Analytical Resources, Incorporated
Analytical Chemists and Consultants

14 October 2015

Craig Hutchings
Integral Consulting, Inc.
1205 West Bay Drive NW
Olympia, WA 98502

RE: Slip 1 Allocation
ARI Job: AFO5

Dear Craig:

Please find enclosed the revised report for the samples from the project referenced above.

A validatable data package has been prepared and submitted for the metals analyses as requested.

An electronic copy of these reports will remain on file with ARI. Should you have any questions regarding these results, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
markh@arilabs.com
206/695-6210

Enclosures

cc: File AFO5

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

SDG: AFO5

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
SL1-PIS-SD-01	AFO5A	15-8863	
SL1-PIS-SD-02	AFO5B	15-8864	
SL1-PIS-SD-03	AFO5C	15-8865	
SL1-PIS-SD-04	AFO5D	15-8866	
SL1-PIS-SD-05	AFO5E	15-8867	
PBS	AFO5MB	15-8867	
LCSS	AFO5MBSPK	15-8867	

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

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: Eric Larson Name: Eric Larson

Date: 10-12-15 Title: Inorganics Director

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

UNITS:ug/L

SDG: AFO5

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Aluminum	AL	ICP	IP051271	2000.0	1970.98	98.5	2000.0	1978.51	98.9	2009.93	100.5	1975.42	98.8	2010.73	100.5	1983.54	99.2
Antimony	SB	ICP	IP051271	2000.0	2136.07	106.8	2000.0	2108.09	105.4	2146.62	107.3	2131.05	106.6	2135.86	106.8	2114.85	105.7
Arsenic	AS	ICP	IP051271	2000.0	1984.76	99.2	2000.0	1962.13	98.1	1984.58	99.2	1993.08	99.7	1991.84	99.6	1983.87	99.2
Barium	BA	ICP	IP051271	1000.0	1039.98	104.0	1000.0	1047.34	104.7	1071.33	107.1	1065.90	106.6	1083.15	108.3	1070.50	107.1
Beryllium	BE	ICP	IP051271	1000.0	982.57	98.3	1000.0	961.91	96.2	979.10	97.9	974.18	97.4	980.90	98.1	963.40	96.3
Cadmium	CD	ICP	IP051271	1000.0	1036.14	103.6	1000.0	1022.02	102.2	1030.78	103.1	1030.29	103.0	1033.61	103.4	1057.25	105.7
Calcium	CA	ICP	IP051271	2000.0	2060.02	103.0	2000.0	2058.46	102.9	2085.44	104.3	2074.64	103.7	2101.70	105.1	2060.45	103.0
Chromium	CR	ICP	IP051271	1000.0	1036.81	103.7	1000.0	1037.48	103.7	1051.73	105.2	1046.79	104.7	1062.98	106.3	1041.63	104.2
Cobalt	CO	ICP	IP051271	1000.0	999.10	99.9	1000.0	982.02	98.2	999.98	100.0	998.88	99.9	1006.76	100.7	1029.21	102.9
Copper	CU	ICP	IP051271	1000.0	975.64	97.6	1000.0	961.14	96.1	978.41	97.8	970.96	97.1	977.66	97.8	1003.98	100.4
Iron	FE	ICP	IP051271	2000.0	2035.17	101.8	2000.0	2031.03	101.6	2027.53	101.4	2023.99	101.2	2050.28	102.5	2005.60	100.3
Lead	PB	ICP	IP051271	2000.0	1996.41	99.8	2000.0	1966.83	98.3	1993.75	99.7	2001.54	100.1	2008.02	100.4	2052.69	102.6
Magnesium	MG	ICP	IP051271	2000.0	1986.60	99.3	2000.0	1994.27	99.7	2020.56	101.0	2016.61	100.8	2038.29	101.9	1999.08	100.0
Manganese	MN	ICP	IP051271	1000.0	980.42	98.0	1000.0	968.58	96.9	979.72	98.0	974.84	97.5	984.20	98.4	964.05	96.4
Mercury	HG	CVA	HG051104	8.0	8.60	107.5	4.0	3.92	98.0	3.90	97.5	3.93	98.3	3.87	96.8	3.90	97.5
Molybdenum	MO	ICP	IP051271	1000.0	1020.06	102.0	1000.0	1002.52	100.3	1017.26	101.7	1015.87	101.6	1019.53	102.0	1040.71	104.1
Nickel	NI	ICP	IP051271	1000.0	1000.43	100.0	1000.0	1002.10	100.2	1019.27	101.9	1016.75	101.7	1035.70	103.6	1010.70	101.1
Potassium	K	ICP	IP051271	20000.0	19823.35	99.1	20000.0	19728.49	98.6	20043.30	100.2	19826.54	99.1	20146.16	100.7	19892.22	99.5
Selenium	SE	ICP	IP051271	2000.0	1992.27	99.6	2000.0	1971.31	98.6	1984.71	99.2	1992.97	99.6	1996.74	99.8	1974.92	98.7
Silver	AG	ICP	IP051271	1000.0	1041.93	104.2	1000.0	1024.00	102.4	1044.13	104.4	1037.36	103.7	1046.04	104.6	1040.94	104.1
Sodium	NA	ICP	IP051271	50000.0	49932.90	99.9	50000.0	49534.26	99.1	51757.31	103.5	49901.87	99.8	51620.64	103.2	49899.39	99.8
Thallium	TL	ICP	IP051271	2000.0	1984.55	99.2	2000.0	1962.96	98.1	1999.36	100.0	1997.11	99.9	2006.30	100.3	1996.09	99.8
Tin	SN	ICP	IP051271	1000.0	1046.89	104.7	1000.0	1035.64	103.6	1042.87	104.3	1046.40	104.6	1048.32	104.8	1039.88	104.0
Vanadium	V	ICP	IP051271	1000.0	1016.44	101.6	1000.0	1000.19	100.0	1018.51	101.9	1016.91	101.7	1021.01	102.1	1014.00	101.4
Zinc	ZN	ICP	IP051271	1000.0	991.42	99.1	1000.0	989.92	99.0	1002.67	100.3	1006.87	100.7	1022.71	102.3	997.62	99.8

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

FORM II (1)

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

UNITS:ug/L

SDG: AF05

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Aluminum	AL	ICP	IP051271	2000.0												
Antimony	SB	ICP	IP051271	2000.0												
Arsenic	AS	ICP	IP051271	2000.0												
Barium	BA	ICP	IP051271	1000.0												
Beryllium	BE	ICP	IP051271	1000.0												
Cadmium	CD	ICP	IP051271	1000.0												
Calcium	CA	ICP	IP051271	2000.0												
Chromium	CR	ICP	IP051271	1000.0												
Cobalt	CO	ICP	IP051271	1000.0												
Copper	CU	ICP	IP051271	1000.0												
Iron	FE	ICP	IP051271	2000.0												
Lead	PB	ICP	IP051271	2000.0												
Magnesium	MG	ICP	IP051271	2000.0												
Manganese	MN	ICP	IP051271	1000.0												
Mercury	HG	CVA	HG051104	4.0	3.94	98.5	3.93	98.3	4.31	107.8	4.08	102.0	4.01	100.3	3.93	98.3
Molybdenum	MO	ICP	IP051271	1000.0												
Nickel	NI	ICP	IP051271	1000.0												
Potassium	K	ICP	IP051271	20000.0												
Selenium	SE	ICP	IP051271	2000.0												
Silver	AG	ICP	IP051271	1000.0												
Sodium	NA	ICP	IP051271	50000.0												
Thallium	TL	ICP	IP051271	2000.0												
Tin	SN	ICP	IP051271	1000.0												
Vanadium	V	ICP	IP051271	1000.0												
Zinc	ZN	ICP	IP051271	1000.0												

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

FORM II (1)

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

UNITS:ug/L

SDG: AF05

ANALYTE	EL	M	RUN	CCVTV	CCV12	%R	CCV13	%R	CCV14	%R	CCV15	%R	CCV16	%R	CCV17	%R
Aluminum	AL	ICP	IP051271	2000.0												
Antimony	SB	ICP	IP051271	2000.0												
Arsenic	AS	ICP	IP051271	2000.0												
Barium	BA	ICP	IP051271	1000.0												
Beryllium	BE	ICP	IP051271	1000.0												
Cadmium	CD	ICP	IP051271	1000.0												
Calcium	CA	ICP	IP051271	2000.0												
Chromium	CR	ICP	IP051271	1000.0												
Cobalt	CO	ICP	IP051271	1000.0												
Copper	CU	ICP	IP051271	1000.0												
Iron	FE	ICP	IP051271	2000.0												
Lead	PB	ICP	IP051271	2000.0												
Magnesium	MG	ICP	IP051271	2000.0												
Manganese	MN	ICP	IP051271	1000.0												
Mercury	HG	CVA	HG051104	4.0	3.97	99.3										
Molybdenum	MO	ICP	IP051271	1000.0												
Nickel	NI	ICP	IP051271	1000.0												
Potassium	K	ICP	IP051271	20000.0												
Selenium	SE	ICP	IP051271	2000.0												
Silver	AG	ICP	IP051271	1000.0												
Sodium	NA	ICP	IP051271	50000.0												
Thallium	TL	ICP	IP051271	2000.0												
Tin	SN	ICP	IP051271	1000.0												
Vanadium	V	ICP	IP051271	1000.0												
Zinc	ZN	ICP	IP051271	1000.0												

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

FORM II (1)

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

UNITS:ug/L

SDG: AF05

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Aluminum	AL	ICP	IP051271	50.0	48.57	97.1										
Antimony	SB	ICP	IP051271	50.0	53.24	106.5										
Arsenic	AS	ICP	IP051271	50.0	48.38	96.8										
Barium	BA	ICP	IP051271	3.0	3.70	123.3										
Beryllium	BE	ICP	IP051271	1.0	1.12	112.0										
Cadmium	CD	ICP	IP051271	2.0	2.10	105.0										
Calcium	CA	ICP	IP051271	50.0	51.13	102.3										
Chromium	CR	ICP	IP051271	5.0	6.33	126.6										
Cobalt	CO	ICP	IP051271	3.0	3.30	110.0										
Copper	CU	ICP	IP051271	2.0	2.06	103.0										
Iron	FE	ICP	IP051271	50.0	52.93	105.9										
Lead	PB	ICP	IP051271	20.0	20.66	103.3										
Magnesium	MG	ICP	IP051271	50.0	49.17	98.3										
Manganese	MN	ICP	IP051271	1.0	1.05	105.0										
Mercury	HG	CVA	HG051104	0.1	0.10	100.0										
Molybdenum	MO	ICP	IP051271	5.0	5.12	102.4										
Nickel	NI	ICP	IP051271	10.0	9.40	94.0										
Potassium	K	ICP	IP051271	500.0	505.76	101.2										
Selenium	SE	ICP	IP051271	50.0	47.90	95.8										
Silver	AG	ICP	IP051271	3.0	3.10	103.3										
Sodium	NA	ICP	IP051271	500.0	501.07	100.2										
Thallium	TL	ICP	IP051271	50.0	49.95	99.9										
Tin	SN	ICP	IP051271	10.0	9.85	98.5										
Vanadium	V	ICP	IP051271	3.0	3.24	108.0										
Zinc	ZN	ICP	IP051271	10.0	10.67	106.7										

Control Limits: no control limits have been established by the EPA at this time.

FORM II (2)

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

UNITS:ug/L

SDG: AF05

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Aluminum	AL	ICP	IP051271	200.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Antimony	SB	ICP	IP051271	60.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Arsenic	AS	ICP	IP051271	10.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Barium	BA	ICP	IP051271	200.0	3.0	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U
Beryllium	BE	ICP	IP051271	5.0	1.0	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Cadmium	CD	ICP	IP051271	5.0	2.0	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Calcium	CA	ICP	IP051271	5000.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Chromium	CR	ICP	IP051271	10.0	5.0	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Cobalt	CO	ICP	IP051271	50.0	3.0	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U
Copper	CU	ICP	IP051271	25.0	2.0	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Iron	FE	ICP	IP051271	100.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Lead	PB	ICP	IP051271	3.0	20.0	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U
Magnesium	MG	ICP	IP051271	5000.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Manganese	MN	ICP	IP051271	15.0	1.0	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Mercury	HG	CVA	HG051104	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Molybdenum	MO	ICP	IP051271	5.0	5.0	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U
Nickel	NI	ICP	IP051271	40.0	10.0	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Potassium	K	ICP	IP051271	5000.0	500.0	500.0	U	500.0	U	500.0	U	500.0	U	500.0	U	500.0	U
Selenium	SE	ICP	IP051271	5.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Silver	AG	ICP	IP051271	10.0	3.0	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U
Sodium	NA	ICP	IP051271	5000.0	500.0	500.0	U	500.0	U	500.0	U	500.0	U	500.0	U	500.0	U
Thallium	TL	ICP	IP051271	10.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Tin	SN	ICP	IP051271	10.0	10.0	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Vanadium	V	ICP	IP051271	50.0	3.0	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U
Zinc	ZN	ICP	IP051271	20.0	10.0	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U

AF05:00007

MANSON009839

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

UNITS:ug/L

SDG: AF05

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Aluminum	AL	ICP	IP051271	200.0	50.0												
Antimony	SB	ICP	IP051271	60.0	50.0												
Arsenic	AS	ICP	IP051271	10.0	50.0												
Barium	BA	ICP	IP051271	200.0	3.0												
Beryllium	BE	ICP	IP051271	5.0	1.0												
Cadmium	CD	ICP	IP051271	5.0	2.0												
Calcium	CA	ICP	IP051271	5000.0	50.0												
Chromium	CR	ICP	IP051271	10.0	5.0												
Cobalt	CO	ICP	IP051271	50.0	3.0												
Copper	CU	ICP	IP051271	25.0	2.0												
Iron	FE	ICP	IP051271	100.0	50.0												
Lead	PB	ICP	IP051271	3.0	20.0												
Magnesium	MG	ICP	IP051271	5000.0	50.0												
Manganese	MN	ICP	IP051271	15.0	1.0												
Mercury	HG	CVA	HG051104	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Molybdenum	MO	ICP	IP051271	5.0	5.0												
Nickel	NI	ICP	IP051271	40.0	10.0												
Potassium	K	ICP	IP051271	5000.0	500.0												
Selenium	SE	ICP	IP051271	5.0	50.0												
Silver	AG	ICP	IP051271	10.0	3.0												
Sodium	NA	ICP	IP051271	5000.0	500.0												
Thallium	TL	ICP	IP051271	10.0	50.0												
Tin	SN	ICP	IP051271	10.0	10.0												
Vanadium	V	ICP	IP051271	50.0	3.0												
Zinc	ZN	ICP	IP051271	20.0	10.0												

AF05:00008

MANSON009840

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

UNITS:ug/L

SDG: AF05

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB12	C	CCB13	C	CCB14	C	CCB15	C	CCB16	C	CCB17	C
Aluminum	AL	ICP	IP051271	200.0	50.0												
Antimony	SB	ICP	IP051271	60.0	50.0												
Arsenic	AS	ICP	IP051271	10.0	50.0												
Barium	BA	ICP	IP051271	200.0	3.0												
Beryllium	BE	ICP	IP051271	5.0	1.0												
Cadmium	CD	ICP	IP051271	5.0	2.0												
Calcium	CA	ICP	IP051271	5000.0	50.0												
Chromium	CR	ICP	IP051271	10.0	5.0												
Cobalt	CO	ICP	IP051271	50.0	3.0												
Copper	CU	ICP	IP051271	25.0	2.0												
Iron	FE	ICP	IP051271	100.0	50.0												
Lead	PB	ICP	IP051271	3.0	20.0												
Magnesium	MG	ICP	IP051271	5000.0	50.0												
Manganese	MN	ICP	IP051271	15.0	1.0												
Mercury	HG	CVA	HG051104	0.2	0.1	0.1	U										
Molybdenum	MO	ICP	IP051271	5.0	5.0												
Nickel	NI	ICP	IP051271	40.0	10.0												
Potassium	K	ICP	IP051271	5000.0	500.0												
Selenium	SE	ICP	IP051271	5.0	50.0												
Silver	AG	ICP	IP051271	10.0	3.0												
Sodium	NA	ICP	IP051271	5000.0	500.0												
Thallium	TL	ICP	IP051271	10.0	50.0												
Tin	SN	ICP	IP051271	10.0	10.0												
Vanadium	V	ICP	IP051271	50.0	3.0												
Zinc	ZN	ICP	IP051271	20.0	10.0												

AF05:00009

MANSON009841

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

SDG: AF05

ICS SOURCE: I.V.

RUNID: IP051271

INSTRUMENT ID: OPTIMA ICP 2

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Aluminum	200000	200000	204020.5	197364.8	**98.7**						
Antimony		1000	0.6	1025.0	**102.5**						
Arsenic		1000	24.2	1008.1	**100.8**						
Barium		1000	-4.9	1021.5	**102.2**						
Beryllium		1000	0.1	990.4	**99.0**						
Boron			-8.3	-7.0							
Cadmium		1000	0.7	1039.2	**103.9**						
Calcium	100000	100000	102353.4	99031.7	**99.0**						
Chromium		1000	-2.7	1022.7	**102.3**						
Cobalt		1000	2.0	955.7	**95.6**						
Copper		1000	-0.1	1046.1	**104.6**						
Iron	200000	200000	200056.7	193549.2	**96.8**						
Lead		1000	-4.2	961.0	**96.1**						
Magnesium	100000	100000	105275.9	97473.6	**97.5**						
Manganese		1000	0.4	947.3	**94.7**						
Molybdenum			4.1	4.3							
Nickel		1000	1.0	969.5	**97.0**						
Potassium			1.9	3.6							
Selenium		1000	4.1	989.5	**99.0**						
Silicon			3.2	-0.7							
Silver		1000	-1.1	1051.0	**105.1**						
Sodium			23.1	11.4							
Strontium			3.0	2.9							
Thallium		1000	4.5	920.8	**92.1**						
Tin			-7.8	-6.5							
Titanium			6.7	6.3							
Vanadium		1000	-0.6	986.6	**98.7**						
Zinc		1000	-1.0	949.5	**95.0**						

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

SDG: AF05

UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Aluminum	AL	ICP	OPTIMA ICP 2	308.22		200	50.0	4/1/2012	250000.0	1/20/2015
Antimony	SB	ICP	OPTIMA ICP 2	206.84		60	50.0	4/1/2012	30000.0	1/20/2015
Arsenic	AS	ICP	OPTIMA ICP 2	197.20		10	50.0	4/1/2012	30000.0	1/20/2015
Barium	BA	ICP	OPTIMA ICP 2	455.50		200	3.0	4/1/2012	100000.0	1/20/2015
Beryllium	BE	ICP	OPTIMA ICP 2	313.04		5	1.0	4/1/2012	5000.0	1/20/2015
Cadmium	CD	ICP	OPTIMA ICP 2	228.80		5	2.0	4/1/2012	20000.0	1/20/2015
Calcium	CA	ICP	OPTIMA ICP 2	317.93		5000	50.0	4/1/2012	500000.0	1/20/2015
Chromium	CR	ICP	OPTIMA ICP 2	267.72		10	5.0	4/1/2012	100000.0	1/20/2015
Cobalt	CO	ICP	OPTIMA ICP 2	228.62		50	3.0	4/1/2012	80000.0	1/20/2015
Copper	CU	ICP	OPTIMA ICP 2	324.75		25	2.0	4/1/2012	40000.0	1/20/2015
Iron	FE	ICP	OPTIMA ICP 2	259.94		100	50.0	4/1/2012	250000.0	1/20/2015
Lead	PB	ICP	OPTIMA ICP 2	220.35		3	20.0	4/1/2012	300000.0	1/20/2015
Magnesium	MG	ICP	OPTIMA ICP 2	279.08		5000	50.0	4/1/2012	500000.0	1/20/2015
Manganese	MN	ICP	OPTIMA ICP 2	257.61		15	1.0	4/1/2012	30000.0	1/20/2015
Mercury	HG	CVA	CETAC MERCURY	253.70		0.2	0.1	4/1/2012		
Molybdenum	MO	ICP	OPTIMA ICP 2	202.03		5	5.0	4/1/2012	40000.0	1/20/2015
Nickel	NI	ICP	OPTIMA ICP 2	231.60		40	10.0	4/1/2012	100000.0	1/20/2015
Potassium	K	ICP	OPTIMA ICP 2	766.49		5000	500.0	4/1/2012	500000.0	1/20/2015
Selenium	SE	ICP	OPTIMA ICP 2	196.02		5	50.0	4/1/2012	20000.0	1/20/2015
Silver	AG	ICP	OPTIMA ICP 2	328.07		10	3.0	4/1/2012	5000.0	1/20/2015
Sodium	NA	ICP	OPTIMA ICP 2	589.00		5000	500.0	4/1/2012	5000000.0	1/20/2015
Thallium	TL	ICP	OPTIMA ICP 2	190.86		10	50.0	4/1/2012	30000.0	1/20/2015
Tin	SN	ICP	OPTIMA ICP 2	189.99		10	10.0	4/1/2012	10000.0	1/20/2015
Vanadium	V	ICP	OPTIMA ICP 2	292.40		50	3.0	4/1/2012	50000.0	1/20/2015
Zinc	ZN	ICP	OPTIMA ICP 2	213.86		20	10.0	4/1/2012	100000.0	1/20/2015

