	0.10	3
1	Ge		769,588.71	0.90	95.3	Pulse	0.10	3
1	Rh		3,244,074.95	0.49	85.0	Pulse	0.10	3
1	In		3,442,207.16	0.99	91.5	Pulse	0.10	3
1	Tb		5,278,325.03	3.79	99.0	Mix	0.10	3
1	Ho		504,809.68	1.11	98.0	Pulse	0.10	3
1	Bi		2,787,704.02	0.66	87.6	Pulse	0.10	3
2	Sc		171,258.04	1.10	92.8	Pulse	0.30	3
2	Ge		93,973.66	0.28	99.5	Pulse	0.30	3
2	Ge		141,243.60	0.60	99.5	Pulse	0.30	3
2	Rh		1,982,663.12	0.79	86.4	Pulse	0.30	3
2	In		828,847.01	0.27	89.7	Pulse	0.30	3
2	Tb		2,818,508.29	0.18	92.3	Pulse	0.30	3
2	Ho		284,042.41	0.73	93.5	Pulse	0.30	3
2	Bi		1,713,157.67	0.52	85.2	Pulse	0.30	3
3	Sc		218,202.62	0.76	99.3	Pulse	0.30	3
3	Ge		122,043.41	0.45	97.1	Pulse	0.30	3
3	Ge		184,572.52	0.91	96.5	Pulse	0.30	3
3	Rh		1,740,078.40	0.22	91.7	Pulse	0.30	3
3	Tb		3,084,746.20	0.62	98.6	Pulse	0.30	3

Quantitation Report

File Name	042SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:54
Sample Name	mp17745-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	10/8/2019 13:38
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	108.454	ug/l	1.30	376,379.42	2.692E-01	Pulse	0.25	3
B			1	434.252	ug/l	0.44	1,096,264.33	7.840E-01	Pulse	0.15	3
Ca			1	121105.472	ug/l	0.80	63,714,359.05	2.032E+01	Analog	0.10	3
Sr			1	422.867	ug/l	0.81	9,201,612.15	2.800E+00	Analog	0.10	3
Mo			1	87.947	ug/l	1.10	360,214.85	1.096E-01	Pulse	0.10	3
Ag			1	71.164	ug/l	0.38	757,017.41	2.175E-01	Pulse	0.10	3
Sn			1	79.681	ug/l	0.12	530,181.73	1.523E-01	Pulse	0.10	3
Sb			1	74.310	ug/l	1.21	618,210.53	1.149E-01	Pulse	0.10	3
Ba			1	132.047	ug/l	0.91	463,588.75	8.617E-02	Pulse	0.10	3
Tl			1	78.105	ug/l	1.03	1,449,454.04	5.201E-01	Pulse	0.10	3
Pb			1	81.827	ug/l	1.14	522,791.75	1.876E-01	Pulse	0.10	3
Pb			1	81.204	ug/l	0.53	458,243.12	1.644E-01	Pulse	0.10	3
Pb			1	82.006	ug/l	0.74	2,099,984.07	7.536E-01	Pulse	0.10	3
Na			2	267791.351	ug/l	0.96	241,255,012.64	1.383E+03	Analog	0.30	3
Mg			2	27881.231	ug/l	0.53	11,527,694.82	6.606E+01	Analog	0.30	3
Al			2	3634.986	ug/l	0.81	502,771.79	2.881E+00	Pulse	0.30	3
K			2	207363.758	ug/l	0.63	62,727,861.95	3.595E+02	Analog	0.30	3
Ca			2	119368.145	ug/l	0.66	1,750,985.38	1.003E+01	Pulse	0.30	3
Ti			2	76.886	ug/l	1.92	8,444.46	4.840E-02	Pulse	0.30	3
V			2	82.165	ug/l	0.31	268,032.26	1.536E+00	Pulse	0.30	3
Cr			2	74.966	ug/l	1.05	313,128.79	1.795E+00	Pulse	0.30	3
Mn			2	719.902	ug/l	0.47	1,609,746.74	9.225E+00	Pulse	0.30	3
Fe			2	3960.806	ug/l	0.34	13,178,991.42	7.553E+01	Analog	0.30	3
Co			2	73.279	ug/l	0.71	463,745.78	2.658E+00	Pulse	0.30	3
Ni			2	70.875	ug/l	0.52	120,455.56	6.903E-01	Pulse	0.30	3
Cu			2	72.557	ug/l	0.55	335,629.02	1.924E+00	Pulse	0.30	3
Zn			2	78.414	ug/l	1.04	53,231.62	3.051E-01	Pulse	0.30	3
As			2	78.790	ug/l	0.77	29,275.43	1.678E-01	Pulse	1.00	3
Cd			2	69.602	ug/l	0.98	64,838.47	7.763E-02	Pulse	0.30	3
Sn			2	83.024	ug/l	0.70	163,283.64	1.955E-01	Pulse	0.30	3
Se			3	326.989	ug/l	1.61	31,318.35	1.668E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,398,399.06	0.41	53.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,135,489.54	1.48	91.9	Pulse	0.10	3
1	Ge		555,693.41	0.97	95.1	Pulse	0.10	3
1	Ge		770,532.28	0.76	95.4	Pulse	0.10	3
1	Rh		3,286,008.29	1.24	86.1	Pulse	0.10	3
1	In		3,480,346.91	1.45	92.5	Pulse	0.10	3
1	Tb		5,380,656.38	1.85	101.0	Analog	0.10	3
1	Ho		507,066.93	1.62	98.4	Pulse	0.10	3
1	Bi		2,786,801.52	1.39	87.6	Pulse	0.10	3
2	Sc		174,492.74	0.66	94.6	Pulse	0.30	3
2	Ge		94,571.49	0.40	100.1	Pulse	0.30	3
2	Ge		140,236.88	0.36	98.8	Pulse	0.30	3
2	Rh		1,994,092.35	0.30	86.9	Pulse	0.30	3
2	In		835,302.39	0.59	90.4	Pulse	0.30	3
2	Tb		2,858,521.90	1.00	93.6	Pulse	0.30	3
2	Ho		287,413.08	0.97	94.6	Pulse	0.30	3
2	Bi		1,710,349.24	0.80	85.0	Pulse	0.30	3
3	Sc		221,775.98	1.91	100.9	Pulse	0.30	3
3	Ge		123,715.66	1.29	98.5	Pulse	0.30	3
3	Ge		187,828.67	1.61	98.2	Pulse	0.30	3
3	Rh		1,760,756.53	0.77	92.8	Pulse	0.30	3
3	Tb		3,114,207.72	1.35	99.6	Pulse	0.30	3

Quantitation Report

File Name	043SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 14:59
Sample Name	jc95642-1
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	10/8/2019 13:38
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	0.016	ug/l	29.91	62.67	4.665E-05	Pulse	0.25	3
B			1	337.822	ug/l	0.92	818,197.45	6.103E-01	Pulse	0.15	3
Ca			1	119207.877	ug/l	0.83	63,074,742.39	2.000E+01	Analog	0.10	3
Sr			1	344.434	ug/l	0.39	7,507,136.14	2.281E+00	Analog	0.10	3
Mo			1	3.145	ug/l	4.14	12,945.63	3.934E-03	Pulse	0.10	3
Ag			1	0.044	ug/l	34.35	513.36	1.469E-04	Pulse	0.10	3
Sn			1	0.456	ug/l	6.99	4,910.93	1.402E-03	Pulse	0.10	3
Sb			1	0.369	ug/l	10.46	3,173.77	6.132E-04	Pulse	0.10	3
Ba			1	61.452	ug/l	0.52	207,689.77	4.011E-02	Pulse	0.10	3
Tl			1	0.028	ug/l	20.54	536.70	1.939E-04	Pulse	0.10	3
Pb			1	1.077	ug/l	6.67	7,018.64	2.535E-03	Pulse	0.10	3
Pb			1	0.935	ug/l	4.98	5,344.48	1.929E-03	Pulse	0.10	3
Pb			1	0.983	ug/l	0.94	25,756.34	9.298E-03	Pulse	0.10	3
Na			2	268921.877	ug/l	0.16	244,053,492.53	1.388E+03	Analog	0.30	3
Mg			2	24704.332	ug/l	0.68	10,288,948.48	5.854E+01	Analog	0.30	3
Al			2	13.962	ug/l	5.82	2,264.64	1.289E-02	Pulse	0.30	3
K			2	206288.916	ug/l	1.02	62,859,377.50	3.576E+02	Analog	0.30	3
Ca			2	117149.249	ug/l	0.06	1,731,020.31	9.848E+00	Pulse	0.30	3
Ti			2	0.968	ug/l	79.50	88.91	5.066E-04	Pulse	0.30	3
V			2	3.443	ug/l	1.11	12,052.27	6.857E-02	Pulse	0.30	3
Cr			2	0.848	ug/l	4.55	4,307.28	2.451E-02	Pulse	0.30	3
Mn			2	656.593	ug/l	0.79	1,478,921.75	8.414E+00	Pulse	0.30	3
Fe			2	35.008	ug/l	1.75	121,294.41	6.901E-01	Pulse	0.30	3
Co			2	0.282	ug/l	7.43	1,875.36	1.067E-02	Pulse	0.30	3
Ni			2	1.668	ug/l	1.49	3,033.65	1.726E-02	Pulse	0.30	3
Cu			2	3.940	ug/l	2.45	22,002.57	1.252E-01	Pulse	0.30	3
Zn			2	18.302	ug/l	2.77	12,769.54	7.265E-02	Pulse	0.30	3
As			2	6.599	ug/l	2.32	2,485.86	1.414E-02	Pulse	1.00	3
Cd			2	0.010	ug/l	164.33	11.26	1.332E-05	Pulse	0.30	3
Sn			2	0.532	ug/l	3.96	1,558.98	1.841E-03	Pulse	0.30	3
Se			3	0.246	ug/l	15.98	26.27	1.372E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,340,852.74	1.35	51.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,153,276.73	0.65	92.4	Pulse	0.10	3
1	Ge		561,065.16	1.22	96.0	Pulse	0.10	3
1	Ge		764,608.66	0.50	94.7	Pulse	0.10	3
1	Rh		3,291,186.51	0.90	86.2	Pulse	0.10	3
1	In		3,504,191.05	1.41	93.2	Pulse	0.10	3
1	Tb		5,178,453.26	1.56	97.2	Mix	0.10	3
1	Ho		505,400.94	0.66	98.1	Pulse	0.10	3
1	Bi		2,770,219.75	1.05	87.1	Pulse	0.10	3
2	Sc		175,767.70	0.26	95.3	Pulse	0.30	3
2	Ge		94,863.08	0.31	100.4	Pulse	0.30	3
2	Ge		142,899.07	0.43	100.7	Pulse	0.30	3
2	Rh		2,014,856.79	0.86	87.9	Pulse	0.30	3
2	In		846,582.90	0.50	91.6	Pulse	0.30	3
2	Tb		2,864,572.46	0.88	93.8	Pulse	0.30	3
2	Ho		286,500.84	0.81	94.3	Pulse	0.30	3
2	Bi		1,720,979.82	0.23	85.5	Pulse	0.30	3
3	Sc		228,753.70	3.78	104.1	Pulse	0.30	3
3	Ge		127,297.98	4.04	101.3	Pulse	0.30	3
3	Ge		192,086.83	3.90	100.5	Pulse	0.30	3
3	Rh		1,805,138.89	4.06	95.1	Pulse	0.30	3
3	Tb		3,192,314.32	4.07	102.1	Pulse	0.30	3

Quantitation Report

File Name	044SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:04
Sample Name	mp17745-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	10/8/2019 13:38
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	0.032	ug/l	26.83	50.67	2.377E-05	Pulse	0.25	3
B			1	254.922	ug/l	0.14	199,744.83	9.359E-02	Pulse	0.15	3
Ca			1	119252.351	ug/l	0.76	13,495,091.47	4.005E+00	Analog	0.10	3
Sr			1	311.472	ug/l	0.81	1,527,968.00	4.126E-01	Pulse	0.10	3
Mo			1	2.867	ug/l	10.07	2,700.35	7.290E-04	Pulse	0.10	3
Ag			1	0.063	ug/l	25.04	193.34	5.034E-05	Pulse	0.10	3
Sn			1	-0.560	ug/l	-24.62	1,223.43	3.185E-04	Pulse	0.10	3
Sb			1	0.544	ug/l	14.25	1,193.42	2.108E-04	Pulse	0.10	3
Ba			1	60.029	ug/l	1.95	44,441.16	7.848E-03	Pulse	0.10	3
Tl			1	0.080	ug/l	23.42	353.35	1.132E-04	Pulse	0.10	3
Pb			1	1.018	ug/l	6.61	1,663.49	5.323E-04	Pulse	0.10	3
Pb			1	1.078	ug/l	6.63	1,473.47	4.716E-04	Pulse	0.10	3
Pb			1	1.002	ug/l	2.45	6,577.47	2.105E-03	Pulse	0.10	3
Na			2	269932.588	ug/l	1.33	52,327,980.14	2.788E+02	Analog	0.30	3
Mg			2	23664.365	ug/l	0.17	2,105,087.42	1.122E+01	Pulse	0.30	3
Al			2	18.222	ug/l	22.05	884.48	4.711E-03	Pulse	0.30	3
K			2	212937.411	ug/l	1.15	13,872,684.73	7.391E+01	Analog	0.30	3
Ca			2	116794.917	ug/l	0.77	368,706.56	1.964E+00	Pulse	0.30	3
Ti			2	1.481	ug/l	33.32	15.56	8.285E-05	Pulse	0.30	3
V			2	3.130	ug/l	10.14	3,014.76	1.606E-02	Pulse	0.30	3
Cr			2	0.472	ug/l	15.22	1,222.29	6.512E-03	Pulse	0.30	3
Mn			2	660.541	ug/l	1.11	317,833.08	1.693E+00	Pulse	0.30	3
Fe			2	44.176	ug/l	2.60	35,882.40	1.912E-01	Pulse	0.30	3
Co			2	0.277	ug/l	16.91	459.91	2.450E-03	Pulse	0.30	3
Ni			2	1.823	ug/l	16.07	860.03	4.583E-03	Pulse	0.30	3
Cu			2	3.428	ug/l	2.27	7,486.24	3.988E-02	Pulse	0.30	3
Zn			2	22.479	ug/l	5.24	3,617.11	1.927E-02	Pulse	0.30	3
As			2	7.543	ug/l	4.05	621.01	3.309E-03	Pulse	1.00	3
Cd			2	0.010	ug/l	363.85	4.23	4.486E-06	Pulse	0.30	3
Sn			2	-0.481	ug/l	-9.22	344.45	3.664E-04	Pulse	0.30	3
Se			3	0.410	ug/l	16.02	10.93	5.368E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,134,297.63	1.16	81.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,369,728.18	1.04	98.7	Pulse	0.10	3
1	Ge		591,317.52	1.66	101.2	Pulse	0.10	3
1	Ge		815,335.04	0.86	101.0	Pulse	0.10	3
1	Rh		3,702,984.01	0.66	97.0	Pulse	0.10	3
1	In		3,845,529.84	1.34	102.3	Pulse	0.10	3
1	Tb		5,662,944.08	0.06	106.3	Analog	0.10	3
1	Ho		527,083.09	1.76	102.3	Pulse	0.10	3
1	Bi		3,125,260.99	0.95	98.3	Pulse	0.10	3
2	Sc		187,697.55	0.28	101.7	Pulse	0.30	3
2	Ge		100,999.49	0.33	106.9	Pulse	0.30	3
2	Ge		151,155.83	0.72	106.5	Pulse	0.30	3
2	Rh		2,261,500.39	0.51	98.6	Pulse	0.30	3
2	In		940,109.73	0.58	101.7	Pulse	0.30	3
2	Tb		3,074,968.70	1.00	100.7	Pulse	0.30	3
2	Ho		305,584.83	0.10	100.6	Pulse	0.30	3
2	Bi		1,953,807.35	0.97	97.1	Pulse	0.30	3
3	Sc		231,331.65	0.98	105.2	Pulse	0.30	3
3	Ge		134,207.67	0.15	106.8	Pulse	0.30	3
3	Ge		203,679.72	0.34	106.5	Pulse	0.30	3
3	Rh		1,938,890.20	0.87	102.1	Pulse	0.30	3
3	Tb		3,269,033.27	1.11	104.5	Pulse	0.30	3

Quantitation Report

File Name	045_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:09
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	10/8/2019 13:38
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	49.552	ug/l	0.88	543,541.19	2.460E-01	Pulse	0.25	3
B			1	103.281	ug/l	0.54	826,125.78	3.738E-01	Pulse	0.15	3
Ca			1	5079.519	ug/l	0.50	5,620,135.12	1.708E+00	Analog	0.10	3
Sr			1	51.601	ug/l	1.28	2,547,298.92	6.835E-01	Pulse	0.10	3
Mo			1	51.435	ug/l	0.65	477,850.14	1.282E-01	Pulse	0.10	3
Ag			1	49.173	ug/l	0.67	1,148,861.44	3.006E-01	Pulse	0.10	3
Sn			1	49.782	ug/l	0.35	727,056.21	1.902E-01	Pulse	0.10	3
Sb			1	49.868	ug/l	0.39	869,278.22	1.542E-01	Pulse	0.10	3
Ba			1	49.121	ug/l	0.68	361,430.84	6.411E-02	Pulse	0.10	3
Tl			1	50.533	ug/l	1.20	2,105,587.10	6.730E-01	Pulse	0.10	3
Pb			1	50.872	ug/l	1.12	729,789.91	2.333E-01	Pulse	0.10	3
Pb			1	50.622	ug/l	0.64	641,422.39	2.050E-01	Pulse	0.10	3
Pb			1	51.144	ug/l	0.33	2,940,706.44	9.399E-01	Pulse	0.10	3
Na			2	4874.469	ug/l	1.09	9,287,045.74	5.039E+01	Analog	0.30	3
Mg			2	4599.525	ug/l	0.98	4,017,441.23	2.180E+01	Pulse	0.30	3
Al			2	4570.198	ug/l	0.45	1,334,884.04	7.243E+00	Pulse	0.30	3
K			2	4758.312	ug/l	0.35	3,057,648.91	1.659E+01	Pulse	0.30	3
Ca			2	5036.330	ug/l	0.40	156,201.69	8.475E-01	Pulse	0.30	3
Ti			2	47.323	ug/l	1.97	10,984.85	5.960E-02	Pulse	0.30	3
V			2	51.561	ug/l	0.95	355,106.55	1.927E+00	Pulse	0.30	3
Cr			2	49.841	ug/l	0.33	439,540.73	2.385E+00	Pulse	0.30	3
Mn			2	49.473	ug/l	0.66	233,773.67	1.268E+00	Pulse	0.30	3
Fe			2	5038.277	ug/l	1.29	35,406,397.48	1.921E+02	Analog	0.30	3
Co			2	50.320	ug/l	1.22	672,685.09	3.650E+00	Pulse	0.30	3
Ni			2	48.978	ug/l	1.21	175,771.82	9.537E-01	Pulse	0.30	3
Cu			2	49.326	ug/l	1.09	480,549.58	2.607E+00	Pulse	0.30	3
Zn			2	48.743	ug/l	0.71	69,817.75	3.788E-01	Pulse	0.30	3
As			2	50.856	ug/l	1.03	39,913.11	2.166E-01	Pulse	1.00	3
Cd			2	50.177	ug/l	0.77	103,271.71	1.119E-01	Pulse	0.30	3
Sn			2	51.512	ug/l	1.52	223,682.87	2.424E-01	Pulse	0.30	3
Se			3	192.536	ug/l	0.56	39,294.79	1.964E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,209,961.96	0.37	84.3	Pulse	0.10	3
1	Sc		3,290,778.60	0.94	96.4	Pulse	0.10	3
1	Ge		578,026.14	0.75	98.9	Pulse	0.10	3

Quantitation Report

1	Ge		802,252.70	1.29	99.4	Pulse	0.10	3
1	Rh		3,726,483.38	1.15	97.6	Pulse	0.10	3
1	In		3,822,217.22	1.53	101.6	Pulse	0.10	3
1	Tb		5,637,455.75	0.79	105.8	Analog	0.10	3
1	Ho		530,731.58	1.23	103.0	Pulse	0.10	3
1	Bi		3,128,672.87	0.32	98.4	Pulse	0.10	3
2	Sc		184,306.78	0.42	99.9	Pulse	0.30	3
2	Ge		99,019.99	0.94	104.8	Pulse	0.30	3
2	Ge		148,383.75	0.60	104.5	Pulse	0.30	3
2	Rh		2,266,705.33	0.97	98.8	Pulse	0.30	3
2	In		922,704.56	0.88	99.8	Pulse	0.30	3
2	Tb		3,006,631.69	0.88	98.5	Pulse	0.30	3
2	Ho		303,016.83	0.89	99.7	Pulse	0.30	3
2	Bi		1,942,648.32	0.58	96.6	Pulse	0.30	3
3	Sc		230,533.85	0.89	104.9	Pulse	0.30	3
3	Ge		131,315.63	0.88	104.5	Pulse	0.30	3
3	Ge		200,087.24	0.33	104.7	Pulse	0.30	3
3	Rh		1,950,273.26	0.84	102.7	Pulse	0.30	3
3	Tb		3,259,107.78	0.60	104.2	Pulse	0.30	3

Quantitation Report

File Name	046_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:14
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	10/8/2019 13:38
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	36.55	62.67	2.767E-05	Pulse	0.25	3
B			1	4.232	ug/l	5.13	38,490.52	1.700E-02	Pulse	0.15	3
Ca			1	0.931	ug/l	42.31	11,948.05	3.664E-03	Pulse	0.10	3
Sr			1	0.004	ug/l	41.84	670.04	1.783E-04	Pulse	0.10	3
Mo			1	0.081	ug/l	9.26	816.72	2.171E-04	Pulse	0.10	3
Ag			1	0.009	ug/l	22.64	256.68	6.751E-05	Pulse	0.10	3
Sn			1	0.111	ug/l	5.27	3,633.92	9.553E-04	Pulse	0.10	3
Sb			1	0.202	ug/l	7.92	3,803.95	6.668E-04	Pulse	0.10	3
Ba			1	-0.001	ug/l	-701.42	76.67	1.344E-05	Pulse	0.10	3
Tl			1	0.012	ug/l	18.52	523.36	1.644E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	24.86	486.69	1.527E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	19.02	410.03	1.288E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	12.66	1,870.12	5.870E-04	Pulse	0.10	3
Na			2	4.722	ug/l	0.97	18,996.36	1.051E-01	Pulse	0.30	3
Mg			2	0.486	ug/l	8.63	563.35	3.117E-03	Pulse	0.30	3
Al			2	4.072	ug/l	5.99	1,495.64	8.276E-03	Pulse	0.30	3
K			2	4.218	ug/l	1.79	19,995.39	1.106E-01	Pulse	0.30	3
Ca			2	0.562	ug/l	158.21	162.22	8.978E-04	Pulse	0.30	3
Ti			2	0.107	ug/l	7.94	5.56	3.075E-05	Pulse	0.30	3
V			2	-0.060	ug/l	-8.55	392.23	2.170E-03	Pulse	0.30	3
Cr			2	0.004	ug/l	167.34	803.36	4.445E-03	Pulse	0.30	3
Mn			2	0.054	ug/l	8.93	343.34	1.900E-03	Pulse	0.30	3
Fe			2	0.932	ug/l	5.07	10,531.42	5.827E-02	Pulse	0.30	3
Co			2	0.001	ug/l	63.61	93.30	5.162E-04	Pulse	0.30	3
Ni			2	0.008	ug/l	64.42	216.67	1.199E-03	Pulse	0.30	3
Cu			2	0.019	ug/l	95.22	4,141.68	2.292E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.103	ug/l	43.12	485.57	2.686E-03	Pulse	0.30	3
As			2	0.013	ug/l	107.30	27.67	1.530E-04	Pulse	1.00	3
Cd			2	0.002	ug/l	113.74	5.46	5.917E-06	Pulse	0.30	3
Sn			2	0.156	ug/l	7.15	1,224.51	1.326E-03	Pulse	0.30	3
Se			3	0.098	ug/l	3.34	22.33	1.121E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,264,862.00	1.15	86.3	Pulse	0.10	3
1	Sc		3,261,203.39	1.02	95.5	Pulse	0.10	3
1	Ge		574,988.96	0.28	98.4	Pulse	0.10	3
1	Ge		793,876.76	1.00	98.3	Pulse	0.10	3
1	Rh		3,759,417.55	1.40	98.5	Pulse	0.10	3
1	In		3,803,674.34	0.55	101.1	Pulse	0.10	3
1	Tb		5,705,185.96	0.51	107.0	Analog	0.10	3
1	Ho		522,724.38	1.11	101.5	Pulse	0.10	3
1	Bi		3,184,899.85	0.51	100.1	Pulse	0.10	3
2	Sc		180,734.24	0.19	97.9	Pulse	0.30	3
2	Ge		97,390.16	1.18	103.1	Pulse	0.30	3
2	Ge		146,595.68	0.61	103.3	Pulse	0.30	3
2	Rh		2,305,663.31	0.47	100.5	Pulse	0.30	3
2	In		923,290.61	0.87	99.9	Pulse	0.30	3
2	Tb		3,016,956.20	0.27	98.8	Pulse	0.30	3
2	Ho		301,526.54	0.83	99.2	Pulse	0.30	3
2	Bi		1,984,071.86	1.31	98.6	Pulse	0.30	3
3	Sc		227,075.11	0.34	103.3	Pulse	0.30	3
3	Ge		131,294.64	1.12	104.5	Pulse	0.30	3
3	Ge		199,157.24	0.44	104.2	Pulse	0.30	3
3	Rh		2,003,275.75	0.63	105.5	Pulse	0.30	3
3	Tb		3,256,341.26	0.55	104.1	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:19
Sample Name	mp17745-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	10/8/2019 13:38
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	114.176	ug/l	1.08	395,597.02	2.834E-01	Pulse	0.25	3
B			1	418.615	ug/l	1.81	1,055,098.36	7.558E-01	Pulse	0.15	3
Ca			1	111775.145	ug/l	0.65	59,169,299.12	1.876E+01	Analog	0.10	3
Sr			1	404.258	ug/l	0.72	8,804,393.20	2.677E+00	Analog	0.10	3
Mo			1	92.049	ug/l	0.57	377,383.30	1.147E-01	Pulse	0.10	3
Ag			1	72.708	ug/l	1.85	778,420.33	2.222E-01	Pulse	0.10	3
Sn			1	83.064	ug/l	1.75	556,183.70	1.588E-01	Pulse	0.10	3
Sb			1	76.661	ug/l	2.05	633,008.40	1.185E-01	Pulse	0.10	3
Ba			1	130.960	ug/l	1.89	456,409.52	8.546E-02	Pulse	0.10	3
Tl			1	80.384	ug/l	0.69	1,516,475.13	5.353E-01	Pulse	0.10	3
Pb			1	80.850	ug/l	0.81	525,146.15	1.854E-01	Pulse	0.10	3
Pb			1	80.979	ug/l	0.85	464,551.14	1.640E-01	Pulse	0.10	3
Pb			1	81.610	ug/l	0.37	2,124,624.70	7.500E-01	Pulse	0.10	3
Na			2	247995.372	ug/l	0.63	226,847,799.87	1.280E+03	Analog	0.30	3
Mg			2	26324.546	ug/l	0.53	11,050,923.73	6.238E+01	Analog	0.30	3
Al			2	3930.179	ug/l	1.11	551,881.80	3.115E+00	Pulse	0.30	3
K			2	191458.821	ug/l	2.17	58,796,337.67	3.319E+02	Analog	0.30	3
Ca			2	109502.577	ug/l	0.71	1,630,749.45	9.206E+00	Pulse	0.30	3
Ti			2	77.979	ug/l	3.70	8,693.48	4.909E-02	Pulse	0.30	3
V			2	84.973	ug/l	1.05	281,379.75	1.588E+00	Pulse	0.30	3
Cr			2	78.571	ug/l	1.01	333,149.74	1.881E+00	Pulse	0.30	3
Mn			2	667.312	ug/l	1.04	1,514,845.01	8.552E+00	Pulse	0.30	3
Fe			2	4006.301	ug/l	1.53	13,532,196.41	7.639E+01	Analog	0.30	3
Co			2	76.428	ug/l	1.19	491,045.37	2.772E+00	Pulse	0.30	3
Ni			2	73.675	ug/l	1.05	127,115.10	7.176E-01	Pulse	0.30	3
Cu			2	74.617	ug/l	0.91	350,307.17	1.977E+00	Pulse	0.30	3
Zn			2	80.817	ug/l	1.96	55,684.02	3.144E-01	Pulse	0.30	3
As			2	82.187	ug/l	1.42	31,001.94	1.750E-01	Pulse	1.00	3
Cd			2	73.601	ug/l	0.98	69,767.78	8.209E-02	Pulse	0.30	3
Sn			2	85.574	ug/l	0.74	171,236.53	2.015E-01	Pulse	0.30	3
Se			3	357.838	ug/l	0.75	34,091.52	1.825E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,396,211.58	1.18	53.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,154,531.93	0.47	92.4	Pulse	0.10	3
1	Ge		554,411.56	1.03	94.8	Pulse	0.10	3
1	Ge		768,163.27	1.40	95.2	Pulse	0.10	3
1	Rh		3,288,802.87	1.55	86.2	Pulse	0.10	3
1	In		3,502,943.01	0.89	93.1	Pulse	0.10	3
1	Tb		5,342,336.48	2.53	100.2	Mix	0.10	3
1	Ho		501,605.53	1.66	97.4	Pulse	0.10	3
1	Bi		2,832,992.56	0.41	89.1	Pulse	0.10	3
2	Sc		177,158.15	1.23	96.0	Pulse	0.30	3
2	Ge		95,150.28	1.07	100.7	Pulse	0.30	3
2	Ge		141,761.30	0.80	99.9	Pulse	0.30	3
2	Rh		2,028,986.10	0.74	88.5	Pulse	0.30	3
2	In		849,939.06	1.00	92.0	Pulse	0.30	3
2	Tb		2,870,824.26	0.34	94.0	Pulse	0.30	3
2	Ho		287,285.43	0.76	94.5	Pulse	0.30	3
2	Bi		1,728,215.77	0.58	85.9	Pulse	0.30	3
3	Sc		225,041.68	0.23	102.4	Pulse	0.30	3
3	Ge		124,764.63	1.35	99.3	Pulse	0.30	3
3	Ge		186,814.78	1.25	97.7	Pulse	0.30	3
3	Rh		1,759,900.35	0.79	92.7	Pulse	0.30	3
3	Tb		3,109,555.92	0.60	99.4	Pulse	0.30	3

Quantitation Report

File Name	048SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:24
Sample Name	jc96147-1a
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	10/8/2019 13:38
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	0.122	ug/l	3.41	338.68	3.119E-04	Pulse	0.25	3
B			1	566.337	ug/l	1.67	1,109,714.05	1.022E+00	Pulse	0.15	3
Ca			1	139985.690	ug/l	0.95	73,013,977.25	2.349E+01	Analog	0.10	3
Sr			1	278.198	ug/l	2.19	5,957,773.66	1.842E+00	Analog	0.10	3
Mo			1	0.217	ug/l	7.50	920.06	2.844E-04	Pulse	0.10	3
Ag			1	0.047	ug/l	16.99	533.36	1.548E-04	Pulse	0.10	3
Sn			1	9.184	ug/l	1.56	62,049.54	1.803E-02	Pulse	0.10	3
Sb			1	0.821	ug/l	3.73	6,801.69	1.311E-03	Pulse	0.10	3
Ba			1	60.033	ug/l	0.91	203,386.69	3.918E-02	Pulse	0.10	3
Tl			1	0.026	ug/l	18.52	496.70	1.808E-04	Pulse	0.10	3
Pb			1	0.081	ug/l	35.53	693.38	2.520E-04	Pulse	0.10	3
Pb			1	0.109	ug/l	13.64	703.38	2.562E-04	Pulse	0.10	3
Pb			1	0.089	ug/l	6.07	2,960.24	1.078E-03	Pulse	0.10	3
Na			2	307958.155	ug/l	2.33	277,435,108.98	1.590E+03	Analog	0.30	3
Mg			2	28431.951	ug/l	0.74	11,756,362.87	6.737E+01	Analog	0.30	3
Al			2	6.040	ug/l	4.15	1,153.38	6.609E-03	Pulse	0.30	3
K			2	269468.521	ug/l	1.71	81,516,258.98	4.671E+02	Analog	0.30	3
Ca			2	136703.160	ug/l	0.95	2,005,392.56	1.149E+01	Pulse	0.30	3
Ti			2	0.982	ug/l	22.99	90.00	5.153E-04	Pulse	0.30	3
V			2	2.951	ug/l	1.99	10,364.48	5.940E-02	Pulse	0.30	3
Cr			2	1.318	ug/l	1.07	6,234.58	3.572E-02	Pulse	0.30	3
Mn			2	859.408	ug/l	0.91	1,921,820.55	1.101E+01	Pulse	0.30	3
Fe			2	1133.951	ug/l	1.51	3,775,947.77	2.164E+01	Pulse	0.30	3
Co			2	0.091	ug/l	2.26	655.38	3.755E-03	Pulse	0.30	3
Ni			2	1.042	ug/l	5.63	1,949.03	1.117E-02	Pulse	0.30	3
Cu			2	0.472	ug/l	3.93	5,985.60	3.430E-02	Pulse	0.30	3
Zn			2	14.382	ug/l	2.51	10,033.18	5.749E-02	Pulse	0.30	3
As			2	14.915	ug/l	1.79	5,556.29	3.184E-02	Pulse	1.00	3
Cd			2	0.015	ug/l	62.23	15.48	1.867E-05	Pulse	0.30	3
Sn			2	9.397	ug/l	2.18	18,826.89	2.265E-02	Pulse	0.30	3
Se			3	0.265	ug/l	9.17	27.27	1.472E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,086,148.23	1.56	41.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,108,494.64	0.81	91.1	Pulse	0.10	3
1	Ge		558,659.10	1.08	95.6	Pulse	0.10	3
1	Ge		761,097.93	1.56	94.3	Pulse	0.10	3
1	Rh		3,234,220.26	1.06	84.7	Pulse	0.10	3
1	In		3,441,788.43	1.64	91.5	Pulse	0.10	3
1	Tb		5,191,259.20	1.73	97.4	Mix	0.10	3
1	Ho		502,055.56	0.44	97.5	Pulse	0.10	3
1	Bi		2,746,135.69	1.29	86.3	Pulse	0.10	3
2	Sc		174,515.67	1.32	94.6	Pulse	0.30	3
2	Ge		94,247.32	0.16	99.8	Pulse	0.30	3
2	Ge		140,767.57	0.76	99.2	Pulse	0.30	3
2	Rh		1,978,127.91	1.10	86.2	Pulse	0.30	3
2	In		831,261.39	0.70	90.0	Pulse	0.30	3
2	Tb		2,807,156.63	0.57	91.9	Pulse	0.30	3
2	Ho		281,832.65	0.29	92.7	Pulse	0.30	3
2	Bi		1,675,443.96	0.81	83.3	Pulse	0.30	3
3	Sc		222,069.63	0.98	101.0	Pulse	0.30	3
3	Ge		122,036.40	0.45	97.1	Pulse	0.30	3
3	Ge		185,140.31	0.98	96.8	Pulse	0.30	3
3	Rh		1,721,809.34	0.39	90.7	Pulse	0.30	3
3	Tb		3,069,070.50	0.23	98.1	Pulse	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:29
Sample Name	jc96147-1f
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	10/8/2019 13:38
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	0.124	ug/l	10.53	334.68	3.164E-04	Pulse	0.25	3
B			1	587.260	ug/l	2.79	1,121,436.48	1.060E+00	Pulse	0.15	3
Ca			1	143472.269	ug/l	0.49	74,044,675.56	2.407E+01	Analog	0.10	3
Sr			1	288.787	ug/l	0.58	6,117,411.57	1.913E+00	Analog	0.10	3
Mo			1	0.144	ug/l	29.94	620.04	1.941E-04	Pulse	0.10	3
Ag			1	0.028	ug/l	23.26	336.69	9.863E-05	Pulse	0.10	3
Sn			1	9.045	ug/l	1.73	60,567.35	1.776E-02	Pulse	0.10	3
Sb			1	0.317	ug/l	7.64	2,743.67	5.327E-04	Pulse	0.10	3
Ba			1	62.522	ug/l	2.64	210,314.59	4.081E-02	Pulse	0.10	3
Tl			1	0.007	ug/l	23.40	140.01	5.196E-05	Pulse	0.10	3
Pb			1	1.202	ug/l	4.41	7,588.86	2.820E-03	Pulse	0.10	3
Pb			1	1.178	ug/l	6.35	6,508.31	2.420E-03	Pulse	0.10	3
Pb			1	1.164	ug/l	1.94	29,489.07	1.096E-02	Pulse	0.10	3
Na			2	317772.185	ug/l	1.25	284,155,073.15	1.641E+03	Analog	0.30	3
Mg			2	29461.977	ug/l	1.15	12,090,496.46	6.981E+01	Analog	0.30	3
Al			2	8.624	ug/l	5.09	1,498.98	8.656E-03	Pulse	0.30	3
K			2	278383.144	ug/l	1.45	83,578,167.79	4.826E+02	Analog	0.30	3
Ca			2	140136.190	ug/l	0.72	2,040,337.70	1.178E+01	Pulse	0.30	3
Ti			2	1.293	ug/l	7.54	123.33	7.118E-04	Pulse	0.30	3
V			2	2.952	ug/l	1.77	10,293.30	5.942E-02	Pulse	0.30	3
Cr			2	1.459	ug/l	2.20	6,771.47	3.909E-02	Pulse	0.30	3
Mn			2	888.646	ug/l	0.73	1,972,333.19	1.139E+01	Pulse	0.30	3
Fe			2	1240.009	ug/l	0.29	4,098,015.67	2.366E+01	Pulse	0.30	3
Co			2	0.085	ug/l	3.31	611.18	3.529E-03	Pulse	0.30	3
Ni			2	10.020	ug/l	2.27	17,056.74	9.849E-02	Pulse	0.30	3
Cu			2	23.170	ug/l	1.64	108,960.85	6.291E-01	Pulse	0.30	3
Zn			2	45.369	ug/l	1.22	30,707.79	1.773E-01	Pulse	0.30	3
As			2	16.188	ug/l	3.26	5,983.11	3.455E-02	Pulse	1.00	3
Cd			2	0.268	ug/l	7.52	248.84	3.016E-04	Pulse	0.30	3
Sn			2	9.443	ug/l	1.45	18,777.95	2.276E-02	Pulse	0.30	3
Se			3	0.157	ug/l	4.95	16.67	9.185E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,058,681.19	1.44	40.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,075,682.14	1.15	90.1	Pulse	0.10	3
1	Ge		550,794.98	1.30	94.2	Pulse	0.10	3
1	Ge		750,503.61	0.25	93.0	Pulse	0.10	3
1	Rh		3,198,669.22	0.75	83.8	Pulse	0.10	3
1	In		3,409,370.52	0.99	90.7	Pulse	0.10	3
1	Tb		5,156,514.82	3.27	96.8	Mix	0.10	3
1	Ho		497,072.74	1.10	96.5	Pulse	0.10	3
1	Bi		2,690,522.56	1.16	84.6	Pulse	0.10	3
2	Sc		173,200.44	0.78	93.9	Pulse	0.30	3
2	Ge		93,746.79	0.90	99.2	Pulse	0.30	3
2	Ge		140,280.18	0.63	98.8	Pulse	0.30	3
2	Rh		1,966,984.30	0.34	85.8	Pulse	0.30	3
2	In		825,053.25	0.42	89.3	Pulse	0.30	3
2	Tb		2,819,912.73	0.19	92.3	Pulse	0.30	3
2	Ho		283,303.34	0.76	93.2	Pulse	0.30	3
2	Bi		1,666,924.24	0.56	82.9	Pulse	0.30	3
3	Sc		213,722.77	3.49	97.2	Pulse	0.30	3
3	Ge		120,028.79	1.43	95.5	Pulse	0.30	3
3	Ge		181,467.52	1.49	94.9	Pulse	0.30	3
3	Rh		1,670,432.71	3.12	88.0	Pulse	0.30	3
3	Tb		2,986,545.44	2.93	95.5	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:34
Sample Name	jc96281-1
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	10/8/2019 13:38
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	44.87	45.33	2.230E-05	Pulse	0.25	3
B			1	112.839	ug/l	1.31	416,804.56	2.050E-01	Pulse	0.15	3
Ca			1	38756.873	ug/l	0.75	19,786,165.54	6.506E+00	Analog	0.10	3
Sr			1	292.187	ug/l	0.52	6,704,263.02	1.935E+00	Analog	0.10	3
Mo			1	0.293	ug/l	3.99	1,316.78	3.801E-04	Pulse	0.10	3
Ag			1	0.017	ug/l	2.74	226.68	6.247E-05	Pulse	0.10	3
Sn			1	0.634	ug/l	5.88	6,311.50	1.740E-03	Pulse	0.10	3
Sb			1	0.239	ug/l	3.53	2,253.58	4.114E-04	Pulse	0.10	3
Ba			1	15.748	ug/l	1.25	56,363.24	1.029E-02	Pulse	0.10	3
Tl			1	0.007	ug/l	33.06	173.34	5.652E-05	Pulse	0.10	3
Pb			1	0.119	ug/l	16.22	1,036.74	3.385E-04	Pulse	0.10	3
Pb			1	0.121	ug/l	24.69	860.06	2.808E-04	Pulse	0.10	3
Pb			1	0.114	ug/l	13.04	4,013.70	1.310E-03	Pulse	0.10	3
Na			2	22313.045	ug/l	0.83	19,089,507.57	1.153E+02	Analog	0.30	3
Mg			2	4949.281	ug/l	0.90	1,942,451.04	1.173E+01	Pulse	0.30	3
Al			2	2.465	ug/l	17.86	625.58	3.777E-03	Pulse	0.30	3
K			2	6958.642	ug/l	0.65	2,013,433.11	1.216E+01	Pulse	0.30	3
Ca			2	38097.826	ug/l	0.16	530,543.96	3.203E+00	Pulse	0.30	3
Ti			2	0.356	ug/l	40.99	20.00	1.208E-04	Pulse	0.30	3
V			2	0.476	ug/l	10.41	2,196.84	1.326E-02	Pulse	0.30	3
Cr			2	0.794	ug/l	3.04	3,843.84	2.321E-02	Pulse	0.30	3
Mn			2	29.631	ug/l	0.54	62,971.81	3.802E-01	Pulse	0.30	3
Fe			2	627.686	ug/l	0.68	1,985,542.91	1.199E+01	Pulse	0.30	3
Co			2	0.284	ug/l	2.38	1,778.09	1.074E-02	Pulse	0.30	3
Ni			2	4.870	ug/l	0.89	8,015.36	4.840E-02	Pulse	0.30	3
Cu			2	6.984	ug/l	1.84	33,946.22	2.050E-01	Pulse	0.30	3
Zn			2	10.195	ug/l	2.49	6,841.50	4.131E-02	Pulse	0.30	3
As			2	24.918	ug/l	2.15	8,799.38	5.313E-02	Pulse	1.00	3
Cd			2	0.008	ug/l	0.92	9.90	1.144E-05	Pulse	0.30	3
Sn			2	0.629	ug/l	10.01	1,790.12	2.070E-03	Pulse	0.30	3
Se			3	0.119	ug/l	1.53	14.27	7.258E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,033,304.64	1.29	77.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,041,375.27	1.00	89.1	Pulse	0.10	3
1	Ge		576,462.64	0.18	98.6	Pulse	0.10	3
1	Ge		787,402.64	1.10	97.5	Pulse	0.10	3
1	Rh		3,464,713.39	0.88	90.8	Pulse	0.10	3
1	In		3,628,771.32	1.06	96.5	Pulse	0.10	3
1	Tb		5,477,712.63	0.36	102.8	Analog	0.10	3
1	Ho		515,293.51	1.70	100.0	Pulse	0.10	3
1	Bi		3,063,915.37	0.51	96.3	Pulse	0.10	3
2	Sc		165,624.31	0.17	89.8	Pulse	0.30	3
2	Ge		94,659.79	0.63	100.2	Pulse	0.30	3
2	Ge		141,941.52	0.69	100.0	Pulse	0.30	3
2	Rh		2,134,011.65	1.16	93.0	Pulse	0.30	3
2	In		865,158.23	0.58	93.6	Pulse	0.30	3
2	Tb		2,908,683.36	0.90	95.2	Pulse	0.30	3
2	Ho		292,948.45	1.06	96.4	Pulse	0.30	3
2	Bi		1,872,670.69	0.97	93.1	Pulse	0.30	3
3	Sc		224,546.55	0.55	102.1	Pulse	0.30	3
3	Ge		130,112.77	0.31	103.6	Pulse	0.30	3
3	Ge		196,553.52	0.74	102.8	Pulse	0.30	3
3	Rh		1,917,183.74	0.65	101.0	Pulse	0.30	3
3	Tb		3,315,766.74	0.97	106.0	Pulse	0.30	3

Quantitation Report

File Name	051SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:39
Sample Name	mp17725-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	10/8/2019 13:38
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	12.94	25.33	1.306E-05	Pulse	0.25	3
B			1	11.621	ug/l	11.40	43,743.42	2.268E-02	Pulse	0.15	3
Ca			1	76.428	ug/l	20.08	47,411.75	1.617E-02	Pulse	0.10	3
Sr			1	0.130	ug/l	17.68	3,420.52	9.831E-04	Pulse	0.10	3
Mo			1	0.345	ug/l	11.96	1,556.81	4.448E-04	Pulse	0.10	3
Ag			1	0.029	ug/l	57.94	353.35	1.013E-04	Pulse	0.10	3
Sn			1	0.255	ug/l	36.47	3,700.58	1.017E-03	Pulse	0.10	3
Sb			1	0.243	ug/l	8.59	2,273.59	4.182E-04	Pulse	0.10	3
Ba			1	0.108	ug/l	30.36	463.36	8.525E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	71.44	93.33	3.137E-05	Pulse	0.10	3
Pb			1	0.018	ug/l	10.21	336.68	1.078E-04	Pulse	0.10	3
Pb			1	0.030	ug/l	25.45	293.35	9.554E-05	Pulse	0.10	3
Pb			1	0.017	ug/l	35.28	1,306.74	4.251E-04	Pulse	0.10	3
Na			2	41.995	ug/l	2.29	45,796.08	2.732E-01	Pulse	0.30	3
Mg			2	4.585	ug/l	2.20	1,957.91	1.168E-02	Pulse	0.30	3
Al			2	13.871	ug/l	1.21	2,147.94	1.281E-02	Pulse	0.30	3
K			2	15.611	ug/l	1.90	20,631.72	1.231E-01	Pulse	0.30	3
Ca			2	69.676	ug/l	9.09	1,116.72	6.660E-03	Pulse	0.30	3
Ti			2	0.953	ug/l	11.18	83.34	4.970E-04	Pulse	0.30	3
V			2	0.502	ug/l	7.28	2,306.86	1.376E-02	Pulse	0.30	3
Cr			2	0.421	ug/l	8.55	2,399.09	1.431E-02	Pulse	0.30	3
Mn			2	0.303	ug/l	10.98	736.69	4.394E-03	Pulse	0.30	3
Fe			2	4.066	ug/l	7.12	16,808.72	1.003E-01	Pulse	0.30	3
Co			2	0.002	ug/l	50.22	84.40	5.035E-04	Pulse	0.30	3
Ni			2	0.099	ug/l	23.19	335.56	2.001E-03	Pulse	0.30	3
Cu			2	0.130	ug/l	14.60	4,246.14	2.533E-02	Pulse	0.30	3
Zn			2	3.453	ug/l	6.29	2,554.67	1.524E-02	Pulse	0.30	3
As			2	0.197	ug/l	17.23	86.67	5.171E-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	214.77	4.34	4.982E-06	Pulse	0.30	3
Sn			2	0.292	ug/l	7.17	1,115.61	1.277E-03	Pulse	0.30	3
Se			3	0.090	ug/l	20.02	11.67	5.797E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,944,082.03	11.48	74.1	Pulse	0.10	3
1	Sc		2,976,904.12	14.76	87.2	Pulse	0.10	3
1	Ge		574,353.90	10.77	98.3	Pulse	0.10	3
1	Ge		773,524.18	10.78	95.8	Pulse	0.10	3
1	Rh		3,530,831.30	14.57	92.5	Pulse	0.10	3
1	In		3,714,391.27	18.21	98.8	Mix	0.10	3
1	Tb		5,472,957.94	13.77	102.7	Analog	0.10	3
1	Ho		513,620.82	14.90	99.7	Pulse	0.10	3
1	Bi		3,113,212.56	14.27	97.9	Pulse	0.10	3
2	Sc		167,643.24	0.33	90.8	Pulse	0.30	3
2	Ge		96,905.17	1.35	102.6	Pulse	0.30	3
2	Ge		147,155.03	0.47	103.7	Pulse	0.30	3
2	Rh		2,219,117.34	1.05	96.8	Pulse	0.30	3
2	In		873,774.63	0.72	94.6	Pulse	0.30	3
2	Tb		2,949,492.10	0.26	96.6	Pulse	0.30	3
2	Ho		295,340.14	0.36	97.2	Pulse	0.30	3
2	Bi		1,936,658.53	0.70	96.3	Pulse	0.30	3
3	Sc		227,497.72	0.65	103.5	Pulse	0.30	3
3	Ge		133,334.26	0.73	106.1	Pulse	0.30	3
3	Ge		201,180.17	0.37	105.2	Pulse	0.30	3
3	Rh		2,012,594.02	1.15	106.0	Pulse	0.30	3
3	Tb		3,333,342.36	0.78	106.6	Pulse	0.30	3

Quantitation Report

File Name	052SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:44
Sample Name	jc96041-11f
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	10/8/2019 13:38
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	23.77	64.00	3.176E-05	Pulse	0.25	3
B			1	10.996	ug/l	6.28	43,397.15	2.156E-02	Pulse	0.15	3
Ca			1	132.412	ug/l	2.07	77,424.18	2.557E-02	Pulse	0.10	3
Sr			1	1.532	ug/l	2.51	36,675.97	1.027E-02	Pulse	0.10	3
Mo			1	0.123	ug/l	22.89	600.03	1.682E-04	Pulse	0.10	3
Ag			1	0.024	ug/l	25.53	306.68	8.429E-05	Pulse	0.10	3
Sn			1	0.215	ug/l	14.07	3,423.83	9.407E-04	Pulse	0.10	3
Sb			1	0.207	ug/l	7.41	2,010.20	3.625E-04	Pulse	0.10	3
Ba			1	1.057	ug/l	5.19	3,903.98	7.040E-04	Pulse	0.10	3
Tl			1	0.010	ug/l	11.16	226.68	7.226E-05	Pulse	0.10	3
Pb			1	0.035	ug/l	53.48	456.69	1.457E-04	Pulse	0.10	3
Pb			1	0.033	ug/l	24.27	323.35	1.031E-04	Pulse	0.10	3
Pb			1	0.026	ug/l	26.52	1,576.76	5.028E-04	Pulse	0.10	3
Na			2	60.180	ug/l	0.74	60,928.86	3.671E-01	Pulse	0.30	3
Mg			2	6.946	ug/l	1.82	2,866.94	1.727E-02	Pulse	0.30	3
Al			2	15.266	ug/l	12.65	2,309.08	1.392E-02	Pulse	0.30	3
K			2	20.168	ug/l	1.53	21,739.81	1.310E-01	Pulse	0.30	3
Ca			2	133.089	ug/l	4.65	1,990.15	1.199E-02	Pulse	0.30	3
Ti			2	1.152	ug/l	11.64	103.33	6.229E-04	Pulse	0.30	3
V			2	0.440	ug/l	5.49	2,091.27	1.260E-02	Pulse	0.30	3
Cr			2	0.432	ug/l	7.73	2,417.98	1.457E-02	Pulse	0.30	3
Mn			2	0.436	ug/l	3.85	1,011.15	6.092E-03	Pulse	0.30	3
Fe			2	7.868	ug/l	1.19	28,671.66	1.727E-01	Pulse	0.30	3
Co			2	0.037	ug/l	8.05	296.59	1.787E-03	Pulse	0.30	3
Ni			2	0.415	ug/l	3.98	842.25	5.074E-03	Pulse	0.30	3
Cu			2	2.385	ug/l	1.56	14,016.08	8.444E-02	Pulse	0.30	3
Zn			2	3.882	ug/l	2.90	2,804.72	1.690E-02	Pulse	0.30	3
As			2	0.173	ug/l	5.71	77.33	4.658E-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	42.30	9.96	1.152E-05	Pulse	0.30	3
Sn			2	0.261	ug/l	4.75	1,042.27	1.205E-03	Pulse	0.30	3
Se			3	0.072	ug/l	16.42	9.67	4.857E-05	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,012,619.82	1.15	76.7	Pulse	0.10	3
1	Sc		3,028,453.81	0.52	88.7	Pulse	0.10	3
1	Ge		582,141.23	0.51	99.6	Pulse	0.10	3
1	Ge		796,155.66	0.86	98.6	Pulse	0.10	3
1	Rh		3,571,805.05	0.79	93.6	Pulse	0.10	3
1	In		3,640,325.60	0.80	96.8	Pulse	0.10	3
1	Tb		5,544,738.67	0.36	104.0	Analog	0.10	3
1	Ho		518,659.89	1.33	100.7	Pulse	0.10	3
1	Bi		3,137,082.04	1.06	98.6	Pulse	0.10	3
2	Sc		165,991.02	0.73	90.0	Pulse	0.30	3
2	Ge		96,199.77	0.25	101.8	Pulse	0.30	3
2	Ge		144,527.53	0.67	101.8	Pulse	0.30	3
2	Rh		2,198,567.34	0.47	95.9	Pulse	0.30	3
2	In		865,334.61	0.64	93.6	Pulse	0.30	3
2	Tb		2,915,791.55	0.62	95.5	Pulse	0.30	3
2	Ho		292,623.31	0.17	96.3	Pulse	0.30	3
2	Bi		1,921,698.05	0.51	95.5	Pulse	0.30	3
3	Sc		227,435.66	0.70	103.5	Pulse	0.30	3
3	Ge		133,450.64	0.72	106.2	Pulse	0.30	3
3	Ge		199,020.41	0.17	104.1	Pulse	0.30	3
3	Rh		1,994,812.56	0.52	105.1	Pulse	0.30	3
3	Tb		3,343,261.74	0.62	106.9	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:49
Sample Name	mp17725-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	10/8/2019 13:38
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	73.253	ug/l	0.86	358,302.52	1.818E-01	Pulse	0.25	3
B			1	86.459	ug/l	0.90	310,370.04	1.575E-01	Pulse	0.15	3
Ca			1	4271.200	ug/l	0.46	2,104,454.29	7.200E-01	Pulse	0.10	3
Sr			1	80.754	ug/l	0.56	1,817,740.91	5.349E-01	Pulse	0.10	3
Mo			1	80.988	ug/l	0.59	343,071.18	1.010E-01	Pulse	0.10	3
Ag			1	76.080	ug/l	1.52	827,642.54	2.325E-01	Pulse	0.10	3
Sn			1	79.749	ug/l	0.40	542,718.22	1.525E-01	Pulse	0.10	3
Sb			1	76.545	ug/l	3.61	641,711.88	1.183E-01	Pulse	0.10	3
Ba			1	73.840	ug/l	2.65	261,381.46	4.819E-02	Pulse	0.10	3
Tl			1	78.699	ug/l	0.68	1,607,385.45	5.241E-01	Pulse	0.10	3
Pb			1	82.017	ug/l	0.75	576,748.19	1.880E-01	Pulse	0.10	3
Pb			1	81.722	ug/l	1.15	507,564.55	1.655E-01	Pulse	0.10	3
Pb			1	82.010	ug/l	0.93	2,311,471.58	7.536E-01	Pulse	0.10	3
Na			2	3889.517	ug/l	1.02	3,239,917.16	2.014E+01	Pulse	0.30	3
Mg			2	3817.564	ug/l	1.27	1,455,436.09	9.046E+00	Pulse	0.30	3
Al			2	3680.232	ug/l	1.31	469,342.55	2.917E+00	Pulse	0.30	3
K			2	3877.850	ug/l	0.51	1,096,796.00	6.817E+00	Pulse	0.30	3
Ca			2	4405.451	ug/l	0.18	59,712.03	3.711E-01	Pulse	0.30	3
Ti			2	75.520	ug/l	1.98	7,648.52	4.754E-02	Pulse	0.30	3
V			2	81.312	ug/l	0.85	244,576.67	1.520E+00	Pulse	0.30	3
Cr			2	79.133	ug/l	0.51	304,745.87	1.894E+00	Pulse	0.30	3
Mn			2	78.402	ug/l	0.78	161,718.41	1.005E+00	Pulse	0.30	3
Fe			2	4234.561	ug/l	1.10	12,991,091.43	8.075E+01	Analog	0.30	3
Co			2	79.704	ug/l	0.95	465,088.27	2.891E+00	Pulse	0.30	3
Ni			2	78.811	ug/l	1.14	123,482.05	7.675E-01	Pulse	0.30	3
Cu			2	78.613	ug/l	0.48	335,007.28	2.082E+00	Pulse	0.30	3
Zn			2	74.395	ug/l	2.07	46,581.57	2.895E-01	Pulse	0.30	3
As			2	76.852	ug/l	0.56	26,330.78	1.637E-01	Pulse	1.00	3
Cd			2	76.381	ug/l	1.59	71,089.75	8.519E-02	Pulse	0.30	3
Sn			2	83.471	ug/l	0.43	164,008.58	1.965E-01	Pulse	0.30	3
Se			3	340.757	ug/l	0.31	33,534.38	1.738E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,970,814.17	0.48	75.1	Pulse	0.10	3
1	Sc		2,922,963.71	1.19	85.6	Pulse	0.10	3
1	Ge		551,885.05	1.19	94.4	Pulse	0.10	3

Quantitation Report

1	Ge		754,209.75	1.44	93.4	Pulse	0.10	3
1	Rh		3,398,284.74	0.77	89.0	Pulse	0.10	3
1	In		3,559,744.59	1.39	94.7	Pulse	0.10	3
1	Tb		5,426,501.06	3.45	101.8	Mix	0.10	3
1	Ho		508,891.32	1.50	98.8	Pulse	0.10	3
1	Bi		3,067,156.93	0.33	96.4	Pulse	0.10	3
2	Sc		160,893.68	0.73	87.2	Pulse	0.30	3
2	Ge		91,418.05	0.99	96.8	Pulse	0.30	3
2	Ge		137,353.62	0.31	96.7	Pulse	0.30	3
2	Rh		2,099,970.47	0.34	91.6	Pulse	0.30	3
2	In		834,518.52	0.40	90.3	Pulse	0.30	3
2	Tb		2,866,260.65	0.30	93.9	Pulse	0.30	3
2	Ho		287,307.82	0.36	94.5	Pulse	0.30	3
2	Bi		1,863,298.47	0.26	92.6	Pulse	0.30	3
3	Sc		220,107.31	0.58	100.1	Pulse	0.30	3
3	Ge		127,348.01	0.88	101.3	Pulse	0.30	3
3	Ge		192,958.28	0.74	100.9	Pulse	0.30	3
3	Rh		1,935,175.90	0.91	102.0	Pulse	0.30	3
3	Tb		3,283,652.72	0.53	105.0	Pulse	0.30	3

Quantitation Report

File Name	054SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:54
Sample Name	mp17725-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	10/8/2019 13:38
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	66.435	ug/l	0.66	325,848.26	1.649E-01	Pulse	0.25	3
B			1	131.299	ug/l	1.12	470,855.29	2.383E-01	Pulse	0.15	3
Ca			1	60356.319	ug/l	1.25	30,969,478.71	1.013E+01	Analog	0.10	3
Sr			1	351.788	ug/l	2.40	7,363,048.44	2.330E+00	Analog	0.10	3
Mo			1	94.501	ug/l	1.09	372,378.29	1.178E-01	Pulse	0.10	3
Ag			1	66.051	ug/l	0.30	680,996.74	2.019E-01	Pulse	0.10	3
Sn			1	73.131	ug/l	0.67	471,776.21	1.399E-01	Pulse	0.10	3
Sb			1	68.871	ug/l	2.30	549,256.46	1.065E-01	Pulse	0.10	3
Ba			1	217.051	ug/l	3.01	730,356.68	1.416E-01	Pulse	0.10	3
Tl			1	72.876	ug/l	1.30	1,336,880.66	4.853E-01	Pulse	0.10	3
Pb			1	80.563	ug/l	0.40	508,875.47	1.847E-01	Pulse	0.10	3
Pb			1	80.118	ug/l	1.33	446,934.64	1.622E-01	Pulse	0.10	3
Pb			1	80.890	ug/l	0.71	2,047,865.36	7.433E-01	Pulse	0.10	3
Na			2	312109.599	ug/l	1.61	271,514,478.10	1.611E+03	Analog	0.30	3
Mg			2	10718.045	ug/l	1.09	4,279,303.86	2.540E+01	Pulse	0.30	3
Al			2	6575.382	ug/l	0.99	878,021.06	5.211E+00	Pulse	0.30	3
K			2	7062.958	ug/l	1.39	2,078,761.38	1.234E+01	Pulse	0.30	3
Ca			2	58523.317	ug/l	1.06	829,059.84	4.920E+00	Pulse	0.30	3
Ti			2	219.265	ug/l	3.40	23,284.98	1.382E-01	Pulse	0.30	3
V			2	103.109	ug/l	1.50	324,597.22	1.927E+00	Pulse	0.30	3
Cr			2	87.505	ug/l	1.38	352,825.48	2.094E+00	Pulse	0.30	3
Mn			2	461.517	ug/l	2.64	996,427.43	5.914E+00	Pulse	0.30	3
Fe			2	21819.672	ug/l	2.68	70,078,730.55	4.160E+02	Analog	0.30	3
Co			2	68.796	ug/l	2.09	420,391.28	2.495E+00	Pulse	0.30	3
Ni			2	71.346	ug/l	1.91	117,080.67	6.949E-01	Pulse	0.30	3
Cu			2	73.839	ug/l	1.52	329,750.91	1.957E+00	Pulse	0.30	3
Zn			2	75.810	ug/l	1.33	49,707.21	2.950E-01	Pulse	0.30	3
As			2	86.097	ug/l	1.51	30,889.37	1.833E-01	Pulse	1.00	3
Cd			2	66.089	ug/l	0.93	59,543.17	7.371E-02	Pulse	0.30	3
Sn			2	75.237	ug/l	0.43	143,149.82	1.772E-01	Pulse	0.30	3
Se			3	302.574	ug/l	0.20	28,371.94	1.543E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,976,293.41	0.25	75.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,057,492.25	0.79	89.6	Pulse	0.10	3
1	Ge		537,004.61	0.01	91.9	Pulse	0.10	3
1	Ge		739,882.02	0.81	91.6	Pulse	0.10	3
1	Rh		3,161,622.87	2.21	82.8	Pulse	0.10	3
1	In		3,373,324.03	1.62	89.7	Pulse	0.10	3
1	Tb		5,160,421.38	3.53	96.8	Mix	0.10	3
1	Ho		521,503.53	0.91	101.2	Pulse	0.10	3
1	Bi		2,755,078.61	1.25	86.6	Pulse	0.10	3
2	Sc		168,512.69	1.38	91.3	Pulse	0.30	3
2	Ge		90,111.18	0.49	95.4	Pulse	0.30	3
2	Ge		135,502.04	0.85	95.4	Pulse	0.30	3
2	Rh		1,952,210.62	0.95	85.1	Pulse	0.30	3
2	In		807,830.07	0.65	87.4	Pulse	0.30	3
2	Tb		2,807,098.36	0.39	91.9	Pulse	0.30	3
2	Ho		296,376.00	1.01	97.5	Pulse	0.30	3
2	Bi		1,697,086.04	0.58	84.4	Pulse	0.30	3
3	Sc		222,270.98	1.21	101.1	Pulse	0.30	3
3	Ge		122,358.05	0.48	97.4	Pulse	0.30	3
3	Ge		183,854.79	0.34	96.2	Pulse	0.30	3
3	Rh		1,749,055.42	0.67	92.1	Pulse	0.30	3
3	Tb		3,109,502.79	0.73	99.4	Pulse	0.30	3

Quantitation Report

File Name	055_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 15:59
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	10/8/2019 13:38
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	48.199	ug/l	0.47	536,950.12	2.392E-01	Pulse	0.25	3
B			1	99.085	ug/l	0.25	805,075.92	3.587E-01	Pulse	0.15	3
Ca			1	5120.255	ug/l	1.03	5,458,884.71	1.721E+00	Analog	0.10	3
Sr			1	51.419	ug/l	0.70	2,455,727.93	6.811E-01	Pulse	0.10	3
Mo			1	51.374	ug/l	1.03	461,777.23	1.281E-01	Pulse	0.10	3
Ag			1	49.302	ug/l	1.07	1,121,215.71	3.014E-01	Pulse	0.10	3
Sn			1	50.161	ug/l	1.05	713,052.59	1.917E-01	Pulse	0.10	3
Sb			1	48.839	ug/l	0.80	851,610.92	1.510E-01	Pulse	0.10	3
Ba			1	47.832	ug/l	0.34	352,050.15	6.243E-02	Pulse	0.10	3
Tl			1	50.491	ug/l	0.51	2,097,507.26	6.725E-01	Pulse	0.10	3
Pb			1	50.942	ug/l	0.15	728,552.93	2.336E-01	Pulse	0.10	3
Pb			1	50.905	ug/l	0.59	643,022.53	2.062E-01	Pulse	0.10	3
Pb			1	51.168	ug/l	0.33	2,933,086.01	9.404E-01	Pulse	0.10	3
Na			2	4884.837	ug/l	0.37	8,921,751.87	5.050E+01	Analog	0.30	3
Mg			2	4622.971	ug/l	0.99	3,870,760.68	2.191E+01	Pulse	0.30	3
Al			2	4603.551	ug/l	0.62	1,288,969.57	7.296E+00	Pulse	0.30	3
K			2	4763.193	ug/l	0.93	2,934,033.22	1.661E+01	Pulse	0.30	3
Ca			2	5070.693	ug/l	0.54	150,760.56	8.533E-01	Pulse	0.30	3
Ti			2	48.247	ug/l	1.36	10,735.79	6.077E-02	Pulse	0.30	3
V			2	51.293	ug/l	0.88	338,647.05	1.917E+00	Pulse	0.30	3
Cr			2	50.080	ug/l	1.19	423,347.30	2.396E+00	Pulse	0.30	3
Mn			2	49.413	ug/l	0.76	223,827.37	1.267E+00	Pulse	0.30	3
Fe			2	5009.607	ug/l	0.25	33,748,911.99	1.910E+02	Analog	0.30	3
Co			2	50.234	ug/l	1.22	643,738.78	3.644E+00	Pulse	0.30	3
Ni			2	49.588	ug/l	0.95	170,590.90	9.656E-01	Pulse	0.30	3
Cu			2	49.403	ug/l	0.91	461,372.48	2.611E+00	Pulse	0.30	3
Zn			2	49.560	ug/l	0.77	68,045.81	3.851E-01	Pulse	0.30	3
As			2	50.826	ug/l	0.39	38,239.12	2.164E-01	Pulse	1.00	3
Cd			2	50.256	ug/l	0.89	99,404.60	1.121E-01	Pulse	0.30	3
Sn			2	52.456	ug/l	0.32	218,914.95	2.469E-01	Pulse	0.30	3
Se			3	182.062	ug/l	6.17	37,850.00	1.857E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,244,392.26	0.38	85.6	Pulse	0.10	3
1	Sc		3,171,004.33	0.35	92.9	Pulse	0.10	3
1	Ge		559,323.09	0.59	95.7	Pulse	0.10	3

Quantitation Report

1	Ge		777,654.10	0.20	96.3	Pulse	0.10	3
1	Rh		3,605,314.01	0.71	94.5	Pulse	0.10	3
1	In		3,720,364.11	0.52	98.9	Pulse	0.10	3
1	Tb		5,639,216.58	0.68	105.8	Analog	0.10	3
1	Ho		524,787.92	0.88	101.9	Pulse	0.10	3
1	Bi		3,119,112.77	0.58	98.1	Pulse	0.10	3
2	Sc		176,681.31	0.68	95.7	Pulse	0.30	3
2	Ge		93,898.94	0.62	99.4	Pulse	0.30	3
2	Ge		142,113.26	1.05	100.1	Pulse	0.30	3
2	Rh		2,182,448.94	0.86	95.2	Pulse	0.30	3
2	In		886,802.65	0.64	96.0	Pulse	0.30	3
2	Tb		2,966,929.67	0.66	97.2	Pulse	0.30	3
2	Ho		296,315.28	0.57	97.5	Pulse	0.30	3
2	Bi		1,902,729.30	0.93	94.6	Pulse	0.30	3
3	Sc		239,387.01	8.26	108.9	Pulse	0.30	3
3	Ge		134,767.92	5.79	107.3	Pulse	0.30	3
3	Ge		204,331.02	6.15	106.9	Pulse	0.30	3
3	Rh		2,041,990.20	8.19	107.6	Pulse	0.30	3
3	Tb		3,444,619.24	8.13	110.1	Pulse	0.30	3

Quantitation Report

File Name	056_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 16:04
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	10/8/2019 13:38
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	7.42	76.00	3.329E-05	Pulse	0.25	3
B			1	4.533	ug/l	3.16	41,279.40	1.808E-02	Pulse	0.15	3
Ca			1	0.307	ug/l	88.01	10,934.00	3.455E-03	Pulse	0.10	3
Sr			1	0.003	ug/l	63.23	623.37	1.711E-04	Pulse	0.10	3
Mo			1	0.092	ug/l	17.89	883.40	2.426E-04	Pulse	0.10	3
Ag			1	0.009	ug/l	25.58	236.68	6.358E-05	Pulse	0.10	3
Sn			1	0.087	ug/l	9.99	3,217.18	8.633E-04	Pulse	0.10	3
Sb			1	0.209	ug/l	3.36	3,830.63	6.898E-04	Pulse	0.10	3
Ba			1	0.000	ug/l	1091.84	83.33	1.501E-05	Pulse	0.10	3
Tl			1	0.013	ug/l	8.81	560.04	1.788E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	43.30	520.03	1.659E-04	Pulse	0.10	3
Pb			1	0.019	ug/l	9.88	346.68	1.107E-04	Pulse	0.10	3
Pb			1	0.018	ug/l	18.73	1,856.78	5.929E-04	Pulse	0.10	3
Na			2	7.101	ug/l	2.97	22,384.87	1.297E-01	Pulse	0.30	3
Mg			2	0.460	ug/l	2.99	516.68	2.993E-03	Pulse	0.30	3
Al			2	4.450	ug/l	2.40	1,532.31	8.875E-03	Pulse	0.30	3
K			2	4.216	ug/l	11.73	19,097.64	1.106E-01	Pulse	0.30	3
Ca			2	0.545	ug/l	67.98	154.45	8.948E-04	Pulse	0.30	3
Ti			2	0.128	ug/l	31.58	10.00	5.798E-05	Pulse	0.30	3
V			2	-0.062	ug/l	-6.49	360.01	2.086E-03	Pulse	0.30	3
Cr			2	0.010	ug/l	87.38	814.47	4.717E-03	Pulse	0.30	3
Mn			2	0.059	ug/l	20.96	348.90	2.021E-03	Pulse	0.30	3
Fe			2	0.962	ug/l	13.10	10,257.89	5.944E-02	Pulse	0.30	3
Co			2	0.001	ug/l	109.20	86.64	5.016E-04	Pulse	0.30	3
Ni			2	0.022	ug/l	50.05	252.23	1.462E-03	Pulse	0.30	3
Cu			2	-0.018	ug/l	-138.65	3,623.78	2.099E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.070	ug/l	44.56	418.90	2.426E-03	Pulse	0.30	3
As			2	0.005	ug/l	224.21	20.67	1.196E-04	Pulse	1.00	3
Cd			2	0.000	ug/l	1599.14	2.13	2.381E-06	Pulse	0.30	3
Sn			2	0.144	ug/l	19.66	1,138.94	1.269E-03	Pulse	0.30	3
Se			3	0.118	ug/l	12.58	25.53	1.326E-04	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,283,197.85	0.71	87.0	Pulse	0.10	3
1	Sc		3,164,816.10	0.46	92.7	Pulse	0.10	3
1	Ge		555,477.78	0.05	95.0	Pulse	0.10	3
1	Ge		767,467.51	0.37	95.1	Pulse	0.10	3
1	Rh		3,642,005.16	0.25	95.4	Pulse	0.10	3
1	In		3,727,506.80	1.13	99.1	Pulse	0.10	3
1	Tb		5,553,684.71	0.28	104.2	Analog	0.10	3
1	Ho		511,054.31	0.45	99.2	Pulse	0.10	3
1	Bi		3,132,369.33	0.68	98.5	Pulse	0.10	3
2	Sc		172,636.01	0.52	93.6	Pulse	0.30	3
2	Ge		93,933.27	0.78	99.4	Pulse	0.30	3
2	Ge		141,769.16	1.70	99.9	Pulse	0.30	3
2	Rh		2,220,904.22	0.36	96.8	Pulse	0.30	3
2	In		897,934.24	0.40	97.2	Pulse	0.30	3
2	Tb		2,938,225.51	0.90	96.2	Pulse	0.30	3
2	Ho		294,083.93	0.92	96.8	Pulse	0.30	3
2	Bi		1,938,872.01	1.46	96.4	Pulse	0.30	3
3	Sc		219,864.38	0.34	100.0	Pulse	0.30	3
3	Ge		127,580.68	0.08	101.5	Pulse	0.30	3
3	Ge		192,443.93	1.27	100.7	Pulse	0.30	3
3	Rh		1,952,721.87	0.59	102.9	Pulse	0.30	3
3	Tb		3,195,101.82	0.74	102.2	Pulse	0.30	3