ICP Interelement Correction Factors

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Amec Geomatrix

PROJECT: Gateway Pacific Term

IEC DATE: 1/20/2015

SDG: AFN0

INSTRUMENT ID: OPTIMA ICP 2

ANALYTE	WAVELENGTH	AL	AS	BA	BE	CA	CD	CO	CR	CU	FE
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	13.0189880	0.0000000	0.0000000
Arsenic	188.98	0.0000000	0.0000000	0.0000000	0.0000000	0.0974840	0.0000000	-1.0117610	1.6122990	0.0000000	0.0000000
Barium	233.53	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1835930	0.0000000	0.0000000	0.1509480
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.67	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	2.0412290	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	5.8769130	0.0000000	0.0000000	0.0000000	0.0000000	0.1309080	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0066550	0.0000000	0.0000000	0.0000000	0.0000000	-0.0499880
Cobalt	228.62	0.0000000	0.0000000	0.0816650	0.0000000	0.0000000	0.0000000	0.0000000	-0.0378250	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1562250	-0.0133070	0.0000000	-0.0419490
Iron	273.96	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.9723130	0.0000000	0.0000000
Lead	220.35	-0.2543860	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1301960	-1.7687510	1.4795520	0.0476310
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.1056720	0.0000000	-1.6599450	-1.1850880	0.0000000	0.6420430
Manganese	257.61	0.0060460	0.0000000	0.0000000	0.0000000	0.0036380	0.0000000	0.0137770	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0158930	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.1186730	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.4757120	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-3.5806220	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	5.7975050	0.4495170	0.0000000	-0.1358030
Tin	189.93	0.0000000	0.0000000	0.0000000	0.0000000	-0.1437630	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0575300	0.0000000	0.0000000	0.1926880	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-3.7554010	0.0000000	0.0533100
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1466580	0.0000000	0.0000000

AF05:00012

MANSON009844

ICP Interelement Correction Factors

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Amec Geomatrix

PROJECT: Gateway Pacific Term

IEC DATE: 1/20/2015

SDG: AFN0

INSTRUMENT ID: OPTIMA ICP 2

ANALYTE	WAVELENGTH	MG	MN	MO	NI	PB	SB	TI	TL	V	ZN
Aluminum	308.22	0.0000000	0.0000000	15.4129220	0.0000000	0.0000000	0.0000000	1.8216540	0.0000000	14.7475500	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.6222080	0.0000000	-3.7811410	0.0000000
Arsenic	188.98	0.0000000	0.0000000	3.5664170	0.0000000	0.0000000	0.0000000	-26.3254350	0.0000000	0.0000000	0.0000000
Barium	233.53	0.0000000	0.0000000	0.0000000	0.1239360	0.0000000	0.0000000	0.0000000	0.0000000	0.2065170	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0119000	0.0000000	0.2251850	0.0000000
Boron	249.67	0.0000000	0.0000000	-1.0909430	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	0.0000000	0.0000000	-1.0090780	0.0000000	0.0000000	0.0000000	0.0000000	0.0639500	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.1024750	0.0000000	0.1118290	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.3906360	0.0000000
Cobalt	228.62	0.0000000	0.0000000	-0.1366970	0.1715810	0.0000000	0.0000000	1.7876660	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0047630	0.0000000	0.3414350	0.0000000	0.0000000	0.0000000	0.1757900	0.0000000	0.0000000	0.0000000
Iron	273.96	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	7.4960750	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	-0.1024390	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	-5.5292350	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	-0.1828440	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.5564470	0.0000000	0.4064690	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.5338700	0.0000000
Silicon	288.16	-0.1172590	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.2622230	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	148.2979000	0.0000000	0.0000000	273.7408530
Thallium	190.80	0.0000000	0.0000000	-1.2699850	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	3.5582180	0.0000000
Tin	189.93	0.0000000	0.0000000	0.0000000	0.0000000	-0.0436460	-0.5185620	-0.1403040	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	0.9234740	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	-0.1589730	-0.5054650	0.0000000	0.0000000	0.0000000	0.5434010	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.7742310	0.0000000	-0.0610360	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

AF05:000013

MANSON009845

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

SDG: AFO5

ANALYSIS METHOD: ICP

ARI PREP CODE: SWC

PREPDATE: 5/8/2015

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
SL1-PIS-SD-01	AFO5A	1.031	0.0	50.0
SL1-PIS-SD-02	AFO5B	1.077	0.0	50.0
SL1-PIS-SD-03	AFO5C	1.049	0.0	50.0
SL1-PIS-SD-04	AFO5D	1.068	0.0	50.0
SL1-PIS-SD-05	AFO5E	1.028	0.0	50.0
PBS	AFO5MB	1.000	0.0	50.0
LCSS	AFO5MBSPK	1.000	0.0	50.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation

SDG: AFO5

ANALYSIS METHOD: CVA

ARI PREP CODE: SMM

PREPDATE: 5/8/2015

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
SL1-PIS-SD-01	AFO5A	0.243	0.0	50.0
SL1-PIS-SD-02	AFO5B	0.253	0.0	50.0
SL1-PIS-SD-03	AFO5C	0.210	0.0	50.0
SL1-PIS-SD-04	AFO5D	0.278	0.0	50.0
SL1-PIS-SD-05	AFO5E	0.241	0.0	50.0
PBS	AFO5MB	0.200	0.0	50.0
LCSW	AFO5MBSPK	0.200	0.0	50.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 5/12/2015

SDG: AFO5 | RUNID: IP051271 METHOD: ICP | END DATE: 5/12/2015

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	08450		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
S2	S2	1.00	08491						X			X	X	X	X					X												X	
S3	S3	1.00	08512		X		X			X													X	X		X				X			X
S4	S4	1.00	08533																		X				X			X					
S5	S5	1.00	08555			X					X					X		X	X			X											
ICV	ICV	1.00	09080		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
ZZZZZZ	ICB1	1.00	09121																														
CRI	CRII	1.00	09162		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
ICSA	ICSAI	1.00	09204		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
ICSAB	ICSABI	1.00	09271		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
CCV	CCV1	1.00	09323		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
CCB	CCB1	1.00	09363		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
ZZZZZZ	AFM7MB	5.00	09550																														
ZZZZZZ	AFM3MB2	5.00	09593																														
ZZZZZZ	AFM3AtDUP	5.00	10040																														
ZZZZZZ	AFM3At	5.00	10082																														
ZZZZZZ	AFM3AtSPK	5.00	10124																														
ZZZZZZ	AFM7A	5.00	10165																														
ZZZZZZ	AFM7BDUP	5.00	10211																														
ZZZZZZ	AFM7B	5.00	10254																														
ZZZZZZ	AFM7BSPK	5.00	10301																														
LCSS	AFO5MBSPK	2.00	10345		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
CCV	CCV2	1.00	10385		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
CCB	CCB2	1.00	10425		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
PBS	AFO5MB	2.00	10471		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
SL1-PIS-SD-01	AFO5A	5.00	10512																														
SL1-PIS-SD-02	AFO5B	5.00	10543																														
SL1-PIS-SD-03	AFO5C	2.00	10573																														
SL1-PIS-SD-04	AFO5D	5.00	11013																														
SL1-PIS-SD-05	AFO5E	2.00	11044		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
ZZZZZZ	AFF8ADUP	2.00	11084																														
ZZZZZZ	AFF8A	2.00	11124																														
ZZZZZZ	AFF8ASPK	2.00	11164																														
ZZZZZZ	AFF8MBSPK	2.00	11204																														
CCV	CCV3	1.00	11244		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X

FORM XIV

AFO5:00016

MANSON009848

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 5/12/2015

SDG: AFO5 | RUNID: IP051271 METHOD: ICP | END DATE: 5/12/2015

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
CCB	CCB3	1.00	11284		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
ZZZZZZ	AFG4MB	2.00	11330																														
ZZZZZZ	AFF8MB	2.00	11371																														
ZZZZZZ	AFF8B	2.00	11413																														
ZZZZZZ	AFF2P	5.00	11453																														
ZZZZZZ	AFG4A	2.00	11493																														
ZZZZZZ	AFG4B	2.00	11533																														
ZZZZZZ	AFG4C	2.00	11573																														
ZZZZZZ	AFG4D	2.00	12013																														
ZZZZZZ	AFG4E	2.00	12053																														
ZZZZZZ	AFG4MBSPK	2.00	12093																														
CCV	CCV4	1.00	12133		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
CCB	CCB4	1.00	12173		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
ZZZZZZ	AFU2MB	1.00	12215																														
ZZZZZZ	AFU2A	5.00	12260																														
SL1-PIS-SD-01	AFO5A	20.00	12305		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
SL1-PIS-SD-02	AFO5B	20.00	12343		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
SL1-PIS-SD-03	AFO5C	5.00	12382		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
SL1-PIS-SD-04	AFO5D	20.00	12422		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
ZZZZZZ	AFG4FDUP	2.00	12460																														
ZZZZZZ	AFG4F	2.00	12500																														
ZZZZZZ	AFG4FSPK	2.00	12540																														
ZZZZZZ	AFU2MBSPK	1.00	12580																														
CCV	CCV5	1.00	13020		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X
CCB	CCB5	1.00	13061		X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X		X	X

AF05:00017
MANSON009849

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation | INSTRUMENT ID: CETAC MERCURY | START DATE: 5/11/2015

SDG: AFO5 | RUNID: HG051104 METHOD: CVA | END DATE: 5/11/2015

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	11401														X																
S0.1	S0.1	1.00	11440														X																
S0.5	S0.5	1.00	11454														X																
S1	S1	1.00	11471														X																
S2	S2	1.00	11485														X																
S5	S5	1.00	11503														X																
S10	S10	1.00	11521														X																
ICV	AICV	1.00	11552																														
ICV	AICV	1.00	12005														X																
ICB	ICB	1.00	12023														X																
CCV	ACCV1	1.00	12041														X																
CCB	CCB1	1.00	12055														X																
CRA	CRA	1.00	12072														X																
ZZZZZZ	AFC4MB1	1.00	12090																														
ZZZZZZ	AFC4MB1SPK	1.00	12103																														
ZZZZZZ	AFC4A	1.00	12121																														
ZZZZZZ	AFC4B	1.00	12135																														
ZZZZZZ	AFC4C	1.00	12152																														
ZZZZZZ	AFC4D	1.00	12170																														
ZZZZZZ	AFC4E	1.00	12184																														
ZZZZZZ	AFC4F	1.00	12202																														
ZZZZZZ	AFC4G	1.00	12215																														
CCV	ACCV2	1.00	12233														X																
CCB	CCB2	1.00	12251														X																
ZZZZZZ	AFM4MB1	1.00	12265																														
ZZZZZZ	AFM4MB1SPK	1.00	12283																														
ZZZZZZ	AFM4A	1.00	12300																														
ZZZZZZ	AFM4ADUP	1.00	12314																														
ZZZZZZ	AFM4ASPK	1.00	12331																														
ZZZZZZ	AFM4B	1.00	12345																														
ZZZZZZ	AFM4C	1.00	12363																														
CCV	ACCV3	1.00	12381														X																
CCB	CCB3	1.00	12395														X																
ZZZZZZ	AER6MB	1.00	12412																														
ZZZZZZ	AER6C	1.00	12430																														

FORM XIV

AFO5:00018

MANSON009850

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation | INSTRUMENT ID: CETAC MERCURY | START DATE: 5/11/2015

SDG: AFO5 | RUNID: HG051104 METHOD: CVA | END DATE: 5/11/2015

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	AER6C	5.00	12453																														
ZZZZZZ	AER6C	10.00	12471																														
ZZZZZZ	AFE7MB	1.00	12485																														
ZZZZZZ	AFE7MBSPK	1.00	12503																														
ZZZZZZ	AFE7A	1.00	12520																														
ZZZZZZ	AFE7B	1.00	12534																														
ZZZZZZ	AFT9MB	1.00	12551																														
ZZZZZZ	AFT9MBSPK	1.00	12565																														
CCV	ACCV4	1.00	12583														X																
CCB	CCB4	1.00	13001														X																
ZZZZZZ	AFT9A	1.00	13015																														
ZZZZZZ	AFT9B	1.00	13033																														
ZZZZZZ	AFM3MB1	1.00	13050																														
ZZZZZZ	AFM3MB1SPK	1.00	13064																														
ZZZZZZ	AFM3A	1.00	13082																														
ZZZZZZ	AFF8MB	1.00	13100																														
ZZZZZZ	AFF8MBSPK	1.00	13114																														
ZZZZZZ	AFF8A	1.00	13131																														
ZZZZZZ	AFF8ADUP	1.00	13145																														
ZZZZZZ	AFF8ASPK	1.00	13163																														
CCV	ACCV5	1.00	13180														X																
CCB	CCB5	1.00	13194														X																
ZZZZZZ	AFF8B	1.00	13212																														
PBW	AFO5MB	1.00	13230														X																
LCSW	AFO5MBSPK	1.00	13244														X																
SL1-PIS-SD-01	AFO5A	1.00	13261														X																
SL1-PIS-SD-02	AFO5B	1.00	13275														X																
SL1-PIS-SD-03	AFO5C	1.00	13293														X																
SL1-PIS-SD-04	AFO5D	1.00	13311																														
SL1-PIS-SD-05	AFO5E	1.00	13341														X																
CCV	ACCV6	1.00	13355														X																
CCB	CCB6	1.00	13373														X																
ZZZZZZ	AFF2MB	1.00	13392																														
ZZZZZZ	AFF2MBSPK	1.00	13413																														
ZZZZZZ	AFF2A	1.00	13431																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation | INSTRUMENT ID: CETAC MERCURY | START DATE: 5/11/2015

SDG: AFO5 | RUNID: HG051104 METHOD: CVA | END DATE: 5/11/2015

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	AFF2ADUP	1.00	13444																														
ZZZZZZ	AFF2ASPK	1.00	13462																														
ZZZZZZ	AFF2B	1.00	13475																														
ZZZZZZ	AFF2C	1.00	13493																														
ZZZZZZ	AFF2D	1.00	13511																														
ZZZZZZ	AFF2E	1.00	13524																														
ZZZZZZ	AFF2F	1.00	13542																														
CCV	ACCV7	1.00	13560														X																
CCB	CCB7	1.00	13574														X																
ZZZZZZ	AFF2G	1.00	13592																														
ZZZZZZ	AFF2H	1.00	14010																														
ZZZZZZ	AFF2I	1.00	14024																														
ZZZZZZ	AFF2J	1.00	14041																														
ZZZZZZ	AFF2K	1.00	14055																														
ZZZZZZ	AFF2L	1.00	14072																														
ZZZZZZ	AFF2M	1.00	14090																														
ZZZZZZ	AFF2N	1.00	14103																														
ZZZZZZ	AFF2O	1.00	14121																														
ZZZZZZ	AFF2P	1.00	14135																														
CCV	ACCV8	1.00	14153														X																
CCB	CCB8	1.00	14171														X																
ZZZZZZ	AFF2Q	1.00	14185																														
ZZZZZZ	AFF2R	1.00	14202																														
ZZZZZZ	AFF2S	1.00	14220																														
ZZZZZZ	AFF2T	1.00	14234																														
ZZZZZZ	AFG4MB	1.00	14252																														
ZZZZZZ	AFG4MBSPK	1.00	14265																														
ZZZZZZ	AFG4A	1.00	14283																														
ZZZZZZ	AFG4B	1.00	14301																														
ZZZZZZ	AFG4C	1.00	14314																														
ZZZZZZ	AFG4D	1.00	14332																														
CCV	ACCV9	1.00	14350														X																
CCB	CCB9	1.00	14364														X																
ZZZZZZ	AFG4E	1.00	14382																														
ZZZZZZ	AFG4F	1.00	14395																														

FORM XIV

AFO5:00020

MANSON009852

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Integral Consulting

PROJECT: Slip 1 Allocation | INSTRUMENT ID: CETAC MERCURY | START DATE: 5/11/2015

SDG: AFO5 | RUNID: HG051104 METHOD: CVA | END DATE: 5/11/2015

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	AFG4FDUP	1.00	14413																														
ZZZZZZ	AFG4FSPK	1.00	14431																														
ZZZZZZ	AFG4G	1.00	14445																														
ZZZZZZ	AFG4H	1.00	14463																														
ZZZZZZ	AFG4I	1.00	14480																														
ZZZZZZ	AFG4J	1.00	14494																														
ZZZZZZ	AFG4K	1.00	14512																														
ZZZZZZ	AFG4L	1.00	14525																														
CCV	ACCV10	1.00	14543														X																
CCB	CCB10	1.00	14561														X																
ZZZZZZ	AFG4M	1.00	14575																														
ZZZZZZ	AFG4N	1.00	14593																														
ZZZZZZ	AFG4O	1.00	15010																														
ZZZZZZ	AFG4P	1.00	15024																														
ZZZZZZ	AFG4Q	1.00	15042																														
ZZZZZZ	AFG4R	1.00	15060																														
ZZZZZZ	AFG4S	1.00	15074																														
ZZZZZZ	AFG4T	1.00	15092																														
CCV	ACCV11	1.00	15110														X																
CCB	CCB11	1.00	15124														X																
ZZZZZZ	AFM4A	1.00	15150																														
ZZZZZZ	AFM4ADUP	1.00	15164																														
ZZZZZZ	AFM4ASPK	1.00	15181																														
SL1-PIS-SD-04	AFO5D	2.00	15195														X																
CCV	ACCV12	1.00	15213														X																
CCB	CCB12	1.00	15231														X																

AFO5:00021
MANSON009853

SDG RUNS Table

RUNID	STARTDATE	METH	END CLPID	END TIME	ENDDATE	AG	AL	AS	AU	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	LI	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	SR	TH	TI	TL	U	V	W	ZN
HG051104	5/11/2015	CVA	CCB12	152311	5/11/2015														X																				
IP051271	5/12/2015	ICP	CCB5	130611	5/12/2015	X	X	X			X	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X		X				X		X		X

ed 10-12-6

AF05:00022

MANSON009854

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: (ICP) ICP-MS GFA CVA **Analysis Date:** 5/12/15

I2	Analyst ce 05/13/15	Peer 5-13-15	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
Samples:			
RSD's & SD's	✓	✓	See log
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	See AFF8
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	CAF AFF8

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7300
Serial No. – 077C8121202

IEC Date: 1-20-15 Analysis Date: 5/12/15 Analyst: ec

LR Date: 1-20-15 Page: 1 of 6

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		Std Ø	D1958		
		2	D1954		
		3	D1955		
		4	D1956		
		5	D1957		
		ICV	D1813		
		ICB	D1958		
		CRI	D15Ø2		
		ICSA	D13Ø2		
		ICSAB	D13Ø3		
		CCV1	D1813		
		CCB1	D1958		
		AFM7 MB	LEN	5	
		AFM3 MB2			
		A+DUP			
		A+			
		A+SPK			
		AFM7 A			
		BDUP			
		B			
		BSPK			
		AF05 MBSPK	SWC	2	✓
		CCV2			
		CCB2			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7300
Serial No. – 077C8121202

IEC Date: — Analysis Date: 5/12/15 Analyst: ee

LR Date: — Page: 2 of 6

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		AF05 MB	SWC	2	
	✓	A		5	Fe↑, RR 20x
	✓	B		5	20x
	✓	C		2	5x
	✓	D		5	20x
		E		2	
		AFF8 A DUP			CAF, Cr↑ RD
		A			
		ASPK			
		MBSPK			✓
		CCV3			
		CCB3			
		AFG4 MB	SWC	2	
		AFF8 MB			
		B			
		AFF2 P		5	
		AFG4 A		2	
		B			
		C			
		D			
		E			
		MB SPK			✓
		CCV4			
		CCB4			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7300
Serial No. – 077C8121202

IEC Date: — Analysis Date: 5/12/15 Analyst: Oe

LR Date: — Page: 3 of 6

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		AFU2 MB	TWC		
		↓ A	↓	5	
		AF05 A	SWC	20	
		B		20	
		C		5	
		↓ D		20	
	✓	AFG4 FDUP		2	Al↑, RR 5x
	✓	E			
	✓	↓ FSPK	↓	↓	↓
		AFU2MBSPK	TWC		✓
		CCV5			
		CCB5			
		AFG4 G	SWC	2	
		H			
	✓	I			Fe↑, RR 5x
		J			
		K			
		L			
		M	10		
		N			
		O			
		↓ P	↓	↓	
		CCV			
		CCB			

MANSON009858

Nebulizer Parameters: Hg_ReAlign

Analyte	Back Pressure	Flow
All	225.0 kPa	0.75 L/min

5/12/2015 8:16:12 AM Hg ReAlign... Actual peak offset (nm): 0.004
Drift (nm): -0.001 Slit adjustment: -4