Quantitation Report

File Name	057SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Method File	
Method Path	
Acq Time	10/8/2019 16:09
Sample Name	mp17725-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	10/8/2019 13:38
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	66.825	ug/l	0.34	337,586.50	1.658E-01	Pulse	0.25	3
B			1	130.289	ug/l	0.44	481,281.99	2.364E-01	Pulse	0.15	3
Ca			1	60029.581	ug/l	1.03	31,270,368.70	1.007E+01	Analog	0.10	3
Sr			1	355.277	ug/l	0.54	7,468,580.93	2.353E+00	Analog	0.10	3
Mo			1	94.220	ug/l	0.54	372,819.38	1.174E-01	Pulse	0.10	3
Ag			1	66.361	ug/l	0.86	682,573.32	2.028E-01	Pulse	0.10	3
Sn			1	72.543	ug/l	0.80	466,853.53	1.387E-01	Pulse	0.10	3
Sb			1	68.889	ug/l	3.37	548,646.58	1.065E-01	Pulse	0.10	3
Ba			1	217.531	ug/l	3.57	731,081.63	1.419E-01	Pulse	0.10	3
Tl			1	71.665	ug/l	0.27	1,322,009.38	4.772E-01	Pulse	0.10	3
Pb			1	79.590	ug/l	0.58	505,523.97	1.825E-01	Pulse	0.10	3
Pb			1	79.186	ug/l	0.48	444,203.11	1.604E-01	Pulse	0.10	3
Pb			1	79.777	ug/l	0.56	2,030,983.80	7.331E-01	Pulse	0.10	3
Na			2	310274.448	ug/l	2.03	271,830,975.87	1.602E+03	Analog	0.30	3
Mg			2	10742.236	ug/l	0.44	4,319,043.16	2.545E+01	Pulse	0.30	3
Al			2	6672.713	ug/l	0.66	897,242.43	5.288E+00	Pulse	0.30	3
K			2	7062.893	ug/l	0.55	2,093,375.89	1.234E+01	Pulse	0.30	3
Ca			2	58551.602	ug/l	0.73	835,264.78	4.923E+00	Pulse	0.30	3
Ti			2	219.544	ug/l	2.99	23,482.27	1.384E-01	Pulse	0.30	3
V			2	102.871	ug/l	0.59	326,132.56	1.922E+00	Pulse	0.30	3
Cr			2	87.368	ug/l	0.41	354,752.37	2.091E+00	Pulse	0.30	3
Mn			2	462.676	ug/l	0.30	1,006,067.32	5.929E+00	Pulse	0.30	3
Fe			2	21961.817	ug/l	0.66	71,039,981.62	4.187E+02	Analog	0.30	3
Co			2	69.082	ug/l	0.22	425,133.43	2.506E+00	Pulse	0.30	3
Ni			2	71.756	ug/l	0.59	118,587.96	6.989E-01	Pulse	0.30	3
Cu			2	73.558	ug/l	0.39	330,824.51	1.950E+00	Pulse	0.30	3
Zn			2	76.337	ug/l	0.70	50,401.61	2.970E-01	Pulse	0.30	3
As			2	86.249	ug/l	0.42	31,161.86	1.837E-01	Pulse	1.00	3
Cd			2	66.003	ug/l	2.06	60,139.75	7.361E-02	Pulse	0.30	3
Sn			2	74.752	ug/l	1.36	143,839.31	1.761E-01	Pulse	0.30	3
Se			3	300.893	ug/l	0.52	28,409.21	1.535E-01	Pulse	5.00	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		2,035,528.27	0.84	77.6	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	10000	5192	5297.6	2.68
59	5000	4322	4373.5	2.54
89	10000	6470	6537.7	2.51
140	10000	6420	6649.5	2.49
205	5000	4616	4443.9	2.78
156/140	1	0.545 %	0.569 %	18.19
70/140	20	12.947 %	13.928 %	8.84
9	20	1	3.0	71.26
11	1000	650	643.2	6.24
88	100	39	39.8	18.26
95	20	10	7.8	39.89
107	20	0	2.4	70.96
121	50	31	25.9	21.50
137	50	17	9.6	34.70
208	50	18	17.2	27.24
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	-34	V
Extract 2	-140.0	V	Cell Exit	-60	V
Omega Bias	-60	V	Deflect	13.8	V
Omega Lens	7.2	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	2.63E+2	Pa	Internal Temp	27.1	℃
Water Temp	22.0	℃	S/C Temp (L)	2.3	℃
Carrier Gas(BP)	1.92E+2	kPa			

US EPA Tune Check Sample Report

Batch Folder C:\Agilent\ICPMH\1\DATA\xa100819m1.b
Report Comment
Instrument Name G3281A JP10340551

[1]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	165496	0.75	5.00	
24	535335	0.21	5.00	
25	70162	0.77	5.00	
26	80752	0.60	5.00	
59	523833	0.65	5.00	
115	668664	0.40	5.00	
206	170140	0.34	5.00	
207	156248	0.27	5.00	
208	368184	0.28	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	163736	165070	166716	166643	165314
24	534447	534013	536468	536482	535265
25	69422	69781	70568	70667	70373
26	80227	81066	81409	80653	80405
59	518991	524319	524028	528565	523264
115	664648	669619	667339	671288	670428
206	170543	169911	170102	169320	170823
207	156567	156502	156129	156489	155556
208	369875	368269	367463	368098	367217

Integration Time [sec] = 0.1

Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	26672	9.00	8.9 - 9.1		0.769	0.900	
24	87718	24.00	23.9 - 24.1		0.742	0.900	
25	11517	25.00	24.9 - 25.1		0.716	0.900	
26	13135	26.00	25.9 - 26.1		0.753	0.900	
59	88101	59.00	58.9 - 59.1		0.728	0.900	
115	122012	115.05	114.9 - 115.1		0.704	0.900	
206	29359	206.00	205.9 - 206.1		0.754	0.900	
207	26705	207.00	206.9 - 207.1		0.756	0.900	
208	63512	208.00	207.9 - 208.1		0.761	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	7.2	V			
Extract 2	-140.0	V	Cell Entrance	-34	V			
Omega Bias	-60	V	Cell Exit	-60	V			
Deflect	13.8	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\xa100819m1.b\111SMPL.d

9 Be [1] / ISTD: 6 Li
y = 4.963E-3 x + 8.127E-6
R 1.0000
DL 0.003218
BEC 0.001637

11 B [1] / ISTD: 6 Li
y = 3.603E-3 x + 1.751E-3
R 0.9998
DL 0.09156
BEC 0.4861

23 Na [2] / ISTD: 45 Sc
y = 1.033E-2 x + 5.635E-2
R 1.0000
DL 0.2829
BEC 5.457

24 Mg [2] / ISTD: 45 Sc
y = 4.739E-3 x + 8.133E-4
R 0.9999
DL 0.0455
BEC 0.1716

27 Al [2] / ISTD: 45 Sc
y = 1.584E-3 x + 1.824E-3
R 1.0000
DL 0.3989
BEC 1.151

39 K [2] / ISTD: 45 Sc
y = 3.466E-3 x + 9.601E-2
R 0.9999
DL 0.6065
BEC 27.7

44 Ca [1] / ISTD: 45 Sc
y = 3.356E-4 x + 3.352E-3
R 1.0000
DL 0.9238
BEC 9.988

44 Ca [2] / ISTD: 45 Sc
y = 1.681E-4 x + 8.032E-4
R 1.0000
DL 1.318
BEC 4.778

47 Ti [2] / ISTD: 45 Sc
y = 1.262E-3 x - 1.040E-4
R 1.0000
DL 0
BEC -0.08241

51 V [2] / ISTD: 45 Sc
y = 3.728E-2 x + 4.394E-3
R 1.0000
DL 0.02186
BEC 0.1179

52 Cr [2] / ISTD: 45 Sc
y = 4.776E-2 x + 4.257E-3

R	1.0000
DL	0.01863
BEC	0.08912

55 Mn [2] / ISTD: 45 Sc
y = 2.563E-2 x + 5.062E-4

R	1.0000
DL	0.008954
BEC	0.01975

56 Fe [2] / ISTD: 45 Sc
y = 3.813E-2 x + 2.274E-2

R	1.0000
DL	0.06014
BEC	0.5965

59 Co [2] / ISTD: 45 Sc
y = 7.253E-2 x + 4.400E-4

R	1.0000
DL	0.003894
BEC	0.006067

60 Ni [2] / ISTD: 45 Sc
y = 1.945E-2 x + 1.036E-3

R	1.0000
DL	0.01199
BEC	0.05327

63 Cu [2] / ISTD: 45 Sc
y = 5.242E-2 x + 2.192E-2

R	1.0000
DL	0.05403
BEC	0.4182

66 Zn [2] / ISTD: 45 Sc
y = 7.733E-3 x + 1.888E-3

R	0.9998
DL	0.0709
BEC	0.2441

75 As [2] / ISTD: 45 Sc
y = 4.256E-3 x + 9.807E-5

R	1.0000
DL	0.01939
BEC	0.02304

78 Se [3] / ISTD: 74 Ge
y = 1.020E-3 x + 1.185E-5

R	0.9999
DL	0.001795
BEC	0.01162

88 Sr [1] / ISTD: 103 Rh
y = 1.324E-2 x + 1.249E-4

R	1.0000
DL	0.008351
BEC	0.009429

Calibration for C:\Agilent\ICPMH\1\DATA\xa100819m1.b\111SMPL.d

95 Mo [1] / ISTD: 103 Rh
y = 2.493E-3 x + 1.438E-5
R 1.0000
DL 0.006618
BEC 0.00577

107 Ag [1] / ISTD: 115 In
y = 6.113E-3 x + 1.162E-5
R 1.0000
DL 0.006047
BEC 0.001901

111 Cd [2] / ISTD: 115 In
y = 2.230E-3 x + 2.247E-6
R 1.0000
DL 0.002806
BEC 0.001007

118 Sn [1] / ISTD: 115 In
y = 3.810E-3 x + 5.320E-4
R 1.0000
DL 0.02408
BEC 0.1396

118 Sn [2] / ISTD: 115 In
y = 4.695E-3 x + 5.923E-4
R 1.0000
DL 0.02859
BEC 0.1262

121 Sb [1] / ISTD: 159 Tb
y = 3.091E-3 x + 4.249E-5
R 1.0000
DL 0.01136
BEC 0.01374

137 Ba [1] / ISTD: 159 Tb
y = 1.305E-3 x + 1.448E-5
R 1.0000
DL 0.00718
BEC 0.0111

205 Tl [1] / ISTD: 209 Bi
y = 1.332E-2 x + 6.822E-6
R 0.9999
DL 0.0003921
BEC 0.0005123

206 Pb [1] / ISTD: 209 Bi
y = 4.584E-3 x + 6.589E-5
R 1.0000
DL 0.00885
BEC 0.01437

207 Pb [1] / ISTD: 209 Bi
y = 4.049E-3 x + 3.531E-5
R 1.0000
DL 0.008188
BEC 0.008721

208 Pb [1] / ISTD: 209 Bi

y = 1.837E-2 x + 2.644E-4

R	1.0000
DL	0.001556
BEC	0.01439

SGS North America Inc

Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP17745	10/7/2019	13:00	10/7/2019	18:30	JC95642-1	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	5	2106305	95	0	95
1	End	5	2105305	95	0	95
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-74	1904119	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP17745-MB1	N/A	N	50	50	AB		
MP17745-B1	N/A	N	50	50	AB	ABCD	
MP17745-S1	5	Y	50	50	AB	ABCD	
MP17745-S2	5	Y	50	50	AB	ABCD	
MP17745-SD1	5	Y	50	50	AB		
JC95642-1	5	Y	50	50	AB		
JC96147-1A	1	Y	50	50	AB		
JC96147-1F	2	Y	50	50	AB		
JC96281-1	1	Y	50	50	AB		
MP17745-B2	N/A	N	50	50	AB	EFGHI	
MP17745-S3	5	Y	50	50	AB	EFGHI	
MP17745-S4	5	Y	50	50	AB	EFGHI	

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 20PPM	0.625
E	ACCUTEST 13B REV1	0.2
F	ACCUTEST 14B REV1	0.2
G	MINERALS 1000PPM	0.2
H	AG 20PPM	0.2
I	SE 20PPM	0.8

Comments: _____

Analyst MOUSTAFR 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

Document Control # NJ-MET-PREP-AQ-01 (2456468 4378704432) Validated by Validated on

7.2.1

7

SGS

Metals Digestion Reagents Information Log

Digestion Batch ID: MP 17745 **Date:** 10/7/19

Matrix: ALL

Standard/Reagent Type	Exp. Date	Standard/Reagent ID
Spiking Solution - (ACCUTEST-13A REV1)	3/26/2020	MP-015-1227
Spiking Solution - (ACCUTEST-14A REV1)	3/26/2020	MP-015-1228
Spiking Solution - 5000 mg/l Minerals	8/21/2020	P2-MEB681527 MFG. INO. VENT.
Spiking Solution - Sulfur 1000ppm	9/25/2021	LOT: 092518 MFG: ABS. STANDARDS
Spiking Solution - Si 1000ppm	9/24/2020	P2-SI676242 MFG. INO. VENT.
Spiking Solution - Bi 1000ppm	8/29/2020	N2-BI669548 MFG: INO. VENT.
Spiking Solution - Se 20ppm	3/30/2020	MP-015-1230
Spiking Solution - Li 1000ppm	8/23/2020	P2-LI675235 MFG: INO. VENT.
Spiking Solution- Ag 20 ppm	3/26/2020	MP-015-1229
Spiking Solution - (ACCUTEST-13B REV1)	3/18/2020	MP-015-1224
Spiking Solution - (ACCUTEST-14B REV1)	3/18/2020	MP-015-1225
Spiking Solution - 1000ppm Minerals	2/22/2020	MP-015-1213
Spiking Solution- P		
Nitric Acid	10/7/2021	LOT: 234822 MFG. J.T. BAKER
Nitric Acid (1:1)	4/3/2020	MP-018-42-314 1:1 HNO3
Hydrochloric Acid	3/13/2022	LOT:4119020 MFG. FISHER
Hydrochloric Acid (1:1)	4/7/2020	MP-018-42-315 1:1 HCL
Hydrogen Peroxide	9/25/2021	LOT: 191365 MFG: FISHER
Soil Lab Control/Soil LC	10/31/2021	LOT: D101-540 MFG: ERA
Teflon Chips(For Soil MB and Blank Spike)	N/A	LOT: 24635764 MFG. SAINT-GOBAIN
Digestion Tubes	N/A	LOT: 1904119 MFG: ENV. EXPRESS
pH Paper	11/1/2021	LOT: 231018 MFG: HYDRION
Filter paper Q8	N/A	LOT: 16939084 MFG: FISHER
Filter paper 0.45µm	N/A	LOT: F9BA55973E MFG: FISHER

Spike witnessed By: _____

Validated By: _____

Validated On: _____

Metals Prep Reagent
1/17/18

7.2.1

7

Date 10/8/2019 Analyst MM MP # 17687, 17748, 17630, 17713, 17745A

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	MA-18-354-153	11/28/19	200	0.2	19.25	20	2
Mixed ICP intermediate Metals Solution (ACCUTEST-14A-REV1)	Sb,As,Mo,Sn,Ti, W,Zr	Yes	Inhouse	MA-18-354-154	11/28/19	200	0.2			2
Ag Spike Intermediate	Ag	Yes	Inhouse	MA-18-354-152	11/28/19	20	0.25			0.25
Metals Mix	Ca,Al,Fe,Mg,K, Na	Yes	Inorganic Venture	P2-MEB 6786549	4/25/20	5000	0.1			25
S spike	S					200	0.2			2
Br Spike	Br					200	0.2			2
Li Spike	Li					200	0.2			2
Sr spike	Sr					1000	0.1			5

Form: DAYT-MET-0095-01-FORM
Rev Date 7/10/2018

Reviewed by

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Sovereign Consulting

Shepley's Hill (SHL), Devens, MA

AC001.M01.05

SGS Job Number: JC98286

Sampling Date: 11/08/19

Report to:

Sovereign Consulting
9 Payson Road Suite 150
Foxborough, MA 02035
SPassafaro@SovCon.com

ATTN: Steve Passafaro

Total number of pages in report: **246**

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.

Laura Degenhardt
General Manager

Client Service contact: Victoria Pushkova 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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Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Case Narrative/Conformance Summary **4**
Section 3: Summary of Hits **5**
Section 4: Sample Results **6**
4.1: JC98286-1: EFFLUENT 7
Section 5: Misc. Forms **8**
5.1: Chain of Custody 9
5.2: Sample Tracking Chronicle 11
5.3: Internal Chain of Custody 12
5.4: QC Evaluation: DOD QSM5.x Limits 13
Section 6: Metals Analysis - QC Data Summaries **14**
6.1: Inst QC MA47822: As 15
6.2: Prep QC MP18386: As 49
6.3: IDL and Linear Range Summaries 55
Section 7: Metals Analysis - Raw Data **59**
7.1: Raw Data MA47822 60
7.2: Prep Logs 245

SGS North America Inc.

Sample Summary

Sovereign Consulting

Job No: JC98286

Shepley's Hill (SHL), Devens, MA
Project No: AC001.M01.05

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC98286-1	11/08/19	06:40	LAP	11/09/19	AQ	Effluent	EFFLUENT

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Sovereign Consulting	**Job No**	JC98286
Site:	Shepley's Hill (SHL), Devens, MA	**Report Date**	11/19/2019 11:42:26 A

On 11/09/2019, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.1 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JC98286 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.

Metals Analysis By Method SW846 6020B

Matrix: AQ **Batch ID:** MP18386

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC98286-1MS, JC98286-1MSD, JC98286-1PS, JC98286-1SDL were used as the QC samples for metals.

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: JC98286
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 11/08/19

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
JC98286-1	**EFFLUENT**					
Arsenic		31.5	3.0	2.0	ug/l	SW846 6020B

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	EFFLUENT		
Lab Sample ID:	JC98286-1	**Date Sampled:**	11/08/19
Matrix:	AQ - Effluent	**Date Received:**	11/09/19
		Percent Solids:	n/a
Project:	Shepley's Hill (SHL), Devens, MA		

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	31.5	3.0	2.0	0.94	ug/l	2	11/14/19	11/15/19	GT	SW846 6020B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA47822
(2) Prep QC Batch: MP18386

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

SGS

GW

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

FED-EX Tracking # 132543153279
Bottle Order Control #
SGS Quote #
SGS Job # JC98286

Client / Reporting Information

Company Name: Sovereign Consulting Inc.
Street Address: 9 Payson Road, Suite 150
City State Zip: Foxborough MA 02035
Project Contact E-mail: Steve Passafaro (spassafaro@sovcon.com)
Phone # Fax #: (508) 339-3200 (
Sampler(s) Name(s) Phone #: Sovereign Staff

Project Information

Project Name: Shepley's Hill (SHL), Devens, MA
Street
City State: Devens MA
Project #: AC001.M01
Client Purchase Order #
Project Manager: Steve Passafaro

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	Total As - 6020A	LAB USE ONLY
1	Effluent		11/8/19	0640	LAB	GW	1			X						X	
																	AY

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [X] 5 Day RUSH - Arsenic Only
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Approved by (SGS Project Manager)/Date:

Emergency & Rush T/A data available via LabLink

Data Deliverable Information

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

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

Comments / Special Instructions

See Project QAPP for all specfic project requirements
5 - Day rush on Arsenic

INITIAL ASESSMENT 3Av

LABEL VERIFICATION

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 Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Brian A. Perretta	11/8/19 0640	1	2	11/8/19 1940	2
3		3	4	11/9/19 0925	4
5		5			

Custody Seal # 01020 ☐ Intact ☐ Not intact
Preserved where applicable
Cooler Temp. 2.3 IR

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

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

5.1 5

JC98286: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JC98286 **Client:** _____ **Project:** _____

Date / Time Received: 11/9/2019 9:35:00 AM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.3);

Cooler Temps (Corrected) °C: Cooler 1: (2.1);

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

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

Quality Control Preservation	Y	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	N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

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

Sample Integrity - Instructions	Y	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: 229517 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

JC98286: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Sovereign Consulting

Job No: JC98286

Shepley's Hill (SHL), Devens, MA
Project No: AC001.M01.05

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC98286-1	Collected: 08-NOV-19 06:40 By: LAP		Received: 09-NOV-19 By: JK			
EFFLUENT						
JC98286-1	SW846 6020B	15-NOV-19 17:00	GT	14-NOV-19	CH	ASMS

SGS Internal Chain of Custody

Job Number: JC98286
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Received: 11/09/19

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC98286-1.1	Secured Storage	Taylor Gorman	11/13/19 20:58	Retrieve from Storage
JC98286-1.1	Taylor Gorman	Secured Staging Area	11/13/19 20:58	Return to Storage
JC98286-1.1	Secured Staging Area	Colleen Hill	11/14/19 08:22	Retrieve from Storage
JC98286-1.1	Colleen Hill	Secured Storage	11/14/19 13:37	Return to Storage
JC98286-1.1.1	Colleen Hill	Metals Digestion	11/14/19 12:44	Digestate from JC98286-1.1
JC98286-1.1.1	Metals Digestion	Colleen Hill	11/14/19 12:44	Digestate from JC98286-1.1
JC98286-1.1.1	Colleen Hill	Metals Digestate Storage	11/14/19 12:44	Return to Storage

QC Evaluation: DOD QSM5.x Limits

Job Number: JC98286
Account: Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA
Collected: 11/08/19

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
MP18386	SW846 6020B						
MP18386-B1	7440-38-2	Arsenic	BSP	REC	109.4	%	84-116
MP18386-S1	7440-38-2	Arsenic	MS	REC	104.4	%	84-116
MP18386-S2	7440-38-2	Arsenic	MSD	REC	106.9	%	84-116
MP18386-S2	7440-38-2	Arsenic	MSD	RPD	1.7	%	20

* Sample used for QC is not from job JC98286

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: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:25	MA47822-STD1	1		See rerun, sample intro not stable.
10:30	MA47822-STD2	1		See rerun, sample intro not stable.
10:35	MA47822-STD3	1		See rerun, sample intro not stable.
10:39	MA47822-STD4	1		See rerun, analytical problems
10:44	MA47822-STD5	1		STDB
10:49	MA47822-STD6	1		STDC
10:54	MA47822-STD7	1		STDD
10:58	MA47822-STD8	1		See rerun, analytical problems
11:03	MA47822-STD9	1		STDF
11:08	MA47822-STD10	1		STDG
11:13	MA47822-STD11	1		STDH
11:17	MA47822-STD12	1		STDI
11:22	MA47822-STD13	1		STDJ
11:27	MA47822-STD14	1		STDE
11:32	MA47822-STD15	1		STDA
11:36	MA47822-ICVA1	1		
11:41	MA47822-ICV1	1		
11:47	MA47822-ICB1	1		
11:52	MA47822-CCVA1	1		
11:57	MA47822-CCB1	1		
12:02	MA47822-CRI1	1		See rerun, Al out
12:07	MA47822-CRI2	1		
12:11	MA47822-ICSA1	1		
12:16	MA47822-ICSAB1	1		See rerun, analytical problems one
12:21	ZZZZZZ	1		
12:25	MA47822-CCVA2	1		
12:30	MA47822-CCB2	1		
12:35	MA47822-ICSAB2	1		Li out
12:40	ZZZZZZ	1		
12:44	ZZZZZZ	1		
12:49	MA47822-CCVA3	1		
12:54	MA47822-CCB3	1		
12:59	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:03	ZZZZZZ	2		
13:08	ZZZZZZ	2		
13:13	ZZZZZZ	2		
13:18	ZZZZZZ	2		
13:22	MP18359A-S3	2		
13:27	MP18359A-S4	2		
13:32	JC98257-2	2		(sample used for QC only; not part of login JC98286)
13:36	MA47822-CCVA4	1		
13:41	MA47822-CCB4	1		
13:46	MP18359A-SD1	10		
13:51	ZZZZZZ	5		
13:55	ZZZZZZ	5		
14:00	ZZZZZZ	5		
14:05	ZZZZZZ	5		
14:09	ZZZZZZ	5		
14:14	ZZZZZZ	5		
14:19	ZZZZZZ	2		
14:23	MA47822-CCVA5	1		
14:28	MA47822-CCB5	1		
14:33	ZZZZZZ	2		
14:38	ZZZZZZ	2		
14:42	ZZZZZZ	2		
14:47	ZZZZZZ	2		
14:52	ZZZZZZ	2		
14:56	ZZZZZZ	2		
15:01	ZZZZZZ	2		
15:06	MA47822-CCVA6	1		
15:11	MA47822-CCB6	1		
15:15	ZZZZZZ	1		
15:20	ZZZZZZ	1		
15:25	MP18402-S1	25		
15:30	MP18402-S2	25		
15:35	JC98254-1	25		(sample used for QC only; not part of login JC98286)

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	15:39	MP18402-S3	2		
	15:44	ZZZZZZ	50		
	15:49	ZZZZZZ	25		
	15:54	MA47822-CCVA7	1		
	15:58	MA47822-CCB7	1		
	16:03	ZZZZZZ	250		
	16:08	ZZZZZZ	2		
	16:12	ZZZZZZ	250		
	16:17	ZZZZZZ	25		
	16:22	ZZZZZZ	2		
	16:27	ZZZZZZ	2		
	16:31	MP18386-MB1	2		
	16:36	MP18386-B1	2		
	16:41	MA47822-CCVA8	1		
	16:46	MA47822-CCB8	1		
	16:50	MP18386-S1	2		
	16:55	MP18386-S2	2		
	17:00	JC98286-1	2		
	17:05	MP18386-SD1	10		
	17:09	MP18386-PS1	2		
---------->	Last reportable sample/prep for job JC98286				
	17:14	MP18391A-MB1	2		
	17:19	MP18391A-B2	2		
	17:24	MP18391A-S3	2		
	17:28	MA47822-CCVA9	1		
	17:33	MA47822-CCB9	1		
---------->	Last reportable CCB for job JC98286				
	17:38	MP18391A-S4	2		
	17:42	JC98405-5	2		(sample used for QC only; not part of login JC98286)
	17:47	MP18391A-SD1	10		
	17:52	ZZZZZZ	2		
	17:57	ZZZZZZ	2		
	18:01	ZZZZZZ	2		
	18:06	ZZZZZZ	2		
	18:11	ZZZZZZ	2		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:16	MA47822-CCVA10	1		
18:20	MA47822-CCB10	1		
18:25	ZZZZZZ	2		
18:30	ZZZZZZ	2		
18:34	ZZZZZZ	2		
18:39	ZZZZZZ	2		
18:44	ZZZZZZ	2		
18:49	ZZZZZZ	2		
18:53	ZZZZZZ	2		
18:58	ZZZZZZ	2		
19:03	MA47822-CCVA11	1		
19:07	MA47822-CCB11	1		As out
19:12	ZZZZZZ	2		
19:17	ZZZZZZ	2		
19:22	ZZZZZZ	2		
19:26	MP18392A-MB1	2		
19:31	MP18392A-B2	2		Sc-2 out. Batch to reanalysis for As.
19:36	MP18392A-S3	2		Internal stds outl
19:41	MP18392A-S4	2		Internal stds outl
19:45	JC98421-9	2		(sample used for QC only; not part of login JC98286)
19:50	ZZZZZZ	1		
19:55	MA47822-CCVA12	1		
20:00	MA47822-CCB12	1		
20:05	ZZZZZZ	2		
20:09	ZZZZZZ	2		
20:14	MP18392A-SD1	10		Internal stds outl
20:19	ZZZZZZ	2		
20:24	ZZZZZZ	2		
20:28	ZZZZZZ	2		
20:33	ZZZZZZ	2		
20:38	ZZZZZZ	2		
20:43	MA47822-CCVA13	1		
20:47	MA47822-CCB13	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:52	ZZZZZZ	2		
20:57	ZZZZZZ	2		
21:02	ZZZZZZ	2		
21:06	ZZZZZZ	2		
21:11	ZZZZZZ	2		
21:16	ZZZZZZ	2		
21:20	ZZZZZZ	2		
21:25	ZZZZZZ	2		
21:30	MA47822-CCVA14	1		
21:35	MA47822-CCB14	1		
21:39	ZZZZZZ	2		
21:44	ZZZZZZ	2		
21:49	ZZZZZZ	2		
21:54	ZZZZZZ	2		
21:58	ZZZZZZ	1		
22:03	ZZZZZZ	1		
22:08	ZZZZZZ	1		
22:13	ZZZZZZ	1		
22:17	MA47822-CCVA15	1		
22:22	MA47822-CCB15	1		
22:27	ZZZZZZ	1		
22:32	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Element: Dilution	As
11:36	MA47822-ICVA1	1	X
11:41	MA47822-ICV1	1	
11:47	MA47822-ICB1	1	X
11:52	MA47822-CCVA1	1	X
11:57	MA47822-CCB1	1	X
12:02	MA47822-CRI1	1	See rerun, Al out
12:07	MA47822-CRI2	1	X
12:11	MA47822-ICSA1	1	X
12:16	MA47822-ICSAB1	1	See rerun, analytical problems one
12:21	ZZZZZZ	1	
12:25	MA47822-CCVA2	1	X
12:30	MA47822-CCB2	1	X
12:35	MA47822-ICSAB2	1	X
12:40	ZZZZZZ	1	
12:44	ZZZZZZ	1	
12:49	MA47822-CCVA3	1	X
12:54	MA47822-CCB3	1	X
12:59	ZZZZZZ	2	
13:03	ZZZZZZ	2	
13:08	ZZZZZZ	2	
13:13	ZZZZZZ	2	
13:18	ZZZZZZ	2	
13:22	MP18359A-S3	2	X
13:27	MP18359A-S4	2	X
13:32	JC98257-2	2	X (a)
13:36	MA47822-CCVA4	1	X
13:41	MA47822-CCB4	1	X
13:46	MP18359A-SD1	10	X
13:51	ZZZZZZ	5	
13:55	ZZZZZZ	5	
14:00	ZZZZZZ	5	
14:05	ZZZZZZ	5	
14:09	ZZZZZZ	5	
		Element:	As

REPORTED ELEMENTS SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Element: Dilution	As	
14:14	ZZZZZZ	5		
14:19	ZZZZZZ	2		
14:23	MA47822-CCVA5	1	X	
14:28	MA47822-CCB5	1	X	
14:33	ZZZZZZ	2		
14:38	ZZZZZZ	2		
14:42	ZZZZZZ	2		
14:47	ZZZZZZ	2		
14:52	ZZZZZZ	2		
14:56	ZZZZZZ	2		
15:01	ZZZZZZ	2		
15:06	MA47822-CCVA6	1	X	
15:11	MA47822-CCB6	1	X	
15:15	ZZZZZZ	1		
15:20	ZZZZZZ	1		
15:25	MP18402-S1	25		
15:30	MP18402-S2	25		
15:35	JC98254-1	25		(a)
15:39	MP18402-S3	2		
15:44	ZZZZZZ	50		
15:49	ZZZZZZ	25		
15:54	MA47822-CCVA7	1	X	
15:58	MA47822-CCB7	1	X	
16:03	ZZZZZZ	250		
16:08	ZZZZZZ	2		
16:12	ZZZZZZ	250		
16:17	ZZZZZZ	25		
16:22	ZZZZZZ	2		
16:27	ZZZZZZ	2		
16:31	MP18386-MB1	2	X	
16:36	MP18386-B1	2	X	
16:41	MA47822-CCVA8	1	X	
16:46	MA47822-CCB8	1	X	
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Element: Dilution	As	
16:50	MP18386-S1	2	X	
16:55	MP18386-S2	2	X	
17:00	JC98286-1	2	X	
17:05	MP18386-SD1	10	X	
17:09	MP18386-PS1	2	X	
17:14	MP18391A-MB1	2	X	
17:19	MP18391A-B2	2	X	
17:24	MP18391A-S3	2	X	
17:28	MA47822-CCVA9	1	X	
17:33	MA47822-CCB9	1	X	
17:38	MP18391A-S4	2	X	
17:42	JC98405-5	2	X	(a)
17:47	MP18391A-SD1	10	X	
17:52	ZZZZZZ	2		
17:57	ZZZZZZ	2		
18:01	ZZZZZZ	2		
18:06	ZZZZZZ	2		
18:11	ZZZZZZ	2		
18:16	MA47822-CCVA10	1	X	
18:20	MA47822-CCB10	1	X	
18:25	ZZZZZZ	2		
18:30	ZZZZZZ	2		
18:34	ZZZZZZ	2		
18:39	ZZZZZZ	2		
18:44	ZZZZZZ	2		
18:49	ZZZZZZ	2		
18:53	ZZZZZZ	2		
18:58	ZZZZZZ	2		
19:03	MA47822-CCVA11	1	X	
19:07	MA47822-CCB11	1	X	
19:12	ZZZZZZ	2		
19:17	ZZZZZZ	2		
19:22	ZZZZZZ	2		
		Element:	As	

REPORTED ELEMENTS SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Element: Dilution	As
19:26	MP18392A-MB1	2	
19:31	MP18392A-B2	2	
19:36	MP18392A-S3	2	Internal stds outl
19:41	MP18392A-S4	2	Internal stds outl
19:45	JC98421-9	2	Internal stds outl
19:50	ZZZZZZ	1	
19:55	MA47822-CCVA12	1	X
20:00	MA47822-CCB12	1	X
20:05	ZZZZZZ	2	
20:09	ZZZZZZ	2	
20:14	MP18392A-SD1	10	Internal stds outl
20:19	ZZZZZZ	2	
20:24	ZZZZZZ	2	
20:28	ZZZZZZ	2	
20:33	ZZZZZZ	2	
20:38	ZZZZZZ	2	
20:43	MA47822-CCVA13	1	X
20:47	MA47822-CCB13	1	X
20:52	ZZZZZZ	2	
20:57	ZZZZZZ	2	
21:02	ZZZZZZ	2	
21:06	ZZZZZZ	2	
21:11	ZZZZZZ	2	
21:16	ZZZZZZ	2	
21:20	ZZZZZZ	2	
21:25	ZZZZZZ	2	
21:30	MA47822-CCVA14	1	X
21:35	MA47822-CCB14	1	X
21:39	ZZZZZZ	2	
21:44	ZZZZZZ	2	
21:49	ZZZZZZ	2	
21:54	ZZZZZZ	2	
21:58	ZZZZZZ	1	
		Element:	As

REPORTED ELEMENTS SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Element: Dilution	As
22:03	ZZZZZZ	1	
22:08	ZZZZZZ	1	
22:13	ZZZZZZ	1	
22:17	MA47822-CCVA15	1	X
22:22	MA47822-CCB15	1	X
22:27	ZZZZZZ	1	
22:32	ZZZZZZ	1	

(a) Sample used for QC only; not part of login JC98286.

Element: As

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
10:25	MA47822-STD1	No results reported for the elements associated with this internal standard.							
10:30	MA47822-STD2	No results reported for the elements associated with this internal standard.							
10:35	MA47822-STD3	No results reported for the elements associated with this internal standard.							
10:39	MA47822-STD4	No results reported for the elements associated with this internal standard.							
10:44	MA47822-STD5	100.276	100.669	99.377	99.998	98.961	101.158	99.699	98.522
10:49	MA47822-STD6	101.174	99.06	99.201	87.404	99.592	99.66	91.684	99.031
10:54	MA47822-STD7	102.123	101.196	100.493	99.102	100.855	100.954	98.958	100.503
10:58	MA47822-STD8	No results reported for the elements associated with this internal standard.							
11:03	MA47822-STD9	102.762	101.402	100.889	97.744	103.571	101.488	99.049	102.795
11:08	MA47822-STD10	101.912	98.964	99.936	96.618	100.429	100.538	99.286	97.907
11:13	MA47822-STD11	100.849	98.087	98.401	97.031	99.266	99.418	98.844	97.211
11:17	MA47822-STD12	101.625	98.17	98.536	95.213	96.527	99.506	95.548	93.828
11:22	MA47822-STD13	100.315	96.686	102.573	95.633	94.751	99.534	94.506	91.661
11:27	MA47822-STD14	102.16	100.186	99.518	94.836	100.991	100.727	97.86	99.565
11:32	MA47822-STD15	100	100	100	100	100	100	100	100
11:36	MA47822-ICVA1	101.044	101.231	102.938	100.708	102.408	101.845	99.751	100.056
11:41	MA47822-ICV1	99.218	99.292	98.554	99.456	99.083	98.718	99.087	99.56
11:47	MA47822-ICB1	98.565	98.324	99.41	99.415	98.695	98.412	100.155	98.518
11:52	MA47822-CCVA1	100.957	101.469	102.217	100.312	101.251	100.879	100.077	99.154
11:57	MA47822-CCB1	96.104	93.419	100.124	99.583	95.348	98.958	99.084	95.156
12:02	MA47822-CRI1	No results reported for the elements associated with this internal standard.							
12:07	MA47822-CRI2	99.411	97.471	99.575	98.398	98.233	98.222	98.468	98.436
12:11	MA47822-ICSA1	83.138	89.006	97.761	94.586	84.753	90.587	86.097	80.267
12:16	MA47822-ICSAB1	No results reported for the elements associated with this internal standard.							
12:21	ZZZZZZ	73.002	89.355	84.254	93.027	94.116	90.203	95.53	95.674
12:25	MA47822-CCVA2	73.087	92.606	88.54	95.297	96.828	93.358	98.228	97.556
12:30	MA47822-CCB2	74.509	91.071	85.671	93.666	95.811	91.217	95.945	97.26
12:35	MA47822-ICSAB2	58.59 !a	81.907	87.233	93.667	80.95	85.074	85.959	77.29
12:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:49	MA47822-CCVA3	66.327 !a	90.296	84.689	94.58	96.748	91.834	98.164	97.048
12:54	MA47822-CCB3	66.979 !a	88.172	81.956	93.687	93.379	88.875	95.765	96.777
12:59	ZZZZZZ	71.504	92.271	87.809	97.332	98.416	94.751	100.112	98.913

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
13:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:08	ZZZZZZ	66.828 !	87.987	84.112	94.803	93.577	89.182	96.996	96.224
13:13	ZZZZZZ	67.168 !a	87.622	82.184	94.42	92.438	88.599	95.399	96.351
13:18	ZZZZZZ	77.1	95.479	91.756	99.906	101.83	98.11	100.51	99.919
13:22	MP18359A-S3	61.515 !a	85.112	84.154	92.166	87.111	84.361	88.971	85.249
13:27	MP18359A-S4	61.543 !a	85.526	82.889	93.056	86.757	84.624	89.22	84.19
13:32	JC98257-2	60.862 !a	85.237	82.975	92.976	85.553	83.923	88.659	84.23
13:36	MA47822-CCVA4	73.595	98.578	95.503	99.031	102.819	99.519	100.728	100.468
13:41	MA47822-CCB4	73.475	96.075	92.072	99.166	100.413	96.646	101.552	100.358
13:46	MP18359A-SD1	72.64	97.121	92.649	100.235	99.306	96.726	99.285	96.514
13:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:55	ZZZZZZ	88.964	111.138	119.428	110.737	97.32	104.164	97.595	86.889
14:00	ZZZZZZ	86.205	108.826	114.148	105.118	99.031	103.375	96.051	89.478
14:05	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:09	ZZZZZZ	86.367	113.179	123.074	112.485	98.104	107.073	99.76	88.121
14:14	ZZZZZZ	84.639	113.956	121.702	112.882	101.4	107.249	100.335	91.714
14:19	ZZZZZZ	72.934	98.903	93.812	101.454	100.748	96.97	99.88	97.504
14:23	MA47822-CCVA5	81.992	103.488	102.019	103.216	107.471	105.866	103.898	103.685
14:28	MA47822-CCB5	82.747	101.99	98.568	102.773	106.09	102.102	103.904	104.554
14:33	ZZZZZZ	65.365 !a	94.182	92.16	100.935	95.597	94.694	98.932	94.013
14:38	ZZZZZZ	62.336 !a	91.843	86.304	98.533	94.829	91.007	97.6	92.885
14:42	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:47	ZZZZZZ	59.741 !a	87.769	85.064	95.189	89.754	85.947	91.851	86.923
14:52	ZZZZZZ	56.596 !a	87.958	85.809	95.388	88.977	87.184	90.13	83.904
14:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:01	ZZZZZZ	49.108 !a	80.403	79.487	88.52	81.187	79.174	80.644	77.863
15:06	MA47822-CCVA6	74.249	96.825	91.599	98.277	102.082	97.546	100.097	99.375
15:11	MA47822-CCB6	74.693	93.884	89.375	97.122	98.723	94.83	98.348	98.4
15:15	ZZZZZZ	75.869	96.302	90.134	98.211	100.393	96.166	98.843	100.291
15:20	ZZZZZZ	76.494	98.498	91.565	98.565	103.617	97.442	100.424	102.949
15:25	MP18402-S1	76.636	97.872	92.493	98.722	102.688	98.387	99.087	100.285
15:30	MP18402-S2	76.167	97.089	92.692	81.005	101.487	98.408	78.976	99.572
15:35	JC98254-1	75.785	97.54	92.243	97.572	100.904	97.777	97.323	99.251

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
15:39	MP18402-S3	75.13	96.094	91.785	96.107	99.2	96.371	96.507	96.515
15:44	ZZZZZZ	75.819	95.63	90.898	98.538	99.838	96.826	99.207	98.395
15:49	ZZZZZZ	76.073	97.131	90.855	98.106	100.695	95.961	98.256	99.422
15:54	MA47822-CCVA7	73.34	95.312	90.395	97.407	99.713	94.312	97.878	97.179
15:58	MA47822-CCB7	74.585	93.324	87.947	95.466	96.407	91.198	95.45	96.379
16:03	ZZZZZZ	75.104	95.951	89.131	94.625	99.336	94.255	94.471	98.5
16:08	ZZZZZZ	73.697	94.966	90.735	96.719	98.038	94.384	93.059	94.413
16:12	ZZZZZZ	75.725	94.623	88.659	95.335	98.474	92.851	94.86	97.286
16:17	ZZZZZZ	74.335	95.248	89.967	95.396	97.642	93.651	94.563	95.754
16:22	ZZZZZZ	62.724 !a	86.456	79.225	91.365	89.737	83.593	87.442	88.714
16:27	ZZZZZZ	57.347 !a	82.925	79.16	90.714	86.097	82.9	88.971	84.835
16:31	MP18386-MB1	56.696 !a	82.38	77.974	89.629	88.626	83.169	89.913	90.545
16:36	MP18386-B1	57.146 !a	82.675	77.185	88.94	88.408	82.866	90.912	88.824
16:41	MA47822-CCVA8	67.743 !a	91.689	89.063	97.3	95.771	93.498	96.744	93.224
16:46	MA47822-CCB8	63.233 !a	81.69	86.515	95.32	84.619	90.037	94.053	91.253
16:50	MP18386-S1	57.112 !a	82.332	76.359	88.316	87.004	81.706	88.264	85.62
16:55	MP18386-S2	55.736 !a	80.644	75.017	87.244	85.56	80.02	86.744	83.516
17:00	JC98286-1	54.457 !a	77.671	73.448	85.65	82.66	79.197	85.547	81.698
17:05	MP18386-SD1	68.913 !a	89.072	82.008	92.304	92.239	87.366	91.845	90.891
17:09	MP18386-PS1	56.023 !a	78.965	74.202	86.29	84.938	79.324	87.05	82.969
17:14	MP18391A-MB1	59.14 !a	80.421	75.325	89.113	85.804	81.178	91.218	88.691
17:19	MP18391A-B2	55.656 !a	78.722	73.965	85.962	85.123	78.762	88.018	85.461
17:24	MP18391A-S3	53.228 !a	78.975	72.632	85.154	82.106	76.453	82.416	79.486
17:28	MA47822-CCVA9	66.959 !a	89.94	84.037	92.079	93.206	87.856	92.847	91.188
17:33	MA47822-CCB9	60.299 !a	76.833	80.948	91.023	78.864	85.385	89.715	85.958
17:38	MP18391A-S4	54.375 !a	77.21	73.298	84.197	81.076	77.626	82.533	79.005
17:42	JC98405-5	56.733 !a	80.09	74.412	86.994	83.853	77.673	84.359	81.621
17:47	MP18391A-SD1	69.652 !a	87.902	81.567	90.9	90.702	84.724	88.768	88.655
17:52	ZZZZZZ	58.721 !a	78.728	71.943	85.749	82.492	77.365	84.362	82.027
17:57	ZZZZZZ	59.097 !a	81.377	74.782	87.094	84.795	80.412	88.098	84.393
18:01	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:11	ZZZZZZ	66.83 !a	83.02	76.706	86.659	87.394	81.569	86.019	85.826

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
18:16	MA47822-CCVA10	77.686	94.312	88.606	91.434	97.677	92.884	90.565	94.043
18:20	MA47822-CCB10	79.29	92.623	81.787	91.611	94.017	84.374	91.596	94.186
18:25	ZZZZZZ	68.949 !a	87.711	80.304	90.386	90.711	85.35	91.588	92.655
18:30	ZZZZZZ	62.803 !a	84.621	77.479	88.537	88.412	82.643	87.29	87.527
18:34	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:39	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:44	ZZZZZZ	67.583 !a	84.882	76.629	85.454	86.048	83.331	83.091	83.869
18:49	ZZZZZZ	63.08 !a	83.294	75.204	85.336	84.844	80.008	83.724	83.806
18:53	ZZZZZZ	61.438 !a	83.349	76.183	86.093	84.651	81.07	83.455	83.57
18:58	ZZZZZZ	58.616 !a	82.112	74.597	84.264	83.216	78.16	79.439	80.531
19:03	MA47822-CCVA11	72.691	91.956	86.412	91.381	95.221	90.375	90.254	92.546
19:07	MA47822-CCB11	76.866	91.665	84.109	88.667	94.513	88.226	89.34	93.603
19:12	ZZZZZZ	61.22 !a	81.438	70.383	81.114	84.361	75.173	80.921	84.067
19:17	ZZZZZZ	53.528 !a	68.388 !a	67.615 !a	78.913	73.386	72.541	79.476	71.821
19:22	ZZZZZZ	55.706 !a	74.728	66.366 !a	78.528	79.405	72.161	78.294	79.079
19:26	MP18392A-MB1	61.999 !a	78.854	70.011	83.373	85.099	79.451	83.792	86.38
19:31	MP18392A-B2	59.334 !a	77.946	67.98 !a	80.697	83.888	73.742	81.869	84.075
19:36	MP18392A-S3	No results reported for the elements associated with this internal standard.							
19:41	MP18392A-S4	No results reported for the elements associated with this internal standard.							
19:45	JC98421-9	No results reported for the elements associated with this internal standard.							
19:50	ZZZZZZ	63.753 !	75.731	80.652	85.412	81.341	85.673	84.336	77.563
19:55	MA47822-CCVA12	72.692	88.985	80.73	86.134	92.259	85.969	83.492	89.695
20:00	MA47822-CCB12	73.157	87.187	79.926	86.489	90.036	84.014	86.684	90.377
20:05	ZZZZZZ	66.833 !a	82.447	72.89	82.964	86.021	77.671	84.004	89.051
20:09	ZZZZZZ	66.845 !a	82.323	73.305	84.284	87.629	79.224	84.943	88.965
20:14	MP18392A-SD1	No results reported for the elements associated with this internal standard.							
20:19	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:24	ZZZZZZ	59.454 !a	82.891	74.98	80.286	83.728	77.824	76.574	80.249
20:28	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:33	ZZZZZZ	59.165 !a	80.781	74.294	80.873	81.948	76.531	77.616	78.346
20:38	ZZZZZZ	63.546 !a	84.523	72.091	83.037	84.248	75.602	79.087	83.951
20:43	MA47822-CCVA13	72.031	88.361	83.29	86.146	92.264	88.046	85.475	89.311
20:47	MA47822-CCB13	73.742	87.554	79.687	84.187	90.051	83.783	82.699	89.505

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	Istd#5	Istd#6	Istd#7	Istd#8
20:52	ZZZZZZ	65.805 !a	81.267	66.056 !a	81.124	84.49	71.383	81.345	86.734
20:57	ZZZZZZ	62.401 !a	79.756	68.718 !a	79.389	81.688	74.812	78.798	81.325
21:02	ZZZZZZ	61.535 !a	78.828	70.102	80.667	82.016	75.682	81.706	81.848
21:06	ZZZZZZ	61.984 !a	78.041	69.141 !a	79.798	81.923	74.116	78.5	81.584
21:11	ZZZZZZ	59.709 !a	78.474	71.18	81.253	80.418	75.174	78.677	79.407
21:16	ZZZZZZ	57.715 !a	76.612	67.736 !a	78.898	78.491	71.825	76.94	77.436
21:20	ZZZZZZ	60.452 !a	75.311	66.574 !a	76.952	80.08	72.087	76.523	79.859
21:25	ZZZZZZ	56.293 !a	75.111	66.946 !a	77.325	76.762	70.866	74.093	75.471
21:30	MA47822-CCVA14	68.599 !a	83.602	75.874	81.265	87.416	79.58	80.486	85.72
21:35	MA47822-CCB14	70.593	81.749	73.918	81.148	84.812	78.674	80.867	85.362
21:39	ZZZZZZ	59.134 !a	75.036	67.309 !a	76.512	77.386	71.498	74.682	76.739
21:44	ZZZZZZ	56.762 !a	74.573	65.287 !a	74.381	76.47	69.73 !a	72.121	75.379
21:49	ZZZZZZ	54.202 !a	72.409	66.029 !a	74.387	73.276	69.132 !a	70.759	71.863
21:54	ZZZZZZ	57.388 !a	72.806	63.372 !a	72.674	74.791	67.985 !a	71.838	74.39
21:58	ZZZZZZ	68.735 !	79.308	71.402	78.874	82.396	76.023	77.37	83.233
22:03	ZZZZZZ	70.531	80.783	72.068	78.724	82.967	75.677	77.682	82.838
22:08	ZZZZZZ	70.542	80.932	72.454	78.429	82.895	77.065	76.294	83.132
22:13	ZZZZZZ	71.591	82.065	73.568	78.998	84.417	77.529	78.311	84.552
22:17	MA47822-CCVA15	70.541	82.372	75.014	79.443	84.424	79.173	78.157	83.285
22:22	MA47822-CCB15	72.097	80.764	68.169 !a	77.601	83.285	71.325	76.525	83.554
22:27	ZZZZZZ	72.483	81.991	74.044	79.267	84.213	77.494	77.169	83.904
22:32	ZZZZZZ	73	82.052	74.102	79.331	84.522	77.695	76.963	84.575

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Lithium	60-125 %
Istd#2	Scandium (45-1)	60-125 %
Istd#3	Scandium (45-2)	60-125 %
Istd#4	Scandium (45-3)	60-125 %
Istd#5	Germanium (74-1)	60-125 %
Istd#6	Germanium (74-2)	60-125 %
Istd#7	Germanium (74-3)	60-125 %
Istd#8	Rhodium (103-1)	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
10:25	MA47822-STD1	No results reported for the elements associated with this internal standard.							
10:30	MA47822-STD2	No results reported for the elements associated with this internal standard.							
10:35	MA47822-STD3	No results reported for the elements associated with this internal standard.							
10:39	MA47822-STD4	No results reported for the elements associated with this internal standard.							
10:44	MA47822-STD5	99.957	100.014	101.532	99.945	99.878	99.339	99.452	101.161
10:49	MA47822-STD6	98.684	89.084	100.383	99.142	99.385	99.766	88.353	100.949
10:54	MA47822-STD7	99.987	100.53	102.133	100.314	99.425	100.661	100.22	102.848
10:58	MA47822-STD8	No results reported for the elements associated with this internal standard.							
11:03	MA47822-STD9	100.386	99.457	104.96	101.047	99.335	101.822	99.437	104.652
11:08	MA47822-STD10	98.195	97.819	99.918	98.499	98.336	99.434	96.694	98.461
11:13	MA47822-STD11	96.098	96.958	97.72	97.783	97.995	98.279	96.904	98.917
11:17	MA47822-STD12	95.213	93.545	96.616	98.218	96.243	98.899	95.66	97.229
11:22	MA47822-STD13	95.226	94.49	94.006	97.931	96.291	99.694	96.703	95.766
11:27	MA47822-STD14	99.353	97.652	101.73	100.144	98.387	100.382	96.267	101.495
11:32	MA47822-STD15	100	100	100	100	100	100	100	100
11:36	MA47822-ICVA1	99.221	96.612	101.094	101.636	99.163	103.974	99.315	103.264
11:41	MA47822-ICV1	98.699	98.913	100.179	98.875	98.627	99.689	98.282	98.974
11:47	MA47822-ICB1	99.168	99.321	98.982	99.167	98.613	99.551	97.551	97.217
11:52	MA47822-CCVA1	98.553	97.013	100.949	100.578	98.196	103.05	99.249	102.296
11:57	MA47822-CCB1	99.143	99.324	93.727	98.897	89.805	99.498	96.446	94.093
12:02	MA47822-CRI1	No results reported for the elements associated with this internal standard.							
12:07	MA47822-CRI2	98.04	97.348	98.94	97.82	97.947	97.427	94.822	97.066
12:11	MA47822-ICSA1	81.63	80.619	83.006	87.341	77.773	87.369	88.509	85.023
12:16	MA47822-ICSAB1	No results reported for the elements associated with this internal standard.							
12:21	ZZZZZZ	92.236	93.976	99.204	91.944	101.119	94.484	93.046	99.159
12:25	MA47822-CCVA2	93.604	93.315	99.532	93.988	100.883	99.256	95.127	103.536
12:30	MA47822-CCB2	93.619	94.966	99.581	92.455	101.7	95.253	93.474	100.009
12:35	MA47822-ICSAB2	77.415	78.547	82.429	82.584	78.399	83.666	86.512	86.132
12:40	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:44	ZZZZZZ	No results reported for the elements associated with this internal standard.							
12:49	MA47822-CCVA3	92.034	93.671	100.282	91.104	103.294	97.019	96.773	104.569
12:54	MA47822-CCB3	91.734	95.029	99.991	88.598	102.731	93.824	94.343	101.109
12:59	ZZZZZZ	93.574	97.102	102.084	93.633	103.792	94.847	95.266	101.852

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
13:03	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:08	ZZZZZZ	91.657	93.144	99.532	90.327	103.713	96.193	96.166	105.096
13:13	ZZZZZZ	89.975	93.421	98.769	88.191	104.128	94.031	94.069	101.778
13:18	ZZZZZZ	95.568	98.611	102.957	96.143	105.695	97.416	96.342	102.849
13:22	MP18359A-S3	81.422	81.98	90.659	84.429	96.039	90.815	90.185	97.263
13:27	MP18359A-S4	80.839	82.351	90.737	82.875	97.018	89.986	89.565	97.148
13:32	JC98257-2	80.959	83.425	89.939	83.821	98.201	90.509	89.12	96.316
13:36	MA47822-CCVA4	96.83	94.246	104.709	97.109	104.697	100.763	94.901	105.482
13:41	MA47822-CCB4	96.754	98.342	102.449	94.359	103.365	95.784	93.817	101.559
13:46	MP18359A-SD1	92.951	93.512	100.533	94.289	103.629	96.955	93.415	101.963
13:51	ZZZZZZ	No results reported for the elements associated with this internal standard.							
13:55	ZZZZZZ	88.376	88.66	90.554	97.06	93.318	92.586	91.761	91.044
14:00	ZZZZZZ	89.187	87.506	92.6757	95.342	93.865	93.241	90.745	94.13
14:05	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:09	ZZZZZZ	89.672	89.525	92.723	99.125	93.962	93.74	92.211	91.391
14:14	ZZZZZZ	91.683	91.24	95.651	98.391	96.72	95.346	93.954	96.311
14:19	ZZZZZZ	92.704	93.586	100.739	94.278	105.485	97.36	95.383	103.491
14:23	MA47822-CCVA5	100.664	97.458	105.915	103.323	104.895	103.171	98.066	106.159
14:28	MA47822-CCB5	99.937	99.927	105.259	100.624	103.919	98.655	94.735	101.9
14:33	ZZZZZZ	90.594	92.449	98.455	93.156	104.591	97.508	94.973	103.003
14:38	ZZZZZZ	87.378	89.23	99.526	89.126	105.2	93.707	92.736	104.586
14:42	ZZZZZZ	No results reported for the elements associated with this internal standard.							
14:47	ZZZZZZ	81.432	83.259	93.088	84.27	99.731	89.057	88.957	99.036
14:52	ZZZZZZ	78.958	81.352	90.988	83.136	98.672	88.284	88.563	96.761
14:56	ZZZZZZ	No results reported for the elements associated with this internal standard.							
15:01	ZZZZZZ	72.501	74.373	84.418	76.103	92.953	82.156	82.421	95.916
15:06	MA47822-CCVA6	94.111	92.801	102.626	95.612	103.749	98.256	93.533	104.355
15:11	MA47822-CCB6	93.563	94.954	100.426	93.27	103.351	94.129	91.118	99.487
15:15	ZZZZZZ	94.758	95.175	101.459	94.067	104.2	94.689	91.681	100.457
15:20	ZZZZZZ	95.977	94.826	105.406	96.348	105.456	95.939	92.305	103.909
15:25	MP18402-S1	95.911	94.14	102.815	96.27	104.526	96.356	90.561	102.01
15:30	MP18402-S2	95.662	76.017	102.482	96.534	103.002	95.434	73.289	100.118
15:35	JC98254-1	95.131	92.871	101.86	95.962	105.265	95.281	88.655	102.192

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
15:39	MP18402-S3	91.156	88.786	100.419	93.837	102.59	95.023	88.722	100.796
15:44	ZZZZZZ	94.592	94.831	100.976	94.418	105.028	95.203	90.08	101.184
15:49	ZZZZZZ	94.251	93.867	102.024	93.273	103.749	94.15	90.086	99.804
15:54	MA47822-CCVA7	91.607	89.5	99.989	91.685	103.612	94.592	88.398	102.32
15:58	MA47822-CCB7	90.618	91.044	98.662	90.099	103.917	90.645	86.027	98.226
16:03	ZZZZZZ	92.48	90.976	101.286	91.554	103.28	92.214	84.831	98.781
16:08	ZZZZZZ	90.253	87.151	98.502	91.537	103.473	94.082	86.207	98.435
16:12	ZZZZZZ	91.289	91.153	99.097	90.329	103.259	90.994	86.658	97.887
16:17	ZZZZZZ	91.753	89.983	98.246	91.359	102.166	91.867	85.128	97.329
16:22	ZZZZZZ	81.513	82.141	92.669	82.272	102.048	87.556	82.717	96.933
16:27	ZZZZZZ	80.303	81.413	90.123	81.527	101.131	87.709	83.322	96.769
16:31	MP18386-MB1	83.682	86.041	93.068	81.624	100.373	84.816	81.189	94.884
16:36	MP18386-B1	82.065	83.759	92.696	81.006	99.325	86.066	83.103	96.475
16:41	MA47822-CCVA8	90.484	88.604	97.085	90.945	100.121	94.289	86.961	98.587
16:46	MA47822-CCB8	89.052	89.249	94.504	87.547	89.853	88.515	83.865	85.479
16:50	MP18386-S1	79.286	80.453	90.658	79.132	99.157	84.571	80.355	94.13
16:55	MP18386-S2	78.103	79.51	89.317	77.57	98.231	82.831	78.886	93.836
17:00	JC98286-1	77.014	78.388	86.215	76.787	96.882	81.64	77.752	92.035
17:05	MP18386-SD1	84.974	85.056	95.756	86.051	101.826	87.033	82.234	96.647
17:09	MP18386-PS1	77.182	79.145	88.474	76.498	98.164	82.315	79.632	93.894
17:14	MP18391A-MB1	81.692	83.994	91.891	79.55	100.795	84.085	81.153	95.607
17:19	MP18391A-B2	79.069	80.505	90.267	78.143	98.293	82.915	78.74	94.064
17:24	MP18391A-S3	73.896	75.784	85.509	74.657	95.6	81.217	79.671	91.343
17:28	MA47822-CCVA9	85.788	84.43	94.505	85.514	100.684	88.956	83.167	96.44
17:33	MA47822-CCB9	84.716	85.403	88.5	83.764	83.75	85.44	80.744	81.512
17:38	MP18391A-S4	74.269	74.536	84.5	75.108	95.707	81.425	77.474	90.494
17:42	JC98405-5	75.202	76.617	86.87	76.334	98.308	82.777	80.091	92.972
17:47	MP18391A-SD1	82.903	82.27	93.626	83.565	100.598	85.722	81.551	94.729
17:52	ZZZZZZ	76.651	77.792	87.165	76.206	99.291	82.399	79.019	92.476
17:57	ZZZZZZ	79.39	79.954	91.101	79.449	101.585	84.455	80.889	93.655
18:01	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:06	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:11	ZZZZZZ	79.796	79.218	91.592	80.339	100.62	85.215	79.501	93.871

INTERNAL STANDARD SUMMARY

Login Number: JC98286
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File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
18:16	MA47822-CCVA10	88.839	83.853	97.286	90.61	100.358	91.115	81.532	96.483
18:20	MA47822-CCB10	82.945	86.391	94.815	83.731	100.566	81.632	82.093	92.684
18:25	ZZZZZZ	85.237	85.076	95.118	82.878	104.949	85.915	81.914	95.784
18:30	ZZZZZZ	81.572	80.995	92.076	82.249	103.28	86.565	81.783	94.933
18:34	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:39	ZZZZZZ	No results reported for the elements associated with this internal standard.							
18:44	ZZZZZZ	78.431	75.492	90.042	82.269	99.658	85.909	78.23	94.58
18:49	ZZZZZZ	77.165	74.665	89.63	79.328	100.475	83.906	77.538	92.777
18:53	ZZZZZZ	77.522	75.712	89.635	79.202	99.786	85.029	78.8	93.873
18:58	ZZZZZZ	74.397	72.02	86.713	76.665	98.227	82.409	76.197	91.068
19:03	MA47822-CCVA11	87.094	82.528	95.424	89.351	100.72	90.383	81.254	96.222
19:07	MA47822-CCB11	87.07	84.659	95.635	87.618	101.047	87.46	80.246	93.695
19:12	ZZZZZZ	75.809	74.121	89.853	76.536	98.996	80.899	74.977	91.609
19:17	ZZZZZZ	72.491	71.429	77.909	73.509	81.721	78.935	74.222	80.43
19:22	ZZZZZZ	71.362	70.956	85.723	72.572	95.455	78.252	73.53	89.366
19:26	MP18392A-MB1	78.35	78.959	89.159	77.135	101.918	82.313	78.042	92.892
19:31	MP18392A-B2	74.922	75.092	88.938	75.602	97.995	80.466	75.701	92.145
19:36	MP18392A-S3	No results reported for the elements associated with this internal standard.							
19:41	MP18392A-S4	No results reported for the elements associated with this internal standard.							
19:45	JC98421-9	No results reported for the elements associated with this internal standard.							
19:50	ZZZZZZ	83.084	76.609	81.039	85.367	81.58	86.947	76.187	81.78
19:55	MA47822-CCVA12	82.847	76.395	93.46	85.537	98.045	87.121	76.144	94.132
20:00	MA47822-CCB12	83.02	80.439	92.314	84.202	99.479	83.734	76.341	89.639
20:05	ZZZZZZ	79.789	77.768	91.262	78.519	103.013	82.408	75.444	93.074
20:09	ZZZZZZ	79.518	79.276	91.871	79.274	101.436	81.976	77.981	92.155
20:14	MP18392A-SD1	No results reported for the elements associated with this internal standard.							
20:19	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:24	ZZZZZZ	72.021	67.719 !a	84.916	75.097	96.803	79.375	71.125	89.206
20:28	ZZZZZZ	No results reported for the elements associated with this internal standard.							
20:33	ZZZZZZ	71.528	68.35 !a	83.326	74.516	93.259	79.201	71.92	86.779
20:38	ZZZZZZ	75.311	73.077	90.019	77.986	100.87	80.96	74.428	92.419
20:43	MA47822-CCVA13	83.489	77.45	92.933	86.49	96.99	87.239	76.906	92.405
20:47	MA47822-CCB13	82.132	77.534	92.122	84.306	99.369	82.544	73.333	88.602

INTERNAL STANDARD SUMMARY

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Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#9	Istd#10	Istd#11	Istd#12	Istd#13	Istd#14	Istd#15	Istd#16
20:52	ZZZZZZ	71.639	75.562	89.916	71.768	100.491	74.242	74.392	90.129
20:57	ZZZZZZ	72.98	70.607	86.839	74.841	99.219	78.72	72.203	89.125
21:02	ZZZZZZ	74.677	72.884	87.23	77.183	98.173	80.869	74.631	89.683
21:06	ZZZZZZ	73.249	71.924	87.437	75.266	99.555	80.599	74.153	90.993
21:11	ZZZZZZ	72.65	70.953	85.643	75.512	98.838	80.372	73.997	88.745
21:16	ZZZZZZ	69.602 !a	68.133 !a	84.919	73.517	97.967	78.562	72.046	88.01
21:20	ZZZZZZ	71.323	68.75 !a	85.633	73.251	97.706	76.959	70.881	87.437
21:25	ZZZZZZ	69.191 !a	67.202 !a	81.333	71.49	94.6	76.201	70.311	84.385
21:30	MA47822-CCVA14	78.119	72.991	89.597	80.483	97.308	82.91	73.513	89.812
21:35	MA47822-CCB14	77.678	75.129	88.171	78.976	98.636	79.26	71.597	86.906
21:39	ZZZZZZ	70.091	67.198 !a	81.978	72.545	95.742	76.384	68.491 !a	83.586
21:44	ZZZZZZ	68.066 !a	65.784 !a	80.837	70.544	92.969	74.663	66.815 !a	82.98
21:49	ZZZZZZ	66.065 !a	63.287 !a	77.786	69.676 !a	91.741	74.931	67.871 !a	83.101
21:54	ZZZZZZ	65.923 !a	64.003 !a	80.045	68.393 !a	92.102	74.024	67.306 !a	84.928
21:58	ZZZZZZ	75.869	72.57	86.257	76.495	97.295	77.075	69.928 !	85.054
22:03	ZZZZZZ	75.577	72.397	85.961	77.328	96.411	76.966	69.226 !	84.672
22:08	ZZZZZZ	75.738	72.593	87.124	76.883	97.637	77.069	68.927 !	84.81
22:13	ZZZZZZ	75.853	72.817	86.731	77.539	97.971	77.865	69.495 !	84.675
22:17	MA47822-CCVA15	75.678	70.795	86.812	78.674	94.859	80.475	69.754 !a	87.362
22:22	MA47822-CCB15	70.94	72.169	86.267	72.346	97.525	71.624	68.687 !a	85.202
22:27	ZZZZZZ	76.417	72.78	86.359	78.005	97.364	77.164	68.905 !	84.48
22:32	ZZZZZZ	76.857	72.057	86.146	77.347	95.433	77.736	69.003 !	83.981

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#9	Rhodium (103-2)	60-125 %
Istd#10	Rhodium (103-3)	60-125 %
Istd#11	Indium (115-1)	60-125 %
Istd#12	Indium (115-2)	60-125 %
Istd#13	Terbium (159-1)	60-125 %
Istd#14	Terbium (159-2)	60-125 %
Istd#15	Terbium (159-3)	60-125 %
Istd#16	Holmium (165-1)	60-125 %

(a) No samples reported for the elements associated with this internal standard.