Analysis Begun

Start Time: 5/12/2015 8:21:41 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 5/12/2015 7:24:55 AM
Technique: ICP Continuous
Autosampler: ESI

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

Method Loaded
Method Name: 7300bcESI2FAST
IEC File: IEC012015a.iec
Method Description: 12Axial Elements
Method Last Saved: 8/13/2012 7:13:22 AM
MSF File:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Al 308.215	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
B 249.677	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Be 313.042	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ca 317.933	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Cd 228.802	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Cr 267.716	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Fe 273.955	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
K 766.490	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Mg 279.077	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Mn 257.610	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Na 589.592	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Na 330.237	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ni 231.604	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Se 196.026	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Si 288.158	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Ti 334.903	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Zn 206.200	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
ScA 357.253	Lin, Calc Int	Peak Area	Axial	n/a	n/a
ScR 361.383	Lin, Calc Int	Peak Area	Radial	n/a	n/a

Sequence No.: 1
Sample ID: B1
Autosampler Location: 1
Date Collected: 5/12/2015 8:21:48 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: B1

Analyte	Back Pressure	Flow
All	225.0 kPa	0.75 L/min

Analysis Begun

Start Time: 5/12/2015 8:45:01 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 5/12/2015 7:24:55 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\0512.sif
Batch ID:
Results Data Set: FAST-Verify-Install
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: Calib Blank 1

Autosampler Location: 1
Date Collected: 5/12/2015 8:45:04 AM
Data Type: Original

Nebulizer Parameters: Calib Blank 1

Analyte	Back Pressure	Flow
All	225.0 kPa	0.75 L/min

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2884408.6	24428.28	0.85%	100.0	%
ScR 361.383	273384.3	3080.97	1.13%	100.0	%
Ag 328.068†	25.3	44.41	175.60%	[0.00]	mg/L
Al 308.215†	117.5	1.43	1.22%	[0.00]	mg/L
As 188.979†	-6.9	1.41	20.40%	[0.00]	mg/L
B 249.677†	-38.9	2.80	7.19%	[0.00]	mg/L
Ba 233.527†	26.8	4.42	16.48%	[0.00]	mg/L
Be 313.042†	563.9	5.51	0.98%	[0.00]	mg/L
Ca 317.933†	17.7	1.75	9.92%	[0.00]	mg/L
Cd 228.802†	211.4	2.15	1.02%	[0.00]	mg/L
Co 228.616†	-102.8	4.89	4.76%	[0.00]	mg/L
Cr 267.716†	-81.8	1.40	1.72%	[0.00]	mg/L
Cu 324.752†	1747.8	35.71	2.04%	[0.00]	mg/L
Fe 273.955†	-10.2	2.53	24.93%	[0.00]	mg/L
K 766.490†	425.5	19.59	4.60%	[0.00]	mg/L
Mg 279.077†	4.0	5.97	150.49%	[0.00]	mg/L
Mn 257.610†	131.5	1.89	1.44%	[0.00]	mg/L
Mo 202.031†	55.6	3.55	6.37%	[0.00]	mg/L
Na 589.592†	95.3	36.11	37.88%	[0.00]	mg/L
Na 330.237†	-33.9	0.66	1.96%	[0.00]	mg/L
Ni 231.604†	19.6	2.79	14.26%	[0.00]	mg/L
Pb 220.353†	-17.6	6.41	36.46%	[0.00]	mg/L
Sb 206.836†	19.5	0.75	3.85%	[0.00]	mg/L
Se 196.026†	-30.9	2.18	7.03%	[0.00]	mg/L
Si 288.158†	36.1	3.80	10.51%	[0.00]	mg/L
Sn 189.927†	-2.3	1.29	55.94%	[0.00]	mg/L
Sr 421.552†	17.2	12.81	74.32%	[0.00]	mg/L
Ti 334.903†	50.7	3.22	6.35%	[0.00]	mg/L
Tl 190.801†	-19.1	5.95	31.14%	[0.00]	mg/L
V 292.402†	41.9	11.06	26.43%	[0.00]	mg/L
Zn 206.200†	-15.6	0.67	4.28%	[0.00]	mg/L

Sequence No.: 2
Sample ID: STD2

Autosampler Location: 2
Date Collected: 5/12/2015 8:49:19 AM
Data Type: Original

Nebulizer Parameters: STD2

Analyte	Back Pressure	Flow
All	225.0 kPa	0.75 L/min

Mean Data: STD2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2917842.3	13024.65	0.45%	101.2	%
ScR 361.383	286291.9	1767.42	0.62%	104.7	%
Ba 233.527†	47185.7	117.23	0.25%	[10]	mg/L
Cd 228.802†	222144.8	707.88	0.32%	[10]	mg/L
Co 228.616†	346982.6	847.78	0.24%	[10]	mg/L
Cr 267.716†	61991.4	252.33	0.41%	[10]	mg/L
Cu 324.752†	2967940.0	25154.97	0.85%	[10]	mg/L
Mn 257.610†	417383.2	1980.08	0.47%	[10]	mg/L
V 292.402†	1455263.8	7286.02	0.50%	[10]	mg/L

Sequence No.: 3
Sample ID: STD3

Autosampler Location: 3
Date Collected: 5/12/2015 8:51:20 AM
Data Type: Original

Nebulizer Parameters: STD3

Analyte	Back Pressure	Flow
All	224.0 kPa	0.75 L/min

Mean Data: STD3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2814652.0	8026.22	0.29%	97.58	%
ScR 361.383	274050.4	2792.80	1.02%	100.2	%
Ag 328.068†	241419.9	598.51	0.25%	[1.0]	mg/L
As 188.979†	12854.5	68.60	0.53%	[10]	mg/L
B 249.677†	57791.1	470.52	0.81%	[10]	mg/L
Be 313.042†	2286666.1	38306.69	1.68%	[5.0]	mg/L
Na 589.592†	787896.5	7896.04	1.00%	[50]	mg/L
Ni 231.604†	33990.8	141.48	0.42%	[10]	mg/L
Pb 220.353†	80792.8	502.48	0.62%	[10]	mg/L
Se 196.026†	13696.9	90.37	0.66%	[10]	mg/L
Sr 421.552†	4293610.1	45828.86	1.07%	[5]	mg/L
Tl 190.801†	17060.4	179.20	1.05%	[10]	mg/L
Zn 206.200†	31686.9	297.34	0.94%	[10]	mg/L

Sequence No.: 4
Sample ID: STD4

Autosampler Location: 4
Date Collected: 5/12/2015 8:53:37 AM
Data Type: Original

Nebulizer Parameters: STD4

Analyte	Back Pressure	Flow
All	226.0 kPa	0.75 L/min

Mean Data: STD4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2943121.0	2134.14	0.07%	102.0	%
ScR 361.383	278713.1	1084.75	0.39%	101.9	%
Mo 202.031†	175449.2	1500.12	0.86%	[10]	mg/L
Sb 206.836†	27129.0	276.07	1.02%	[10]	mg/L
Si 288.158†	13296.2	174.23	1.31%	[10]	mg/L
Sn 189.927†	39168.3	419.74	1.07%	[10]	mg/L
Ti 334.903†	201122.7	319.26	0.16%	[10]	mg/L

Sequence No.: 5
Sample ID: STD5

Autosampler Location: 5
Date Collected: 5/12/2015 8:55:51 AM
Data Type: Original

Nebulizer Parameters: STD5

Analyte	Back Pressure	Flow
All	225.0 kPa	0.75 L/min

Mean Data: STD5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2677554.5	12972.36	0.48%	92.83	%
ScR 361.383	276173.0	1279.90	0.46%	101.0	%
Al 308.215†	32680.7	374.73	1.15%	[30]	mg/L
Ca 317.933†	251853.6	1239.18	0.49%	[30]	mg/L
Fe 273.955†	112456.0	778.13	0.69%	[100]	mg/L
K 766.490†	263710.5	407.99	0.15%	[100]	mg/L
Mg 279.077†	23155.3	271.10	1.17%	[30]	mg/L
Na 330.237†	2531.2	20.66	0.82%	[100]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	241400	0.00000	1.000000	
Al 308.215	1	Lin Thru 0	0.0	1089	0.00000	1.000000	
As 188.979	1	Lin Thru 0	0.0	1285	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	5779	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	4719	0.00000	1.000000	
Be 313.042	1	Lin Thru 0	0.0	457300	0.00000	1.000000	
Ca 317.933	1	Lin Thru 0	0.0	8395	0.00000	1.000000	
Cd 228.802	1	Lin Thru 0	0.0	22210	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	34700	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	6199	0.00000	1.000000	
Cu 324.752	1	Lin Thru 0	0.0	296800	0.00000	1.000000	
Fe 273.955	1	Lin Thru 0	0.0	1125	0.00000	1.000000	
K 766.490	1	Lin Thru 0	0.0	2637	0.00000	1.000000	
Mg 279.077	1	Lin Thru 0	0.0	771.8	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	41740	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	17540	0.00000	1.000000	
Na 589.592	1	Lin Thru 0	0.0	15760	0.00000	1.000000	
Na 330.237	1	Lin Thru 0	0.0	25.31	0.00000	1.000000	
Ni 231.604	1	Lin Thru 0	0.0	3399	0.00000	1.000000	
Pb 220.353	1	Lin Thru 0	0.0	8079	0.00000	1.000000	
Sb 206.836	1	Lin Thru 0	0.0	2713	0.00000	1.000000	
Se 196.026	1	Lin Thru 0	0.0	1370	0.00000	1.000000	
Si 288.158	1	Lin Thru 0	0.0	1330	0.00000	1.000000	
Sn 189.927	1	Lin Thru 0	0.0	3917	0.00000	1.000000	
Sr 421.552	1	Lin Thru 0	0.0	858700	0.00000	1.000000	
Ti 334.903	1	Lin Thru 0	0.0	20110	0.00000	1.000000	
Tl 190.801	1	Lin Thru 0	0.0	1706	0.00000	1.000000	
V 292.402	1	Lin Thru 0	0.0	145500	0.00000	1.000000	
Zn 206.200	1	Lin Thru 0	0.0	3169	0.00000	1.000000	

Analysis Begun

Start Time: 5/12/2015 9:08:05 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 5/12/2015 7:24:55 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\0512.sif
Batch ID:
Results Data Set: FAST-Verify-Install
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: ICV
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 5/12/2015 9:08:08 AM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	226.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2845745.3	98.66	%	0.569				0.58%
ScR 361.383	279483.6	102.2	%	1.20				1.17%
Ag 328.068†	251479.3	1.042	mg/L	0.0040	1.042	mg/L	0.0040	0.38%
Al 308.215†	2182.5	1.971	mg/L	0.0245	1.971	mg/L	0.0245	1.24%
As 188.979†	2523.1	1.985	mg/L	0.0070	1.985	mg/L	0.0070	0.35%
B 249.677†	5695.8	0.9847	mg/L	0.00961	0.9847	mg/L	0.00961	0.98%
Ba 233.527†	4909.4	1.040	mg/L	0.0107	1.040	mg/L	0.0107	1.03%
Be 313.042†	449472.7	0.9826	mg/L	0.00889	0.9826	mg/L	0.00889	0.90%
Ca 317.933†	17294.1	2.060	mg/L	0.0211	2.060	mg/L	0.0211	1.02%
Cd 228.802†	23255.5	1.036	mg/L	0.0084	1.036	mg/L	0.0084	0.81%
Co 228.616†	34732.0	0.9991	mg/L	0.00739	0.9991	mg/L	0.00739	0.74%
Cr 267.716†	6431.2	1.037	mg/L	0.0101	1.037	mg/L	0.0101	0.98%
Cu 324.752†	289666.7	0.9756	mg/L	0.00282	0.9756	mg/L	0.00282	0.29%
Fe 273.955†	2296.1	2.035	mg/L	0.0272	2.035	mg/L	0.0272	1.34%
K 766.490†	52276.2	19.82	mg/L	0.167	19.82	mg/L	0.167	0.84%
Mg 279.077†	1527.9	1.987	mg/L	0.0267	1.987	mg/L	0.0267	1.34%
Mn 257.610†	40906.6	0.9804	mg/L	0.00952	0.9804	mg/L	0.00952	0.97%
Mo 202.031†	17897.4	1.020	mg/L	0.0095	1.020	mg/L	0.0095	0.94%
Na 589.592†	786839.2	49.93	mg/L	0.508	49.93	mg/L	0.508	1.02%
Na 330.237†	1288.5	50.88	mg/L	0.535	50.88	mg/L	0.535	1.05%
Ni 231.604†	3399.3	1.000	mg/L	0.0109	1.000	mg/L	0.0109	1.09%
Pb 220.353†	16121.2	1.996	mg/L	0.0136	1.996	mg/L	0.0136	0.68%
Sb 206.836†	5794.1	2.136	mg/L	0.0095	2.136	mg/L	0.0095	0.44%
Se 196.026†	2730.5	1.992	mg/L	0.0122	1.992	mg/L	0.0122	0.61%
Si 288.158†	2761.4	2.072	mg/L	0.0167	2.072	mg/L	0.0167	0.81%
Sn 189.927†	4094.1	1.047	mg/L	0.0026	1.047	mg/L	0.0026	0.25%
Sr 421.552†	861251.4	1.003	mg/L	0.0100	1.003	mg/L	0.0100	1.00%
Ti 334.903†	20194.4	1.003	mg/L	0.0088	1.003	mg/L	0.0088	0.88%
Tl 190.801†	3399.9	1.985	mg/L	0.0100	1.985	mg/L	0.0100	0.51%
V 292.402†	147349.8	1.016	mg/L	0.0035	1.016	mg/L	0.0035	0.35%
Zn 206.200†	3141.8	0.9914	mg/L	0.00972	0.9914	mg/L	0.00972	0.98%

Sequence No.: 2
Sample ID: ICB
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 5/12/2015 9:12:12 AM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	225.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2928872.0	101.5	%	0.89				0.87%
ScR 361.383	282922.8	103.5	%	0.56				0.55%
Ag 328.068†	0.0	0.00000	mg/L	0.000008	0.00000	mg/L	0.000008	>999.9%
Al 308.215†	-9.3	-0.00855	mg/L	0.002072	-0.00855	mg/L	0.002072	24.22%
As 188.979†	-1.1	-0.00083	mg/L	0.001184	-0.00083	mg/L	0.001184	142.91%
B 249.677†	18.0	0.00311	mg/L	0.001363	0.00311	mg/L	0.001363	43.79%
Ba 233.527†	3.4	0.00072	mg/L	0.000403	0.00072	mg/L	0.000403	56.34%
Be 313.042†	-0.8	-0.00000	mg/L	0.000011	-0.00000	mg/L	0.000011	606.57%
Ca 317.933†	2.2	0.00026	mg/L	0.000546	0.00026	mg/L	0.000546	212.24%
Cd 228.802†	-1.3	-0.00005	mg/L	0.000074	-0.00005	mg/L	0.000074	141.21%
Co 228.616†	3.1	0.00009	mg/L	0.000096	0.00009	mg/L	0.000096	109.76%
Cr 267.716†	4.1	0.00065	mg/L	0.000467	0.00065	mg/L	0.000467	71.52%
Cu 324.752†	-7.1	-0.00002	mg/L	0.000034	-0.00002	mg/L	0.000034	137.91%
Fe 273.955†	1.2	0.00104	mg/L	0.001205	0.00104	mg/L	0.001205	115.58%
K 766.490†	-11.4	-0.00433	mg/L	0.003352	-0.00433	mg/L	0.003352	77.39%
Mg 279.077†	0.5	0.00060	mg/L	0.008023	0.00060	mg/L	0.008023	>999.9%
Mn 257.610†	-0.4	-0.00001	mg/L	0.000048	-0.00001	mg/L	0.000048	495.71%
Mo 202.031†	22.5	0.00128	mg/L	0.000195	0.00128	mg/L	0.000195	15.21%
Na 589.592†	60.6	0.00385	mg/L	0.001928	0.00385	mg/L	0.001928	50.15%
Na 330.237†	-0.7	-0.02575	mg/L	0.220505	-0.02575	mg/L	0.220505	856.28%
Ni 231.604†	-2.3	-0.00067	mg/L	0.000850	-0.00067	mg/L	0.000850	127.59%
Pb 220.353†	8.6	0.00107	mg/L	0.000245	0.00107	mg/L	0.000245	22.88%
Sb 206.836†	8.5	0.00312	mg/L	0.001519	0.00312	mg/L	0.001519	48.73%
Se 196.026†	-3.7	-0.00273	mg/L	0.001260	-0.00273	mg/L	0.001260	46.10%
Si 288.158†	5.9	0.00445	mg/L	0.001753	0.00445	mg/L	0.001753	39.42%
Sn 189.927†	0.3	0.00008	mg/L	0.000574	0.00008	mg/L	0.000574	725.53%
Sr 421.552†	49.9	0.00006	mg/L	0.000020	0.00006	mg/L	0.000020	33.62%
Ti 334.903†	12.0	0.00060	mg/L	0.000212	0.00060	mg/L	0.000212	35.53%
Tl 190.801†	0.3	0.00018	mg/L	0.000356	0.00018	mg/L	0.000356	200.76%
V 292.402†	16.4	0.00012	mg/L	0.000067	0.00012	mg/L	0.000067	58.26%
Zn 206.200†	2.5	0.00079	mg/L	0.000646	0.00079	mg/L	0.000646	81.26%

Sequence No.: 3
Sample ID: CRI
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 301
Date Collected: 5/12/2015 9:16:27 AM
Data Type: Original

Nebulizer Parameters: CRI

Analyte	Back Pressure	Flow
All	226.0 kPa	0.75 L/min

Mean Data: CRI

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2882627.8	99.94	%	0.703				0.70%
ScR 361.383	277921.6	101.7	%	0.27				0.27%
Ag 328.068†	748.5	0.00310	mg/L	0.000084	0.00310	mg/L	0.000084	2.70%
Al 308.215†	53.1	0.04857	mg/L	0.005835	0.04857	mg/L	0.005835	12.01%
As 188.979†	62.0	0.04838	mg/L	0.001865	0.04838	mg/L	0.001865	3.86%
B 249.677†	125.6	0.02173	mg/L	0.000897	0.02173	mg/L	0.000897	4.13%
Ba 233.527†	17.5	0.00370	mg/L	0.000209	0.00370	mg/L	0.000209	5.66%
Be 313.042†	511.2	0.00112	mg/L	0.000003	0.00112	mg/L	0.000003	0.31%
Ca 317.933†	429.2	0.05113	mg/L	0.000425	0.05113	mg/L	0.000425	0.83%
Cd 228.802†	52.7	0.00210	mg/L	0.000117	0.00210	mg/L	0.000117	5.60%
Co 228.616†	114.9	0.00330	mg/L	0.000134	0.00330	mg/L	0.000134	4.06%
Cr 267.716†	39.3	0.00633	mg/L	0.000150	0.00633	mg/L	0.000150	2.37%
Cu 324.752†	611.8	0.00206	mg/L	0.000090	0.00206	mg/L	0.000090	4.35%
Fe 273.955†	59.5	0.05293	mg/L	0.003276	0.05293	mg/L	0.003276	6.19%
K 766.490†	1333.7	0.5058	mg/L	0.01102	0.5058	mg/L	0.01102	2.18%
Mg 279.077†	38.0	0.04917	mg/L	0.003595	0.04917	mg/L	0.003595	7.31%
Mn 257.610†	43.6	0.00105	mg/L	0.000102	0.00105	mg/L	0.000102	9.72%
Mo 202.031†	89.9	0.00512	mg/L	0.000024	0.00512	mg/L	0.000024	0.46%
Na 589.592†	7895.9	0.5011	mg/L	0.00350	0.5011	mg/L	0.00350	0.70%
Na 330.237†	14.2	0.5603	mg/L	0.11975	0.5603	mg/L	0.11975	21.37%
Ni 231.604†	31.9	0.00940	mg/L	0.001305	0.00940	mg/L	0.001305	13.87%
Pb 220.353†	166.7	0.02066	mg/L	0.000918	0.02066	mg/L	0.000918	4.44%
Sb 206.836†	144.4	0.05324	mg/L	0.000568	0.05324	mg/L	0.000568	1.07%
Se 196.026†	65.6	0.04790	mg/L	0.000778	0.04790	mg/L	0.000778	1.63%
Si 288.158†	82.8	0.06217	mg/L	0.002224	0.06217	mg/L	0.002224	3.58%
Sn 189.927†	38.5	0.00985	mg/L	0.000060	0.00985	mg/L	0.000060	0.61%
Sr 421.552†	896.1	0.00104	mg/L	0.000027	0.00104	mg/L	0.000027	2.59%
Ti 334.903†	110.9	0.00551	mg/L	0.000385	0.00551	mg/L	0.000385	7.00%
Tl 190.801†	85.3	0.04995	mg/L	0.001546	0.04995	mg/L	0.001546	3.09%
V 292.402†	468.2	0.00324	mg/L	0.000167	0.00324	mg/L	0.000167	5.15%
Zn 206.200†	33.8	0.01067	mg/L	0.000449	0.01067	mg/L	0.000449	4.21%

Sequence No.: 4
Sample ID: ICSA
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 302
Date Collected: 5/12/2015 9:20:43 AM
Data Type: Original

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	225.0 kPa	0.75 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2731278.1	94.69	%	1.586				1.68%
ScR 361.383	263566.1	96.41	%	0.816				0.85%
Ag 328.068†	-267.7	-0.00111	mg/L	0.000278	-0.00111	mg/L	0.000278	25.16%
Al 308.215†	222251.4	204.0	mg/L	0.65	204.0	mg/L	0.65	0.32%
As 188.979†	43.5	0.02416	mg/L	0.001698	0.02416	mg/L	0.001698	7.03%
B 249.677†	-48.0	-0.00831	mg/L	0.002043	-0.00831	mg/L	0.002043	24.58%
Ba 233.527†	119.6	-0.00486	mg/L	0.000434	-0.00486	mg/L	0.000434	8.93%
Be 313.042†	34.2	0.00007	mg/L	0.000017	0.00007	mg/L	0.000017	23.92%
Ca 317.933†	859269.4	102.4	mg/L	0.24	102.4	mg/L	0.24	0.24%
Cd 228.802†	20.8	0.00074	mg/L	0.000158	0.00074	mg/L	0.000158	21.50%
Co 228.616†	70.7	0.00201	mg/L	0.000097	0.00201	mg/L	0.000097	4.82%
Cr 267.716†	-7.5	-0.00270	mg/L	0.000526	-0.00270	mg/L	0.000526	19.51%
Cu 324.752†	-2363.9	-0.00008	mg/L	0.000122	-0.00008	mg/L	0.000122	155.14%
Fe 273.955†	224975.9	200.1	mg/L	1.44	200.1	mg/L	1.44	0.72%
K 766.490†	5.0	0.00191	mg/L	0.005207	0.00191	mg/L	0.005207	272.31%
Mg 279.077†	81363.8	105.3	mg/L	0.90	105.3	mg/L	0.90	0.86%
Mn 257.610†	84.4	0.00041	mg/L	0.000103	0.00041	mg/L	0.000103	25.24%
Mo 202.031†	100.5	0.00410	mg/L	0.000363	0.00410	mg/L	0.000363	8.85%
Na 589.592†	364.1	0.02311	mg/L	0.001066	0.02311	mg/L	0.001066	4.61%
Na 330.237†	-10.9	-0.4253	mg/L	0.01420	-0.4253	mg/L	0.01420	3.34%
Ni 231.604†	3.5	0.00104	mg/L	0.000715	0.00104	mg/L	0.000715	68.80%
Pb 220.353†	-376.5	-0.00422	mg/L	0.001582	-0.00422	mg/L	0.001582	37.48%
Sb 206.836†	2.1	0.00062	mg/L	0.002408	0.00062	mg/L	0.002408	388.53%
Se 196.026†	38.8	0.00411	mg/L	0.005583	0.00411	mg/L	0.005583	135.80%
Si 288.158†	-12.4	0.00321	mg/L	0.003110	0.00321	mg/L	0.003110	96.92%
Sn 189.927†	-88.4	-0.00784	mg/L	0.001773	-0.00784	mg/L	0.001773	22.61%
Sr 421.552†	2592.0	0.00302	mg/L ok	0.000072	0.00302	mg/L	0.000072	2.40%
Ti 334.903†	253.8	0.00673	mg/L	0.000232	0.00673	mg/L	0.000232	3.45%
Tl 190.801†	-38.6	0.00448	mg/L	0.004568	0.00448	mg/L	0.004568	102.03%
V 292.402†	1469.4	-0.00058	mg/L	0.000130	-0.00058	mg/L	0.000130	22.62%
Zn 206.200†	-3.1	-0.00100	mg/L	0.000738	-0.00100	mg/L	0.000738	73.98%

Sequence No.: 5
Sample ID: ICSAB
Analyst: CC
Dilution: 1.000000X
User canceled analysis.

Autosampler Location: 303
Date Collected: 5/12/2015 9:24:58 AM
Data Type: Original

Analysis Begun

Start Time: 5/12/2015 9:27:08 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 5/12/2015 7:24:55 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\0512.sif
Batch ID:
Results Data Set: FAST-Verify-Install
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 5
Sample ID: ICSAB
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 303
Date Collected: 5/12/2015 9:27:10 AM
Data Type: Original

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	226.0 kPa	0.75 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2778401.2	96.32	%	0.103				0.11%
ScR 361.383	274758.8	100.5	%	1.02				1.02%
Ag 328.068†	253667.5	1.051	mg/L	0.0017	1.051	mg/L	0.0017	0.16%
Al 308.215†	215016.8	197.4	mg/L	0.26	197.4	mg/L	0.26	0.13%
As 188.979†	1308.7	1.008	mg/L	0.0054	1.008	mg/L	0.0054	0.54%
B 249.677†	-29.0	-0.00696	mg/L	0.001526	-0.00696	mg/L	0.001526	21.93%
Ba 233.527†	4958.5	1.021	mg/L	0.0076	1.021	mg/L	0.0076	0.74%
Be 313.042†	453065.6	0.9904	mg/L	0.00339	0.9904	mg/L	0.00339	0.34%
Ca 317.933†	831382.8	99.03	mg/L	0.088	99.03	mg/L	0.088	0.09%
Cd 228.802†	23200.6	1.039	mg/L	0.0012	1.039	mg/L	0.0012	0.11%
Co 228.616†	33170.6	0.9557	mg/L	0.00046	0.9557	mg/L	0.00046	0.05%
Cr 267.716†	6348.1	1.023	mg/L	0.0059	1.023	mg/L	0.0059	0.57%
Cu 324.752†	308182.2	1.046	mg/L	0.0017	1.046	mg/L	0.0017	0.16%
Fe 273.955†	217665.1	193.5	mg/L	1.67	193.5	mg/L	1.67	0.86%
K 766.490†	9.4	0.00357	mg/L	0.004345	0.00357	mg/L	0.004345	121.55%
Mg 279.077†	75336.0	97.47	mg/L	0.076	97.47	mg/L	0.076	0.08%
Mn 257.610†	39597.2	0.9473	mg/L	0.00519	0.9473	mg/L	0.00519	0.55%
Mo 202.031†	102.9	0.00429	mg/L	0.000355	0.00429	mg/L	0.000355	8.27%
Na 589.592†	180.3	0.01144	mg/L	0.001385	0.01144	mg/L	0.001385	12.11%
Na 330.237†	-1.3	-0.3099	mg/L	0.25106	-0.3099	mg/L	0.25106	81.02%
Ni 231.604†	3294.6	0.9695	mg/L	0.00350	0.9695	mg/L	0.00350	0.36%
Pb 220.353†	7429.1	0.9610	mg/L	0.00166	0.9610	mg/L	0.00166	0.17%
Sb 206.836†	2807.2	1.025	mg/L	0.0045	1.025	mg/L	0.0045	0.43%
Se 196.026†	1388.7	0.9895	mg/L	0.01071	0.9895	mg/L	0.01071	1.08%
Si 288.158†	-21.3	-0.00067	mg/L	0.002313	-0.00067	mg/L	0.002313	345.15%
Sn 189.927†	-83.6	-0.00653	mg/L	0.000252	-0.00653	mg/L	0.000252	3.86%
Sr 421.552†	2448.1	0.00285	mg/L cont.	0.000016	0.00285	mg/L	0.000016	0.56%
Ti 334.903†	245.3	0.00630	mg/L	0.000131	0.00630	mg/L	0.000131	2.08%
Tl 190.801†	1542.4	0.9208	mg/L	0.00693	0.9208	mg/L	0.00693	0.75%
V 292.402†	144502.2	0.9866	mg/L	0.00048	0.9866	mg/L	0.00048	0.05%
Zn 206.200†	3008.1	0.9495	mg/L	0.00716	0.9495	mg/L	0.00716	0.75%

Sequence No.: 6
Sample ID: CV(
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 5/12/2015 9:32:35 AM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	224.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2876654.6	99.73	%	0.668				0.67%
ScR 361.383	274897.7	100.6	%	0.69				0.69%
Ag 328.068†	247151.9	1.024	mg/L	0.0089	1.024	mg/L	0.0089	0.87%
Al 308.215†	2190.1	1.979	mg/L	0.0233	1.979	mg/L	0.0233	1.18%
As 188.979†	2494.4	1.962	mg/L	0.0178	1.962	mg/L	0.0178	0.91%
B 249.677†	5695.5	0.9846	mg/L	0.01062	0.9846	mg/L	0.01062	1.08%
Ba 233.527†	4944.1	1.047	mg/L	0.0079	1.047	mg/L	0.0079	0.75%
Be 313.042†	440021.3	0.9619	mg/L	0.01435	0.9619	mg/L	0.01435	1.49%
Ca 317.933†	17281.0	2.058	mg/L	0.0132	2.058	mg/L	0.0132	0.64%
Cd 228.802†	22938.7	1.022	mg/L	0.0037	1.022	mg/L	0.0037	0.36%
Co 228.616†	34138.5	0.9820	mg/L	0.00632	0.9820	mg/L	0.00632	0.64%
Cr 267.716†	6435.3	1.037	mg/L	0.0065	1.037	mg/L	0.0065	0.63%
Cu 324.752†	285361.4	0.9611	mg/L	0.00317	0.9611	mg/L	0.00317	0.33%
Fe 273.955†	2291.3	2.031	mg/L	0.0122	2.031	mg/L	0.0122	0.60%
K 766.490†	52026.1	19.73	mg/L	0.243	19.73	mg/L	0.243	1.23%
Mg 279.077†	1534.0	1.994	mg/L	0.0104	1.994	mg/L	0.0104	0.52%
Mn 257.610†	40412.9	0.9686	mg/L	0.01595	0.9686	mg/L	0.01595	1.65%
Mo 202.031†	17589.8	1.003	mg/L	0.0016	1.003	mg/L	0.0016	0.16%
Na 589.592†	780557.5	49.53	mg/L	0.638	49.53	mg/L	0.638	1.29%
Na 330.237†	1283.8	50.69	mg/L	0.516	50.69	mg/L	0.516	1.02%
Ni 231.604†	3405.0	1.002	mg/L	0.0090	1.002	mg/L	0.0090	0.90%
Pb 220.353†	15882.0	1.967	mg/L	0.0071	1.967	mg/L	0.0071	0.36%
Sb 206.836†	5718.6	2.108	mg/L	0.0214	2.108	mg/L	0.0214	1.01%
Se 196.026†	2701.8	1.971	mg/L	0.0169	1.971	mg/L	0.0169	0.86%
Si 288.158†	2739.8	2.056	mg/L	0.0367	2.056	mg/L	0.0367	1.78%
Sn 189.927†	4050.1	1.036	mg/L	0.0102	1.036	mg/L	0.0102	0.98%
Sr 421.552†	853666.6	0.9941	mg/L	0.01342	0.9941	mg/L	0.01342	1.35%
Ti 334.903†	19937.7	0.9901	mg/L	0.01528	0.9901	mg/L	0.01528	1.54%
Tl 190.801†	3362.8	1.963	mg/L	0.0108	1.963	mg/L	0.0108	0.55%
V 292.402†	144984.1	1.000	mg/L	0.0085	1.000	mg/L	0.0085	0.85%
Zn 206.200†	3137.0	0.9899	mg/L	0.00710	0.9899	mg/L	0.00710	0.72%

Sequence No.: 7
Sample ID: CB
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 5/12/2015 9:36:39 AM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	225.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2871055.2	99.54	%	0.996				1.00%
ScR 361.383	280082.5	102.5	%	0.95				0.93%
Ag 328.068†	40.5	0.00017	mg/L	0.000128	0.00017	mg/L	0.000128	76.50%
Al 308.215†	-1.1	-0.00106	mg/L	0.003532	-0.00106	mg/L	0.003532	332.11%
As 188.979†	-0.4	-0.00026	mg/L	0.001154	-0.00026	mg/L	0.001154	437.21%
B 249.677†	18.9	0.00327	mg/L	0.000993	0.00327	mg/L	0.000993	30.35%
Ba 233.527†	0.3	0.00006	mg/L	0.000983	0.00006	mg/L	0.000983	>999.9%
Be 313.042†	11.7	0.00003	mg/L	0.000011	0.00003	mg/L	0.000011	41.80%
Ca 317.933†	34.2	0.00407	mg/L	0.000170	0.00407	mg/L	0.000170	4.18%
Cd 228.802†	3.2	0.00015	mg/L	0.000180	0.00015	mg/L	0.000180	123.96%
Co 228.616†	1.0	0.00003	mg/L	0.000061	0.00003	mg/L	0.000061	218.69%
Cr 267.716†	4.9	0.00079	mg/L	0.000988	0.00079	mg/L	0.000988	124.79%
Cu 324.752†	43.8	0.00015	mg/L	0.000049	0.00015	mg/L	0.000049	33.29%
Fe 273.955†	2.1	0.00182	mg/L	0.001964	0.00182	mg/L	0.001964	107.69%
K 766.490†	14.1	0.00534	mg/L	0.014593	0.00534	mg/L	0.014593	273.02%
Mg 279.077†	0.4	0.00047	mg/L	0.006930	0.00047	mg/L	0.006930	>999.9%
Mn 257.610†	-1.1	-0.00003	mg/L	0.000113	-0.00003	mg/L	0.000113	437.91%
Mo 202.031†	25.6	0.00146	mg/L	0.000373	0.00146	mg/L	0.000373	25.60%
Na 589.592†	54.8	0.00348	mg/L	0.000645	0.00348	mg/L	0.000645	18.54%
Na 330.237†	3.4	0.1323	mg/L	0.22742	0.1323	mg/L	0.22742	171.92%
Ni 231.604†	-4.8	-0.00142	mg/L	0.000803	-0.00142	mg/L	0.000803	56.56%
Pb 220.353†	-2.3	-0.00029	mg/L	0.000255	-0.00029	mg/L	0.000255	88.39%
Sb 206.836†	10.9	0.00401	mg/L	0.001356	0.00401	mg/L	0.001356	33.78%
Se 196.026†	-2.9	-0.00210	mg/L	0.000932	-0.00210	mg/L	0.000932	44.38%
Si 288.158†	4.1	0.00306	mg/L	0.002814	0.00306	mg/L	0.002814	92.05%
Sn 189.927†	1.2	0.00030	mg/L	0.000768	0.00030	mg/L	0.000768	251.81%
Sr 421.552†	64.1	0.00007	mg/L	0.000012	0.00007	mg/L	0.000012	15.91%
Ti 334.903†	13.2	0.00065	mg/L	0.000441	0.00065	mg/L	0.000441	67.51%
Tl 190.801†	-2.4	-0.00141	mg/L	0.000612	-0.00141	mg/L	0.000612	43.50%
V 292.402†	46.1	0.00032	mg/L	0.000073	0.00032	mg/L	0.000073	22.69%
Zn 206.200†	3.8	0.00121	mg/L	0.000507	0.00121	mg/L	0.000507	41.80%

User canceled analysis.

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Analysis Begun

Start Time: 5/12/2015 9:53:02 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 5/12/2015 7:24:55 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\0512.sif
Batch ID:
Results Data Set: FAST-Verify-Install
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

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Sequence No.: 8
Sample ID: AFM7 MB LEN
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 304
Date Collected: 5/12/2015 9:53:05 AM
Data Type: Original

User canceled analysis.

==========

Analysis Begun

Start Time: 5/12/2015 9:54:58 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 5/12/2015 7:24:55 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\0512.sif
Batch ID:
Results Data Set: FAST-Verify-Install
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

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Sequence No.: 8
Sample ID: AFM7 MB LEN
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 304
Date Collected: 5/12/2015 9:55:01 AM
Data Type: Original

Nebulizer Parameters: AFM7 MB LEN

Analyte	Back Pressure	Flow
All	225.0 kPa	0.75 L/min

Mean Data: AFM7 MB LEN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2814908.8	97.59	%	0.193				0.20%
ScR 361.383	282067.7	103.2	%	0.79				0.77%
Ag 328.068†	21.4	0.00009	mg/L	0.000215	0.00044	mg/L	0.001075	242.50%
Al 308.215†	-0.4	-0.00033	mg/L	0.002237	-0.00165	mg/L	0.011186	678.40%
As 188.979†	-1.7	-0.00132	mg/L	0.002273	-0.00660	mg/L	0.011363	172.25%
B 249.677†	39.9	0.00691	mg/L	0.001008	0.03455	mg/L	0.005041	14.59%
Ba 233.527†	5.0	0.00106	mg/L	0.000129	0.00530	mg/L	0.000646	12.18%
Be 313.042†	-6.5	-0.00001	mg/L	0.000009	-0.00007	mg/L	0.000043	60.15%
Ca 317.933†	639.2	0.07614*	mg/L	0.000886	0.3807	mg/L	0.00443	1.16%
Cd 228.802†	6.3	0.00029	mg/L	0.000117	0.00145	mg/L	0.000583	40.25%
Co 228.616†	-0.6	-0.00002	mg/L	0.000093	-0.00010	mg/L	0.000463	487.03%
Cr 267.716†	1.9	0.00031	mg/L	0.000728	0.00155	mg/L	0.003640	235.28%
Cu 324.752†	141.6	0.00048	mg/L	0.000048	0.00239	mg/L	0.000242	10.16%
Fe 273.955†	3.8	0.00337	mg/L	0.000879	0.01684	mg/L	0.004394	26.09%
K 766.490†	21.9	0.00829	mg/L	0.014768	0.04147	mg/L	0.073838	178.06%
Mg 279.077†	8.8	0.01142	mg/L	0.005418	0.05710	mg/L	0.027090	47.44%
Mn 257.610†	-0.4	-0.00001	mg/L	0.000054	-0.00005	mg/L	0.000270	570.17%
Mo 202.031†	1.1	0.00006	mg/L	0.000067	0.00031	mg/L	0.000337	108.03%
Na 589.592†	4400317.0	279.2*	mg/L	2.92	1396	mg/L	14.59	1.04%
Na 330.237†	7231.6	285.7*	mg/L	1.81	1428	mg/L	9.06	0.63%
Ni 231.604†	-1.0	-0.00029	mg/L	0.000622	-0.00143	mg/L	0.003110	217.39%
Pb 220.353†	-0.1	-0.00002	mg/L	0.000635	-0.00008	mg/L	0.003174	>999.9%
Sb 206.836†	0.1	0.00005	mg/L	0.001467	0.00024	mg/L	0.007336	>999.9%
Se 196.026†	-3.8	-0.00275	mg/L	0.002312	-0.01376	mg/L	0.011562	84.02%

Si 288.158†	25.5	0.01915 mg/L	0.004221	0.09577 mg/L	0.021104	22.04%
Sn 189.927†	-1.1	-0.00028 mg/L	0.000731	-0.00141 mg/L	0.003655	259.94%
Sr 421.552†	78.4	0.00009 mg/L	0.000003	0.00046 mg/L	0.000014	3.02%
Ti 334.903†	7.8	0.00038 mg/L	0.000279	0.00191 mg/L	0.001396	73.07%
Tl 190.801†	1.2	0.00068 mg/L	0.001560	0.00342 mg/L	0.007799	227.81%
V 292.402†	44.3	0.00031 mg/L	0.000135	0.00153 mg/L	0.000677	44.30%
Zn 206.200†	6.9	0.00218 mg/L	0.000476	0.01088 mg/L	0.002378	21.86%

Sequence No.: 9
Sample ID: AFM3 MB2 LEN
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 305
Date Collected: 5/12/2015 9:59:34 AM
Data Type: Original