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19
10:25	MA47822-STD1	No results reported for the elements associated with this internal standard.		
10:30	MA47822-STD2	No results reported for the elements associated with this internal standard.		
10:35	MA47822-STD3	No results reported for the elements associated with this internal standard.		
10:39	MA47822-STD4	No results reported for the elements associated with this internal standard.		
10:44	MA47822-STD5	98.626	100.034	99.382
10:49	MA47822-STD6	99.787	100.438	100.068
10:54	MA47822-STD7	100.525	102.339	100.948
10:58	MA47822-STD8	No results reported for the elements associated with this internal standard.		
11:03	MA47822-STD9	100.568	104.824	101.92
11:08	MA47822-STD10	98.054	98.35	98.111
11:13	MA47822-STD11	97.79	97.139	97.603
11:17	MA47822-STD12	97.885	94.605	96.137
11:22	MA47822-STD13	98.732	91.037	94.438
11:27	MA47822-STD14	99.259	100.574	99.681
11:32	MA47822-STD15	100	100	100
11:36	MA47822-ICVA1	102.515	98.756	99.443
11:41	MA47822-ICV1	99.116	98.998	98.552
11:47	MA47822-ICB1	98.206	98.11	98.057
11:52	MA47822-CCVA1	101.955	98.458	98.449
11:57	MA47822-CCB1	98.214	95.495	98.242
12:02	MA47822-CRI1	No results reported for the elements associated with this internal standard.		
12:07	MA47822-CRI2	96.5	97.197	96.656
12:11	MA47822-ICSA1	86.326	75.682	77.075
12:16	MA47822-ICSAB1	No results reported for the elements associated with this internal standard.		
12:21	ZZZZZZ	94.271	99.636	95.631
12:25	MA47822-CCVA2	99.05	100.937	97.207
12:30	MA47822-CCB2	94.497	99.526	96.06
12:35	MA47822-ICSAB2	83.817	77.389	75.381
12:40	ZZZZZZ	No results reported for the elements associated with this internal standard.		
12:44	ZZZZZZ	No results reported for the elements associated with this internal standard.		
12:49	MA47822-CCVA3	97.192	102.1	95.577
12:54	MA47822-CCB3	92.44	101.816	94.305
12:59	ZZZZZZ	95.456	102.203	97.685

INTERNAL STANDARD SUMMARY

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Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19
13:03	ZZZZZZ	No results reported for the elements associated with this internal standard.		
13:08	ZZZZZZ	96.735	100.162	94.507
13:13	ZZZZZZ	93.866	98.673	92.868
13:18	ZZZZZZ	96.176	102.207	97.581
13:22	MP18359A-S3	91.109	85.896	81.349
13:27	MP18359A-S4	89.489	84.838	79.372
13:32	JC98257-2	90.815	84.192	81.343
13:36	MA47822-CCVA4	101.242	100.692	97.377
13:41	MA47822-CCB4	96.201	100.031	95.461
13:46	MP18359A-SD1	96.971	96.802	93.577
13:51	ZZZZZZ	No results reported for the elements associated with this internal standard.		
13:55	ZZZZZZ	91.841	72.96	75.114
14:00	ZZZZZZ	93.863	76.42	76.71
14:05	ZZZZZZ	No results reported for the elements associated with this internal standard.		
14:09	ZZZZZZ	93.025	73.25	75.542
14:14	ZZZZZZ	95.148	76.224	77.195
14:19	ZZZZZZ	98.071	92.771	90.888
14:23	MA47822-CCVA5	103.482	99.613	99.801
14:28	MA47822-CCB5	99.067	100.474	97.61
14:33	ZZZZZZ	97.682	91.292	89.466
14:38	ZZZZZZ	95.268	91.625	86.786
14:42	ZZZZZZ	No results reported for the elements associated with this internal standard.		
14:47	ZZZZZZ	89.669	84.385	79.167
14:52	ZZZZZZ	88.43	80.336	76.652
14:56	ZZZZZZ	No results reported for the elements associated with this internal standard.		
15:01	ZZZZZZ	85.44	76.189	69.714 !a
15:06	MA47822-CCVA6	97.762	97.929	95.035
15:11	MA47822-CCB6	93.896	96.917	93.402
15:15	ZZZZZZ	94.644	97.321	93.27
15:20	ZZZZZZ	95.986	101.232	96.268
15:25	MP18402-S1	97.102	98.846	95.911
15:30	MP18402-S2	95.084	98.087	95.433
15:35	JC98254-1	96.062	97.703	95.289

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19
15:39	MP18402-S3	94.971	94.107	90.188
15:44	ZZZZZZ	94.443	97.749	94.608
15:49	ZZZZZZ	93.985	97.888	94.148
15:54	MA47822-CCVA7	94.45	95.223	91.431
15:58	MA47822-CCB7	90.401	96.067	90.934
16:03	ZZZZZZ	91.803	96.975	91.691
16:08	ZZZZZZ	93.772	91.957	89.696
16:12	ZZZZZZ	91.403	95.482	91.12
16:17	ZZZZZZ	91.488	95.256	92.291
16:22	ZZZZZZ	88.259	88.716	82.613
16:27	ZZZZZZ	88.493	85.688	80.568
16:31	MP18386-MB1	85.127	92.627	85.439
16:36	MP18386-B1	86.188	91.599	85.069
16:41	MA47822-CCVA8	94.668	93.094	90.218
16:46	MA47822-CCB8	87.894	83.363	88.046
16:50	MP18386-S1	85.261	88.311	81.745
16:55	MP18386-S2	83.736	88.417	80.811
17:00	JC98286-1	83.14	85.745	80.194
17:05	MP18386-SD1	87.365	93.664	87.942
17:09	MP18386-PS1	84.269	87.856	80.239
17:14	MP18391A-MB1	84.062	90.598	83.062
17:19	MP18391A-B2	83.214	90.484	82.836
17:24	MP18391A-S3	81.35	82.913	75.643
17:28	MA47822-CCVA9	88.968	90.742	86.579
17:33	MA47822-CCB9	84.811	79.471	84.717
17:38	MP18391A-S4	82.141	81.982	75.683
17:42	JC98405-5	83.867	82.619	77.09
17:47	MP18391A-SD1	85.776	90.863	84.083
17:52	ZZZZZZ	83.118	85.813	78.754
17:57	ZZZZZZ	84.873	87.067	82.628
18:01	ZZZZZZ	No results reported for the elements associated with this internal standard.		
18:06	ZZZZZZ	No results reported for the elements associated with this internal standard.		
18:11	ZZZZZZ	85.461	85.463	80.855

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19
18:16	MA47822-CCVA10	91.579	89.582	87.89
18:20	MA47822-CCB10	81.619	90.068	80.91
18:25	ZZZZZZ	85.541	89.519	84.077
18:30	ZZZZZZ	86.948	87.062	83.004
18:34	ZZZZZZ	No results reported for the elements associated with this internal standard.		
18:39	ZZZZZZ	No results reported for the elements associated with this internal standard.		
18:44	ZZZZZZ	86.348	84.74	80.791
18:49	ZZZZZZ	84.589	82.031	77.679
18:53	ZZZZZZ	85.777	81.61	77.827
18:58	ZZZZZZ	82.414	77.329	73.605
19:03	MA47822-CCVA11	90.321	89.102	86.69
19:07	MA47822-CCB11	87.225	90.198	85.463
19:12	ZZZZZZ	81.091	86.918	79.487
19:17	ZZZZZZ	79.054	76.265	77.448
19:22	ZZZZZZ	79.102	83.256	76.351
19:26	MP18392A-MB1	83.379	87.975	81.499
19:31	MP18392A-B2	80.709	87.742	79.672
19:36	MP18392A-S3	No results reported for the elements associated with this internal standard.		
19:41	MP18392A-S4	No results reported for the elements associated with this internal standard.		
19:45	JC98421-9	No results reported for the elements associated with this internal standard.		
19:50	ZZZZZZ	86.733	76.359	84.013
19:55	MA47822-CCVA12	87.057	87.149	83.558
20:00	MA47822-CCB12	83.616	86.809	82.892
20:05	ZZZZZZ	83.126	86.735	80.554
20:09	ZZZZZZ	82.183	86.726	80.233
20:14	MP18392A-SD1	No results reported for the elements associated with this internal standard.		
20:19	ZZZZZZ	No results reported for the elements associated with this internal standard.		
20:24	ZZZZZZ	79.339	73.866	69.604 !a
20:28	ZZZZZZ	No results reported for the elements associated with this internal standard.		
20:33	ZZZZZZ	80.184	72.691	69.212 !a
20:38	ZZZZZZ	82.866	83.453	77.687
20:43	MA47822-CCVA13	87.069	84.903	83.93
20:47	MA47822-CCB13	82.4	85.733	81.857

INTERNAL STANDARD SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
Analyst: GT Run ID: MA47822
Parameters: As

Time	Sample Description	Istd#17	Istd#18	Istd#19
20:52	ZZZZZZ	74.526	84.569	73.212
20:57	ZZZZZZ	78.487	80.889	74.249
21:02	ZZZZZZ	81.16	81.358	76.991
21:06	ZZZZZZ	80.751	81.416	76.064
21:11	ZZZZZZ	80.671	79.143	74.447
21:16	ZZZZZZ	79.339	77.658	72.107
21:20	ZZZZZZ	77.352	81.773	75.439
21:25	ZZZZZZ	76.689	75.978	71.619
21:30	MA47822-CCVA14	83.113	84.582	80.5
21:35	MA47822-CCB14	78.772	83.194	78.774
21:39	ZZZZZZ	76.297	76.896	72.609
21:44	ZZZZZZ	74.527	76.477	70.788
21:49	ZZZZZZ	75.172	70.972	67.938 !a
21:54	ZZZZZZ	74.33	76.137	70.458
21:58	ZZZZZZ	76.746	82.153	76.852
22:03	ZZZZZZ	76.649	81.571	77.251
22:08	ZZZZZZ	77.419	80.833	76.923
22:13	ZZZZZZ	77.808	80.775	76.836
22:17	MA47822-CCVA15	80.903	80.781	77.716
22:22	MA47822-CCB15	71.648	81.892	72.056
22:27	ZZZZZZ	76.569	80.958	76.293
22:32	ZZZZZZ	77.071	81.138	76.252

! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#17	Holmium (165-2)	60-125 %
Istd#18	Bismuth (209-1)	60-125 %
Istd#19	Bismuth (209-2)	60-125 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA47822 Units: ug/l

Time:			11:47		11:57		12:30		12:54	
Sample ID:			ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27								
Antimony	2.0	.061								
Arsenic	0.50	.008	-0.0132	<1.5	-0.00532	<1.5	-0.0153	<1.5	0.00355	<1.5
Barium	1.0	.01								
Beryllium	0.50	.005								
Boron	25	.67								
Cadmium	0.50	.002								
Calcium	250	1.8								
Chromium	1.0	.018								
Cobalt	0.50	.002								
Copper	2.0	.006								
Iron	25	.16								
Lead	0.50	.004	anr							
Magnesium	250	.14								
Manganese	1.0	.005								
Molybdenum	1.0	.01								
Nickel	1.0	.008								
Potassium	250	1								
Selenium	0.50	.4								
Silver	0.50	.002								
Sodium	250	.28								
Strontium	5.0	.003								
Thallium	0.50	.002	anr							
Tin	5.0	.035								
Titanium	1.0	.02								
Vanadium	1.0	.023								
Zinc	5.0	.023								

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA47822 Units: ug/l

Time:			13:41		14:28		15:11		15:58	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	25	.27								
Antimony	2.0	.061								
Arsenic	0.50	.008	-0.00369	<0.50	-0.00271	<0.50	-0.00934	<0.50	-0.00653	<1.0
Barium	1.0	.01								
Beryllium	0.50	.005								
Boron	25	.67								
Cadmium	0.50	.002								
Calcium	250	1.8								
Chromium	1.0	.018								
Cobalt	0.50	.002								
Copper	2.0	.006								
Iron	25	.16								
Lead	0.50	.004	anr							
Magnesium	250	.14								
Manganese	1.0	.005								
Molybdenum	1.0	.01								
Nickel	1.0	.008								
Potassium	250	1								
Selenium	0.50	.4								
Silver	0.50	.002								
Sodium	250	.28								
Strontium	5.0	.003								
Thallium	0.50	.002	anr							
Tin	5.0	.035								
Titanium	1.0	.02								
Vanadium	1.0	.023								
Zinc	5.0	.023								

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

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
QC Limits: result < RL Run ID: MA47822 Units: ug/l

Time:			16:46		17:33	
Sample ID:			CCB8		CCB9	
Metal	RL	IDL	raw	final	raw	final
Aluminum	25	.27				
Antimony	2.0	.061				
Arsenic	0.50	.008	-0.00255	<1.5	0.00868	<0.50
Barium	1.0	.01				
Beryllium	0.50	.005				
Boron	25	.67				
Cadmium	0.50	.002				
Calcium	250	1.8				
Chromium	1.0	.018				
Cobalt	0.50	.002				
Copper	2.0	.006				
Iron	25	.16				
Lead	0.50	.004	anr			
Magnesium	250	.14				
Manganese	1.0	.005				
Molybdenum	1.0	.01				
Nickel	1.0	.008				
Potassium	250	1				
Selenium	0.50	.4				
Silver	0.50	.002				
Sodium	250	.28				
Strontium	5.0	.003				
Thallium	0.50	.002	anr			
Tin	5.0	.035				
Titanium	1.0	.02				
Vanadium	1.0	.023				
Zinc	5.0	.023				

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47822 Units: ug/l

Time:		11:36			11:41			11:52	
Sample ID:	ICVA	ICVA1		ICV	ICV1		CCVA	CCVA1	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	60	61.8	103.0				50	50.3	100.6
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc									

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47822 Units: ug/l

Time:		12:25			12:49			13:36	
Sample ID:	CCVA	CCVA2		CCVA	CCVA3		CCVA	CCVA4	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	50	53.0	106.0	50	53.9	107.8	50	52.7	105.4
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc									

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47822 Units: ug/l

Time:		14:23			15:06			15:54	
Sample ID:	CCVA	CCVA5		CCVA	CCVA6		CCVA	CCVA7	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum									
Antimony									
Arsenic	50	52.7	105.4	50	53.3	106.6	50	52.3	104.6
Barium									
Beryllium									
Boron									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium									
Zinc									

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

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 90 to 110 % Recovery Run ID: MA47822 Units: ug/l

Time:		16:41			17:28	
Sample ID:	CCVA	CCVA8		CCVA	CCVA9	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony						
Arsenic	50	53.5	107.0	50	52.4	104.8
Barium						
Beryllium						
Boron						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead	anr					
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium						
Zinc						

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

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA47822 Units: ug/l

Time:			12:07	
Sample ID:	CRI	CRIA	CRI2	
Metal	True	True	Results	% Rec
Aluminum	25	25		
Antimony	2.0	0.25		
Arsenic	0.50	0.50	0.457	91.4
Barium	1.0	0.50		
Beryllium	0.50	0.25		
Boron	25	2.5		
Cadmium	0.50	0.25		
Calcium	250	125		
Chromium	1.0	2.0		
Cobalt	0.50	0.25		
Copper	2.0	2.0		
Iron	25	25		
Lead	0.50	0.25	anr	
Magnesium	250	125		
Manganese	1.0	0.25		
Molybdenum	1.0	0.50		
Nickel	1.0	2.0		
Potassium	250	125		
Selenium	0.50	0.50		
Silver	0.50	1.0		
Sodium	250	125		
Strontium	5.0	0.50		
Thallium	0.50	0.25	anr	
Tin	5.0	0.50		
Titanium	1.0	0.50		
Vanadium	1.0	2.0		
Zinc	5.0	2.0		

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

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

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

File ID: XB111519M1.CSV Date Analyzed: 11/15/19 Methods: EPA 200.8, SW846 6020B
QC Limits: 80 to 120 % Recovery Run ID: MA47822 Units: ug/l

Time:			12:11		12:35	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	100000	100000	98300	98.3	95000	95.0
Antimony			0.381		0.559	
Arsenic		20	0.0715		19.5	97.5
Barium			0.407		0.403	
Beryllium			-0.00661		-0.00645	
Boron		50	0.333		58.3	116.6
Cadmium		20	-0.262		17.8	89.0
Calcium	100000	100000	107000	107.0	106000	106.0
Chromium		20	0.305		20.6	103.0
Cobalt		20	0.195		19.6	98.0
Copper		20	0.283		17.5	87.5
Iron	100000	100000	93000	93.0	93400	93.4
Lead			0.0958		0.0849	
Magnesium	100000	100000	98200	98.2	97300	97.3
Manganese		20	0.427		20.2	101.0
Molybdenum	2000	2000	2310	115.5	2270	113.5
Nickel		20	0.702		18.7	93.5
Potassium	100000	100000	104000	104.0	102000	102.0
Selenium		20	-0.127		21.4	107.0
Silver		20	0.0295		18.5	92.5
Sodium	100000	100000	99800	99.8	99000	99.0
Strontium	2000	2000	2070	103.5	2100	105.0
Thallium			-0.000653		-0.00439	
Tin	2000	2000	1740	87.0	1740	87.0
Titanium	2000	2000	1930	96.5	1890	94.5
Vanadium		20	0.0705		20.6	103.0
Zinc		20	0.640		16.0	80.0

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

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP18386
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 11/14/19

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.54	32		
Antimony	4.0	.12	1.7		
Arsenic	3.0	.016	.94	0.79	<3.0
Barium	2.0	.02	.73		
Beryllium	1.0	.01	.15		
Boron	50	1.3	14		
Cadmium	6.0	.004	.17		
Calcium	500	3.7	64		
Chromium	8.0	.036	.62		
Cobalt	1.0	.004	.17		
Copper	10	.012	1.9		
Iron	50	.31	19		
Lead	3.0	.008	.52		
Magnesium	500	.27	46		
Manganese	4.0	.01	.63		
Molybdenum	2.0	.02	.45		
Nickel	8.0	.016	.95		
Potassium	500	2	68		
Selenium	2.0	.8	.55		
Silver	2.0	.004	.16		
Sodium	500	.56	140		
Strontium	20	.006	2.4		
Thallium	2.0	.004	.17		
Tin	10	.07	2.6		
Titanium	4.0	.04	1.6		
Vanadium	3.0	.046	1.8		
Zinc	20	.046	5.4		

Associated samples MP18386: JC98286-1

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: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP18386 Methods: SW846 6020B
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 11/14/19

Metal	JC98286-1 Original	MS	Spikelot MP6020AQ	3% Rec	QC Limits
Aluminum					
Antimony					
Arsenic	31.5	115	80	104.4	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 MP18386: JC98286-1

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: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP18386 Methods: SW846 6020B
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 11/14/19

Metal	JC98286-1 Original	MSD	Spikelot MP6020AQ3%	Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	31.5	117	80	106.9	1.7	20
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 MP18386: JC98286-1

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: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP18386
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 11/14/19

Metal	BSP Result	Spikelot MP6020AQ3%	Rec	QC Limits
Aluminum				
Antimony				
Arsenic	87.5	80	109.4	80-120
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 MP18386: JC98286-1

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

SERIAL DILUTION RESULTS SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP18386 | Methods: SW846 6020B
Matrix Type: AQUEOUS | Units: ug/l

Prep Date: 11/14/19

Metal	JC98286-1 Original	SDL 2:10	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	31.5	33.5	6.2	0-10
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 MP18386: JC98286-1

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

POST DIGESTATE SPIKE SUMMARY

Login Number: JC98286
Account: SCMAW - Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

QC Batch ID: MP18386
Matrix Type: AQUEOUS

Methods: SW846 6020B
Units: ug/l

Prep Date: 11/14/19

Metal	Sample ml	Final ml	JC98286-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic	9.14	10	31.53646	28.82432	115.5222	0.2	4	80	108.4	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 MP18386: JC98286-1

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: JC98286
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: AGICPMS2 **Effective Date:** 01/31/19

Analyte	IDL ug/l
Aluminum	.371
Aluminum	.272
Antimony	.061
Arsenic	.253
Arsenic	.008
Barium	.01
Beryllium	.005
Boron	.671
Cadmium	.005
Cadmium	.002
Calcium	1.84
Chromium	.147
Chromium	.018
Cobalt	.003
Cobalt	.002
Copper	.018
Copper	.006
Iron	3.211
Iron	.155
Lead	.004
Magnesium	.163
Magnesium	.136
Manganese	.012
Manganese	.005
Molybdenum	.01
Nickel	.012
Nickel	.008
Potassium	3.978
Potassium	1.01
Selenium	.84
Selenium	.4
Silver	.002
Sodium	.503
Sodium	.278
Strontium	.003
Thallium	.002
Tin	.02
Tin	.035
Titanium	.197
Titanium	.02
Vanadium	.113
Vanadium	.023
Zinc	.886
Zinc	.023

Instrument Detection Limits

Job Number: JC98286
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: AGICPMS2 **Effective Date:** 01/31/19

Analyte	IDL ug/l

The above applies to the following instrument runs:
MA47822

Instrument Linear Ranges

Job Number: JC98286
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: AGICPMS2 **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: JC98286
Account: SCMAW Sovereign Consulting
Project: Shepley's Hill (SHL), Devens, MA

Instrument ID: AGICPMS2 **Effective Date:** 09/10/18

Analyte	Linear Range ug/l
Zinc	100

The above applies to the following instrument runs:
MA47822

Metals Analysis

Raw Data

Quantitation Report

File Name	001CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 10:25
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-5.35	9.33	6.002E-06	Pulse	0.25	3
B			1	-1.646	ug/l	-1.15	1,844.62	1.189E-03	Pulse	0.15	3
Ca			1	1.035	ug/l	25.77	16,620.63	5.929E-03	Pulse	0.10	3
Sr			1	-0.009	ug/l	-5.81	413.35	1.280E-04	Pulse	0.10	3
Mo			1	-0.055	ug/l	-3.63	50.00	1.536E-05	Pulse	0.10	3
Ag			1	-0.012	ug/l	-4.71	26.67	8.786E-06	Pulse	0.10	3
Sn			1	-0.106	ug/l	-9.81	683.38	2.258E-04	Pulse	0.10	3
Sb			1	0.149	ug/l	3.41	436.69	9.988E-05	Pulse	0.10	3
Ba			1	0.175	ug/l	3.26	56.67	1.293E-05	Pulse	0.10	3
Tl			1	-0.020	ug/l	-7.90	130.01	5.775E-05	Pulse	0.10	3
Pb			1	-0.003	ug/l	-12.35	240.01	1.062E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	153.05	223.34	9.889E-05	Pulse	0.10	3
Pb			1	-0.002	ug/l	-126.87	973.39	4.300E-04	Pulse	0.10	3
Na			2	1.579	ug/l	9.65	24,171.88	2.071E-01	Pulse	0.30	3
Mg			2	-0.143	ug/l	-70.24	204.45	1.751E-03	Pulse	0.30	3
Al			2	-0.762	ug/l	-7.68	101.11	8.663E-04	Pulse	0.30	3
K			2	0.516	ug/l	44.92	5,491.16	4.704E-02	Pulse	0.30	3
Ca			2	0.653	ug/l	466.45	101.11	8.677E-04	Pulse	0.30	3
Ti			2	-0.017	ug/l	-82.17	1.11	9.480E-06	Pulse	0.30	3
V			2	0.031	ug/l	21.42	394.46	3.378E-03	Pulse	0.30	3
Cr			2	0.001	ug/l	662.14	601.13	5.151E-03	Pulse	0.30	3
Mn			2	0.009	ug/l	95.36	78.89	6.751E-04	Pulse	0.30	3
Fe			2	-0.612	ug/l	-5.32	3,809.49	3.263E-02	Pulse	0.30	3
Co			2	0.003	ug/l	66.53	94.43	8.091E-04	Pulse	0.30	3
Ni			2	-0.012	ug/l	-125.77	88.89	7.610E-04	Pulse	0.30	3
Cu			2	0.124	ug/l	4.40	1,891.26	1.620E-02	Pulse	0.30	3
Zn			2	20.847	ug/l	7.44	21,201.08	1.816E-01	Pulse	0.30	3
As			2	-0.010	ug/l	-96.18	10.67	9.133E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.044	ug/l	5.96	9.97	2.002E-05	Pulse	0.30	3
Sn			2	-0.043	ug/l	-31.60	161.11	3.235E-04	Pulse	0.30	3
Se			3	-0.025	ug/l	-404.73	34.00	8.301E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,551,785.88	1.68	100.0	Pulse	0.10	3
1	Sc		2,803,999.02	3.05	100.0	Pulse	0.10	3
1	Ge		672,298.22	3.86	100.0	Pulse	0.10	3
1	Rh		3,226,857.04	4.30	100.0	Pulse	0.10	3
1	In		3,014,661.02	3.53	100.0	Pulse	0.10	3
1	Tb		4,375,402.02	1.01	100.0	Analog	0.10	3
1	Ho		388,685.16	3.66	100.0	Pulse	0.10	3
1	Bi		2,259,169.81	2.99	100.0	Pulse	0.10	3
2	Sc		116,741.36	0.49	100.0	Pulse	0.30	3
2	Ge		87,057.54	0.42	100.0	Pulse	0.30	3
2	Rh		1,470,283.17	0.76	100.0	Pulse	0.30	3
2	In		497,791.57	0.39	100.0	Pulse	0.30	3
2	Tb		1,617,695.39	0.64	100.0	Pulse	0.30	3
2	Ho		156,923.10	0.91	100.0	Pulse	0.30	3
2	Bi		986,198.61	0.65	100.0	Pulse	0.30	3
3	Sc		88,990.78	0.19	100.0	Pulse	0.30	3
3	Ge		40,976.91	0.80	100.0	Pulse	0.30	3
3	Rh		295,098.29	0.09	100.0	Pulse	0.30	3
3	Tb		382,496.34	0.07	100.0	Pulse	0.30	3

Quantitation Report

File Name	002CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 10:30
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-1040.20	49.33	3.133E-05	Pulse	0.25	3
B			1	-1.652	ug/l	-0.58	1,831.28	1.167E-03	Pulse	0.15	3
Ca			1	2.688	ug/l	12.00	18,176.05	6.444E-03	Pulse	0.10	3
Sr			1	0.005	ug/l	91.77	1,016.75	3.110E-04	Pulse	0.10	3
Mo			1	-0.052	ug/l	-10.04	80.00	2.399E-05	Pulse	0.10	3
Ag			1	-0.012	ug/l	-7.30	36.67	1.205E-05	Pulse	0.10	3
Sn			1	-0.098	ug/l	-9.78	776.72	2.535E-04	Pulse	0.10	3
Sb			1	0.148	ug/l	3.11	426.69	9.755E-05	Pulse	0.10	3
Ba			1	0.186	ug/l	4.33	116.67	2.671E-05	Pulse	0.10	3
Tl			1	-0.017	ug/l	-14.89	230.01	9.982E-05	Pulse	0.10	3
Pb			1	0.004	ug/l	210.80	313.35	1.362E-04	Pulse	0.10	3
Pb			1	0.005	ug/l	68.61	270.01	1.180E-04	Pulse	0.10	3
Pb			1	0.002	ug/l	88.47	1,183.40	5.145E-04	Pulse	0.10	3
Na			2	1.415	ug/l	55.41	23,889.17	2.057E-01	Pulse	0.30	3
Mg			2	0.110	ug/l	70.26	316.67	2.728E-03	Pulse	0.30	3
Al			2	0.048	ug/l	180.68	236.67	2.039E-03	Pulse	0.30	3
K			2	0.681	ug/l	10.95	5,515.60	4.749E-02	Pulse	0.30	3
Ca			2	2.894	ug/l	51.48	141.12	1.214E-03	Pulse	0.30	3
Ti			2	-0.026	ug/l	0.00	0.00	0.000E+00	Pulse	0.30	3
V			2	0.031	ug/l	22.27	394.45	3.396E-03	Pulse	0.30	3
Cr			2	0.003	ug/l	397.91	606.69	5.227E-03	Pulse	0.30	3
Mn			2	0.009	ug/l	36.47	80.00	6.881E-04	Pulse	0.30	3
Fe			2	-0.435	ug/l	-5.78	4,589.72	3.952E-02	Pulse	0.30	3
Co			2	0.000	ug/l	-989.59	65.55	5.639E-04	Pulse	0.30	3
Ni			2	0.011	ug/l	123.87	141.11	1.216E-03	Pulse	0.30	3
Cu			2	0.083	ug/l	8.48	1,624.56	1.399E-02	Pulse	0.30	3
Zn			2	10.781	ug/l	4.56	11,090.14	9.546E-02	Pulse	0.30	3
As			2	-0.018	ug/l	-43.30	7.00	6.040E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.045	ug/l	3.57	11.04	2.211E-05	Pulse	0.30	3
Sn			2	-0.051	ug/l	-8.31	143.34	2.868E-04	Pulse	0.30	3
Se			3	-0.042	ug/l	-275.38	32.67	8.077E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,567,653.60	2.98	100.0	Pulse	0.10	3
1	Sc		2,821,107.56	2.94	100.0	Pulse	0.10	3
1	Ge		683,832.83	3.49	100.0	Pulse	0.10	3
1	Rh		3,287,262.56	4.30	100.0	Pulse	0.10	3
1	In		3,058,924.11	3.32	100.0	Pulse	0.10	3
1	Tb		4,376,795.04	0.94	100.0	Analog	0.10	3
1	Ho		387,559.35	4.54	100.0	Pulse	0.10	3
1	Bi		2,295,732.73	4.66	100.0	Pulse	0.10	3
2	Sc		116,152.27	1.20	100.0	Pulse	0.30	3
2	Ge		87,124.28	0.49	100.0	Pulse	0.30	3
2	Rh		1,470,789.11	0.53	100.0	Pulse	0.30	3
2	In		499,563.12	1.27	100.0	Pulse	0.30	3
2	Tb		1,605,009.38	2.07	100.0	Pulse	0.30	3
2	Ho		155,395.57	1.13	100.0	Pulse	0.30	3
2	Bi		986,349.20	0.54	100.0	Pulse	0.30	3
3	Sc		88,595.26	1.14	100.0	Pulse	0.30	3
3	Ge		40,445.24	0.81	100.0	Pulse	0.30	3
3	Rh		292,557.06	0.40	100.0	Pulse	0.30	3
3	Tb		377,151.61	0.68	100.0	Pulse	0.30	3

Quantitation Report

File Name	003CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 10:35
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-8.37	4.00	2.504E-06	Pulse	0.25	3
B			1	-1.664	ug/l	-1.12	1,762.38	1.115E-03	Pulse	0.15	3
Ca			1	0.083	ug/l	731.30	15,913.22	5.632E-03	Pulse	0.10	3
Sr			1	-0.009	ug/l	-41.63	450.03	1.365E-04	Pulse	0.10	3
Mo			1	-0.056	ug/l	-3.26	43.33	1.301E-05	Pulse	0.10	3
Ag			1	-0.011	ug/l	-2.53	43.33	1.411E-05	Pulse	0.10	3
Sn			1	-0.117	ug/l	-9.54	570.03	1.861E-04	Pulse	0.10	3
Sb			1	0.138	ug/l	1.53	296.68	6.813E-05	Pulse	0.10	3
Ba			1	0.166	ug/l	1.71	13.33	3.017E-06	Pulse	0.10	3
Tl			1	-0.021	ug/l	-3.85	103.34	4.517E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-678.61	266.68	1.167E-04	Pulse	0.10	3
Pb			1	-0.003	ug/l	-302.84	200.01	8.751E-05	Pulse	0.10	3
Pb			1	-0.006	ug/l	-79.12	836.71	3.664E-04	Pulse	0.10	3
Na			2	-0.286	ug/l	-119.71	22,519.15	1.919E-01	Pulse	0.30	3
Mg			2	-0.453	ug/l	-6.34	65.55	5.579E-04	Pulse	0.30	3
Al			2	-0.694	ug/l	-14.63	113.34	9.646E-04	Pulse	0.30	3
K			2	0.235	ug/l	199.78	5,430.00	4.627E-02	Pulse	0.30	3
Ca			2	-0.674	ug/l	-9.27	77.78	6.626E-04	Pulse	0.30	3
Ti			2	-0.018	ug/l	-80.44	1.11	9.344E-06	Pulse	0.30	3
V			2	0.018	ug/l	41.81	343.34	2.924E-03	Pulse	0.30	3
Cr			2	-0.003	ug/l	-189.42	578.91	4.935E-03	Pulse	0.30	3
Mn			2	-0.002	ug/l	-202.10	45.56	3.878E-04	Pulse	0.30	3
Fe			2	-0.846	ug/l	-6.74	2,765.94	2.355E-02	Pulse	0.30	3
Co			2	-0.002	ug/l	-69.17	47.77	4.063E-04	Pulse	0.30	3
Ni			2	-0.006	ug/l	-64.54	102.23	8.712E-04	Pulse	0.30	3
Cu			2	0.036	ug/l	15.56	1,345.64	1.147E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	6.643	ug/l	7.93	7,044.11	6.004E-02	Pulse	0.30	3
As			2	-0.016	ug/l	-16.96	8.33	7.108E-05	Pulse	1.00	3
Cd			2	0.040	ug/l	15.55	4.44	9.005E-06	Pulse	0.30	3
Sn			2	-0.076	ug/l	-6.20	84.45	1.704E-04	Pulse	0.30	3
Se			3	-0.122	ug/l	-121.58	28.67	7.022E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,579,094.31	2.32	100.0	Pulse	0.10	3
1	Sc		2,827,071.62	2.79	100.0	Pulse	0.10	3
1	Ge		679,335.62	4.28	100.0	Pulse	0.10	3
1	Rh		3,319,575.99	3.18	100.0	Pulse	0.10	3
1	In		3,071,088.96	4.07	100.0	Pulse	0.10	3
1	Tb		4,359,570.56	1.87	100.0	Analog	0.10	3
1	Ho		385,866.86	3.35	100.0	Pulse	0.10	3
1	Bi		2,300,580.33	4.97	100.0	Pulse	0.10	3
2	Sc		117,367.72	1.12	100.0	Pulse	0.30	3
2	Ge		87,238.34	1.12	100.0	Pulse	0.30	3
2	Rh		1,477,959.21	0.57	100.0	Pulse	0.30	3
2	In		495,511.97	0.63	100.0	Pulse	0.30	3
2	Tb		1,609,269.48	1.61	100.0	Pulse	0.30	3
2	Ho		154,944.52	1.24	100.0	Pulse	0.30	3
2	Bi		977,200.17	1.04	100.0	Pulse	0.30	3
3	Sc		87,890.62	1.27	100.0	Pulse	0.30	3
3	Ge		40,738.45	1.16	100.0	Pulse	0.30	3
3	Rh		294,753.71	0.25	100.0	Pulse	0.30	3
3	Tb		378,786.04	0.32	100.0	Pulse	0.30	3

Quantitation Report

File Name	004CALB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 10:39
Sample Name	STDA 4
Sample Type	CalBlk
Comment	0
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-5.32	5.33	3.436E-06	Pulse	0.25	3
B			1	-1.666	ug/l	-2.48	1,724.61	1.109E-03	Pulse	0.15	3
Ca			1	0.139	ug/l	56.83	15,883.06	5.649E-03	Pulse	0.10	3
Sr			1	-0.007	ug/l	-15.23	533.37	1.609E-04	Pulse	0.10	3
Mo			1	-0.058	ug/l	-4.70	26.67	8.189E-06	Pulse	0.10	3
Ag			1	-0.011	ug/l	-3.97	40.00	1.311E-05	Pulse	0.10	3
Sn			1	-0.116	ug/l	-5.85	576.70	1.895E-04	Pulse	0.10	3
Sb			1	0.141	ug/l	2.41	323.35	7.519E-05	Pulse	0.10	3
Ba			1	0.170	ug/l	1.98	30.00	6.998E-06	Pulse	0.10	3
Tl			1	-0.020	ug/l	-6.46	120.01	5.260E-05	Pulse	0.10	3
Pb			1	-0.008	ug/l	-88.14	196.68	8.656E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-237.19	213.34	9.335E-05	Pulse	0.10	3
Pb			1	-0.006	ug/l	-17.84	850.05	3.715E-04	Pulse	0.10	3
Na			2	0.202	ug/l	29.74	22,728.39	1.958E-01	Pulse	0.30	3
Mg			2	-0.357	ug/l	-31.81	107.79	9.282E-04	Pulse	0.30	3
Al			2	-0.871	ug/l	-3.21	82.22	7.083E-04	Pulse	0.30	3
K			2	-0.108	ug/l	-658.09	5,259.93	4.533E-02	Pulse	0.30	3
Ca			2	-0.505	ug/l	-237.78	80.00	6.887E-04	Pulse	0.30	3
Ti			2	-0.009	ug/l	-161.29	2.22	1.917E-05	Pulse	0.30	3
V			2	0.027	ug/l	85.96	374.49	3.230E-03	Pulse	0.30	3
Cr			2	-0.003	ug/l	-47.94	572.24	4.931E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-67.56	37.78	3.258E-04	Pulse	0.30	3
Fe			2	-0.858	ug/l	-1.57	2,679.24	2.309E-02	Pulse	0.30	3
Co			2	-0.004	ug/l	-32.99	31.10	2.677E-04	Pulse	0.30	3
Ni			2	-0.019	ug/l	-34.60	72.22	6.221E-04	Pulse	0.30	3
Cu			2	0.056	ug/l	32.29	1,454.54	1.254E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	4.236	ug/l	6.60	4,578.60	3.944E-02	Pulse	0.30	3
As			2	-0.010	ug/l	-25.48	10.67	9.195E-05	Pulse	1.00	3
Cd			2	0.040	ug/l	7.77	4.43	9.001E-06	Pulse	0.30	3
Sn			2	-0.059	ug/l	-6.74	123.34	2.487E-04	Pulse	0.30	3
Se			3	-0.265	ug/l	-30.12	20.67	5.131E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,555,855.44	1.11	100.0	Pulse	0.10	3
1	Sc		2,811,725.27	2.98	100.0	Pulse	0.10	3
1	Ge		681,054.99	3.08	100.0	Pulse	0.10	3
1	Rh		3,309,621.82	3.01	100.0	Pulse	0.10	3
1	In		3,034,112.93	3.64	100.0	Pulse	0.10	3
1	Tb		4,296,696.18	1.65	100.0	Analog	0.10	3
1	Ho		382,935.96	4.10	100.0	Pulse	0.10	3
1	Bi		2,290,311.63	3.49	100.0	Pulse	0.10	3
2	Sc		116,056.61	0.57	100.0	Pulse	0.30	3
2	Ge		85,820.49	0.25	100.0	Pulse	0.30	3
2	Rh		1,470,008.21	0.27	100.0	Pulse	0.30	3
2	In		496,006.79	1.39	100.0	Pulse	0.30	3
2	Tb		1,603,214.28	0.38	100.0	Pulse	0.30	3
2	Ho		157,191.71	0.85	100.0	Pulse	0.30	3
2	Bi		988,574.48	0.90	100.0	Pulse	0.30	3
3	Sc		86,761.59	0.36	100.0	Pulse	0.30	3
3	Ge		40,301.50	0.44	100.0	Pulse	0.30	3
3	Rh		291,360.72	0.37	100.0	Pulse	0.30	3
3	Tb		378,264.98	0.41	100.0	Pulse	0.30	3

Quantitation Report

File Name	005CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 10:44
Sample Name	STDB
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	0.443	ug/l	5.15	2,864.33	1.836E-03	Pulse	0.25	3
B			1	22.311	ug/l	2.09	157,958.94	1.012E-01	Pulse	0.15	3
Ca			1	247.963	ug/l	0.91	234,700.84	8.292E-02	Pulse	0.10	3
Sr			1	4.712	ug/l	0.92	191,604.97	5.877E-02	Pulse	0.10	3
Mo			1	0.893	ug/l	2.92	7,495.74	2.299E-03	Pulse	0.10	3
Ag			1	0.470	ug/l	4.29	9,296.92	3.017E-03	Pulse	0.10	3
Sn			1	4.635	ug/l	1.45	53,910.46	1.749E-02	Pulse	0.10	3
Sb			1	2.008	ug/l	3.89	23,277.80	5.426E-03	Pulse	0.10	3
Ba			1	1.089	ug/l	5.93	4,791.04	1.117E-03	Pulse	0.10	3
Tl			1	0.459	ug/l	0.34	14,165.27	6.183E-03	Pulse	0.10	3
Pb			1	0.476	ug/l	3.10	5,127.97	2.236E-03	Pulse	0.10	3
Pb			1	0.473	ug/l	2.54	4,397.62	1.920E-03	Pulse	0.10	3
Pb			1	0.472	ug/l	1.84	20,247.26	8.839E-03	Pulse	0.10	3
Na			2	252.602	ug/l	1.20	259,683.51	2.252E+00	Pulse	0.30	3
Mg			2	258.540	ug/l	1.34	115,188.42	9.987E-01	Pulse	0.30	3
Al			2	25.257	ug/l	3.16	4,444.10	3.853E-02	Pulse	0.30	3
K			2	247.335	ug/l	2.57	83,195.81	7.214E-01	Pulse	0.30	3
Ca			2	290.982	ug/l	1.14	5,273.29	4.572E-02	Pulse	0.30	3
Ti			2	0.748	ug/l	14.00	102.23	8.863E-04	Pulse	0.30	3
V			2	0.972	ug/l	1.87	4,336.29	3.760E-02	Pulse	0.30	3
Cr			2	0.978	ug/l	0.99	5,861.30	5.082E-02	Pulse	0.30	3
Mn			2	0.935	ug/l	4.39	2,920.34	2.532E-02	Pulse	0.30	3
Fe			2	24.108	ug/l	1.43	114,650.63	9.940E-01	Pulse	0.30	3
Co			2	0.480	ug/l	2.40	4,249.28	3.684E-02	Pulse	0.30	3
Ni			2	0.979	ug/l	7.86	2,389.13	2.071E-02	Pulse	0.30	3
Cu			2	2.164	ug/l	1.35	14,482.17	1.256E-01	Pulse	0.30	3
Zn			2	7.302	ug/l	3.93	7,576.63	6.569E-02	Pulse	0.30	3
As			2	0.491	ug/l	5.71	241.67	2.096E-03	Pulse	1.00	3
Cd			2	0.497	ug/l	3.41	578.96	1.168E-03	Pulse	0.30	3
Sn			2	4.622	ug/l	1.70	10,737.81	2.166E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.517	ug/l	49.40	62.00	1.545E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,560,150.38	1.91	100.3	Pulse	0.10	3
1	Sc		2,830,531.00	2.30	100.7	Pulse	0.10	3
1	Ge		673,976.25	2.97	99.0	Pulse	0.10	3
1	Rh		3,260,714.01	2.83	98.5	Pulse	0.10	3
1	In		3,080,610.23	3.98	101.5	Pulse	0.10	3
1	Tb		4,291,458.17	1.33	99.9	Analog	0.10	3
1	Ho		387,383.62	3.19	101.2	Pulse	0.10	3
1	Bi		2,291,082.83	4.51	100.0	Pulse	0.10	3
2	Sc		115,333.23	0.75	99.4	Pulse	0.30	3
2	Ge		86,814.71	2.16	101.2	Pulse	0.30	3
2	Rh		1,469,375.11	0.22	100.0	Pulse	0.30	3
2	In		495,736.15	0.75	99.9	Pulse	0.30	3
2	Tb		1,592,613.86	1.50	99.3	Pulse	0.30	3
2	Ho		155,031.11	0.99	98.6	Pulse	0.30	3
2	Bi		982,468.43	0.32	99.4	Pulse	0.30	3
3	Sc		86,759.58	1.79	100.0	Pulse	0.30	3
3	Ge		40,180.01	1.44	99.7	Pulse	0.30	3
3	Rh		291,400.27	1.64	100.0	Pulse	0.30	3
3	Tb		376,192.29	0.68	99.5	Pulse	0.30	3

Quantitation Report

File Name	006CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 10:49
Sample Name	STDC
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	4.816	ug/l	2.72	30,957.93	1.966E-02	Pulse	0.25	3
B			1	3.632	ug/l	2.12	36,574.51	2.323E-02	Pulse	0.15	3
Ca			1	17.726	ug/l	5.49	30,998.75	1.113E-02	Pulse	0.10	3
Sr			1	4.878	ug/l	1.01	199,325.52	6.083E-02	Pulse	0.10	3
Mo			1	4.949	ug/l	2.83	39,522.19	1.207E-02	Pulse	0.10	3
Ag			1	5.009	ug/l	1.54	95,501.50	3.137E-02	Pulse	0.10	3
Sn			1	4.991	ug/l	0.80	57,227.82	1.879E-02	Pulse	0.10	3
Sb			1	4.903	ug/l	3.33	58,590.77	1.372E-02	Pulse	0.10	3
Ba			1	4.967	ug/l	3.59	24,780.99	5.802E-03	Pulse	0.10	3
Tl			1	4.883	ug/l	2.10	144,347.41	6.272E-02	Pulse	0.10	3
Pb			1	4.881	ug/l	0.76	50,204.54	2.183E-02	Pulse	0.10	3
Pb			1	4.979	ug/l	2.13	44,345.98	1.927E-02	Pulse	0.10	3
Pb			1	4.958	ug/l	1.11	203,405.55	8.842E-02	Pulse	0.10	3
Na			2	8.500	ug/l	2.80	30,325.90	2.634E-01	Pulse	0.30	3
Mg			2	5.965	ug/l	2.85	2,911.45	2.529E-02	Pulse	0.30	3
Al			2	7.036	ug/l	2.20	1,398.98	1.215E-02	Pulse	0.30	3
K			2	6.203	ug/l	3.87	7,203.05	6.257E-02	Pulse	0.30	3
Ca			2	47.505	ug/l	3.02	933.38	8.106E-03	Pulse	0.30	3
Ti			2	5.062	ug/l	2.42	671.14	5.831E-03	Pulse	0.30	3
V			2	5.019	ug/l	1.29	21,263.10	1.847E-01	Pulse	0.30	3
Cr			2	5.063	ug/l	2.91	27,836.95	2.418E-01	Pulse	0.30	3
Mn			2	5.042	ug/l	2.14	15,501.00	1.346E-01	Pulse	0.30	3
Fe			2	4.841	ug/l	0.24	28,176.57	2.447E-01	Pulse	0.30	3
Co			2	4.938	ug/l	1.00	42,999.11	3.735E-01	Pulse	0.30	3
Ni			2	5.009	ug/l	3.81	11,721.79	1.018E-01	Pulse	0.30	3
Cu			2	5.105	ug/l	2.86	32,619.75	2.833E-01	Pulse	0.30	3
Zn			2	7.200	ug/l	1.48	7,462.11	6.481E-02	Pulse	0.30	3
As			2	5.798	ug/l	21.61	2,680.07	2.330E-02	Pulse	1.00	3
Cd			2	4.945	ug/l	0.71	6,118.16	1.244E-02	Pulse	0.30	3
Sn			2	5.050	ug/l	1.06	11,615.20	2.362E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	7.052	ug/l	45.71	380.11	1.016E-02	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,574,127.18	1.38	101.2	Pulse	0.10	3
1	Sc		2,785,305.58	2.60	99.1	Pulse	0.10	3
1	Ge		678,279.34	2.54	99.6	Pulse	0.10	3
1	Rh		3,277,537.35	3.61	99.0	Pulse	0.10	3
1	In		3,045,724.45	3.72	100.4	Pulse	0.10	3
1	Tb		4,270,275.67	1.89	99.4	Analog	0.10	3
1	Ho		386,568.34	4.02	100.9	Pulse	0.10	3
1	Bi		2,300,339.96	4.04	100.4	Pulse	0.10	3
2	Sc		115,129.15	1.71	99.2	Pulse	0.30	3
2	Ge		85,528.67	0.56	99.7	Pulse	0.30	3
2	Rh		1,450,666.12	1.37	98.7	Pulse	0.30	3
2	In		491,752.87	1.54	99.1	Pulse	0.30	3
2	Tb		1,599,456.60	1.32	99.8	Pulse	0.30	3
2	Ho		156,857.01	1.31	99.8	Pulse	0.30	3
2	Bi		989,247.08	1.70	100.1	Pulse	0.30	3
3	Sc		75,833.05	9.25	87.4	Pulse	0.30	3
3	Ge		36,950.14	6.56	91.7	Pulse	0.30	3
3	Rh		259,554.62	8.79	89.1	Pulse	0.30	3
3	Tb		334,210.03	9.07	88.4	Pulse	0.30	3

Quantitation Report

File Name	007CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 10:54
Sample Name	STDD
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	24.932	ug/l	0.92	161,551.56	1.017E-01	Pulse	0.25	3
B			1	22.985	ug/l	0.19	165,336.97	1.041E-01	Pulse	0.15	3
Ca			1	53.501	ug/l	2.90	63,385.04	2.229E-02	Pulse	0.10	3
Sr			1	24.810	ug/l	1.05	1,025,804.73	3.084E-01	Pulse	0.10	3
Mo			1	25.241	ug/l	1.27	202,617.32	6.092E-02	Pulse	0.10	3
Ag			1	25.248	ug/l	0.72	488,796.88	1.578E-01	Pulse	0.10	3
Sn			1	25.458	ug/l	1.10	289,206.82	9.335E-02	Pulse	0.10	3
Sb			1	24.910	ug/l	5.04	303,381.71	7.105E-02	Pulse	0.10	3
Ba			1	24.893	ug/l	4.52	127,556.70	2.987E-02	Pulse	0.10	3
Tl			1	24.993	ug/l	0.75	749,218.40	3.197E-01	Pulse	0.10	3
Pb			1	25.125	ug/l	0.94	262,190.93	1.119E-01	Pulse	0.10	3
Pb			1	24.779	ug/l	0.54	223,892.43	9.553E-02	Pulse	0.10	3
Pb			1	25.108	ug/l	0.38	1,045,114.43	4.458E-01	Pulse	0.10	3
Na			2	27.787	ug/l	3.58	49,043.81	4.205E-01	Pulse	0.30	3
Mg			2	27.456	ug/l	0.81	12,610.20	1.081E-01	Pulse	0.30	3
Al			2	27.802	ug/l	1.85	4,923.15	4.222E-02	Pulse	0.30	3
K			2	27.606	ug/l	2.91	14,118.38	1.211E-01	Pulse	0.30	3
Ca			2	210.089	ug/l	2.82	3,875.04	3.322E-02	Pulse	0.30	3
Ti			2	25.537	ug/l	1.91	3,417.13	2.930E-02	Pulse	0.30	3
V			2	24.964	ug/l	1.20	106,094.21	9.097E-01	Pulse	0.30	3
Cr			2	25.287	ug/l	1.00	138,515.58	1.188E+00	Pulse	0.30	3
Mn			2	24.903	ug/l	1.40	77,357.01	6.632E-01	Pulse	0.30	3
Fe			2	25.600	ug/l	1.81	122,707.45	1.052E+00	Pulse	0.30	3
Co			2	25.042	ug/l	1.03	220,632.58	1.892E+00	Pulse	0.30	3
Ni			2	24.963	ug/l	0.24	58,721.08	5.035E-01	Pulse	0.30	3
Cu			2	24.947	ug/l	0.81	157,126.65	1.347E+00	Pulse	0.30	3
Zn			2	26.906	ug/l	2.22	27,231.51	2.335E-01	Pulse	0.30	3
As			2	25.650	ug/l	0.76	11,969.90	1.026E-01	Pulse	1.00	3
Cd			2	25.191	ug/l	1.09	31,724.20	6.376E-02	Pulse	0.30	3
Sn			2	25.019	ug/l	1.62	57,209.18	1.150E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	25.918	ug/l	12.46	1,396.75	3.504E-02	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,588,891.64	2.03	102.1	Pulse	0.10	3
1	Sc		2,845,339.54	3.89	101.2	Pulse	0.10	3
1	Ge		686,875.93	3.67	100.9	Pulse	0.10	3
1	Rh		3,326,252.87	3.55	100.5	Pulse	0.10	3
1	In		3,098,837.12	4.56	102.1	Pulse	0.10	3
1	Tb		4,272,006.29	1.37	99.4	Analog	0.10	3
1	Ho		393,840.18	2.95	102.8	Pulse	0.10	3
1	Bi		2,343,882.31	4.40	102.3	Pulse	0.10	3
2	Sc		116,629.05	0.91	100.5	Pulse	0.30	3
2	Ge		86,639.14	1.84	101.0	Pulse	0.30	3
2	Rh		1,469,820.50	1.39	100.0	Pulse	0.30	3
2	In		497,566.16	0.31	100.3	Pulse	0.30	3
2	Tb		1,613,815.84	0.52	100.7	Pulse	0.30	3
2	Ho		158,016.84	1.07	100.5	Pulse	0.30	3
2	Bi		997,942.15	0.82	100.9	Pulse	0.30	3
3	Sc		85,982.51	0.18	99.1	Pulse	0.30	3
3	Ge		39,881.40	1.05	99.0	Pulse	0.30	3
3	Rh		292,905.48	1.09	100.5	Pulse	0.30	3
3	Tb		379,097.63	0.58	100.2	Pulse	0.30	3

Quantitation Report

File Name	008CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 10:58
Sample Name	STDE
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	50.088	ug/l	1.86	324,662.68	2.042E-01	Pulse	0.25	3
B			1	48.686	ug/l	1.41	336,045.09	2.114E-01	Pulse	0.15	3
Ca			1	89.512	ug/l	2.49	95,700.30	3.352E-02	Pulse	0.10	3
Sr			1	49.056	ug/l	0.82	2,049,456.69	6.096E-01	Pulse	0.10	3
Mo			1	50.127	ug/l	0.20	406,289.70	1.208E-01	Pulse	0.10	3
Ag			1	50.602	ug/l	1.43	981,467.43	3.161E-01	Pulse	0.10	3
Sn			1	50.801	ug/l	0.40	576,639.50	1.857E-01	Pulse	0.10	3
Sb			1	49.541	ug/l	3.46	609,521.75	1.416E-01	Pulse	0.10	3
Ba			1	49.726	ug/l	3.12	257,654.37	5.987E-02	Pulse	0.10	3
Tl			1	50.248	ug/l	1.56	1,512,646.85	6.424E-01	Pulse	0.10	3
Pb			1	50.254	ug/l	1.77	526,558.52	2.236E-01	Pulse	0.10	3
Pb			1	50.408	ug/l	1.58	457,226.05	1.942E-01	Pulse	0.10	3
Pb			1	50.280	ug/l	1.29	2,100,829.11	8.924E-01	Pulse	0.10	3
Na			2	52.309	ug/l	2.51	71,993.23	6.203E-01	Pulse	0.30	3
Mg			2	53.954	ug/l	2.79	24,402.37	2.102E-01	Pulse	0.30	3
Al			2	71.451	ug/l	46.09	12,236.62	1.054E-01	Pulse	0.30	3
K			2	51.829	ug/l	2.00	21,732.56	1.872E-01	Pulse	0.30	3
Ca			2	406.701	ug/l	1.11	7,382.05	6.360E-02	Pulse	0.30	3
Ti			2	51.438	ug/l	4.23	6,845.09	5.898E-02	Pulse	0.30	3
V			2	50.151	ug/l	1.53	211,862.78	1.825E+00	Pulse	0.30	3
Cr			2	50.645	ug/l	2.49	275,470.46	2.373E+00	Pulse	0.30	3
Mn			2	49.822	ug/l	1.86	153,958.98	1.326E+00	Pulse	0.30	3
Fe			2	51.976	ug/l	2.57	241,170.72	2.078E+00	Pulse	0.30	3
Co			2	50.252	ug/l	1.07	440,534.47	3.795E+00	Pulse	0.30	3
Ni			2	49.965	ug/l	1.76	116,856.01	1.007E+00	Pulse	0.30	3
Cu			2	50.347	ug/l	1.40	314,446.46	2.709E+00	Pulse	0.30	3
Zn			2	52.256	ug/l	1.39	52,282.45	4.504E-01	Pulse	0.30	3
As			2	50.428	ug/l	2.32	23,405.59	2.016E-01	Pulse	1.00	3
Cd			2	49.520	ug/l	0.26	61,967.21	1.254E-01	Pulse	0.30	3
Sn			2	50.502	ug/l	1.27	114,409.75	2.316E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	63.336	ug/l	38.35	3,381.68	8.437E-02	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,589,518.31	1.90	102.2	Pulse	0.10	3
1	Sc		2,856,400.79	2.54	101.6	Pulse	0.10	3
1	Ge		690,913.27	3.23	101.4	Pulse	0.10	3
1	Rh		3,362,132.35	3.21	101.6	Pulse	0.10	3
1	In		3,105,384.28	3.90	102.3	Pulse	0.10	3
1	Tb		4,303,179.21	0.72	100.2	Analog	0.10	3
1	Ho		396,443.77	4.33	103.5	Pulse	0.10	3
1	Bi		2,354,321.48	3.73	102.8	Pulse	0.10	3
2	Sc		116,074.28	0.51	100.0	Pulse	0.30	3
2	Ge		86,530.70	1.56	100.8	Pulse	0.30	3
2	Rh		1,470,075.18	0.70	100.0	Pulse	0.30	3
2	In		494,062.19	1.27	99.6	Pulse	0.30	3
2	Tb		1,628,261.43	0.60	101.6	Pulse	0.30	3
2	Ho		156,702.30	0.36	99.7	Pulse	0.30	3
2	Bi		998,844.47	1.15	101.0	Pulse	0.30	3
3	Sc		85,086.88	0.57	98.1	Pulse	0.30	3
3	Ge		40,136.62	1.68	99.6	Pulse	0.30	3
3	Rh		288,949.32	0.50	99.2	Pulse	0.30	3
3	Tb		371,358.81	0.36	98.2	Pulse	0.30	3

Quantitation Report

File Name	009CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:03
Sample Name	STDF
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	100.298	ug/l	0.98	653,836.50	4.089E-01	Pulse	0.25	3
B			1	96.429	ug/l	2.64	656,994.82	4.108E-01	Pulse	0.15	3
Ca			1	156.058	ug/l	2.53	154,659.62	5.426E-02	Pulse	0.10	3
Sr			1	100.885	ug/l	4.42	4,257,583.17	1.253E+00	Analog	0.10	3
Mo			1	99.798	ug/l	1.29	817,666.81	2.404E-01	Pulse	0.10	3
Ag			1	99.831	ug/l	1.20	1,986,422.99	6.236E-01	Pulse	0.10	3
Sn			1	99.879	ug/l	0.98	1,160,761.42	3.645E-01	Pulse	0.10	3
Sb			1	100.407	ug/l	3.98	1,226,690.61	2.874E-01	Pulse	0.10	3
Ba			1	100.195	ug/l	3.84	515,773.06	1.208E-01	Pulse	0.10	3
Tl			1	99.771	ug/l	0.15	3,061,758.08	1.275E+00	Pulse	0.10	3
Pb			1	99.849	ug/l	0.43	1,066,597.61	4.442E-01	Pulse	0.10	3
Pb			1	99.688	ug/l	0.31	922,002.02	3.840E-01	Pulse	0.10	3
Pb			1	99.739	ug/l	0.32	4,248,528.30	1.770E+00	Pulse	0.10	3
Na			2	100.590	ug/l	2.74	118,649.08	1.014E+00	Pulse	0.30	3
Mg			2	102.738	ug/l	0.97	46,628.00	3.983E-01	Pulse	0.30	3
Al			2	98.154	ug/l	2.47	16,864.72	1.441E-01	Pulse	0.30	3
K			2	100.513	ug/l	1.70	37,494.73	3.203E-01	Pulse	0.30	3
Ca			2	766.115	ug/l	2.60	13,944.94	1.191E-01	Pulse	0.30	3
Ti			2	99.899	ug/l	0.69	13,408.80	1.145E-01	Pulse	0.30	3
V			2	99.966	ug/l	1.26	425,726.80	3.636E+00	Pulse	0.30	3
Cr			2	100.414	ug/l	1.48	550,361.86	4.701E+00	Pulse	0.30	3
Mn			2	99.659	ug/l	1.39	310,593.44	2.653E+00	Pulse	0.30	3
Fe			2	99.994	ug/l	1.84	461,914.77	3.945E+00	Pulse	0.30	3
Co			2	99.937	ug/l	1.26	883,625.77	7.547E+00	Pulse	0.30	3
Ni			2	100.229	ug/l	0.73	236,340.45	2.019E+00	Pulse	0.30	3
Cu			2	99.677	ug/l	0.64	626,909.14	5.354E+00	Pulse	0.30	3
Zn			2	99.559	ug/l	1.92	100,135.38	8.553E-01	Pulse	0.30	3
As			2	99.518	ug/l	1.94	46,572.01	3.978E-01	Pulse	1.00	3
Cd			2	100.091	ug/l	1.18	127,109.14	2.536E-01	Pulse	0.30	3
Sn			2	99.745	ug/l	0.84	228,964.32	4.568E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	100.576	ug/l	7.96	5,321.07	1.335E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,598,834.54	2.48	102.8	Pulse	0.10	3
1	Sc		2,851,156.52	2.98	101.4	Pulse	0.10	3
1	Ge		705,378.06	3.39	103.6	Pulse	0.10	3
1	Rh		3,402,116.09	5.05	102.8	Pulse	0.10	3
1	In		3,184,600.44	4.17	105.0	Pulse	0.10	3
1	Tb		4,268,130.98	0.61	99.3	Analog	0.10	3
1	Ho		400,750.27	5.07	104.7	Pulse	0.10	3
1	Bi		2,400,798.09	5.38	104.8	Pulse	0.10	3
2	Sc		117,088.42	1.34	100.9	Pulse	0.30	3
2	Ge		87,097.31	0.75	101.5	Pulse	0.30	3
2	Rh		1,475,685.74	0.42	100.4	Pulse	0.30	3
2	In		501,201.96	0.84	101.0	Pulse	0.30	3
2	Tb		1,632,428.47	0.71	101.8	Pulse	0.30	3
2	Ho		158,084.43	1.34	100.6	Pulse	0.30	3
2	Bi		1,007,559.06	0.26	101.9	Pulse	0.30	3
3	Sc		84,804.34	0.76	97.7	Pulse	0.30	3
3	Ge		39,918.14	2.42	99.0	Pulse	0.30	3
3	Rh		289,778.46	1.42	99.5	Pulse	0.30	3
3	Tb		376,134.52	1.25	99.4	Pulse	0.30	3

Quantitation Report

File Name	010CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:08
Sample Name	STDG
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	29980.89	50.67	3.203E-05	Pulse	0.25	3
B			1	203.035	ug/l	0.90	1,357,372.41	8.560E-01	Pulse	0.15	3
Ca			1	510.084	ug/l	0.99	458,208.68	1.647E-01	Pulse	0.10	3
Sr			1	0.028	ug/l	12.53	1,913.54	5.898E-04	Pulse	0.10	3
Mo			1	0.057	ug/l	3.81	926.74	2.859E-04	Pulse	0.10	3
Ag			1	0.000	ug/l	5108.02	256.68	8.441E-05	Pulse	0.10	3
Sn			1	0.236	ug/l	6.98	4,464.26	1.472E-03	Pulse	0.10	3
Sb			1	0.817	ug/l	4.13	8,506.37	2.013E-03	Pulse	0.10	3
Ba			1	0.192	ug/l	2.58	143.34	3.393E-05	Pulse	0.10	3
Tl			1	0.020	ug/l	9.43	1,266.78	5.629E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	48.88	376.69	1.667E-04	Pulse	0.10	3
Pb			1	0.016	ug/l	70.48	360.02	1.608E-04	Pulse	0.10	3
Pb			1	0.010	ug/l	18.01	1,480.10	6.574E-04	Pulse	0.10	3
Na			2	497.096	ug/l	0.69	492,138.00	4.243E+00	Pulse	0.30	3
Mg			2	512.565	ug/l	1.40	229,387.61	1.978E+00	Pulse	0.30	3
Al			2	496.739	ug/l	1.04	83,630.69	7.211E-01	Pulse	0.30	3
K			2	500.130	ug/l	0.97	163,781.78	1.412E+00	Pulse	0.30	3
Ca			2	520.421	ug/l	3.38	9,414.42	8.117E-02	Pulse	0.30	3
Ti			2	0.091	ug/l	31.55	15.55	1.341E-04	Pulse	0.30	3
V			2	0.001	ug/l	847.37	265.56	2.290E-03	Pulse	0.30	3
Cr			2	0.025	ug/l	36.95	724.47	6.247E-03	Pulse	0.30	3
Mn			2	0.051	ug/l	7.83	208.89	1.801E-03	Pulse	0.30	3
Fe			2	495.884	ug/l	1.00	2,243,379.98	1.934E+01	Pulse	0.30	3
Co			2	0.025	ug/l	17.67	287.28	2.477E-03	Pulse	0.30	3
Ni			2	0.041	ug/l	41.94	211.12	1.820E-03	Pulse	0.30	3
Cu			2	0.365	ug/l	12.16	3,379.35	2.913E-02	Pulse	0.30	3
Zn			2	3.669	ug/l	8.79	4,011.75	3.459E-02	Pulse	0.30	3
As			2	0.006	ug/l	230.14	18.33	1.580E-04	Pulse	1.00	3
Cd			2	0.059	ug/l	17.39	28.57	5.856E-05	Pulse	0.30	3
Sn			2	0.298	ug/l	2.94	920.05	1.883E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	195.516	ug/l	5.77	10,353.32	2.586E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,585,598.41	2.07	101.9	Pulse	0.10	3
1	Sc		2,782,591.83	2.27	99.0	Pulse	0.10	3
1	Ge		683,978.11	3.58	100.4	Pulse	0.10	3
1	Rh		3,240,339.95	3.74	97.9	Pulse	0.10	3
1	In		3,031,621.25	3.10	99.9	Pulse	0.10	3
1	Tb		4,225,186.81	0.53	98.3	Analog	0.10	3
1	Ho		377,041.79	3.98	98.5	Pulse	0.10	3
1	Bi		2,252,532.47	3.56	98.4	Pulse	0.10	3
2	Sc		115,982.52	0.23	99.9	Pulse	0.30	3
2	Ge		86,282.23	1.39	100.5	Pulse	0.30	3
2	Rh		1,443,472.06	0.61	98.2	Pulse	0.30	3
2	In		488,562.97	0.81	98.5	Pulse	0.30	3
2	Tb		1,594,142.33	0.90	99.4	Pulse	0.30	3
2	Ho		154,132.15	0.82	98.1	Pulse	0.30	3
2	Bi		969,905.10	1.16	98.1	Pulse	0.30	3
3	Sc		83,827.34	0.29	96.6	Pulse	0.30	3
3	Ge		40,013.94	1.17	99.3	Pulse	0.30	3
3	Rh		285,006.39	0.42	97.8	Pulse	0.30	3
3	Tb		365,758.01	0.74	96.7	Pulse	0.30	3

Quantitation Report

File Name	011CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:13
Sample Name	STDH
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-34.80	14.67	9.352E-06	Pulse	0.25	3
B			1	2.041	ug/l	6.14	26,015.43	1.659E-02	Pulse	0.15	3
Ca			1	996.276	ug/l	0.48	872,171.21	3.162E-01	Pulse	0.10	3
Sr			1	0.027	ug/l	13.49	1,860.20	5.793E-04	Pulse	0.10	3
Mo			1	-0.018	ug/l	-46.60	336.69	1.050E-04	Pulse	0.10	3
Ag			1	-0.008	ug/l	-3.75	93.33	3.149E-05	Pulse	0.10	3
Sn			1	0.012	ug/l	194.28	1,950.22	6.565E-04	Pulse	0.10	3
Sb			1	0.382	ug/l	3.74	3,223.85	7.657E-04	Pulse	0.10	3
Ba			1	0.194	ug/l	3.16	153.34	3.645E-05	Pulse	0.10	3
Tl			1	-0.002	ug/l	-137.27	630.05	2.822E-04	Pulse	0.10	3
Pb			1	0.002	ug/l	315.60	286.68	1.288E-04	Pulse	0.10	3
Pb			1	0.012	ug/l	75.66	320.02	1.432E-04	Pulse	0.10	3
Pb			1	0.003	ug/l	65.65	1,186.74	5.325E-04	Pulse	0.10	3
Na			2	1006.486	ug/l	1.07	958,293.26	8.392E+00	Pulse	0.30	3
Mg			2	1031.487	ug/l	0.49	454,232.47	3.978E+00	Pulse	0.30	3
Al			2	999.720	ug/l	0.36	165,493.32	1.449E+00	Pulse	0.30	3
K			2	1003.743	ug/l	1.28	318,363.48	2.788E+00	Pulse	0.30	3
Ca			2	1010.972	ug/l	1.92	17,923.89	1.570E-01	Pulse	0.30	3
Ti			2	0.000	ug/l	-174.64	3.33	2.917E-05	Pulse	0.30	3
V			2	0.006	ug/l	125.09	282.23	2.473E-03	Pulse	0.30	3
Cr			2	0.023	ug/l	52.33	703.36	6.160E-03	Pulse	0.30	3
Mn			2	0.041	ug/l	8.45	174.45	1.527E-03	Pulse	0.30	3
Fe			2	1033.827	ug/l	1.90	4,599,064.82	4.026E+01	Analog	0.30	3
Co			2	0.043	ug/l	2.33	435.37	3.813E-03	Pulse	0.30	3
Ni			2	0.049	ug/l	27.36	226.67	1.982E-03	Pulse	0.30	3
Cu			2	0.209	ug/l	8.96	2,372.46	2.077E-02	Pulse	0.30	3
Zn			2	0.756	ug/l	6.97	1,102.28	9.657E-03	Pulse	0.30	3
As			2	-0.006	ug/l	-91.62	12.33	1.082E-04	Pulse	1.00	3
Cd			2	0.051	ug/l	13.15	18.77	3.865E-05	Pulse	0.30	3
Sn			2	0.087	ug/l	13.70	445.57	9.185E-04	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	399.583	ug/l	5.84	21,012.24	5.277E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,569,063.79	2.32	100.8	Pulse	0.10	3
1	Sc		2,757,938.09	2.32	98.1	Pulse	0.10	3
1	Ge		676,057.22	3.58	99.3	Pulse	0.10	3
1	Rh		3,217,318.60	3.79	97.2	Pulse	0.10	3
1	In		2,964,931.00	3.15	97.7	Pulse	0.10	3
1	Tb		4,210,543.90	1.10	98.0	Analog	0.10	3
1	Ho		378,788.18	2.90	98.9	Pulse	0.10	3
1	Bi		2,224,793.35	3.70	97.1	Pulse	0.10	3
2	Sc		114,200.50	1.79	98.4	Pulse	0.30	3
2	Ge		85,320.80	2.04	99.4	Pulse	0.30	3
2	Rh		1,412,651.02	0.86	96.1	Pulse	0.30	3
2	In		485,009.71	0.42	97.8	Pulse	0.30	3
2	Tb		1,575,616.60	0.72	98.3	Pulse	0.30	3
2	Ho		153,718.45	1.36	97.8	Pulse	0.30	3
2	Bi		964,882.29	1.59	97.6	Pulse	0.30	3
3	Sc		84,185.67	0.91	97.0	Pulse	0.30	3
3	Ge		39,835.80	1.17	98.8	Pulse	0.30	3
3	Rh		282,497.06	0.69	97.0	Pulse	0.30	3
3	Tb		366,553.07	0.89	96.9	Pulse	0.30	3

Quantitation Report

File Name	012CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:17
Sample Name	STDI
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-5.33	6.67	4.222E-06	Pulse	0.25	3
B			1	0.290	ug/l	16.95	14,663.52	9.277E-03	Pulse	0.15	3
Ca			1	5078.220	ug/l	4.35	4,387,793.58	1.589E+00	Mix	0.10	3
Sr			1	0.051	ug/l	13.81	2,740.38	8.809E-04	Pulse	0.10	3
Mo			1	-0.036	ug/l	-27.41	193.34	6.173E-05	Pulse	0.10	3
Ag			1	-0.009	ug/l	-2.76	83.33	2.843E-05	Pulse	0.10	3
Sn			1	-0.009	ug/l	-160.15	1,696.84	5.787E-04	Pulse	0.10	3
Sb			1	0.291	ug/l	3.97	2,096.92	5.072E-04	Pulse	0.10	3
Ba			1	0.175	ug/l	1.78	53.33	1.291E-05	Pulse	0.10	3
Tl			1	-0.012	ug/l	-15.58	353.35	1.635E-04	Pulse	0.10	3
Pb			1	-0.002	ug/l	-429.61	246.68	1.133E-04	Pulse	0.10	3
Pb			1	0.002	ug/l	109.17	230.01	1.065E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	907.24	1,036.73	4.773E-04	Pulse	0.10	3
Na			2	5126.485	ug/l	0.23	4,797,446.06	4.195E+01	Analog	0.30	3
Mg			2	5103.312	ug/l	0.76	2,249,478.59	1.967E+01	Pulse	0.30	3
Al			2	5014.181	ug/l	1.24	830,283.65	7.261E+00	Pulse	0.30	3
K			2	5000.853	ug/l	0.55	1,567,772.75	1.371E+01	Pulse	0.30	3
Ca			2	5099.890	ug/l	0.98	90,188.31	7.887E-01	Pulse	0.30	3
Ti			2	0.017	ug/l	88.66	5.56	4.863E-05	Pulse	0.30	3
V			2	0.000	ug/l	684.58	260.01	2.274E-03	Pulse	0.30	3
Cr			2	0.030	ug/l	21.62	742.26	6.492E-03	Pulse	0.30	3
Mn			2	0.094	ug/l	15.95	335.56	2.933E-03	Pulse	0.30	3
Fe			2	5112.662	ug/l	2.46	22,744,225.21	1.989E+02	Analog	0.30	3
Co			2	0.265	ug/l	20.07	2,358.90	2.062E-02	Pulse	0.30	3
Ni			2	0.233	ug/l	11.69	650.02	5.685E-03	Pulse	0.30	3
Cu			2	0.233	ug/l	0.97	2,519.15	2.203E-02	Pulse	0.30	3
Zn			2	0.825	ug/l	12.96	1,171.18	1.024E-02	Pulse	0.30	3
As			2	0.017	ug/l	78.79	23.00	2.012E-04	Pulse	1.00	3
Cd			2	0.047	ug/l	10.16	13.27	2.730E-05	Pulse	0.30	3
Sn			2	0.044	ug/l	16.38	351.12	7.207E-04	Pulse	0.30	3
Se			3	0.068	ug/l	130.67	36.67	9.531E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,581,140.95	2.01	101.6	Pulse	0.10	3
1	Sc		2,760,277.87	3.32	98.2	Pulse	0.10	3
1	Ge		657,403.82	3.40	96.5	Pulse	0.10	3

Quantitation Report

1	Rh		3,105,361.20	3.44	93.8	Pulse	0.10	3
1	In		2,931,441.86	4.14	96.6	Pulse	0.10	3
1	Tb		4,135,290.46	0.53	96.2	Analog	0.10	3
1	Ho		372,324.37	3.19	97.2	Pulse	0.10	3
1	Bi		2,166,756.12	4.92	94.6	Pulse	0.10	3
2	Sc		114,357.89	0.51	98.5	Pulse	0.30	3
2	Ge		85,396.86	0.94	99.5	Pulse	0.30	3
2	Rh		1,399,645.95	0.40	95.2	Pulse	0.30	3
2	In		487,169.43	0.76	98.2	Pulse	0.30	3
2	Tb		1,585,567.09	0.30	98.9	Pulse	0.30	3
2	Ho		153,867.58	0.49	97.9	Pulse	0.30	3
2	Bi		950,383.19	0.61	96.1	Pulse	0.30	3
3	Sc		82,608.72	0.72	95.2	Pulse	0.30	3
3	Ge		38,507.45	1.17	95.5	Pulse	0.30	3
3	Rh		272,554.73	0.62	93.5	Pulse	0.30	3
3	Tb		361,848.00	0.74	95.7	Pulse	0.30	3

Quantitation Report

File Name	013CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:22
Sample Name	STDJ
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-49.29	25.33	1.624E-05	Pulse	0.25	3
B			1	-0.124	ug/l	-32.16	11,780.77	7.547E-03	Pulse	0.15	3
Ca			1	10793.427	ug/l	3.42	9,157,533.40	3.371E+00	Analog	0.10	3
Sr			1	0.096	ug/l	6.94	4,347.55	1.432E-03	Pulse	0.10	3
Mo			1	-0.018	ug/l	-63.86	320.02	1.049E-04	Pulse	0.10	3
Ag			1	-0.008	ug/l	-16.47	103.34	3.631E-05	Pulse	0.10	3
Sn			1	-0.005	ug/l	-129.45	1,686.86	5.919E-04	Pulse	0.10	3
Sb			1	0.295	ug/l	3.35	2,146.93	5.187E-04	Pulse	0.10	3
Ba			1	0.207	ug/l	5.66	216.68	5.226E-05	Pulse	0.10	3
Tl			1	-0.014	ug/l	-21.00	290.02	1.388E-04	Pulse	0.10	3
Pb			1	0.023	ug/l	17.15	460.03	2.202E-04	Pulse	0.10	3
Pb			1	0.032	ug/l	17.47	463.36	2.222E-04	Pulse	0.10	3
Pb			1	0.025	ug/l	10.64	1,896.80	9.093E-04	Pulse	0.10	3
Na			2	9872.677	ug/l	4.81	9,587,077.12	8.061E+01	Analog	0.30	3
Mg			2	9944.354	ug/l	5.50	4,558,486.35	3.833E+01	Mix	0.30	3
Al			2	9716.902	ug/l	2.77	1,673,805.66	1.407E+01	Pulse	0.30	3
K			2	9700.174	ug/l	3.15	3,158,525.22	2.655E+01	Pulse	0.30	3
Ca			2	9946.912	ug/l	2.95	182,917.35	1.537E+00	Pulse	0.30	3
Ti			2	-0.001	ug/l	-1909.66	3.33	2.797E-05	Pulse	0.30	3
V			2	0.025	ug/l	9.27	377.79	3.175E-03	Pulse	0.30	3
Cr			2	0.187	ug/l	3.34	1,647.90	1.384E-02	Pulse	0.30	3
Mn			2	0.233	ug/l	3.46	790.03	6.638E-03	Pulse	0.30	3
Fe			2	9861.046	ug/l	3.54	45,636,604.85	3.836E+02	Analog	0.30	3
Co			2	0.536	ug/l	3.28	4,879.97	4.102E-02	Pulse	0.30	3
Ni			2	0.379	ug/l	0.88	1,027.83	8.635E-03	Pulse	0.30	3
Cu			2	0.158	ug/l	20.23	2,144.64	1.803E-02	Pulse	0.30	3
Zn			2	0.968	ug/l	8.08	1,365.64	1.147E-02	Pulse	0.30	3
As			2	0.043	ug/l	55.57	36.67	3.062E-04	Pulse	1.00	3
Cd			2	0.052	ug/l	0.21	19.90	4.097E-05	Pulse	0.30	3
Sn			2	0.067	ug/l	8.81	401.12	8.258E-04	Pulse	0.30	3
Se			3	-0.069	ug/l	-208.97	29.33	7.713E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,560,761.68	1.79	100.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,718,535.27	3.19	96.7	Pulse	0.10	3
1	Ge		645,308.04	3.85	94.8	Pulse	0.10	3
1	Rh		3,033,630.89	3.82	91.7	Pulse	0.10	3
1	In		2,852,238.16	3.28	94.0	Pulse	0.10	3
1	Tb		4,137,319.63	1.40	96.3	Analog	0.10	3
1	Ho		366,722.64	3.53	95.8	Pulse	0.10	3
1	Bi		2,085,038.82	3.89	91.0	Pulse	0.10	3
2	Sc		119,042.89	2.99	102.6	Pulse	0.30	3
2	Ge		85,420.21	0.70	99.5	Pulse	0.30	3
2	Rh		1,399,829.70	1.02	95.2	Pulse	0.30	3
2	In		485,743.83	0.62	97.9	Pulse	0.30	3
2	Tb		1,598,307.19	0.79	99.7	Pulse	0.30	3
2	Ho		155,198.49	0.85	98.7	Pulse	0.30	3
2	Bi		933,592.56	1.18	94.4	Pulse	0.30	3
3	Sc		82,973.13	0.67	95.6	Pulse	0.30	3
3	Ge		38,087.39	0.90	94.5	Pulse	0.30	3
3	Rh		275,307.58	0.65	94.5	Pulse	0.30	3
3	Tb		365,794.67	0.85	96.7	Pulse	0.30	3