Nebulizer Parameters: AFM3 MB2 LEN

Analyte	Back Pressure	Flow
All	225.0 kPa	0.75 L/min

Mean Data: AFM3 MB2 LEN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2734999.9	94.82	%	0.433				0.46%
ScR 361.383	279300.2	102.2	%	0.57				0.56%
Ag 328.068†	51.4	0.00021	mg/L	0.000028	0.00106	mg/L	0.000139	13.06%
Al 308.215†	-2.0	-0.00184	mg/L	0.005694	-0.00920	mg/L	0.028471	309.41%
As 188.979†	-2.8	-0.00219	mg/L	0.000792	-0.01097	mg/L	0.003958	36.08%
B 249.677†	31.3	0.00541	mg/L	0.001059	0.02705	mg/L	0.005296	19.58%
Ba 233.527†	8.6	0.00183	mg/L	0.000972	0.00915	mg/L	0.004861	53.10%
Be 313.042†	-9.3	-0.00002	mg/L	0.000012	-0.00010	mg/L	0.000058	56.94%
Ca 317.933†	611.1	0.07279	mg/L	0.000329	0.3640	mg/L	0.00165	0.45%
Cd 228.802†	11.5	0.00053	mg/L	0.000105	0.00266	mg/L	0.000525	19.75%
Co 228.616†	-6.8	-0.00020	mg/L	0.000098	-0.00099	mg/L	0.000491	49.59%
Cr 267.716†	8.1	0.00130	mg/L	0.000290	0.00651	mg/L	0.001452	22.32%
Cu 324.752†	200.6	0.00068	mg/L	0.000008	0.00338	mg/L	0.000042	1.24%
Fe 273.955†	1.0	0.00086	mg/L	0.000767	0.00430	mg/L	0.003833	89.05%
K 766.490†	34.3	0.01303	mg/L	0.010743	0.06513	mg/L	0.053717	82.48%
Mg 279.077†	13.1	0.01694	mg/L	0.006065	0.08468	mg/L	0.030324	35.81%
Mn 257.610†	-2.1	-0.00005	mg/L	0.000057	-0.00025	mg/L	0.000283	113.17%
Mo 202.031†	7.3	0.00042	mg/L	0.000204	0.00208	mg/L	0.001018	48.88%
Na 589.592†	4263335.5	270.6	mg/L	2.03	1353	mg/L	10.15	0.75%
Na 330.237†	7069.6	279.3	mg/L	1.87	1396	mg/L	9.35	0.67%
Ni 231.604†	1.9	0.00057	mg/L	0.000615	0.00284	mg/L	0.003074	108.13%
Pb 220.353†	1.5	0.00019	mg/L	0.000644	0.00095	mg/L	0.003220	337.61%
Sb 206.836†	1.0	0.00033	mg/L	0.000737	0.00166	mg/L	0.003684	221.89%
Se 196.026†	-1.9	-0.00140	mg/L	0.000420	-0.00699	mg/L	0.002098	30.00%
Si 288.158†	23.5	0.01771	mg/L	0.003983	0.08856	mg/L	0.019914	22.49%
Sn 189.927†	-1.9	-0.00048	mg/L	0.000545	-0.00241	mg/L	0.002724	113.05%
Sr 421.552†	85.8	0.00010	mg/L	0.000010	0.00050	mg/L	0.000049	9.74%
Ti 334.903†	8.6	0.00042	mg/L	0.000489	0.00211	mg/L	0.002447	116.26%
Tl 190.801†	-0.2	-0.00009	mg/L	0.001687	-0.00046	mg/L	0.008433	>999.9%
V 292.402†	22.8	0.00016	mg/L	0.000081	0.00081	mg/L	0.000407	50.39%
Zn 206.200†	5.6	0.00176	mg/L	0.000438	0.00879	mg/L	0.002191	24.93%

Sequence No.: 10
Sample ID: AFM3 AtDUP LEN
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 306
Date Collected: 5/12/2015 10:04:06 AM
Data Type: Original

Nebulizer Parameters: AFM3 AtDUP LEN

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AFM3 AtDUP LEN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2769931.5	96.03	%	0.609				0.63%
ScR 361.383	280522.3	102.6	%	0.38				0.37%
Ag 328.068†	2.7	0.00001	mg/L	0.000061	0.00006	mg/L	0.000303	529.06%
Al 308.215†	107.6	0.09868	mg/L	0.001969	0.4934	mg/L	0.00985	2.00%
As 188.979†	27.0	0.01821	mg/L	0.000501	0.09106	mg/L	0.002505	2.75%
B 249.677†	63.8	0.01103	mg/L	0.001850	0.05514	mg/L	0.009250	16.77%
Ba 233.527†	413.7	0.08757	mg/L	0.000853	0.4379	mg/L	0.00426	0.97%
Be 313.042†	5.4	0.00001	mg/L	0.000016	0.00006	mg/L	0.000078	132.41%
Ca 317.933†	251963.4	30.01	mg/L	0.086	150.1	mg/L	0.43	0.29%
Cd 228.802†	148.7	0.00658	mg/L	0.000042	0.03288	mg/L	0.000210	0.64%
Co 228.616†	263.7	0.00759	mg/L	0.000179	0.03793	mg/L	0.000895	2.36%
Cr 267.716†	21.4	0.00316	mg/L	0.000576	0.01578	mg/L	0.002880	18.25%
Cu 324.752†	5139.8	0.01734	mg/L	0.000104	0.08671	mg/L	0.000520	0.60%
Fe 273.955†	827.3	0.7356	mg/L	0.00328	3.678	mg/L	0.0164	0.45%
K 766.490†	3445.4	1.307	mg/L	0.0160	6.533	mg/L	0.0798	1.22%
Mg 279.077†	962.4	1.243	mg/L	0.0055	6.216	mg/L	0.0273	0.44%
Mn 257.610†	13350.2	0.3197	mg/L	0.00186	1.599	mg/L	0.0093	0.58%
Mo 202.031†	57.0	0.00277	mg/L	0.000180	0.01386	mg/L	0.000898	6.48%
Na 589.592†	4350588.3	276.1	mg/L	1.44	1380	mg/L	7.19	0.52%
Na 330.237†	7017.6	276.9	mg/L	0.74	1384	mg/L	3.70	0.27%
Ni 231.604†	27.5	0.00808	mg/L	0.000156	0.04038	mg/L	0.000782	1.94%
Pb 220.353†	25.8	0.00317	mg/L	0.000593	0.01585	mg/L	0.002965	18.71%
Sb 206.836†	6.2	0.00214	mg/L	0.001125	0.01072	mg/L	0.005627	52.48%
Se 196.026†	4.5	0.00326	mg/L	0.003987	0.01629	mg/L	0.019937	122.37%
Si 288.158†	2017.0	1.517	mg/L	0.0042	7.586	mg/L	0.0210	0.28%
Sn 189.927†	-46.5	-0.00755	mg/L	0.001005	-0.03776	mg/L	0.005024	13.30%
Sr 421.552†	78923.3	0.09191	mg/L	0.000185	0.4595	mg/L	0.00092	0.20%
Ti 334.903†	84.1	0.00245	mg/L	0.000159	0.01225	mg/L	0.000793	6.48%
Tl 190.801†	12.1	0.00715	mg/L	0.000949	0.03575	mg/L	0.004747	13.28%
V 292.402†	44.2	0.00033	mg/L	0.000081	0.00164	mg/L	0.000407	24.82%
Zn 206.200†	4002.3	1.263	mg/L	0.0020	6.317	mg/L	0.0098	0.16%

Sequence No.: 11
Sample ID: AFM3 At LEN
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 307
Date Collected: 5/12/2015 10:08:23 AM
Data Type: Original

Nebulizer Parameters: AFM3 At LEN

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFM3 At LEN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2687648.7	93.18	%	0.287				0.31%
ScR 361.383	272266.8	99.59	%	0.346				0.35%
Ag 328.068†	-9.4	-0.00004	mg/L	0.000038	-0.00019	mg/L	0.000188	96.31%
Al 308.215†	118.0	0.1082	mg/L	0.00629	0.5412	mg/L	0.03143	5.81%
As 188.979†	31.4	0.02140	mg/L	0.001919	0.1070	mg/L	0.00959	8.97%
B 249.677†	73.5	0.01270	mg/L	0.000385	0.06351	mg/L	0.001924	3.03%
Ba 233.527†	444.4	0.09406	mg/L	0.000182	0.4703	mg/L	0.00091	0.19%
Be 313.042†	44.0	0.00010	mg/L	0.000020	0.00048	mg/L	0.000101	20.96%
Ca 317.933†	268899.5	32.03	mg/L	0.278	160.2	mg/L	1.39	0.87%
Cd 228.802†	162.8	0.00719	mg/L	0.000069	0.03596	mg/L	0.000343	0.95%
Co 228.616†	278.5	0.00801	mg/L	0.000246	0.04005	mg/L	0.001232	3.08%
Cr 267.716†	19.2	0.00279	mg/L	0.000923	0.01396	mg/L	0.004615	33.06%
Cu 324.752†	5506.8	0.01858	mg/L	0.000259	0.09290	mg/L	0.001295	1.39%
Fe 273.955†	885.8	0.7877	mg/L	0.00601	3.938	mg/L	0.0300	0.76%
K 766.490†	3677.9	1.395	mg/L	0.0063	6.973	mg/L	0.0313	0.45%
Mg 279.077†	1019.7	1.317	mg/L	0.0023	6.586	mg/L	0.0116	0.18%
Mn 257.610†	14260.0	0.3415	mg/L	0.00302	1.708	mg/L	0.0151	0.89%
Mo 202.031†	59.1	0.00286	mg/L	0.000411	0.01431	mg/L	0.002053	14.35%
Na 589.592†	4651913.9	295.2	mg/L	2.12	1476	mg/L	10.58	0.72%
Na 330.237†	7481.5	295.2	mg/L	1.43	1476	mg/L	7.13	0.48%
Ni 231.604†	34.7	0.01019	mg/L	0.000529	0.05097	mg/L	0.002644	5.19%
Pb 220.353†	25.1	0.00308	mg/L	0.000401	0.01542	mg/L	0.002004	13.00%
Sb 206.836†	9.0	0.00317	mg/L	0.000294	0.01584	mg/L	0.001469	9.27%
Se 196.026†	-0.7	-0.00051	mg/L	0.007909	-0.00254	mg/L	0.039544	>999.9%
Si 288.158†	2157.9	1.623	mg/L	0.0136	8.116	mg/L	0.0681	0.84%
Sn 189.927†	-48.5	-0.00777	mg/L	0.000897	-0.03883	mg/L	0.004483	11.55%
Sr 421.552†	84710.0	0.09865	mg/L	0.000696	0.4932	mg/L	0.00348	0.71%
Ti 334.903†	92.9	0.00277	mg/L	0.000083	0.01386	mg/L	0.000416	3.00%
Tl 190.801†	11.1	0.00659	mg/L	0.002229	0.03296	mg/L	0.011143	33.81%
V 292.402†	28.2	0.00022	mg/L	0.000074	0.00108	mg/L	0.000370	34.19%
Zn 206.200†	4279.9	1.351	mg/L	0.0097	6.755	mg/L	0.0484	0.72%

Sequence No.: 12
Sample ID: AFM3 AtSPK LEN
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 308
Date Collected: 5/12/2015 10:12:40 AM
Data Type: Original

Nebulizer Parameters: AFM3 AtSPK LEN

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AFM3 AtSPK LEN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2707538.5	93.87	%	0.120				0.13%
ScR 361.383	268581.5	98.24	%	0.188				0.19%
Ag 328.068†	51059.7	0.2116	mg/L	0.00114	1.058	mg/L	0.0057	0.54%
Al 308.215†	1011.8	0.9257	mg/L	0.00353	4.629	mg/L	0.0177	0.38%
As 188.979†	1103.2	0.8547	mg/L	0.00464	4.274	mg/L	0.0232	0.54%
B 249.677†	70.7	0.01183	mg/L	0.000693	0.05914	mg/L	0.003464	5.86%
Ba 233.527†	4470.5	0.9472	mg/L	0.00656	4.736	mg/L	0.0328	0.69%
Be 313.042†	90685.5	0.1982	mg/L	0.00114	0.9912	mg/L	0.00571	0.58%
Ca 317.933†	296006.0	35.26	mg/L	0.207	176.3	mg/L	1.04	0.59%
Cd 228.802†	4986.0	0.2196	mg/L	0.00058	1.098	mg/L	0.0029	0.26%
Co 228.616†	7112.9	0.2049	mg/L	0.00054	1.024	mg/L	0.0027	0.26%
Cr 267.716†	1309.3	0.2104	mg/L	0.00206	1.052	mg/L	0.0103	0.98%
Cu 324.752†	66544.8	0.2243	mg/L	0.00091	1.121	mg/L	0.0046	0.41%
Fe 273.955†	1779.8	1.581	mg/L	0.0052	7.906	mg/L	0.0262	0.33%
K 766.490†	14415.6	5.466	mg/L	0.0253	27.33	mg/L	0.126	0.46%
Mg 279.077†	4168.9	5.397	mg/L	0.0211	26.99	mg/L	0.105	0.39%
Mn 257.610†	22168.8	0.5311	mg/L	0.00160	2.656	mg/L	0.0080	0.30%
Mo 202.031†	61.0	0.00291	mg/L	0.000153	0.01457	mg/L	0.000763	5.24%
Na 589.592†	4637160.1	294.3	mg/L	1.58	1471	mg/L	7.90	0.54%
Na 330.237†	7760.0	306.2	mg/L	1.39	1531	mg/L	6.97	0.46%
Ni 231.604†	721.7	0.2120	mg/L	0.00165	1.060	mg/L	0.0083	0.78%
Pb 220.353†	6464.8	0.8004	mg/L	0.00253	4.002	mg/L	0.0126	0.32%
Sb 206.836†	10.8	0.00187	mg/L	0.000583	0.00935	mg/L	0.002915	31.16%
Se 196.026†	1152.1	0.8408	mg/L	0.00465	4.204	mg/L	0.0232	0.55%
Si 288.158†	2125.9	1.600	mg/L	0.0121	8.002	mg/L	0.0603	0.75%
Sn 189.927†	-52.7	-0.00835	mg/L	0.001826	-0.04177	mg/L	0.009129	21.86%
Sr 421.552†	258290.3	0.3008	mg/L	0.00164	1.504	mg/L	0.0082	0.55%
Ti 334.903†	99.4	0.00287	mg/L	0.000207	0.01436	mg/L	0.001036	7.22%
Tl 190.801†	1334.8	0.7806	mg/L	0.00355	3.903	mg/L	0.0178	0.45%
V 292.402†	29736.5	0.2051	mg/L	0.00073	1.026	mg/L	0.0037	0.36%
Zn 206.200†	4790.0	1.512	mg/L	0.0083	7.560	mg/L	0.0414	0.55%

Sequence No.: 13
Sample ID: AFM7 A LEN
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 309
Date Collected: 5/12/2015 10:16:58 AM
Data Type: Original

Nebulizer Parameters: AFM7 A LEN

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFM7 A LEN

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2810350.2	97.43	%	0.160				0.16%
ScR 361.383	271685.7	99.38	%	0.782				0.79%
Ag 328.068†	-2.1	-0.00001	mg/L	0.000047	-0.00004	mg/L	0.000236	546.68%
Al 308.215†	25.9	0.02375	mg/L	0.006895	0.1188	mg/L	0.03447	29.03%
As 188.979†	1.0	0.00077	mg/L	0.000811	0.00386	mg/L	0.004054	105.02%
B 249.677†	451.5	0.07812	mg/L	0.001082	0.3906	mg/L	0.00541	1.39%
Ba 233.527†	118.9	0.02517	mg/L	0.000316	0.1259	mg/L	0.00158	1.26%
Be 313.042†	15.6	0.00003	mg/L	0.000013	0.00017	mg/L	0.000065	38.47%
Ca 317.933†	23114.2	2.753	mg/L	0.0131	13.77	mg/L	0.065	0.48%
Cd 228.802†	5.0	0.00022	mg/L	0.000123	0.00111	mg/L	0.000613	55.15%
Co 228.616†	31.1	0.00088	mg/L	0.000047	0.00439	mg/L	0.000233	5.32%
Cr 267.716†	12.4	0.00195	mg/L	0.001015	0.00973	mg/L	0.005074	52.14%
Cu 324.752†	8066.0	0.02718	mg/L	0.000183	0.1359	mg/L	0.00091	0.67%
Fe 273.955†	168.1	0.1494	mg/L	0.00247	0.7472	mg/L	0.01236	1.65%
K 766.490†	1294.1	0.4907	mg/L	0.00547	2.454	mg/L	0.0273	1.11%
Mg 279.077†	295.0	0.3818	mg/L	0.00126	1.909	mg/L	0.0063	0.33%
Mn 257.610†	523.1	0.01252	mg/L	0.000104	0.06262	mg/L	0.000518	0.83%
Mo 202.031†	10.0	0.00053	mg/L	0.000207	0.00263	mg/L	0.001036	39.31%
Na 589.592†	1055032.8	66.95	mg/L	0.442	334.8	mg/L	2.21	0.66%
Na 330.237†	1753.9	69.20	mg/L	0.665	346.0	mg/L	3.32	0.96%
Ni 231.604†	2.4	0.00070	mg/L	0.001724	0.00352	mg/L	0.008619	245.04%
Pb 220.353†	3.5	0.00039	mg/L	0.000235	0.00195	mg/L	0.001175	60.21%
Sb 206.836†	0.1	0.00001	mg/L	0.001749	0.00006	mg/L	0.008744	>999.9%
Se 196.026†	-1.6	-0.00115	mg/L	0.002348	-0.00576	mg/L	0.011742	203.75%
Si 288.158†	1460.2	1.098	mg/L	0.0168	5.491	mg/L	0.0841	1.53%
Sn 189.927†	-9.0	-0.00191	mg/L	0.000573	-0.00956	mg/L	0.002863	29.94%
Sr 421.552†	6596.5	0.00768	mg/L	0.000046	0.03841	mg/L	0.000230	0.60%
Ti 334.903†	189.5	0.00926	mg/L	0.000456	0.04631	mg/L	0.002280	4.92%
Tl 190.801†	-1.2	-0.00066	mg/L	0.001515	-0.00332	mg/L	0.007576	227.91%
V 292.402†	37.0	0.00025	mg/L	0.000167	0.00125	mg/L	0.000835	66.55%
Zn 206.200†	1043.2	0.3294	mg/L	0.00132	1.647	mg/L	0.0066	0.40%

Sequence No.: 14
Sample ID: AFM7 BDUP LEN
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 310
Date Collected: 5/12/2015 10:21:13 AM
Data Type: Original

Nebulizer Parameters: AFM7 BDUP LEN

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFM7 BDUP LEN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2665423.0	92.41	%	0.338				0.37%
ScR 361.383	263252.0	96.29	%	0.227				0.24%
Ag 328.068†	-176.8	-0.00073	mg/L	0.000170	-0.00366	mg/L	0.000850	23.22%
Al 308.215†	2.4	0.00207	mg/L	0.003665	0.01033	mg/L	0.018324	177.31%
As 188.979†	72.9	0.04150	mg/L	0.003277	0.2075	mg/L	0.01639	7.90%
B 249.677†	52.0	0.00897	mg/L	0.000727	0.04486	mg/L	0.003635	8.10%
Ba 233.527†	1733.9	0.3675	mg/L	0.00063	1.837	mg/L	0.0031	0.17%
Be 313.042†	39.0	0.00009	mg/L	0.000012	0.00043	mg/L	0.000060	14.16%
Ca 317.933†	1356099.7	161.5	mg/L	1.63	807.7	mg/L	8.17	1.01%
Cd 228.802†	-24.5	-0.00141	mg/L	0.000204	-0.00704	mg/L	0.001020	14.49%
Co 228.616†	705.9	0.02028	mg/L	0.000131	0.1014	mg/L	0.00065	0.65%
Cr 267.716†	5.8	-0.00027	mg/L	0.000594	-0.00137	mg/L	0.002972	217.15%
Cu 324.752†	8078.0	0.02721	mg/L	0.000353	0.1360	mg/L	0.00177	1.30%
Fe 273.955†	14.8	0.01317	mg/L	0.002356	0.06584	mg/L	0.011782	17.89%
K 766.490†	2508.7	0.9513	mg/L	0.02132	4.756	mg/L	0.1066	2.24%
Mg 279.077†	978.0	1.250	mg/L	0.0094	6.250	mg/L	0.0470	0.75%
Mn 257.610†	28867.8	0.6911	mg/L	0.00764	3.455	mg/L	0.0382	1.11%
Mo 202.031†	121.2	0.00434	mg/L	0.000027	0.02171	mg/L	0.000135	0.62%
Na 589.592†	4679334.7	297.0	mg/L	1.51	1485	mg/L	7.54	0.51%
Na 330.237†	7586.1	297.8	mg/L	1.93	1489	mg/L	9.67	0.65%
Ni 231.604†	98.9	0.02910	mg/L	0.000574	0.1455	mg/L	0.00287	1.97%
Pb 220.353†	-17.1	-0.00215	mg/L	0.000695	-0.01074	mg/L	0.003473	32.34%
Sb 206.836†	12.2	0.00429	mg/L	0.000993	0.02146	mg/L	0.004967	23.15%
Se 196.026†	14.5	0.01059	mg/L	0.001618	0.05297	mg/L	0.008090	15.27%
Si 288.158†	2243.8	1.688	mg/L	0.0025	8.439	mg/L	0.0127	0.15%
Sn 189.927†	-82.2	0.00224	mg/L	0.000938	0.01118	mg/L	0.004688	41.95%
Sr 421.552†	374955.4	0.4366	mg/L	0.00243	2.183	mg/L	0.0122	0.56%
Ti 334.903†	390.3	0.01011	mg/L	0.000120	0.05054	mg/L	0.000600	1.19%
Tl 190.801†	29.5	0.01719	mg/L	0.001491	0.08593	mg/L	0.007453	8.67%
V 292.402†	27.9	0.00030	mg/L	0.000063	0.00149	mg/L	0.000315	21.16%
Zn 206.200†	22048.5	6.959	mg/L	0.0910	34.79	mg/L	0.455	1.31%

Sequence No.: 15
Sample ID: AFM7 B LEN
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 311
Date Collected: 5/12/2015 10:25:46 AM
Data Type: Original