Quantitation Report

File Name	014CALS.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:27
Sample Name	STDE
Sample Type	CalStd
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	49.457	ug/l	1.41	320,517.37	2.016E-01	Pulse	0.25	3
B			1	47.490	ug/l	0.83	328,044.55	2.064E-01	Pulse	0.15	3
Ca			1	90.971	ug/l	1.01	95,702.34	3.397E-02	Pulse	0.10	3
Sr			1	49.621	ug/l	1.33	2,031,216.48	6.166E-01	Pulse	0.10	3
Mo			1	50.291	ug/l	0.84	399,423.34	1.212E-01	Pulse	0.10	3
Ag			1	50.214	ug/l	1.04	968,225.61	3.137E-01	Pulse	0.10	3
Sn			1	50.439	ug/l	0.57	569,102.54	1.844E-01	Pulse	0.10	3
Sb			1	49.240	ug/l	4.85	595,077.72	1.408E-01	Pulse	0.10	3
Ba			1	49.666	ug/l	4.70	252,783.28	5.979E-02	Pulse	0.10	3
Tl			1	50.474	ug/l	0.30	1,486,574.77	6.453E-01	Pulse	0.10	3
Pb			1	50.172	ug/l	0.81	514,398.74	2.233E-01	Pulse	0.10	3
Pb			1	50.591	ug/l	0.56	449,007.66	1.949E-01	Pulse	0.10	3
Pb			1	50.473	ug/l	0.40	2,063,615.58	8.958E-01	Pulse	0.10	3
Na			2	51.610	ug/l	2.82	70,969.16	6.146E-01	Pulse	0.30	3
Mg			2	53.104	ug/l	1.36	23,905.95	2.070E-01	Pulse	0.30	3
Al			2	52.382	ug/l	1.87	8,984.07	7.780E-02	Pulse	0.30	3
K			2	52.250	ug/l	0.14	21,758.13	1.884E-01	Pulse	0.30	3
Ca			2	401.652	ug/l	1.42	7,255.33	6.282E-02	Pulse	0.30	3
Ti			2	49.933	ug/l	2.09	6,611.65	5.725E-02	Pulse	0.30	3
V			2	50.242	ug/l	0.81	211,201.95	1.829E+00	Pulse	0.30	3
Cr			2	50.580	ug/l	1.13	273,742.82	2.370E+00	Pulse	0.30	3
Mn			2	50.471	ug/l	0.89	155,185.86	1.344E+00	Pulse	0.30	3
Fe			2	53.385	ug/l	1.80	246,301.11	2.133E+00	Pulse	0.30	3
Co			2	50.111	ug/l	0.54	437,121.62	3.785E+00	Pulse	0.30	3
Ni			2	50.310	ug/l	0.54	117,083.95	1.014E+00	Pulse	0.30	3
Cu			2	50.137	ug/l	1.41	311,582.77	2.698E+00	Pulse	0.30	3
Zn			2	50.651	ug/l	0.32	50,436.77	4.367E-01	Pulse	0.30	3
As			2	50.560	ug/l	1.34	23,349.49	2.022E-01	Pulse	1.00	3
Cd			2	49.729	ug/l	0.74	62,561.33	1.260E-01	Pulse	0.30	3
Sn			2	50.539	ug/l	1.45	115,106.52	2.317E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	51.203	ug/l	8.56	2,698.29	6.837E-02	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,589,459.54	1.98	102.2	Pulse	0.10	3
1	Sc		2,816,947.35	2.04	100.2	Pulse	0.10	3
1	Ge		687,806.37	3.42	101.0	Pulse	0.10	3
1	Rh		3,295,222.87	4.22	99.6	Pulse	0.10	3
1	In		3,086,610.32	4.08	101.7	Pulse	0.10	3
1	Tb		4,227,377.23	0.32	98.4	Analog	0.10	3
1	Ho		388,660.54	3.70	101.5	Pulse	0.10	3
1	Bi		2,303,461.63	3.80	100.6	Pulse	0.10	3
2	Sc		115,496.64	1.29	99.5	Pulse	0.30	3
2	Ge		86,444.28	0.53	100.7	Pulse	0.30	3
2	Rh		1,460,497.30	0.42	99.4	Pulse	0.30	3
2	In		496,719.55	0.79	100.1	Pulse	0.30	3
2	Tb		1,609,333.65	0.63	100.4	Pulse	0.30	3
2	Ho		156,026.65	0.22	99.3	Pulse	0.30	3
2	Bi		985,421.18	0.38	99.7	Pulse	0.30	3
3	Sc		82,281.37	0.66	94.8	Pulse	0.30	3
3	Ge		39,439.04	1.87	97.9	Pulse	0.30	3
3	Rh		284,518.23	0.67	97.7	Pulse	0.30	3
3	Tb		364,143.91	0.37	96.3	Pulse	0.30	3

Quantitation Report

File Name	015SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:32
Sample Name	STDA
Sample Type	CalBlk
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	---	50.67	3.200E-05	Pulse	0.25	3
B			1	0.000	ug/l	---	12,766.05	8.065E-03	Pulse	0.15	3
Ca			1	0.047	ug/l	1164.66	15,545.92	5.620E-03	Pulse	0.10	3
Sr			1	0.001	ug/l	309.96	836.73	2.606E-04	Pulse	0.10	3
Mo			1	0.000	ug/l	---	480.03	1.488E-04	Pulse	0.10	3
Ag			1	0.000	ug/l	---	250.01	8.413E-05	Pulse	0.10	3
Sn			1	0.004	ug/l	189.05	1,866.89	6.262E-04	Pulse	0.10	3
Sb			1	0.533	ug/l	6.55	5,091.18	1.198E-03	Pulse	0.10	3
Ba			1	0.191	ug/l	7.42	136.67	3.219E-05	Pulse	0.10	3
Tl			1	0.000	ug/l	---	703.39	3.125E-04	Pulse	0.10	3
Pb			1	0.002	ug/l	503.98	286.68	1.285E-04	Pulse	0.10	3
Pb			1	0.002	ug/l	223.24	233.34	1.034E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	---	1,060.06	4.721E-04	Pulse	0.10	3
Na			2	-0.509	ug/l	-91.65	21,470.87	1.900E-01	Pulse	0.30	3
Mg			2	0.000	ug/l	---	260.01	2.303E-03	Pulse	0.30	3
Al			2	-0.151	ug/l	-165.01	197.78	1.751E-03	Pulse	0.30	3
K			2	-0.003	ug/l	-4753.82	5,154.34	4.562E-02	Pulse	0.30	3
Ca			2	0.000	ug/l	---	86.67	7.668E-04	Pulse	0.30	3
Ti			2	0.000	ug/l	---	3.33	2.946E-05	Pulse	0.30	3
V			2	0.017	ug/l	87.46	323.34	2.865E-03	Pulse	0.30	3
Cr			2	0.016	ug/l	53.37	656.69	5.813E-03	Pulse	0.30	3
Mn			2	0.001	ug/l	346.55	52.22	4.626E-04	Pulse	0.30	3
Fe			2	-0.081	ug/l	-47.81	6,021.44	5.330E-02	Pulse	0.30	3
Co			2	0.000	ug/l	---	64.42	5.707E-04	Pulse	0.30	3
Ni			2	0.001	ug/l	1511.39	114.45	1.012E-03	Pulse	0.30	3
Cu			2	-0.014	ug/l	-44.49	991.16	8.774E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	0.000	ug/l	---	360.01	3.184E-03	Pulse	0.30	3
As			2	0.000	ug/l	---	15.00	1.332E-04	Pulse	1.00	3
Cd			2	0.048	ug/l	18.53	14.26	2.950E-05	Pulse	0.30	3
Sn			2	0.076	ug/l	9.71	420.01	8.673E-04	Pulse	0.30	3
Se			3	-0.033	ug/l	-720.40	32.00	8.195E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,583,176.21	1.58	100.0	Pulse	0.10	3
1	Sc		2,764,915.59	2.66	100.0	Pulse	0.10	3
1	Ge		666,425.78	3.35	100.0	Pulse	0.10	3
1	Rh		3,220,751.10	4.07	100.0	Pulse	0.10	3
1	In		2,985,565.26	4.87	100.0	Pulse	0.10	3
1	Tb		4,247,929.83	0.34	100.0	Analog	0.10	3
1	Ho		375,898.72	3.81	100.0	Pulse	0.10	3
1	Bi		2,249,875.91	4.04	100.0	Pulse	0.10	3
2	Sc		112,995.48	1.08	100.0	Pulse	0.30	3
2	Ge		85,046.72	0.84	100.0	Pulse	0.30	3
2	Rh		1,431,814.15	1.10	100.0	Pulse	0.30	3
2	In		484,491.33	1.64	100.0	Pulse	0.30	3
2	Tb		1,560,290.53	1.08	100.0	Pulse	0.30	3
2	Ho		153,653.97	0.66	100.0	Pulse	0.30	3
2	Bi		972,625.55	1.14	100.0	Pulse	0.30	3
3	Sc		82,603.56	1.22	100.0	Pulse	0.30	3
3	Ge		38,909.70	1.49	100.0	Pulse	0.30	3
3	Rh		284,716.71	0.67	100.0	Pulse	0.30	3
3	Tb		367,837.68	0.57	100.0	Pulse	0.30	3

Quantitation Report

File Name	016_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:36
Sample Name	ICVA 5
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	58.078	ug/l	1.00	378,760.61	2.368E-01	Pulse	0.25	3
B			1	119.877	ug/l	1.41	813,762.59	5.087E-01	Pulse	0.15	3
Ca			1	5863.589	ug/l	3.34	5,128,977.22	1.834E+00	Analog	0.10	3
Sr			1	58.881	ug/l	0.52	2,357,193.72	7.316E-01	Pulse	0.10	3
Mo			1	60.936	ug/l	0.69	473,227.49	1.469E-01	Pulse	0.10	3
Ag			1	59.123	ug/l	0.94	1,114,495.74	3.693E-01	Pulse	0.10	3
Sn			1	60.776	ug/l	1.01	670,310.07	2.220E-01	Pulse	0.10	3
Sb			1	63.206	ug/l	5.67	761,489.31	1.808E-01	Pulse	0.10	3
Ba			1	58.802	ug/l	4.45	298,355.41	7.083E-02	Pulse	0.10	3
Tl			1	62.593	ug/l	1.16	1,777,222.21	8.002E-01	Pulse	0.10	3
Pb			1	60.586	ug/l	1.67	598,695.83	2.696E-01	Pulse	0.10	3
Pb			1	57.816	ug/l	1.16	494,755.11	2.228E-01	Pulse	0.10	3
Pb			1	59.155	ug/l	0.98	2,331,826.13	1.050E+00	Pulse	0.10	3
Na			2	5542.430	ug/l	2.32	5,274,105.90	4.534E+01	Analog	0.30	3
Mg			2	5497.836	ug/l	0.72	2,464,929.55	2.119E+01	Pulse	0.30	3
Al			2	5513.639	ug/l	0.54	928,611.70	7.984E+00	Pulse	0.30	3
K			2	5480.399	ug/l	0.44	1,747,009.20	1.502E+01	Pulse	0.30	3
Ca			2	5972.663	ug/l	0.52	107,418.16	9.235E-01	Pulse	0.30	3
Ti			2	57.616	ug/l	1.62	7,684.42	6.606E-02	Pulse	0.30	3
V			2	60.259	ug/l	0.19	255,047.43	2.193E+00	Pulse	0.30	3
Cr			2	59.116	ug/l	0.42	322,135.47	2.770E+00	Pulse	0.30	3
Mn			2	58.339	ug/l	0.23	180,653.28	1.553E+00	Pulse	0.30	3
Fe			2	5556.816	ug/l	2.05	25,146,631.22	2.162E+02	Analog	0.30	3
Co			2	58.101	ug/l	1.10	510,396.99	4.388E+00	Pulse	0.30	3
Ni			2	57.815	ug/l	1.46	135,479.39	1.165E+00	Pulse	0.30	3
Cu			2	56.571	ug/l	0.68	353,934.91	3.043E+00	Pulse	0.30	3
Zn			2	56.413	ug/l	0.60	56,533.52	4.860E-01	Pulse	0.30	3
As			2	61.807	ug/l	0.46	28,743.02	2.471E-01	Pulse	1.00	3
Cd			2	58.111	ug/l	0.73	72,484.06	1.472E-01	Pulse	0.30	3
Sn			2	60.735	ug/l	0.56	137,070.09	2.784E-01	Pulse	0.30	3
Se			3	270.383	ug/l	2.89	13,873.12	3.574E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,599,699.80	2.31	101.0	Pulse	0.10	3
1	Sc		2,798,938.19	3.55	101.2	Pulse	0.10	3
1	Ge		682,471.86	4.58	102.4	Pulse	0.10	3

Quantitation Report

1	Rh		3,222,551.93	4.47	100.1	Pulse	0.10	3
1	In		3,018,235.15	5.36	101.1	Pulse	0.10	3
1	Tb		4,212,394.10	0.60	99.2	Analog	0.10	3
1	Ho		388,167.44	4.16	103.3	Pulse	0.10	3
1	Bi		2,221,881.01	5.74	98.8	Pulse	0.10	3
2	Sc		116,315.49	0.87	102.9	Pulse	0.30	3
2	Ge		86,615.46	0.61	101.8	Pulse	0.30	3
2	Rh		1,420,664.32	0.30	99.2	Pulse	0.30	3
2	In		492,416.82	1.33	101.6	Pulse	0.30	3
2	Tb		1,622,298.16	0.19	104.0	Pulse	0.30	3
2	Ho		157,517.90	0.12	102.5	Pulse	0.30	3
2	Bi		967,209.79	0.29	99.4	Pulse	0.30	3
3	Sc		83,188.77	1.07	100.7	Pulse	0.30	3
3	Ge		38,812.81	1.16	99.8	Pulse	0.30	3
3	Rh		275,071.03	0.46	96.6	Pulse	0.30	3
3	Tb		365,317.91	0.42	99.3	Pulse	0.30	3

Quantitation Report

File Name	017_ICV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:41
Sample Name	ICV
Sample Type	ICV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-18.84	25.33	1.613E-05	Pulse	0.25	3
B			1	0.880	ug/l	6.42	18,439.15	1.174E-02	Pulse	0.15	3
Ca			1	2.751	ug/l	64.52	17,715.28	6.464E-03	Pulse	0.10	3
Sr			1	0.003	ug/l	22.29	900.07	2.808E-04	Pulse	0.10	3
Mo			1	0.016	ug/l	60.81	603.37	1.878E-04	Pulse	0.10	3
Ag			1	0.020	ug/l	19.06	616.71	2.062E-04	Pulse	0.10	3
Sn			1	0.065	ug/l	11.08	2,537.02	8.487E-04	Pulse	0.10	3
Sb			1	0.236	ug/l	1.33	1,456.81	3.478E-04	Pulse	0.10	3
Ba			1	0.193	ug/l	5.26	146.67	3.508E-05	Pulse	0.10	3
Tl			1	0.011	ug/l	11.61	1,020.08	4.582E-04	Pulse	0.10	3
Pb			1	0.008	ug/l	116.24	350.02	1.560E-04	Pulse	0.10	3
Pb			1	0.009	ug/l	54.19	293.35	1.322E-04	Pulse	0.10	3
Pb			1	0.007	ug/l	7.93	1,310.08	5.880E-04	Pulse	0.10	3
Na			2	1.893	ug/l	27.47	23,337.22	2.096E-01	Pulse	0.30	3
Mg			2	0.253	ug/l	78.33	364.45	3.277E-03	Pulse	0.30	3
Al			2	64.858	ug/l	3.63	10,671.94	9.586E-02	Pulse	0.30	3
K			2	0.259	ug/l	274.95	5,157.69	4.633E-02	Pulse	0.30	3
Ca			2	3.706	ug/l	56.88	148.89	1.339E-03	Pulse	0.30	3
Ti			2	0.001	ug/l	3980.63	3.33	3.023E-05	Pulse	0.30	3
V			2	0.040	ug/l	33.46	412.23	3.706E-03	Pulse	0.30	3
Cr			2	0.038	ug/l	5.04	766.70	6.884E-03	Pulse	0.30	3
Mn			2	0.020	ug/l	27.16	107.78	9.683E-04	Pulse	0.30	3
Fe			2	1.646	ug/l	2.66	13,415.55	1.205E-01	Pulse	0.30	3
Co			2	0.001	ug/l	195.67	71.07	6.368E-04	Pulse	0.30	3
Ni			2	0.048	ug/l	16.82	220.01	1.974E-03	Pulse	0.30	3
Cu			2	0.015	ug/l	31.08	1,148.95	1.032E-02	Pulse	0.30	3
Zn			2	0.511	ug/l	18.57	841.15	7.562E-03	Pulse	0.30	3
As			2	-0.004	ug/l	-223.53	13.00	1.163E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.055	ug/l	13.27	23.14	4.836E-05	Pulse	0.30	3
Sn			2	0.119	ug/l	10.12	510.02	1.065E-03	Pulse	0.30	3
Se			3	-0.118	ug/l	-169.00	27.33	7.077E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,570,794.53	1.09	99.2	Pulse	0.10	3
1	Sc		2,745,347.15	3.09	99.3	Pulse	0.10	3
1	Ge		660,315.82	3.29	99.1	Pulse	0.10	3
1	Rh		3,206,577.76	2.63	99.6	Pulse	0.10	3
1	In		2,990,922.68	3.69	100.2	Pulse	0.10	3
1	Tb		4,189,607.54	1.55	98.6	Analog	0.10	3
1	Ho		372,042.66	3.69	99.0	Pulse	0.10	3
1	Bi		2,227,328.45	4.04	99.0	Pulse	0.10	3
2	Sc		111,361.10	1.59	98.6	Pulse	0.30	3
2	Ge		83,956.46	1.03	98.7	Pulse	0.30	3
2	Rh		1,413,184.73	0.58	98.7	Pulse	0.30	3
2	In		479,042.97	0.41	98.9	Pulse	0.30	3
2	Tb		1,555,438.89	1.20	99.7	Pulse	0.30	3
2	Ho		152,296.09	0.97	99.1	Pulse	0.30	3
2	Bi		958,540.00	1.18	98.6	Pulse	0.30	3
3	Sc		82,154.03	0.98	99.5	Pulse	0.30	3
3	Ge		38,554.33	0.71	99.1	Pulse	0.30	3
3	Rh		281,621.64	0.76	98.9	Pulse	0.30	3
3	Tb		361,518.24	0.35	98.3	Pulse	0.30	3

Quantitation Report

File Name	018_ICB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:47
Sample Name	ICB
Sample Type	ICB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-5.99	13.33	8.537E-06	Pulse	0.25	3
B			1	-0.301	ug/l	-17.89	10,624.27	6.809E-03	Pulse	0.15	3
Ca			1	-1.586	ug/l	-11.95	13,897.45	5.111E-03	Pulse	0.10	3
Sr			1	-0.006	ug/l	-35.98	513.37	1.626E-04	Pulse	0.10	3
Mo			1	-0.039	ug/l	-17.89	173.34	5.418E-05	Pulse	0.10	3
Ag			1	-0.008	ug/l	-16.42	100.01	3.408E-05	Pulse	0.10	3
Sn			1	-0.095	ug/l	-8.21	790.06	2.671E-04	Pulse	0.10	3
Sb			1	0.187	ug/l	1.03	876.73	2.092E-04	Pulse	0.10	3
Ba			1	0.172	ug/l	3.17	40.00	9.635E-06	Pulse	0.10	3
Tl			1	-0.011	ug/l	-1.21	386.69	1.752E-04	Pulse	0.10	3
Pb			1	-0.004	ug/l	-72.11	223.34	1.011E-04	Pulse	0.10	3
Pb			1	-0.005	ug/l	-68.90	176.68	7.979E-05	Pulse	0.10	3
Pb			1	-0.006	ug/l	-35.45	816.71	3.711E-04	Pulse	0.10	3
Na			2	-1.114	ug/l	-36.43	20,795.39	1.851E-01	Pulse	0.30	3
Mg			2	-0.241	ug/l	-33.26	154.45	1.374E-03	Pulse	0.30	3
Al			2	-0.745	ug/l	-10.43	100.00	8.907E-04	Pulse	0.30	3
K			2	-0.607	ug/l	-66.92	4,938.73	4.397E-02	Pulse	0.30	3
Ca			2	0.097	ug/l	767.39	87.78	7.818E-04	Pulse	0.30	3
Ti			2	-0.026	ug/l	0.00	0.00	0.000E+00	Pulse	0.30	3
V			2	0.013	ug/l	88.42	306.68	2.732E-03	Pulse	0.30	3
Cr			2	0.008	ug/l	189.31	612.24	5.453E-03	Pulse	0.30	3
Mn			2	-0.004	ug/l	-172.06	37.78	3.358E-04	Pulse	0.30	3
Fe			2	-0.429	ug/l	-11.09	4,466.33	3.976E-02	Pulse	0.30	3
Co			2	0.023	ug/l	211.97	261.74	2.326E-03	Pulse	0.30	3
Ni			2	-0.009	ug/l	-77.34	92.22	8.210E-04	Pulse	0.30	3
Cu			2	-0.018	ug/l	-78.73	962.27	8.570E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.116	ug/l	-42.94	245.56	2.188E-03	Pulse	0.30	3
As			2	-0.013	ug/l	-61.79	9.00	8.025E-05	Pulse	1.00	3
Cd			2	0.042	ug/l	3.76	7.72	1.608E-05	Pulse	0.30	3
Sn			2	-0.023	ug/l	-33.16	198.89	4.141E-04	Pulse	0.30	3
Se			3	-0.187	ug/l	-45.10	24.00	6.168E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,560,453.43	1.22	98.6	Pulse	0.10	3
1	Sc		2,718,582.46	3.00	98.3	Pulse	0.10	3
1	Ge		657,727.68	4.57	98.7	Pulse	0.10	3
1	Rh		3,173,009.54	4.03	98.5	Pulse	0.10	3
1	In		2,955,160.06	4.36	99.0	Pulse	0.10	3
1	Tb		4,189,028.06	2.00	98.6	Analog	0.10	3
1	Ho		365,437.61	3.45	97.2	Pulse	0.10	3
1	Bi		2,207,346.69	4.66	98.1	Pulse	0.10	3
2	Sc		112,328.69	0.70	99.4	Pulse	0.30	3
2	Ge		83,696.22	0.98	98.4	Pulse	0.30	3
2	Rh		1,419,899.84	0.65	99.2	Pulse	0.30	3
2	In		480,455.35	0.62	99.2	Pulse	0.30	3
2	Tb		1,553,291.54	0.44	99.6	Pulse	0.30	3
2	Ho		150,897.48	1.45	98.2	Pulse	0.30	3
2	Bi		953,729.37	0.73	98.1	Pulse	0.30	3
3	Sc		82,120.49	0.85	99.4	Pulse	0.30	3
3	Ge		38,970.00	1.35	100.2	Pulse	0.30	3
3	Rh		282,782.84	0.50	99.3	Pulse	0.30	3
3	Tb		358,830.10	0.59	97.6	Pulse	0.30	3

Quantitation Report

File Name	019_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:52
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	50.702	ug/l	1.29	330,421.37	2.067E-01	Pulse	0.25	3
B			1	102.108	ug/l	0.74	694,458.15	4.345E-01	Pulse	0.15	3
Ca			1	5373.948	ug/l	3.74	4,713,154.10	1.681E+00	Analog	0.10	3
Sr			1	51.685	ug/l	0.24	2,051,026.06	6.422E-01	Pulse	0.10	3
Mo			1	51.777	ug/l	0.45	398,591.93	1.248E-01	Pulse	0.10	3
Ag			1	50.604	ug/l	1.05	952,686.29	3.161E-01	Pulse	0.10	3
Sn			1	50.586	ug/l	0.88	557,174.17	1.849E-01	Pulse	0.10	3
Sb			1	51.434	ug/l	4.66	613,322.09	1.471E-01	Pulse	0.10	3
Ba			1	50.242	ug/l	4.65	252,289.36	6.049E-02	Pulse	0.10	3
Tl			1	51.682	ug/l	0.76	1,463,934.30	6.608E-01	Pulse	0.10	3
Pb			1	51.574	ug/l	0.43	508,467.51	2.295E-01	Pulse	0.10	3
Pb			1	51.749	ug/l	0.80	441,650.61	1.994E-01	Pulse	0.10	3
Pb			1	51.351	ug/l	0.12	2,018,829.35	9.114E-01	Pulse	0.10	3
Na			2	5110.151	ug/l	3.34	4,829,545.92	4.182E+01	Mix	0.30	3
Mg			2	5086.428	ug/l	1.13	2,264,371.85	1.961E+01	Pulse	0.30	3
Al			2	5014.877	ug/l	1.37	838,685.54	7.262E+00	Pulse	0.30	3
K			2	5041.416	ug/l	1.00	1,596,193.45	1.382E+01	Pulse	0.30	3
Ca			2	5473.262	ug/l	1.25	97,747.94	8.463E-01	Pulse	0.30	3
Ti			2	51.666	ug/l	2.74	6,841.78	5.924E-02	Pulse	0.30	3
V			2	50.820	ug/l	1.30	213,619.24	1.850E+00	Pulse	0.30	3
Cr			2	50.603	ug/l	1.34	273,893.51	2.371E+00	Pulse	0.30	3
Mn			2	49.858	ug/l	0.42	153,314.21	1.327E+00	Pulse	0.30	3
Fe			2	5113.583	ug/l	2.10	22,975,537.42	1.989E+02	Analog	0.30	3
Co			2	50.149	ug/l	1.15	437,467.68	3.788E+00	Pulse	0.30	3
Ni			2	49.824	ug/l	0.54	115,955.84	1.004E+00	Pulse	0.30	3
Cu			2	48.927	ug/l	0.20	304,114.44	2.633E+00	Pulse	0.30	3
Zn			2	48.609	ug/l	1.61	48,417.23	4.192E-01	Pulse	0.30	3
As			2	50.330	ug/l	1.25	23,243.31	2.013E-01	Pulse	1.00	3
Cd			2	50.549	ug/l	1.17	62,386.07	1.280E-01	Pulse	0.30	3
Sn			2	50.990	ug/l	1.78	113,917.65	2.338E-01	Pulse	0.30	3
Se			3	202.767	ug/l	2.60	10,444.05	2.682E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,598,329.09	1.57	101.0	Pulse	0.10	3
1	Sc		2,805,530.79	3.19	101.5	Pulse	0.10	3
1	Ge		674,760.81	4.42	101.3	Pulse	0.10	3

Quantitation Report

1	Rh		3,193,492.56	4.29	99.2	Pulse	0.10	3
1	In		3,013,898.16	4.29	100.9	Pulse	0.10	3
1	Tb		4,171,315.25	1.05	98.2	Analog	0.10	3
1	Ho		384,528.11	4.05	102.3	Pulse	0.10	3
1	Bi		2,215,173.15	4.64	98.5	Pulse	0.10	3
2	Sc		115,500.61	0.64	102.2	Pulse	0.30	3
2	Ge		85,793.90	0.16	100.9	Pulse	0.30	3
2	Rh		1,411,091.23	0.30	98.6	Pulse	0.30	3
2	In		487,290.42	0.46	100.6	Pulse	0.30	3
2	Tb		1,607,883.03	0.40	103.1	Pulse	0.30	3
2	Ho		156,658.29	1.29	102.0	Pulse	0.30	3
2	Bi		957,542.60	0.67	98.4	Pulse	0.30	3
3	Sc		82,861.39	0.66	100.3	Pulse	0.30	3
3	Ge		38,939.81	1.14	100.1	Pulse	0.30	3
3	Rh		276,213.49	0.87	97.0	Pulse	0.30	3
3	Tb		365,076.84	0.60	99.2	Pulse	0.30	3

Quantitation Report

File Name	020_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 11:57
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-71.51	32.00	2.060E-05	Pulse	0.25	3
B			1	0.666	ug/l	32.92	16,423.22	1.085E-02	Pulse	0.15	3
Ca			1	1.083	ug/l	263.58	15,162.21	5.944E-03	Pulse	0.10	3
Sr			1	-0.002	ug/l	-102.51	673.38	2.177E-04	Pulse	0.10	3
Mo			1	0.004	ug/l	473.45	473.36	1.576E-04	Pulse	0.10	3
Ag			1	-0.006	ug/l	-16.68	133.34	4.763E-05	Pulse	0.10	3
Sn			1	-0.023	ug/l	-99.10	1,463.47	5.273E-04	Pulse	0.10	3
Sb			1	0.294	ug/l	5.81	1,946.90	5.149E-04	Pulse	0.10	3
Ba			1	0.174	ug/l	2.52	50.00	1.251E-05	Pulse	0.10	3
Tl			1	0.009	ug/l	40.20	903.41	4.229E-04	Pulse	0.10	3
Pb			1	-0.001	ug/l	-323.98	250.01	1.171E-04	Pulse	0.10	3
Pb			1	0.009	ug/l	84.62	283.35	1.337E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	1031.10	1,020.06	4.781E-04	Pulse	0.10	3
Na			2	-0.823	ug/l	-42.79	21,210.52	1.875E-01	Pulse	0.30	3
Mg			2	-0.032	ug/l	-149.39	246.67	2.182E-03	Pulse	0.30	3
Al			2	0.106	ug/l	854.88	241.24	2.122E-03	Pulse	0.30	3
K			2	0.179	ug/l	156.15	5,216.60	4.611E-02	Pulse	0.30	3
Ca			2	-0.380	ug/l	-499.39	80.00	7.081E-04	Pulse	0.30	3
Ti			2	-0.017	ug/l	-87.93	1.11	9.922E-06	Pulse	0.30	3
V			2	0.027	ug/l	51.36	365.57	3.230E-03	Pulse	0.30	3
Cr			2	0.008	ug/l	99.44	618.91	5.468E-03	Pulse	0.30	3
Mn			2	-0.003	ug/l	-144.46	38.89	3.427E-04	Pulse	0.30	3
Fe			2	0.193	ug/l	37.31	7,236.45	6.394E-02	Pulse	0.30	3
Co			2	0.019	ug/l	197.07	231.47	2.024E-03	Pulse	0.30	3
Ni			2	-0.004	ug/l	-138.30	104.45	9.230E-04	Pulse	0.30	3
Cu			2	-0.029	ug/l	-30.28	901.15	7.969E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.115	ug/l	-31.50	248.89	2.201E-03	Pulse	0.30	3
As			2	-0.005	ug/l	-41.74	12.67	1.119E-04	Pulse	1.00	3
Cd			2	0.062	ug/l	20.56	32.05	6.685E-05	Pulse	0.30	3
Sn			2	0.016	ug/l	33.22	284.45	5.936E-04	Pulse	0.30	3
Se			3	-0.142	ug/l	-58.73	26.00	6.751E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,521,493.88	8.47	96.1	Pulse	0.10	3
1	Sc		2,582,969.44	12.81	93.4	Pulse	0.10	3
1	Ge		635,422.91	10.04	95.3	Pulse	0.10	3
1	Rh		3,064,740.11	12.70	95.2	Pulse	0.10	3
1	In		2,798,292.58	13.06	93.7	Pulse	0.10	3
1	Tb		3,814,870.78	17.44	89.8	Mix	0.10	3
1	Ho		353,694.32	14.82	94.1	Pulse	0.10	3
1	Bi		2,148,521.32	10.95	95.5	Pulse	0.10	3
2	Sc		113,136.11	1.23	100.1	Pulse	0.30	3
2	Ge		84,160.22	2.34	99.0	Pulse	0.30	3
2	Rh		1,419,548.31	1.32	99.1	Pulse	0.30	3
2	In		479,149.08	0.67	98.9	Pulse	0.30	3
2	Tb		1,552,462.44	1.38	99.5	Pulse	0.30	3
2	Ho		150,909.84	0.17	98.2	Pulse	0.30	3
2	Bi		955,526.98	0.29	98.2	Pulse	0.30	3
3	Sc		82,259.12	1.38	99.6	Pulse	0.30	3
3	Ge		38,553.11	0.97	99.1	Pulse	0.30	3
3	Rh		282,792.84	1.11	99.3	Pulse	0.30	3
3	Tb		354,765.37	0.48	96.4	Pulse	0.30	3

Quantitation Report

File Name	021LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:02
Sample Name	CRI
Sample Type	LLCCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	0.458	ug/l	2.79	2,975.02	1.900E-03	Pulse	0.25	3
B			1	23.090	ug/l	2.63	163,626.78	1.045E-01	Pulse	0.15	3
Ca			1	254.620	ug/l	0.70	231,652.07	8.500E-02	Pulse	0.10	3
Sr			1	4.691	ug/l	2.47	184,219.14	5.851E-02	Pulse	0.10	3
Mo			1	0.927	ug/l	3.20	7,495.68	2.381E-03	Pulse	0.10	3
Ag			1	0.462	ug/l	3.33	8,819.93	2.971E-03	Pulse	0.10	3
Sn			1	4.714	ug/l	0.62	52,799.75	1.779E-02	Pulse	0.10	3
Sb			1	2.155	ug/l	4.84	24,369.85	5.848E-03	Pulse	0.10	3
Ba			1	1.100	ug/l	0.92	4,711.05	1.131E-03	Pulse	0.10	3
Tl			1	0.467	ug/l	2.99	13,768.12	6.282E-03	Pulse	0.10	3
Pb			1	0.473	ug/l	6.33	4,874.46	2.223E-03	Pulse	0.10	3
Pb			1	0.459	ug/l	1.16	4,087.50	1.863E-03	Pulse	0.10	3
Pb			1	0.468	ug/l	3.06	19,236.51	8.765E-03	Pulse	0.10	3
Na			2	247.027	ug/l	0.84	245,598.38	2.206E+00	Pulse	0.30	3
Mg			2	254.832	ug/l	0.84	109,583.46	9.844E-01	Pulse	0.30	3
Al			2	30.778	ug/l	31.35	5,170.75	4.652E-02	Pulse	0.30	3
K			2	247.025	ug/l	1.67	80,211.77	7.206E-01	Pulse	0.30	3
Ca			2	288.964	ug/l	2.64	5,054.32	4.541E-02	Pulse	0.30	3
Ti			2	0.959	ug/l	12.70	125.56	1.128E-03	Pulse	0.30	3
V			2	1.000	ug/l	3.09	4,297.39	3.861E-02	Pulse	0.30	3
Cr			2	0.966	ug/l	2.14	5,594.53	5.026E-02	Pulse	0.30	3
Mn			2	0.964	ug/l	4.08	2,903.69	2.609E-02	Pulse	0.30	3
Fe			2	24.256	ug/l	1.15	111,292.30	9.998E-01	Pulse	0.30	3
Co			2	0.483	ug/l	1.84	4,120.38	3.701E-02	Pulse	0.30	3
Ni			2	0.962	ug/l	2.89	2,267.99	2.038E-02	Pulse	0.30	3
Cu			2	1.833	ug/l	5.13	12,000.92	1.078E-01	Pulse	0.30	3
Zn			2	4.969	ug/l	3.33	5,089.89	4.572E-02	Pulse	0.30	3
As			2	0.462	ug/l	11.27	220.33	1.978E-03	Pulse	1.00	3
Cd			2	0.512	ug/l	8.87	571.09	1.206E-03	Pulse	0.30	3
Sn			2	4.754	ug/l	0.94	10,547.66	2.227E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.463	ug/l	37.51	56.00	1.474E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,565,537.60	1.50	98.9	Pulse	0.10	3
1	Sc		2,725,828.71	3.35	98.6	Pulse	0.10	3
1	Ge		660,637.44	3.52	99.1	Pulse	0.10	3
1	Rh		3,150,573.18	4.15	97.8	Pulse	0.10	3
1	In		2,969,098.03	4.10	99.4	Pulse	0.10	3
1	Tb		4,166,858.59	1.07	98.1	Analog	0.10	3
1	Ho		365,342.26	4.74	97.2	Pulse	0.10	3
1	Bi		2,193,671.95	4.53	97.5	Pulse	0.10	3
2	Sc		111,320.57	0.89	98.5	Pulse	0.30	3
2	Ge		83,923.37	1.67	98.7	Pulse	0.30	3
2	Rh		1,393,755.08	0.56	97.3	Pulse	0.30	3
2	In		473,669.45	0.20	97.8	Pulse	0.30	3
2	Tb		1,534,250.95	0.58	98.3	Pulse	0.30	3
2	Ho		148,586.53	0.83	96.7	Pulse	0.30	3
2	Bi		936,885.83	0.50	96.3	Pulse	0.30	3
3	Sc		80,528.23	0.81	97.5	Pulse	0.30	3
3	Ge		37,995.13	0.21	97.6	Pulse	0.30	3
3	Rh		278,057.45	0.41	97.7	Pulse	0.30	3
3	Tb		351,383.11	0.84	95.5	Pulse	0.30	3

Quantitation Report

File Name	022LCCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:07
Sample Name	CRI
Sample Type	LLCCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	0.460	ug/l	3.21	3,003.04	1.908E-03	Pulse	0.25	3
B			1	22.975	ug/l	1.29	163,712.86	1.040E-01	Pulse	0.15	3
Ca			1	254.686	ug/l	0.82	229,130.58	8.502E-02	Pulse	0.10	3
Sr			1	4.657	ug/l	0.80	184,161.21	5.808E-02	Pulse	0.10	3
Mo			1	0.927	ug/l	4.32	7,545.80	2.380E-03	Pulse	0.10	3
Ag			1	0.473	ug/l	0.89	8,983.37	3.041E-03	Pulse	0.10	3
Sn			1	4.751	ug/l	0.69	52,943.51	1.792E-02	Pulse	0.10	3
Sb			1	2.105	ug/l	5.92	23,738.81	5.705E-03	Pulse	0.10	3
Ba			1	1.089	ug/l	7.87	4,647.69	1.118E-03	Pulse	0.10	3
Tl			1	0.471	ug/l	1.31	13,834.78	6.325E-03	Pulse	0.10	3
Pb			1	0.487	ug/l	9.08	4,987.83	2.287E-03	Pulse	0.10	3
Pb			1	0.486	ug/l	2.56	4,304.24	1.968E-03	Pulse	0.10	3
Pb			1	0.478	ug/l	3.95	19,560.03	8.954E-03	Pulse	0.10	3
Na			2	244.217	ug/l	2.36	245,604.31	2.183E+00	Pulse	0.30	3
Mg			2	254.148	ug/l	0.72	110,471.39	9.818E-01	Pulse	0.30	3
Al			2	24.147	ug/l	1.18	4,154.00	3.692E-02	Pulse	0.30	3
K			2	245.746	ug/l	1.07	80,672.13	7.171E-01	Pulse	0.30	3
Ca			2	286.439	ug/l	3.82	5,064.31	4.502E-02	Pulse	0.30	3
Ti			2	0.985	ug/l	29.63	130.00	1.158E-03	Pulse	0.30	3
V			2	0.968	ug/l	0.37	4,212.92	3.744E-02	Pulse	0.30	3
Cr			2	0.950	ug/l	1.42	5,571.18	4.951E-02	Pulse	0.30	3
Mn			2	0.932	ug/l	3.86	2,842.55	2.525E-02	Pulse	0.30	3
Fe			2	23.975	ug/l	0.57	111,258.86	9.889E-01	Pulse	0.30	3
Co			2	0.476	ug/l	1.60	4,103.69	3.648E-02	Pulse	0.30	3
Ni			2	0.944	ug/l	2.98	2,250.22	2.000E-02	Pulse	0.30	3
Cu			2	1.866	ug/l	1.19	12,332.31	1.096E-01	Pulse	0.30	3
Zn			2	4.824	ug/l	2.33	5,003.19	4.447E-02	Pulse	0.30	3
As			2	0.457	ug/l	2.99	220.33	1.959E-03	Pulse	1.00	3
Cd			2	0.531	ug/l	6.58	594.29	1.254E-03	Pulse	0.30	3
Sn			2	4.719	ug/l	1.10	10,476.47	2.211E-02	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.532	ug/l	61.69	60.00	1.564E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,573,847.77	1.58	99.4	Pulse	0.10	3
1	Sc		2,695,003.50	2.46	97.5	Pulse	0.10	3
1	Ge		654,651.05	3.19	98.2	Pulse	0.10	3
1	Rh		3,170,376.93	3.16	98.4	Pulse	0.10	3
1	In		2,953,924.33	3.85	98.9	Pulse	0.10	3
1	Tb		4,160,721.29	1.60	97.9	Analog	0.10	3
1	Ho		364,869.36	3.85	97.1	Pulse	0.10	3
1	Bi		2,186,817.78	4.63	97.2	Pulse	0.10	3
2	Sc		112,515.74	1.93	99.6	Pulse	0.30	3
2	Ge		83,534.20	0.20	98.2	Pulse	0.30	3
2	Rh		1,403,750.60	0.77	98.0	Pulse	0.30	3
2	In		473,930.84	0.71	97.8	Pulse	0.30	3
2	Tb		1,520,148.10	0.62	97.4	Pulse	0.30	3
2	Ho		148,276.49	1.71	96.5	Pulse	0.30	3
2	Bi		940,096.35	0.77	96.7	Pulse	0.30	3
3	Sc		81,279.88	0.84	98.4	Pulse	0.30	3
3	Ge		38,313.66	1.54	98.5	Pulse	0.30	3
3	Rh		277,165.26	1.47	97.3	Pulse	0.30	3
3	Tb		348,790.40	1.13	94.8	Pulse	0.30	3

Quantitation Report

File Name	023ICSA.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:11
Sample Name	ICSA
Sample Type	ICSA
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-17.06	6.67	5.049E-06	Pulse	0.25	3
B			1	0.333	ug/l	26.48	12,443.56	9.456E-03	Pulse	0.15	3
Ca			1	106603.533	ug/l	3.29	81,750,508.78	3.324E+01	Analog	0.10	3
Sr			1	2072.800	ug/l	3.12	66,502,970.68	2.575E+01	Analog	0.10	3
Mo			1	2307.400	ug/l	4.15	14,347,237.29	5.556E+00	Analog	0.10	3
Ag			1	0.030	ug/l	17.96	666.71	2.684E-04	Pulse	0.10	3
Sn			1	1954.815	ug/l	4.69	17,623,669.32	7.122E+00	Analog	0.10	3
Sb			1	0.381	ug/l	2.69	2,523.66	7.646E-04	Pulse	0.10	3
Ba			1	0.407	ug/l	2.47	970.08	2.933E-04	Pulse	0.10	3
Tl			1	-0.001	ug/l	-345.59	516.70	3.041E-04	Pulse	0.10	3
Pb			1	0.102	ug/l	15.05	973.41	5.735E-04	Pulse	0.10	3
Pb			1	0.108	ug/l	1.69	876.74	5.150E-04	Pulse	0.10	3
Pb			1	0.096	ug/l	7.76	3,690.35	2.171E-03	Pulse	0.10	3
Na			2	99775.251	ug/l	1.98	89,788,067.54	8.129E+02	Analog	0.30	3
Mg			2	98227.686	ug/l	1.14	41,817,635.00	3.786E+02	Analog	0.30	3
Al			2	98300.676	ug/l	2.21	15,717,969.38	1.423E+02	Analog	0.30	3
K			2	104119.973	ug/l	0.79	31,430,384.31	2.845E+02	Analog	0.30	3
Ca			2	108588.697	ug/l	1.62	1,853,112.63	1.678E+01	Pulse	0.30	3
Ti			2	1927.297	ug/l	1.91	243,978.25	2.209E+00	Pulse	0.30	3
V			2	0.070	ug/l	9.34	532.24	4.819E-03	Pulse	0.30	3
Cr			2	0.305	ug/l	4.54	2,136.86	1.934E-02	Pulse	0.30	3
Mn			2	0.427	ug/l	2.60	1,302.30	1.179E-02	Pulse	0.30	3
Fe			2	93008.121	ug/l	2.18	399,546,224.13	3.617E+03	Analog	0.30	3
Co			2	0.195	ug/l	2.75	1,685.98	1.526E-02	Pulse	0.30	3
Ni			2	0.702	ug/l	12.53	1,670.12	1.513E-02	Pulse	0.30	3
Cu			2	0.283	ug/l	8.75	2,731.42	2.473E-02	Pulse	0.30	3
Zn			2	0.640	ug/l	14.58	956.71	8.665E-03	Pulse	0.30	3
As			2	0.072	ug/l	36.27	46.33	4.189E-04	Pulse	1.00	3
Cd			2	-0.262	ug/l	-161.93	-319.07	-7.550E-04	Pulse	0.30	3
Sn			2	1741.214	ug/l	1.43	3,370,810.07	7.966E+00	Pulse	0.30	3
Se			3	-0.127	ug/l	-97.18	23.33	6.952E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,316,213.68	1.30	83.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,460,941.16	3.52	89.0	Pulse	0.10	3
1	Ge		564,818.70	4.07	84.8	Pulse	0.10	3
1	Rh		2,585,208.87	4.03	80.3	Pulse	0.10	3
1	In		2,478,199.79	4.63	83.0	Pulse	0.10	3
1	Tb		3,303,746.51	4.18	77.8	Pulse	0.10	3
1	Ho		319,600.57	4.10	85.0	Pulse	0.10	3
1	Bi		1,702,750.81	4.16	75.7	Pulse	0.10	3
2	Sc		110,465.78	0.75	97.8	Pulse	0.30	3
2	Ge		77,041.17	0.26	90.6	Pulse	0.30	3
2	Rh		1,168,791.10	0.80	81.6	Pulse	0.30	3
2	In		423,159.82	0.39	87.3	Pulse	0.30	3
2	Tb		1,363,214.91	0.24	87.4	Pulse	0.30	3
2	Ho		132,643.88	0.59	86.3	Pulse	0.30	3
2	Bi		749,647.07	0.46	77.1	Pulse	0.30	3
3	Sc		78,131.22	0.66	94.6	Pulse	0.30	3
3	Ge		33,499.97	1.51	86.1	Pulse	0.30	3
3	Rh		229,535.87	1.51	80.6	Pulse	0.30	3
3	Tb		325,568.70	0.84	88.5	Pulse	0.30	3

Quantitation Report

File Name	024ICSB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:16
Sample Name	ICSAB
Sample Type	ICSB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-7.70	5.33	4.868E-06	Pulse	0.25	3
B			1	53.823	ug/l	1.39	254,944.56	2.328E-01	Pulse	0.15	3
Ca			1	104518.757	ug/l	2.40	77,920,417.17	3.259E+01	Analog	0.10	3
Sr			1	2093.079	ug/l	3.85	65,794,534.02	2.600E+01	Analog	0.10	3
Mo			1	2291.734	ug/l	3.63	13,965,716.87	5.518E+00	Analog	0.10	3
Ag			1	17.069	ug/l	0.17	265,611.77	1.067E-01	Pulse	0.10	3
Sn			1	1916.636	ug/l	4.23	17,363,441.82	6.983E+00	Analog	0.10	3
Sb			1	0.349	ug/l	2.58	2,243.61	6.727E-04	Pulse	0.10	3
Ba			1	0.419	ug/l	7.88	1,026.75	3.081E-04	Pulse	0.10	3
Tl			1	-0.006	ug/l	-70.90	423.36	2.414E-04	Pulse	0.10	3
Pb			1	0.087	ug/l	14.80	893.40	5.088E-04	Pulse	0.10	3
Pb			1	0.086	ug/l	20.42	750.05	4.274E-04	Pulse	0.10	3
Pb			1	0.082	ug/l	4.33	3,383.66	1.932E-03	Pulse	0.10	3
Na			2	97331.681	ug/l	1.60	83,514,154.46	7.930E+02	Analog	0.30	3
Mg			2	96991.875	ug/l	0.68	39,372,409.55	3.738E+02	Analog	0.30	3
Al			2	94434.263	ug/l	0.71	14,398,061.65	1.367E+02	Analog	0.30	3
K			2	101023.739	ug/l	0.67	29,078,716.62	2.761E+02	Analog	0.30	3
Ca			2	106140.582	ug/l	0.72	1,727,100.42	1.640E+01	Pulse	0.30	3
Ti			2	1869.500	ug/l	0.33	225,667.58	2.143E+00	Pulse	0.30	3
V			2	20.690	ug/l	0.53	79,453.91	7.544E-01	Pulse	0.30	3
Cr			2	18.642	ug/l	0.49	92,352.91	8.769E-01	Pulse	0.30	3
Mn			2	18.256	ug/l	1.25	51,219.17	4.863E-01	Pulse	0.30	3
Fe			2	91743.068	ug/l	1.13	375,840,749.51	3.568E+03	Analog	0.30	3
Co			2	17.453	ug/l	1.75	138,856.33	1.319E+00	Pulse	0.30	3
Ni			2	16.669	ug/l	0.67	35,447.77	3.365E-01	Pulse	0.30	3
Cu			2	15.696	ug/l	1.19	89,641.47	8.511E-01	Pulse	0.30	3
Zn			2	14.765	ug/l	0.72	13,644.70	1.296E-01	Pulse	0.30	3
As			2	17.274	ug/l	1.65	7,283.29	6.916E-02	Pulse	1.00	3
Cd			2	16.451	ug/l	2.66	17,018.73	4.161E-02	Pulse	0.30	3
Sn			2	1754.811	ug/l	1.16	3,284,348.34	8.028E+00	Pulse	0.30	3
Se			3	19.763	ug/l	3.48	896.04	2.692E-02	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,094,773.99	1.41	69.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,391,468.82	2.34	86.5	Pulse	0.10	3
1	Ge		560,719.18	2.80	84.1	Pulse	0.10	3
1	Rh		2,533,023.40	3.60	78.6	Pulse	0.10	3
1	In		2,489,526.56	4.07	83.4	Pulse	0.10	3
1	Tb		3,332,581.10	3.60	78.5	Pulse	0.10	3
1	Ho		324,880.61	3.40	86.4	Pulse	0.10	3
1	Bi		1,750,979.82	4.05	77.8	Pulse	0.10	3
2	Sc		105,325.77	1.06	93.2	Pulse	0.30	3
2	Ge		75,347.18	0.60	88.6	Pulse	0.30	3
2	Rh		1,138,965.54	0.23	79.5	Pulse	0.30	3
2	In		409,082.97	0.54	84.4	Pulse	0.30	3
2	Tb		1,340,196.54	0.81	85.9	Pulse	0.30	3
2	Ho		130,877.38	0.29	85.2	Pulse	0.30	3
2	Bi		746,784.34	0.58	76.8	Pulse	0.30	3
3	Sc		79,220.50	0.34	95.9	Pulse	0.30	3
3	Ge		33,297.40	1.67	85.6	Pulse	0.30	3
3	Rh		230,583.57	0.31	81.0	Pulse	0.30	3
3	Tb		323,963.28	0.65	88.1	Pulse	0.30	3

Quantitation Report

File Name	025SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:21
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-235.16	29.33	2.560E-05	Pulse	0.25	3
B			1	-0.087	ug/l	-61.35	8,896.36	7.700E-03	Pulse	0.15	3
Ca			1	5.153	ug/l	8.44	17,818.79	7.213E-03	Pulse	0.10	3
Sr			1	0.117	ug/l	3.08	5,241.23	1.702E-03	Pulse	0.10	3
Mo			1	0.576	ug/l	5.59	4,731.02	1.535E-03	Pulse	0.10	3
Ag			1	-0.001	ug/l	-227.47	226.68	7.644E-05	Pulse	0.10	3
Sn			1	0.106	ug/l	8.49	2,957.11	9.981E-04	Pulse	0.10	3
Sb			1	0.153	ug/l	1.13	480.03	1.118E-04	Pulse	0.10	3
Ba			1	0.180	ug/l	3.66	86.67	2.011E-05	Pulse	0.10	3
Tl			1	-0.013	ug/l	-5.13	340.02	1.517E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	454.17	273.35	1.221E-04	Pulse	0.10	3
Pb			1	0.001	ug/l	942.83	226.68	1.009E-04	Pulse	0.10	3
Pb			1	-0.001	ug/l	-102.20	1,013.39	4.517E-04	Pulse	0.10	3
Na			2	12.819	ug/l	7.07	28,432.06	2.986E-01	Pulse	0.30	3
Mg			2	4.771	ug/l	3.57	1,970.16	2.069E-02	Pulse	0.30	3
Al			2	4.628	ug/l	10.44	825.59	8.668E-03	Pulse	0.30	3
K			2	6.730	ug/l	14.61	6,095.84	6.401E-02	Pulse	0.30	3
Ca			2	5.447	ug/l	47.19	153.34	1.608E-03	Pulse	0.30	3
Ti			2	0.321	ug/l	20.68	37.78	3.973E-04	Pulse	0.30	3
V			2	0.010	ug/l	53.74	248.89	2.614E-03	Pulse	0.30	3
Cr			2	0.010	ug/l	63.53	530.02	5.569E-03	Pulse	0.30	3
Mn			2	0.028	ug/l	15.04	113.34	1.191E-03	Pulse	0.30	3
Fe			2	8.341	ug/l	1.97	36,260.94	3.809E-01	Pulse	0.30	3
Co			2	-0.003	ug/l	-12.61	29.90	3.139E-04	Pulse	0.30	3
Ni			2	-0.009	ug/l	-62.63	78.89	8.288E-04	Pulse	0.30	3
Cu			2	-0.023	ug/l	-46.59	790.03	8.295E-03	Pulse	0.30	3
Zn			2	-0.018	ug/l	-101.11	288.89	3.034E-03	Pulse	0.30	3
As			2	-0.010	ug/l	-70.55	9.00	9.444E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.052	ug/l	14.76	18.48	4.140E-05	Pulse	0.30	3
Sn			2	0.148	ug/l	10.64	533.35	1.197E-03	Pulse	0.30	3
Se			3	-0.080	ug/l	-242.02	28.00	7.573E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,155,756.12	2.22	73.0	Pulse	0.10	3
1	Sc		2,470,584.81	1.96	89.4	Pulse	0.10	3
1	Ge		627,213.64	4.28	94.1	Pulse	0.10	3
1	Rh		3,081,413.60	2.48	95.7	Pulse	0.10	3
1	In		2,961,800.48	3.66	99.2	Pulse	0.10	3
1	Tb		4,295,481.19	1.89	101.1	Analog	0.10	3
1	Ho		372,736.75	2.94	99.2	Pulse	0.10	3
1	Bi		2,241,697.15	3.17	99.6	Pulse	0.10	3
2	Sc		95,202.67	0.90	84.3	Pulse	0.30	3
2	Ge		76,714.88	0.73	90.2	Pulse	0.30	3
2	Rh		1,320,649.39	1.20	92.2	Pulse	0.30	3
2	In		445,460.66	1.30	91.9	Pulse	0.30	3
2	Tb		1,474,220.60	0.97	94.5	Pulse	0.30	3
2	Ho		144,850.42	0.68	94.3	Pulse	0.30	3
2	Bi		930,128.61	0.46	95.6	Pulse	0.30	3
3	Sc		76,844.03	0.10	93.0	Pulse	0.30	3
3	Ge		37,170.57	2.35	95.5	Pulse	0.30	3
3	Rh		267,566.77	0.20	94.0	Pulse	0.30	3
3	Tb		342,258.76	1.57	93.0	Pulse	0.30	3

Quantitation Report

File Name	026_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:25
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	55.654	ug/l	0.18	262,536.63	2.269E-01	Pulse	0.25	3
B			1	111.448	ug/l	1.31	547,913.93	4.735E-01	Pulse	0.15	3
Ca			1	5053.089	ug/l	1.31	4,049,389.94	1.581E+00	Pulse	0.10	3
Sr			1	51.526	ug/l	1.15	2,011,990.91	6.402E-01	Pulse	0.10	3
Mo			1	51.790	ug/l	1.42	392,335.05	1.248E-01	Pulse	0.10	3
Ag			1	49.761	ug/l	0.30	923,683.14	3.109E-01	Pulse	0.10	3
Sn			1	51.881	ug/l	0.51	563,399.90	1.896E-01	Pulse	0.10	3
Sb			1	51.848	ug/l	3.77	635,260.87	1.482E-01	Pulse	0.10	3
Ba			1	49.773	ug/l	3.38	256,827.22	5.992E-02	Pulse	0.10	3
Tl			1	51.576	ug/l	0.76	1,497,893.05	6.594E-01	Pulse	0.10	3
Pb			1	51.153	ug/l	0.56	517,042.04	2.276E-01	Pulse	0.10	3
Pb			1	51.366	ug/l	0.80	449,570.02	1.979E-01	Pulse	0.10	3
Pb			1	51.202	ug/l	0.37	2,063,839.82	9.087E-01	Pulse	0.10	3
Na			2	4908.346	ug/l	1.13	4,019,107.76	4.017E+01	Pulse	0.30	3
Mg			2	4963.580	ug/l	0.49	1,914,082.22	1.913E+01	Pulse	0.30	3
Al			2	4773.417	ug/l	0.84	691,545.34	6.912E+00	Pulse	0.30	3
K			2	4984.840	ug/l	0.10	1,367,202.03	1.367E+01	Pulse	0.30	3
Ca			2	5375.541	ug/l	0.52	83,164.06	8.312E-01	Pulse	0.30	3
Ti			2	49.181	ug/l	2.84	5,642.32	5.639E-02	Pulse	0.30	3
V			2	52.914	ug/l	0.29	192,659.50	1.926E+00	Pulse	0.30	3
Cr			2	52.392	ug/l	0.47	245,620.21	2.455E+00	Pulse	0.30	3
Mn			2	50.722	ug/l	0.81	135,099.19	1.350E+00	Pulse	0.30	3
Fe			2	5236.018	ug/l	2.00	20,380,512.52	2.037E+02	Analog	0.30	3
Co			2	52.067	ug/l	0.41	393,426.87	3.932E+00	Pulse	0.30	3
Ni			2	51.603	ug/l	0.16	104,024.20	1.040E+00	Pulse	0.30	3
Cu			2	51.119	ug/l	0.71	275,176.67	2.751E+00	Pulse	0.30	3
Zn			2	50.908	ug/l	2.10	43,907.78	4.389E-01	Pulse	0.30	3
As			2	53.037	ug/l	0.94	21,215.72	2.121E-01	Pulse	1.00	3
Cd			2	51.143	ug/l	1.06	58,983.91	1.295E-01	Pulse	0.30	3
Sn			2	52.436	ug/l	0.62	109,464.64	2.404E-01	Pulse	0.30	3
Se			3	201.394	ug/l	3.95	10,182.53	2.664E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,157,088.31	2.76	73.1	Pulse	0.10	3
1	Sc		2,560,476.37	2.48	92.6	Pulse	0.10	3
1	Ge		645,283.97	4.12	96.8	Pulse	0.10	3

Quantitation Report

1	Rh		3,142,047.24	3.93	97.6	Pulse	0.10	3
1	In		2,971,591.86	4.48	99.5	Pulse	0.10	3
1	Tb		4,285,449.31	0.90	100.9	Analog	0.10	3
1	Ho		389,190.15	5.89	103.5	Pulse	0.10	3
1	Bi		2,270,952.99	5.52	100.9	Pulse	0.10	3
2	Sc		100,046.26	0.68	88.5	Pulse	0.30	3
2	Ge		79,397.86	1.04	93.4	Pulse	0.30	3
2	Rh		1,340,233.80	0.21	93.6	Pulse	0.30	3
2	In		455,362.83	0.92	94.0	Pulse	0.30	3
2	Tb		1,548,675.63	1.07	99.3	Pulse	0.30	3
2	Ho		152,194.13	0.52	99.0	Pulse	0.30	3
2	Bi		945,456.14	0.85	97.2	Pulse	0.30	3
3	Sc		78,718.84	0.63	95.3	Pulse	0.30	3
3	Ge		38,220.03	0.51	98.2	Pulse	0.30	3
3	Rh		265,684.22	0.39	93.3	Pulse	0.30	3
3	Tb		349,913.54	0.16	95.1	Pulse	0.30	3

Quantitation Report

File Name	027_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:30
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-8.62	13.33	1.129E-05	Pulse	0.25	3
B			1	1.035	ug/l	11.34	14,607.86	1.239E-02	Pulse	0.15	3
Ca			1	-1.507	ug/l	-21.46	12,926.57	5.136E-03	Pulse	0.10	3
Sr			1	0.022	ug/l	30.05	1,626.83	5.210E-04	Pulse	0.10	3
Mo			1	0.101	ug/l	15.04	1,226.78	3.908E-04	Pulse	0.10	3
Ag			1	-0.001	ug/l	-207.58	226.68	7.605E-05	Pulse	0.10	3
Sn			1	0.005	ug/l	121.87	1,866.86	6.284E-04	Pulse	0.10	3
Sb			1	0.258	ug/l	5.58	1,776.86	4.117E-04	Pulse	0.10	3
Ba			1	0.176	ug/l	2.49	63.33	1.465E-05	Pulse	0.10	3
Tl			1	0.002	ug/l	212.53	760.06	3.404E-04	Pulse	0.10	3
Pb			1	-0.002	ug/l	-65.34	246.68	1.103E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	32.07	270.01	1.204E-04	Pulse	0.10	3
Pb			1	-0.001	ug/l	-98.86	1,023.39	4.574E-04	Pulse	0.10	3
Na			2	7.145	ug/l	1.99	24,432.34	2.524E-01	Pulse	0.30	3
Mg			2	1.049	ug/l	23.38	614.47	6.347E-03	Pulse	0.30	3
Al			2	0.464	ug/l	30.00	255.56	2.640E-03	Pulse	0.30	3
K			2	2.280	ug/l	34.93	5,020.97	5.185E-02	Pulse	0.30	3
Ca			2	1.878	ug/l	52.62	102.23	1.057E-03	Pulse	0.30	3
Ti			2	0.055	ug/l	85.07	8.89	9.195E-05	Pulse	0.30	3
V			2	0.013	ug/l	69.05	263.34	2.720E-03	Pulse	0.30	3
Cr			2	0.003	ug/l	545.12	505.57	5.218E-03	Pulse	0.30	3
Mn			2	0.009	ug/l	39.77	64.44	6.661E-04	Pulse	0.30	3
Fe			2	2.143	ug/l	0.97	13,531.23	1.398E-01	Pulse	0.30	3
Co			2	-0.002	ug/l	-43.77	37.74	3.898E-04	Pulse	0.30	3
Ni			2	-0.004	ug/l	-472.97	90.00	9.301E-04	Pulse	0.30	3
Cu			2	-0.048	ug/l	-26.07	676.69	6.989E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.128	ug/l	-35.55	202.23	2.091E-03	Pulse	0.30	3
As			2	-0.015	ug/l	-66.50	7.00	7.205E-05	Pulse	1.00	3
Cd			2	0.050	ug/l	6.04	16.26	3.634E-05	Pulse	0.30	3
Sn			2	0.067	ug/l	22.17	370.01	8.263E-04	Pulse	0.30	3
Se			3	0.144	ug/l	122.80	39.33	1.052E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,179,602.56	1.43	74.5	Pulse	0.10	3
1	Sc		2,518,031.68	3.87	91.1	Pulse	0.10	3
1	Ge		638,508.37	2.45	95.8	Pulse	0.10	3
1	Rh		3,132,507.14	3.48	97.3	Pulse	0.10	3
1	In		2,973,050.26	3.53	99.6	Pulse	0.10	3
1	Tb		4,320,143.37	1.53	101.7	Analog	0.10	3
1	Ho		375,932.42	3.51	100.0	Pulse	0.10	3
1	Bi		2,239,215.38	4.16	99.5	Pulse	0.10	3
2	Sc		96,804.90	0.98	85.7	Pulse	0.30	3
2	Ge		77,577.47	0.72	91.2	Pulse	0.30	3
2	Rh		1,340,451.72	0.51	93.6	Pulse	0.30	3
2	In		447,935.77	0.72	92.5	Pulse	0.30	3
2	Tb		1,486,218.55	0.75	95.3	Pulse	0.30	3
2	Ho		145,198.98	0.21	94.5	Pulse	0.30	3
2	Bi		934,303.09	0.17	96.1	Pulse	0.30	3
3	Sc		77,371.29	1.38	93.7	Pulse	0.30	3
3	Ge		37,332.04	0.93	95.9	Pulse	0.30	3
3	Rh		270,383.92	0.45	95.0	Pulse	0.30	3
3	Tb		343,831.88	0.91	93.5	Pulse	0.30	3

Quantitation Report

File Name	028ICSB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:35
Sample Name	ICSAB
Sample Type	ICSB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-18.80	5.33	5.709E-06	Pulse	0.25	3
B			1	58.275	ug/l	1.29	233,242.07	2.514E-01	Pulse	0.15	3
Ca			1	106232.418	ug/l	2.62	74,976,272.22	3.313E+01	Analog	0.10	3
Sr			1	2099.128	ug/l	3.98	64,845,990.70	2.607E+01	Analog	0.10	3
Mo			1	2268.212	ug/l	3.14	13,585,768.55	5.462E+00	Analog	0.10	3
Ag			1	18.549	ug/l	1.12	285,231.94	1.159E-01	Pulse	0.10	3
Sn			1	1923.176	ug/l	4.47	17,218,440.99	7.006E+00	Analog	0.10	3
Sb			1	0.559	ug/l	0.74	4,247.51	1.275E-03	Pulse	0.10	3
Ba			1	0.403	ug/l	3.76	960.07	2.886E-04	Pulse	0.10	3
Tl			1	-0.004	ug/l	-66.19	446.69	2.563E-04	Pulse	0.10	3
Pb			1	0.083	ug/l	11.69	850.06	4.874E-04	Pulse	0.10	3
Pb			1	0.083	ug/l	12.50	726.72	4.168E-04	Pulse	0.10	3
Pb			1	0.085	ug/l	2.79	3,447.00	1.979E-03	Pulse	0.10	3
Na			2	99000.371	ug/l	0.77	79,502,176.84	8.066E+02	Analog	0.30	3
Mg			2	97265.918	ug/l	1.47	36,948,891.86	3.749E+02	Analog	0.30	3
Al			2	94970.110	ug/l	1.82	13,550,528.90	1.375E+02	Analog	0.30	3
K			2	102221.698	ug/l	2.24	27,532,608.35	2.793E+02	Analog	0.30	3
Ca			2	105415.314	ug/l	1.00	1,605,284.31	1.629E+01	Pulse	0.30	3
Ti			2	1888.251	ug/l	1.45	213,299.90	2.164E+00	Pulse	0.30	3
V			2	20.631	ug/l	1.00	74,142.55	7.522E-01	Pulse	0.30	3
Cr			2	20.605	ug/l	2.15	95,473.02	9.686E-01	Pulse	0.30	3
Mn			2	20.236	ug/l	1.32	53,130.55	5.390E-01	Pulse	0.30	3
Fe			2	93410.434	ug/l	1.36	358,086,412.44	3.633E+03	Analog	0.30	3
Co			2	19.555	ug/l	0.93	145,608.37	1.477E+00	Pulse	0.30	3
Ni			2	18.730	ug/l	1.33	37,262.48	3.780E-01	Pulse	0.30	3
Cu			2	17.453	ug/l	0.84	93,182.86	9.454E-01	Pulse	0.30	3
Zn			2	16.027	ug/l	5.15	13,832.63	1.404E-01	Pulse	0.30	3
As			2	19.503	ug/l	0.23	7,694.84	7.807E-02	Pulse	1.00	3
Cd			2	17.769	ug/l	3.36	17,979.70	4.495E-02	Pulse	0.30	3
Sn			2	1740.075	ug/l	0.88	3,185,334.80	7.961E+00	Pulse	0.30	3
Se			3	21.388	ug/l	8.82	972.04	2.906E-02	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		927,579.80	1.23	58.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,264,647.99	3.79	81.9	Pulse	0.10	3
1	Ge		539,473.92	3.41	81.0	Pulse	0.10	3
1	Rh		2,489,333.71	3.50	77.3	Pulse	0.10	3
1	In		2,460,980.61	4.77	82.4	Pulse	0.10	3
1	Tb		3,330,348.60	3.87	78.4	Pulse	0.10	3
1	Ho		323,769.10	4.78	86.1	Pulse	0.10	3
1	Bi		1,741,158.20	4.09	77.4	Pulse	0.10	3
2	Sc		98,569.27	0.56	87.2	Pulse	0.30	3
2	Ge		72,352.45	0.67	85.1	Pulse	0.30	3
2	Rh		1,108,431.90	0.29	77.4	Pulse	0.30	3
2	In		400,113.93	0.90	82.6	Pulse	0.30	3
2	Tb		1,305,439.74	0.80	83.7	Pulse	0.30	3
2	Ho		128,787.76	0.61	83.8	Pulse	0.30	3
2	Bi		733,171.32	0.62	75.4	Pulse	0.30	3
3	Sc		77,372.27	0.85	93.7	Pulse	0.30	3
3	Ge		33,446.45	0.37	86.0	Pulse	0.30	3
3	Rh		223,637.14	0.27	78.5	Pulse	0.30	3
3	Tb		318,224.41	1.35	86.5	Pulse	0.30	3

Quantitation Report

File Name	029SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:40
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-69.78	28.00	2.769E-05	Pulse	0.25	3
B			1	0.500	ug/l	27.79	10,226.14	1.015E-02	Pulse	0.15	3
Ca			1	4.533	ug/l	31.99	16,113.34	7.019E-03	Pulse	0.10	3
Sr			1	0.120	ug/l	5.67	5,141.20	1.733E-03	Pulse	0.10	3
Mo			1	0.571	ug/l	2.54	4,520.93	1.523E-03	Pulse	0.10	3
Ag			1	-0.005	ug/l	-45.52	156.68	5.485E-05	Pulse	0.10	3
Sn			1	0.101	ug/l	8.67	2,810.43	9.781E-04	Pulse	0.10	3
Sb			1	0.171	ug/l	8.35	686.72	1.622E-04	Pulse	0.10	3
Ba			1	0.186	ug/l	1.41	113.34	2.684E-05	Pulse	0.10	3
Tl			1	-0.014	ug/l	-5.96	286.68	1.283E-04	Pulse	0.10	3
Pb			1	-0.006	ug/l	-29.87	206.68	9.318E-05	Pulse	0.10	3
Pb			1	0.000	ug/l	-3758.32	216.68	9.726E-05	Pulse	0.10	3
Pb			1	-0.004	ug/l	-12.52	896.71	4.030E-04	Pulse	0.10	3
Na			2	12.146	ug/l	3.97	26,350.17	2.931E-01	Pulse	0.30	3
Mg			2	4.687	ug/l	4.60	1,831.25	2.037E-02	Pulse	0.30	3
Al			2	4.250	ug/l	2.41	730.03	8.121E-03	Pulse	0.30	3
K			2	6.293	ug/l	9.38	5,646.77	6.282E-02	Pulse	0.30	3
Ca			2	5.750	ug/l	40.75	148.89	1.655E-03	Pulse	0.30	3
Ti			2	0.266	ug/l	24.82	30.00	3.340E-04	Pulse	0.30	3
V			2	0.015	ug/l	68.17	253.34	2.819E-03	Pulse	0.30	3
Cr			2	0.002	ug/l	680.39	464.46	5.165E-03	Pulse	0.30	3
Mn			2	0.020	ug/l	66.29	87.78	9.768E-04	Pulse	0.30	3
Fe			2	7.904	ug/l	2.55	32,708.72	3.638E-01	Pulse	0.30	3
Co			2	-0.004	ug/l	-12.64	22.13	2.460E-04	Pulse	0.30	3
Ni			2	-0.007	ug/l	-202.79	76.67	8.543E-04	Pulse	0.30	3
Cu			2	-0.021	ug/l	-24.41	755.58	8.404E-03	Pulse	0.30	3
Zn			2	-0.034	ug/l	-61.67	260.01	2.893E-03	Pulse	0.30	3
As			2	0.002	ug/l	327.25	12.67	1.408E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.057	ug/l	20.02	23.15	5.399E-05	Pulse	0.30	3
Sn			2	0.143	ug/l	15.83	503.35	1.176E-03	Pulse	0.30	3
Se			3	0.067	ug/l	218.28	34.67	9.509E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,008,700.59	3.58	63.7	Pulse	0.10	3
1	Sc		2,301,155.59	6.28	83.2	Pulse	0.10	3
1	Ge		598,124.11	5.46	89.8	Pulse	0.10	3
1	Rh		2,971,273.19	6.00	92.3	Pulse	0.10	3
1	In		2,876,261.93	6.75	96.3	Pulse	0.10	3
1	Tb		4,218,876.71	3.32	99.3	Analog	0.10	3
1	Ho		366,520.68	6.70	97.5	Pulse	0.10	3
1	Bi		2,225,988.04	6.29	98.9	Pulse	0.10	3
2	Sc		89,894.55	0.70	79.6	Pulse	0.30	3
2	Ge		74,432.35	1.09	87.5	Pulse	0.30	3
2	Rh		1,287,022.73	0.89	89.9	Pulse	0.30	3
2	In		428,039.47	0.53	88.3	Pulse	0.30	3
2	Tb		1,439,191.05	1.12	92.2	Pulse	0.30	3
2	Ho		141,801.83	0.81	92.3	Pulse	0.30	3
2	Bi		911,850.34	0.44	93.8	Pulse	0.30	3
3	Sc		75,363.50	0.35	91.2	Pulse	0.30	3
3	Ge		36,589.02	3.05	94.0	Pulse	0.30	3
3	Rh		264,698.06	0.74	93.0	Pulse	0.30	3
3	Tb		334,844.89	0.30	91.0	Pulse	0.30	3

Quantitation Report

File Name	030SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:44
Sample Name	rinseconf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-33.21	20.00	1.930E-05	Pulse	0.25	3
B			1	-0.027	ug/l	-99.90	8,258.18	7.950E-03	Pulse	0.15	3
Ca			1	-0.649	ug/l	-10.99	12,923.21	5.404E-03	Pulse	0.10	3
Sr			1	0.034	ug/l	6.63	2,063.57	6.691E-04	Pulse	0.10	3
Mo			1	0.101	ug/l	14.50	1,206.76	3.911E-04	Pulse	0.10	3
Ag			1	-0.006	ug/l	-37.12	130.01	4.380E-05	Pulse	0.10	3
Sn			1	-0.023	ug/l	-52.52	1,570.22	5.282E-04	Pulse	0.10	3
Sb			1	0.156	ug/l	4.56	526.70	1.201E-04	Pulse	0.10	3
Ba			1	0.178	ug/l	2.76	73.33	1.674E-05	Pulse	0.10	3
Tl			1	-0.018	ug/l	-6.51	180.01	7.855E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-192.39	260.01	1.137E-04	Pulse	0.10	3
Pb			1	0.004	ug/l	93.78	256.68	1.124E-04	Pulse	0.10	3
Pb			1	-0.004	ug/l	-54.04	933.38	4.083E-04	Pulse	0.10	3
Na			2	8.497	ug/l	3.04	23,985.96	2.634E-01	Pulse	0.30	3
Mg			2	2.113	ug/l	9.34	951.16	1.045E-02	Pulse	0.30	3
Al			2	1.472	ug/l	23.06	373.34	4.099E-03	Pulse	0.30	3
K			2	3.034	ug/l	35.69	4,910.91	5.392E-02	Pulse	0.30	3
Ca			2	3.084	ug/l	79.55	113.34	1.243E-03	Pulse	0.30	3
Ti			2	0.060	ug/l	82.31	8.89	9.778E-05	Pulse	0.30	3
V			2	0.016	ug/l	18.97	260.01	2.855E-03	Pulse	0.30	3
Cr			2	0.003	ug/l	537.87	474.46	5.208E-03	Pulse	0.30	3
Mn			2	0.017	ug/l	23.01	81.11	8.906E-04	Pulse	0.30	3
Fe			2	2.882	ug/l	1.36	15,346.45	1.685E-01	Pulse	0.30	3
Co			2	-0.002	ug/l	-96.57	37.74	4.150E-04	Pulse	0.30	3
Ni			2	0.002	ug/l	1012.38	94.45	1.039E-03	Pulse	0.30	3
Cu			2	-0.047	ug/l	-4.59	638.91	7.016E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.098	ug/l	-27.46	213.34	2.342E-03	Pulse	0.30	3
As			2	0.084	ug/l	194.02	42.34	4.670E-04	Pulse	1.00	3
Cd			2	0.046	ug/l	9.85	10.69	2.451E-05	Pulse	0.30	3
Sn			2	0.019	ug/l	76.39	264.45	6.076E-04	Pulse	0.30	3
Se			3	0.030	ug/l	323.44	33.33	9.019E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,038,959.46	2.47	65.6	Pulse	0.10	3
1	Sc		2,391,633.98	3.32	86.5	Pulse	0.10	3
1	Ge		616,784.45	4.60	92.6	Pulse	0.10	3
1	Rh		3,083,469.85	4.32	95.7	Pulse	0.10	3
1	In		2,976,335.10	3.56	99.7	Pulse	0.10	3
1	Tb		4,391,584.00	1.10	103.4	Analog	0.10	3
1	Ho		383,709.67	3.07	102.1	Pulse	0.10	3
1	Bi		2,291,413.61	4.17	101.8	Pulse	0.10	3
2	Sc		91,065.38	0.64	80.6	Pulse	0.30	3
2	Ge		75,406.33	1.13	88.7	Pulse	0.30	3
2	Rh		1,302,848.24	0.59	91.0	Pulse	0.30	3
2	In		435,334.88	0.58	89.9	Pulse	0.30	3
2	Tb		1,455,941.09	1.11	93.3	Pulse	0.30	3
2	Ho		144,139.07	1.80	93.8	Pulse	0.30	3
2	Bi		920,395.90	1.00	94.6	Pulse	0.30	3
3	Sc		76,822.58	0.62	93.0	Pulse	0.30	3
3	Ge		36,922.06	1.16	94.9	Pulse	0.30	3
3	Rh		269,878.18	0.40	94.8	Pulse	0.30	3
3	Tb		343,425.49	0.88	93.4	Pulse	0.30	3

Quantitation Report

File Name	031_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:49
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	58.130	ug/l	2.67	248,757.20	2.370E-01	Pulse	0.25	3
B			1	117.217	ug/l	3.83	522,235.26	4.976E-01	Pulse	0.15	3
Ca			1	5044.138	ug/l	0.68	3,940,815.15	1.578E+00	Pulse	0.10	3
Sr			1	52.391	ug/l	0.20	2,034,678.72	6.510E-01	Pulse	0.10	3
Mo			1	51.762	ug/l	0.75	390,020.52	1.248E-01	Pulse	0.10	3
Ag			1	49.919	ug/l	1.12	933,400.14	3.118E-01	Pulse	0.10	3
Sn			1	51.933	ug/l	0.88	568,110.02	1.898E-01	Pulse	0.10	3
Sb			1	51.003	ug/l	3.56	639,827.22	1.458E-01	Pulse	0.10	3
Ba			1	49.232	ug/l	4.89	260,065.99	5.927E-02	Pulse	0.10	3
Tl			1	51.431	ug/l	1.15	1,510,588.57	6.576E-01	Pulse	0.10	3
Pb			1	51.025	ug/l	1.16	521,686.86	2.271E-01	Pulse	0.10	3
Pb			1	51.212	ug/l	0.76	453,356.07	1.973E-01	Pulse	0.10	3
Pb			1	51.107	ug/l	0.68	2,083,991.35	9.070E-01	Pulse	0.10	3
Na			2	4955.409	ug/l	0.95	3,881,079.29	4.056E+01	Pulse	0.30	3
Mg			2	4963.785	ug/l	0.15	1,830,941.11	1.913E+01	Pulse	0.30	3
Al			2	4697.063	ug/l	0.55	650,864.21	6.801E+00	Pulse	0.30	3
K			2	4971.311	ug/l	0.96	1,304,225.12	1.363E+01	Pulse	0.30	3
Ca			2	5421.383	ug/l	0.44	80,222.79	8.383E-01	Pulse	0.30	3
Ti			2	50.846	ug/l	2.71	5,578.99	5.830E-02	Pulse	0.30	3
V			2	53.945	ug/l	0.17	187,869.10	1.963E+00	Pulse	0.30	3
Cr			2	52.423	ug/l	0.52	235,081.16	2.457E+00	Pulse	0.30	3
Mn			2	50.907	ug/l	1.39	129,697.54	1.355E+00	Pulse	0.30	3
Fe			2	5285.406	ug/l	1.01	19,676,658.11	2.056E+02	Analog	0.30	3
Co			2	52.773	ug/l	1.51	381,428.96	3.986E+00	Pulse	0.30	3
Ni			2	52.332	ug/l	0.83	100,904.68	1.054E+00	Pulse	0.30	3
Cu			2	51.829	ug/l	0.71	266,859.80	2.789E+00	Pulse	0.30	3
Zn			2	50.933	ug/l	1.30	42,019.73	4.391E-01	Pulse	0.30	3
As			2	53.880	ug/l	1.73	20,616.80	2.154E-01	Pulse	1.00	3
Cd			2	51.562	ug/l	1.09	57,642.00	1.306E-01	Pulse	0.30	3
Sn			2	53.562	ug/l	0.69	108,384.45	2.456E-01	Pulse	0.30	3
Se			3	204.828	ug/l	5.81	10,339.98	2.709E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,050,078.15	2.92	66.3	Pulse	0.10	3
1	Sc		2,496,594.50	2.56	90.3	Pulse	0.10	3
1	Ge		644,752.71	3.76	96.7	Pulse	0.10	3

Quantitation Report

1	Rh		3,125,683.91	3.06	97.0	Pulse	0.10	3
1	In		2,993,972.83	4.40	100.3	Pulse	0.10	3
1	Tb		4,387,840.87	0.55	103.3	Analog	0.10	3
1	Ho		393,074.19	5.01	104.6	Pulse	0.10	3
1	Bi		2,297,118.61	5.01	102.1	Pulse	0.10	3
2	Sc		95,695.30	0.36	84.7	Pulse	0.30	3
2	Ge		78,101.48	0.25	91.8	Pulse	0.30	3
2	Rh		1,317,753.63	0.07	92.0	Pulse	0.30	3
2	In		441,389.07	0.60	91.1	Pulse	0.30	3
2	Tb		1,513,771.54	0.46	97.0	Pulse	0.30	3
2	Ho		149,339.35	1.60	97.2	Pulse	0.30	3
2	Bi		929,602.64	1.67	95.6	Pulse	0.30	3
3	Sc		78,126.56	0.48	94.6	Pulse	0.30	3
3	Ge		38,195.47	2.29	98.2	Pulse	0.30	3
3	Rh		266,695.63	0.39	93.7	Pulse	0.30	3
3	Tb		355,969.22	0.35	96.8	Pulse	0.30	3

Quantitation Report

File Name	032_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:54
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-30.53	13.33	1.261E-05	Pulse	0.25	3
B			1	1.011	ug/l	12.47	13,021.88	1.229E-02	Pulse	0.15	3
Ca			1	-2.918	ug/l	-13.48	11,448.50	4.696E-03	Pulse	0.10	3
Sr			1	0.013	ug/l	5.29	1,250.11	4.010E-04	Pulse	0.10	3
Mo			1	0.050	ug/l	12.67	836.73	2.682E-04	Pulse	0.10	3
Ag			1	-0.003	ug/l	-51.49	196.68	6.609E-05	Pulse	0.10	3
Sn			1	-0.023	ug/l	-63.32	1,583.49	5.293E-04	Pulse	0.10	3
Sb			1	0.249	ug/l	6.00	1,690.18	3.871E-04	Pulse	0.10	3
Ba			1	0.169	ug/l	1.73	26.67	6.111E-06	Pulse	0.10	3
Tl			1	-0.001	ug/l	-511.19	690.05	3.021E-04	Pulse	0.10	3
Pb			1	-0.005	ug/l	-69.30	220.01	9.641E-05	Pulse	0.10	3
Pb			1	-0.004	ug/l	-198.46	190.01	8.260E-05	Pulse	0.10	3
Pb			1	-0.005	ug/l	-31.91	866.72	3.780E-04	Pulse	0.10	3
Na			2	5.053	ug/l	18.34	21,789.14	2.353E-01	Pulse	0.30	3
Mg			2	0.639	ug/l	14.05	441.13	4.765E-03	Pulse	0.30	3
Al			2	0.464	ug/l	30.59	244.45	2.641E-03	Pulse	0.30	3
K			2	1.224	ug/l	31.21	4,534.12	4.897E-02	Pulse	0.30	3
Ca			2	-0.150	ug/l	-141.16	68.89	7.437E-04	Pulse	0.30	3
Ti			2	0.016	ug/l	226.02	4.45	4.777E-05	Pulse	0.30	3
V			2	0.016	ug/l	33.01	263.34	2.844E-03	Pulse	0.30	3
Cr			2	0.009	ug/l	78.53	510.02	5.508E-03	Pulse	0.30	3
Mn			2	0.007	ug/l	47.37	57.78	6.245E-04	Pulse	0.30	3
Fe			2	1.377	ug/l	2.33	10,185.06	1.100E-01	Pulse	0.30	3
Co			2	-0.006	ug/l	-22.19	13.30	1.432E-04	Pulse	0.30	3
Ni			2	-0.007	ug/l	-150.76	80.00	8.647E-04	Pulse	0.30	3
Cu			2	-0.052	ug/l	-16.07	623.36	6.730E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Zn			2	-0.093	ug/l	-11.79	221.11	2.388E-03	Pulse	0.30	3
As			2	0.004	ug/l	235.00	13.67	1.474E-04	Pulse	1.00	3
Cd			2	0.050	ug/l	12.54	15.31	3.561E-05	Pulse	0.30	3
Sn			2	0.057	ug/l	52.93	334.45	7.798E-04	Pulse	0.30	3
Se			3	0.441	ug/l	160.93	53.34	1.444E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,060,390.44	1.97	67.0	Pulse	0.10	3
1	Sc		2,437,872.36	2.39	88.2	Pulse	0.10	3
1	Ge		622,301.45	2.15	93.4	Pulse	0.10	3
1	Rh		3,116,957.56	3.52	96.8	Pulse	0.10	3
1	In		2,985,298.75	3.47	100.0	Pulse	0.10	3
1	Tb		4,363,933.89	1.57	102.7	Analog	0.10	3
1	Ho		380,068.93	4.58	101.1	Pulse	0.10	3
1	Bi		2,290,722.83	3.39	101.8	Pulse	0.10	3
2	Sc		92,606.30	1.24	82.0	Pulse	0.30	3
2	Ge		75,585.61	1.99	88.9	Pulse	0.30	3
2	Rh		1,313,462.87	0.40	91.7	Pulse	0.30	3
2	In		429,249.76	0.78	88.6	Pulse	0.30	3
2	Tb		1,463,921.78	1.17	93.8	Pulse	0.30	3
2	Ho		142,038.12	0.56	92.4	Pulse	0.30	3
2	Bi		917,237.29	0.90	94.3	Pulse	0.30	3
3	Sc		77,389.15	0.76	93.7	Pulse	0.30	3
3	Ge		37,261.96	2.01	95.8	Pulse	0.30	3
3	Rh		270,562.30	0.93	95.0	Pulse	0.30	3
3	Tb		347,030.52	0.18	94.3	Pulse	0.30	3

Quantitation Report

File Name	033SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 12:59
Sample Name	JC98523-1Q 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-66.85	14.67	1.309E-05	Pulse	0.25	3
B			1	0.286	ug/l	70.25	9,805.87	8.663E-03	Pulse	0.15	3
Ca			1	56.794	ug/l	3.60	36,903.23	1.446E-02	Pulse	0.10	3
Sr			1	0.634	ug/l	1.68	13,307.09	4.179E-03	Pulse	0.10	3
Mo			1	0.032	ug/l	27.64	596.71	1.872E-04	Pulse	0.10	3
Ag			1	-0.019	ug/l	-23.37	73.34	2.429E-05	Pulse	0.10	3
Sn			1	0.226	ug/l	20.60	3,110.51	1.023E-03	Pulse	0.10	3
Sb			1	0.310	ug/l	2.25	513.37	1.164E-04	Pulse	0.10	3
Ba			1	0.394	ug/l	1.38	176.68	4.006E-05	Pulse	0.10	3
Tl			1	-0.007	ug/l	-44.35	620.04	2.695E-04	Pulse	0.10	3
Pb			1	0.034	ug/l	38.44	453.36	1.966E-04	Pulse	0.10	3
Pb			1	0.044	ug/l	52.34	420.03	1.823E-04	Pulse	0.10	3
Pb			1	0.030	ug/l	43.05	1,710.12	7.412E-04	Pulse	0.10	3
Na			2	231.055	ug/l	1.09	112,629.93	1.135E+00	Pulse	0.30	3
Mg			2	8.716	ug/l	5.62	1,894.60	1.910E-02	Pulse	0.30	3
Al			2	106.328	ug/l	1.12	7,831.15	7.893E-02	Pulse	0.30	3
K			2	2.160	ug/l	32.92	4,819.77	4.858E-02	Pulse	0.30	3
Ca			2	69.957	ug/l	2.05	612.24	6.171E-03	Pulse	0.30	3
Ti			2	0.026	ug/l	335.52	4.44	4.464E-05	Pulse	0.30	3
V			2	-0.088	ug/l	-7.05	64.44	6.490E-04	Pulse	0.30	3
Cr			2	-0.033	ug/l	-87.54	428.90	4.321E-03	Pulse	0.30	3
Mn			2	0.105	ug/l	19.58	182.23	1.835E-03	Pulse	0.30	3
Fe			2	1.789	ug/l	9.71	9,051.98	9.125E-02	Pulse	0.30	3
Co			2	-0.004	ug/l	-49.38	41.09	4.141E-04	Pulse	0.30	3
Ni			2	0.054	ug/l	8.20	153.34	1.546E-03	Pulse	0.30	3
Cu			2	0.092	ug/l	29.58	1,191.18	1.200E-02	Pulse	0.30	3
Zn			2	3.824	ug/l	4.15	1,940.16	1.955E-02	Pulse	0.30	3
As			2	-0.016	ug/l	-138.05	10.00	1.010E-04	Pulse	1.00	3
Cd			2	0.083	ug/l	6.75	6.47	1.420E-05	Pulse	0.30	3
Sn			2	0.322	ug/l	16.42	570.02	1.257E-03	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	0.017	ug/l	3051.78	34.00	8.740E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,132,033.90	1.74	71.5	Pulse	0.10	3
1	Sc		2,551,222.77	3.36	92.3	Pulse	0.10	3
1	Ge		655,872.78	3.82	98.4	Pulse	0.10	3
1	Rh		3,185,739.33	3.36	98.9	Pulse	0.10	3
1	In		3,047,781.53	3.49	102.1	Pulse	0.10	3
1	Tb		4,409,019.93	1.10	103.8	Analog	0.10	3
1	Ho		382,860.63	3.62	101.9	Pulse	0.10	3
1	Bi		2,299,438.72	4.81	102.2	Pulse	0.10	3
2	Sc		99,220.15	0.71	87.8	Pulse	0.30	3
2	Ge		80,582.40	0.38	94.8	Pulse	0.30	3
2	Rh		1,339,805.64	0.39	93.6	Pulse	0.30	3
2	In		453,642.69	1.12	93.6	Pulse	0.30	3
2	Tb		1,479,881.99	0.36	94.8	Pulse	0.30	3
2	Ho		146,672.31	0.12	95.5	Pulse	0.30	3
2	Bi		950,113.16	1.42	97.7	Pulse	0.30	3
3	Sc		80,399.43	1.25	97.3	Pulse	0.30	3
3	Ge		38,953.26	0.58	100.1	Pulse	0.30	3
3	Rh		276,464.38	0.97	97.1	Pulse	0.30	3
3	Tb		350,425.26	0.40	95.3	Pulse	0.30	3

Quantitation Report

File Name	034SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:03
Sample Name	mp18359a-mb1conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-56.90	14.67	1.366E-05	Pulse	0.25	3
B			1	0.722	ug/l	9.00	10,161.72	9.572E-03	Pulse	0.15	3
Ca			1	18.372	ug/l	12.23	20,225.40	8.470E-03	Pulse	0.10	3
Sr			1	0.114	ug/l	2.88	2,953.78	9.511E-04	Pulse	0.10	3
Mo			1	0.268	ug/l	20.84	1,466.81	4.717E-04	Pulse	0.10	3
Ag			1	0.005	ug/l	140.24	286.68	9.890E-05	Pulse	0.10	3
Sn			1	0.667	ug/l	9.12	5,317.91	1.827E-03	Pulse	0.10	3
Sb			1	0.528	ug/l	2.12	1,883.54	4.290E-04	Pulse	0.10	3
Ba			1	0.462	ug/l	2.94	356.69	8.124E-05	Pulse	0.10	3
Tl			1	-0.009	ug/l	-51.72	560.03	2.520E-04	Pulse	0.10	3
Pb			1	0.049	ug/l	26.46	513.37	2.301E-04	Pulse	0.10	3
Pb			1	0.067	ug/l	47.37	503.36	2.265E-04	Pulse	0.10	3
Pb			1	0.052	ug/l	14.36	2,076.80	9.339E-04	Pulse	0.10	3
Na			2	28.994	ug/l	6.89	28,857.34	3.123E-01	Pulse	0.30	3
Mg			2	4.198	ug/l	15.36	961.16	1.039E-02	Pulse	0.30	3
Al			2	111.362	ug/l	2.13	7,632.17	8.257E-02	Pulse	0.30	3
K			2	5.383	ug/l	5.47	4,896.47	5.298E-02	Pulse	0.30	3
Ca			2	24.330	ug/l	18.28	244.45	2.646E-03	Pulse	0.30	3
Ti			2	0.347	ug/l	9.45	21.11	2.283E-04	Pulse	0.30	3
V			2	0.454	ug/l	22.92	970.05	1.050E-02	Pulse	0.30	3
Cr			2	0.519	ug/l	2.49	1,592.34	1.723E-02	Pulse	0.30	3
Mn			2	0.222	ug/l	13.02	313.34	3.388E-03	Pulse	0.30	3
Fe			2	11.914	ug/l	4.10	26,634.69	2.881E-01	Pulse	0.30	3
Co			2	0.002	ug/l	105.70	58.82	6.359E-04	Pulse	0.30	3
Ni			2	0.055	ug/l	35.29	143.34	1.551E-03	Pulse	0.30	3
Cu			2	0.891	ug/l	5.11	3,089.27	3.342E-02	Pulse	0.30	3
Zn			2	5.066	ug/l	7.47	2,298.00	2.486E-02	Pulse	0.30	3
As			2	0.240	ug/l	13.33	56.67	6.130E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.116	ug/l	16.54	23.99	5.566E-05	Pulse	0.30	3
Sn			2	0.798	ug/l	3.87	1,008.94	2.346E-03	Pulse	0.30	3
Se			3	-0.187	ug/l	-56.92	27.33	7.398E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,061,788.53	2.28	67.1	Pulse	0.10	3
1	Sc		2,389,276.79	2.32	86.4	Pulse	0.10	3
1	Ge		612,197.83	2.89	91.9	Pulse	0.10	3
1	Rh		3,106,555.47	3.25	96.5	Pulse	0.10	3
1	In		2,912,093.22	3.35	97.5	Pulse	0.10	3
1	Tb		4,391,059.83	0.63	103.4	Analog	0.10	3
1	Ho		380,000.72	2.69	101.1	Pulse	0.10	3
1	Bi		2,228,270.12	4.15	99.0	Pulse	0.10	3
2	Sc		92,425.57	0.95	81.8	Pulse	0.30	3
2	Ge		74,074.90	1.15	87.1	Pulse	0.30	3
2	Rh		1,299,162.34	1.02	90.7	Pulse	0.30	3
2	In		429,983.79	0.86	88.7	Pulse	0.30	3
2	Tb		1,451,134.70	1.91	93.0	Pulse	0.30	3
2	Ho		143,568.69	1.61	93.4	Pulse	0.30	3
2	Bi		911,174.41	0.84	93.7	Pulse	0.30	3
3	Sc		77,373.50	1.14	93.7	Pulse	0.30	3
3	Ge		36,903.18	1.79	94.8	Pulse	0.30	3
3	Rh		267,418.05	0.17	93.9	Pulse	0.30	3
3	Tb		348,449.52	0.60	94.7	Pulse	0.30	3

Quantitation Report

File Name	035SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:08
Sample Name	mp18359a-b2conf
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	84.140	ug/l	1.99	181,478.37	1.715E-01	Pulse	0.25	3
B			1	90.435	ug/l	2.60	208,343.05	1.969E-01	Pulse	0.15	3
Ca			1	4122.601	ug/l	0.37	1,577,198.52	6.483E-01	Pulse	0.10	3
Sr			1	78.936	ug/l	0.95	1,519,649.92	4.905E-01	Pulse	0.10	3
Mo			1	79.861	ug/l	0.67	298,374.83	9.629E-02	Pulse	0.10	3
Ag			1	76.800	ug/l	0.87	712,744.99	2.399E-01	Pulse	0.10	3
Sn			1	80.870	ug/l	0.73	439,479.93	1.479E-01	Pulse	0.10	3
Sb			1	75.124	ug/l	4.01	472,817.68	1.073E-01	Pulse	0.10	3
Ba			1	73.861	ug/l	4.70	195,691.34	4.441E-02	Pulse	0.10	3
Tl			1	79.661	ug/l	1.78	1,147,806.68	5.093E-01	Pulse	0.10	3
Pb			1	81.588	ug/l	0.34	409,184.77	1.816E-01	Pulse	0.10	3
Pb			1	81.999	ug/l	1.60	356,185.53	1.580E-01	Pulse	0.10	3
Pb			1	81.803	ug/l	0.86	1,636,294.93	7.260E-01	Pulse	0.10	3
Na			2	3984.111	ug/l	0.76	1,560,600.74	1.642E+01	Pulse	0.30	3
Mg			2	3991.951	ug/l	0.29	731,337.66	7.695E+00	Pulse	0.30	3
Al			2	3814.960	ug/l	1.20	262,627.16	2.763E+00	Pulse	0.30	3
K			2	3953.579	ug/l	0.78	517,665.45	5.447E+00	Pulse	0.30	3
Ca			2	4550.702	ug/l	0.24	33,482.54	3.523E-01	Pulse	0.30	3
Ti			2	78.328	ug/l	2.39	4,268.50	4.491E-02	Pulse	0.30	3
V			2	81.078	ug/l	2.10	140,266.72	1.476E+00	Pulse	0.30	3
Cr			2	80.539	ug/l	1.38	179,457.79	1.888E+00	Pulse	0.30	3
Mn			2	77.995	ug/l	0.95	98,688.37	1.038E+00	Pulse	0.30	3
Fe			2	4332.731	ug/l	1.54	8,013,261.35	8.431E+01	Analog	0.30	3
Co			2	80.232	ug/l	0.91	287,968.81	3.030E+00	Pulse	0.30	3
Ni			2	79.327	ug/l	0.99	75,977.65	7.994E-01	Pulse	0.30	3
Cu			2	78.611	ug/l	0.88	201,211.01	2.117E+00	Pulse	0.30	3
Zn			2	71.084	ug/l	2.17	29,212.26	3.074E-01	Pulse	0.30	3
As			2	73.071	ug/l	1.73	13,887.72	1.461E-01	Pulse	1.00	3
Cd			2	72.764	ug/l	1.35	40,316.82	9.212E-02	Pulse	0.30	3
Sn			2	81.772	ug/l	0.87	82,083.87	1.876E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	322.121	ug/l	4.28	8,045.76	2.132E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,058,010.52	0.53	66.8	Pulse	0.10	3
1	Sc		2,432,775.43	3.02	88.0	Pulse	0.10	3
1	Ge		623,622.08	3.71	93.6	Pulse	0.10	3
1	Rh		3,099,120.79	3.85	96.2	Pulse	0.10	3
1	In		2,971,592.85	4.52	99.5	Pulse	0.10	3
1	Tb		4,405,673.06	0.60	103.7	Analog	0.10	3
1	Ho		395,053.86	5.34	105.1	Pulse	0.10	3
1	Bi		2,253,512.31	4.78	100.2	Pulse	0.10	3
2	Sc		95,042.59	0.67	84.1	Pulse	0.30	3
2	Ge		75,846.69	0.72	89.2	Pulse	0.30	3
2	Rh		1,312,363.28	0.43	91.7	Pulse	0.30	3
2	In		437,628.47	0.40	90.3	Pulse	0.30	3
2	Tb		1,500,888.59	0.37	96.2	Pulse	0.30	3
2	Ho		148,636.63	0.23	96.7	Pulse	0.30	3
2	Bi		919,199.41	0.39	94.5	Pulse	0.30	3
3	Sc		78,311.01	0.26	94.8	Pulse	0.30	3
3	Ge		37,740.94	1.31	97.0	Pulse	0.30	3
3	Rh		265,195.83	0.78	93.1	Pulse	0.30	3
3	Tb		353,733.01	0.50	96.2	Pulse	0.30	3

Quantitation Report

File Name	036SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:13
Sample Name	jc98257-5 4
Sample Type	Sample
Comment	fb
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-69.95	24.00	2.259E-05	Pulse	0.25	3
B			1	1.221	ug/l	12.10	11,287.02	1.061E-02	Pulse	0.15	3
Ca			1	34.801	ug/l	1.97	26,726.51	1.103E-02	Pulse	0.10	3
Sr			1	0.641	ug/l	0.66	13,103.49	4.223E-03	Pulse	0.10	3
Mo			1	0.237	ug/l	24.18	1,340.12	4.336E-04	Pulse	0.10	3
Ag			1	0.009	ug/l	20.18	333.35	1.129E-04	Pulse	0.10	3
Sn			1	0.383	ug/l	6.09	3,857.41	1.309E-03	Pulse	0.10	3
Sb			1	0.523	ug/l	5.70	1,866.87	4.222E-04	Pulse	0.10	3
Ba			1	0.925	ug/l	3.58	1,593.50	3.605E-04	Pulse	0.10	3
Tl			1	0.014	ug/l	34.03	896.73	4.032E-04	Pulse	0.10	3
Pb			1	0.033	ug/l	30.25	430.03	1.932E-04	Pulse	0.10	3
Pb			1	0.034	ug/l	22.76	363.35	1.633E-04	Pulse	0.10	3
Pb			1	0.028	ug/l	4.17	1,606.77	7.235E-04	Pulse	0.10	3
Na			2	42.821	ug/l	0.18	34,228.14	3.686E-01	Pulse	0.30	3
Mg			2	3.586	ug/l	6.88	855.60	9.214E-03	Pulse	0.30	3
Al			2	107.871	ug/l	2.85	7,433.15	8.005E-02	Pulse	0.30	3
K			2	10.959	ug/l	17.19	5,626.74	6.060E-02	Pulse	0.30	3
Ca			2	42.737	ug/l	11.82	377.79	4.068E-03	Pulse	0.30	3
Ti			2	0.617	ug/l	40.86	35.55	3.827E-04	Pulse	0.30	3
V			2	0.488	ug/l	11.64	1,033.39	1.113E-02	Pulse	0.30	3
Cr			2	0.653	ug/l	3.60	1,890.15	2.035E-02	Pulse	0.30	3
Mn			2	0.220	ug/l	7.48	312.23	3.363E-03	Pulse	0.30	3
Fe			2	6.651	ug/l	1.76	17,252.02	1.858E-01	Pulse	0.30	3
Co			2	0.018	ug/l	56.78	117.73	1.268E-03	Pulse	0.30	3
Ni			2	0.269	ug/l	17.10	344.45	3.708E-03	Pulse	0.30	3
Cu			2	9.059	ug/l	2.30	23,439.00	2.524E-01	Pulse	0.30	3
Zn			2	5.004	ug/l	5.44	2,284.67	2.460E-02	Pulse	0.30	3
As			2	0.275	ug/l	13.83	63.33	6.818E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.088	ug/l	14.37	8.37	1.953E-05	Pulse	0.30	3
Sn			2	0.621	ug/l	4.78	828.93	1.940E-03	Pulse	0.30	3
Se			3	0.113	ug/l	361.79	34.67	9.376E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,063,385.23	0.53	67.2	Pulse	0.10	3
1	Sc		2,422,671.73	2.05	87.6	Pulse	0.10	3
1	Ge		616,032.94	3.01	92.4	Pulse	0.10	3
1	Rh		3,103,229.95	4.27	96.4	Pulse	0.10	3
1	In		2,948,801.96	3.76	98.8	Pulse	0.10	3
1	Tb		4,423,265.14	1.86	104.1	Analog	0.10	3
1	Ho		382,584.03	3.68	101.8	Pulse	0.10	3
1	Bi		2,220,028.25	4.07	98.7	Pulse	0.10	3
2	Sc		92,863.74	0.32	82.2	Pulse	0.30	3
2	Ge		75,350.42	0.32	88.6	Pulse	0.30	3
2	Rh		1,288,279.53	0.68	90.0	Pulse	0.30	3
2	In		427,278.26	0.76	88.2	Pulse	0.30	3
2	Tb		1,467,150.64	1.60	94.0	Pulse	0.30	3
2	Ho		144,228.26	1.18	93.9	Pulse	0.30	3
2	Bi		903,256.53	0.87	92.9	Pulse	0.30	3
3	Sc		77,993.98	0.51	94.4	Pulse	0.30	3
3	Ge		37,119.31	2.11	95.4	Pulse	0.30	3
3	Rh		265,984.39	0.44	93.4	Pulse	0.30	3
3	Tb		346,022.01	1.47	94.1	Pulse	0.30	3

Quantitation Report

File Name	037SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:18
Sample Name	jc98257-5undigconf
Sample Type	Sample
Comment	fb
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	448.30	44.00	3.620E-05	Pulse	0.25	3
B			1	-0.768	ug/l	-1.72	7,886.84	6.461E-03	Pulse	0.15	3
Ca			1	20.079	ug/l	7.53	23,053.12	8.736E-03	Pulse	0.10	3
Sr			1	0.636	ug/l	4.16	13,497.28	4.194E-03	Pulse	0.10	3
Mo			1	-0.064	ug/l	-15.08	230.01	7.171E-05	Pulse	0.10	3
Ag			1	-0.021	ug/l	-16.45	56.67	1.865E-05	Pulse	0.10	3
Sn			1	-0.260	ug/l	-4.73	423.36	1.373E-04	Pulse	0.10	3
Sb			1	0.277	ug/l	2.01	310.02	6.904E-05	Pulse	0.10	3
Ba			1	1.009	ug/l	7.18	1,846.87	4.114E-04	Pulse	0.10	3
Tl			1	-0.021	ug/l	-27.72	406.69	1.765E-04	Pulse	0.10	3
Pb			1	0.002	ug/l	222.80	286.68	1.244E-04	Pulse	0.10	3
Pb			1	-0.008	ug/l	-82.12	190.01	8.274E-05	Pulse	0.10	3
Pb			1	-0.003	ug/l	-165.80	1,020.07	4.435E-04	Pulse	0.10	3
Na			2	11.480	ug/l	8.33	24,982.21	2.409E-01	Pulse	0.30	3
Mg			2	1.486	ug/l	29.00	535.57	5.166E-03	Pulse	0.30	3
Al			2	103.933	ug/l	1.94	8,003.47	7.720E-02	Pulse	0.30	3
K			2	5.204	ug/l	30.31	5,467.80	5.273E-02	Pulse	0.30	3
Ca			2	31.708	ug/l	23.08	333.34	3.216E-03	Pulse	0.30	3
Ti			2	0.023	ug/l	368.82	4.44	4.275E-05	Pulse	0.30	3
V			2	-0.079	ug/l	-4.82	84.45	8.146E-04	Pulse	0.30	3
Cr			2	-0.091	ug/l	-16.19	306.67	2.958E-03	Pulse	0.30	3
Mn			2	0.072	ug/l	20.05	144.45	1.393E-03	Pulse	0.30	3
Fe			2	-0.915	ug/l	-1.72	4,008.41	3.866E-02	Pulse	0.30	3
Co			2	0.010	ug/l	69.22	98.88	9.532E-04	Pulse	0.30	3
Ni			2	0.191	ug/l	19.05	303.34	2.925E-03	Pulse	0.30	3
Cu			2	8.882	ug/l	1.12	25,677.43	2.477E-01	Pulse	0.30	3
Zn			2	3.188	ug/l	1.75	1,744.58	1.683E-02	Pulse	0.30	3
As			2	0.012	ug/l	263.29	16.33	1.574E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.083	ug/l	13.72	6.58	1.423E-05	Pulse	0.30	3
Sn			2	-0.126	ug/l	-29.58	107.78	2.314E-04	Pulse	0.30	3
Se			3	-0.043	ug/l	-921.26	32.67	8.347E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,220,626.95	1.32	77.1	Pulse	0.10	3
1	Sc		2,639,923.97	3.39	95.5	Pulse	0.10	3
1	Ge		678,618.22	3.54	101.8	Pulse	0.10	3
1	Rh		3,218,127.66	3.89	99.9	Pulse	0.10	3
1	In		3,073,851.67	3.98	103.0	Pulse	0.10	3
1	Tb		4,489,859.31	0.37	105.7	Analog	0.10	3
1	Ho		386,608.28	4.06	102.8	Pulse	0.10	3
1	Bi		2,299,536.27	3.83	102.2	Pulse	0.10	3
2	Sc		103,680.17	0.45	91.8	Pulse	0.30	3
2	Ge		83,439.63	0.86	98.1	Pulse	0.30	3
2	Rh		1,368,361.09	0.72	95.6	Pulse	0.30	3
2	In		465,803.71	1.09	96.1	Pulse	0.30	3
2	Tb		1,519,965.43	0.15	97.4	Pulse	0.30	3
2	Ho		147,778.93	1.62	96.2	Pulse	0.30	3
2	Bi		949,096.63	1.14	97.6	Pulse	0.30	3
3	Sc		82,526.04	1.60	99.9	Pulse	0.30	3
3	Ge		39,108.00	0.76	100.5	Pulse	0.30	3
3	Rh		280,763.30	0.73	98.6	Pulse	0.30	3
3	Tb		354,382.24	0.59	96.3	Pulse	0.30	3

Quantitation Report

File Name	038SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:22
Sample Name	mp18359a-s3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	86.868	ug/l	1.51	172,486.83	1.771E-01	Pulse	0.25	3
B			1	227.389	ug/l	1.37	470,340.59	4.829E-01	Pulse	0.15	3
Ca			1	301631.553	ug/l	3.21	110,586,838.35	4.703E+01	Analog	0.10	3
Sr			1	802.263	ug/l	5.54	13,658,521.05	4.983E+00	Analog	0.10	3
Mo			1	86.811	ug/l	1.51	287,239.37	1.047E-01	Pulse	0.10	3
Ag			1	71.014	ug/l	1.77	600,181.15	2.218E-01	Pulse	0.10	3
Sn			1	80.324	ug/l	1.18	397,760.67	1.469E-01	Pulse	0.10	3
Sb			1	72.812	ug/l	4.18	424,241.74	1.040E-01	Pulse	0.10	3
Ba			1	461.316	ug/l	4.60	1,135,862.46	2.784E-01	Pulse	0.10	3
Tl			1	82.547	ug/l	0.26	1,019,852.25	5.278E-01	Pulse	0.10	3
Pb			1	84.281	ug/l	0.62	362,530.41	1.875E-01	Pulse	0.10	3
Pb			1	84.366	ug/l	0.58	314,158.07	1.626E-01	Pulse	0.10	3
Pb			1	84.177	ug/l	0.24	1,443,849.28	7.471E-01	Pulse	0.10	3
Na			2	88545.906	ug/l	9.02	34,147,671.98	3.608E+02	Analog	0.30	3
Mg			2	51385.883	ug/l	7.73	9,378,199.63	9.902E+01	Analog	0.30	3
Al			2	3799.892	ug/l	7.90	260,633.25	2.752E+00	Pulse	0.30	3
K			2	5571.978	ug/l	8.13	725,065.72	7.658E+00	Pulse	0.30	3
Ca			2	279324.936	ug/l	7.72	2,043,429.02	2.158E+01	Pulse	0.30	3
Ti			2	77.306	ug/l	11.27	4,190.70	4.433E-02	Pulse	0.30	3
V			2	82.232	ug/l	7.58	141,765.15	1.497E+00	Pulse	0.30	3
Cr			2	77.922	ug/l	8.40	172,961.76	1.827E+00	Pulse	0.30	3
Mn			2	8326.373	ug/l	7.13	10,496,830.14	1.108E+02	Analog	0.30	3
Fe			2	5580.999	ug/l	8.35	10,280,383.20	1.086E+02	Analog	0.30	3
Co			2	76.234	ug/l	8.50	272,531.95	2.879E+00	Pulse	0.30	3
Ni			2	75.259	ug/l	8.64	71,794.33	7.585E-01	Pulse	0.30	3
Cu			2	78.283	ug/l	8.89	199,539.07	2.108E+00	Pulse	0.30	3
Zn			2	66.964	ug/l	7.55	27,446.37	2.898E-01	Pulse	0.30	3
As			2	70.411	ug/l	8.16	13,332.16	1.408E-01	Pulse	1.00	3
Cd			2	70.267	ug/l	6.19	36,284.33	8.896E-02	Pulse	0.30	3
Sn			2	81.345	ug/l	6.89	76,076.14	1.866E-01	Pulse	0.30	3
Se			3	322.970	ug/l	2.22	7,401.39	2.138E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		973,889.81	1.53	61.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,353,270.43	3.70	85.1	Pulse	0.10	3
1	Ge		580,530.33	3.83	87.1	Pulse	0.10	3
1	Rh		2,745,653.66	4.34	85.2	Pulse	0.10	3
1	In		2,706,691.76	4.97	90.7	Pulse	0.10	3
1	Tb		4,079,664.52	0.98	96.0	Analog	0.10	3
1	Ho		365,610.20	5.04	97.3	Pulse	0.10	3
1	Bi		1,932,563.36	5.36	85.9	Pulse	0.10	3
2	Sc		95,089.74	7.94	84.2	Pulse	0.30	3
2	Ge		71,746.44	5.20	84.4	Pulse	0.30	3
2	Rh		1,165,808.98	7.09	81.4	Pulse	0.30	3
2	In		409,051.70	7.07	84.4	Pulse	0.30	3
2	Tb		1,416,980.95	6.85	90.8	Pulse	0.30	3
2	Ho		139,992.81	6.68	91.1	Pulse	0.30	3
2	Bi		791,217.21	6.63	81.3	Pulse	0.30	3
3	Sc		76,132.26	1.49	92.2	Pulse	0.30	3
3	Ge		34,618.25	0.90	89.0	Pulse	0.30	3
3	Rh		233,409.75	0.27	82.0	Pulse	0.30	3
3	Tb		331,735.63	1.13	90.2	Pulse	0.30	3

Quantitation Report

File Name	039SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:27
Sample Name	mp18359a-s4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	87.280	ug/l	1.04	173,371.57	1.779E-01	Pulse	0.25	3
B			1	235.678	ug/l	2.36	487,444.34	5.002E-01	Pulse	0.15	3
Ca			1	311878.591	ug/l	2.89	114,940,461.62	4.863E+01	Analog	0.10	3
Sr			1	836.500	ug/l	5.16	14,066,433.96	5.195E+00	Analog	0.10	3
Mo			1	88.589	ug/l	2.07	289,449.17	1.068E-01	Pulse	0.10	3
Ag			1	72.060	ug/l	0.96	609,806.12	2.251E-01	Pulse	0.10	3
Sn			1	82.432	ug/l	0.66	408,348.38	1.508E-01	Pulse	0.10	3
Sb			1	73.262	ug/l	4.49	431,200.50	1.046E-01	Pulse	0.10	3
Ba			1	475.448	ug/l	4.41	1,182,549.35	2.870E-01	Pulse	0.10	3
Tl			1	83.941	ug/l	0.76	1,024,249.39	5.367E-01	Pulse	0.10	3
Pb			1	85.388	ug/l	0.94	362,681.13	1.900E-01	Pulse	0.10	3
Pb			1	85.459	ug/l	0.57	314,258.77	1.647E-01	Pulse	0.10	3
Pb			1	85.557	ug/l	0.09	1,449,270.40	7.593E-01	Pulse	0.10	3
Na			2	92738.566	ug/l	0.45	35,392,869.71	3.779E+02	Analog	0.30	3
Mg			2	54376.990	ug/l	1.17	9,814,275.45	1.048E+02	Analog	0.30	3
Al			2	3902.081	ug/l	0.81	264,709.18	2.826E+00	Pulse	0.30	3
K			2	5745.416	ug/l	1.32	739,399.33	7.895E+00	Pulse	0.30	3
Ca			2	293851.232	ug/l	0.84	2,125,994.29	2.270E+01	Pulse	0.30	3
Ti			2	81.242	ug/l	3.75	4,362.97	4.658E-02	Pulse	0.30	3
V			2	83.996	ug/l	1.29	143,192.86	1.529E+00	Pulse	0.30	3
Cr			2	79.235	ug/l	0.48	173,993.53	1.858E+00	Pulse	0.30	3
Mn			2	8660.658	ug/l	1.29	10,794,824.01	1.153E+02	Analog	0.30	3
Fe			2	5724.335	ug/l	0.69	10,430,930.42	1.114E+02	Analog	0.30	3
Co			2	77.665	ug/l	0.86	274,706.71	2.933E+00	Pulse	0.30	3
Ni			2	76.552	ug/l	0.37	72,259.08	7.715E-01	Pulse	0.30	3
Cu			2	78.197	ug/l	0.67	197,244.96	2.106E+00	Pulse	0.30	3
Zn			2	68.760	ug/l	1.22	27,858.38	2.974E-01	Pulse	0.30	3
As			2	72.135	ug/l	1.22	13,511.01	1.443E-01	Pulse	1.00	3
Cd			2	71.500	ug/l	1.90	36,341.49	9.052E-02	Pulse	0.30	3
Sn			2	84.433	ug/l	1.82	77,746.81	1.936E-01	Pulse	0.30	3
Se			3	322.017	ug/l	2.82	7,400.05	2.131E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		974,340.53	1.23	61.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,364,710.12	2.50	85.5	Pulse	0.10	3
1	Ge		578,169.59	2.89	86.8	Pulse	0.10	3
1	Rh		2,711,553.92	4.29	84.2	Pulse	0.10	3
1	In		2,709,013.64	4.87	90.7	Pulse	0.10	3
1	Tb		4,121,244.21	1.07	97.0	Analog	0.10	3
1	Ho		365,178.76	3.44	97.1	Pulse	0.10	3
1	Bi		1,908,740.65	5.34	84.8	Pulse	0.10	3
2	Sc		93,661.26	0.66	82.9	Pulse	0.30	3
2	Ge		71,970.26	1.44	84.6	Pulse	0.30	3
2	Rh		1,157,470.13	0.74	80.8	Pulse	0.30	3
2	In		401,520.00	0.98	82.9	Pulse	0.30	3
2	Tb		1,404,047.90	0.08	90.0	Pulse	0.30	3
2	Ho		137,503.37	0.28	89.5	Pulse	0.30	3
2	Bi		771,992.47	0.43	79.4	Pulse	0.30	3
3	Sc		76,867.54	0.64	93.1	Pulse	0.30	3
3	Ge		34,715.20	0.56	89.2	Pulse	0.30	3
3	Rh		234,467.74	0.57	82.4	Pulse	0.30	3
3	Tb		329,454.60	0.67	89.6	Pulse	0.30	3

Quantitation Report

File Name	040SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:32
Sample Name	jc98257-2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	63.17	49.33	5.123E-05	Pulse	0.25	3
B			1	138.434	ug/l	0.73	286,291.24	2.971E-01	Pulse	0.15	3
Ca			1	296175.248	ug/l	2.85	108,775,311.71	4.618E+01	Analog	0.10	3
Sr			1	723.029	ug/l	3.55	12,171,133.15	4.491E+00	Analog	0.10	3
Mo			1	0.284	ug/l	19.43	1,333.45	4.902E-04	Pulse	0.10	3
Ag			1	0.011	ug/l	102.90	316.69	1.177E-04	Pulse	0.10	3
Sn			1	0.498	ug/l	14.40	4,074.11	1.519E-03	Pulse	0.10	3
Sb			1	0.481	ug/l	6.17	1,506.81	3.616E-04	Pulse	0.10	3
Ba			1	378.125	ug/l	3.82	951,704.18	2.282E-01	Pulse	0.10	3
Tl			1	0.032	ug/l	3.06	980.07	5.175E-04	Pulse	0.10	3
Pb			1	0.599	ug/l	1.82	2,753.73	1.453E-03	Pulse	0.10	3
Pb			1	0.591	ug/l	3.16	2,340.31	1.236E-03	Pulse	0.10	3
Pb			1	0.594	ug/l	1.22	10,872.30	5.739E-03	Pulse	0.10	3
Na			2	85335.697	ug/l	1.07	32,602,557.59	3.477E+02	Analog	0.30	3
Mg			2	47984.622	ug/l	1.65	8,669,946.32	9.247E+01	Analog	0.30	3
Al			2	161.998	ug/l	2.28	11,177.96	1.192E-01	Pulse	0.30	3
K			2	1649.243	ug/l	1.12	215,522.85	2.299E+00	Pulse	0.30	3
Ca			2	275580.098	ug/l	0.85	1,995,906.52	2.129E+01	Pulse	0.30	3
Ti			2	2.161	ug/l	7.03	118.89	1.268E-03	Pulse	0.30	3
V			2	1.477	ug/l	2.49	2,729.20	2.911E-02	Pulse	0.30	3
Cr			2	0.901	ug/l	10.44	2,451.35	2.615E-02	Pulse	0.30	3
Mn			2	8180.483	ug/l	1.83	10,206,782.93	1.089E+02	Analog	0.30	3
Fe			2	1422.574	ug/l	0.90	2,598,939.06	2.772E+01	Pulse	0.30	3
Co			2	2.917	ug/l	1.86	10,381.56	1.107E-01	Pulse	0.30	3
Ni			2	4.698	ug/l	4.07	4,527.46	4.829E-02	Pulse	0.30	3
Cu			2	11.697	ug/l	0.47	30,296.72	3.231E-01	Pulse	0.30	3
Zn			2	9.465	ug/l	0.57	4,096.22	4.369E-02	Pulse	0.30	3
As			2	1.339	ug/l	6.66	263.33	2.809E-03	Pulse	1.00	3
Cd			2	0.981	ug/l	11.53	467.51	1.152E-03	Pulse	0.30	3
Sn			2	0.686	ug/l	15.06	848.93	2.089E-03	Pulse	0.30	3
Se			3	0.832	ug/l	13.76	48.67	1.411E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		963,548.84	1.38	60.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,356,720.80	2.77	85.2	Pulse	0.10	3
1	Ge		570,145.88	3.46	85.6	Pulse	0.10	3
1	Rh		2,712,829.02	3.76	84.2	Pulse	0.10	3
1	In		2,685,193.48	3.99	89.9	Pulse	0.10	3
1	Tb		4,171,502.54	1.24	98.2	Analog	0.10	3
1	Ho		362,052.18	3.54	96.3	Pulse	0.10	3
1	Bi		1,894,226.48	3.33	84.2	Pulse	0.10	3
2	Sc		93,757.61	0.20	83.0	Pulse	0.30	3
2	Ge		71,373.85	0.31	83.9	Pulse	0.30	3
2	Rh		1,159,177.97	0.68	81.0	Pulse	0.30	3
2	In		406,106.27	0.89	83.8	Pulse	0.30	3
2	Tb		1,412,198.10	0.24	90.5	Pulse	0.30	3
2	Ho		139,541.46	0.67	90.8	Pulse	0.30	3
2	Bi		791,158.40	0.73	81.3	Pulse	0.30	3
3	Sc		76,801.44	0.75	93.0	Pulse	0.30	3
3	Ge		34,496.78	0.76	88.7	Pulse	0.30	3
3	Rh		237,524.43	0.65	83.4	Pulse	0.30	3
3	Tb		327,818.49	0.42	89.1	Pulse	0.30	3

Quantitation Report

File Name	041_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:36
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	58.032	ug/l	1.28	275,671.08	2.366E-01	Pulse	0.25	3
B			1	119.789	ug/l	2.76	592,349.14	5.083E-01	Pulse	0.15	3
Ca			1	5541.282	ug/l	2.98	4,721,138.16	1.733E+00	Analog	0.10	3
Sr			1	53.018	ug/l	1.17	2,132,036.58	6.588E-01	Pulse	0.10	3
Mo			1	52.262	ug/l	0.88	407,753.95	1.260E-01	Pulse	0.10	3
Ag			1	49.406	ug/l	0.52	964,747.10	3.086E-01	Pulse	0.10	3
Sn			1	51.004	ug/l	0.52	582,681.02	1.864E-01	Pulse	0.10	3
Sb			1	51.689	ug/l	4.75	657,124.08	1.478E-01	Pulse	0.10	3
Ba			1	49.576	ug/l	4.20	265,396.51	5.969E-02	Pulse	0.10	3
Tl			1	51.822	ug/l	0.33	1,501,053.10	6.626E-01	Pulse	0.10	3
Pb			1	51.757	ug/l	0.56	521,664.27	2.303E-01	Pulse	0.10	3
Pb			1	51.488	ug/l	1.12	449,267.94	1.984E-01	Pulse	0.10	3
Pb			1	51.585	ug/l	0.95	2,073,341.25	9.155E-01	Pulse	0.10	3
Na			2	4905.503	ug/l	0.31	4,332,818.85	4.015E+01	Pulse	0.30	3
Mg			2	4968.860	ug/l	0.39	2,066,854.78	1.915E+01	Pulse	0.30	3
Al			2	4767.262	ug/l	0.67	744,921.46	6.903E+00	Pulse	0.30	3
K			2	5033.284	ug/l	0.69	1,488,978.76	1.380E+01	Pulse	0.30	3
Ca			2	5459.249	ug/l	0.33	91,096.94	8.442E-01	Pulse	0.30	3
Ti			2	50.656	ug/l	1.43	6,268.15	5.808E-02	Pulse	0.30	3
V			2	52.901	ug/l	0.71	207,756.27	1.925E+00	Pulse	0.30	3
Cr			2	52.020	ug/l	0.29	263,063.60	2.438E+00	Pulse	0.30	3
Mn			2	50.400	ug/l	0.57	144,808.12	1.342E+00	Pulse	0.30	3
Fe			2	5190.048	ug/l	0.73	21,788,957.47	2.019E+02	Analog	0.30	3
Co			2	51.245	ug/l	0.47	417,666.85	3.870E+00	Pulse	0.30	3
Ni			2	51.156	ug/l	0.97	111,232.35	1.031E+00	Pulse	0.30	3
Cu			2	50.678	ug/l	0.96	294,278.09	2.727E+00	Pulse	0.30	3
Zn			2	49.713	ug/l	0.92	46,259.97	4.287E-01	Pulse	0.30	3
As			2	52.748	ug/l	1.00	22,759.86	2.109E-01	Pulse	1.00	3
Cd			2	51.157	ug/l	0.97	60,960.02	1.296E-01	Pulse	0.30	3
Sn			2	52.769	ug/l	1.42	113,828.10	2.419E-01	Pulse	0.30	3
Se			3	205.602	ug/l	4.87	10,653.54	2.719E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,165,138.13	0.94	73.6	Pulse	0.10	3
1	Sc		2,725,609.02	3.67	98.6	Pulse	0.10	3
1	Ge		685,210.14	3.84	102.8	Pulse	0.10	3

Quantitation Report

1	Rh		3,235,834.33	3.67	100.5	Pulse	0.10	3
1	In		3,126,167.17	4.48	104.7	Pulse	0.10	3
1	Tb		4,447,454.62	1.25	104.7	Analog	0.10	3
1	Ho		396,506.60	4.49	105.5	Pulse	0.10	3
1	Bi		2,265,437.73	5.66	100.7	Pulse	0.10	3
2	Sc		107,914.35	0.63	95.5	Pulse	0.30	3
2	Ge		84,637.80	0.50	99.5	Pulse	0.30	3
2	Rh		1,386,425.33	0.73	96.8	Pulse	0.30	3
2	In		470,484.08	0.94	97.1	Pulse	0.30	3
2	Tb		1,572,200.11	0.77	100.8	Pulse	0.30	3
2	Ho		155,562.31	0.89	101.2	Pulse	0.30	3
2	Bi		947,117.81	0.78	97.4	Pulse	0.30	3
3	Sc		81,803.02	2.10	99.0	Pulse	0.30	3
3	Ge		39,192.77	1.57	100.7	Pulse	0.30	3
3	Rh		268,334.74	2.50	94.2	Pulse	0.30	3
3	Tb		349,081.65	3.02	94.9	Pulse	0.30	3

Quantitation Report

File Name	042_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:41
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-193.73	30.67	2.634E-05	Pulse	0.25	3
B			1	1.672	ug/l	9.93	17,500.26	1.505E-02	Pulse	0.15	3
Ca			1	2.227	ug/l	7.33	16,734.05	6.300E-03	Pulse	0.10	3
Sr			1	0.010	ug/l	28.42	1,186.77	3.678E-04	Pulse	0.10	3
Mo			1	0.003	ug/l	744.39	503.37	1.549E-04	Pulse	0.10	3
Ag			1	-0.002	ug/l	-53.35	223.34	7.311E-05	Pulse	0.10	3
Sn			1	-0.036	ug/l	-20.19	1,463.47	4.788E-04	Pulse	0.10	3
Sb			1	0.243	ug/l	7.47	1,623.50	3.695E-04	Pulse	0.10	3
Ba			1	0.181	ug/l	1.87	90.00	2.052E-05	Pulse	0.10	3
Tl			1	0.008	ug/l	70.24	936.75	4.146E-04	Pulse	0.10	3
Pb			1	-0.004	ug/l	-124.28	230.01	1.025E-04	Pulse	0.10	3
Pb			1	0.002	ug/l	150.22	233.34	1.035E-04	Pulse	0.10	3
Pb			1	-0.003	ug/l	-13.88	943.38	4.191E-04	Pulse	0.10	3
Na			2	10.262	ug/l	7.55	28,896.30	2.778E-01	Pulse	0.30	3
Mg			2	0.649	ug/l	23.87	500.02	4.803E-03	Pulse	0.30	3
Al			2	-0.386	ug/l	-50.56	146.67	1.410E-03	Pulse	0.30	3
K			2	0.506	ug/l	43.18	4,890.93	4.701E-02	Pulse	0.30	3
Ca			2	1.742	ug/l	69.11	107.78	1.036E-03	Pulse	0.30	3
Ti			2	-0.016	ug/l	-97.46	1.11	1.061E-05	Pulse	0.30	3
V			2	0.008	ug/l	15.94	266.67	2.563E-03	Pulse	0.30	3
Cr			2	0.007	ug/l	126.74	563.35	5.415E-03	Pulse	0.30	3
Mn			2	0.118	ug/l	22.07	372.23	3.578E-03	Pulse	0.30	3
Fe			2	0.638	ug/l	48.09	8,457.16	8.127E-02	Pulse	0.30	3
Co			2	-0.001	ug/l	-14.71	47.76	4.590E-04	Pulse	0.30	3
Ni			2	0.003	ug/l	188.55	111.12	1.068E-03	Pulse	0.30	3
Cu			2	-0.052	ug/l	-21.80	701.14	6.739E-03	Pulse	0.30	3
Zn			2	-0.111	ug/l	-32.21	232.23	2.233E-03	Pulse	0.30	3
As			2	-0.004	ug/l	-258.90	12.33	1.184E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.048	ug/l	3.37	14.33	3.133E-05	Pulse	0.30	3
Sn			2	0.034	ug/l	21.17	307.78	6.732E-04	Pulse	0.30	3
Se			3	0.037	ug/l	286.04	36.00	9.116E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,163,239.83	1.04	73.5	Pulse	0.10	3
1	Sc		2,656,389.85	2.09	96.1	Pulse	0.10	3
1	Ge		669,175.22	3.50	100.4	Pulse	0.10	3
1	Rh		3,232,296.10	2.75	100.4	Pulse	0.10	3
1	In		3,058,668.67	4.27	102.4	Pulse	0.10	3
1	Tb		4,390,890.04	0.82	103.4	Analog	0.10	3
1	Ho		381,759.21	3.48	101.6	Pulse	0.10	3
1	Bi		2,250,567.31	3.92	100.0	Pulse	0.10	3
2	Sc		104,037.27	0.76	92.1	Pulse	0.30	3
2	Ge		82,194.07	0.69	96.6	Pulse	0.30	3
2	Rh		1,385,338.00	0.92	96.8	Pulse	0.30	3
2	In		457,163.14	0.66	94.4	Pulse	0.30	3
2	Tb		1,494,509.35	0.47	95.8	Pulse	0.30	3
2	Ho		147,816.47	0.66	96.2	Pulse	0.30	3
2	Bi		928,480.83	1.27	95.5	Pulse	0.30	3
3	Sc		81,914.82	0.61	99.2	Pulse	0.30	3
3	Ge		39,513.73	1.65	101.6	Pulse	0.30	3
3	Rh		279,995.57	0.53	98.3	Pulse	0.30	3
3	Tb		345,093.86	0.79	93.8	Pulse	0.30	3

Quantitation Report

File Name	043SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:46
Sample Name	mp18359a-sd1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-175.90	32.00	2.789E-05	Pulse	0.25	3
B			1	138.583	ug/l	2.26	75,814.38	6.594E-02	Pulse	0.15	3
Ca			1	299125.240	ug/l	2.65	25,047,014.63	9.332E+00	Analog	0.10	3
Sr			1	630.440	ug/l	0.79	2,434,602.26	7.833E-01	Pulse	0.10	3
Mo			1	0.315	ug/l	54.70	696.71	2.246E-04	Pulse	0.10	3
Ag			1	-0.087	ug/l	-14.65	90.00	2.987E-05	Pulse	0.10	3
Sn			1	-0.374	ug/l	-57.28	1,430.13	4.751E-04	Pulse	0.10	3
Sb			1	2.066	ug/l	4.42	1,163.43	2.644E-04	Pulse	0.10	3
Ba			1	395.118	ug/l	4.21	209,197.30	4.753E-02	Pulse	0.10	3
Tl			1	-0.076	ug/l	-29.32	466.70	2.152E-04	Pulse	0.10	3
Pb			1	0.620	ug/l	10.97	863.40	3.957E-04	Pulse	0.10	3
Pb			1	0.782	ug/l	22.28	863.41	3.986E-04	Pulse	0.10	3
Pb			1	0.639	ug/l	7.52	3,493.67	1.606E-03	Pulse	0.10	3
Na			2	85685.793	ug/l	1.39	7,326,601.37	6.999E+01	Analog	0.30	3
Mg			2	46205.177	ug/l	0.86	1,864,468.33	1.781E+01	Pulse	0.30	3
Al			2	1667.915	ug/l	1.18	25,483.21	2.434E-01	Pulse	0.30	3
K			2	1682.042	ug/l	2.05	52,887.31	5.052E-01	Pulse	0.30	3
Ca			2	280740.500	ug/l	0.60	454,125.59	4.338E+00	Pulse	0.30	3
Ti			2	2.149	ug/l	29.47	28.89	2.757E-04	Pulse	0.30	3
V			2	1.043	ug/l	11.81	633.36	6.049E-03	Pulse	0.30	3
Cr			2	0.374	ug/l	1.35	715.58	6.835E-03	Pulse	0.30	3
Mn			2	7828.830	ug/l	1.12	2,181,306.65	2.084E+01	Pulse	0.30	3
Fe			2	1477.675	ug/l	0.13	607,543.53	5.803E+00	Pulse	0.30	3
Co			2	3.075	ug/l	3.88	2,490.83	2.379E-02	Pulse	0.30	3
Ni			2	5.539	ug/l	2.62	1,272.30	1.215E-02	Pulse	0.30	3
Cu			2	18.748	ug/l	3.20	11,521.56	1.101E-01	Pulse	0.30	3
Zn			2	49.649	ug/l	1.39	4,782.00	4.568E-02	Pulse	0.30	3
As			2	1.483	ug/l	8.31	76.00	7.258E-04	Pulse	1.00	3
Cd			2	1.425	ug/l	17.57	123.11	2.697E-04	Pulse	0.30	3
Sn			2	0.119	ug/l	43.13	262.23	5.740E-04	Pulse	0.30	3
Se			3	3.273	ug/l	24.45	50.00	1.294E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,150,012.12	1.91	72.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,685,311.42	2.98	97.1	Pulse	0.10	3
1	Ge		661,801.38	2.57	99.3	Pulse	0.10	3
1	Rh		3,108,470.48	3.72	96.5	Pulse	0.10	3
1	In		3,001,479.48	3.49	100.5	Pulse	0.10	3
1	Tb		4,402,107.43	0.65	103.6	Analog	0.10	3
1	Ho		383,276.60	4.25	102.0	Pulse	0.10	3
1	Bi		2,177,934.19	5.02	96.8	Pulse	0.10	3
2	Sc		104,688.98	0.63	92.6	Pulse	0.30	3
2	Ge		82,262.22	1.22	96.7	Pulse	0.30	3
2	Rh		1,330,884.25	0.65	93.0	Pulse	0.30	3
2	In		456,821.02	0.64	94.3	Pulse	0.30	3
2	Tb		1,512,779.38	0.24	97.0	Pulse	0.30	3
2	Ho		148,999.80	0.96	97.0	Pulse	0.30	3
2	Bi		910,156.63	0.50	93.6	Pulse	0.30	3
3	Sc		82,797.46	1.08	100.2	Pulse	0.30	3
3	Ge		38,631.38	0.26	99.3	Pulse	0.30	3
3	Rh		266,243.74	0.26	93.5	Pulse	0.30	3
3	Tb		343,617.29	1.11	93.4	Pulse	0.30	3

Quantitation Report

File Name	044SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:51
Sample Name	jc98212-1
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	0.015	ug/l	55.23	54.67	4.431E-05	Pulse	0.25	3
B			1	2148.135	ug/l	1.72	2,216,901.09	1.802E+00	Pulse	0.15	3
Ca			1	233086.348	ug/l	2.76	40,110,487.74	1.454E+01	Analog	0.10	3
Sr			1	4001.359	ug/l	4.38	24,040,596.31	9.940E+00	Analog	0.10	3
Mo			1	1.322	ug/l	13.75	1,903.55	7.854E-04	Pulse	0.10	3
Ag			1	0.023	ug/l	185.24	273.34	1.132E-04	Pulse	0.10	3
Sn			1	0.249	ug/l	12.76	1,893.54	7.925E-04	Pulse	0.10	3
Sb			1	1.218	ug/l	5.04	1,163.43	3.700E-04	Pulse	0.10	3
Ba			1	69.700	ug/l	0.73	52,204.62	1.664E-02	Pulse	0.10	3
Tl			1	0.081	ug/l	47.92	726.72	5.184E-04	Pulse	0.10	3
Pb			1	0.423	ug/l	27.48	693.38	4.961E-04	Pulse	0.10	3
Pb			1	0.415	ug/l	24.95	580.04	4.173E-04	Pulse	0.10	3
Pb			1	0.385	ug/l	8.33	2,570.21	1.839E-03	Pulse	0.10	3
Na			2	4662786.392	ug/l	0.55	959,980,904.07	7.596E+03	Analog	0.30	3
Mg			2	512234.202	ug/l	0.72	49,899,896.91	3.948E+02	Analog	0.30	3
Al			2	34.471	ug/l	16.84	1,509.57	1.195E-02	Pulse	0.30	3
K			2	132457.383	ug/l	0.77	9,152,902.41	7.243E+01	Analog	0.30	3
Ca			2	230759.329	ug/l	0.67	901,144.17	7.131E+00	Pulse	0.30	3
Ti			2	1.599	ug/l	32.08	50.00	3.961E-04	Pulse	0.30	3
V			2	1.291	ug/l	4.28	1,471.21	1.164E-02	Pulse	0.30	3
Cr			2	3.695	ug/l	2.11	5,009.86	3.964E-02	Pulse	0.30	3
Mn			2	7481.502	ug/l	0.59	5,032,996.05	3.982E+01	Analog	0.30	3
Fe			2	28659.168	ug/l	0.73	28,180,160.54	2.230E+02	Analog	0.30	3
Co			2	16.806	ug/l	1.32	32,147.29	2.544E-01	Pulse	0.30	3
Ni			2	10.731	ug/l	2.96	5,585.64	4.420E-02	Pulse	0.30	3
Cu			2	15.889	ug/l	1.33	22,739.98	1.799E-01	Pulse	0.30	3
Zn			2	9.602	ug/l	8.27	2,479.15	1.962E-02	Pulse	0.30	3
As			2	4.928	ug/l	4.93	514.68	4.072E-03	Pulse	1.00	3
Cd			2	0.346	ug/l	18.51	34.98	8.403E-05	Pulse	0.30	3
Sn			2	0.560	ug/l	16.73	430.01	1.032E-03	Pulse	0.30	3
Se			3	19.047	ug/l	12.67	192.67	5.885E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,229,743.89	3.38	77.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,760,073.61	3.46	99.8	Pulse	0.10	3
1	Ge		564,242.40	4.27	84.7	Pulse	0.10	3
1	Rh		2,421,526.06	4.24	75.2	Pulse	0.10	3
1	In		2,387,908.52	3.67	80.0	Pulse	0.10	3
1	Tb		3,137,619.85	4.66	73.9	Pulse	0.10	3
1	Ho		305,984.31	5.24	81.4	Pulse	0.10	3
1	Bi		1,396,861.49	4.24	62.1	Pulse	0.10	3
2	Sc		126,377.21	0.79	111.8	Pulse	0.30	3
2	Ge		78,634.30	0.25	92.5	Pulse	0.30	3
2	Rh		1,085,205.31	0.80	75.8	Pulse	0.30	3
2	In		416,800.10	0.68	86.0	Pulse	0.30	3
2	Tb		1,270,252.97	0.72	81.4	Pulse	0.30	3
2	Ho		124,425.87	0.19	81.0	Pulse	0.30	3
2	Bi		609,777.08	0.11	62.7	Pulse	0.30	3
3	Sc		80,981.49	0.14	98.0	Pulse	0.30	3
3	Ge		32,764.83	1.36	84.2	Pulse	0.30	3
3	Rh		216,366.99	0.78	76.0	Pulse	0.30	3
3	Tb		294,650.73	0.75	80.1	Pulse	0.30	3

Quantitation Report

File Name	045SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 13:55
Sample Name	jc98212-2
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-0.020	ug/l	-20.59	22.67	1.610E-05	Pulse	0.25	3
B			1	1002.337	ug/l	0.77	1,190,548.25	8.453E-01	Pulse	0.15	3
Ca			1	124998.950	ug/l	4.03	23,949,492.15	7.801E+00	Analog	0.10	3
Sr			1	2141.834	ug/l	3.54	14,875,672.70	5.321E+00	Analog	0.10	3
Mo			1	2.525	ug/l	2.82	3,820.68	1.365E-03	Pulse	0.10	3
Ag			1	0.017	ug/l	112.00	283.35	1.051E-04	Pulse	0.10	3
Sn			1	0.486	ug/l	20.68	2,610.36	9.658E-04	Pulse	0.10	3
Sb			1	1.068	ug/l	4.42	1,126.75	2.844E-04	Pulse	0.10	3
Ba			1	104.356	ug/l	3.42	99,192.19	2.501E-02	Pulse	0.10	3
Tl			1	-0.049	ug/l	-29.03	306.68	1.876E-04	Pulse	0.10	3
Pb			1	0.466	ug/l	3.11	876.73	5.345E-04	Pulse	0.10	3
Pb			1	0.432	ug/l	9.85	706.72	4.299E-04	Pulse	0.10	3
Pb			1	0.406	ug/l	4.84	3,136.94	1.912E-03	Pulse	0.10	3
Na			2	2123373.271	ug/l	1.39	466,826,328.12	3.459E+03	Analog	0.30	3
Mg			2	279907.439	ug/l	1.92	29,116,556.62	2.158E+02	Analog	0.30	3
Al			2	114.945	ug/l	7.19	4,756.57	3.525E-02	Pulse	0.30	3
K			2	82516.324	ug/l	0.99	6,091,188.65	4.514E+01	Analog	0.30	3
Ca			2	123192.926	ug/l	0.95	513,773.85	3.807E+00	Pulse	0.30	3
Ti			2	3.860	ug/l	29.49	123.34	9.141E-04	Pulse	0.30	3
V			2	1.183	ug/l	5.66	1,465.65	1.086E-02	Pulse	0.30	3
Cr			2	3.268	ug/l	1.57	4,810.90	3.565E-02	Pulse	0.30	3
Mn			2	631.091	ug/l	0.46	453,393.32	3.360E+00	Pulse	0.30	3
Fe			2	44930.800	ug/l	1.14	47,170,067.02	3.495E+02	Analog	0.30	3
Co			2	7.295	ug/l	0.83	14,944.36	1.107E-01	Pulse	0.30	3
Ni			2	6.706	ug/l	2.32	3,778.34	2.800E-02	Pulse	0.30	3
Cu			2	1.459	ug/l	6.76	3,399.36	2.519E-02	Pulse	0.30	3
Zn			2	9.127	ug/l	2.70	2,538.04	1.881E-02	Pulse	0.30	3
As			2	8.185	ug/l	3.46	900.70	6.675E-03	Pulse	1.00	3
Cd			2	0.273	ug/l	18.46	22.09	4.694E-05	Pulse	0.30	3
Sn			2	0.777	ug/l	24.05	578.91	1.231E-03	Pulse	0.30	3
Se			3	13.251	ug/l	22.21	165.33	4.357E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,408,452.65	2.48	89.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,072,871.73	3.48	111.1	Pulse	0.10	3
1	Ge		648,564.43	3.78	97.3	Pulse	0.10	3
1	Rh		2,798,474.75	4.16	86.9	Pulse	0.10	3
1	In		2,703,538.46	3.70	90.6	Pulse	0.10	3
1	Tb		3,964,097.65	1.99	93.3	Analog	0.10	3
1	Ho		342,232.58	4.10	91.0	Pulse	0.10	3
1	Bi		1,641,500.13	4.45	73.0	Pulse	0.10	3
2	Sc		134,948.73	0.11	119.4	Pulse	0.30	3
2	Ge		88,588.03	1.17	104.2	Pulse	0.30	3
2	Rh		1,265,382.34	0.79	88.4	Pulse	0.30	3
2	In		470,247.76	0.19	97.1	Pulse	0.30	3
2	Tb		1,444,607.89	0.35	92.6	Pulse	0.30	3
2	Ho		141,118.04	0.55	91.8	Pulse	0.30	3
2	Bi		730,573.65	0.20	75.1	Pulse	0.30	3
3	Sc		91,472.77	1.57	110.7	Pulse	0.30	3
3	Ge		37,973.81	0.85	97.6	Pulse	0.30	3
3	Rh		252,430.44	1.67	88.7	Pulse	0.30	3
3	Tb		337,532.49	1.23	91.8	Pulse	0.30	3