Nebulizer Parameters: AFM7 B LEN

Analyte	Back Pressure	Flow
All	226.0 kPa	0.75 L/min

Mean Data: AFM7 B LEN

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2666353.9	92.44	%	0.454				0.49%
ScR 361.383	261846.4	95.78	%	0.360				0.38%
Ag 328.068†	-159.7	-0.00066	mg/L	0.000022	-0.00331	mg/L	0.000109	3.30%
Al 308.215†	3.1	0.00267	mg/L	0.002708	0.01336	mg/L	0.013542	101.36%
As 188.979†	68.5	0.03802	mg/L	0.002333	0.1901	mg/L	0.01167	6.14%
B 249.677†	50.1	0.00864	mg/L	0.000083	0.04318	mg/L	0.000414	0.96%
Ba 233.527†	1721.1	0.3647	mg/L	0.00143	1.824	mg/L	0.0071	0.39%
Be 313.042†	21.7	0.00005	mg/L	0.000001	0.00024	mg/L	0.000005	2.16%
Ca 317.933†	1355055.5	161.4	mg/L	1.59	807.0	mg/L	7.96	0.99%
Cd 228.802†	-25.0	-0.00141	mg/L	0.000285	-0.00705	mg/L	0.001426	20.23%
Co 228.616†	702.8	0.02019	mg/L	0.000137	0.1009	mg/L	0.00068	0.68%
Cr 267.716†	9.5	0.00033	mg/L	0.000519	0.00167	mg/L	0.002597	155.55%
Cu 324.752†	8057.0	0.02714	mg/L	0.000179	0.1357	mg/L	0.00090	0.66%
Fe 273.955†	12.8	0.01139	mg/L	0.001161	0.05697	mg/L	0.005803	10.19%
K 766.490†	2533.0	0.9605	mg/L	0.00700	4.803	mg/L	0.0350	0.73%
Mg 279.077†	979.5	1.252	mg/L	0.0023	6.261	mg/L	0.0116	0.18%
Mn 257.610†	28986.1	0.6939	mg/L	0.00433	3.469	mg/L	0.0216	0.62%
Mo 202.031†	124.1	0.00451	mg/L	0.000318	0.02254	mg/L	0.001588	7.04%
Na 589.592†	4663492.0	295.9	mg/L	2.94	1480	mg/L	14.71	0.99%
Na 330.237†	7618.2	299.1	mg/L	0.94	1495	mg/L	4.72	0.32%
Ni 231.604†	103.3	0.03039	mg/L	0.001594	0.1520	mg/L	0.00797	5.24%
Pb 220.353†	-18.6	-0.00233	mg/L	0.000642	-0.01167	mg/L	0.003212	27.52%
Sb 206.836†	8.2	0.00285	mg/L	0.000747	0.01425	mg/L	0.003736	26.22%
Se 196.026†	14.6	0.01066	mg/L	0.002980	0.05329	mg/L	0.014899	27.96%
Si 288.158†	2240.6	1.685	mg/L	0.0088	8.427	mg/L	0.0438	0.52%
Sn 189.927†	-75.6	0.00392	mg/L	0.000950	0.01960	mg/L	0.004748	24.23%
Sr 421.552†	372098.3	0.4333	mg/L	0.00526	2.167	mg/L	0.0263	1.21%
Ti 334.903†	376.6	0.00943	mg/L	0.000244	0.04716	mg/L	0.001221	2.59%
Tl 190.801†	27.1	0.01577	mg/L	0.002482	0.07883	mg/L	0.012410	15.74%
V 292.402†	22.8	0.00027	mg/L	0.000028	0.00133	mg/L	0.000140	10.52%
Zn 206.200†	22139.8	6.987	mg/L	0.0171	34.94	mg/L	0.086	0.25%

Sequence No.: 16
Sample ID: AFM7 BSPK LEN
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 312
Date Collected: 5/12/2015 10:30:19 AM
Data Type: Original

Nebulizer Parameters: AFM7 BSPK LEN

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFM7 BSPK LEN

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2636215.2	91.40	%	0.373				0.41%
ScR 361.383	263014.4	96.21	%	0.055				0.06%
Ag 328.068†	50849.3	0.2107	mg/L	0.00045	1.053	mg/L	0.0023	0.21%
Al 308.215†	917.1	0.8388	mg/L	0.00205	4.194	mg/L	0.0103	0.24%
As 188.979†	1135.4	0.8675	mg/L	0.00305	4.338	mg/L	0.0152	0.35%
B 249.677†	53.8	0.00887	mg/L	0.000177	0.04437	mg/L	0.000883	1.99%
Ba 233.527†	5727.7	1.214	mg/L	0.0055	6.068	mg/L	0.0274	0.45%
Be 313.042†	91832.9	0.2008	mg/L	0.00087	1.004	mg/L	0.0043	0.43%
Ca 317.933†	1384506.5	164.9	mg/L	0.87	824.6	mg/L	4.35	0.53%
Cd 228.802†	4938.2	0.2173	mg/L	0.00191	1.086	mg/L	0.0096	0.88%
Co 228.616†	7612.9	0.2192	mg/L	0.00102	1.096	mg/L	0.0051	0.47%
Cr 267.716†	1301.0	0.2082	mg/L	0.00132	1.041	mg/L	0.0066	0.64%
Cu 324.752†	69539.3	0.2343	mg/L	0.00037	1.172	mg/L	0.0019	0.16%
Fe 273.955†	924.2	0.8206	mg/L	0.00970	4.103	mg/L	0.0485	1.18%
K 766.490†	13593.1	5.155	mg/L	0.0414	25.77	mg/L	0.207	0.80%
Mg 279.077†	4160.1	5.373	mg/L	0.0100	26.86	mg/L	0.050	0.19%
Mn 257.610†	36766.3	0.8804	mg/L	0.00598	4.402	mg/L	0.0299	0.68%
Mo 202.031†	125.9	0.00455	mg/L	0.000172	0.02276	mg/L	0.000860	3.78%
Na 589.592†	4723676.2	299.8	mg/L	1.94	1499	mg/L	9.70	0.65%
Na 330.237†	7857.6	308.5	mg/L	0.58	1543	mg/L	2.92	0.19%
Ni 231.604†	790.2	0.2322	mg/L	0.00246	1.161	mg/L	0.0123	1.06%
Pb 220.353†	6509.2	0.8059	mg/L	0.00576	4.030	mg/L	0.0288	0.71%
Sb 206.836†	20.4	0.00538	mg/L	0.001417	0.02692	mg/L	0.007084	26.32%
Se 196.026†	1156.5	0.8440	mg/L	0.00374	4.220	mg/L	0.0187	0.44%
Si 288.158†	2226.7	1.676	mg/L	0.0041	8.382	mg/L	0.0203	0.24%
Sn 189.927†	-81.4	0.00297	mg/L	0.000853	0.01486	mg/L	0.004263	28.68%
Sr 421.552†	548829.2	0.6391	mg/L	0.00414	3.196	mg/L	0.0207	0.65%
Ti 334.903†	390.5	0.00988	mg/L	0.000577	0.04941	mg/L	0.002884	5.84%
Tl 190.801†	1325.3	0.7749	mg/L	0.00326	3.874	mg/L	0.0163	0.42%
V 292.402†	29459.9	0.2033	mg/L	0.00053	1.017	mg/L	0.0027	0.26%
Zn 206.200†	22332.5	7.048	mg/L	0.0294	35.24	mg/L	0.147	0.42%

Sequence No.: 17
Sample ID: AF05 MBSPK SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 313
Date Collected: 5/12/2015 10:34:52 AM
Data Type: Original

Nebulizer Parameters: AF05 MBSPK SWC

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AF05 MBSPK SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2827443.5	98.03	%	0.462				0.47%
ScR 361.383	274500.0	100.4	%	0.90				0.90%
Ag 328.068†	129332.3	0.5359	mg/L	0.00023	1.072	mg/L	0.0005	0.04%
Al 308.215†	2314.3	2.109	mg/L	0.0239	4.217	mg/L	0.0478	1.13%
As 188.979†	2659.3	2.066	mg/L	0.0087	4.131	mg/L	0.0173	0.42%
B 249.677†	7.9	0.00085	mg/L	0.001085	0.00170	mg/L	0.002170	127.90%
Ba 233.527†	10439.7	2.212	mg/L	0.0268	4.424	mg/L	0.0535	1.21%
Be 313.042†	234067.2	0.5117	mg/L	0.00451	1.023	mg/L	0.0090	0.88%
Ca 317.933†	86126.8	10.26	mg/L	0.065	20.52	mg/L	0.130	0.63%
Cd 228.802†	12381.2	0.5456	mg/L	0.00324	1.091	mg/L	0.0065	0.59%
Co 228.616†	18540.5	0.5342	mg/L	0.00169	1.068	mg/L	0.0034	0.32%
Cr 267.716†	3387.5	0.5451	mg/L	0.00732	1.090	mg/L	0.0146	1.34%
Cu 324.752†	154487.5	0.5204	mg/L	0.00113	1.041	mg/L	0.0023	0.22%
Fe 273.955†	2391.5	2.123	mg/L	0.0271	4.246	mg/L	0.0542	1.28%
K 766.490†	27463.1	10.41	mg/L	0.057	20.83	mg/L	0.114	0.55%
Mg 279.077†	8300.6	10.76	mg/L	0.122	21.51	mg/L	0.245	1.14%
Mn 257.610†	21136.9	0.5068	mg/L	0.00072	1.014	mg/L	0.0014	0.14%
Mo 202.031†	9232.0	0.5260	mg/L	0.00173	1.052	mg/L	0.0035	0.33%
Na 589.592†	165011.9	10.47	mg/L	0.052	20.94	mg/L	0.104	0.50%
Na 330.237†	278.1	10.85	mg/L	0.123	21.70	mg/L	0.245	1.13%
Ni 231.604†	1803.2	0.5308	mg/L	0.00541	1.062	mg/L	0.0108	1.02%
Pb 220.353†	17301.3	2.142	mg/L	0.0082	4.284	mg/L	0.0165	0.38%
Sb 206.836†	5848.8	2.155	mg/L	0.0101	4.311	mg/L	0.0202	0.47%
Se 196.026†	2806.5	2.048	mg/L	0.0115	4.096	mg/L	0.0229	0.56%
Si 288.158†	3.6	0.00180	mg/L	0.005569	0.00360	mg/L	0.011138	309.61%
Sn 189.927†	1974.1	0.5067	mg/L	0.00244	1.013	mg/L	0.0049	0.48%
Sr 421.552†	452457.5	0.5269	mg/L	0.00329	1.054	mg/L	0.0066	0.62%
Ti 334.903†	44.7	0.00104	mg/L	0.000208	0.00208	mg/L	0.000415	19.97%
Tl 190.801†	3571.5	2.089	mg/L	0.0061	4.178	mg/L	0.0121	0.29%
V 292.402†	75931.0	0.5241	mg/L	0.00021	1.048	mg/L	0.0004	0.04%
Zn 206.200†	1627.5	0.5134	mg/L	0.00657	1.027	mg/L	0.0131	1.28%

Sequence No.: 18
Sample ID: CV2
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 5/12/2015 10:38:52 AM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2826861.7	98.00	%	0.341				0.35%
ScR 361.383	270072.5	98.79	%	0.409				0.41%
Ag 328.068†	252010.5	1.044	mg/L	0.0040	1.044	mg/L	0.0040	0.38%
Al 308.215†	2224.9	2.010	mg/L	0.0126	2.010	mg/L	0.0126	0.63%
As 188.979†	2522.6	1.985	mg/L	0.0086	1.985	mg/L	0.0086	0.43%
B 249.677†	5759.2	0.9956	mg/L	0.00179	0.9956	mg/L	0.00179	0.18%
Ba 233.527†	5057.3	1.071	mg/L	0.0067	1.071	mg/L	0.0067	0.63%
Be 313.042†	447883.7	0.9791	mg/L	0.01111	0.9791	mg/L	0.01111	1.13%
Ca 317.933†	17507.5	2.085	mg/L	0.0091	2.085	mg/L	0.0091	0.44%
Cd 228.802†	23136.0	1.031	mg/L	0.0054	1.031	mg/L	0.0054	0.53%
Co 228.616†	34763.2	1.0000	mg/L	0.00481	1.0000	mg/L	0.00481	0.48%
Cr 267.716†	6523.7	1.052	mg/L	0.0036	1.052	mg/L	0.0036	0.34%
Cu 324.752†	290491.7	0.9784	mg/L	0.00164	0.9784	mg/L	0.00164	0.17%
Fe 273.955†	2287.5	2.028	mg/L	0.0055	2.028	mg/L	0.0055	0.27%
K 766.490†	52856.3	20.04	mg/L	0.176	20.04	mg/L	0.176	0.88%
Mg 279.077†	1554.1	2.021	mg/L	0.0148	2.021	mg/L	0.0148	0.73%
Mn 257.610†	40877.4	0.9797	mg/L	0.00260	0.9797	mg/L	0.00260	0.27%
Mo 202.031†	17848.3	1.017	mg/L	0.0016	1.017	mg/L	0.0016	0.15%
Na 589.592†	796659.9	50.56	mg/L	0.450	50.56	mg/L	0.450	0.89%
Na 330.237†	1310.7	51.76	mg/L	0.325	51.76	mg/L	0.325	0.63%
Ni 231.604†	3463.3	1.019	mg/L	0.0028	1.019	mg/L	0.0028	0.27%
Pb 220.353†	16099.4	1.994	mg/L	0.0036	1.994	mg/L	0.0036	0.18%
Sb 206.836†	5823.3	2.147	mg/L	0.0110	2.147	mg/L	0.0110	0.51%
Se 196.026†	2720.2	1.985	mg/L	0.0116	1.985	mg/L	0.0116	0.59%
Si 288.158†	2771.3	2.080	mg/L	0.0131	2.080	mg/L	0.0131	0.63%
Sn 189.927†	4078.3	1.043	mg/L	0.0057	1.043	mg/L	0.0057	0.54%
Sr 421.552†	869951.3	1.013	mg/L	0.0079	1.013	mg/L	0.0079	0.78%
Ti 334.903†	20392.5	1.013	mg/L	0.0099	1.013	mg/L	0.0099	0.98%
Tl 190.801†	3425.2	1.999	mg/L	0.0100	1.999	mg/L	0.0100	0.50%
V 292.402†	147642.9	1.019	mg/L	0.0042	1.019	mg/L	0.0042	0.42%
Zn 206.200†	3177.5	1.003	mg/L	0.0046	1.003	mg/L	0.0046	0.46%

Sequence No.: 19
Sample ID: CB 2
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 5/12/2015 10:42:56 AM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2843671.3	98.59	%	0.988				1.00%
ScR 361.383	277157.8	101.4	%	1.30				1.29%
Ag 328.068†	37.0	0.00015	mg/L	0.000055	0.00015	mg/L	0.000055	36.24%
Al 308.215†	0.3	0.00026	mg/L	0.001174	0.00026	mg/L	0.001174	444.48%
As 188.979†	0.3	0.00023	mg/L	0.001770	0.00023	mg/L	0.001770	774.34%
B 249.677†	12.4	0.00214	mg/L	0.000679	0.00214	mg/L	0.000679	31.70%
Ba 233.527†	2.0	0.00041	mg/L	0.000198	0.00041	mg/L	0.000198	47.86%
Be 313.042†	18.0	0.00004	mg/L	0.000002	0.00004	mg/L	0.000002	4.15%
Ca 317.933†	34.1	0.00406	mg/L	0.000240	0.00406	mg/L	0.000240	5.92%
Cd 228.802†	2.2	0.00010	mg/L	0.000022	0.00010	mg/L	0.000022	22.86%
Co 228.616†	1.1	0.00003	mg/L	0.000121	0.00003	mg/L	0.000121	385.98%
Cr 267.716†	2.3	0.00038	mg/L	0.000595	0.00038	mg/L	0.000595	158.14%
Cu 324.752†	69.4	0.00023	mg/L	0.000107	0.00023	mg/L	0.000107	45.89%
Fe 273.955†	-0.7	-0.00064	mg/L	0.000062	-0.00064	mg/L	0.000062	9.75%
K 766.490†	18.1	0.00685	mg/L	0.015484	0.00685	mg/L	0.015484	226.20%
Mg 279.077†	1.8	0.00233	mg/L	0.001049	0.00233	mg/L	0.001049	44.98%
Mn 257.610†	0.9	0.00002	mg/L	0.000029	0.00002	mg/L	0.000029	136.70%
Mo 202.031†	25.9	0.00148	mg/L	0.000443	0.00148	mg/L	0.000443	30.02%
Na 589.592†	421.3	0.02674	mg/L	0.001610	0.02674	mg/L	0.001610	6.02%
Na 330.237†	1.8	0.06917	mg/L	0.082471	0.06917	mg/L	0.082471	119.22%
Ni 231.604†	-2.1	-0.00061	mg/L	0.001986	-0.00061	mg/L	0.001986	325.76%
Pb 220.353†	4.0	0.00049	mg/L	0.000670	0.00049	mg/L	0.000670	135.51%
Sb 206.836†	6.7	0.00248	mg/L	0.001176	0.00248	mg/L	0.001176	47.47%
Se 196.026†	0.5	0.00038	mg/L	0.001880	0.00038	mg/L	0.001880	498.95%
Si 288.158†	0.5	0.00036	mg/L	0.001903	0.00036	mg/L	0.001903	526.86%
Sn 189.927†	-0.8	-0.00020	mg/L	0.000049	-0.00020	mg/L	0.000049	24.34%
Sr 421.552†	63.8	0.00007	mg/L	0.000013	0.00007	mg/L	0.000013	17.98%
Ti 334.903†	8.2	0.00040	mg/L	0.000304	0.00040	mg/L	0.000304	75.27%
Tl 190.801†	1.8	0.00105	mg/L	0.001617	0.00105	mg/L	0.001617	153.38%
V 292.402†	23.9	0.00017	mg/L	0.000063	0.00017	mg/L	0.000063	38.19%
Zn 206.200†	3.3	0.00104	mg/L	0.000696	0.00104	mg/L	0.000696	66.89%

Sequence No.: 20
Sample ID: AF05 MB SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 314
Date Collected: 5/12/2015 10:47:11 AM
Data Type: Original

Nebulizer Parameters: AF05 MB SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AF05 MB SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2868564.0	99.45	%	0.263				0.26%
ScR 361.383	279452.7	102.2	%	0.73				0.71%
Ag 328.068†	-6.7	-0.00003	mg/L	0.000103	-0.00006	mg/L	0.000206	370.37%
Al 308.215†	-0.7	-0.00061	mg/L	0.002958	-0.00123	mg/L	0.005916	481.20%
As 188.979†	-0.3	-0.00018	mg/L	0.001547	-0.00036	mg/L	0.003094	864.10%
B 249.677†	10.4	0.00180	mg/L	0.000849	0.00360	mg/L	0.001698	47.11%
Ba 233.527†	1.9	0.00041	mg/L	0.000479	0.00082	mg/L	0.000958	116.42%
Be 313.042†	-5.9	-0.00001	mg/L	0.000003	-0.00003	mg/L	0.000007	25.98%
Ca 317.933†	130.2	0.01551	mg/L	0.000504	0.03102	mg/L	0.001009	3.25%
Cd 228.802†	5.1	0.00023	mg/L	0.000078	0.00046	mg/L	0.000156	33.70%
Co 228.616†	-4.1	-0.00012	mg/L	0.000060	-0.00024	mg/L	0.000121	50.20%
Cr 267.716†	6.3	0.00101	mg/L	0.001364	0.00202	mg/L	0.002728	135.11%
Cu 324.752†	81.7	0.00028	mg/L	0.000112	0.00055	mg/L	0.000224	40.71%
Fe 273.955†	2.4	0.00217	mg/L	0.001750	0.00434	mg/L	0.003500	80.65%
K 766.490†	-37.0	-0.01404	mg/L	0.003801	-0.02807	mg/L	0.007602	27.08%
Mg 279.077†	1.1	0.00136	mg/L	0.002951	0.00272	mg/L	0.005902	216.85%
Mn 257.610†	-0.3	-0.00001	mg/L	0.000127	-0.00001	mg/L	0.000255	>999.9%
Mo 202.031†	1.1	0.00006	mg/L	0.000296	0.00013	mg/L	0.000592	468.07%
Na 589.592†	278.1	0.01765	mg/L	0.001870	0.03530	mg/L	0.003741	10.60%
Na 330.237†	2.2	0.08572	mg/L	0.188222	0.1714	mg/L	0.37644	219.58%
Ni 231.604†	-4.8	-0.00142	mg/L	0.001254	-0.00285	mg/L	0.002508	88.07%
Pb 220.353†	3.6	0.00044	mg/L	0.000378	0.00088	mg/L	0.000757	85.75%
Sb 206.836†	1.0	0.00036	mg/L	0.002252	0.00071	mg/L	0.004505	632.13%
Se 196.026†	-6.1	-0.00444	mg/L	0.002218	-0.00887	mg/L	0.004437	50.01%
Si 288.158†	2.8	0.00213	mg/L	0.001251	0.00425	mg/L	0.002502	58.85%
Sn 189.927†	-3.2	-0.00083	mg/L	0.000373	-0.00165	mg/L	0.000745	45.13%
Sr 421.552†	28.7	0.00003	mg/L	0.000017	0.00007	mg/L	0.000035	52.33%
Ti 334.903†	17.3	0.00086	mg/L	0.000517	0.00172	mg/L	0.001034	60.12%
Tl 190.801†	-1.8	-0.00107	mg/L	0.001368	-0.00214	mg/L	0.002737	128.16%
V 292.402†	14.4	0.00010	mg/L	0.000102	0.00020	mg/L	0.000203	99.68%
Zn 206.200†	8.6	0.00272	mg/L	0.000207	0.00543	mg/L	0.000414	7.62%