Quantitation Report

File Name	046SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:00
Sample Name	jc98212-3
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	0.245	ug/l	19.50	316.01	2.317E-04	Pulse	0.25	3
B			1	2885.105	ug/l	0.64	3,299,978.48	2.418E+00	Pulse	0.15	3
Ca			1	42205.193	ug/l	2.20	7,931,751.97	2.638E+00	Analog	0.10	3
Sr			1	899.447	ug/l	1.83	6,436,551.57	2.235E+00	Analog	0.10	3
Mo			1	5.139	ug/l	3.58	7,565.76	2.624E-03	Pulse	0.10	3
Ag			1	0.024	ug/l	12.49	316.68	1.144E-04	Pulse	0.10	3
Sn			1	1.030	ug/l	9.86	3,760.67	1.362E-03	Pulse	0.10	3
Sb			1	1.119	ug/l	2.85	1,250.11	3.135E-04	Pulse	0.10	3
Ba			1	572.168	ug/l	4.73	550,383.96	1.380E-01	Pulse	0.10	3
Tl			1	-0.070	ug/l	-13.46	226.68	1.326E-04	Pulse	0.10	3
Pb			1	2.170	ug/l	2.54	3,523.95	2.050E-03	Pulse	0.10	3
Pb			1	1.915	ug/l	6.85	2,707.06	1.573E-03	Pulse	0.10	3
Pb			1	2.052	ug/l	2.83	13,339.95	7.753E-03	Pulse	0.10	3
Na			2	1749297.093	ug/l	0.75	367,590,020.95	2.850E+03	Analog	0.30	3
Mg			2	130601.148	ug/l	1.68	12,983,990.59	1.007E+02	Analog	0.30	3
Al			2	506.510	ug/l	1.34	19,167.68	1.486E-01	Pulse	0.30	3
K			2	141246.122	ug/l	1.33	9,960,395.99	7.723E+01	Analog	0.30	3
Ca			2	42939.972	ug/l	1.10	171,226.75	1.328E+00	Pulse	0.30	3
Ti			2	19.771	ug/l	14.79	588.91	4.561E-03	Pulse	0.30	3
V			2	25.006	ug/l	2.15	23,737.10	1.841E-01	Pulse	0.30	3
Cr			2	21.555	ug/l	0.95	26,656.81	2.067E-01	Pulse	0.30	3
Mn			2	643.918	ug/l	1.54	442,166.99	3.428E+00	Pulse	0.30	3
Fe			2	40103.054	ug/l	1.90	40,239,727.29	3.120E+02	Analog	0.30	3
Co			2	22.426	ug/l	1.54	43,758.82	3.393E-01	Pulse	0.30	3
Ni			2	16.761	ug/l	2.01	8,834.04	6.848E-02	Pulse	0.30	3
Cu			2	1.852	ug/l	4.65	3,792.80	2.941E-02	Pulse	0.30	3
Zn			2	8.933	ug/l	4.70	2,382.46	1.848E-02	Pulse	0.30	3
As			2	17.408	ug/l	1.59	1,811.79	1.405E-02	Pulse	1.00	3
Cd			2	0.238	ug/l	13.92	13.47	2.924E-05	Pulse	0.30	3
Sn			2	1.448	ug/l	5.16	852.26	1.845E-03	Pulse	0.30	3
Se			3	35.714	ug/l	24.19	383.36	1.028E-02	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,364,770.73	1.88	86.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,008,936.52	3.77	108.8	Pulse	0.10	3
1	Ge		659,969.66	4.68	99.0	Pulse	0.10	3
1	Rh		2,881,853.08	4.11	89.5	Pulse	0.10	3
1	In		2,766,893.51	4.82	92.7	Pulse	0.10	3
1	Tb		3,987,339.11	0.49	93.9	Analog	0.10	3
1	Ho		353,833.68	3.85	94.1	Pulse	0.10	3
1	Bi		1,719,356.59	4.73	76.4	Pulse	0.10	3
2	Sc		128,982.25	1.41	114.1	Pulse	0.30	3
2	Ge		87,917.03	1.46	103.4	Pulse	0.30	3
2	Rh		1,276,994.74	0.86	89.2	Pulse	0.30	3
2	In		461,923.45	0.83	95.3	Pulse	0.30	3
2	Tb		1,454,833.93	0.64	93.2	Pulse	0.30	3
2	Ho		144,224.48	1.26	93.9	Pulse	0.30	3
2	Bi		746,104.85	0.18	76.7	Pulse	0.30	3
3	Sc		86,831.14	2.02	105.1	Pulse	0.30	3
3	Ge		37,373.35	2.06	96.1	Pulse	0.30	3
3	Rh		249,142.99	0.35	87.5	Pulse	0.30	3
3	Tb		333,793.39	0.78	90.7	Pulse	0.30	3

Quantitation Report

File Name	047SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:05
Sample Name	jc98212-1f
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-5470.17	38.67	3.184E-05	Pulse	0.25	3
B			1	2255.000	ug/l	0.73	2,289,006.72	1.892E+00	Pulse	0.15	3
Ca			1	238016.661	ug/l	1.51	41,439,266.05	1.485E+01	Analog	0.10	3
Sr			1	4142.897	ug/l	1.72	25,134,488.79	1.029E+01	Analog	0.10	3
Mo			1	1.368	ug/l	13.59	1,973.54	8.077E-04	Pulse	0.10	3
Ag			1	0.031	ug/l	87.37	293.35	1.229E-04	Pulse	0.10	3
Sn			1	0.267	ug/l	30.28	1,923.55	8.060E-04	Pulse	0.10	3
Sb			1	1.380	ug/l	1.35	1,466.81	4.629E-04	Pulse	0.10	3
Ba			1	71.148	ug/l	1.48	53,787.94	1.699E-02	Pulse	0.10	3
Tl			1	-0.063	ug/l	-14.88	213.34	1.525E-04	Pulse	0.10	3
Pb			1	0.020	ug/l	168.40	193.34	1.380E-04	Pulse	0.10	3
Pb			1	0.027	ug/l	159.08	166.68	1.183E-04	Pulse	0.10	3
Pb			1	0.035	ug/l	62.74	840.05	5.959E-04	Pulse	0.10	3
Na			2	4812672.932	ug/l	1.10	1,009,614,537.66	7.840E+03	Analog	0.30	3
Mg			2	528322.853	ug/l	1.02	52,441,432.36	4.072E+02	Analog	0.30	3
Al			2	3.962	ug/l	15.27	401.12	3.116E-03	Pulse	0.30	3
K			2	140164.695	ug/l	1.26	9,869,208.78	7.664E+01	Analog	0.30	3
Ca			2	239725.197	ug/l	1.23	953,914.69	7.408E+00	Pulse	0.30	3
Ti			2	0.777	ug/l	63.97	26.67	2.076E-04	Pulse	0.30	3
V			2	1.297	ug/l	2.81	1,504.55	1.168E-02	Pulse	0.30	3
Cr			2	1.286	ug/l	3.91	2,203.54	1.711E-02	Pulse	0.30	3
Mn			2	7824.000	ug/l	1.61	5,363,030.76	4.165E+01	Analog	0.30	3
Fe			2	27860.534	ug/l	2.50	27,911,690.56	2.168E+02	Analog	0.30	3
Co			2	17.448	ug/l	1.12	34,007.85	2.641E-01	Pulse	0.30	3
Ni			2	10.320	ug/l	3.36	5,478.94	4.255E-02	Pulse	0.30	3
Cu			2	0.967	ug/l	15.32	2,563.60	1.991E-02	Pulse	0.30	3
Zn			2	8.980	ug/l	5.01	2,390.24	1.856E-02	Pulse	0.30	3
As			2	6.291	ug/l	4.40	664.69	5.161E-03	Pulse	1.00	3
Cd			2	0.198	ug/l	8.86	3.81	8.877E-06	Pulse	0.30	3
Sn			2	0.588	ug/l	19.59	454.46	1.058E-03	Pulse	0.30	3
Se			3	19.079	ug/l	12.91	198.00	5.894E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,210,070.86	3.31	76.4	Pulse	0.10	3
1	Sc		2,791,893.39	3.81	101.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Ge		573,188.45	5.00	86.0	Pulse	0.10	3
1	Rh		2,443,276.06	3.86	75.9	Pulse	0.10	3
1	In		2,391,780.57	4.98	80.1	Pulse	0.10	3
1	Tb		3,167,313.91	5.27	74.6	Pulse	0.10	3
1	Ho		308,792.53	4.83	82.1	Pulse	0.10	3
1	Bi		1,405,933.21	4.58	62.5	Pulse	0.10	3
2	Sc		128,779.42	0.84	114.0	Pulse	0.30	3
2	Ge		80,987.94	0.91	95.2	Pulse	0.30	3
2	Rh		1,103,471.97	0.32	77.1	Pulse	0.30	3
2	In		429,843.33	1.17	88.7	Pulse	0.30	3
2	Tb		1,294,193.84	1.41	82.9	Pulse	0.30	3
2	Ho		126,867.89	0.89	82.6	Pulse	0.30	3
2	Bi		616,815.11	0.61	63.4	Pulse	0.30	3
3	Sc		82,793.15	1.11	100.2	Pulse	0.30	3
3	Ge		33,629.15	1.42	86.4	Pulse	0.30	3
3	Rh		220,823.06	1.14	77.6	Pulse	0.30	3
3	Tb		303,209.59	1.27	82.4	Pulse	0.30	3

Quantitation Report

File Name	048SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:09
Sample Name	jc98212-2f
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-0.034	ug/l	-15.70	5.33	3.887E-06	Pulse	0.25	3
B			1	1096.937	ug/l	0.68	1,263,746.58	9.243E-01	Pulse	0.15	3
Ca			1	126076.053	ug/l	2.51	24,604,492.13	7.868E+00	Analog	0.10	3
Sr			1	2218.413	ug/l	3.50	15,630,068.94	5.511E+00	Analog	0.10	3
Mo			1	0.945	ug/l	13.50	1,716.86	6.037E-04	Pulse	0.10	3
Ag			1	0.004	ug/l	616.86	246.68	8.917E-05	Pulse	0.10	3
Sn			1	-0.036	ug/l	-166.82	1,616.83	5.854E-04	Pulse	0.10	3
Sb			1	0.847	ug/l	3.96	630.04	1.578E-04	Pulse	0.10	3
Ba			1	100.613	ug/l	3.72	96,260.17	2.411E-02	Pulse	0.10	3
Tl			1	-0.102	ug/l	-6.61	86.67	5.242E-05	Pulse	0.10	3
Pb			1	-0.010	ug/l	-141.65	183.34	1.109E-04	Pulse	0.10	3
Pb			1	0.013	ug/l	131.41	176.68	1.073E-04	Pulse	0.10	3
Pb			1	-0.013	ug/l	-73.07	700.04	4.254E-04	Pulse	0.10	3
Na			2	2136635.614	ug/l	1.43	484,039,696.32	3.481E+03	Analog	0.30	3
Mg			2	283109.232	ug/l	1.53	30,345,119.90	2.182E+02	Analog	0.30	3
Al			2	-0.897	ug/l	-35.18	237.78	1.709E-03	Pulse	0.30	3
K			2	84783.514	ug/l	2.50	6,450,525.44	4.638E+01	Analog	0.30	3
Ca			2	126310.327	ug/l	1.13	542,823.73	3.904E+00	Pulse	0.30	3
Ti			2	0.500	ug/l	37.23	20.00	1.441E-04	Pulse	0.30	3
V			2	0.880	ug/l	7.83	1,203.41	8.657E-03	Pulse	0.30	3
Cr			2	0.906	ug/l	16.30	1,884.60	1.356E-02	Pulse	0.30	3
Mn			2	644.252	ug/l	1.44	476,965.80	3.430E+00	Pulse	0.30	3
Fe			2	41652.731	ug/l	1.10	45,063,155.98	3.240E+02	Analog	0.30	3
Co			2	6.199	ug/l	1.86	13,096.99	9.419E-02	Pulse	0.30	3
Ni			2	4.592	ug/l	4.07	2,710.30	1.949E-02	Pulse	0.30	3
Cu			2	-0.021	ug/l	-1342.83	1,291.49	9.310E-03	Pulse	0.30	3
Zn			2	5.563	ug/l	3.14	1,766.80	1.271E-02	Pulse	0.30	3
As			2	3.601	ug/l	4.14	418.68	3.011E-03	Pulse	1.00	3
Cd			2	0.192	ug/l	7.09	2.84	5.884E-06	Pulse	0.30	3
Sn			2	0.213	ug/l	40.86	343.34	7.144E-04	Pulse	0.30	3
Se			3	9.357	ug/l	43.04	129.33	3.330E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,367,336.99	1.49	86.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,129,302.14	3.95	113.2	Pulse	0.10	3
1	Ge		653,790.03	3.58	98.1	Pulse	0.10	3
1	Rh		2,838,164.23	3.10	88.1	Pulse	0.10	3
1	In		2,768,319.31	4.54	92.7	Pulse	0.10	3
1	Tb		3,991,423.27	1.36	94.0	Analog	0.10	3
1	Ho		343,536.30	5.28	91.4	Pulse	0.10	3
1	Bi		1,648,029.25	4.54	73.2	Pulse	0.10	3
2	Sc		139,068.45	1.25	123.1	Pulse	0.30	3
2	Ge		91,061.69	0.88	107.1	Pulse	0.30	3
2	Rh		1,283,935.82	0.80	89.7	Pulse	0.30	3
2	In		480,249.88	0.97	99.1	Pulse	0.30	3
2	Tb		1,462,613.94	0.63	93.7	Pulse	0.30	3
2	Ho		142,936.34	0.33	93.0	Pulse	0.30	3
2	Bi		734,742.14	0.53	75.5	Pulse	0.30	3
3	Sc		92,916.47	0.65	112.5	Pulse	0.30	3
3	Ge		38,816.14	0.34	99.8	Pulse	0.30	3
3	Rh		254,893.38	0.30	89.5	Pulse	0.30	3
3	Tb		339,186.18	0.32	92.2	Pulse	0.30	3

Quantitation Report

File Name	049SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:14
Sample Name	jc98212-3f
Sample Type	Sample
Comment	
Prep Dilution	5.000
Auto Dilution	N/A
Total Dilution	5.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	0.116	ug/l	14.72	169.33	1.262E-04	Pulse	0.25	3
B			1	3388.899	ug/l	0.70	3,803,477.63	2.839E+00	Pulse	0.15	3
Ca			1	45625.904	ug/l	2.41	8,977,666.33	2.851E+00	Analog	0.10	3
Sr			1	975.997	ug/l	4.27	7,153,630.72	2.425E+00	Analog	0.10	3
Mo			1	4.677	ug/l	4.61	7,092.14	2.401E-03	Pulse	0.10	3
Ag			1	0.007	ug/l	150.25	263.35	9.263E-05	Pulse	0.10	3
Sn			1	1.623	ug/l	7.01	5,127.89	1.794E-03	Pulse	0.10	3
Sb			1	1.103	ug/l	5.57	1,250.11	3.041E-04	Pulse	0.10	3
Ba			1	464.472	ug/l	5.39	460,198.83	1.120E-01	Pulse	0.10	3
Tl			1	-0.097	ug/l	-20.94	113.34	6.511E-05	Pulse	0.10	3
Pb			1	0.085	ug/l	33.69	336.69	1.959E-04	Pulse	0.10	3
Pb			1	0.133	ug/l	38.16	343.35	1.996E-04	Pulse	0.10	3
Pb			1	0.079	ug/l	12.67	1,293.42	7.532E-04	Pulse	0.10	3
Na			2	1955589.608	ug/l	0.34	438,124,115.92	3.186E+03	Analog	0.30	3
Mg			2	145118.515	ug/l	0.42	15,382,814.39	1.119E+02	Analog	0.30	3
Al			2	24.873	ug/l	6.10	1,261.19	9.170E-03	Pulse	0.30	3
K			2	156849.361	ug/l	1.80	11,793,719.25	8.576E+01	Analog	0.30	3
Ca			2	46852.162	ug/l	0.16	199,182.17	1.448E+00	Pulse	0.30	3
Ti			2	8.152	ug/l	14.01	261.12	1.898E-03	Pulse	0.30	3
V			2	14.870	ug/l	2.48	15,177.31	1.104E-01	Pulse	0.30	3
Cr			2	16.190	ug/l	1.91	21,523.54	1.565E-01	Pulse	0.30	3
Mn			2	682.362	ug/l	0.64	499,553.17	3.633E+00	Pulse	0.30	3
Fe			2	19162.335	ug/l	0.23	20,504,879.74	1.491E+02	Analog	0.30	3
Co			2	25.122	ug/l	0.22	52,255.73	3.800E-01	Pulse	0.30	3
Ni			2	16.679	ug/l	2.44	9,372.19	6.815E-02	Pulse	0.30	3
Cu			2	1.696	ug/l	5.32	3,812.80	2.773E-02	Pulse	0.30	3
Zn			2	6.968	ug/l	4.44	2,077.96	1.511E-02	Pulse	0.30	3
As			2	8.700	ug/l	2.30	974.37	7.086E-03	Pulse	1.00	3
Cd			2	0.200	ug/l	6.99	4.59	9.610E-06	Pulse	0.30	3
Sn			2	2.076	ug/l	9.98	1,152.84	2.419E-03	Pulse	0.30	3
Se			3	36.428	ug/l	7.39	408.68	1.047E-02	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,339,985.70	3.18	84.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		3,150,796.62	3.31	114.0	Pulse	0.10	3
1	Ge		675,754.41	4.86	101.4	Pulse	0.10	3
1	Rh		2,953,867.46	4.40	91.7	Pulse	0.10	3
1	In		2,855,733.24	4.99	95.7	Pulse	0.10	3
1	Tb		4,108,612.13	0.81	96.7	Analog	0.10	3
1	Ho		362,032.35	4.55	96.3	Pulse	0.10	3
1	Bi		1,714,948.62	4.90	76.2	Pulse	0.10	3
2	Sc		137,517.49	0.45	121.7	Pulse	0.30	3
2	Ge		91,211.86	0.88	107.2	Pulse	0.30	3
2	Rh		1,312,733.32	0.30	91.7	Pulse	0.30	3
2	In		476,698.05	0.32	98.4	Pulse	0.30	3
2	Tb		1,487,674.39	0.24	95.3	Pulse	0.30	3
2	Ho		146,199.39	0.95	95.1	Pulse	0.30	3
2	Bi		750,821.83	0.61	77.2	Pulse	0.30	3
3	Sc		93,244.43	1.42	112.9	Pulse	0.30	3
3	Ge		39,040.07	0.43	100.3	Pulse	0.30	3
3	Rh		259,774.15	0.89	91.2	Pulse	0.30	3
3	Tb		345,598.77	0.96	94.0	Pulse	0.30	3

Quantitation Report

File Name	050SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:19
Sample Name	jc98257-3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	0.053	ug/l	14.79	162.67	1.409E-04	Pulse	0.25	3
B			1	560.893	ug/l	1.23	1,361,697.52	1.179E+00	Pulse	0.15	3
Ca			1	41440.522	ug/l	2.42	17,674,586.40	6.466E+00	Analog	0.10	3
Sr			1	260.938	ug/l	4.13	5,084,508.05	1.621E+00	Analog	0.10	3
Mo			1	123.556	ug/l	0.89	467,580.38	1.489E-01	Pulse	0.10	3
Ag			1	0.088	ug/l	8.36	1,076.75	3.584E-04	Pulse	0.10	3
Sn			1	0.728	ug/l	3.73	5,828.22	1.937E-03	Pulse	0.10	3
Sb			1	1.353	ug/l	3.21	7,218.85	1.611E-03	Pulse	0.10	3
Ba			1	35.132	ug/l	2.11	94,198.94	2.102E-02	Pulse	0.10	3
Tl			1	-0.018	ug/l	-19.11	410.03	1.969E-04	Pulse	0.10	3
Pb			1	3.287	ug/l	3.91	15,506.88	7.431E-03	Pulse	0.10	3
Pb			1	3.140	ug/l	3.56	12,830.32	6.144E-03	Pulse	0.10	3
Pb			1	3.270	ug/l	0.89	61,515.50	2.947E-02	Pulse	0.10	3
Na			2	68059.566	ug/l	0.90	29,404,611.06	2.774E+02	Analog	0.30	3
Mg			2	4211.629	ug/l	0.73	860,574.12	8.118E+00	Pulse	0.30	3
Al			2	1007.712	ug/l	3.40	77,537.96	7.314E-01	Pulse	0.30	3
K			2	3408.073	ug/l	0.17	498,381.33	4.702E+00	Pulse	0.30	3
Ca			2	39127.143	ug/l	0.79	320,467.96	3.023E+00	Pulse	0.30	3
Ti			2	24.135	ug/l	15.31	1,469.14	1.386E-02	Pulse	0.30	3
V			2	6.162	ug/l	1.04	12,109.88	1.142E-01	Pulse	0.30	3
Cr			2	2.560	ug/l	3.42	6,881.80	6.493E-02	Pulse	0.30	3
Mn			2	421.265	ug/l	0.92	594,286.68	5.606E+00	Pulse	0.30	3
Fe			2	3243.603	ug/l	1.49	6,692,491.12	6.313E+01	Analog	0.30	3
Co			2	2.430	ug/l	1.21	9,786.62	9.232E-02	Pulse	0.30	3
Ni			2	18.465	ug/l	2.62	19,806.57	1.868E-01	Pulse	0.30	3
Cu			2	36.592	ug/l	2.59	105,012.67	9.906E-01	Pulse	0.30	3
Zn			2	37.319	ug/l	2.28	17,265.37	1.629E-01	Pulse	0.30	3
As			2	1.607	ug/l	5.55	354.34	3.343E-03	Pulse	1.00	3
Cd			2	0.719	ug/l	12.09	374.32	8.202E-04	Pulse	0.30	3
Sn			2	0.884	ug/l	6.04	1,161.18	2.543E-03	Pulse	0.30	3
Se			3	0.408	ug/l	104.29	44.00	1.132E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,154,667.15	1.00	72.9	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,734,592.15	2.78	98.9	Pulse	0.10	3
1	Ge		671,412.21	3.18	100.7	Pulse	0.10	3
1	Rh		3,140,350.16	3.76	97.5	Pulse	0.10	3
1	In		3,007,641.55	3.13	100.7	Pulse	0.10	3
1	Tb		4,480,915.25	1.17	105.5	Analog	0.10	3
1	Ho		389,021.58	3.25	103.5	Pulse	0.10	3
1	Bi		2,087,237.16	3.90	92.8	Pulse	0.10	3
2	Sc		106,002.92	1.06	93.8	Pulse	0.30	3
2	Ge		82,470.04	0.33	97.0	Pulse	0.30	3
2	Rh		1,327,351.79	1.83	92.7	Pulse	0.30	3
2	In		456,771.12	0.97	94.3	Pulse	0.30	3
2	Tb		1,519,099.49	0.44	97.4	Pulse	0.30	3
2	Ho		150,689.23	0.61	98.1	Pulse	0.30	3
2	Bi		884,004.37	0.70	90.9	Pulse	0.30	3
3	Sc		83,804.78	1.56	101.5	Pulse	0.30	3
3	Ge		38,862.90	1.55	99.9	Pulse	0.30	3
3	Rh		266,455.37	0.95	93.6	Pulse	0.30	3
3	Tb		350,853.86	0.80	95.4	Pulse	0.30	3

Quantitation Report

File Name	051_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:23
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	55.746	ug/l	0.37	295,015.22	2.273E-01	Pulse	0.25	3
B			1	121.458	ug/l	1.62	668,914.23	5.153E-01	Pulse	0.15	3
Ca			1	5599.553	ug/l	2.70	5,008,319.09	1.752E+00	Analog	0.10	3
Sr			1	52.824	ug/l	0.23	2,191,909.76	6.564E-01	Pulse	0.10	3
Mo			1	52.143	ug/l	0.91	419,665.27	1.257E-01	Pulse	0.10	3
Ag			1	49.913	ug/l	0.65	986,175.17	3.118E-01	Pulse	0.10	3
Sn			1	51.037	ug/l	0.44	589,865.50	1.865E-01	Pulse	0.10	3
Sb			1	51.880	ug/l	5.56	660,661.59	1.483E-01	Pulse	0.10	3
Ba			1	50.203	ug/l	4.81	269,224.76	6.044E-02	Pulse	0.10	3
Tl			1	52.003	ug/l	0.89	1,489,921.12	6.649E-01	Pulse	0.10	3
Pb			1	51.737	ug/l	0.37	516,053.98	2.302E-01	Pulse	0.10	3
Pb			1	51.893	ug/l	0.92	448,055.64	1.999E-01	Pulse	0.10	3
Pb			1	51.657	ug/l	0.41	2,054,713.46	9.168E-01	Pulse	0.10	3
Na			2	5078.698	ug/l	1.98	4,790,657.73	4.156E+01	Analog	0.30	3
Mg			2	4824.651	ug/l	1.50	2,143,630.96	1.860E+01	Pulse	0.30	3
Al			2	4769.413	ug/l	1.50	796,084.50	6.906E+00	Pulse	0.30	3
K			2	5054.388	ug/l	1.25	1,597,144.52	1.386E+01	Pulse	0.30	3
Ca			2	5475.109	ug/l	1.69	97,587.71	8.466E-01	Pulse	0.30	3
Ti			2	51.472	ug/l	1.23	6,803.98	5.902E-02	Pulse	0.30	3
V			2	52.405	ug/l	2.00	219,842.76	1.907E+00	Pulse	0.30	3
Cr			2	51.224	ug/l	1.44	276,705.09	2.400E+00	Pulse	0.30	3
Mn			2	50.079	ug/l	0.86	153,691.26	1.333E+00	Pulse	0.30	3
Fe			2	5190.006	ug/l	1.78	23,272,621.30	2.019E+02	Analog	0.30	3
Co			2	50.645	ug/l	1.13	440,916.00	3.825E+00	Pulse	0.30	3
Ni			2	50.218	ug/l	1.52	116,642.71	1.012E+00	Pulse	0.30	3
Cu			2	49.321	ug/l	1.36	305,939.40	2.654E+00	Pulse	0.30	3
Zn			2	49.169	ug/l	0.79	48,877.67	4.240E-01	Pulse	0.30	3
As			2	52.728	ug/l	2.24	24,301.81	2.108E-01	Pulse	1.00	3
Cd			2	49.636	ug/l	1.21	62,932.16	1.257E-01	Pulse	0.30	3
Sn			2	51.775	ug/l	0.29	118,830.24	2.374E-01	Pulse	0.30	3
Se			3	209.802	ug/l	3.23	11,220.02	2.775E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,298,076.33	2.12	82.0	Pulse	0.10	3
1	Sc		2,861,359.85	3.87	103.5	Pulse	0.10	3
1	Ge		716,217.05	4.85	107.5	Pulse	0.10	3

Quantitation Report

1	Rh		3,339,449.95	4.12	103.7	Pulse	0.10	3
1	In		3,162,157.94	4.24	105.9	Pulse	0.10	3
1	Tb		4,455,868.37	1.61	104.9	Analog	0.10	3
1	Ho		399,049.36	5.11	106.2	Pulse	0.10	3
1	Bi		2,241,158.82	5.63	99.6	Pulse	0.10	3
2	Sc		115,277.10	0.87	102.0	Pulse	0.30	3
2	Ge		90,035.14	0.03	105.9	Pulse	0.30	3
2	Rh		1,441,317.79	0.45	100.7	Pulse	0.30	3
2	In		500,589.06	0.90	103.3	Pulse	0.30	3
2	Tb		1,609,766.05	0.40	103.2	Pulse	0.30	3
2	Ho		159,004.47	0.48	103.5	Pulse	0.30	3
2	Bi		970,689.89	0.27	99.8	Pulse	0.30	3
3	Sc		85,260.03	0.93	103.2	Pulse	0.30	3
3	Ge		40,426.36	1.10	103.9	Pulse	0.30	3
3	Rh		277,480.26	0.27	97.5	Pulse	0.30	3
3	Tb		360,723.50	0.21	98.1	Pulse	0.30	3

Quantitation Report

File Name	052_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:28
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-74.63	30.67	2.342E-05	Pulse	0.25	3
B			1	8.203	ug/l	1.02	55,446.81	4.232E-02	Pulse	0.15	3
Ca			1	-1.821	ug/l	-22.08	14,201.06	5.038E-03	Pulse	0.10	3
Sr			1	0.011	ug/l	33.67	1,260.11	3.752E-04	Pulse	0.10	3
Mo			1	0.012	ug/l	16.52	596.71	1.773E-04	Pulse	0.10	3
Ag			1	0.004	ug/l	51.77	346.69	1.104E-04	Pulse	0.10	3
Sn			1	-0.025	ug/l	-63.71	1,636.84	5.212E-04	Pulse	0.10	3
Sb			1	0.243	ug/l	2.24	1,630.16	3.692E-04	Pulse	0.10	3
Ba			1	0.181	ug/l	1.48	93.33	2.112E-05	Pulse	0.10	3
Tl			1	-0.003	ug/l	-92.93	613.38	2.722E-04	Pulse	0.10	3
Pb			1	0.001	ug/l	220.74	283.35	1.251E-04	Pulse	0.10	3
Pb			1	0.002	ug/l	98.48	233.34	1.032E-04	Pulse	0.10	3
Pb			1	0.000	ug/l	-576.97	1,053.39	4.668E-04	Pulse	0.10	3
Na			2	62.193	ug/l	1.27	78,047.03	7.008E-01	Pulse	0.30	3
Mg			2	1.152	ug/l	17.62	751.14	6.744E-03	Pulse	0.30	3
Al			2	-0.464	ug/l	-16.29	144.45	1.298E-03	Pulse	0.30	3
K			2	7.452	ug/l	10.39	7,350.90	6.599E-02	Pulse	0.30	3
Ca			2	2.073	ug/l	76.56	121.11	1.087E-03	Pulse	0.30	3
Ti			2	0.009	ug/l	687.03	4.44	3.940E-05	Pulse	0.30	3
V			2	0.025	ug/l	28.96	354.45	3.180E-03	Pulse	0.30	3
Cr			2	-0.001	ug/l	-977.89	560.02	5.027E-03	Pulse	0.30	3
Mn			2	0.027	ug/l	47.22	127.78	1.148E-03	Pulse	0.30	3
Fe			2	0.581	ug/l	6.84	8,802.90	7.904E-02	Pulse	0.30	3
Co			2	-0.001	ug/l	-87.01	51.09	4.595E-04	Pulse	0.30	3
Ni			2	-0.008	ug/l	-103.88	93.33	8.367E-04	Pulse	0.30	3
Cu			2	-0.048	ug/l	-8.98	773.36	6.944E-03	Pulse	0.30	3
Zn			2	-0.153	ug/l	-27.78	208.89	1.877E-03	Pulse	0.30	3
As			2	-0.003	ug/l	-441.49	13.67	1.223E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.042	ug/l	13.28	7.54	1.549E-05	Pulse	0.30	3
Sn			2	0.017	ug/l	40.98	292.23	5.994E-04	Pulse	0.30	3
Se			3	0.070	ug/l	393.07	38.67	9.552E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,310,038.60	0.20	82.7	Pulse	0.10	3
1	Sc		2,819,930.90	3.27	102.0	Pulse	0.10	3
1	Ge		707,014.37	3.00	106.1	Pulse	0.10	3
1	Rh		3,367,425.78	3.77	104.6	Pulse	0.10	3
1	In		3,142,585.98	3.49	105.3	Pulse	0.10	3
1	Tb		4,414,424.62	1.05	103.9	Analog	0.10	3
1	Ho		383,039.63	3.83	101.9	Pulse	0.10	3
1	Bi		2,260,541.68	3.79	100.5	Pulse	0.10	3
2	Sc		111,377.09	1.23	98.6	Pulse	0.30	3
2	Ge		86,834.65	0.99	102.1	Pulse	0.30	3
2	Rh		1,430,907.06	0.35	99.9	Pulse	0.30	3
2	In		487,513.37	0.31	100.6	Pulse	0.30	3
2	Tb		1,539,309.17	0.64	98.7	Pulse	0.30	3
2	Ho		152,220.50	0.97	99.1	Pulse	0.30	3
2	Bi		949,383.05	0.34	97.6	Pulse	0.30	3
3	Sc		84,894.43	1.46	102.8	Pulse	0.30	3
3	Ge		40,428.65	1.53	103.9	Pulse	0.30	3
3	Rh		284,507.77	0.66	99.9	Pulse	0.30	3
3	Tb		348,470.26	1.01	94.7	Pulse	0.30	3

Quantitation Report

File Name	053SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:33
Sample Name	jc98257-4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	0.074	ug/l	17.45	188.00	1.819E-04	Pulse	0.25	3
B			1	83.399	ug/l	1.36	188,578.04	1.822E-01	Pulse	0.15	3
Ca			1	56266.340	ug/l	3.45	22,840,819.66	8.778E+00	Analog	0.10	3
Sr			1	543.233	ug/l	3.10	10,209,560.68	3.374E+00	Analog	0.10	3
Mo			1	0.837	ug/l	6.96	3,500.60	1.157E-03	Pulse	0.10	3
Ag			1	0.063	ug/l	16.66	826.73	2.819E-04	Pulse	0.10	3
Sn			1	0.578	ug/l	3.81	4,891.10	1.665E-03	Pulse	0.10	3
Sb			1	3.547	ug/l	5.91	21,117.48	4.754E-03	Pulse	0.10	3
Ba			1	98.770	ug/l	3.45	264,176.84	5.946E-02	Pulse	0.10	3
Tl			1	-0.016	ug/l	-35.52	433.36	2.110E-04	Pulse	0.10	3
Pb			1	0.303	ug/l	6.95	1,626.83	7.932E-04	Pulse	0.10	3
Pb			1	0.274	ug/l	2.64	1,283.46	6.250E-04	Pulse	0.10	3
Pb			1	0.292	ug/l	1.15	6,297.56	3.066E-03	Pulse	0.10	3
Na			2	64863.917	ug/l	1.66	27,528,733.91	2.644E+02	Analog	0.30	3
Mg			2	15786.035	ug/l	1.78	3,167,966.75	3.042E+01	Pulse	0.30	3
Al			2	141.463	ug/l	2.57	10,867.68	1.044E-01	Pulse	0.30	3
K			2	3682.953	ug/l	1.17	528,697.32	5.077E+00	Pulse	0.30	3
Ca			2	53622.336	ug/l	1.88	431,402.33	4.143E+00	Pulse	0.30	3
Ti			2	1.103	ug/l	15.85	68.89	6.618E-04	Pulse	0.30	3
V			2	1.706	ug/l	2.31	3,463.81	3.326E-02	Pulse	0.30	3
Cr			2	1.124	ug/l	7.73	3,265.99	3.136E-02	Pulse	0.30	3
Mn			2	1577.128	ug/l	0.97	2,185,588.80	2.099E+01	Pulse	0.30	3
Fe			2	54.445	ug/l	1.07	116,128.47	1.115E+00	Pulse	0.30	3
Co			2	0.199	ug/l	11.84	841.94	8.087E-03	Pulse	0.30	3
Ni			2	14.334	ug/l	2.05	15,127.30	1.453E-01	Pulse	0.30	3
Cu			2	28.753	ug/l	1.38	81,269.37	7.804E-01	Pulse	0.30	3
Zn			2	42.715	ug/l	1.62	19,367.09	1.860E-01	Pulse	0.30	3
As			2	1.509	ug/l	11.41	327.67	3.147E-03	Pulse	1.00	3
Cd			2	0.513	ug/l	16.46	252.37	5.587E-04	Pulse	0.30	3
Sn			2	0.733	ug/l	5.04	991.19	2.196E-03	Pulse	0.30	3
Se			3	6.308	ug/l	6.08	193.33	5.021E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,034,840.67	2.02	65.4	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,604,045.74	3.12	94.2	Pulse	0.10	3
1	Ge		637,085.60	3.03	95.6	Pulse	0.10	3
1	Rh		3,027,936.62	3.09	94.0	Pulse	0.10	3
1	In		2,939,432.50	3.24	98.5	Pulse	0.10	3
1	Tb		4,442,965.66	0.74	104.6	Analog	0.10	3
1	Ho		387,187.57	5.50	103.0	Pulse	0.10	3
1	Bi		2,053,955.44	3.69	91.3	Pulse	0.10	3
2	Sc		104,136.96	0.40	92.2	Pulse	0.30	3
2	Ge		80,534.15	1.52	94.7	Pulse	0.30	3
2	Rh		1,297,140.92	0.82	90.6	Pulse	0.30	3
2	In		451,333.79	0.66	93.2	Pulse	0.30	3
2	Tb		1,521,414.32	0.37	97.5	Pulse	0.30	3
2	Ho		150,091.78	0.86	97.7	Pulse	0.30	3
2	Bi		870,173.80	1.06	89.5	Pulse	0.30	3
3	Sc		83,375.94	1.52	100.9	Pulse	0.30	3
3	Ge		38,494.17	1.11	98.9	Pulse	0.30	3
3	Rh		263,216.71	1.99	92.4	Pulse	0.30	3
3	Tb		349,345.68	0.84	95.0	Pulse	0.30	3

Quantitation Report

File Name	054SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:38
Sample Name	jc98257-8
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	42.10	60.00	6.098E-05	Pulse	0.25	3
B			1	1534.423	ug/l	3.33	3,168,666.33	3.212E+00	Pulse	0.15	3
Ca			1	74660.840	ug/l	3.44	29,559,067.06	1.165E+01	Analog	0.10	3
Sr			1	425.624	ug/l	3.69	7,900,557.80	2.644E+00	Analog	0.10	3
Mo			1	0.291	ug/l	13.27	1,496.80	4.991E-04	Pulse	0.10	3
Ag			1	0.006	ug/l	115.61	306.68	1.029E-04	Pulse	0.10	3
Sn			1	0.377	ug/l	10.77	3,857.38	1.299E-03	Pulse	0.10	3
Sb			1	0.540	ug/l	8.07	1,990.24	4.458E-04	Pulse	0.10	3
Ba			1	45.136	ug/l	5.04	120,909.91	2.706E-02	Pulse	0.10	3
Tl			1	-0.034	ug/l	-3.08	196.68	9.528E-05	Pulse	0.10	3
Pb			1	0.555	ug/l	1.65	2,793.75	1.355E-03	Pulse	0.10	3
Pb			1	0.509	ug/l	13.14	2,230.29	1.078E-03	Pulse	0.10	3
Pb			1	0.521	ug/l	2.68	10,515.45	5.097E-03	Pulse	0.10	3
Na			2	79731.352	ug/l	1.96	31,683,848.74	3.249E+02	Analog	0.30	3
Mg			2	16327.997	ug/l	2.20	3,068,297.03	3.147E+01	Pulse	0.30	3
Al			2	220.649	ug/l	4.97	15,763.51	1.617E-01	Pulse	0.30	3
K			2	3100.508	ug/l	2.11	417,470.18	4.281E+00	Pulse	0.30	3
Ca			2	70812.231	ug/l	1.25	533,462.48	5.471E+00	Pulse	0.30	3
Ti			2	2.592	ug/l	8.83	147.78	1.515E-03	Pulse	0.30	3
V			2	1.840	ug/l	4.70	3,480.48	3.570E-02	Pulse	0.30	3
Cr			2	1.544	ug/l	3.71	4,016.18	4.118E-02	Pulse	0.30	3
Mn			2	309.055	ug/l	1.90	401,080.12	4.113E+00	Pulse	0.30	3
Fe			2	8985.485	ug/l	2.98	17,043,553.77	1.748E+02	Analog	0.30	3
Co			2	0.208	ug/l	4.74	820.69	8.418E-03	Pulse	0.30	3
Ni			2	1.361	ug/l	2.24	1,433.43	1.470E-02	Pulse	0.30	3
Cu			2	2.356	ug/l	5.25	7,087.46	7.269E-02	Pulse	0.30	3
Zn			2	8.016	ug/l	1.35	3,656.08	3.749E-02	Pulse	0.30	3
As			2	2.102	ug/l	3.72	422.68	4.334E-03	Pulse	1.00	3
Cd			2	0.120	ug/l	10.23	26.14	6.056E-05	Pulse	0.30	3
Sn			2	0.515	ug/l	4.47	733.36	1.698E-03	Pulse	0.30	3
Se			3	0.235	ug/l	127.26	38.67	1.018E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		986,896.34	2.41	62.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,539,385.69	1.89	91.8	Pulse	0.10	3
1	Ge		631,964.34	3.63	94.8	Pulse	0.10	3
1	Rh		2,991,606.52	4.19	92.9	Pulse	0.10	3
1	In		2,971,402.80	2.51	99.5	Pulse	0.10	3
1	Tb		4,468,827.85	1.10	105.2	Analog	0.10	3
1	Ho		393,137.01	4.91	104.6	Pulse	0.10	3
1	Bi		2,061,442.78	4.49	91.6	Pulse	0.10	3
2	Sc		97,519.88	0.86	86.3	Pulse	0.30	3
2	Ge		77,398.46	0.31	91.0	Pulse	0.30	3
2	Rh		1,251,084.36	0.27	87.4	Pulse	0.30	3
2	In		431,807.97	0.33	89.1	Pulse	0.30	3
2	Tb		1,462,108.00	0.33	93.7	Pulse	0.30	3
2	Ho		146,383.20	0.88	95.3	Pulse	0.30	3
2	Bi		844,101.22	0.21	86.8	Pulse	0.30	3
3	Sc		81,391.70	0.57	98.5	Pulse	0.30	3
3	Ge		37,976.04	0.22	97.6	Pulse	0.30	3
3	Rh		254,051.76	0.86	89.2	Pulse	0.30	3
3	Tb		341,119.08	0.55	92.7	Pulse	0.30	3

Quantitation Report

File Name	055SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:42
Sample Name	jc98257-9
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-97.71	26.67	2.668E-05	Pulse	0.25	3
B			1	300.140	ug/l	2.47	636,175.83	6.348E-01	Pulse	0.15	3
Ca			1	17597.654	ug/l	3.15	7,000,375.10	2.749E+00	Analog	0.10	3
Sr			1	155.383	ug/l	1.68	2,935,617.04	9.652E-01	Pulse	0.10	3
Mo			1	17.267	ug/l	2.06	63,681.93	2.094E-02	Pulse	0.10	3
Ag			1	0.009	ug/l	73.25	333.35	1.120E-04	Pulse	0.10	3
Sn			1	0.410	ug/l	13.16	4,020.76	1.358E-03	Pulse	0.10	3
Sb			1	4.337	ug/l	4.47	26,229.96	5.885E-03	Pulse	0.10	3
Ba			1	15.232	ug/l	5.23	40,115.74	9.001E-03	Pulse	0.10	3
Tl			1	-0.023	ug/l	-8.50	346.69	1.623E-04	Pulse	0.10	3
Pb			1	1.068	ug/l	3.67	5,321.34	2.494E-03	Pulse	0.10	3
Pb			1	1.006	ug/l	5.23	4,340.93	2.034E-03	Pulse	0.10	3
Pb			1	1.053	ug/l	2.78	20,914.42	9.811E-03	Pulse	0.10	3
Na			2	91796.462	ug/l	9.73	33,384,774.23	3.740E+02	Analog	0.30	3
Mg			2	3745.459	ug/l	10.32	644,163.25	7.220E+00	Pulse	0.30	3
Al			2	278.908	ug/l	9.82	18,193.18	2.038E-01	Pulse	0.30	3
K			2	9886.605	ug/l	11.30	1,208,258.53	1.355E+01	Pulse	0.30	3
Ca			2	18526.155	ug/l	10.65	127,718.70	1.432E+00	Pulse	0.30	3
Ti			2	3.959	ug/l	8.13	205.56	2.298E-03	Pulse	0.30	3
V			2	16.186	ug/l	11.83	26,419.69	2.964E-01	Pulse	0.30	3
Cr			2	6.578	ug/l	13.06	14,155.14	1.589E-01	Pulse	0.30	3
Mn			2	45.392	ug/l	10.52	53,927.12	6.045E-01	Pulse	0.30	3
Fe			2	370.662	ug/l	11.21	647,726.85	7.264E+00	Pulse	0.30	3
Co			2	0.398	ug/l	17.20	1,386.12	1.561E-02	Pulse	0.30	3
Ni			2	1.408	ug/l	13.06	1,352.31	1.518E-02	Pulse	0.30	3
Cu			2	5.894	ug/l	13.55	14,926.02	1.676E-01	Pulse	0.30	3
Zn			2	10.235	ug/l	11.43	4,191.80	4.698E-02	Pulse	0.30	3
As			2	7.891	ug/l	15.00	1,414.08	1.590E-02	Pulse	1.00	3
Cd			2	0.077	ug/l	32.78	3.02	5.693E-06	Pulse	0.30	3
Sn			2	0.620	ug/l	18.21	768.92	1.937E-03	Pulse	0.30	3
Se			3	0.724	ug/l	59.26	50.67	1.340E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,002,295.25	2.61	63.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,547,862.36	3.04	92.1	Pulse	0.10	3
1	Ge		632,271.10	5.47	94.9	Pulse	0.10	3
1	Rh		3,042,610.27	4.85	94.5	Pulse	0.10	3
1	In		2,964,338.07	3.02	99.3	Pulse	0.10	3
1	Tb		4,459,129.83	1.71	105.0	Analog	0.10	3
1	Ho		389,919.07	4.39	103.7	Pulse	0.10	3
1	Bi		2,131,426.48	4.51	94.7	Pulse	0.10	3
2	Sc		89,866.36	10.58	79.5	Pulse	0.30	3
2	Ge		71,711.25	10.02	84.3	Pulse	0.30	3
2	Rh		1,173,691.55	10.69	82.0	Pulse	0.30	3
2	In		400,261.97	10.59	82.6	Pulse	0.30	3
2	Tb		1,355,096.65	10.78	86.8	Pulse	0.30	3
2	Ho		134,277.11	11.61	87.4	Pulse	0.30	3
2	Bi		792,001.95	11.40	81.4	Pulse	0.30	3
3	Sc		80,299.20	1.66	97.2	Pulse	0.30	3
3	Ge		37,734.30	1.64	97.0	Pulse	0.30	3
3	Rh		255,354.71	0.75	89.7	Pulse	0.30	3
3	Tb		339,778.83	0.06	92.4	Pulse	0.30	3

Quantitation Report

File Name	056SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:47
Sample Name	jc98257-10
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-27.08	16.00	1.689E-05	Pulse	0.25	3
B			1	920.963	ug/l	0.56	1,826,489.23	1.931E+00	Pulse	0.15	3
Ca			1	12558.741	ug/l	3.89	4,760,493.78	1.964E+00	Analog	0.10	3
Sr			1	252.567	ug/l	3.26	4,388,881.50	1.569E+00	Analog	0.10	3
Mo			1	0.084	ug/l	61.28	703.38	2.499E-04	Pulse	0.10	3
Ag			1	-0.004	ug/l	-126.45	200.01	7.196E-05	Pulse	0.10	3
Sn			1	0.460	ug/l	6.17	4,024.12	1.449E-03	Pulse	0.10	3
Sb			1	0.450	ug/l	3.81	1,340.12	3.164E-04	Pulse	0.10	3
Ba			1	64.712	ug/l	4.21	164,748.24	3.889E-02	Pulse	0.10	3
Tl			1	-0.039	ug/l	-10.53	113.34	6.016E-05	Pulse	0.10	3
Pb			1	0.222	ug/l	3.97	1,166.76	6.141E-04	Pulse	0.10	3
Pb			1	0.195	ug/l	4.84	896.73	4.720E-04	Pulse	0.10	3
Pb			1	0.217	ug/l	2.93	4,547.18	2.396E-03	Pulse	0.10	3
Na			2	336186.997	ug/l	0.36	131,618,856.99	1.369E+03	Analog	0.30	3
Mg			2	10553.315	ug/l	0.29	1,954,931.31	2.034E+01	Pulse	0.30	3
Al			2	142.939	ug/l	4.62	10,134.93	1.054E-01	Pulse	0.30	3
K			2	9994.919	ug/l	0.42	1,316,828.91	1.370E+01	Pulse	0.30	3
Ca			2	12328.617	ug/l	0.97	91,613.34	9.531E-01	Pulse	0.30	3
Ti			2	3.116	ug/l	3.04	174.45	1.815E-03	Pulse	0.30	3
V			2	2.393	ug/l	4.33	4,397.42	4.575E-02	Pulse	0.30	3
Cr			2	2.376	ug/l	2.93	5,827.96	6.063E-02	Pulse	0.30	3
Mn			2	91.966	ug/l	0.37	117,673.29	1.224E+00	Pulse	0.30	3
Fe			2	37928.806	ug/l	1.83	70,903,119.40	7.376E+02	Analog	0.30	3
Co			2	0.164	ug/l	5.36	650.82	6.772E-03	Pulse	0.30	3
Ni			2	0.729	ug/l	4.01	801.14	8.334E-03	Pulse	0.30	3
Cu			2	7.026	ug/l	2.15	19,024.38	1.979E-01	Pulse	0.30	3
Zn			2	10.267	ug/l	1.85	4,529.69	4.712E-02	Pulse	0.30	3
As			2	5.794	ug/l	1.25	1,125.38	1.171E-02	Pulse	1.00	3
Cd			2	0.080	ug/l	4.53	4.26	1.043E-05	Pulse	0.30	3
Sn			2	0.496	ug/l	16.40	675.58	1.655E-03	Pulse	0.30	3
Se			3	1.356	ug/l	29.61	62.67	1.756E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		945,808.96	1.91	59.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,426,736.37	3.69	87.8	Pulse	0.10	3
1	Ge		598,142.18	4.17	89.8	Pulse	0.10	3
1	Rh		2,799,583.92	3.50	86.9	Pulse	0.10	3
1	In		2,779,207.50	4.17	93.1	Pulse	0.10	3
1	Tb		4,236,492.33	0.64	99.7	Analog	0.10	3
1	Ho		372,273.77	3.97	99.0	Pulse	0.10	3
1	Bi		1,898,549.82	4.66	84.4	Pulse	0.10	3
2	Sc		96,118.02	0.64	85.1	Pulse	0.30	3
2	Ge		73,095.12	0.38	85.9	Pulse	0.30	3
2	Rh		1,165,950.89	0.35	81.4	Pulse	0.30	3
2	In		408,280.39	0.12	84.3	Pulse	0.30	3
2	Tb		1,389,544.95	0.58	89.1	Pulse	0.30	3
2	Ho		137,779.89	1.29	89.7	Pulse	0.30	3
2	Bi		769,993.70	0.53	79.2	Pulse	0.30	3
3	Sc		78,629.50	1.16	95.2	Pulse	0.30	3
3	Ge		35,738.93	1.70	91.9	Pulse	0.30	3
3	Rh		237,053.01	0.53	83.3	Pulse	0.30	3
3	Tb		327,216.45	0.86	89.0	Pulse	0.30	3

Quantitation Report

File Name	057SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:52
Sample Name	jc98257-11
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	0.016	ug/l	96.46	58.67	6.549E-05	Pulse	0.25	3
B			1	1000.263	ug/l	0.69	1,878,717.15	2.097E+00	Pulse	0.15	3
Ca			1	112501.689	ug/l	3.01	42,639,022.70	1.754E+01	Analog	0.10	3
Sr			1	1268.882	ug/l	5.27	21,270,629.68	7.880E+00	Analog	0.10	3
Mo			1	1.544	ug/l	4.19	5,431.30	2.008E-03	Pulse	0.10	3
Ag			1	0.004	ug/l	106.20	263.34	9.685E-05	Pulse	0.10	3
Sn			1	0.451	ug/l	6.22	3,894.07	1.434E-03	Pulse	0.10	3
Sb			1	1.144	ug/l	3.86	5,494.71	1.311E-03	Pulse	0.10	3
Ba			1	191.453	ug/l	4.61	483,850.88	1.154E-01	Pulse	0.10	3
Tl			1	-0.034	ug/l	-3.56	176.68	9.757E-05	Pulse	0.10	3
Pb			1	1.126	ug/l	1.69	4,741.09	2.624E-03	Pulse	0.10	3
Pb			1	1.074	ug/l	5.75	3,920.81	2.166E-03	Pulse	0.10	3
Pb			1	1.124	ug/l	2.07	18,883.14	1.045E-02	Pulse	0.10	3
Na			2	410053.319	ug/l	2.95	161,935,180.23	1.670E+03	Analog	0.30	3
Mg			2	46180.717	ug/l	3.25	8,628,174.38	8.899E+01	Analog	0.30	3
Al			2	143.543	ug/l	1.71	10,264.98	1.059E-01	Pulse	0.30	3
K			2	23452.852	ug/l	0.91	3,110,971.06	3.209E+01	Pulse	0.30	3
Ca			2	108645.217	ug/l	1.09	813,771.27	8.393E+00	Pulse	0.30	3
Ti			2	3.088	ug/l	21.67	174.45	1.799E-03	Pulse	0.30	3
V			2	5.715	ug/l	2.05	10,290.60	1.061E-01	Pulse	0.30	3
Cr			2	2.936	ug/l	1.39	7,149.70	7.374E-02	Pulse	0.30	3
Mn			2	362.156	ug/l	0.55	467,325.21	4.820E+00	Pulse	0.30	3
Fe			2	5094.665	ug/l	2.44	9,610,730.17	9.913E+01	Analog	0.30	3
Co			2	0.355	ug/l	5.47	1,354.14	1.397E-02	Pulse	0.30	3
Ni			2	1.498	ug/l	6.40	1,559.00	1.608E-02	Pulse	0.30	3
Cu			2	3.887	ug/l	0.71	11,028.98	1.137E-01	Pulse	0.30	3
Zn			2	9.517	ug/l	2.35	4,257.38	4.391E-02	Pulse	0.30	3
As			2	4.907	ug/l	4.08	963.37	9.937E-03	Pulse	1.00	3
Cd			2	0.413	ug/l	17.01	173.85	4.316E-04	Pulse	0.30	3
Sn			2	0.536	ug/l	4.93	703.36	1.746E-03	Pulse	0.30	3
Se			3	2.271	ug/l	20.14	82.67	2.360E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		896,020.92	0.92	56.6	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,431,968.30	3.38	88.0	Pulse	0.10	3
1	Ge		592,968.25	3.77	89.0	Pulse	0.10	3
1	Rh		2,702,333.50	3.35	83.9	Pulse	0.10	3
1	In		2,716,508.60	4.03	91.0	Pulse	0.10	3
1	Tb		4,191,510.67	0.12	98.7	Analog	0.10	3
1	Ho		363,721.91	4.61	96.8	Pulse	0.10	3
1	Bi		1,807,453.20	4.45	80.3	Pulse	0.10	3
2	Sc		96,960.85	0.62	85.8	Pulse	0.30	3
2	Ge		74,147.55	1.30	87.2	Pulse	0.30	3
2	Rh		1,130,524.78	0.50	79.0	Pulse	0.30	3
2	In		402,788.43	0.66	83.1	Pulse	0.30	3
2	Tb		1,377,493.24	0.39	88.3	Pulse	0.30	3
2	Ho		135,876.57	0.68	88.4	Pulse	0.30	3
2	Bi		745,532.47	0.98	76.7	Pulse	0.30	3
3	Sc		78,793.65	0.82	95.4	Pulse	0.30	3
3	Ge		35,069.41	1.95	90.1	Pulse	0.30	3
3	Rh		231,621.36	0.53	81.4	Pulse	0.30	3
3	Tb		325,767.88	0.57	88.6	Pulse	0.30	3

Quantitation Report

File Name	058SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 14:56
Sample Name	jc98257-12
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	0.048	ug/l	9.35	121.33	1.303E-04	Pulse	0.25	3
B			1	74.426	ug/l	1.88	152,259.12	1.635E-01	Pulse	0.15	3
Ca			1	88590.855	ug/l	2.53	33,343,602.00	1.382E+01	Analog	0.10	3
Sr			1	737.509	ug/l	3.71	13,100,458.14	4.580E+00	Analog	0.10	3
Mo			1	0.791	ug/l	5.98	3,150.51	1.102E-03	Pulse	0.10	3
Ag			1	0.003	ug/l	104.99	270.01	9.406E-05	Pulse	0.10	3
Sn			1	0.894	ug/l	5.23	6,431.80	2.241E-03	Pulse	0.10	3
Sb			1	0.757	ug/l	6.39	3,317.24	7.571E-04	Pulse	0.10	3
Ba			1	229.638	ug/l	4.19	606,991.92	1.385E-01	Pulse	0.10	3
Tl			1	0.025	ug/l	10.94	960.07	4.743E-04	Pulse	0.10	3
Pb			1	0.316	ug/l	9.81	1,670.17	8.237E-04	Pulse	0.10	3
Pb			1	0.316	ug/l	4.81	1,426.82	7.057E-04	Pulse	0.10	3
Pb			1	0.389	ug/l	36.13	7,946.34	3.925E-03	Pulse	0.10	3
Na			2	61473.724	ug/l	2.91	23,669,134.06	2.506E+02	Analog	0.30	3
Mg			2	20758.214	ug/l	2.11	3,779,025.13	4.000E+01	Pulse	0.30	3
Al			2	153.104	ug/l	4.70	10,654.23	1.128E-01	Pulse	0.30	3
K			2	3396.526	ug/l	1.48	442,667.26	4.686E+00	Pulse	0.30	3
Ca			2	84463.208	ug/l	0.93	616,460.96	6.525E+00	Pulse	0.30	3
Ti			2	2.801	ug/l	15.06	154.45	1.634E-03	Pulse	0.30	3
V			2	0.665	ug/l	11.30	1,354.53	1.435E-02	Pulse	0.30	3
Cr			2	0.889	ug/l	4.72	2,444.70	2.588E-02	Pulse	0.30	3
Mn			2	1247.931	ug/l	1.08	1,569,048.03	1.661E+01	Pulse	0.30	3
Fe			2	23854.750	ug/l	1.35	43,832,046.04	4.639E+02	Analog	0.30	3
Co			2	2.337	ug/l	1.00	8,388.80	8.879E-02	Pulse	0.30	3
Ni			2	3.176	ug/l	2.85	3,114.84	3.297E-02	Pulse	0.30	3
Cu			2	28.478	ug/l	1.91	73,030.16	7.730E-01	Pulse	0.30	3
Zn			2	53.327	ug/l	2.94	21,860.84	2.314E-01	Pulse	0.30	3
As			2	3.351	ug/l	21.09	645.40	6.828E-03	Pulse	1.00	3
Cd			2	0.085	ug/l	11.17	6.80	1.605E-05	Pulse	0.30	3
Sn			2	1.013	ug/l	8.21	1,193.40	2.838E-03	Pulse	0.30	3
Se			3	-0.077	ug/l	-438.29	30.00	8.119E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		931,530.82	1.95	58.8	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,414,009.86	2.23	87.3	Pulse	0.10	3
1	Ge		608,320.88	3.78	91.3	Pulse	0.10	3
1	Rh		2,862,312.77	3.49	88.9	Pulse	0.10	3
1	In		2,867,676.83	4.20	96.1	Pulse	0.10	3
1	Tb		4,384,479.21	2.14	103.2	Analog	0.10	3
1	Ho		378,909.46	2.48	100.8	Pulse	0.10	3
1	Bi		2,023,188.77	5.01	89.9	Pulse	0.10	3
2	Sc		94,481.59	1.30	83.6	Pulse	0.30	3
2	Ge		75,440.24	0.71	88.7	Pulse	0.30	3
2	Rh		1,224,021.48	0.85	85.5	Pulse	0.30	3
2	In		420,726.70	1.49	86.8	Pulse	0.30	3
2	Tb		1,454,007.44	0.28	93.2	Pulse	0.30	3
2	Ho		144,540.97	0.19	94.1	Pulse	0.30	3
2	Bi		834,092.90	0.56	85.8	Pulse	0.30	3
3	Sc		80,482.45	1.51	97.4	Pulse	0.30	3
3	Ge		37,001.12	1.09	95.1	Pulse	0.30	3
3	Rh		249,459.59	1.12	87.6	Pulse	0.30	3
3	Tb		341,275.95	0.71	92.8	Pulse	0.30	3

Quantitation Report

File Name	059SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:01
Sample Name	jc98257-13
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	1.989	ug/l	6.25	3,177.74	4.086E-03	Pulse	0.25	3
B			1	589.042	ug/l	0.42	962,581.49	1.238E+00	Pulse	0.15	3
Ca			1	201572.199	ug/l	3.55	69,816,383.96	3.143E+01	Analog	0.10	3
Sr			1	1453.407	ug/l	3.49	22,619,850.49	9.026E+00	Analog	0.10	3
Mo			1	1.286	ug/l	7.35	4,257.53	1.697E-03	Pulse	0.10	3
Ag			1	-0.006	ug/l	-202.83	170.01	6.656E-05	Pulse	0.10	3
Sn			1	0.339	ug/l	14.32	3,097.19	1.230E-03	Pulse	0.10	3
Sb			1	0.429	ug/l	3.71	1,130.09	2.863E-04	Pulse	0.10	3
Ba			1	1138.670	ug/l	3.80	2,714,373.66	6.875E-01	Pulse	0.10	3
Tl			1	-0.036	ug/l	-0.75	146.68	8.562E-05	Pulse	0.10	3
Pb			1	0.515	ug/l	2.39	2,170.28	1.265E-03	Pulse	0.10	3
Pb			1	0.461	ug/l	7.86	1,686.85	9.854E-04	Pulse	0.10	3
Pb			1	0.478	ug/l	2.06	8,071.35	4.711E-03	Pulse	0.10	3
Na			2	484503.444	ug/l	2.62	177,149,450.74	1.973E+03	Analog	0.30	3
Mg			2	91533.188	ug/l	1.73	15,837,088.81	1.764E+02	Analog	0.30	3
Al			2	323.859	ug/l	0.96	21,231.95	2.364E-01	Pulse	0.30	3
K			2	5165.699	ug/l	2.09	637,683.13	7.103E+00	Pulse	0.30	3
Ca			2	189052.452	ug/l	1.95	1,311,143.07	1.460E+01	Pulse	0.30	3
Ti			2	3.274	ug/l	9.54	171.11	1.905E-03	Pulse	0.30	3
V			2	3.115	ug/l	4.56	5,283.29	5.888E-02	Pulse	0.30	3
Cr			2	2.361	ug/l	2.94	5,411.12	6.028E-02	Pulse	0.30	3
Mn			2	98012.670	ug/l	2.73	117,078,759.79	1.304E+03	Analog	0.30	3
Fe			2	86473.154	ug/l	2.69	150,953,914.00	1.682E+03	Analog	0.30	3
Co			2	42.755	ug/l	2.37	144,970.48	1.615E+00	Pulse	0.30	3
Ni			2	17.764	ug/l	2.92	16,138.43	1.798E-01	Pulse	0.30	3
Cu			2	23.514	ug/l	2.77	57,443.82	6.399E-01	Pulse	0.30	3
Zn			2	36.942	ug/l	2.39	14,478.86	1.613E-01	Pulse	0.30	3
As			2	4.073	ug/l	2.07	743.02	8.271E-03	Pulse	1.00	3
Cd			2	0.207	ug/l	6.14	63.01	1.709E-04	Pulse	0.30	3
Sn			2	0.480	ug/l	20.31	596.69	1.618E-03	Pulse	0.30	3
Se			3	1.399	ug/l	25.63	56.00	1.785E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		777,463.92	1.48	49.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,223,076.84	3.51	80.4	Pulse	0.10	3
1	Ge		541,053.73	3.70	81.2	Pulse	0.10	3
1	Rh		2,507,786.94	3.14	77.9	Pulse	0.10	3
1	In		2,520,362.56	3.80	84.4	Pulse	0.10	3
1	Tb		3,948,572.02	0.62	93.0	Analog	0.10	3
1	Ho		360,545.55	3.98	95.9	Pulse	0.10	3
1	Bi		1,714,160.03	5.36	76.2	Pulse	0.10	3
2	Sc		89,816.40	3.33	79.5	Pulse	0.30	3
2	Ge		67,334.67	1.50	79.2	Pulse	0.30	3
2	Rh		1,038,084.23	1.13	72.5	Pulse	0.30	3
2	In		368,711.05	0.72	76.1	Pulse	0.30	3
2	Tb		1,281,879.57	0.72	82.2	Pulse	0.30	3
2	Ho		131,281.71	1.58	85.4	Pulse	0.30	3
2	Bi		678,060.60	0.71	69.7	Pulse	0.30	3
3	Sc		73,120.79	1.11	88.5	Pulse	0.30	3
3	Ge		31,378.26	0.42	80.6	Pulse	0.30	3
3	Rh		211,753.25	0.58	74.4	Pulse	0.30	3
3	Tb		303,176.89	0.25	82.4	Pulse	0.30	3

Quantitation Report

File Name	060_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:06
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	56.119	ug/l	0.84	268,925.16	2.288E-01	Pulse	0.25	3
B			1	122.884	ug/l	0.58	612,690.74	5.213E-01	Pulse	0.15	3
Ca			1	5301.201	ug/l	4.23	4,444,448.79	1.659E+00	Mix	0.10	3
Sr			1	52.739	ug/l	1.23	2,096,829.81	6.553E-01	Pulse	0.10	3
Mo			1	52.014	ug/l	0.95	401,253.81	1.254E-01	Pulse	0.10	3
Ag			1	49.678	ug/l	0.68	950,903.19	3.103E-01	Pulse	0.10	3
Sn			1	51.491	ug/l	0.33	576,544.91	1.882E-01	Pulse	0.10	3
Sb			1	51.363	ug/l	3.78	647,260.55	1.469E-01	Pulse	0.10	3
Ba			1	49.188	ug/l	4.78	261,037.52	5.922E-02	Pulse	0.10	3
Tl			1	52.167	ug/l	1.62	1,468,712.74	6.670E-01	Pulse	0.10	3
Pb			1	51.678	ug/l	1.78	506,448.26	2.300E-01	Pulse	0.10	3
Pb			1	51.370	ug/l	0.84	435,978.26	1.979E-01	Pulse	0.10	3
Pb			1	51.313	ug/l	1.21	2,005,630.68	9.107E-01	Pulse	0.10	3
Na			2	4881.250	ug/l	0.18	4,135,256.92	3.995E+01	Pulse	0.30	3
Mg			2	4881.816	ug/l	1.04	1,947,605.06	1.882E+01	Pulse	0.30	3
Al			2	4691.738	ug/l	1.22	703,170.33	6.794E+00	Pulse	0.30	3
K			2	5015.017	ug/l	0.39	1,422,950.29	1.375E+01	Pulse	0.30	3
Ca			2	5475.247	ug/l	0.77	87,627.61	8.466E-01	Pulse	0.30	3
Ti			2	51.209	ug/l	2.40	6,076.95	5.872E-02	Pulse	0.30	3
V			2	53.044	ug/l	1.06	199,802.94	1.930E+00	Pulse	0.30	3
Cr			2	51.621	ug/l	0.52	250,372.82	2.419E+00	Pulse	0.30	3
Mn			2	52.587	ug/l	1.03	144,904.58	1.400E+00	Pulse	0.30	3
Fe			2	5314.242	ug/l	1.77	21,396,576.37	2.067E+02	Analog	0.30	3
Co			2	51.461	ug/l	0.91	402,271.87	3.887E+00	Pulse	0.30	3
Ni			2	51.027	ug/l	0.61	106,415.40	1.028E+00	Pulse	0.30	3
Cu			2	49.742	ug/l	0.91	277,048.01	2.677E+00	Pulse	0.30	3
Zn			2	49.925	ug/l	1.60	44,554.33	4.305E-01	Pulse	0.30	3
As			2	53.295	ug/l	0.66	22,055.72	2.131E-01	Pulse	1.00	3
Cd			2	50.293	ug/l	0.82	59,007.48	1.274E-01	Pulse	0.30	3
Sn			2	52.322	ug/l	2.30	111,118.64	2.399E-01	Pulse	0.30	3
Se			3	204.462	ug/l	4.11	10,530.79	2.704E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,175,500.24	2.37	74.2	Pulse	0.10	3
1	Sc		2,677,139.86	3.55	96.8	Pulse	0.10	3
1	Ge		680,299.83	3.87	102.1	Pulse	0.10	3

Quantitation Report

1	Rh		3,200,608.91	3.45	99.4	Pulse	0.10	3
1	In		3,063,955.38	4.32	102.6	Pulse	0.10	3
1	Tb		4,407,175.87	1.32	103.7	Analog	0.10	3
1	Ho		392,267.51	3.61	104.4	Pulse	0.10	3
1	Bi		2,203,288.14	5.94	97.9	Pulse	0.10	3
2	Sc		103,502.22	0.45	91.6	Pulse	0.30	3
2	Ge		82,959.63	0.25	97.5	Pulse	0.30	3
2	Rh		1,347,499.67	0.60	94.1	Pulse	0.30	3
2	In		463,230.11	0.04	95.6	Pulse	0.30	3
2	Tb		1,533,077.82	0.35	98.3	Pulse	0.30	3
2	Ho		150,215.41	1.28	97.8	Pulse	0.30	3
2	Bi		924,335.24	1.48	95.0	Pulse	0.30	3
3	Sc		81,180.40	0.82	98.3	Pulse	0.30	3
3	Ge		38,947.58	1.50	100.1	Pulse	0.30	3
3	Rh		264,219.93	0.86	92.8	Pulse	0.30	3
3	Tb		344,050.59	0.76	93.5	Pulse	0.30	3

Quantitation Report

File Name	061_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:11
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-66.75	25.33	2.144E-05	Pulse	0.25	3
B			1	8.110	ug/l	1.34	49,594.05	4.193E-02	Pulse	0.15	3
Ca			1	-0.313	ug/l	-161.65	14,287.86	5.508E-03	Pulse	0.10	3
Sr			1	0.013	ug/l	12.22	1,266.78	3.994E-04	Pulse	0.10	3
Mo			1	-0.005	ug/l	-65.59	433.36	1.370E-04	Pulse	0.10	3
Ag			1	0.001	ug/l	206.65	266.68	8.913E-05	Pulse	0.10	3
Sn			1	-0.045	ug/l	-9.91	1,343.45	4.481E-04	Pulse	0.10	3
Sb			1	0.232	ug/l	6.10	1,483.48	3.376E-04	Pulse	0.10	3
Ba			1	0.190	ug/l	5.85	140.01	3.181E-05	Pulse	0.10	3
Tl			1	-0.008	ug/l	-28.85	466.69	2.143E-04	Pulse	0.10	3
Pb			1	-0.002	ug/l	-166.00	240.01	1.098E-04	Pulse	0.10	3
Pb			1	0.001	ug/l	244.29	220.01	1.009E-04	Pulse	0.10	3
Pb			1	-0.002	ug/l	-103.44	956.72	4.391E-04	Pulse	0.10	3
Na			2	42.434	ug/l	0.69	54,518.02	5.398E-01	Pulse	0.30	3
Mg			2	0.556	ug/l	11.84	448.90	4.445E-03	Pulse	0.30	3
Al			2	-0.287	ug/l	-141.21	156.67	1.553E-03	Pulse	0.30	3
K			2	4.301	ug/l	6.04	5,794.60	5.738E-02	Pulse	0.30	3
Ca			2	1.372	ug/l	76.26	98.89	9.788E-04	Pulse	0.30	3
Ti			2	-0.006	ug/l	-514.37	2.22	2.204E-05	Pulse	0.30	3
V			2	0.014	ug/l	53.65	277.78	2.750E-03	Pulse	0.30	3
Cr			2	0.009	ug/l	53.50	554.46	5.489E-03	Pulse	0.30	3
Mn			2	0.423	ug/l	6.31	1,181.18	1.169E-02	Pulse	0.30	3
Fe			2	0.941	ug/l	2.98	9,397.73	9.305E-02	Pulse	0.30	3
Co			2	-0.003	ug/l	-20.35	37.75	3.739E-04	Pulse	0.30	3
Ni			2	0.002	ug/l	382.68	105.56	1.045E-03	Pulse	0.30	3
Cu			2	-0.068	ug/l	-9.65	597.80	5.920E-03	Pulse	0.30	3
Zn			2	-0.152	ug/l	-14.78	190.00	1.881E-03	Pulse	0.30	3
As			2	-0.009	ug/l	-86.49	9.67	9.584E-05	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.086	ug/l	69.33	57.65	1.275E-04	Pulse	0.30	3
Sn			2	0.021	ug/l	79.55	277.78	6.154E-04	Pulse	0.30	3
Se			3	-0.047	ug/l	-497.92	30.67	8.004E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,182,524.20	1.77	74.7	Pulse	0.10	3
1	Sc		2,595,803.14	3.95	93.9	Pulse	0.10	3
1	Ge		657,913.24	3.92	98.7	Pulse	0.10	3
1	Rh		3,169,215.06	4.21	98.4	Pulse	0.10	3
1	In		2,998,283.06	3.51	100.4	Pulse	0.10	3
1	Tb		4,390,287.23	1.11	103.4	Analog	0.10	3
1	Ho		373,969.23	3.89	99.5	Pulse	0.10	3
1	Bi		2,180,518.41	3.86	96.9	Pulse	0.10	3
2	Sc		100,990.00	0.57	89.4	Pulse	0.30	3
2	Ge		80,649.59	1.69	94.8	Pulse	0.30	3
2	Rh		1,339,645.92	0.82	93.6	Pulse	0.30	3
2	In		451,886.83	1.36	93.3	Pulse	0.30	3
2	Tb		1,468,686.02	0.46	94.1	Pulse	0.30	3
2	Ho		144,274.22	0.56	93.9	Pulse	0.30	3
2	Bi		908,448.23	0.49	93.4	Pulse	0.30	3
3	Sc		80,226.18	0.23	97.1	Pulse	0.30	3
3	Ge		38,266.79	0.58	98.3	Pulse	0.30	3
3	Rh		270,349.25	0.46	95.0	Pulse	0.30	3
3	Tb		335,166.87	0.53	91.1	Pulse	0.30	3

Quantitation Report

File Name	062SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:15
Sample Name	mp18402-mb1conf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-11.52	4.00	3.313E-06	Pulse	0.25	3
B			1	6.462	ug/l	0.57	42,100.76	3.505E-02	Pulse	0.15	3
Ca			1	8.612	ug/l	3.19	22,074.68	8.291E-03	Pulse	0.10	3
Sr			1	0.012	ug/l	13.71	1,270.10	3.929E-04	Pulse	0.10	3
Mo			1	-0.041	ug/l	-22.26	163.34	5.088E-05	Pulse	0.10	3
Ag			1	-0.003	ug/l	-30.15	203.34	6.705E-05	Pulse	0.10	3
Sn			1	-0.086	ug/l	-19.46	903.41	2.972E-04	Pulse	0.10	3
Sb			1	0.159	ug/l	2.29	566.70	1.280E-04	Pulse	0.10	3
Ba			1	0.191	ug/l	1.46	146.68	3.313E-05	Pulse	0.10	3
Tl			1	-0.019	ug/l	-10.87	156.67	7.225E-05	Pulse	0.10	3
Pb			1	-0.011	ug/l	-20.93	153.34	6.995E-05	Pulse	0.10	3
Pb			1	-0.010	ug/l	-38.45	130.01	5.972E-05	Pulse	0.10	3
Pb			1	-0.010	ug/l	-14.77	640.04	2.921E-04	Pulse	0.10	3
Na			2	40.986	ug/l	1.99	53,775.07	5.280E-01	Pulse	0.30	3
Mg			2	1.025	ug/l	2.04	636.69	6.252E-03	Pulse	0.30	3
Al			2	0.571	ug/l	36.85	284.45	2.796E-03	Pulse	0.30	3
K			2	7.964	ug/l	12.05	6,865.10	6.739E-02	Pulse	0.30	3
Ca			2	11.056	ug/l	10.69	252.23	2.475E-03	Pulse	0.30	3
Ti			2	0.059	ug/l	208.02	10.00	9.682E-05	Pulse	0.30	3
V			2	0.018	ug/l	43.47	294.45	2.894E-03	Pulse	0.30	3
Cr			2	0.014	ug/l	36.04	585.57	5.749E-03	Pulse	0.30	3
Mn			2	0.212	ug/l	5.66	618.92	6.079E-03	Pulse	0.30	3
Fe			2	0.149	ug/l	14.28	6,339.31	6.225E-02	Pulse	0.30	3
Co			2	-0.005	ug/l	-24.33	16.65	1.635E-04	Pulse	0.30	3
Ni			2	0.009	ug/l	172.71	121.11	1.192E-03	Pulse	0.30	3
Cu			2	-0.038	ug/l	-6.63	765.58	7.517E-03	Pulse	0.30	3
Zn			2	0.539	ug/l	8.29	794.48	7.798E-03	Pulse	0.30	3
As			2	-0.005	ug/l	-223.76	11.67	1.149E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.038	ug/l	4.37	2.16	4.747E-06	Pulse	0.30	3
Sn			2	-0.037	ug/l	-22.93	158.89	3.490E-04	Pulse	0.30	3
Se			3	0.112	ug/l	378.06	38.67	1.010E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,201,139.27	0.78	75.9	Pulse	0.10	3
1	Sc		2,662,663.45	2.73	96.3	Pulse	0.10	3
1	Ge		669,042.84	3.31	100.4	Pulse	0.10	3
1	Rh		3,230,139.43	3.14	100.3	Pulse	0.10	3
1	In		3,029,115.35	3.94	101.5	Pulse	0.10	3
1	Tb		4,426,355.25	0.60	104.2	Analog	0.10	3
1	Ho		377,615.46	2.63	100.5	Pulse	0.10	3
1	Bi		2,189,597.68	4.11	97.3	Pulse	0.10	3
2	Sc		101,847.78	1.47	90.1	Pulse	0.30	3
2	Ge		81,786.12	1.02	96.2	Pulse	0.30	3
2	Rh		1,356,752.41	0.53	94.8	Pulse	0.30	3
2	In		455,744.84	1.33	94.1	Pulse	0.30	3
2	Tb		1,477,419.90	0.73	94.7	Pulse	0.30	3
2	Ho		145,424.92	0.67	94.6	Pulse	0.30	3
2	Bi		907,167.54	0.83	93.3	Pulse	0.30	3
3	Sc		81,125.85	0.91	98.2	Pulse	0.30	3
3	Ge		38,459.62	1.22	98.8	Pulse	0.30	3
3	Rh		270,978.40	0.62	95.2	Pulse	0.30	3
3	Tb		337,235.66	0.43	91.7	Pulse	0.30	3

Quantitation Report

File Name	063SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:20
Sample Name	mp18402-b1conf
Sample Type	Sample
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	81.391	ug/l	0.75	401,858.94	3.318E-01	Pulse	0.25	3
B			1	88.282	ug/l	1.32	456,276.04	3.768E-01	Pulse	0.15	3
Ca			1	36.219	ug/l	0.69	46,023.94	1.690E-02	Pulse	0.10	3
Sr			1	76.371	ug/l	1.53	3,145,082.45	9.488E-01	Pulse	0.10	3
Mo			1	-0.035	ug/l	-17.61	213.34	6.439E-05	Pulse	0.10	3
Ag			1	0.008	ug/l	32.65	426.69	1.354E-04	Pulse	0.10	3
Sn			1	-0.092	ug/l	-12.88	860.07	2.747E-04	Pulse	0.10	3
Sb			1	0.188	ug/l	5.33	946.74	2.114E-04	Pulse	0.10	3
Ba			1	71.888	ug/l	4.17	388,180.61	8.664E-02	Pulse	0.10	3
Tl			1	76.747	ug/l	0.27	2,234,330.90	9.811E-01	Pulse	0.10	3
Pb			1	78.308	ug/l	0.32	793,489.13	3.484E-01	Pulse	0.10	3
Pb			1	77.985	ug/l	1.16	684,145.46	3.004E-01	Pulse	0.10	3
Pb			1	77.997	ug/l	0.31	3,152,177.69	1.384E+00	Pulse	0.10	3
Na			2	35.689	ug/l	2.24	50,165.28	4.849E-01	Pulse	0.30	3
Mg			2	0.126	ug/l	48.03	288.90	2.789E-03	Pulse	0.30	3
Al			2	0.143	ug/l	231.75	224.45	2.175E-03	Pulse	0.30	3
K			2	3.608	ug/l	25.43	5,738.05	5.548E-02	Pulse	0.30	3
Ca			2	482.431	ug/l	1.94	7,790.06	7.530E-02	Pulse	0.30	3
Ti			2	0.002	ug/l	1188.14	3.33	3.213E-05	Pulse	0.30	3
V			2	78.753	ug/l	0.66	296,402.59	2.865E+00	Pulse	0.30	3
Cr			2	77.351	ug/l	0.66	374,746.20	3.622E+00	Pulse	0.30	3
Mn			2	75.246	ug/l	1.06	207,235.19	2.003E+00	Pulse	0.30	3
Fe			2	0.188	ug/l	26.39	6,592.79	6.375E-02	Pulse	0.30	3
Co			2	78.002	ug/l	1.35	609,396.38	5.891E+00	Pulse	0.30	3
Ni			2	77.657	ug/l	1.58	161,804.24	1.564E+00	Pulse	0.30	3
Cu			2	75.880	ug/l	1.28	421,867.45	4.078E+00	Pulse	0.30	3
Zn			2	77.511	ug/l	1.22	68,960.41	6.666E-01	Pulse	0.30	3
As			2	0.241	ug/l	17.01	113.33	1.096E-03	Pulse	1.00	3
Cd			2	75.361	ug/l	1.39	89,114.03	1.909E-01	Pulse	0.30	3
Sn			2	-0.040	ug/l	-7.81	157.78	3.380E-04	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	81.472	ug/l	4.91	4,231.36	1.083E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,211,035.38	1.33	76.5	Pulse	0.10	3
1	Sc		2,723,376.52	2.97	98.5	Pulse	0.10	3
1	Ge		690,530.69	3.93	103.6	Pulse	0.10	3
1	Rh		3,315,731.20	4.65	102.9	Pulse	0.10	3
1	In		3,146,978.39	4.91	105.4	Pulse	0.10	3
1	Tb		4,479,710.14	1.31	105.5	Analog	0.10	3
1	Ho		390,593.44	5.07	103.9	Pulse	0.10	3
1	Bi		2,277,583.92	6.00	101.2	Pulse	0.10	3
2	Sc		103,464.37	2.26	91.6	Pulse	0.30	3
2	Ge		82,871.43	1.12	97.4	Pulse	0.30	3
2	Rh		1,374,215.57	1.18	96.0	Pulse	0.30	3
2	In		466,797.44	1.47	96.3	Pulse	0.30	3
2	Tb		1,496,923.20	1.39	95.9	Pulse	0.30	3
2	Ho		147,486.06	0.95	96.0	Pulse	0.30	3
2	Bi		936,322.81	1.47	96.3	Pulse	0.30	3
3	Sc		81,418.21	0.49	98.6	Pulse	0.30	3
3	Ge		39,074.73	0.69	100.4	Pulse	0.30	3
3	Rh		269,985.77	0.35	94.8	Pulse	0.30	3
3	Tb		339,532.12	0.77	92.3	Pulse	0.30	3

Quantitation Report

File Name	064SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:25
Sample Name	mp18402-s1 1
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	84.336	ug/l	1.45	16,721.97	1.378E-02	Pulse	0.25	3
B			1	282.578	ug/l	1.13	67,058.84	5.527E-02	Pulse	0.15	3
Ca			1	53073.979	ug/l	1.01	1,806,609.66	6.675E-01	Pulse	0.10	3
Sr			1	168.569	ug/l	0.61	271,240.13	8.399E-02	Pulse	0.10	3
Mo			1	0.373	ug/l	33.32	596.70	1.847E-04	Pulse	0.10	3
Ag			1	0.145	ug/l	26.01	370.02	1.204E-04	Pulse	0.10	3
Sn			1	114.094	ug/l	1.00	52,896.65	1.724E-02	Pulse	0.10	3
Sb			1	49.615	ug/l	3.63	23,795.54	5.359E-03	Pulse	0.10	3
Ba			1	104.859	ug/l	1.75	21,621.95	4.869E-03	Pulse	0.10	3
Tl			1	79.554	ug/l	1.44	91,123.46	4.098E-02	Pulse	0.10	3
Pb			1	1257.175	ug/l	1.16	497,671.85	2.238E-01	Pulse	0.10	3
Pb			1	1227.874	ug/l	1.10	420,833.95	1.892E-01	Pulse	0.10	3
Pb			1	1237.073	ug/l	0.97	1,952,987.72	8.782E-01	Pulse	0.10	3
Na			2	33212.094	ug/l	1.08	1,151,206.62	1.102E+01	Pulse	0.30	3
Mg			2	4625.200	ug/l	0.65	74,762.21	7.153E-01	Pulse	0.30	3
Al			2	486.018	ug/l	2.85	3,147.06	3.011E-02	Pulse	0.30	3
K			2	861.627	ug/l	3.47	14,609.96	1.398E-01	Pulse	0.30	3
Ca			2	54722.061	ug/l	1.00	35,421.80	3.389E-01	Pulse	0.30	3
Ti			2	14.667	ug/l	19.13	73.33	7.018E-04	Pulse	0.30	3
V			2	84.079	ug/l	3.95	13,012.89	1.245E-01	Pulse	0.30	3
Cr			2	82.100	ug/l	1.12	16,581.18	1.587E-01	Pulse	0.30	3
Mn			2	852.617	ug/l	0.35	94,911.94	9.081E-01	Pulse	0.30	3
Fe			2	3341.669	ug/l	0.25	549,212.69	5.255E+00	Pulse	0.30	3
Co			2	89.528	ug/l	0.59	28,323.24	2.710E-01	Pulse	0.30	3
Ni			2	3833.820	ug/l	0.39	322,729.96	3.088E+00	Pulse	0.30	3
Cu			2	4280.597	ug/l	0.48	960,536.63	9.191E+00	Pulse	0.30	3
Zn			2	81154.551	ug/l	0.51	2,904,114.68	2.779E+01	Pulse	0.30	3
As			2	6.951	ug/l	20.29	130.00	1.244E-03	Pulse	1.00	3
Cd			2	128.136	ug/l	1.13	6,016.77	1.290E-02	Pulse	0.30	3
Sn			2	115.600	ug/l	1.76	10,108.38	2.167E-02	Pulse	0.30	3
Se			3	86.597	ug/l	10.01	209.33	5.430E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,213,289.96	2.19	76.6	Pulse	0.10	3
1	Sc		2,706,081.42	2.75	97.9	Pulse	0.10	3
1	Ge		684,342.18	2.99	102.7	Pulse	0.10	3

Quantitation Report

1	Rh		3,229,946.31	4.74	100.3	Pulse	0.10	3
1	In		3,069,621.90	3.91	102.8	Pulse	0.10	3
1	Tb		4,440,174.72	1.86	104.5	Analog	0.10	3
1	Ho		383,452.82	4.73	102.0	Pulse	0.10	3
1	Bi		2,223,904.39	5.45	98.8	Pulse	0.10	3
2	Sc		104,513.16	0.30	92.5	Pulse	0.30	3
2	Ge		83,675.00	0.51	98.4	Pulse	0.30	3
2	Rh		1,373,262.24	1.54	95.9	Pulse	0.30	3
2	In		466,420.21	0.46	96.3	Pulse	0.30	3
2	Tb		1,503,435.60	0.56	96.4	Pulse	0.30	3
2	Ho		149,201.80	0.80	97.1	Pulse	0.30	3
2	Bi		932,851.73	1.08	95.9	Pulse	0.30	3
3	Sc		81,548.06	0.71	98.7	Pulse	0.30	3
3	Ge		38,554.33	0.43	99.1	Pulse	0.30	3
3	Rh		268,031.73	0.05	94.1	Pulse	0.30	3
3	Tb		333,116.61	0.60	90.6	Pulse	0.30	3

Quantitation Report

File Name	065SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:30
Sample Name	mp18402-s2
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	88.577	ug/l	1.03	17,457.59	1.447E-02	Pulse	0.25	3
B			1	261.199	ug/l	0.93	62,335.01	5.170E-02	Pulse	0.15	3
Ca			1	52631.077	ug/l	0.31	1,777,258.67	6.620E-01	Pulse	0.10	3
Sr			1	166.642	ug/l	0.62	266,327.46	8.304E-02	Pulse	0.10	3
Mo			1	0.683	ug/l	35.47	686.71	2.146E-04	Pulse	0.10	3
Ag			1	0.191	ug/l	57.57	403.36	1.318E-04	Pulse	0.10	3
Sn			1	119.284	ug/l	2.93	55,067.50	1.799E-02	Pulse	0.10	3
Sb			1	48.188	ug/l	3.67	22,736.93	5.195E-03	Pulse	0.10	3
Ba			1	108.272	ug/l	6.13	22,029.35	5.033E-03	Pulse	0.10	3
Tl			1	80.735	ug/l	0.34	91,767.47	4.158E-02	Pulse	0.10	3
Pb			1	1257.084	ug/l	0.56	493,743.79	2.238E-01	Pulse	0.10	3
Pb			1	1229.107	ug/l	0.48	418,018.51	1.894E-01	Pulse	0.10	3
Pb			1	1231.622	ug/l	0.09	1,929,581.17	8.744E-01	Pulse	0.10	3
Na			2	32960.388	ug/l	1.26	1,145,117.77	1.093E+01	Pulse	0.30	3
Mg			2	4584.266	ug/l	1.94	74,261.85	7.090E-01	Pulse	0.30	3
Al			2	575.797	ug/l	0.89	3,698.31	3.531E-02	Pulse	0.30	3
K			2	844.353	ug/l	1.77	14,444.28	1.379E-01	Pulse	0.30	3
Ca			2	53675.308	ug/l	1.92	34,820.26	3.325E-01	Pulse	0.30	3
Ti			2	2.829	ug/l	0.34	16.67	1.592E-04	Pulse	0.30	3
V			2	82.864	ug/l	0.38	12,856.08	1.227E-01	Pulse	0.30	3
Cr			2	83.995	ug/l	0.87	16,988.34	1.622E-01	Pulse	0.30	3
Mn			2	843.802	ug/l	1.45	94,133.25	8.987E-01	Pulse	0.30	3
Fe			2	3240.174	ug/l	0.56	533,856.21	5.097E+00	Pulse	0.30	3
Co			2	90.566	ug/l	0.67	28,712.91	2.741E-01	Pulse	0.30	3
Ni			2	3783.096	ug/l	0.48	319,148.15	3.047E+00	Pulse	0.30	3
Cu			2	4132.707	ug/l	0.99	929,376.70	8.873E+00	Pulse	0.30	3
Zn			2	79739.578	ug/l	0.62	2,859,607.45	2.730E+01	Pulse	0.30	3
As			2	6.893	ug/l	17.09	129.33	1.235E-03	Pulse	1.00	3
Cd			2	129.974	ug/l	1.10	6,120.17	1.309E-02	Pulse	0.30	3
Sn			2	124.662	ug/l	1.49	10,912.36	2.333E-02	Pulse	0.30	3
Se			3	133.692	ug/l	43.11	222.67	7.914E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,205,858.44	2.49	76.2	Pulse	0.10	3
1	Sc		2,684,436.84	2.90	97.1	Pulse	0.10	3
1	Ge		676,337.67	3.59	101.5	Pulse	0.10	3

Quantitation Report

1	Rh		3,206,981.62	3.43	99.6	Pulse	0.10	3
1	In		3,059,681.43	3.32	102.5	Pulse	0.10	3
1	Tb		4,375,451.39	0.76	103.0	Analog	0.10	3
1	Ho		376,343.26	3.79	100.1	Pulse	0.10	3
1	Bi		2,206,840.02	3.94	98.1	Pulse	0.10	3
2	Sc		104,738.05	0.28	92.7	Pulse	0.30	3
2	Ge		83,693.01	0.99	98.4	Pulse	0.30	3
2	Rh		1,369,704.81	0.64	95.7	Pulse	0.30	3
2	In		467,701.28	0.19	96.5	Pulse	0.30	3
2	Tb		1,489,045.74	1.17	95.4	Pulse	0.30	3
2	Ho		146,100.92	0.36	95.1	Pulse	0.30	3
2	Bi		928,202.57	0.75	95.4	Pulse	0.30	3
3	Sc		66,912.77	41.35	81.0	Pulse	0.30	3
3	Ge		30,729.32	35.75	79.0	Pulse	0.30	3
3	Rh		216,432.60	40.22	76.0	Pulse	0.30	3
3	Tb		269,585.88	41.34	73.3	Pulse	0.30	3

Quantitation Report

File Name	066SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:35
Sample Name	jc98254-1
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-0.134	ug/l	-27.53	12.00	1.008E-05	Pulse	0.25	3
B			1	169.854	ug/l	1.64	43,719.11	3.644E-02	Pulse	0.15	3
Ca			1	52256.479	ug/l	0.29	1,772,876.64	6.573E-01	Pulse	0.10	3
Sr			1	86.163	ug/l	0.87	137,619.67	4.305E-02	Pulse	0.10	3
Mo			1	0.358	ug/l	118.02	586.70	1.833E-04	Pulse	0.10	3
Ag			1	0.165	ug/l	62.46	380.02	1.255E-04	Pulse	0.10	3
Sn			1	115.770	ug/l	2.92	53,127.22	1.748E-02	Pulse	0.10	3
Sb			1	47.278	ug/l	7.57	22,753.66	5.091E-03	Pulse	0.10	3
Ba			1	30.417	ug/l	4.73	5,684.78	1.272E-03	Pulse	0.10	3
Tl			1	0.237	ug/l	44.04	953.41	4.335E-04	Pulse	0.10	3
Pb			1	1170.824	ug/l	0.95	458,223.13	2.084E-01	Pulse	0.10	3
Pb			1	1134.132	ug/l	0.77	384,329.35	1.748E-01	Pulse	0.10	3
Pb			1	1144.214	ug/l	0.30	1,785,648.09	8.123E-01	Pulse	0.10	3
Na			2	32586.259	ug/l	1.71	1,126,721.27	1.081E+01	Pulse	0.30	3
Mg			2	4510.349	ug/l	2.19	72,704.80	6.976E-01	Pulse	0.30	3
Al			2	2550.422	ug/l	3.67	15,594.31	1.496E-01	Pulse	0.30	3
K			2	881.725	ug/l	6.16	14,795.74	1.420E-01	Pulse	0.30	3
Ca			2	52958.946	ug/l	0.89	34,189.72	3.280E-01	Pulse	0.30	3
Ti			2	3.320	ug/l	49.36	18.89	1.817E-04	Pulse	0.30	3
V			2	1.306	ug/l	26.69	433.35	4.156E-03	Pulse	0.30	3
Cr			2	1.904	ug/l	20.28	901.15	8.645E-03	Pulse	0.30	3
Mn			2	757.783	ug/l	0.85	84,127.10	8.072E-01	Pulse	0.30	3
Fe			2	3202.049	ug/l	1.94	525,023.89	5.038E+00	Pulse	0.30	3
Co			2	9.732	ug/l	6.90	3,122.31	2.997E-02	Pulse	0.30	3
Ni			2	3619.896	ug/l	2.00	303,863.44	2.916E+00	Pulse	0.30	3
Cu			2	3872.261	ug/l	1.94	866,539.77	8.315E+00	Pulse	0.30	3
Zn			2	78790.598	ug/l	1.40	2,811,656.21	2.698E+01	Pulse	0.30	3
As			2	5.970	ug/l	14.68	113.33	1.087E-03	Pulse	1.00	3
Cd			2	48.866	ug/l	2.36	2,261.16	4.863E-03	Pulse	0.30	3
Sn			2	118.594	ug/l	1.84	10,331.90	2.222E-02	Pulse	0.30	3
Se			3	5.007	ug/l	13.95	42.67	1.127E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,199,816.30	2.01	75.8	Pulse	0.10	3
1	Sc		2,696,906.21	2.59	97.5	Pulse	0.10	3
1	Ge		672,451.59	3.56	100.9	Pulse	0.10	3

Quantitation Report

1	Rh		3,196,637.45	2.59	99.3	Pulse	0.10	3
1	In		3,041,084.61	4.12	101.9	Pulse	0.10	3
1	Tb		4,471,604.31	0.97	105.3	Analog	0.10	3
1	Ho		384,138.64	4.61	102.2	Pulse	0.10	3
1	Bi		2,198,189.19	3.75	97.7	Pulse	0.10	3
2	Sc		104,229.91	1.02	92.2	Pulse	0.30	3
2	Ge		83,156.18	0.17	97.8	Pulse	0.30	3
2	Rh		1,362,102.06	0.62	95.1	Pulse	0.30	3
2	In		464,927.81	1.04	96.0	Pulse	0.30	3
2	Tb		1,486,662.23	0.68	95.3	Pulse	0.30	3
2	Ho		147,603.69	0.15	96.1	Pulse	0.30	3
2	Bi		926,809.10	1.02	95.3	Pulse	0.30	3
3	Sc		80,598.12	1.03	97.6	Pulse	0.30	3
3	Ge		37,867.96	0.58	97.3	Pulse	0.30	3
3	Rh		264,419.34	1.05	92.9	Pulse	0.30	3
3	Tb		326,107.01	1.10	88.7	Pulse	0.30	3

Quantitation Report

File Name	067SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:39
Sample Name	mp18402-s3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	83.317	ug/l	0.30	202,028.16	1.698E-01	Pulse	0.25	3
B			1	109.293	ug/l	1.54	280,962.79	2.363E-01	Pulse	0.15	3
Ca			1	22081.691	ug/l	3.17	9,157,655.49	3.448E+00	Analog	0.10	3
Sr			1	159.992	ug/l	0.59	3,089,596.41	9.939E-01	Pulse	0.10	3
Mo			1	0.262	ug/l	7.27	1,440.13	4.636E-04	Pulse	0.10	3
Ag			1	0.340	ug/l	3.72	3,437.28	1.147E-03	Pulse	0.10	3
Sn			1	1.197	ug/l	4.44	8,372.96	2.792E-03	Pulse	0.10	3
Sb			1	16.940	ug/l	3.29	104,346.39	2.394E-02	Pulse	0.10	3
Ba			1	97.129	ug/l	5.45	254,800.29	5.846E-02	Pulse	0.10	3
Tl			1	78.572	ug/l	0.85	1,063,406.91	5.024E-01	Pulse	0.10	3
Pb			1	114.915	ug/l	1.57	541,061.02	2.557E-01	Pulse	0.10	3
Pb			1	111.630	ug/l	1.08	455,249.86	2.151E-01	Pulse	0.10	3
Pb			1	112.498	ug/l	1.03	2,113,068.52	9.983E-01	Pulse	0.10	3
Na			2	45143.416	ug/l	0.38	19,088,158.68	1.840E+02	Analog	0.30	3
Mg			2	6642.204	ug/l	1.67	1,327,636.89	1.280E+01	Pulse	0.30	3
Al			2	62.020	ug/l	1.86	4,859.80	4.686E-02	Pulse	0.30	3
K			2	1387.871	ug/l	0.89	201,363.95	1.942E+00	Pulse	0.30	3
Ca			2	20863.856	ug/l	0.60	167,220.69	1.612E+00	Pulse	0.30	3
Ti			2	0.173	ug/l	55.88	13.34	1.285E-04	Pulse	0.30	3
V			2	79.803	ug/l	0.67	150,659.09	1.453E+00	Pulse	0.30	3
Cr			2	76.791	ug/l	0.69	186,739.25	1.801E+00	Pulse	0.30	3
Mn			2	198.976	ug/l	0.32	274,659.74	2.648E+00	Pulse	0.30	3
Fe			2	123.128	ug/l	0.49	254,174.24	2.451E+00	Pulse	0.30	3
Co			2	76.217	ug/l	1.13	298,508.37	2.878E+00	Pulse	0.30	3
Ni			2	232.739	ug/l	1.25	243,032.74	2.343E+00	Pulse	0.30	3
Cu			2	528.197	ug/l	0.71	1,469,603.10	1.417E+01	Pulse	0.30	3
Zn			2	4873.724	ug/l	0.86	2,163,392.07	2.086E+01	Pulse	0.30	3
As			2	0.585	ug/l	13.49	135.00	1.302E-03	Pulse	1.00	3
Cd			2	75.742	ug/l	1.27	43,595.01	9.590E-02	Pulse	0.30	3
Sn			2	1.379	ug/l	8.66	1,670.13	3.675E-03	Pulse	0.30	3
Se			3	79.123	ug/l	4.38	1,990.83	5.302E-02	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,189,443.34	3.14	75.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,656,924.33	2.10	96.1	Pulse	0.10	3
1	Ge		661,092.84	3.24	99.2	Pulse	0.10	3
1	Rh		3,108,497.56	3.35	96.5	Pulse	0.10	3
1	In		2,998,089.16	3.22	100.4	Pulse	0.10	3
1	Tb		4,357,937.12	0.17	102.6	Analog	0.10	3
1	Ho		378,889.06	5.65	100.8	Pulse	0.10	3
1	Bi		2,117,300.07	5.36	94.1	Pulse	0.10	3
2	Sc		103,712.51	0.90	91.8	Pulse	0.30	3
2	Ge		81,960.41	0.87	96.4	Pulse	0.30	3
2	Rh		1,305,191.27	0.57	91.2	Pulse	0.30	3
2	In		454,633.45	0.82	93.8	Pulse	0.30	3
2	Tb		1,482,628.10	1.03	95.0	Pulse	0.30	3
2	Ho		145,927.33	0.59	95.0	Pulse	0.30	3
2	Bi		877,187.71	0.10	90.2	Pulse	0.30	3
3	Sc		79,387.87	0.64	96.1	Pulse	0.30	3
3	Ge		37,550.47	0.50	96.5	Pulse	0.30	3
3	Rh		252,788.78	0.84	88.8	Pulse	0.30	3
3	Tb		326,351.25	0.34	88.7	Pulse	0.30	3

Quantitation Report

File Name	068SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:44
Sample Name	jc98254-13
Sample Type	Sample
Comment	
Prep Dilution	50.000
Auto Dilution	N/A
Total Dilution	50.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-0.188	ug/l	-22.38	20.00	1.668E-05	Pulse	0.25	3
B			1	219.946	ug/l	2.53	31,726.99	2.644E-02	Pulse	0.15	3
Ca			1	23102.461	ug/l	1.19	395,783.14	1.497E-01	Pulse	0.10	3
Sr			1	102.447	ug/l	1.07	81,395.69	2.569E-02	Pulse	0.10	3
Mo			1	-0.732	ug/l	-53.22	360.02	1.136E-04	Pulse	0.10	3
Ag			1	2.276	ug/l	14.46	1,110.09	3.684E-04	Pulse	0.10	3
Sn			1	1610.579	ug/l	1.28	355,460.51	1.180E-01	Pulse	0.10	3
Sb			1	12.334	ug/l	4.88	1,690.21	3.791E-04	Pulse	0.10	3
Ba			1	153.280	ug/l	4.38	15,636.60	3.505E-03	Pulse	0.10	3
Tl			1	-0.042	ug/l	-111.95	663.37	3.017E-04	Pulse	0.10	3
Pb			1	1809.118	ug/l	1.45	354,258.09	1.610E-01	Pulse	0.10	3
Pb			1	1763.251	ug/l	0.32	298,878.67	1.359E-01	Pulse	0.10	3
Pb			1	1776.548	ug/l	0.58	1,387,260.58	6.307E-01	Pulse	0.10	3
Na			2	43441.294	ug/l	0.79	746,790.47	7.271E+00	Pulse	0.30	3
Mg			2	7704.363	ug/l	0.21	61,232.41	5.962E-01	Pulse	0.30	3
Al			2	4778.509	ug/l	3.01	14,410.82	1.403E-01	Pulse	0.30	3
K			2	1743.780	ug/l	2.95	14,473.22	1.409E-01	Pulse	0.30	3
Ca			2	24134.647	ug/l	1.00	7,737.81	7.534E-02	Pulse	0.30	3
Ti			2	21.394	ug/l	27.16	53.33	5.198E-04	Pulse	0.30	3
V			2	4.140	ug/l	18.69	541.13	5.267E-03	Pulse	0.30	3
Cr			2	3.837	ug/l	21.80	891.15	8.673E-03	Pulse	0.30	3
Mn			2	2750.492	ug/l	0.59	150,420.48	1.465E+00	Pulse	0.30	3
Fe			2	16720.238	ug/l	0.31	1,341,596.65	1.306E+01	Pulse	0.30	3
Co			2	9.334	ug/l	39.20	1,504.43	1.467E-02	Pulse	0.30	3
Ni			2	805.171	ug/l	1.04	33,398.27	3.252E-01	Pulse	0.30	3
Cu			2	46521.236	ug/l	1.58	5,124,941.88	4.990E+01	Analog	0.30	3
Zn			2	24549.890	ug/l	1.06	431,940.57	4.206E+00	Pulse	0.30	3
As			2	26.540	ug/l	153.88	231.40	2.254E-03	Pulse	1.00	3
Cd			2	7.067	ug/l	38.16	122.13	2.667E-04	Pulse	0.30	3
Sn			2	1658.082	ug/l	1.01	69,636.39	1.522E-01	Pulse	0.30	3
Se			3	-0.621	ug/l	-498.49	32.67	8.464E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,200,345.83	1.66	75.8	Pulse	0.10	3
1	Sc		2,644,094.59	3.04	95.6	Pulse	0.10	3
1	Ge		665,344.96	3.54	99.8	Pulse	0.10	3

Quantitation Report

1	Rh		3,169,070.79	4.44	98.4	Pulse	0.10	3
1	In		3,014,704.53	4.49	101.0	Pulse	0.10	3
1	Tb		4,461,503.58	1.42	105.0	Analog	0.10	3
1	Ho		380,347.65	4.18	101.2	Pulse	0.10	3
1	Bi		2,199,239.81	4.79	97.7	Pulse	0.10	3
2	Sc		102,710.92	0.66	90.9	Pulse	0.30	3
2	Ge		82,347.09	0.46	96.8	Pulse	0.30	3
2	Rh		1,354,383.45	0.58	94.6	Pulse	0.30	3
2	In		457,447.59	0.31	94.4	Pulse	0.30	3
2	Tb		1,485,445.74	0.31	95.2	Pulse	0.30	3
2	Ho		145,115.54	0.29	94.4	Pulse	0.30	3
2	Bi		920,182.43	0.62	94.6	Pulse	0.30	3
3	Sc		81,396.17	0.22	98.5	Pulse	0.30	3
3	Ge		38,601.19	0.33	99.2	Pulse	0.30	3
3	Rh		269,999.74	0.46	94.8	Pulse	0.30	3
3	Tb		331,347.81	0.45	90.1	Pulse	0.30	3

Quantitation Report

File Name	069SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:49
Sample Name	jc98254-15
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-0.100	ug/l	-97.93	18.67	1.566E-05	Pulse	0.25	3
B			1	108.974	ug/l	3.63	31,644.76	2.627E-02	Pulse	0.15	3
Ca			1	22923.160	ug/l	0.40	782,896.71	2.915E-01	Pulse	0.10	3
Sr			1	97.106	ug/l	1.47	155,202.66	4.849E-02	Pulse	0.10	3
Mo			1	-0.437	ug/l	-45.60	343.35	1.067E-04	Pulse	0.10	3
Ag			1	0.170	ug/l	68.02	386.68	1.265E-04	Pulse	0.10	3
Sn			1	1894.014	ug/l	1.21	842,710.77	2.766E-01	Pulse	0.10	3
Sb			1	5.340	ug/l	2.85	1,253.44	2.844E-04	Pulse	0.10	3
Ba			1	80.720	ug/l	5.30	16,317.42	3.702E-03	Pulse	0.10	3
Tl			1	0.239	ug/l	54.15	960.08	4.345E-04	Pulse	0.10	3
Pb			1	567.746	ug/l	0.65	222,728.25	1.011E-01	Pulse	0.10	3
Pb			1	553.473	ug/l	0.56	188,011.89	8.536E-02	Pulse	0.10	3
Pb			1	557.357	ug/l	0.92	872,186.76	3.959E-01	Pulse	0.10	3
Na			2	42461.510	ug/l	0.95	1,440,148.21	1.403E+01	Pulse	0.30	3
Mg			2	7792.166	ug/l	2.09	123,543.85	1.204E+00	Pulse	0.30	3
Al			2	1762.461	ug/l	0.79	10,678.60	1.040E-01	Pulse	0.30	3
K			2	1604.196	ug/l	1.10	22,681.92	2.210E-01	Pulse	0.30	3
Ca			2	23785.606	ug/l	0.35	15,168.41	1.478E-01	Pulse	0.30	3
Ti			2	10.690	ug/l	40.23	53.33	5.195E-04	Pulse	0.30	3
V			2	1.669	ug/l	23.09	481.13	4.684E-03	Pulse	0.30	3
Cr			2	3.484	ug/l	2.20	1,191.18	1.160E-02	Pulse	0.30	3
Mn			2	2363.486	ug/l	1.25	258,338.23	2.517E+00	Pulse	0.30	3
Fe			2	7026.682	ug/l	1.14	1,127,919.22	1.099E+01	Pulse	0.30	3
Co			2	2.413	ug/l	4.37	806.99	7.861E-03	Pulse	0.30	3
Ni			2	193.312	ug/l	0.73	16,081.75	1.567E-01	Pulse	0.30	3
Cu			2	5146.921	ug/l	0.64	1,134,226.27	1.105E+01	Pulse	0.30	3
Zn			2	7962.456	ug/l	0.78	280,170.88	2.729E+00	Pulse	0.30	3
As			2	0.971	ug/l	54.96	29.67	2.884E-04	Pulse	1.00	3
Cd			2	5.703	ug/l	3.29	219.90	4.866E-04	Pulse	0.30	3
Sn			2	1982.048	ug/l	1.55	164,117.79	3.632E-01	Pulse	0.30	3
Se			3	5.795	ug/l	26.99	44.67	1.168E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,204,370.13	1.59	76.1	Pulse	0.10	3
1	Sc		2,685,594.91	2.76	97.1	Pulse	0.10	3
1	Ge		671,055.63	2.94	100.7	Pulse	0.10	3

Quantitation Report

1	Rh		3,202,125.89	4.11	99.4	Pulse	0.10	3
1	In		3,045,992.73	3.11	102.0	Pulse	0.10	3
1	Tb		4,407,183.37	0.37	103.7	Analog	0.10	3
1	Ho		375,160.14	5.39	99.8	Pulse	0.10	3
1	Bi		2,202,358.51	4.35	97.9	Pulse	0.10	3
2	Sc		102,661.99	1.06	90.9	Pulse	0.30	3
2	Ge		81,611.80	0.71	96.0	Pulse	0.30	3
2	Rh		1,349,496.58	1.45	94.3	Pulse	0.30	3
2	In		451,898.62	1.24	93.3	Pulse	0.30	3
2	Tb		1,469,009.60	0.53	94.1	Pulse	0.30	3
2	Ho		144,411.58	1.02	94.0	Pulse	0.30	3
2	Bi		915,702.88	1.00	94.1	Pulse	0.30	3
3	Sc		81,038.66	0.77	98.1	Pulse	0.30	3
3	Ge		38,231.15	0.24	98.3	Pulse	0.30	3
3	Rh		267,253.86	0.62	93.9	Pulse	0.30	3
3	Tb		331,371.10	0.72	90.1	Pulse	0.30	3

Quantitation Report

File Name	070_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:54
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	57.452	ug/l	1.01	271,960.69	2.342E-01	Pulse	0.25	3
B			1	120.138	ug/l	1.58	592,005.79	5.098E-01	Pulse	0.15	3
Ca			1	5615.783	ug/l	4.06	4,624,565.77	1.757E+00	Analog	0.10	3
Sr			1	52.992	ug/l	1.17	2,061,364.08	6.584E-01	Pulse	0.10	3
Mo			1	52.306	ug/l	0.81	394,674.23	1.261E-01	Pulse	0.10	3
Ag			1	50.319	ug/l	2.15	938,828.61	3.143E-01	Pulse	0.10	3
Sn			1	51.566	ug/l	1.11	562,682.13	1.885E-01	Pulse	0.10	3
Sb			1	50.459	ug/l	5.50	634,657.79	1.443E-01	Pulse	0.10	3
Ba			1	48.410	ug/l	4.62	256,413.08	5.828E-02	Pulse	0.10	3
Tl			1	52.105	ug/l	0.82	1,427,271.38	6.662E-01	Pulse	0.10	3
Pb			1	51.616	ug/l	0.54	492,191.57	2.297E-01	Pulse	0.10	3
Pb			1	51.309	ug/l	0.67	423,647.36	1.977E-01	Pulse	0.10	3
Pb			1	51.251	ug/l	0.58	1,948,876.05	9.096E-01	Pulse	0.10	3
Na			2	4927.032	ug/l	0.16	4,119,047.75	4.033E+01	Pulse	0.30	3
Mg			2	4978.823	ug/l	0.27	1,960,204.09	1.919E+01	Pulse	0.30	3
Al			2	4782.477	ug/l	0.89	707,359.16	6.925E+00	Pulse	0.30	3
K			2	5024.500	ug/l	0.70	1,406,937.20	1.377E+01	Pulse	0.30	3
Ca			2	5431.247	ug/l	1.24	85,785.59	8.398E-01	Pulse	0.30	3
Ti			2	54.869	ug/l	12.68	6,427.97	6.291E-02	Pulse	0.30	3
V			2	52.435	ug/l	0.63	194,917.91	1.908E+00	Pulse	0.30	3
Cr			2	51.980	ug/l	0.30	248,804.10	2.436E+00	Pulse	0.30	3
Mn			2	50.334	ug/l	1.01	136,884.00	1.340E+00	Pulse	0.30	3
Fe			2	5319.725	ug/l	2.20	21,139,678.05	2.069E+02	Analog	0.30	3
Co			2	50.798	ug/l	0.19	391,887.00	3.837E+00	Pulse	0.30	3
Ni			2	50.653	ug/l	0.48	104,247.39	1.021E+00	Pulse	0.30	3
Cu			2	49.543	ug/l	0.45	272,319.85	2.666E+00	Pulse	0.30	3
Zn			2	50.456	ug/l	0.60	44,436.05	4.350E-01	Pulse	0.30	3
As			2	52.318	ug/l	0.86	21,367.63	2.092E-01	Pulse	1.00	3
Cd			2	50.755	ug/l	2.02	57,101.12	1.286E-01	Pulse	0.30	3
Sn			2	53.192	ug/l	1.23	108,318.46	2.439E-01	Pulse	0.30	3
Se			3	206.714	ug/l	3.86	10,411.34	2.734E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,161,101.72	2.44	73.3	Pulse	0.10	3
1	Sc		2,635,304.29	3.71	95.3	Pulse	0.10	3
1	Ge		664,513.32	4.89	99.7	Pulse	0.10	3

Quantitation Report

1	Rh		3,129,907.77	3.46	97.2	Pulse	0.10	3
1	In		2,985,241.93	3.50	100.0	Pulse	0.10	3
1	Tb		4,401,344.21	1.44	103.6	Analog	0.10	3
1	Ho		384,620.16	5.42	102.3	Pulse	0.10	3
1	Bi		2,142,391.32	5.79	95.2	Pulse	0.10	3
2	Sc		102,142.30	0.55	90.4	Pulse	0.30	3
2	Ge		80,208.98	0.89	94.3	Pulse	0.30	3
2	Rh		1,311,637.31	0.15	91.6	Pulse	0.30	3
2	In		444,206.07	0.57	91.7	Pulse	0.30	3
2	Tb		1,475,915.67	0.51	94.6	Pulse	0.30	3
2	Ho		145,125.79	0.64	94.4	Pulse	0.30	3
2	Bi		889,283.61	0.44	91.4	Pulse	0.30	3
3	Sc		80,461.82	0.85	97.4	Pulse	0.30	3
3	Ge		38,084.09	0.88	97.9	Pulse	0.30	3
3	Rh		254,822.03	0.45	89.5	Pulse	0.30	3
3	Tb		325,161.45	0.38	88.4	Pulse	0.30	3

Quantitation Report

File Name	071_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 15:58
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-158.20	29.33	2.492E-05	Pulse	0.25	3
B			1	4.042	ug/l	1.70	29,453.39	2.495E-02	Pulse	0.15	3
Ca			1	-1.508	ug/l	-34.65	13,246.78	5.136E-03	Pulse	0.10	3
Sr			1	-0.002	ug/l	-65.72	686.71	2.211E-04	Pulse	0.10	3
Mo			1	-0.005	ug/l	-255.36	423.36	1.361E-04	Pulse	0.10	3
Ag			1	0.001	ug/l	403.26	260.02	8.840E-05	Pulse	0.10	3
Sn			1	0.062	ug/l	22.91	2,473.66	8.387E-04	Pulse	0.10	3
Sb			1	0.225	ug/l	7.48	1,396.80	3.163E-04	Pulse	0.10	3
Ba			1	0.181	ug/l	4.77	93.34	2.114E-05	Pulse	0.10	3
Tl			1	-0.005	ug/l	-23.83	536.70	2.486E-04	Pulse	0.10	3
Pb			1	0.003	ug/l	311.75	283.35	1.323E-04	Pulse	0.10	3
Pb			1	0.004	ug/l	125.83	243.34	1.120E-04	Pulse	0.10	3
Pb			1	0.001	ug/l	250.31	1,056.72	4.903E-04	Pulse	0.10	3
Na			2	16.518	ug/l	1.40	32,666.65	3.287E-01	Pulse	0.30	3
Mg			2	0.191	ug/l	32.32	302.23	3.039E-03	Pulse	0.30	3
Al			2	-0.513	ug/l	-65.21	122.22	1.226E-03	Pulse	0.30	3
K			2	1.961	ug/l	19.19	5,066.55	5.098E-02	Pulse	0.30	3
Ca			2	0.966	ug/l	71.11	91.11	9.160E-04	Pulse	0.30	3
Ti			2	-0.026	ug/l	0.00	0.00	0.000E+00	Pulse	0.30	3
V			2	0.014	ug/l	43.44	275.56	2.773E-03	Pulse	0.30	3
Cr			2	0.011	ug/l	119.54	555.57	5.592E-03	Pulse	0.30	3
Mn			2	0.034	ug/l	17.14	132.23	1.331E-03	Pulse	0.30	3
Fe			2	0.395	ug/l	18.67	7,136.40	7.180E-02	Pulse	0.30	3
Co			2	-0.003	ug/l	-34.13	31.09	3.135E-04	Pulse	0.30	3
Ni			2	0.010	ug/l	41.51	118.89	1.197E-03	Pulse	0.30	3
Cu			2	-0.054	ug/l	-18.81	661.13	6.650E-03	Pulse	0.30	3
Zn			2	-0.007	ug/l	-558.82	310.01	3.123E-03	Pulse	0.30	3
As			2	-0.007	ug/l	-156.76	10.67	1.071E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.043	ug/l	10.78	7.60	1.739E-05	Pulse	0.30	3
Sn			2	0.133	ug/l	11.34	493.35	1.130E-03	Pulse	0.30	3
Se			3	-0.083	ug/l	-50.58	28.00	7.540E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,180,811.66	1.46	74.6	Pulse	0.10	3
1	Sc		2,580,332.67	1.79	93.3	Pulse	0.10	3
1	Ge		642,480.99	2.82	96.4	Pulse	0.10	3
1	Rh		3,104,127.87	3.03	96.4	Pulse	0.10	3
1	In		2,945,633.31	3.95	98.7	Pulse	0.10	3
1	Tb		4,414,312.12	0.75	103.9	Analog	0.10	3
1	Ho		369,230.19	3.64	98.2	Pulse	0.10	3
1	Bi		2,161,387.36	5.00	96.1	Pulse	0.10	3
2	Sc		99,376.22	1.34	87.9	Pulse	0.30	3
2	Ge		77,560.83	2.25	91.2	Pulse	0.30	3
2	Rh		1,297,475.89	1.57	90.6	Pulse	0.30	3
2	In		436,520.45	1.14	90.1	Pulse	0.30	3
2	Tb		1,414,320.95	0.71	90.6	Pulse	0.30	3
2	Ho		138,904.67	0.44	90.4	Pulse	0.30	3
2	Bi		884,449.86	1.18	90.9	Pulse	0.30	3
3	Sc		78,858.39	0.53	95.5	Pulse	0.30	3
3	Ge		37,139.41	0.46	95.5	Pulse	0.30	3
3	Rh		259,218.19	1.33	91.0	Pulse	0.30	3
3	Tb		316,439.46	0.60	86.0	Pulse	0.30	3

Quantitation Report

File Name	072SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:03
Sample Name	jc98254-17
Sample Type	Sample
Comment	
Prep Dilution	250.000
Auto Dilution	N/A
Total Dilution	250.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-1.414	ug/l	-8.01	10.67	8.956E-06	Pulse	0.25	3
B			1	959.855	ug/l	1.73	28,658.38	2.410E-02	Pulse	0.15	3
Ca			1	20419.339	ug/l	0.71	82,434.66	3.107E-02	Pulse	0.10	3
Sr			1	84.480	ug/l	2.60	14,077.83	4.440E-03	Pulse	0.10	3
Mo			1	-5.195	ug/l	-3.38	313.35	9.875E-05	Pulse	0.10	3
Ag			1	0.410	ug/l	163.74	286.68	9.437E-05	Pulse	0.10	3
Sn			1	2358.903	ug/l	0.76	105,790.31	3.498E-02	Pulse	0.10	3
Sb			1	67.553	ug/l	6.14	1,960.22	4.465E-04	Pulse	0.10	3
Ba			1	70.351	ug/l	5.27	623.37	1.420E-04	Pulse	0.10	3
Tl			1	-3.425	ug/l	-12.70	300.01	1.374E-04	Pulse	0.10	3
Pb			1	13822.161	ug/l	0.65	536,672.90	2.460E-01	Pulse	0.10	3
Pb			1	13232.081	ug/l	1.10	444,817.81	2.039E-01	Pulse	0.10	3
Pb			1	13461.123	ug/l	0.86	2,084,336.62	9.556E-01	Pulse	0.10	3
Na			2	47383.285	ug/l	1.13	175,029.58	1.738E+00	Pulse	0.30	3
Mg			2	6541.743	ug/l	1.06	10,388.36	1.032E-01	Pulse	0.30	3
Al			2	9067.508	ug/l	2.32	5,485.59	5.447E-02	Pulse	0.30	3
K			2	2156.654	ug/l	4.23	6,968.49	6.920E-02	Pulse	0.30	3
Ca			2	21128.382	ug/l	3.09	1,392.31	1.382E-02	Pulse	0.30	3
Ti			2	8.066	ug/l	91.44	6.67	6.644E-05	Pulse	0.30	3
V			2	6.723	ug/l	29.03	325.57	3.235E-03	Pulse	0.30	3
Cr			2	10.326	ug/l	7.46	706.69	7.016E-03	Pulse	0.30	3
Mn			2	67.919	ug/l	2.49	772.25	7.666E-03	Pulse	0.30	3
Fe			2	1768.747	ug/l	0.24	33,397.11	3.316E-01	Pulse	0.30	3
Co			2	0.920	ug/l	4.77	85.47	8.486E-04	Pulse	0.30	3
Ni			2	125.083	ug/l	5.96	1,115.62	1.107E-02	Pulse	0.30	3
Cu			2	14126.006	ug/l	1.33	306,083.53	3.039E+00	Pulse	0.30	3
Zn			2	22104.886	ug/l	0.15	76,539.38	7.600E-01	Pulse	0.30	3
As			2	2.610	ug/l	173.98	17.67	1.749E-04	Pulse	1.00	3
Cd			2	15.925	ug/l	2.52	31.01	6.991E-05	Pulse	0.30	3
Sn			2	2369.474	ug/l	1.87	19,462.17	4.388E-02	Pulse	0.30	3
Se			3	2780.894	ug/l	170.17	574.48	1.553E-02	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,189,027.17	1.71	75.1	Pulse	0.10	3
1	Sc		2,652,962.56	2.74	96.0	Pulse	0.10	3
1	Ge		661,999.99	4.23	99.3	Pulse	0.10	3

Quantitation Report

1	Rh		3,172,445.68	3.90	98.5	Pulse	0.10	3
1	In		3,023,948.57	3.88	101.3	Pulse	0.10	3
1	Tb		4,387,271.60	0.84	103.3	Analog	0.10	3
1	Ho		371,317.55	4.93	98.8	Pulse	0.10	3
1	Bi		2,181,807.62	5.00	97.0	Pulse	0.10	3
2	Sc		100,714.54	1.11	89.1	Pulse	0.30	3
2	Ge		80,161.10	0.30	94.3	Pulse	0.30	3
2	Rh		1,324,148.70	0.46	92.5	Pulse	0.30	3
2	In		443,572.03	1.03	91.6	Pulse	0.30	3
2	Tb		1,438,809.49	0.96	92.2	Pulse	0.30	3
2	Ho		141,058.25	1.41	91.8	Pulse	0.30	3
2	Bi		891,813.89	0.51	91.7	Pulse	0.30	3
3	Sc		78,163.25	0.72	94.6	Pulse	0.30	3
3	Ge		36,758.24	0.69	94.5	Pulse	0.30	3
3	Rh		259,024.88	0.87	91.0	Pulse	0.30	3
3	Tb		312,039.33	1.04	84.8	Pulse	0.30	3

Quantitation Report

File Name	073SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:08
Sample Name	jc98254-19
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-0.012	ug/l	-23.03	9.33	8.089E-06	Pulse	0.25	3
B			1	25.205	ug/l	4.62	70,795.76	6.070E-02	Pulse	0.15	3
Ca			1	25964.032	ug/l	3.13	10,635,674.42	4.053E+00	Analog	0.10	3
Sr			1	95.169	ug/l	1.68	1,798,666.33	5.913E-01	Pulse	0.10	3
Mo			1	0.262	ug/l	14.31	1,410.14	4.645E-04	Pulse	0.10	3
Ag			1	0.134	ug/l	7.90	1,483.47	5.040E-04	Pulse	0.10	3
Sn			1	62.684	ug/l	1.83	337,606.69	1.148E-01	Pulse	0.10	3
Sb			1	1.005	ug/l	2.54	4,887.79	1.112E-03	Pulse	0.10	3
Ba			1	22.463	ug/l	4.29	58,759.71	1.337E-02	Pulse	0.10	3
Tl			1	0.138	ug/l	3.21	2,467.02	1.193E-03	Pulse	0.10	3
Pb			1	96.349	ug/l	1.60	443,347.47	2.144E-01	Pulse	0.10	3
Pb			1	95.241	ug/l	1.80	379,444.30	1.835E-01	Pulse	0.10	3
Pb			1	95.511	ug/l	1.06	1,753,122.85	8.476E-01	Pulse	0.10	3
Na			2	47972.158	ug/l	0.72	20,050,241.98	1.956E+02	Analog	0.30	3
Mg			2	7901.127	ug/l	0.28	1,561,254.11	1.523E+01	Pulse	0.30	3
Al			2	53.451	ug/l	5.50	4,169.85	4.066E-02	Pulse	0.30	3
K			2	1498.148	ug/l	1.09	214,504.77	2.092E+00	Pulse	0.30	3
Ca			2	23949.860	ug/l	0.83	189,746.52	1.851E+00	Pulse	0.30	3
Ti			2	0.648	ug/l	21.27	41.11	4.007E-04	Pulse	0.30	3
V			2	0.226	ug/l	2.35	652.24	6.362E-03	Pulse	0.30	3
Cr			2	35.062	ug/l	1.85	84,563.58	8.249E-01	Pulse	0.30	3
Mn			2	25.745	ug/l	0.98	35,169.14	3.430E-01	Pulse	0.30	3
Fe			2	186.784	ug/l	0.81	378,159.84	3.689E+00	Pulse	0.30	3
Co			2	0.651	ug/l	1.07	2,579.26	2.516E-02	Pulse	0.30	3
Ni			2	112.891	ug/l	0.63	116,593.57	1.137E+00	Pulse	0.30	3
Cu			2	2377.929	ug/l	1.01	6,537,685.71	6.376E+01	Analog	0.30	3
Zn			2	2151.321	ug/l	1.14	944,161.32	9.210E+00	Pulse	0.30	3
As			2	0.174	ug/l	9.50	49.33	4.813E-04	Pulse	1.00	3
Cd			2	0.919	ug/l	5.01	476.22	1.074E-03	Pulse	0.30	3
Sn			2	63.991	ug/l	1.55	65,147.55	1.469E-01	Pulse	0.30	3
Se			3	-0.274	ug/l	-175.69	24.67	6.823E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,166,751.87	2.68	73.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,625,718.19	3.60	95.0	Pulse	0.10	3
1	Ge		653,349.03	4.58	98.0	Pulse	0.10	3
1	Rh		3,040,798.39	3.71	94.4	Pulse	0.10	3
1	In		2,940,849.41	3.81	98.5	Pulse	0.10	3
1	Tb		4,395,461.19	0.90	103.5	Analog	0.10	3
1	Ho		370,014.51	4.02	98.4	Pulse	0.10	3
1	Bi		2,068,927.05	4.77	92.0	Pulse	0.10	3
2	Sc		102,526.39	0.98	90.7	Pulse	0.30	3
2	Ge		80,270.66	0.97	94.4	Pulse	0.30	3
2	Rh		1,292,258.56	0.65	90.3	Pulse	0.30	3
2	In		443,488.31	0.56	91.5	Pulse	0.30	3
2	Tb		1,467,957.06	0.74	94.1	Pulse	0.30	3
2	Ho		144,084.69	0.17	93.8	Pulse	0.30	3
2	Bi		872,409.34	0.42	89.7	Pulse	0.30	3
3	Sc		79,893.33	0.90	96.7	Pulse	0.30	3
3	Ge		36,209.00	0.53	93.1	Pulse	0.30	3
3	Rh		248,132.72	0.54	87.2	Pulse	0.30	3
3	Tb		317,102.02	1.01	86.2	Pulse	0.30	3

Quantitation Report

File Name	074SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:12
Sample Name	jc98256-5
Sample Type	Sample
Comment	
Prep Dilution	250.000
Auto Dilution	N/A
Total Dilution	250.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-1.623	ug/l	-14.30	6.67	5.540E-06	Pulse	0.25	3
B			1	716.138	ug/l	5.18	23,996.40	2.003E-02	Pulse	0.15	3
Ca			1	1346.002	ug/l	16.66	19,047.02	7.285E-03	Pulse	0.10	3
Sr			1	3.883	ug/l	4.50	1,366.79	4.360E-04	Pulse	0.10	3
Mo			1	-9.458	ug/l	-9.01	180.01	5.769E-05	Pulse	0.10	3
Ag			1	-0.901	ug/l	-43.73	183.34	6.163E-05	Pulse	0.10	3
Sn			1	199.528	ug/l	6.40	10,411.13	3.519E-03	Pulse	0.10	3
Sb			1	45.609	ug/l	3.90	856.73	1.950E-04	Pulse	0.10	3
Ba			1	48.638	ug/l	5.03	163.34	3.708E-05	Pulse	0.10	3
Tl			1	-4.056	ug/l	-14.67	223.35	1.051E-04	Pulse	0.10	3
Pb			1	7195.778	ug/l	1.60	275,189.79	1.281E-01	Pulse	0.10	3
Pb			1	6997.596	ug/l	0.90	231,763.90	1.079E-01	Pulse	0.10	3
Pb			1	7057.171	ug/l	0.73	1,076,589.92	5.012E-01	Pulse	0.10	3
Na			2	5717.036	ug/l	0.48	38,114.63	3.805E-01	Pulse	0.30	3
Mg			2	611.335	ug/l	11.95	1,174.50	1.173E-02	Pulse	0.30	3
Al			2	12839.392	ug/l	1.80	7,645.50	7.631E-02	Pulse	0.30	3
K			2	631.309	ug/l	12.18	5,262.17	5.252E-02	Pulse	0.30	3
Ca			2	2135.103	ug/l	18.79	208.90	2.086E-03	Pulse	0.30	3
Ti			2	39.558	ug/l	74.45	21.11	2.108E-04	Pulse	0.30	3
V			2	17.660	ug/l	21.39	483.35	4.825E-03	Pulse	0.30	3
Cr			2	21.031	ug/l	11.58	903.37	9.018E-03	Pulse	0.30	3
Mn			2	670.300	ug/l	2.26	7,191.96	7.180E-02	Pulse	0.30	3
Fe			2	4676.883	ug/l	1.30	78,542.56	7.840E-01	Pulse	0.30	3
Co			2	0.638	ug/l	35.41	76.46	7.633E-04	Pulse	0.30	3
Ni			2	250.299	ug/l	4.10	2,119.08	2.116E-02	Pulse	0.30	3
Cu			2	26350.029	ug/l	0.75	567,131.40	5.661E+00	Pulse	0.30	3
Zn			2	2562.731	ug/l	3.11	9,107.54	9.092E-02	Pulse	0.30	3
As			2	8.525	ug/l	32.92	27.00	2.694E-04	Pulse	1.00	3
Cd			2	9.765	ug/l	0.07	3.26	7.457E-06	Pulse	0.30	3
Sn			2	222.067	ug/l	3.39	2,005.74	4.583E-03	Pulse	0.30	3
Se			3	-12.899	ug/l	-121.50	29.33	7.948E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,198,856.52	3.05	75.7	Pulse	0.10	3
1	Sc		2,616,252.72	2.42	94.6	Pulse	0.10	3
1	Ge		656,253.91	4.64	98.5	Pulse	0.10	3

Quantitation Report

1	Rh		3,133,346.41	4.69	97.3	Pulse	0.10	3
1	In		2,958,613.48	5.32	99.1	Pulse	0.10	3
1	Tb		4,386,373.06	2.12	103.3	Analog	0.10	3
1	Ho		367,955.42	5.23	97.9	Pulse	0.10	3
1	Bi		2,148,226.69	5.62	95.5	Pulse	0.10	3
2	Sc		100,180.53	0.59	88.7	Pulse	0.30	3
2	Ge		78,966.50	0.48	92.9	Pulse	0.30	3
2	Rh		1,307,083.66	1.25	91.3	Pulse	0.30	3
2	In		437,634.83	0.58	90.3	Pulse	0.30	3
2	Tb		1,419,765.47	0.40	91.0	Pulse	0.30	3
2	Ho		140,443.65	0.50	91.4	Pulse	0.30	3
2	Bi		886,257.68	0.17	91.1	Pulse	0.30	3
3	Sc		78,750.22	1.77	95.3	Pulse	0.30	3
3	Ge		36,909.78	1.02	94.9	Pulse	0.30	3
3	Rh		259,526.50	1.36	91.2	Pulse	0.30	3
3	Tb		318,759.63	0.69	86.7	Pulse	0.30	3

Quantitation Report

File Name	075SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:17
Sample Name	jc98256-12
Sample Type	Sample
Comment	
Prep Dilution	25.000
Auto Dilution	N/A
Total Dilution	25.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-7.07	5.33	4.527E-06	Pulse	0.25	3
B			1	102.306	ug/l	1.20	29,602.65	2.516E-02	Pulse	0.15	3
Ca			1	26585.295	ug/l	0.29	887,928.11	3.372E-01	Pulse	0.10	3
Sr			1	103.833	ug/l	0.31	159,831.65	5.183E-02	Pulse	0.10	3
Mo			1	1.172	ug/l	37.50	810.07	2.617E-04	Pulse	0.10	3
Ag			1	0.444	ug/l	25.41	573.37	1.951E-04	Pulse	0.10	3
Sn			1	5.335	ug/l	3.38	4,074.13	1.389E-03	Pulse	0.10	3
Sb			1	7.249	ug/l	1.25	2,183.60	5.031E-04	Pulse	0.10	3
Ba			1	41.116	ug/l	7.49	7,762.59	1.789E-03	Pulse	0.10	3
Tl			1	0.445	ug/l	19.21	1,156.77	5.397E-04	Pulse	0.10	3
Pb			1	848.694	ug/l	0.38	323,822.87	1.511E-01	Pulse	0.10	3
Pb			1	823.159	ug/l	1.11	272,000.86	1.269E-01	Pulse	0.10	3
Pb			1	829.961	ug/l	0.82	1,263,137.68	5.894E-01	Pulse	0.10	3
Na			2	63083.891	ug/l	1.26	2,108,991.93	2.075E+01	Pulse	0.30	3
Mg			2	7400.324	ug/l	1.54	116,200.35	1.143E+00	Pulse	0.30	3
Al			2	396.476	ug/l	25.86	2,537.13	2.493E-02	Pulse	0.30	3
K			2	1628.382	ug/l	1.38	22,728.58	2.236E-01	Pulse	0.30	3
Ca			2	27363.557	ug/l	1.26	17,266.39	1.699E-01	Pulse	0.30	3
Ti			2	1.503	ug/l	1.59	10.00	9.838E-05	Pulse	0.30	3
V			2	1.537	ug/l	9.06	456.68	4.492E-03	Pulse	0.30	3
Cr			2	1.147	ug/l	41.78	734.48	7.231E-03	Pulse	0.30	3
Mn			2	1515.083	ug/l	2.85	163,981.10	1.613E+00	Pulse	0.30	3
Fe			2	407.602	ug/l	1.91	70,190.58	6.905E-01	Pulse	0.30	3
Co			2	1.037	ug/l	6.92	376.49	3.702E-03	Pulse	0.30	3
Ni			2	249.630	ug/l	2.03	20,532.06	2.020E-01	Pulse	0.30	3
Cu			2	3890.332	ug/l	1.22	849,127.68	8.354E+00	Pulse	0.30	3
Zn			2	4916.970	ug/l	1.53	171,434.54	1.687E+00	Pulse	0.30	3
As			2	3.349	ug/l	32.35	68.00	6.684E-04	Pulse	1.00	3
Cd			2	1.294	ug/l	6.56	17.55	3.965E-05	Pulse	0.30	3
Sn			2	6.474	ug/l	6.76	754.47	1.704E-03	Pulse	0.30	3
Se			3	0.107	ug/l	4092.88	32.00	8.684E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,176,859.57	1.26	74.3	Pulse	0.10	3
1	Sc		2,633,526.32	3.08	95.2	Pulse	0.10	3
1	Ge		650,709.01	3.94	97.6	Pulse	0.10	3

Quantitation Report

1	Rh		3,083,998.71	3.94	95.8	Pulse	0.10	3
1	In		2,933,186.96	2.73	98.2	Pulse	0.10	3
1	Tb		4,339,939.62	0.67	102.2	Analog	0.10	3
1	Ho		365,859.47	3.42	97.3	Pulse	0.10	3
1	Bi		2,143,133.92	3.81	95.3	Pulse	0.10	3
2	Sc		101,658.15	1.11	90.0	Pulse	0.30	3
2	Ge		79,646.99	1.11	93.7	Pulse	0.30	3
2	Rh		1,313,727.41	0.23	91.8	Pulse	0.30	3
2	In		442,626.21	0.52	91.4	Pulse	0.30	3
2	Tb		1,433,398.76	0.82	91.9	Pulse	0.30	3
2	Ho		140,574.39	1.10	91.5	Pulse	0.30	3
2	Bi		897,648.44	1.11	92.3	Pulse	0.30	3
3	Sc		78,800.14	0.84	95.4	Pulse	0.30	3
3	Ge		36,794.02	0.84	94.6	Pulse	0.30	3
3	Rh		256,195.96	0.31	90.0	Pulse	0.30	3
3	Tb		313,133.28	0.24	85.1	Pulse	0.30	3

Quantitation Report

File Name	076SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:22
Sample Name	jc98257-9 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-163.92	28.00	2.812E-05	Pulse	0.25	3
B			1	265.281	ug/l	2.43	557,974.23	5.620E-01	Pulse	0.15	3
Ca			1	17774.687	ug/l	3.66	6,632,473.65	2.777E+00	Analog	0.10	3
Sr			1	154.769	ug/l	0.74	2,746,884.33	9.614E-01	Pulse	0.10	3
Mo			1	17.454	ug/l	0.44	60,470.50	2.116E-02	Pulse	0.10	3
Ag			1	0.016	ug/l	22.58	366.69	1.326E-04	Pulse	0.10	3
Sn			1	1.479	ug/l	6.58	9,133.51	3.305E-03	Pulse	0.10	3
Sb			1	4.274	ug/l	2.63	25,121.24	5.796E-03	Pulse	0.10	3
Ba			1	13.847	ug/l	3.88	35,392.12	8.165E-03	Pulse	0.10	3
Tl			1	-0.015	ug/l	-22.49	426.69	2.135E-04	Pulse	0.10	3
Pb			1	1.130	ug/l	2.28	5,261.33	2.634E-03	Pulse	0.10	3
Pb			1	1.038	ug/l	2.99	4,180.86	2.097E-03	Pulse	0.10	3
Pb			1	1.060	ug/l	1.03	19,703.39	9.874E-03	Pulse	0.10	3
Na			2	84648.862	ug/l	1.21	30,877,054.33	3.449E+02	Analog	0.30	3
Mg			2	3432.468	ug/l	0.91	592,319.92	6.617E+00	Pulse	0.30	3
Al			2	250.960	ug/l	0.47	16,436.50	1.836E-01	Pulse	0.30	3
K			2	8926.312	ug/l	1.55	1,095,638.46	1.224E+01	Pulse	0.30	3
Ca			2	16802.442	ug/l	1.23	116,243.78	1.299E+00	Pulse	0.30	3
Ti			2	3.851	ug/l	7.50	200.01	2.236E-03	Pulse	0.30	3
V			2	14.745	ug/l	0.65	24,192.41	2.703E-01	Pulse	0.30	3
Cr			2	5.841	ug/l	1.64	12,679.29	1.417E-01	Pulse	0.30	3
Mn			2	42.398	ug/l	0.19	50,546.52	5.646E-01	Pulse	0.30	3
Fe			2	338.282	ug/l	0.73	593,908.81	6.635E+00	Pulse	0.30	3
Co			2	0.381	ug/l	6.91	1,340.70	1.497E-02	Pulse	0.30	3
Ni			2	1.276	ug/l	6.48	1,240.07	1.385E-02	Pulse	0.30	3
Cu			2	5.875	ug/l	1.35	14,957.15	1.671E-01	Pulse	0.30	3
Zn			2	11.369	ug/l	2.63	4,639.72	5.184E-02	Pulse	0.30	3
As			2	7.312	ug/l	1.36	1,319.73	1.474E-02	Pulse	1.00	3
Cd			2	0.088	ug/l	3.76	8.04	2.017E-05	Pulse	0.30	3
Sn			2	1.406	ug/l	5.87	1,488.99	3.736E-03	Pulse	0.30	3
Se			3	0.767	ug/l	133.45	46.67	1.368E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		993,024.55	2.45	62.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,390,424.86	3.29	86.5	Pulse	0.10	3
1	Ge		598,028.83	4.59	89.7	Pulse	0.10	3
1	Rh		2,857,244.85	3.68	88.7	Pulse	0.10	3
1	In		2,766,679.50	3.16	92.7	Pulse	0.10	3
1	Tb		4,334,938.48	1.02	102.0	Analog	0.10	3
1	Ho		364,368.11	4.34	96.9	Pulse	0.10	3
1	Bi		1,996,006.01	5.49	88.7	Pulse	0.10	3
2	Sc		89,520.36	1.58	79.2	Pulse	0.30	3
2	Ge		71,092.69	1.28	83.6	Pulse	0.30	3
2	Rh		1,167,114.85	1.11	81.5	Pulse	0.30	3
2	In		398,599.70	0.77	82.3	Pulse	0.30	3
2	Tb		1,366,129.18	0.85	87.6	Pulse	0.30	3
2	Ho		135,613.97	0.88	88.3	Pulse	0.30	3
2	Bi		803,514.55	0.77	82.6	Pulse	0.30	3
3	Sc		75,471.15	0.48	91.4	Pulse	0.30	3
3	Ge		34,023.44	0.84	87.4	Pulse	0.30	3
3	Rh		233,868.36	0.89	82.1	Pulse	0.30	3
3	Tb		304,263.02	1.07	82.7	Pulse	0.30	3

Quantitation Report

File Name	077SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:27
Sample Name	jc98257-12
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	0.048	ug/l	46.23	117.33	1.288E-04	Pulse	0.25	3
B			1	55.828	ug/l	1.39	113,174.93	1.246E-01	Pulse	0.15	3
Ca			1	89957.371	ug/l	2.44	32,149,577.85	1.403E+01	Analog	0.10	3
Sr			1	756.363	ug/l	2.61	12,827,032.31	4.698E+00	Analog	0.10	3
Mo			1	0.807	ug/l	8.76	3,067.14	1.121E-03	Pulse	0.10	3
Ag			1	0.004	ug/l	209.15	256.68	9.592E-05	Pulse	0.10	3
Sn			1	1.263	ug/l	3.11	7,835.95	2.911E-03	Pulse	0.10	3
Sb			1	0.783	ug/l	2.21	3,410.58	7.938E-04	Pulse	0.10	3
Ba			1	221.049	ug/l	3.99	572,836.01	1.333E-01	Pulse	0.10	3
Tl			1	0.021	ug/l	9.81	863.40	4.479E-04	Pulse	0.10	3
Pb			1	0.300	ug/l	15.20	1,513.48	7.866E-04	Pulse	0.10	3
Pb			1	0.348	ug/l	2.98	1,480.15	7.678E-04	Pulse	0.10	3
Pb			1	0.313	ug/l	9.76	6,270.87	3.252E-03	Pulse	0.10	3
Na			2	62135.594	ug/l	2.03	22,651,259.10	2.533E+02	Analog	0.30	3
Mg			2	20693.179	ug/l	1.55	3,566,675.41	3.988E+01	Pulse	0.30	3
Al			2	154.308	ug/l	0.70	10,166.10	1.137E-01	Pulse	0.30	3
K			2	3343.386	ug/l	1.26	412,610.74	4.613E+00	Pulse	0.30	3
Ca			2	83525.363	ug/l	0.78	577,152.43	6.453E+00	Pulse	0.30	3
Ti			2	2.834	ug/l	47.24	147.79	1.653E-03	Pulse	0.30	3
V			2	0.640	ug/l	4.04	1,243.40	1.390E-02	Pulse	0.30	3
Cr			2	0.834	ug/l	8.35	2,199.10	2.459E-02	Pulse	0.30	3
Mn			2	1246.221	ug/l	2.29	1,483,205.60	1.658E+01	Pulse	0.30	3
Fe			2	23977.172	ug/l	2.87	41,702,123.90	4.663E+02	Analog	0.30	3
Co			2	2.327	ug/l	2.01	7,910.95	8.843E-02	Pulse	0.30	3
Ni			2	3.222	ug/l	3.59	2,989.26	3.343E-02	Pulse	0.30	3
Cu			2	28.203	ug/l	1.27	68,481.69	7.657E-01	Pulse	0.30	3
Zn			2	54.137	ug/l	1.87	21,005.06	2.349E-01	Pulse	0.30	3
As			2	2.905	ug/l	12.39	530.68	5.938E-03	Pulse	1.00	3
Cd			2	0.091	ug/l	14.68	9.16	2.317E-05	Pulse	0.30	3
Sn			2	1.433	ug/l	1.70	1,500.10	3.798E-03	Pulse	0.30	3
Se			3	0.182	ug/l	255.36	34.00	9.829E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		907,898.53	2.19	57.3	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,292,815.54	3.75	82.9	Pulse	0.10	3
1	Ge		573,772.55	3.85	86.1	Pulse	0.10	3
1	Rh		2,732,334.70	3.90	84.8	Pulse	0.10	3
1	In		2,690,683.05	3.74	90.1	Pulse	0.10	3
1	Tb		4,295,958.06	1.81	101.1	Analog	0.10	3
1	Ho		363,754.85	4.49	96.8	Pulse	0.10	3
1	Bi		1,927,880.49	3.99	85.7	Pulse	0.10	3
2	Sc		89,447.31	1.06	79.2	Pulse	0.30	3
2	Ge		70,504.03	1.75	82.9	Pulse	0.30	3
2	Rh		1,149,786.72	0.69	80.3	Pulse	0.30	3
2	In		394,991.95	0.56	81.5	Pulse	0.30	3
2	Tb		1,368,509.43	0.84	87.7	Pulse	0.30	3
2	Ho		135,973.68	0.40	88.5	Pulse	0.30	3
2	Bi		783,621.44	1.07	80.6	Pulse	0.30	3
3	Sc		74,932.72	0.62	90.7	Pulse	0.30	3
3	Ge		34,618.32	2.00	89.0	Pulse	0.30	3
3	Rh		231,795.67	0.30	81.4	Pulse	0.30	3
3	Tb		306,488.62	0.70	83.3	Pulse	0.30	3