Sequence No.: 21
Sample ID: AF05 A SWC
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 315
Date Collected: 5/12/2015 10:51:27 AM
Data Type: Original

Nebulizer Parameters: AF05 A SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Del

Mean Data: AF05 A SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2718812.2	94.26	%	0.564				0.60%
ScR 361.383	263634.3	96.43	%	0.477				0.49%
Ag 328.068†	4290.1	0.01783	mg/L	0.000085	0.08914	mg/L	0.000425	0.48%
Al 308.215†	68210.2	62.57	mg/L	0.464	312.8	mg/L	2.32	0.74%
As 188.979†	28096.3	21.91	mg/L	0.141	109.5	mg/L	0.71	0.65%
B 249.677†	598.3	0.1042	mg/L	0.00207	0.5212	mg/L	0.01036	1.99%
Ba 233.527†	8289.8	1.653	mg/L	0.0109	8.263	mg/L	0.0545	0.66%
Be 313.042†	7759.8	0.01688	mg/L	0.000117	0.08442	mg/L	0.000587	0.70%
Ca 317.933†	1480734.2	176.4	mg/L	2.00	881.9	mg/L	10.00	1.13%
Cd 228.802†	3510.6	0.02968	mg/L	0.001714	0.1484	mg/L	0.00857	5.78%
Co 228.616†	33798.0	0.9691	mg/L	0.00699	4.845	mg/L	0.0350	0.72%
Cr 267.716†	3580.6	0.6073	mg/L	0.00448	3.037	mg/L	0.0224	0.74%
Cu 324.752†	4040597.8	13.64	mg/L	0.009	68.21	mg/L	0.047	0.07%
Fe 273.955†	777087.4	691.0	mg/L	5.79	3455	mg/L	28.94	0.84%
K 766.490†	41591.9	15.77	mg/L	0.101	78.86	mg/L	0.503	0.64%
Mg 279.077†	24650.9	31.49	mg/L	0.189	157.5	mg/L	0.95	0.60%
Mn 257.610†	173244.3	4.152	mg/L	0.0355	20.76	mg/L	0.177	0.85%
Mo 202.031†	43217.8	2.460	mg/L	0.0172	12.30	mg/L	0.086	0.70%
Na 589.592†	371054.0	23.55	mg/L	0.146	117.7	mg/L	0.73	0.62%
Na 330.237†	970.0	24.60	mg/L	0.146	123.0	mg/L	0.73	0.59%
Ni 231.604†	797.3	0.2375	mg/L	0.00293	1.188	mg/L	0.0146	1.23%
Pb 220.353†	94025.4	11.60	mg/L	0.033	58.01	mg/L	0.163	0.28%
Sb 206.836†	14252.6	5.260	mg/L	0.0432	26.30	mg/L	0.216	0.82%
Se 196.026†	27.1	0.01176	mg/L	0.006619	0.05878	mg/L	0.033094	56.30%
Si 288.158†	1953.6	1.463	mg/L	0.0086	7.314	mg/L	0.0428	0.59%
Sn 189.927†	5123.8	1.337	mg/L	0.0083	6.686	mg/L	0.0416	0.62%
Sr 421.552†	440255.2	0.5127	mg/L	0.00318	2.563	mg/L	0.0159	0.62%
Ti 334.903†	57883.5	2.865	mg/L	0.0235	14.33	mg/L	0.117	0.82%
Tl 190.801†	-130.4	0.01383	mg/L	0.001983	0.06917	mg/L	0.009914	14.33%
V 292.402†	31788.6	0.1841	mg/L	0.00064	0.9206	mg/L	0.00319	0.35%
Zn 206.200†	167114.4	52.74	mg/L	0.723	263.7	mg/L	3.62	1.37%

Sequence No.: 22
Sample ID: AF05 B SWC
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 316
Date Collected: 5/12/2015 10:54:32 AM
Data Type: Original

Nebulizer Parameters: AF05 B SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Del

Mean Data: AF05 B SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2779059.6	96.35	%	0.388				0.40%
ScR 361.383	276061.0	101.0	%	0.36				0.35%
Ag 328.068†	3319.1	0.01379	mg/L	0.000270	0.06896	mg/L	0.001349	1.96%
Al 308.215†	44332.0	40.65	mg/L	0.223	203.2	mg/L	1.11	0.55%
As 188.979†	25627.4	19.98	mg/L	0.060	99.88	mg/L	0.300	0.30%
B 249.677†	301.8	0.05321	mg/L	0.000669	0.2661	mg/L	0.00334	1.26%
Ba 233.527†	4090.3	0.7781	mg/L	0.00485	3.890	mg/L	0.0242	0.62%
Be 313.042†	12159.9	0.02652	mg/L	0.000101	0.1326	mg/L	0.00050	0.38%
Ca 317.933†	964280.5	114.9	mg/L	0.25	574.3	mg/L	1.26	0.22%
Cd 228.802†	3268.3	0.03002	mg/L	0.001731	0.1501	mg/L	0.00866	5.77%
Co 228.616†	31404.1	0.9012	mg/L	0.00473	4.506	mg/L	0.0236	0.52%
Cr 267.716†	4583.8	0.7649	mg/L	0.00267	3.824	mg/L	0.0133	0.35%
Cu 324.752†	2368677.7	8.004	mg/L	0.0026	40.02	mg/L	0.013	0.03%
Fe 273.955†	661954.8	588.6	mg/L	3.84	2943	mg/L	19.19	0.65%
K 766.490†	25031.1	9.492	mg/L	0.0147	47.46	mg/L	0.074	0.16%
Mg 279.077†	21392.3	27.34	mg/L	0.101	136.7	mg/L	0.51	0.37%
Mn 257.610†	106410.8	2.551	mg/L	0.0115	12.75	mg/L	0.057	0.45%
Mo 202.031†	45537.4	2.594	mg/L	0.0063	12.97	mg/L	0.032	0.24%
Na 589.592†	291206.8	18.48	mg/L	0.099	92.40	mg/L	0.497	0.54%
Na 330.237†	819.0	19.50	mg/L	0.077	97.52	mg/L	0.387	0.40%
Ni 231.604†	640.8	0.1909	mg/L	0.00164	0.9545	mg/L	0.00822	0.86%
Pb 220.353†	75919.6	9.369	mg/L	0.0141	46.84	mg/L	0.070	0.15%
Sb 206.836†	11465.5	4.229	mg/L	0.0101	21.14	mg/L	0.050	0.24%
Se 196.026†	-0.9	-0.00603	mg/L	0.014670	-0.03013	mg/L	0.073352	243.43%
Si 288.158†	2173.8	1.630	mg/L	0.0091	8.148	mg/L	0.0454	0.56%
Sn 189.927†	4317.4	1.122	mg/L	0.0047	5.609	mg/L	0.0236	0.42%
Sr 421.552†	286054.2	0.3331	mg/L	0.00178	1.666	mg/L	0.0089	0.54%
Ti 334.903†	46530.3	2.304	mg/L	0.0134	11.52	mg/L	0.067	0.58%
Tl 190.801†	-100.3	0.01823	mg/L	0.005557	0.09116	mg/L	0.027787	30.48%
V 292.402†	24753.7	0.1420	mg/L	0.00085	0.7098	mg/L	0.00426	0.60%
Zn 206.200†	155402.7	49.04	mg/L	0.184	245.2	mg/L	0.92	0.37%

Sequence No.: 23
Sample ID: AF05 C SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 317
Date Collected: 5/12/2015 10:57:36 AM
Data Type: Original

Nebulizer Parameters: AF05 C SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Del

Mean Data: AF05 C SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2787902.1	96.65	%	0.399				0.41%
ScR 361.383	273331.1	99.98	%	0.794				0.79%
Ag 328.068†	691.4	0.00298	mg/L	0.000173	0.00596	mg/L	0.000346	5.80%
Al 308.215†	115419.5	105.9	mg/L	0.91	211.8	mg/L	1.83	0.86%
As 188.979†	6577.4	5.291	mg/L	0.0247	10.58	mg/L	0.049	0.47%
B 249.677†	430.4	0.07450	mg/L	0.000511	0.1490	mg/L	0.00102	0.69%
Ba 233.527†	4024.4	0.7865	mg/L	0.00892	1.573	mg/L	0.0178	1.13%
Be 313.042†	2108.5	0.00443	mg/L	0.000050	0.00886	mg/L	0.000100	1.13%
Ca 317.933†	668000.4	79.57	mg/L	0.907	159.1	mg/L	1.81	1.14%
Cd 228.802†	930.3	0.01200	mg/L	0.000274	0.02401	mg/L	0.000547	2.28%
Co 228.616†	10554.4	0.2916	mg/L	0.00156	0.5833	mg/L	0.00312	0.53%
Cr 267.716†	2183.0	0.3680	mg/L	0.00275	0.7360	mg/L	0.00549	0.75%
Cu 324.752†	910423.9	~~3.084~~	mg/L	0.0028	6.169	mg/L	0.0056	0.09%
Fe 273.955†	494135.8	439.4	mg/L	4.90	878.8	mg/L	9.79	1.11%
K 766.490†	27089.8	10.27	mg/L	0.102	20.55	mg/L	0.203	0.99%
Mg 279.077†	40319.2	51.95	mg/L	0.478	103.9	mg/L	0.96	0.92%
Mn 257.610†	226752.7	5.432	mg/L	0.0625	10.86	mg/L	0.125	1.15%
Mo 202.031†	10407.3	0.5919	mg/L	0.00290	1.184	mg/L	0.0058	0.49%
Na 589.592†	441104.0	27.99	mg/L	0.265	55.99	mg/L	0.531	0.95%
Na 330.237†	758.2	27.98	mg/L	0.454	55.96	mg/L	0.908	1.62%
Ni 231.604†	887.0	0.2616	mg/L	0.00226	0.5233	mg/L	0.00453	0.87%
Pb 220.353†	28693.0	3.554	mg/L	0.0170	7.107	mg/L	0.0340	0.48%
Sb 206.836†	3214.8	1.189	mg/L	0.0058	2.379	mg/L	0.0115	0.49%
Se 196.026†	21.7	0.00292	mg/L	0.002053	0.00584	mg/L	0.004106	70.30%
Si 288.158†	3214.0	2.421	mg/L	0.0202	4.842	mg/L	0.0405	0.84%
Sn 189.927†	1230.4	0.3273	mg/L	0.00122	0.6546	mg/L	0.00244	0.37%
Sr 421.552†	358554.5	0.4175	mg/L	0.00393	0.8351	mg/L	0.00785	0.94%
Ti 334.903†	141006.2	7.006	mg/L	0.0629	14.01	mg/L	0.126	0.90%
Tl 190.801†	-79.8	0.01019	mg/L	0.001918	0.02038	mg/L	0.003836	18.83%
V 292.402†	64014.3	0.4151	mg/L	0.00252	0.8303	mg/L	0.00505	0.61%
Zn 206.200†	42981.7	13.56	mg/L	0.122	27.13	mg/L	0.245	0.90%

Sequence No.: 24
Sample ID: AF05 D SWC
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 318
Date Collected: 5/12/2015 11:01:38 AM
Data Type: Original

Nebulizer Parameters: AF05 D SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Del

Mean Data: AF05 D SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2787542.3	96.64	%	0.096				0.10%
ScR 361.383	273642.8	100.1	%	0.55				0.55%
Ag 328.068†	3784.8	0.01573	mg/L	0.000267	0.07863	mg/L	0.001337	1.70%
Al 308.215†	51350.2	47.09	mg/L	0.339	235.5	mg/L	1.70	0.72%
As 188.979†	26990.9	21.04	mg/L	0.084	105.2	mg/L	0.42	0.40%
B 249.677†	418.9	0.07332	mg/L	0.003232	0.3666	mg/L	0.01616	4.41%
Ba 233.527†	5152.4	0.9953	mg/L	0.00558	4.976	mg/L	0.0279	0.56%
Be 313.042†	6957.2	0.01514	mg/L	0.000145	0.07572	mg/L	0.000724	0.96%
Ca 317.933†	995019.1	118.5	mg/L	1.17	592.6	mg/L	5.85	0.99%
Cd 228.802†	3449.7	0.03195	mg/L	0.001550	0.1598	mg/L	0.00775	4.85%
Co 228.616†	30836.2	0.8848	mg/L	0.00508	4.424	mg/L	0.0254	0.57%
Cr 267.716†	3628.4	0.6136	mg/L	0.00486	3.068	mg/L	0.0243	0.79%
Cu 324.752†	2784978.7	9.409	mg/L	0.0214	47.05	mg/L	0.107	0.23%
Fe 273.955†	720800.5	641.0	mg/L	8.03	3205	mg/L	40.16	1.25%
K 766.490†	31075.3	11.78	mg/L	0.096	58.92	mg/L	0.479	0.81%
Mg 279.077†	19715.6	25.14	mg/L	0.173	125.7	mg/L	0.87	0.69%
Mn 257.610†	113708.5	2.726	mg/L	0.0323	13.63	mg/L	0.161	1.18%
Mo 202.031†	42538.1	2.423	mg/L	0.0063	12.11	mg/L	0.031	0.26%
Na 589.592†	354119.6	22.47	mg/L	0.177	112.4	mg/L	0.88	0.79%
Na 330.237†	948.4	23.12	mg/L	0.201	115.6	mg/L	1.00	0.87%
Ni 231.604†	645.4	0.1926	mg/L	0.00345	0.9628	mg/L	0.01726	1.79%
Pb 220.353†	89032.2	10.99	mg/L	0.026	54.94	mg/L	0.132	0.24%
Sb 206.836†	13020.7	4.805	mg/L	0.0322	24.02	mg/L	0.161	0.67%
Se 196.026†	3.0	-0.00395	mg/L	0.011442	-0.01974	mg/L	0.057209	289.87%
Si 288.158†	1954.8	1.464	mg/L	0.0065	7.319	mg/L	0.0325	0.44%
Sn 189.927†	4729.6	1.228	mg/L	0.0038	6.139	mg/L	0.0191	0.31%
Sr 421.552†	333757.7	0.3887	mg/L	0.00319	1.943	mg/L	0.0160	0.82%
Ti 334.903†	46191.2	2.287	mg/L	0.0206	11.44	mg/L	0.103	0.90%
Tl 190.801†	-120.8	0.01325	mg/L	0.004191	0.06626	mg/L	0.020957	31.63%
V 292.402†	26951.3	0.1536	mg/L	0.00055	0.7682	mg/L	0.00275	0.36%
Zn 206.200†	172660.3	54.49	mg/L	0.573	272.4	mg/L	2.87	1.05%

Sequence No.: 25
Sample ID: AF05 E SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 319
Date Collected: 5/12/2015 11:04:41 AM
Data Type: Original

Nebulizer Parameters: AF05 E SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AF05 E SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2830251.7	98.12	%	0.163				0.17%
ScR 361.383	280094.6	102.5	%	0.51				0.50%
Ag 328.068†	-78.9	-0.00023	mg/L	0.000108	-0.00047	mg/L	0.000216	46.19%
Al 308.215†	104317.7	95.75	mg/L	0.632	191.5	mg/L	1.26	0.66%
As 188.979†	281.4	0.3537	mg/L	0.00510	0.7075	mg/L	0.01021	1.44%
B 249.677†	438.0	0.07570	mg/L	0.000638	0.1514	mg/L	0.00128	0.84%
Ba 233.527†	1551.3	0.2968	mg/L	0.00189	0.5936	mg/L	0.00378	0.64%
Be 313.042†	742.2	0.00148	mg/L	0.000011	0.00296	mg/L	0.000022	0.75%
Ca 317.933†	327963.9	39.07	mg/L	0.196	78.13	mg/L	0.393	0.50%
Cd 228.802†	176.6	0.00686	mg/L	0.000219	0.01372	mg/L	0.000437	3.19%
Co 228.616†	2481.4	0.06203	mg/L	0.000132	0.1241	mg/L	0.00026	0.21%
Cr 267.716†	1498.9	0.2476	mg/L	0.00138	0.4952	mg/L	0.00277	0.56%
Cu 324.752†	208066.4	0.7088	mg/L	0.00449	1.418	mg/L	0.0090	0.63%
Fe 273.955†	237407.3	211.1	mg/L	2.03	422.2	mg/L	4.07	0.96%
K 766.490†	22917.8	8.691	mg/L	0.0403	17.38	mg/L	0.081	0.46%
Mg 279.077†	32667.9	42.19	mg/L	0.224	84.37	mg/L	0.447	0.53%
Mn 257.610†	139249.0	3.336	mg/L	0.0283	6.671	mg/L	0.0566	0.85%
Mo 202.031†	809.1	0.04550	mg/L	0.000678	0.09099	mg/L	0.001356	1.49%
Na 589.592†	533447.6	33.85	mg/L	0.194	67.71	mg/L	0.388	0.57%
Na 330.237†	844.8	34.15	mg/L	0.096	68.31	mg/L	0.192	0.28%
Ni 231.604†	775.2	0.2281	mg/L	0.00172	0.4562	mg/L	0.00344	0.75%
Pb 220.353†	4730.5	0.5992	mg/L	0.00254	1.198	mg/L	0.0051	0.42%
Sb 206.836†	176.2	0.06666	mg/L	0.002161	0.1333	mg/L	0.00432	3.24%
Se 196.026†	10.5	-0.00392	mg/L	0.003915	-0.00784	mg/L	0.007830	99.93%
Si 288.158†	3636.0	2.739	mg/L	0.0089	5.479	mg/L	0.0178	0.33%
Sn 189.927†	102.7	0.03265	mg/L	0.000304	0.06529	mg/L	0.000609	0.93%
Sr 421.552†	302114.3	0.3518	mg/L	0.00218	0.7036	mg/L	0.00435	0.62%
Ti 334.903†	106293.4	5.283	mg/L	0.0331	10.57	mg/L	0.066	0.63%
Tl 190.801†	-37.4	0.00500	mg/L	0.002326	0.01000	mg/L	0.004652	46.51%
V 292.402†	51386.1	0.3404	mg/L	0.00240	0.6809	mg/L	0.00480	0.71%
Zn 206.200†	6203.0	1.958	mg/L	0.0125	3.916	mg/L	0.0250	0.64%

Sequence No.: 26
Sample ID: AFF8 ADUP SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 320
Date Collected: 5/12/2015 11:08:42 AM
Data Type: Original

Nebulizer Parameters: AFF8 ADUP SWC

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFF8 ADUP SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2892206.6	100.3	%	0.21				0.21%
ScR 361.383	284933.7	104.2	%	0.65				0.62%
Ag 328.068†	-312.5	-0.00123	mg/L	0.000173	-0.00246	mg/L	0.000347	14.12%
Al 308.215†	99288.2	91.13	mg/L	0.206	182.3	mg/L	0.41	0.23%
As 188.979†	37.8	0.1920	mg/L	0.00275	0.3840	mg/L	0.00550	1.43%
B 249.677†	93.4	0.01604	mg/L	0.000565	0.03208	mg/L	0.001130	3.52%
Ba 233.527†	4746.2	0.9898	mg/L	0.00973	1.980	mg/L	0.0195	0.98%
Be 313.042†	1176.0	0.00244	mg/L	0.000022	0.00488	mg/L	0.000044	0.91%
Ca 317.933†	328487.0	39.13	mg/L	0.203	78.26	mg/L	0.405	0.52%
Cd 228.802†	51.0	0.00224	mg/L	0.000196	0.00447	mg/L	0.000392	8.77%
Co 228.616†	2249.7	0.05343	mg/L	0.000219	0.1069	mg/L	0.00044	0.41%
Cr 267.716†	929.5	0.1522	mg/L	0.00139	0.3045	mg/L	0.00279	0.91%
Cu 324.752†	29741.1	0.1034	mg/L	0.00038	0.2069	mg/L	0.00077	0.37%
Fe 273.955†	119514.8	106.3	mg/L	0.80	212.6	mg/L	1.61	0.76%
K 766.490†	48704.5	18.47	mg/L	0.085	36.94	mg/L	0.170	0.46%
Mg 279.077†	19958.9	25.79	mg/L	0.014	51.57	mg/L	0.029	0.06%
Mn 257.610†	151363.5	3.626	mg/L	0.0244	7.252	mg/L	0.0489	0.67%
Mo 202.031†	136.3	0.00715	mg/L	0.000231	0.01429	mg/L	0.000463	3.24%
Na 589.592†	20349.8	1.291	mg/L	0.0027	2.583	mg/L	0.0055	0.21%
Na 330.237†	-7.8	1.152	mg/L	0.1650	2.304	mg/L	0.3299	14.32%
Ni 231.604†	463.8	0.1365	mg/L	0.00110	0.2729	mg/L	0.00221	0.81%
Pb 220.353†	7061.5	0.8923	mg/L	0.00374	1.785	mg/L	0.0075	0.42%
Sb 206.836†	14.1	0.00806	mg/L	0.001551	0.01612	mg/L	0.003101	19.23%
Se 196.026†	17.0	0.00142	mg/L	0.001274	0.00283	mg/L	0.002547	89.98%
Si 288.158†	6246.2	4.701	mg/L	0.0365	9.402	mg/L	0.0729	0.78%
Sn 189.927†	-37.7	-0.00307	mg/L	0.001606	-0.00615	mg/L	0.003212	52.24%
Sr 421.552†	316787.4	0.3689	mg/L	0.00105	0.7378	mg/L	0.00210	0.29%
Ti 334.903†	127314.6	6.328	mg/L	0.0158	12.66	mg/L	0.032	0.25%
Tl 190.801†	-6.6	0.00921	mg/L	0.002696	0.01842	mg/L	0.005391	29.26%
V 292.402†	36759.1	0.2446	mg/L	0.00140	0.4893	mg/L	0.00280	0.57%
Zn 206.200†	1290.8	0.4084	mg/L	0.00313	0.8167	mg/L	0.00627	0.77%