Quantitation Report

File Name	078SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:31
Sample Name	mp18386-mb1 5
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-15.91	4.00	4.433E-06	Pulse	0.25	3
B			1	7.419	ug/l	4.57	21,138.51	2.356E-02	Pulse	0.15	3
Ca			1	9.659	ug/l	14.29	16,190.04	7.112E-03	Pulse	0.10	3
Sr			1	0.081	ug/l	13.63	2,170.26	7.453E-04	Pulse	0.10	3
Mo			1	-0.066	ug/l	-16.15	203.34	6.992E-05	Pulse	0.10	3
Ag			1	-0.003	ug/l	-65.24	206.68	7.427E-05	Pulse	0.10	3
Sn			1	0.648	ug/l	3.37	4,974.47	1.791E-03	Pulse	0.10	3
Sb			1	0.382	ug/l	2.65	936.74	2.196E-04	Pulse	0.10	3
Ba			1	0.408	ug/l	5.73	206.68	4.842E-05	Pulse	0.10	3
Tl			1	-0.041	ug/l	-6.20	106.67	5.140E-05	Pulse	0.10	3
Pb			1	-0.001	ug/l	-969.71	243.35	1.171E-04	Pulse	0.10	3
Pb			1	0.007	ug/l	131.13	230.01	1.107E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	122.67	1,096.73	5.273E-04	Pulse	0.10	3
Na			2	100.674	ug/l	0.62	53,234.19	6.042E-01	Pulse	0.30	3
Mg			2	2.801	ug/l	83.03	679.41	7.702E-03	Pulse	0.30	3
Al			2	1.902	ug/l	59.36	294.45	3.345E-03	Pulse	0.30	3
K			2	9.985	ug/l	10.31	5,222.15	5.927E-02	Pulse	0.30	3
Ca			2	14.554	ug/l	14.43	166.67	1.891E-03	Pulse	0.30	3
Ti			2	1.264	ug/l	162.25	66.71	7.539E-04	Pulse	0.30	3
V			2	0.466	ug/l	15.39	945.60	1.073E-02	Pulse	0.30	3
Cr			2	0.202	ug/l	18.00	864.48	9.813E-03	Pulse	0.30	3
Mn			2	0.502	ug/l	12.17	626.69	7.110E-03	Pulse	0.30	3
Fe			2	5.672	ug/l	4.18	14,691.28	1.667E-01	Pulse	0.30	3
Co			2	-0.002	ug/l	-100.76	42.18	4.784E-04	Pulse	0.30	3
Ni			2	0.031	ug/l	20.47	115.56	1.312E-03	Pulse	0.30	3
Cu			2	0.254	ug/l	14.95	1,440.10	1.635E-02	Pulse	0.30	3
Zn			2	4.006	ug/l	4.51	1,791.25	2.033E-02	Pulse	0.30	3
As			2	0.791	ug/l	11.26	151.00	1.713E-03	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.081	ug/l	12.45	4.39	1.104E-05	Pulse	0.30	3
Sn			2	0.708	ug/l	8.72	846.71	2.140E-03	Pulse	0.30	3
Se			3	0.196	ug/l	183.28	34.67	9.918E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		897,596.72	1.60	56.7	Pulse	0.10	3
1	Sc		2,277,749.86	2.67	82.4	Pulse	0.10	3
1	Ge		590,623.26	3.45	88.6	Pulse	0.10	3
1	Rh		2,916,230.68	2.48	90.5	Pulse	0.10	3
1	In		2,778,592.50	3.13	93.1	Pulse	0.10	3
1	Tb		4,263,792.02	1.03	100.4	Analog	0.10	3
1	Ho		356,668.39	3.43	94.9	Pulse	0.10	3
1	Bi		2,084,001.43	2.72	92.6	Pulse	0.10	3
2	Sc		88,106.83	0.62	78.0	Pulse	0.30	3
2	Ge		70,732.08	0.39	83.2	Pulse	0.30	3
2	Rh		1,198,171.93	1.08	83.7	Pulse	0.30	3
2	In		395,460.06	0.86	81.6	Pulse	0.30	3
2	Tb		1,323,375.09	0.73	84.8	Pulse	0.30	3
2	Ho		130,800.58	0.99	85.1	Pulse	0.30	3
2	Bi		831,003.40	1.21	85.4	Pulse	0.30	3
3	Sc		74,036.89	0.64	89.6	Pulse	0.30	3
3	Ge		34,984.79	0.57	89.9	Pulse	0.30	3
3	Rh		244,974.24	0.39	86.0	Pulse	0.30	3
3	Tb		298,644.65	1.11	81.2	Pulse	0.30	3

Quantitation Report

File Name	079SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:36
Sample Name	mp18386-b1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	100.242	ug/l	0.75	184,875.85	2.043E-01	Pulse	0.25	3
B			1	102.924	ug/l	1.66	201,748.48	2.230E-01	Pulse	0.15	3
Ca			1	4010.892	ug/l	0.58	1,442,020.86	6.309E-01	Pulse	0.10	3
Sr			1	79.020	ug/l	1.46	1,404,836.13	4.910E-01	Pulse	0.10	3
Mo			1	77.690	ug/l	0.71	268,031.18	9.368E-02	Pulse	0.10	3
Ag			1	74.570	ug/l	0.77	644,759.23	2.329E-01	Pulse	0.10	3
Sn			1	77.143	ug/l	0.98	390,538.18	1.411E-01	Pulse	0.10	3
Sb			1	75.929	ug/l	4.34	457,635.70	1.085E-01	Pulse	0.10	3
Ba			1	69.837	ug/l	4.59	177,138.55	4.198E-02	Pulse	0.10	3
Tl			1	76.982	ug/l	0.76	1,014,562.04	4.922E-01	Pulse	0.10	3
Pb			1	79.642	ug/l	0.69	365,331.29	1.772E-01	Pulse	0.10	3
Pb			1	79.404	ug/l	0.53	315,339.24	1.530E-01	Pulse	0.10	3
Pb			1	79.429	ug/l	0.83	1,453,203.70	7.050E-01	Pulse	0.10	3
Na			2	4048.225	ug/l	1.24	1,454,816.47	1.668E+01	Pulse	0.30	3
Mg			2	4013.002	ug/l	1.87	674,620.01	7.736E+00	Pulse	0.30	3
Al			2	3703.719	ug/l	1.71	233,966.30	2.683E+00	Pulse	0.30	3
K			2	3963.261	ug/l	1.53	476,181.39	5.460E+00	Pulse	0.30	3
Ca			2	4440.461	ug/l	2.94	29,982.35	3.438E-01	Pulse	0.30	3
Ti			2	77.834	ug/l	4.78	3,892.82	4.463E-02	Pulse	0.30	3
V			2	79.818	ug/l	0.80	126,718.36	1.453E+00	Pulse	0.30	3
Cr			2	78.310	ug/l	0.18	160,137.73	1.836E+00	Pulse	0.30	3
Mn			2	75.255	ug/l	1.43	87,376.43	1.002E+00	Pulse	0.30	3
Fe			2	4343.774	ug/l	3.03	7,371,040.26	8.452E+01	Analog	0.30	3
Co			2	77.714	ug/l	1.70	255,953.18	2.935E+00	Pulse	0.30	3
Ni			2	77.379	ug/l	1.35	68,007.93	7.798E-01	Pulse	0.30	3
Cu			2	78.145	ug/l	0.98	183,547.89	2.105E+00	Pulse	0.30	3
Zn			2	91.510	ug/l	1.46	34,432.09	3.948E-01	Pulse	0.30	3
As			2	87.504	ug/l	0.96	15,259.51	1.750E-01	Pulse	1.00	3
Cd			2	82.380	ug/l	1.36	40,939.47	1.043E-01	Pulse	0.30	3
Sn			2	78.463	ug/l	0.46	70,643.12	1.800E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	511.911	ug/l	1.45	11,968.65	3.383E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		904,728.85	3.39	57.1	Pulse	0.10	3
1	Sc		2,285,883.46	3.38	82.7	Pulse	0.10	3
1	Ge		589,170.42	4.48	88.4	Pulse	0.10	3
1	Rh		2,860,799.02	4.11	88.8	Pulse	0.10	3
1	In		2,767,505.83	4.27	92.7	Pulse	0.10	3
1	Tb		4,219,246.71	0.20	99.3	Analog	0.10	3
1	Ho		362,646.93	5.53	96.5	Pulse	0.10	3
1	Bi		2,060,854.24	4.90	91.6	Pulse	0.10	3
2	Sc		87,215.77	0.67	77.2	Pulse	0.30	3
2	Ge		70,475.23	0.88	82.9	Pulse	0.30	3
2	Rh		1,175,015.09	0.59	82.1	Pulse	0.30	3
2	In		392,467.08	0.70	81.0	Pulse	0.30	3
2	Tb		1,342,882.48	0.44	86.1	Pulse	0.30	3
2	Ho		132,430.87	0.44	86.2	Pulse	0.30	3
2	Bi		827,402.94	0.24	85.1	Pulse	0.30	3
3	Sc		73,467.93	0.87	88.9	Pulse	0.30	3
3	Ge		35,373.67	1.04	90.9	Pulse	0.30	3
3	Rh		238,475.81	0.85	83.8	Pulse	0.30	3
3	Tb		305,683.34	0.46	83.1	Pulse	0.30	3

Quantitation Report

File Name	080_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:41
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	59.441	ug/l	1.42	259,809.13	2.423E-01	Pulse	0.25	3
B			1	122.696	ug/l	1.68	557,980.83	5.205E-01	Pulse	0.15	3
Ca			1	5855.602	ug/l	7.14	4,628,147.95	1.831E+00	Analog	0.10	3
Sr			1	53.896	ug/l	3.28	2,007,477.89	6.697E-01	Pulse	0.10	3
Mo			1	53.006	ug/l	2.81	383,117.85	1.278E-01	Pulse	0.10	3
Ag			1	50.562	ug/l	3.53	914,100.11	3.159E-01	Pulse	0.10	3
Sn			1	52.212	ug/l	3.05	552,299.26	1.908E-01	Pulse	0.10	3
Sb			1	51.513	ug/l	1.17	626,457.53	1.473E-01	Pulse	0.10	3
Ba			1	48.801	ug/l	0.37	249,867.76	5.875E-02	Pulse	0.10	3
Tl			1	52.784	ug/l	2.51	1,411,833.63	6.749E-01	Pulse	0.10	3
Pb			1	52.150	ug/l	2.62	485,453.06	2.321E-01	Pulse	0.10	3
Pb			1	52.020	ug/l	1.41	419,518.38	2.004E-01	Pulse	0.10	3
Pb			1	52.148	ug/l	2.45	1,936,174.55	9.255E-01	Pulse	0.10	3
Na			2	4960.872	ug/l	0.97	4,085,799.00	4.060E+01	Pulse	0.30	3
Mg			2	4991.602	ug/l	1.20	1,936,138.46	1.924E+01	Pulse	0.30	3
Al			2	4774.344	ug/l	0.21	695,729.17	6.913E+00	Pulse	0.30	3
K			2	5060.038	ug/l	0.41	1,395,950.12	1.387E+01	Pulse	0.30	3
Ca			2	5415.072	ug/l	0.56	84,268.61	8.373E-01	Pulse	0.30	3
Ti			2	50.773	ug/l	3.79	5,859.07	5.822E-02	Pulse	0.30	3
V			2	52.647	ug/l	1.42	192,839.94	1.916E+00	Pulse	0.30	3
Cr			2	51.630	ug/l	1.07	243,500.66	2.419E+00	Pulse	0.30	3
Mn			2	49.978	ug/l	0.88	133,900.97	1.331E+00	Pulse	0.30	3
Fe			2	5417.002	ug/l	1.23	21,207,786.93	2.107E+02	Analog	0.30	3
Co			2	50.912	ug/l	0.97	386,948.05	3.845E+00	Pulse	0.30	3
Ni			2	50.957	ug/l	1.00	103,322.90	1.027E+00	Pulse	0.30	3
Cu			2	50.101	ug/l	0.94	271,296.34	2.696E+00	Pulse	0.30	3
Zn			2	50.478	ug/l	0.55	43,797.52	4.352E-01	Pulse	0.30	3
As			2	53.502	ug/l	3.66	21,532.93	2.139E-01	Pulse	1.00	3
Cd			2	50.734	ug/l	0.33	56,619.82	1.285E-01	Pulse	0.30	3
Sn			2	52.341	ug/l	0.98	105,735.35	2.400E-01	Pulse	0.30	3
Se			3	208.417	ug/l	3.28	10,377.36	2.757E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,072,497.95	3.84	67.7	Pulse	0.10	3
1	Sc		2,535,120.33	6.73	91.7	Pulse	0.10	3
1	Ge		638,240.43	5.93	95.8	Pulse	0.10	3

Quantitation Report

1	Rh		3,002,520.68	7.51	93.2	Pulse	0.10	3
1	In		2,898,523.20	7.02	97.1	Pulse	0.10	3
1	Tb		4,253,067.23	3.37	100.1	Analog	0.10	3
1	Ho		370,587.66	7.11	98.6	Pulse	0.10	3
1	Bi		2,094,492.11	7.53	93.1	Pulse	0.10	3
2	Sc		100,637.19	1.04	89.1	Pulse	0.30	3
2	Ge		79,517.36	1.14	93.5	Pulse	0.30	3
2	Rh		1,295,563.91	0.53	90.5	Pulse	0.30	3
2	In		440,618.67	0.41	90.9	Pulse	0.30	3
2	Tb		1,471,183.03	1.03	94.3	Pulse	0.30	3
2	Ho		145,461.78	1.05	94.7	Pulse	0.30	3
2	Bi		877,481.77	0.88	90.2	Pulse	0.30	3
3	Sc		80,372.92	0.68	97.3	Pulse	0.30	3
3	Ge		37,642.90	0.40	96.7	Pulse	0.30	3
3	Rh		252,271.79	0.18	88.6	Pulse	0.30	3
3	Tb		319,874.08	0.72	87.0	Pulse	0.30	3

Quantitation Report

File Name	081_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:46
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-225.17	28.00	2.822E-05	Pulse	0.25	3
B			1	4.208	ug/l	34.80	24,762.05	2.564E-02	Pulse	0.15	3
Ca			1	0.854	ug/l	606.12	12,669.56	5.872E-03	Pulse	0.10	3
Sr			1	-0.001	ug/l	-190.45	646.71	2.267E-04	Pulse	0.10	3
Mo			1	-0.001	ug/l	-1509.65	400.02	1.458E-04	Pulse	0.10	3
Ag			1	0.001	ug/l	250.62	253.35	9.225E-05	Pulse	0.10	3
Sn			1	-0.008	ug/l	-787.53	1,503.48	5.838E-04	Pulse	0.10	3
Sb			1	0.245	ug/l	20.08	1,300.11	3.733E-04	Pulse	0.10	3
Ba			1	0.187	ug/l	3.82	100.00	2.788E-05	Pulse	0.10	3
Tl			1	0.004	ug/l	354.14	623.38	3.578E-04	Pulse	0.10	3
Pb			1	0.001	ug/l	352.18	230.01	1.240E-04	Pulse	0.10	3
Pb			1	0.011	ug/l	111.49	250.01	1.409E-04	Pulse	0.10	3
Pb			1	0.003	ug/l	158.51	970.05	5.319E-04	Pulse	0.10	3
Na			2	16.415	ug/l	2.47	32,055.27	3.279E-01	Pulse	0.30	3
Mg			2	-0.037	ug/l	-42.10	211.12	2.159E-03	Pulse	0.30	3
Al			2	-0.275	ug/l	-75.44	153.34	1.570E-03	Pulse	0.30	3
K			2	1.051	ug/l	48.97	4,741.98	4.850E-02	Pulse	0.30	3
Ca			2	2.549	ug/l	40.85	113.34	1.161E-03	Pulse	0.30	3
Ti			2	0.004	ug/l	769.33	3.33	3.384E-05	Pulse	0.30	3
V			2	0.019	ug/l	26.47	286.68	2.931E-03	Pulse	0.30	3
Cr			2	0.019	ug/l	93.06	583.36	5.971E-03	Pulse	0.30	3
Mn			2	0.018	ug/l	20.37	90.00	9.213E-04	Pulse	0.30	3
Fe			2	0.308	ug/l	19.02	6,689.51	6.842E-02	Pulse	0.30	3
Co			2	-0.003	ug/l	-39.07	34.42	3.520E-04	Pulse	0.30	3
Ni			2	-0.003	ug/l	-198.57	92.22	9.442E-04	Pulse	0.30	3
Cu			2	-0.079	ug/l	-2.78	521.13	5.331E-03	Pulse	0.30	3
Zn			2	-0.091	ug/l	-58.40	235.56	2.406E-03	Pulse	0.30	3
As			2	-0.003	ug/l	-277.82	12.00	1.230E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.043	ug/l	10.94	7.62	1.793E-05	Pulse	0.30	3
Sn			2	0.031	ug/l	120.75	280.01	6.601E-04	Pulse	0.30	3
Se			3	0.161	ug/l	143.25	39.33	1.075E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,001,091.08	22.15	63.2	Pulse	0.10	3
1	Sc		2,258,666.32	24.49	81.7	Pulse	0.10	3
1	Ge		563,921.13	21.95	84.6	Pulse	0.10	3
1	Rh		2,939,040.32	34.07	91.3	Mix	0.10	3
1	In		2,821,473.86	35.72	94.5	Mix	0.10	3
1	Tb		3,816,898.80	35.00	89.9	Mix	0.10	3
1	Ho		321,313.38	25.12	85.5	Pulse	0.10	3
1	Bi		1,875,573.10	23.74	83.4	Pulse	0.10	3
2	Sc		97,758.12	1.16	86.5	Pulse	0.30	3
2	Ge		76,573.17	0.46	90.0	Pulse	0.30	3
2	Rh		1,275,052.49	1.48	89.1	Pulse	0.30	3
2	In		424,159.37	0.43	87.5	Pulse	0.30	3
2	Tb		1,381,093.70	0.92	88.5	Pulse	0.30	3
2	Ho		135,051.94	1.20	87.9	Pulse	0.30	3
2	Bi		856,357.73	0.55	88.0	Pulse	0.30	3
3	Sc		78,737.95	0.69	95.3	Pulse	0.30	3
3	Ge		36,595.66	0.44	94.1	Pulse	0.30	3
3	Rh		254,107.70	1.81	89.2	Pulse	0.30	3
3	Tb		308,486.92	0.64	83.9	Pulse	0.30	3

Quantitation Report

File Name	082SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:50
Sample Name	mp18386-s1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	97.517	ug/l	0.65	179,749.14	1.988E-01	Pulse	0.25	3
B			1	226.594	ug/l	1.51	435,148.63	4.812E-01	Pulse	0.15	3
Ca			1	45255.601	ug/l	3.96	16,062,400.18	7.061E+00	Analog	0.10	3
Sr			1	401.046	ug/l	3.91	6,860,629.90	2.491E+00	Analog	0.10	3
Mo			1	78.580	ug/l	1.69	261,164.77	9.475E-02	Pulse	0.10	3
Ag			1	72.739	ug/l	1.08	614,861.59	2.272E-01	Pulse	0.10	3
Sn			1	75.507	ug/l	0.31	373,933.56	1.381E-01	Pulse	0.10	3
Sb			1	72.743	ug/l	4.22	437,667.21	1.039E-01	Pulse	0.10	3
Ba			1	80.498	ug/l	2.60	203,970.90	4.842E-02	Pulse	0.10	3
Tl			1	76.306	ug/l	0.39	969,313.89	4.879E-01	Pulse	0.10	3
Pb			1	78.410	ug/l	0.82	346,660.89	1.745E-01	Pulse	0.10	3
Pb			1	78.636	ug/l	0.21	301,063.57	1.515E-01	Pulse	0.10	3
Pb			1	78.509	ug/l	0.53	1,384,336.53	6.968E-01	Pulse	0.10	3
Na			2	28467.895	ug/l	2.00	10,021,529.60	1.161E+02	Analog	0.30	3
Mg			2	8981.833	ug/l	1.11	1,493,403.00	1.731E+01	Pulse	0.30	3
Al			2	3647.057	ug/l	1.17	227,902.58	2.642E+00	Pulse	0.30	3
K			2	10777.295	ug/l	0.74	1,274,175.82	1.477E+01	Pulse	0.30	3
Ca			2	42609.336	ug/l	1.55	284,029.08	3.292E+00	Pulse	0.30	3
Ti			2	76.245	ug/l	2.26	3,772.79	4.372E-02	Pulse	0.30	3
V			2	79.095	ug/l	1.94	124,204.95	1.440E+00	Pulse	0.30	3
Cr			2	78.368	ug/l	2.51	158,495.54	1.837E+00	Pulse	0.30	3
Mn			2	99.735	ug/l	1.96	114,528.76	1.328E+00	Pulse	0.30	3
Fe			2	5005.290	ug/l	1.78	8,401,454.11	9.739E+01	Analog	0.30	3
Co			2	75.865	ug/l	2.54	247,122.83	2.865E+00	Pulse	0.30	3
Ni			2	78.994	ug/l	1.40	68,673.45	7.961E-01	Pulse	0.30	3
Cu			2	83.421	ug/l	1.32	193,762.41	2.246E+00	Pulse	0.30	3
Zn			2	91.312	ug/l	0.71	33,987.69	3.940E-01	Pulse	0.30	3
As			2	115.211	ug/l	1.26	19,869.72	2.303E-01	Pulse	1.00	3
Cd			2	79.846	ug/l	0.82	38,758.19	1.011E-01	Pulse	0.30	3
Sn			2	77.754	ug/l	0.57	68,386.98	1.784E-01	Pulse	0.30	3
Se			3	484.797	ug/l	7.08	10,999.85	3.205E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		904,182.38	0.96	57.1	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,276,423.98	2.67	82.3	Pulse	0.10	3
1	Ge		579,819.80	4.47	87.0	Pulse	0.10	3
1	Rh		2,757,610.95	4.60	85.6	Pulse	0.10	3
1	In		2,706,640.95	4.54	90.7	Pulse	0.10	3
1	Tb		4,212,105.77	0.94	99.2	Analog	0.10	3
1	Ho		353,834.24	3.60	94.1	Pulse	0.10	3
1	Bi		1,986,879.92	4.44	88.3	Pulse	0.10	3
2	Sc		86,281.86	1.93	76.4	Pulse	0.30	3
2	Ge		69,487.87	0.52	81.7	Pulse	0.30	3
2	Rh		1,135,223.36	0.76	79.3	Pulse	0.30	3
2	In		383,388.39	1.08	79.1	Pulse	0.30	3
2	Tb		1,319,549.11	0.18	84.6	Pulse	0.30	3
2	Ho		131,007.20	1.05	85.3	Pulse	0.30	3
2	Bi		795,071.74	0.73	81.7	Pulse	0.30	3
3	Sc		72,952.37	0.56	88.3	Pulse	0.30	3
3	Ge		34,343.20	1.29	88.3	Pulse	0.30	3
3	Rh		229,062.99	0.48	80.5	Pulse	0.30	3
3	Tb		295,575.72	0.76	80.4	Pulse	0.30	3

Quantitation Report

File Name	083SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 16:55
Sample Name	mp18386-s2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	97.068	ug/l	2.28	174,595.62	1.979E-01	Pulse	0.25	3
B			1	225.889	ug/l	1.88	423,280.93	4.798E-01	Pulse	0.15	3
Ca			1	45228.262	ug/l	3.47	15,725,178.52	7.057E+00	Analog	0.10	3
Sr			1	404.580	ug/l	6.11	6,748,409.90	2.513E+00	Analog	0.10	3
Mo			1	80.445	ug/l	0.68	260,946.17	9.700E-02	Pulse	0.10	3
Ag			1	72.763	ug/l	1.85	606,003.39	2.273E-01	Pulse	0.10	3
Sn			1	75.027	ug/l	1.53	366,053.94	1.373E-01	Pulse	0.10	3
Sb			1	72.718	ug/l	2.55	433,478.80	1.039E-01	Pulse	0.10	3
Ba			1	79.603	ug/l	3.09	199,846.65	4.788E-02	Pulse	0.10	3
Tl			1	77.507	ug/l	0.97	986,005.56	4.956E-01	Pulse	0.10	3
Pb			1	79.025	ug/l	2.53	350,036.45	1.759E-01	Pulse	0.10	3
Pb			1	78.913	ug/l	1.25	302,532.68	1.521E-01	Pulse	0.10	3
Pb			1	78.697	ug/l	1.19	1,389,716.73	6.985E-01	Pulse	0.10	3
Na			2	28341.227	ug/l	0.52	9,800,421.56	1.156E+02	Analog	0.30	3
Mg			2	8870.313	ug/l	0.43	1,449,145.19	1.710E+01	Pulse	0.30	3
Al			2	3595.045	ug/l	0.39	220,738.09	2.604E+00	Pulse	0.30	3
K			2	10707.284	ug/l	0.62	1,243,810.99	1.467E+01	Pulse	0.30	3
Ca			2	42362.253	ug/l	0.25	277,443.16	3.273E+00	Pulse	0.30	3
Ti			2	76.274	ug/l	2.19	3,707.21	4.374E-02	Pulse	0.30	3
V			2	79.140	ug/l	0.13	122,119.61	1.441E+00	Pulse	0.30	3
Cr			2	77.925	ug/l	1.00	154,874.87	1.827E+00	Pulse	0.30	3
Mn			2	100.472	ug/l	1.03	113,373.18	1.337E+00	Pulse	0.30	3
Fe			2	5009.628	ug/l	2.53	8,262,486.62	9.747E+01	Analog	0.30	3
Co			2	75.397	ug/l	1.59	241,367.31	2.847E+00	Pulse	0.30	3
Ni			2	78.703	ug/l	1.43	67,231.82	7.931E-01	Pulse	0.30	3
Cu			2	80.513	ug/l	1.04	183,784.02	2.168E+00	Pulse	0.30	3
Zn			2	92.313	ug/l	1.08	33,757.15	3.982E-01	Pulse	0.30	3
As			2	117.045	ug/l	0.76	19,834.32	2.340E-01	Pulse	1.00	3
Cd			2	80.082	ug/l	0.84	38,106.56	1.014E-01	Pulse	0.30	3
Sn			2	77.333	ug/l	0.49	66,673.93	1.774E-01	Pulse	0.30	3
Se			3	489.016	ug/l	2.16	10,910.40	3.232E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		882,401.66	1.75	55.7	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,229,731.53	2.58	80.6	Pulse	0.10	3
1	Ge		570,190.66	3.01	85.6	Pulse	0.10	3
1	Rh		2,689,836.42	3.88	83.5	Pulse	0.10	3
1	In		2,666,631.17	3.71	89.3	Pulse	0.10	3
1	Tb		4,172,779.84	1.43	98.2	Analog	0.10	3
1	Ho		352,728.43	5.32	93.8	Pulse	0.10	3
1	Bi		1,989,275.96	3.83	88.4	Pulse	0.10	3
2	Sc		84,766.00	0.26	75.0	Pulse	0.30	3
2	Ge		68,054.15	0.62	80.0	Pulse	0.30	3
2	Rh		1,118,293.05	0.44	78.1	Pulse	0.30	3
2	In		375,818.68	0.37	77.6	Pulse	0.30	3
2	Tb		1,292,410.81	0.59	82.8	Pulse	0.30	3
2	Ho		128,663.19	0.65	83.7	Pulse	0.30	3
2	Bi		785,991.08	0.55	80.8	Pulse	0.30	3
3	Sc		72,066.64	0.31	87.2	Pulse	0.30	3
3	Ge		33,751.71	0.47	86.7	Pulse	0.30	3
3	Rh		226,378.85	0.38	79.5	Pulse	0.30	3
3	Tb		290,172.60	0.50	78.9	Pulse	0.30	3

Quantitation Report

File Name	084SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 17:00
Sample Name	jc98286-1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-79.30	21.33	2.481E-05	Pulse	0.25	3
B			1	131.058	ug/l	1.20	242,900.02	2.817E-01	Pulse	0.15	3
Ca			1	42020.140	ug/l	3.29	14,071,843.96	6.557E+00	Analog	0.10	3
Sr			1	316.343	ug/l	3.74	5,165,452.94	1.965E+00	Analog	0.10	3
Mo			1	0.262	ug/l	12.14	1,223.45	4.644E-04	Pulse	0.10	3
Ag			1	0.009	ug/l	96.07	290.02	1.128E-04	Pulse	0.10	3
Sn			1	0.402	ug/l	6.95	3,457.25	1.344E-03	Pulse	0.10	3
Sb			1	0.445	ug/l	2.92	1,273.44	3.096E-04	Pulse	0.10	3
Ba			1	12.610	ug/l	6.30	30,509.75	7.418E-03	Pulse	0.10	3
Tl			1	0.001	ug/l	628.52	620.04	3.210E-04	Pulse	0.10	3
Pb			1	0.152	ug/l	11.92	883.40	4.573E-04	Pulse	0.10	3
Pb			1	0.178	ug/l	23.02	846.74	4.409E-04	Pulse	0.10	3
Pb			1	0.167	ug/l	1.12	3,770.39	1.954E-03	Pulse	0.10	3
Na			2	24791.306	ug/l	7.12	8,366,470.23	1.012E+02	Analog	0.30	3
Mg			2	5128.116	ug/l	7.40	817,399.32	9.884E+00	Pulse	0.30	3
Al			2	0.628	ug/l	72.14	202.23	2.423E-03	Pulse	0.30	3
K			2	6922.688	ug/l	7.72	785,749.57	9.503E+00	Pulse	0.30	3
Ca			2	38198.823	ug/l	7.57	244,044.29	2.951E+00	Pulse	0.30	3
Ti			2	0.161	ug/l	50.43	10.00	1.218E-04	Pulse	0.30	3
V			2	0.476	ug/l	7.88	903.38	1.091E-02	Pulse	0.30	3
Cr			2	1.402	ug/l	10.53	3,129.28	3.787E-02	Pulse	0.30	3
Mn			2	27.021	ug/l	8.31	29,757.70	3.600E-01	Pulse	0.30	3
Fe			2	693.690	ug/l	7.95	1,119,879.26	1.355E+01	Pulse	0.30	3
Co			2	0.343	ug/l	9.51	1,117.04	1.352E-02	Pulse	0.30	3
Ni			2	4.865	ug/l	9.41	4,131.79	4.996E-02	Pulse	0.30	3
Cu			2	6.901	ug/l	6.95	16,095.06	1.946E-01	Pulse	0.30	3
Zn			2	12.412	ug/l	10.06	4,650.85	5.630E-02	Pulse	0.30	3
As			2	31.536	ug/l	6.78	5,223.68	6.314E-02	Pulse	1.00	3
Cd			2	0.115	ug/l	32.82	20.74	5.428E-05	Pulse	0.30	3
Sn			2	0.575	ug/l	8.50	681.14	1.835E-03	Pulse	0.30	3
Se			3	0.211	ug/l	56.16	33.33	1.002E-03	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		862,154.92	1.74	54.5	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,147,548.82	2.84	77.7	Pulse	0.10	3
1	Ge		550,866.63	3.34	82.7	Pulse	0.10	3
1	Rh		2,631,295.32	4.07	81.7	Pulse	0.10	3
1	In		2,574,013.81	2.56	86.2	Pulse	0.10	3
1	Tb		4,115,497.96	1.77	96.9	Analog	0.10	3
1	Ho		345,957.86	2.72	92.0	Pulse	0.10	3
1	Bi		1,929,163.82	3.83	85.7	Pulse	0.10	3
2	Sc		82,993.00	7.33	73.4	Pulse	0.30	3
2	Ge		67,354.49	4.80	79.2	Pulse	0.30	3
2	Rh		1,102,696.10	6.16	77.0	Pulse	0.30	3
2	In		372,027.53	5.80	76.8	Pulse	0.30	3
2	Tb		1,273,817.62	6.45	81.6	Pulse	0.30	3
2	Ho		127,748.28	7.12	83.1	Pulse	0.30	3
2	Bi		779,987.90	4.86	80.2	Pulse	0.30	3
3	Sc		70,749.77	0.53	85.6	Pulse	0.30	3
3	Ge		33,286.01	0.84	85.5	Pulse	0.30	3
3	Rh		223,184.23	0.25	78.4	Pulse	0.30	3
3	Tb		286,001.89	0.91	77.8	Pulse	0.30	3

Quantitation Report

File Name	085SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 17:05
Sample Name	mp18386-sd1
Sample Type	Sample
Comment	
Prep Dilution	10.000
Auto Dilution	N/A
Total Dilution	10.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-0.046	ug/l	-38.58	14.67	1.331E-05	Pulse	0.25	3
B			1	128.316	ug/l	2.41	67,247.20	6.165E-02	Pulse	0.15	3
Ca			1	36076.207	ug/l	1.73	2,783,179.75	1.130E+00	Pulse	0.10	3
Sr			1	269.139	ug/l	0.35	979,351.24	3.345E-01	Pulse	0.10	3
Mo			1	-0.050	ug/l	-151.88	400.02	1.368E-04	Pulse	0.10	3
Ag			1	-0.062	ug/l	-16.41	130.01	4.542E-05	Pulse	0.10	3
Sn			1	-0.873	ug/l	-6.01	840.06	2.935E-04	Pulse	0.10	3
Sb			1	1.690	ug/l	10.00	676.71	1.565E-04	Pulse	0.10	3
Ba			1	14.400	ug/l	7.03	6,668.68	1.542E-03	Pulse	0.10	3
Tl			1	-0.105	ug/l	-27.03	373.36	1.782E-04	Pulse	0.10	3
Pb			1	0.150	ug/l	16.52	393.35	1.866E-04	Pulse	0.10	3
Pb			1	0.108	ug/l	97.69	290.01	1.389E-04	Pulse	0.10	3
Pb			1	0.101	ug/l	23.27	1,370.08	6.511E-04	Pulse	0.10	3
Na			2	22268.648	ug/l	0.94	1,698,699.38	1.833E+01	Pulse	0.30	3
Mg			2	5166.965	ug/l	0.89	184,733.75	1.994E+00	Pulse	0.30	3
Al			2	-3.341	ug/l	-72.68	137.78	1.485E-03	Pulse	0.30	3
K			2	7001.637	ug/l	0.51	181,499.54	1.959E+00	Pulse	0.30	3
Ca			2	38211.489	ug/l	0.42	54,776.34	5.911E-01	Pulse	0.30	3
Ti			2	0.994	ug/l	52.90	13.33	1.434E-04	Pulse	0.30	3
V			2	0.222	ug/l	84.72	283.34	3.063E-03	Pulse	0.30	3
Cr			2	0.816	ug/l	7.98	824.48	8.899E-03	Pulse	0.30	3
Mn			2	26.641	ug/l	1.65	6,610.54	7.134E-02	Pulse	0.30	3
Fe			2	669.146	ug/l	1.27	246,361.07	2.659E+00	Pulse	0.30	3
Co			2	0.297	ug/l	6.41	260.46	2.812E-03	Pulse	0.30	3
Ni			2	4.885	ug/l	3.07	1,003.94	1.084E-02	Pulse	0.30	3
Cu			2	6.297	ug/l	3.32	4,012.86	4.331E-02	Pulse	0.30	3
Zn			2	14.017	ug/l	3.05	1,406.76	1.518E-02	Pulse	0.30	3
As			2	33.500	ug/l	1.71	1,252.73	1.352E-02	Pulse	1.00	3
Cd			2	0.413	ug/l	11.58	5.43	1.302E-05	Pulse	0.30	3
Sn			2	-0.274	ug/l	-40.36	164.45	3.943E-04	Pulse	0.30	3
Se			3	-0.605	ug/l	-181.23	28.00	7.831E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,091,009.66	3.08	68.9	Pulse	0.10	3
1	Sc		2,462,764.24	4.05	89.1	Pulse	0.10	3
1	Ge		614,706.74	3.37	92.2	Pulse	0.10	3

Quantitation Report

1	Rh		2,927,384.43	3.73	90.9	Pulse	0.10	3
1	In		2,858,845.36	3.34	95.8	Pulse	0.10	3
1	Tb		4,325,498.37	0.90	101.8	Analog	0.10	3
1	Ho		363,294.42	4.62	96.6	Pulse	0.10	3
1	Bi		2,107,326.48	4.79	93.7	Pulse	0.10	3
2	Sc		92,665.65	1.22	82.0	Pulse	0.30	3
2	Ge		74,301.83	0.29	87.4	Pulse	0.30	3
2	Rh		1,216,673.42	0.82	85.0	Pulse	0.30	3
2	In		416,907.74	0.66	86.1	Pulse	0.30	3
2	Tb		1,357,969.94	0.94	87.0	Pulse	0.30	3
2	Ho		134,240.51	1.70	87.4	Pulse	0.30	3
2	Bi		855,350.82	0.63	87.9	Pulse	0.30	3
3	Sc		76,246.41	1.84	92.3	Pulse	0.30	3
3	Ge		35,736.63	1.11	91.8	Pulse	0.30	3
3	Rh		242,169.86	0.51	85.1	Pulse	0.30	3
3	Tb		302,487.41	0.61	82.2	Pulse	0.30	3

Quantitation Report

File Name	086SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 17:09
Sample Name	mp18386-ps1
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	100.783	ug/l	1.77	182,164.87	2.054E-01	Pulse	0.25	3
B			1	217.060	ug/l	1.61	409,038.48	4.613E-01	Pulse	0.15	3
Ca			1	42410.555	ug/l	3.30	14,439,095.62	6.617E+00	Analog	0.10	3
Sr			1	379.944	ug/l	3.62	6,299,479.91	2.360E+00	Analog	0.10	3
Mo			1	83.706	ug/l	0.93	269,674.36	1.009E-01	Pulse	0.10	3
Ag			1	74.954	ug/l	0.30	618,456.32	2.341E-01	Pulse	0.10	3
Sn			1	82.325	ug/l	1.81	397,854.16	1.506E-01	Pulse	0.10	3
Sb			1	77.483	ug/l	6.37	461,150.70	1.107E-01	Pulse	0.10	3
Ba			1	80.844	ug/l	5.28	202,630.51	4.863E-02	Pulse	0.10	3
Tl			1	80.645	ug/l	0.37	1,019,143.66	5.156E-01	Pulse	0.10	3
Pb			1	78.856	ug/l	0.47	346,824.88	1.755E-01	Pulse	0.10	3
Pb			1	78.686	ug/l	1.16	299,585.54	1.516E-01	Pulse	0.10	3
Pb			1	78.504	ug/l	0.63	1,376,970.51	6.968E-01	Pulse	0.10	3
Na			2	26486.198	ug/l	1.05	9,060,502.70	1.081E+02	Analog	0.30	3
Mg			2	8555.662	ug/l	1.22	1,382,518.52	1.649E+01	Pulse	0.30	3
Al			2	3720.845	ug/l	0.67	225,969.59	2.695E+00	Pulse	0.30	3
K			2	10178.216	ug/l	1.27	1,169,657.63	1.395E+01	Pulse	0.30	3
Ca			2	38745.924	ug/l	1.43	250,999.47	2.994E+00	Pulse	0.30	3
Ti			2	77.985	ug/l	2.86	3,749.44	4.472E-02	Pulse	0.30	3
V			2	81.045	ug/l	0.99	123,692.53	1.475E+00	Pulse	0.30	3
Cr			2	80.312	ug/l	1.04	157,871.32	1.883E+00	Pulse	0.30	3
Mn			2	99.948	ug/l	0.80	111,555.85	1.330E+00	Pulse	0.30	3
Fe			2	5047.202	ug/l	1.18	8,233,754.67	9.820E+01	Analog	0.30	3
Co			2	78.242	ug/l	0.39	247,745.25	2.955E+00	Pulse	0.30	3
Ni			2	81.314	ug/l	0.67	68,702.54	8.194E-01	Pulse	0.30	3
Cu			2	82.939	ug/l	0.24	187,237.26	2.233E+00	Pulse	0.30	3
Zn			2	96.159	ug/l	1.55	34,768.48	4.147E-01	Pulse	0.30	3
As			2	115.522	ug/l	0.88	19,363.32	2.309E-01	Pulse	1.00	3
Cd			2	83.582	ug/l	2.40	39,223.70	1.058E-01	Pulse	0.30	3
Sn			2	84.595	ug/l	0.69	71,907.60	1.940E-01	Pulse	0.30	3
Se			3	511.250	ug/l	3.11	11,445.53	3.379E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		886,941.17	3.59	56.0	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,183,303.35	2.86	79.0	Pulse	0.10	3
1	Ge		566,050.19	4.27	84.9	Pulse	0.10	3
1	Rh		2,672,235.12	4.41	83.0	Pulse	0.10	3
1	In		2,641,446.36	3.79	88.5	Pulse	0.10	3
1	Tb		4,169,957.85	2.36	98.2	Analog	0.10	3
1	Ho		352,947.20	3.30	93.9	Pulse	0.10	3
1	Bi		1,976,651.69	4.64	87.9	Pulse	0.10	3
2	Sc		83,844.94	0.33	74.2	Pulse	0.30	3
2	Ge		67,462.06	0.43	79.3	Pulse	0.30	3
2	Rh		1,105,096.52	0.58	77.2	Pulse	0.30	3
2	In		370,624.98	0.43	76.5	Pulse	0.30	3
2	Tb		1,284,351.31	0.82	82.3	Pulse	0.30	3
2	Ho		129,483.16	1.12	84.3	Pulse	0.30	3
2	Bi		780,424.76	0.59	80.2	Pulse	0.30	3
3	Sc		71,279.00	0.24	86.3	Pulse	0.30	3
3	Ge		33,870.92	0.79	87.1	Pulse	0.30	3
3	Rh		225,340.24	0.88	79.1	Pulse	0.30	3
3	Tb		292,914.83	0.73	79.6	Pulse	0.30	3

Quantitation Report

File Name	087SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 17:14
Sample Name	mp18391a-mb1 4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	-71.18	20.00	2.139E-05	Pulse	0.25	3
B			1	7.970	ug/l	2.82	23,132.69	2.471E-02	Pulse	0.15	3
Ca			1	47.114	ug/l	0.92	28,800.65	1.295E-02	Pulse	0.10	3
Sr			1	0.110	ug/l	15.15	2,640.37	9.256E-04	Pulse	0.10	3
Mo			1	0.035	ug/l	65.03	543.37	1.905E-04	Pulse	0.10	3
Ag			1	-0.001	ug/l	-288.88	223.34	8.136E-05	Pulse	0.10	3
Sn			1	0.346	ug/l	8.07	3,403.90	1.241E-03	Pulse	0.10	3
Sb			1	0.367	ug/l	4.32	846.73	1.977E-04	Pulse	0.10	3
Ba			1	0.390	ug/l	5.92	160.01	3.735E-05	Pulse	0.10	3
Tl			1	0.003	ug/l	137.36	680.05	3.340E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	108.24	313.35	1.530E-04	Pulse	0.10	3
Pb			1	0.022	ug/l	84.67	286.68	1.402E-04	Pulse	0.10	3
Pb			1	0.021	ug/l	39.57	1,353.42	6.623E-04	Pulse	0.10	3
Na			2	69.994	ug/l	2.50	40,785.34	4.793E-01	Pulse	0.30	3
Mg			2	4.271	ug/l	13.03	895.60	1.053E-02	Pulse	0.30	3
Al			2	51.664	ug/l	2.86	3,349.33	3.936E-02	Pulse	0.30	3
K			2	5.387	ug/l	14.98	4,510.78	5.298E-02	Pulse	0.30	3
Ca			2	55.738	ug/l	13.11	432.23	5.072E-03	Pulse	0.30	3
Ti			2	0.244	ug/l	57.88	14.45	1.693E-04	Pulse	0.30	3
V			2	0.470	ug/l	18.02	918.93	1.080E-02	Pulse	0.30	3
Cr			2	0.492	ug/l	8.61	1,410.09	1.658E-02	Pulse	0.30	3
Mn			2	0.248	ug/l	2.57	317.79	3.734E-03	Pulse	0.30	3
Fe			2	4.705	ug/l	3.69	12,592.53	1.479E-01	Pulse	0.30	3
Co			2	0.004	ug/l	212.24	59.97	7.074E-04	Pulse	0.30	3
Ni			2	0.044	ug/l	47.57	123.34	1.447E-03	Pulse	0.30	3
Cu			2	0.137	ug/l	20.16	1,124.50	1.322E-02	Pulse	0.30	3
Zn			2	4.685	ug/l	6.64	1,977.95	2.323E-02	Pulse	0.30	3
As			2	0.119	ug/l	32.29	31.67	3.717E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.092	ug/l	7.40	9.85	2.557E-05	Pulse	0.30	3
Sn			2	0.482	ug/l	7.61	625.58	1.623E-03	Pulse	0.30	3
Se			3	-0.085	ug/l	-485.28	28.67	8.066E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		936,285.91	1.55	59.1	Pulse	0.10	3
1	Sc		2,223,575.65	3.05	80.4	Pulse	0.10	3
1	Ge		571,821.55	2.89	85.8	Pulse	0.10	3
1	Rh		2,856,510.17	2.81	88.7	Pulse	0.10	3
1	In		2,743,478.83	3.15	91.9	Pulse	0.10	3
1	Tb		4,281,712.75	0.28	100.8	Analog	0.10	3
1	Ho		359,383.99	4.04	95.6	Pulse	0.10	3
1	Bi		2,038,343.98	3.29	90.6	Pulse	0.10	3
2	Sc		85,113.81	1.67	75.3	Pulse	0.30	3
2	Ge		69,038.95	1.52	81.2	Pulse	0.30	3
2	Rh		1,169,684.33	0.19	81.7	Pulse	0.30	3
2	In		385,410.53	0.35	79.5	Pulse	0.30	3
2	Tb		1,311,968.21	0.73	84.1	Pulse	0.30	3
2	Ho		129,164.48	0.29	84.1	Pulse	0.30	3
2	Bi		807,886.53	0.84	83.1	Pulse	0.30	3
3	Sc		73,610.15	0.80	89.1	Pulse	0.30	3
3	Ge		35,492.71	1.26	91.2	Pulse	0.30	3
3	Rh		239,144.13	0.42	84.0	Pulse	0.30	3
3	Tb		298,510.74	0.93	81.2	Pulse	0.30	3

Quantitation Report

File Name	088SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 17:19
Sample Name	mp18391a-b2
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	98.054	ug/l	0.45	176,110.91	1.999E-01	Pulse	0.25	3
B			1	101.961	ug/l	3.90	194,591.77	2.210E-01	Pulse	0.15	3
Ca			1	4002.726	ug/l	0.50	1,370,409.20	6.296E-01	Pulse	0.10	3
Sr			1	77.191	ug/l	1.35	1,320,529.93	4.796E-01	Pulse	0.10	3
Mo			1	77.606	ug/l	0.75	257,616.92	9.358E-02	Pulse	0.10	3
Ag			1	73.769	ug/l	1.61	620,807.63	2.304E-01	Pulse	0.10	3
Sn			1	76.191	ug/l	0.26	375,620.02	1.394E-01	Pulse	0.10	3
Sb			1	73.910	ug/l	4.61	440,615.63	1.056E-01	Pulse	0.10	3
Ba			1	66.473	ug/l	3.59	166,759.02	3.995E-02	Pulse	0.10	3
Tl			1	74.545	ug/l	0.80	970,208.58	4.766E-01	Pulse	0.10	3
Pb			1	77.294	ug/l	1.19	350,044.08	1.720E-01	Pulse	0.10	3
Pb			1	77.356	ug/l	0.81	303,420.93	1.491E-01	Pulse	0.10	3
Pb			1	77.220	ug/l	0.68	1,394,967.45	6.854E-01	Pulse	0.10	3
Na			2	4065.162	ug/l	0.80	1,399,798.73	1.675E+01	Pulse	0.30	3
Mg			2	3997.439	ug/l	0.80	643,937.94	7.706E+00	Pulse	0.30	3
Al			2	3695.470	ug/l	1.36	223,677.35	2.677E+00	Pulse	0.30	3
K			2	3891.851	ug/l	1.29	448,113.99	5.362E+00	Pulse	0.30	3
Ca			2	4355.901	ug/l	0.97	28,181.99	3.372E-01	Pulse	0.30	3
Ti			2	73.553	ug/l	5.20	3,522.71	4.218E-02	Pulse	0.30	3
V			2	78.025	ug/l	1.36	118,691.74	1.420E+00	Pulse	0.30	3
Cr			2	77.108	ug/l	2.16	151,069.25	1.808E+00	Pulse	0.30	3
Mn			2	73.660	ug/l	2.07	81,939.95	9.807E-01	Pulse	0.30	3
Fe			2	4295.901	ug/l	1.30	6,985,390.56	8.359E+01	Analog	0.30	3
Co			2	76.854	ug/l	1.63	242,526.28	2.902E+00	Pulse	0.30	3
Ni			2	75.803	ug/l	1.30	63,838.34	7.639E-01	Pulse	0.30	3
Cu			2	75.578	ug/l	1.06	170,124.70	2.036E+00	Pulse	0.30	3
Zn			2	92.001	ug/l	1.40	33,172.36	3.969E-01	Pulse	0.30	3
As			2	85.666	ug/l	2.44	14,312.50	1.713E-01	Pulse	1.00	3
Cd			2	81.047	ug/l	1.05	38,847.03	1.026E-01	Pulse	0.30	3
Sn			2	78.973	ug/l	1.47	68,576.10	1.812E-01	Pulse	0.30	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Se			3	499.535	ug/l	5.03	11,306.07	3.302E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		881,135.87	2.48	55.7	Pulse	0.10	3
1	Sc		2,176,606.95	2.56	78.7	Pulse	0.10	3
1	Ge		567,283.10	3.88	85.1	Pulse	0.10	3
1	Rh		2,752,496.63	3.17	85.5	Pulse	0.10	3
1	In		2,694,984.94	4.31	90.3	Pulse	0.10	3
1	Tb		4,175,403.17	1.25	98.3	Analog	0.10	3
1	Ho		353,583.61	3.93	94.1	Pulse	0.10	3
1	Bi		2,035,770.33	4.80	90.5	Pulse	0.10	3
2	Sc		83,576.88	1.90	74.0	Pulse	0.30	3
2	Ge		66,984.37	1.73	78.8	Pulse	0.30	3
2	Rh		1,132,128.05	0.71	79.1	Pulse	0.30	3
2	In		378,597.67	1.89	78.1	Pulse	0.30	3
2	Tb		1,293,712.31	0.78	82.9	Pulse	0.30	3
2	Ho		127,861.49	1.35	83.2	Pulse	0.30	3
2	Bi		805,686.91	0.19	82.8	Pulse	0.30	3
3	Sc		71,007.85	1.31	86.0	Pulse	0.30	3
3	Ge		34,247.37	0.45	88.0	Pulse	0.30	3
3	Rh		229,210.38	1.39	80.5	Pulse	0.30	3
3	Tb		289,633.86	1.11	78.7	Pulse	0.30	3

Quantitation Report

File Name	089SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 17:24
Sample Name	mp18391a-s3
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	94.878	ug/l	1.10	163,006.59	1.934E-01	Pulse	0.25	3
B			1	293.073	ug/l	0.93	522,567.10	6.200E-01	Pulse	0.15	3
Ca			1	32685.092	ug/l	3.19	11,132,216.50	5.101E+00	Analog	0.10	3
Sr			1	293.648	ug/l	4.62	4,664,580.66	1.824E+00	Analog	0.10	3
Mo			1	81.420	ug/l	0.63	251,302.00	9.817E-02	Pulse	0.10	3
Ag			1	70.152	ug/l	0.20	559,453.05	2.191E-01	Pulse	0.10	3
Sn			1	77.146	ug/l	0.80	360,237.47	1.411E-01	Pulse	0.10	3
Sb			1	71.698	ug/l	2.88	415,811.05	1.024E-01	Pulse	0.10	3
Ba			1	118.293	ug/l	4.36	289,313.37	7.125E-02	Pulse	0.10	3
Tl			1	75.627	ug/l	0.78	901,802.64	4.835E-01	Pulse	0.10	3
Pb			1	77.952	ug/l	0.84	323,515.64	1.735E-01	Pulse	0.10	3
Pb			1	77.936	ug/l	1.33	280,066.66	1.502E-01	Pulse	0.10	3
Pb			1	77.893	ug/l	1.11	1,289,220.33	6.913E-01	Pulse	0.10	3
Na			2	143686.708	ug/l	0.82	48,043,141.42	5.854E+02	Analog	0.30	3
Mg			2	14902.406	ug/l	0.68	2,356,926.23	2.872E+01	Pulse	0.30	3
Al			2	3671.471	ug/l	0.70	218,244.62	2.659E+00	Pulse	0.30	3
K			2	9169.792	ug/l	0.53	1,031,815.27	1.257E+01	Pulse	0.30	3
Ca			2	30573.743	ug/l	1.33	193,871.55	2.362E+00	Pulse	0.30	3
Ti			2	78.177	ug/l	2.24	3,678.32	4.483E-02	Pulse	0.30	3
V			2	78.251	ug/l	0.49	116,912.43	1.425E+00	Pulse	0.30	3
Cr			2	75.493	ug/l	0.41	145,288.28	1.770E+00	Pulse	0.30	3
Mn			2	292.228	ug/l	0.33	319,203.43	3.889E+00	Pulse	0.30	3
Fe			2	5073.041	ug/l	1.10	8,101,322.18	9.871E+01	Analog	0.30	3
Co			2	72.814	ug/l	0.73	225,669.15	2.750E+00	Pulse	0.30	3
Ni			2	74.878	ug/l	1.54	61,927.26	7.546E-01	Pulse	0.30	3
Cu			2	72.169	ug/l	0.87	159,564.25	1.944E+00	Pulse	0.30	3
Zn			2	78.505	ug/l	2.22	27,828.33	3.391E-01	Pulse	0.30	3
As			2	170.934	ug/l	1.12	28,039.25	3.417E-01	Pulse	1.00	3
Cd			2	74.861	ug/l	0.95	34,280.97	9.478E-02	Pulse	0.30	3
Sn			2	80.157	ug/l	1.02	66,499.92	1.839E-01	Pulse	0.30	3
Se			3	352.284	ug/l	3.93	7,472.76	2.331E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		842,696.16	1.92	53.2	Pulse	0.10	3

Quantitation Report

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Sc		2,183,599.14	3.02	79.0	Pulse	0.10	3
1	Ge		547,178.61	3.68	82.1	Pulse	0.10	3
1	Rh		2,560,039.39	3.90	79.5	Pulse	0.10	3
1	In		2,552,918.05	3.47	85.5	Pulse	0.10	3
1	Tb		4,061,003.48	0.67	95.6	Analog	0.10	3
1	Ho		343,356.84	3.76	91.3	Pulse	0.10	3
1	Bi		1,865,429.40	4.93	82.9	Pulse	0.10	3
2	Sc		82,070.44	1.35	72.6	Pulse	0.30	3
2	Ge		65,020.42	2.15	76.5	Pulse	0.30	3
2	Rh		1,058,052.80	0.19	73.9	Pulse	0.30	3
2	In		361,707.71	1.37	74.7	Pulse	0.30	3
2	Tb		1,267,213.77	0.41	81.2	Pulse	0.30	3
2	Ho		124,998.14	0.87	81.4	Pulse	0.30	3
2	Bi		735,719.99	0.67	75.6	Pulse	0.30	3
3	Sc		70,340.06	1.22	85.2	Pulse	0.30	3
3	Ge		32,067.78	1.45	82.4	Pulse	0.30	3
3	Rh		215,768.36	0.83	75.8	Pulse	0.30	3
3	Tb		293,059.45	1.30	79.7	Pulse	0.30	3

Quantitation Report

File Name	090_CCV.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 17:28
Sample Name	CCVA
Sample Type	CCV
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	58.890	ug/l	1.23	254,455.25	2.401E-01	Pulse	0.25	3
B			1	123.487	ug/l	1.01	555,149.81	5.238E-01	Pulse	0.15	3
Ca			1	5279.141	ug/l	7.55	4,107,896.81	1.652E+00	Mix	0.10	3
Sr			1	52.693	ug/l	0.89	1,922,435.65	6.547E-01	Pulse	0.10	3
Mo			1	52.083	ug/l	1.13	368,672.81	1.256E-01	Pulse	0.10	3
Ag			1	49.767	ug/l	1.05	876,969.85	3.109E-01	Pulse	0.10	3
Sn			1	51.041	ug/l	0.77	526,231.62	1.865E-01	Pulse	0.10	3
Sb			1	48.806	ug/l	5.56	596,568.28	1.395E-01	Pulse	0.10	3
Ba			1	46.141	ug/l	5.92	237,462.32	5.554E-02	Pulse	0.10	3
Tl			1	52.580	ug/l	0.96	1,372,046.25	6.723E-01	Pulse	0.10	3
Pb			1	52.104	ug/l	0.66	473,259.89	2.319E-01	Pulse	0.10	3
Pb			1	51.581	ug/l	1.01	405,607.18	1.987E-01	Pulse	0.10	3
Pb			1	51.702	ug/l	0.57	1,872,971.22	9.176E-01	Pulse	0.10	3
Na			2	5008.220	ug/l	0.69	3,891,983.87	4.099E+01	Pulse	0.30	3
Mg			2	5030.278	ug/l	0.83	1,841,156.32	1.939E+01	Pulse	0.30	3
Al			2	4788.988	ug/l	1.71	658,487.86	6.935E+00	Pulse	0.30	3
K			2	4996.154	ug/l	1.01	1,300,543.87	1.370E+01	Pulse	0.30	3
Ca			2	5421.116	ug/l	0.78	79,602.69	8.383E-01	Pulse	0.30	3
Ti			2	50.663	ug/l	1.90	5,516.72	5.809E-02	Pulse	0.30	3
V			2	52.247	ug/l	1.69	180,555.92	1.901E+00	Pulse	0.30	3
Cr			2	51.679	ug/l	0.81	229,955.52	2.422E+00	Pulse	0.30	3
Mn			2	49.965	ug/l	0.12	126,319.23	1.330E+00	Pulse	0.30	3
Fe			2	5422.825	ug/l	2.42	20,030,804.20	2.110E+02	Analog	0.30	3
Co			2	51.040	ug/l	0.46	366,045.32	3.855E+00	Pulse	0.30	3
Ni			2	50.058	ug/l	0.84	95,776.64	1.009E+00	Pulse	0.30	3
Cu			2	49.918	ug/l	1.11	255,057.62	2.686E+00	Pulse	0.30	3
Zn			2	50.609	ug/l	1.10	41,432.41	4.363E-01	Pulse	0.30	3
As			2	52.416	ug/l	0.42	19,902.10	2.096E-01	Pulse	1.00	3
Cd			2	50.987	ug/l	1.03	53,503.52	1.291E-01	Pulse	0.30	3
Sn			2	52.275	ug/l	1.38	99,288.61	2.397E-01	Pulse	0.30	3
Se			3	208.374	ug/l	4.91	9,956.35	2.756E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		1,060,076.74	3.26	67.0	Pulse	0.10	3
1	Sc		2,486,770.38	2.53	89.9	Pulse	0.10	3
1	Ge		621,150.30	4.04	93.2	Pulse	0.10	3

Quantitation Report

1	Rh		2,936,940.27	4.37	91.2	Pulse	0.10	3
1	In		2,821,502.86	4.52	94.5	Pulse	0.10	3
1	Tb		4,276,983.79	0.87	100.7	Analog	0.10	3
1	Ho		362,517.52	4.50	96.4	Pulse	0.10	3
1	Bi		2,041,577.89	5.44	90.7	Pulse	0.10	3
2	Sc		94,957.99	0.74	84.0	Pulse	0.30	3
2	Ge		74,718.53	1.18	87.9	Pulse	0.30	3
2	Rh		1,228,320.64	0.72	85.8	Pulse	0.30	3
2	In		414,309.74	0.71	85.5	Pulse	0.30	3
2	Tb		1,387,964.39	0.22	89.0	Pulse	0.30	3
2	Ho		136,702.58	0.04	89.0	Pulse	0.30	3
2	Bi		842,089.22	0.34	86.6	Pulse	0.30	3
3	Sc		76,060.77	1.29	92.1	Pulse	0.30	3
3	Ge		36,126.64	0.10	92.8	Pulse	0.30	3
3	Rh		240,385.76	1.16	84.4	Pulse	0.30	3
3	Tb		305,921.35	0.87	83.2	Pulse	0.30	3

Quantitation Report

File Name	091_CCB.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 17:33
Sample Name	CCB
Sample Type	CCB
Comment	
Prep Dilution	1.000
Auto Dilution	N/A
Total Dilution	1.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	310.14	33.33	3.692E-05	Pulse	0.25	3
B			1	4.870	ug/l	35.26	26,195.92	2.840E-02	Pulse	0.15	3
Ca			1	1.635	ug/l	338.84	12,365.93	6.116E-03	Pulse	0.10	3
Sr			1	0.006	ug/l	176.77	793.39	3.136E-04	Pulse	0.10	3
Mo			1	0.009	ug/l	419.01	416.69	1.697E-04	Pulse	0.10	3
Ag			1	0.002	ug/l	201.50	243.35	9.573E-05	Pulse	0.10	3
Sn			1	0.008	ug/l	709.47	1,570.15	6.396E-04	Pulse	0.10	3
Sb			1	0.247	ug/l	13.34	1,276.78	3.786E-04	Pulse	0.10	3
Ba			1	0.183	ug/l	4.06	76.67	2.326E-05	Pulse	0.10	3
Tl			1	0.009	ug/l	108.22	740.05	4.333E-04	Pulse	0.10	3
Pb			1	0.009	ug/l	125.16	270.01	1.582E-04	Pulse	0.10	3
Pb			1	0.015	ug/l	39.59	273.35	1.563E-04	Pulse	0.10	3
Pb			1	0.006	ug/l	127.93	1,006.72	5.845E-04	Pulse	0.10	3
Na			2	16.389	ug/l	3.25	29,970.65	3.277E-01	Pulse	0.30	3
Mg			2	0.241	ug/l	89.93	295.56	3.234E-03	Pulse	0.30	3
Al			2	-0.294	ug/l	-32.97	141.11	1.544E-03	Pulse	0.30	3
K			2	1.504	ug/l	28.43	4,548.59	4.973E-02	Pulse	0.30	3
Ca			2	1.093	ug/l	83.21	85.56	9.356E-04	Pulse	0.30	3
Ti			2	0.006	ug/l	512.06	3.33	3.661E-05	Pulse	0.30	3
V			2	0.021	ug/l	58.50	275.56	3.015E-03	Pulse	0.30	3
Cr			2	0.020	ug/l	39.32	552.24	6.040E-03	Pulse	0.30	3
Mn			2	0.027	ug/l	19.37	104.45	1.141E-03	Pulse	0.30	3
Fe			2	0.528	ug/l	8.10	7,041.88	7.699E-02	Pulse	0.30	3
Co			2	-0.002	ug/l	-82.97	38.87	4.257E-04	Pulse	0.30	3
Ni			2	0.003	ug/l	130.95	97.78	1.069E-03	Pulse	0.30	3
Cu			2	-0.067	ug/l	-15.46	542.24	5.931E-03	Pulse	0.30	3
Zn			2	-0.098	ug/l	-42.54	214.45	2.345E-03	Pulse	0.30	3
As			2	0.009	ug/l	158.79	15.33	1.679E-04	Pulse	1.00	3

Quantitation Report

Element	Mass	ISTD	Tune	Conc	Units	RSD(%)	CPS	Ratio	Det	Time(sec)	Rep
Cd			2	0.056	ug/l	19.81	20.93	5.145E-05	Pulse	0.30	3
Sn			2	0.035	ug/l	23.92	276.67	6.819E-04	Pulse	0.30	3
Se			3	0.017	ug/l	2127.74	30.67	8.855E-04	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		954,646.73	20.14	60.3	Pulse	0.10	3
1	Sc		2,124,361.27	25.79	76.8	Pulse	0.10	3
1	Ge		525,570.85	21.39	78.9	Pulse	0.10	3
1	Rh		2,768,497.93	32.86	86.0	Mix	0.10	3
1	In		2,642,224.54	34.66	88.5	Mix	0.10	3
1	Tb		3,557,632.39	32.38	83.7	Mix	0.10	3
1	Ho		306,402.19	24.92	81.5	Pulse	0.10	3
1	Bi		1,788,010.02	22.75	79.5	Pulse	0.10	3
2	Sc		91,468.05	0.88	80.9	Pulse	0.30	3
2	Ge		72,617.05	1.58	85.4	Pulse	0.30	3
2	Rh		1,212,978.32	1.06	84.7	Pulse	0.30	3
2	In		405,831.25	0.77	83.8	Pulse	0.30	3
2	Tb		1,333,119.04	0.13	85.4	Pulse	0.30	3
2	Ho		130,315.71	0.76	84.8	Pulse	0.30	3
2	Bi		823,977.83	1.34	84.7	Pulse	0.30	3
3	Sc		75,188.52	1.74	91.0	Pulse	0.30	3
3	Ge		34,907.88	2.30	89.7	Pulse	0.30	3
3	Rh		243,155.68	0.96	85.4	Pulse	0.30	3
3	Tb		297,006.08	0.65	80.7	Pulse	0.30	3

Quantitation Report

File Name	092SMPL.d
File Path	C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Method File	
Method Path	
Acq Time	11/15/2019 17:38
Sample Name	mp18391a-s4
Sample Type	Sample
Comment	
Prep Dilution	2.000
Auto Dilution	N/A
Total Dilution	2.000
Operator Name	Metals
Acq Mode	Spectrum
Cal Title	
Cal Type	External Calibration
Last Calib	11/15/2019 14:30
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	94.712	ug/l	2.18	166,129.60	1.931E-01	Pulse	0.25	3
B			1	284.328	ug/l	1.77	517,852.44	6.018E-01	Pulse	0.15	3
Ca			1	32495.826	ug/l	3.03	10,821,074.84	5.072E+00	Analog	0.10	3
Sr			1	293.211	ug/l	4.38	4,629,482.64	1.821E+00	Analog	0.10	3
Mo			1	82.218	ug/l	0.42	252,258.65	9.913E-02	Pulse	0.10	3
Ag			1	70.299	ug/l	0.59	554,076.62	2.196E-01	Pulse	0.10	3
Sn			1	78.399	ug/l	0.91	361,844.71	1.434E-01	Pulse	0.10	3
Sb			1	71.011	ug/l	6.14	411,968.09	1.014E-01	Pulse	0.10	3
Ba			1	116.077	ug/l	6.08	283,995.81	6.991E-02	Pulse	0.10	3
Tl			1	76.566	ug/l	0.89	902,964.60	4.895E-01	Pulse	0.10	3
Pb			1	79.248	ug/l	1.39	325,336.65	1.764E-01	Pulse	0.10	3
Pb			1	79.005	ug/l	1.22	280,850.89	1.522E-01	Pulse	0.10	3
Pb			1	79.328	ug/l	0.74	1,298,789.07	7.041E-01	Pulse	0.10	3
Na			2	140234.418	ug/l	1.09	47,317,021.45	5.713E+02	Analog	0.30	3
Mg			2	14687.189	ug/l	1.08	2,344,230.46	2.831E+01	Pulse	0.30	3
Al			2	3645.319	ug/l	0.65	218,688.41	2.640E+00	Pulse	0.30	3
K			2	9016.547	ug/l	0.82	1,023,958.67	1.236E+01	Pulse	0.30	3
Ca			2	30296.205	ug/l	1.87	193,876.89	2.341E+00	Pulse	0.30	3
Ti			2	75.863	ug/l	4.36	3,602.73	4.350E-02	Pulse	0.30	3
V			2	79.829	ug/l	0.43	120,356.79	1.453E+00	Pulse	0.30	3
Cr			2	76.032	ug/l	1.30	147,653.06	1.783E+00	Pulse	0.30	3
Mn			2	289.564	ug/l	1.29	319,171.22	3.854E+00	Pulse	0.30	3
Fe			2	5011.464	ug/l	2.07	8,075,311.34	9.751E+01	Analog	0.30	3
Co			2	73.450	ug/l	1.35	229,731.81	2.774E+00	Pulse	0.30	3
Ni			2	75.256	ug/l	0.75	62,815.48	7.584E-01	Pulse	0.30	3
Cu			2	72.560	ug/l	0.43	161,907.73	1.955E+00	Pulse	0.30	3
Zn			2	79.828	ug/l	1.61	28,556.45	3.448E-01	Pulse	0.30	3
As			2	169.567	ug/l	1.50	28,069.31	3.389E-01	Pulse	1.00	3
Cd			2	76.634	ug/l	1.52	35,311.06	9.703E-02	Pulse	0.30	3
Sn			2	79.231	ug/l	1.26	66,131.26	1.817E-01	Pulse	0.30	3
Se			3	353.411	ug/l	4.85	7,508.13	2.338E-01	Pulse	0.50	3

ISTD Table

Tune	Element	Mass	CPS	RSD(%)	ISTD Recovery%	Det	Time(sec)	Rep
1	Li		860,857.24	3.65	54.4	Pulse	0.10	3

Current Signal

[1]

Mass	Range	Count	Avg. Count	RSD [%]
7	5000	2342	2284.7	3.10
59	5000	3244	3380.7	2.84
89	10000	4986	5055.2	2.75
140	5000	4600	4610.5	2.56
205	5000	2780	2727.6	2.96
156/140	2	1.087 %	1.100 %	15.19
70/140	100	3.892 %	13.173 %	117.01
9	20	3	3.2	67.21
11	500	208	187.9	9.60
88	100	52	50.4	13.03
95	20	9	8.5	35.04
107	20	7	5.1	52.48
121	100	58	52.3	18.16
137	100	32	34.5	15.88
208	100	58	53.0	14.44
Integration Time [sec]		0.10		

Plasma Parameters

RF Power	1500	W	Nebulizer Pump	0.10	rps
RF Matching	1.65	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	-38	V
Extract 2	-150.0	V	Cell Exit	-60	V
Omega Bias	-75	V	Deflect	15.6	V
Omega Lens	10.0	V	Plate Bias	-50	V

Cell Parameters

Use Gas	false		OctP Bias	-8.0	V
He Flow	0.0	mL/min	OctP RF	150	V
H2 Flow	0.0	mL/min	Energy Discrimination	5.0	V
3rd Gas Flow	0	%			

Meters

IF/BK Press	2.61E+2	Pa	TMP Revolution	100.0	%
Analyzer Press	1.00E-4	Pa	Reflected Power	2	W
Forward Power	1498	W			

US EPA Tune Check Sample Report

Batch Folder C:\Agilent\ICPMH\1\DATA\.b111519m1.b
Report Comment
Instrument Name G3281A JP12412081

[1]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	77400	0.50	5.00	
24	339359	0.52	5.00	
25	45316	0.86	5.00	
26	52364	1.12	5.00	
59	442039	1.35	5.00	
115	488705	0.91	5.00	
206	103314	1.05	5.00	
207	91829	0.67	5.00	
208	220305	1.14	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	76980	77111	77296	77773	77841
24	336945	339137	338797	340207	341707
25	44704	45433	45764	45443	45234
26	51347	52842	52628	52451	52553
59	432483	440043	444605	447049	446014
115	483955	485871	491684	494836	487180
206	101479	103722	103735	104326	103307
207	90940	91708	92477	92332	91690
208	217463	220146	221695	223737	218483

Integration Time [sec] = 0.1

Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	13350	9.05	8.9 - 9.1		0.724	0.900	
24	56246	24.00	23.9 - 24.1		0.767	0.900	
25	7477	25.00	24.9 - 25.1		0.759	0.900	
26	8653	26.00	25.9 - 26.1		0.767	0.900	
59	76893	59.00	58.9 - 59.1		0.739	0.900	
115	98740	115.05	114.9 - 115.1		0.684	0.900	
206	21589	206.05	205.9 - 206.1		0.719	0.900	
207	19156	207.00	206.9 - 207.1		0.700	0.900	
208	46603	208.05	207.9 - 208.1		0.704	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	1.65	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	10.0	V			
Extract 2	-150.0	V	Cell Entrance	-38	V			
Omega Bias	-75	V	Cell Exit	-60	V			
Deflect	15.6	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	150	V			
Energy Discrimination	5.0	V						

SGS North America Inc.

Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP18386	11/14/2019	11:25	11/14/2019	16:55	JC98286-1	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	8	4156601	95	0	95
1	End	8	4156601	94	0	94
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-74	1904119	

Sample ID	Bottle Number	Pres (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP18386-MB1	N/A	N	50	50	AB		
MP18386-B1	N/A	N	50	50	AB	ABCDE	
MP18386-S1	1	Y	50	50	AB	ABCDE	
MP18386-S2	1	Y	50	50	AB	ABCDE	
MP18386-SD1	1	Y	50	50	AB		
JC98286-1	1	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 13B REV-1	0.2
B	ACCUTEST 14B REV-1	0.2
C	MINERALS 1000PPM	0.2
D	AG 20PPM	0.2
E	SE 20PPM	0.8
F		
G		
H		
I		

Comments:

Analyst COLLEENH **Approved by** Wendyz **Approved on** 11/15/2019

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

Document Control #: NJ-MET-PREP-AQ-01 (2456468.4378704432) Validated by: Validated on:

SGS

Metals Digestion Reagents Information Log

Digestion Batch ID: MP 18386 **Date:** 11/14/2019

Matrix: ALL

Standard/Reagent Type	Exp. Date	Standard/Reagent ID
Spiking Solution - (ACCUTEST-13A REV1)	4/28/2020	MP-015-1240
Spiking Solution - (ACCUTEST-14A REV1)	4/28/2020	MP-015-1241
Spiking Solution - 5000 mg/l Minerals	10/24/2020	P2-MEB684097 MFG: INO. VENT.
Spiking Solution - Sulfur 1000ppm	9/25/2021	LOT: 092518 MFG: ABS. STANDARDS
Spiking Solution - Si 1000ppm	9/24/2020	P2-SI676242 MFG: INO. VENT.
Spiking Solution - Bi 1000ppm	8/29/2020	N2-BI669548 MFG: INO. VENT.
Spiking Solution - Se 20ppm	3/30/2020	MP-015-1230
Spiking Solution - Li 1000ppm	8/23/2020	P2-LI675235 MFG: INO. VENT.
Spiking Solution- Ag 20 ppm	4/28/2020	MP-015-1248
Spiking Solution - (ACCUTEST-13B REV1)	4/28/2020	MP-015-1246
Spiking Solution - (ACCUTEST-14B REV1)	4/28/2020	MP-015-1247
Spiking Solution - 1000ppm Minerals	2/22/2020	MP-015-1213
Spiking Solution- P		
Nitric Acid	11/13/2021	LOT: 237365 MFG: J.T. BAKER
Nitric Acid (1:1)	5/8/2020	MP-018-42-335 1:1 HNO3
Hydrochloric Acid	11/11/2021	LOT:240180 MFG: BAKER
Hydrochloric Acid (1:1)	5/8/2020	MP-018-42-336 1:1 HCL
Hydrogen Peroxide	11/4/2021	LOT: 192235 MFG: FISHER
Soil Lab Control/Soil LC	10/31/2021	LOT: D101-540 MFG: ERA
Teflon Chips(For Soil MB and Blank Spike)	N/A	LOT: 24635764 MFG: SAINT-GOBAIN
Digestion Tubes	N/A	LOT: 1904119 MFG: ENV. EXPRESS
pH Paper	11/1/2021	LOT: 231018 MFG: HYDRION
Filter paper Q8	N/A	LOT: 16939084 MFG: FISHER
Filter paper 0.45µm	N/A	LOT: F9HA99962E MFG: FISHER

Spike witnessed By: SN

Validated By:

Validated On:

Metals Prep Reagent
1/17/18

7.2.1

7