Sequence No.: 27
Sample ID: AFF8 A SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 321
Date Collected: 5/12/2015 11:12:42 AM
Data Type: Original

Nebulizer Parameters: AFF8 A SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AFF8 A SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2844896.2	98.63	%	0.789				0.80%
ScR 361.383	277208.0	101.4	%	1.56				1.54%
Ag 328.068†	-344.5	-0.00134	mg/L	0.000117	-0.00268	mg/L	0.000234	8.75%
Al 308.215†	116979.6	107.4	mg/L	0.92	214.7	mg/L	1.85	0.86%
As 188.979†	-19.6	0.1575	mg/L	0.00282	0.3149	mg/L	0.00564	1.79%
B 249.677†	74.1	0.01267	mg/L	0.000843	0.02533	mg/L	0.001687	6.66%
Ba 233.527†	4725.8	0.9817	mg/L	0.00823	1.963	mg/L	0.0165	0.84%
Be 313.042†	1297.4	0.00268	mg/L	0.000060	0.00536	mg/L	0.000120	2.24%
Ca 317.933†	307150.1	36.59	mg/L	0.357	73.17	mg/L	0.714	0.98%
Cd 228.802†	60.4	0.00295	mg/L	0.000236	0.00591	mg/L	0.000472	7.99%
Co 228.616†	2659.7	0.06457	mg/L	0.000506	0.1291	mg/L	0.00101	0.78%
Cr 267.716†	1205.7	0.1971	mg/L	0.00233	0.3942	mg/L	0.00466	1.18%
Cu 324.752†	32079.9	0.1122	mg/L	0.00100	0.2245	mg/L	0.00200	0.89%
Fe 273.955†	146964.5	130.7	mg/L	1.12	261.4	mg/L	2.24	0.86%
K 766.490†	52735.6	20.00	mg/L	0.121	40.00	mg/L	0.242	0.61%
Mg 279.077†	26546.1	34.31	mg/L	0.277	68.61	mg/L	0.554	0.81%
Mn 257.610†	170745.3	4.090	mg/L	0.0332	8.180	mg/L	0.0663	0.81%
Mo 202.031†	92.3	0.00468	mg/L	0.000459	0.00936	mg/L	0.000917	9.80%
Na 589.592†	21354.7	1.355	mg/L	0.0104	2.710	mg/L	0.0208	0.77%
Na 330.237†	-11.7	1.074	mg/L	0.0737	2.149	mg/L	0.1473	6.86%
Ni 231.604†	602.6	0.1773	mg/L	0.00273	0.3546	mg/L	0.00545	1.54%
Pb 220.353†	6671.8	0.8471	mg/L	0.00549	1.694	mg/L	0.0110	0.65%
Sb 206.836†	4.5	0.00447	mg/L	0.001800	0.00894	mg/L	0.003600	40.28%
Se 196.026†	21.8	0.00299	mg/L	0.002990	0.00598	mg/L	0.005979	100.06%
Si 288.158†	2611.1	1.968	mg/L	0.0214	3.936	mg/L	0.0428	1.09%
Sn 189.927†	-41.2	-0.00429	mg/L	0.001819	-0.00858	mg/L	0.003638	42.42%
Sr 421.552†	299432.4	0.3487	mg/L	0.00231	0.6974	mg/L	0.00461	0.66%
Ti 334.903†	134868.3	6.704	mg/L	0.0477	13.41	mg/L	0.095	0.71%
Tl 190.801†	-19.7	0.00451	mg/L	0.002279	0.00902	mg/L	0.004559	50.55%
V 292.402†	48380.8	0.3232	mg/L	0.00274	0.6465	mg/L	0.00548	0.85%
Zn 206.200†	1487.9	0.4700	mg/L	0.00477	0.9401	mg/L	0.00953	1.01%

Sequence No.: 28
Sample ID: AFF8 ASPK SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 322
Date Collected: 5/12/2015 11:16:42 AM
Data Type: Original

Nebulizer Parameters: AFF8 ASPK SWC

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFF8 ASPK SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2843070.1	98.57	%	0.784				0.80%
ScR 361.383	281753.9	103.1	%	0.52				0.50%
Ag 328.068†	127162.4	0.5269	mg/L	0.00444	1.054	mg/L	0.0089	0.84%
Al 308.215†	119811.8	110.0	mg/L	0.40	219.9	mg/L	0.79	0.36%
As 188.979†	2627.0	2.230	mg/L	0.0197	4.461	mg/L	0.0394	0.88%
B 249.677†	107.0	0.01733	mg/L	0.000232	0.03465	mg/L	0.000465	1.34%
Ba 233.527†	15063.0	3.174	mg/L	0.0451	6.349	mg/L	0.0902	1.42%
Be 313.042†	233024.9	0.5093	mg/L	0.00100	1.019	mg/L	0.0020	0.20%
Ca 317.933†	425326.5	50.66	mg/L	0.192	101.3	mg/L	0.38	0.38%
Cd 228.802†	12324.4	0.5433	mg/L	0.00496	1.087	mg/L	0.0099	0.91%
Co 228.616†	20254.1	0.5703	mg/L	0.00461	1.141	mg/L	0.0092	0.81%
Cr 267.716†	4357.3	0.7036	mg/L	0.00513	1.407	mg/L	0.0103	0.73%
Cu 324.752†	189836.3	0.6432	mg/L	0.00618	1.286	mg/L	0.0124	0.96%
Fe 273.955†	132626.7	117.9	mg/L	0.89	235.9	mg/L	1.78	0.75%
K 766.490†	81720.8	30.99	mg/L	0.106	61.98	mg/L	0.212	0.34%
Mg 279.077†	33765.0	43.67	mg/L	0.362	87.33	mg/L	0.723	0.83%
Mn 257.610†	169123.1	4.052	mg/L	0.0192	8.103	mg/L	0.0383	0.47%
Mo 202.031†	110.9	0.00551	mg/L	0.000156	0.01103	mg/L	0.000312	2.82%
Na 589.592†	187761.3	11.92	mg/L	0.042	23.83	mg/L	0.085	0.36%
Na 330.237†	258.1	11.75	mg/L	0.255	23.50	mg/L	0.511	2.17%
Ni 231.604†	2281.1	0.6703	mg/L	0.00649	1.341	mg/L	0.0130	0.97%
Pb 220.353†	23667.5	2.952	mg/L	0.0246	5.904	mg/L	0.0492	0.83%
Sb 206.836†	10.5	0.00214	mg/L	0.000844	0.00428	mg/L	0.001688	39.48%
Se 196.026†	2840.3	2.060	mg/L	0.0316	4.120	mg/L	0.0631	1.53%
Si 288.158†	6361.5	4.792	mg/L	0.0278	9.583	mg/L	0.0555	0.58%
Sn 189.927†	-52.0	-0.00483	mg/L	0.001308	-0.00967	mg/L	0.002616	27.06%
Sr 421.552†	779026.6	0.9072	mg/L	0.00293	1.814	mg/L	0.0059	0.32%
Ti 334.903†	146915.4	7.302	mg/L	0.0241	14.60	mg/L	0.048	0.33%
Tl 190.801†	3338.2	1.966	mg/L	0.0170	3.932	mg/L	0.0339	0.86%
V 292.402†	115107.7	0.7840	mg/L	0.00648	1.568	mg/L	0.0130	0.83%
Zn 206.200†	2986.8	0.9438	mg/L	0.00862	1.888	mg/L	0.0172	0.91%

Sequence No.: 29
Sample ID: AFF8 MBSPK SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 323
Date Collected: 5/12/2015 11:20:43 AM
Data Type: Original

Nebulizer Parameters: AFF8 MBSPK SWC

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFF8 MBSPK SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2873138.1	99.61	%	0.159				0.16%
ScR 361.383	280956.6	102.8	%	0.94				0.91%
Ag 328.068†	132147.0	0.5475	mg/L	0.00224	1.095	mg/L	0.0045	0.41%
Al 308.215†	2286.7	2.091	mg/L	0.0212	4.183	mg/L	0.0425	1.02%
As 188.979†	2718.7	2.114	mg/L	0.0099	4.227	mg/L	0.0198	0.47%
B 249.677†	8.0	0.00031	mg/L	0.001116	0.00062	mg/L	0.002231	358.61%
Ba 233.527†	10408.5	2.205	mg/L	0.0214	4.411	mg/L	0.0428	0.97%
Be 313.042†	232917.0	0.5092	mg/L	0.00640	1.018	mg/L	0.0128	1.26%
Ca 317.933†	85778.2	10.22	mg/L	0.102	20.44	mg/L	0.204	1.00%
Cd 228.802†	12247.3	0.5393	mg/L	0.00206	1.079	mg/L	0.0041	0.38%
Co 228.616†	18210.2	0.5246	mg/L	0.00343	1.049	mg/L	0.0069	0.65%
Cr 267.716†	3372.3	0.5427	mg/L	0.00519	1.085	mg/L	0.0104	0.96%
Cu 324.752†	155871.7	0.5253	mg/L	0.00353	1.051	mg/L	0.0071	0.67%
Fe 273.955†	2400.0	2.131	mg/L	0.0148	4.261	mg/L	0.0297	0.70%
K 766.490†	27232.5	10.33	mg/L	0.097	20.65	mg/L	0.193	0.94%
Mg 279.077†	8247.0	10.68	mg/L	0.100	21.37	mg/L	0.201	0.94%
Mn 257.610†	21236.2	0.5091	mg/L	0.00477	1.018	mg/L	0.0095	0.94%
Mo 202.031†	28.0	0.00143	mg/L	0.000072	0.00287	mg/L	0.000144	5.01%
Na 589.592†	162198.5	10.29	mg/L	0.073	20.59	mg/L	0.146	0.71%
Na 330.237†	272.4	10.62	mg/L	0.093	21.24	mg/L	0.186	0.87%
Ni 231.604†	1808.2	0.5311	mg/L	0.00451	1.062	mg/L	0.0090	0.85%
Pb 220.353†	17060.2	2.112	mg/L	0.0050	4.225	mg/L	0.0101	0.24%
Sb 206.836†	17.2	0.00122	mg/L	0.002352	0.00244	mg/L	0.004705	192.85%
Se 196.026†	2875.9	2.099	mg/L	0.0151	4.198	mg/L	0.0302	0.72%
Si 288.158†	4.5	0.00666	mg/L	0.002295	0.01331	mg/L	0.004590	34.48%
Sn 189.927†	-24.6	-0.00471	mg/L	0.000546	-0.00941	mg/L	0.001092	11.60%
Sr 421.552†	446857.2	0.5204	mg/L	0.00405	1.041	mg/L	0.0081	0.78%
Ti 334.903†	92.0	0.00388	mg/L	0.000232	0.00776	mg/L	0.000465	5.99%
Tl 190.801†	3621.1	2.118	mg/L	0.0116	4.235	mg/L	0.0233	0.55%
V 292.402†	77519.0	0.5347	mg/L	0.00190	1.069	mg/L	0.0038	0.36%
Zn 206.200†	1637.9	0.5171	mg/L	0.00313	1.034	mg/L	0.0063	0.60%

Sequence No.: 30
Sample ID: CV 3
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 5/12/2015 11:24:43 AM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2890097.6	100.2	%	1.10				1.10%
ScR 361.383	278557.0	101.9	%	0.95				0.94%
Ag 328.068†	250375.7	1.037	mg/L	0.0102	1.037	mg/L	0.0102	0.99%
Al 308.215†	2187.3	1.975	mg/L	0.0227	1.975	mg/L	0.0227	1.15%
As 188.979†	2533.8	1.993	mg/L	0.0219	1.993	mg/L	0.0219	1.10%
B 249.677†	5714.7	0.9879	mg/L	0.01185	0.9879	mg/L	0.01185	1.20%
Ba 233.527†	5031.7	1.066	mg/L	0.0127	1.066	mg/L	0.0127	1.19%
Be 313.042†	445635.3	0.9742	mg/L	0.00994	0.9742	mg/L	0.00994	1.02%
Ca 317.933†	17416.9	2.075	mg/L	0.0212	2.075	mg/L	0.0212	1.02%
Cd 228.802†	23126.4	1.030	mg/L	0.0097	1.030	mg/L	0.0097	0.94%
Co 228.616†	34724.4	0.9989	mg/L	0.01165	0.9989	mg/L	0.01165	1.17%
Cr 267.716†	6493.1	1.047	mg/L	0.0101	1.047	mg/L	0.0101	0.97%
Cu 324.752†	288279.9	0.9710	mg/L	0.00825	0.9710	mg/L	0.00825	0.85%
Fe 273.955†	2283.5	2.024	mg/L	0.0180	2.024	mg/L	0.0180	0.89%
K 766.490†	52284.7	19.83	mg/L	0.291	19.83	mg/L	0.291	1.47%
Mg 279.077†	1551.1	2.017	mg/L	0.0142	2.017	mg/L	0.0142	0.70%
Mn 257.610†	40673.6	0.9748	mg/L	0.00980	0.9748	mg/L	0.00980	1.00%
Mo 202.031†	17823.9	1.016	mg/L	0.0093	1.016	mg/L	0.0093	0.92%
Na 589.592†	786350.1	49.90	mg/L	0.595	49.90	mg/L	0.595	1.19%
Na 330.237†	1287.2	50.83	mg/L	0.621	50.83	mg/L	0.621	1.22%
Ni 231.604†	3454.8	1.017	mg/L	0.0126	1.017	mg/L	0.0126	1.24%
Pb 220.353†	16162.4	2.002	mg/L	0.0191	2.002	mg/L	0.0191	0.95%
Sb 206.836†	5780.8	2.131	mg/L	0.0244	2.131	mg/L	0.0244	1.15%
Se 196.026†	2731.5	1.993	mg/L	0.0217	1.993	mg/L	0.0217	1.09%
Si 288.158†	2744.0	2.059	mg/L	0.0362	2.059	mg/L	0.0362	1.76%
Sn 189.927†	4092.2	1.046	mg/L	0.0095	1.046	mg/L	0.0095	0.91%
Sr 421.552†	858022.8	0.9992	mg/L	0.01241	0.9992	mg/L	0.01241	1.24%
Ti 334.903†	20207.0	1.003	mg/L	0.0127	1.003	mg/L	0.0127	1.27%
Tl 190.801†	3421.3	1.997	mg/L	0.0241	1.997	mg/L	0.0241	1.20%
V 292.402†	147413.5	1.017	mg/L	0.0095	1.017	mg/L	0.0095	0.94%
Zn 206.200†	3190.8	1.007	mg/L	0.0125	1.007	mg/L	0.0125	1.24%

Sequence No.: 31
Sample ID: CB 3
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 5/12/2015 11:28:46 AM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2950447.5	102.3	%	0.91				0.89%
ScR 361.383	284807.3	104.2	%	1.16				1.11%
Ag 328.068†	2.5	0.00001	mg/L	0.000127	0.00001	mg/L	0.000127	>999.9%
Al 308.215†	-1.3	-0.00120	mg/L	0.003449	-0.00120	mg/L	0.003449	287.89%
As 188.979†	2.1	0.00163	mg/L	0.001615	0.00163	mg/L	0.001615	99.02%
B 249.677†	9.9	0.00171	mg/L	0.000668	0.00171	mg/L	0.000668	39.10%
Ba 233.527†	4.3	0.00091	mg/L	0.001370	0.00091	mg/L	0.001370	149.97%
Be 313.042†	14.0	0.00003	mg/L	0.000008	0.00003	mg/L	0.000008	24.95%
Ca 317.933†	32.5	0.00387	mg/L	0.000132	0.00387	mg/L	0.000132	3.41%
Cd 228.802†	0.9	0.00003	mg/L	0.000186	0.00003	mg/L	0.000186	676.31%
Co 228.616†	3.0	0.00009	mg/L	0.000157	0.00009	mg/L	0.000157	183.72%
Cr 267.716†	6.1	0.00098	mg/L	0.000437	0.00098	mg/L	0.000437	44.64%
Cu 324.752†	31.7	0.00011	mg/L	0.000039	0.00011	mg/L	0.000039	37.04%
Fe 273.955†	2.8	0.00249	mg/L	0.001462	0.00249	mg/L	0.001462	58.65%
K 766.490†	3.2	0.00121	mg/L	0.010734	0.00121	mg/L	0.010734	890.62%
Mg 279.077†	1.2	0.00161	mg/L	0.002524	0.00161	mg/L	0.002524	156.27%
Mn 257.610†	4.0	0.00010	mg/L	0.000083	0.00010	mg/L	0.000083	87.00%
Mo 202.031†	22.1	0.00126	mg/L	0.000407	0.00126	mg/L	0.000407	32.32%
Na 589.592†	32.4	0.00206	mg/L	0.001896	0.00206	mg/L	0.001896	92.22%
Na 330.237†	-0.5	-0.01820	mg/L	0.186050	-0.01820	mg/L	0.186050	>999.9%
Ni 231.604†	-5.2	-0.00151	mg/L	0.000642	-0.00151	mg/L	0.000642	42.38%
Pb 220.353†	7.8	0.00097	mg/L	0.000240	0.00097	mg/L	0.000240	24.76%
Sb 206.836†	12.8	0.00469	mg/L	0.001536	0.00469	mg/L	0.001536	32.71%
Se 196.026†	-0.7	-0.00050	mg/L	0.002682	-0.00050	mg/L	0.002682	536.67%
Si 288.158†	-5.3	-0.00400	mg/L	0.002018	-0.00400	mg/L	0.002018	50.46%
Sn 189.927†	-1.7	-0.00043	mg/L	0.000291	-0.00043	mg/L	0.000291	66.82%
Sr 421.552†	62.8	0.00007	mg/L	0.000014	0.00007	mg/L	0.000014	19.09%
Ti 334.903†	10.8	0.00054	mg/L	0.000251	0.00054	mg/L	0.000251	46.88%
Tl 190.801†	1.2	0.00073	mg/L	0.001645	0.00073	mg/L	0.001645	225.33%
V 292.402†	36.8	0.00026	mg/L	0.000037	0.00026	mg/L	0.000037	14.35%
Zn 206.200†	2.1	0.00067	mg/L	0.000162	0.00067	mg/L	0.000162	24.12%

Sequence No.: 32
Sample ID: AFG4 MB SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 324
Date Collected: 5/12/2015 11:33:01 AM
Data Type: Original

Nebulizer Parameters: AFG4 MB SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AFG4 MB SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2927405.7	101.5	%	0.26				0.25%
ScR 361.383	280040.4	102.4	%	0.80				0.78%
Ag 328.068†	-19.1	-0.00008	mg/L	0.000129	-0.00016	mg/L	0.000257	163.06%
Al 308.215†	3.8	0.00352	mg/L	0.007214	0.00704	mg/L	0.014428	205.04%
As 188.979†	-1.9	-0.00149	mg/L	0.001045	-0.00298	mg/L	0.002090	70.20%
B 249.677†	9.4	0.00162	mg/L	0.000217	0.00324	mg/L	0.000434	13.40%
Ba 233.527†	2.5	0.00053	mg/L	0.000450	0.00106	mg/L	0.000900	84.85%
Be 313.042†	4.8	0.00001	mg/L	0.000008	0.00002	mg/L	0.000016	77.17%
Ca 317.933†	109.3	0.01301	mg/L	0.000602	0.02603	mg/L	0.001204	4.62%
Cd 228.802†	1.4	0.00007	mg/L	0.000092	0.00014	mg/L	0.000184	127.91%
Co 228.616†	1.3	0.00004	mg/L	0.000039	0.00007	mg/L	0.000078	105.59%
Cr 267.716†	1.6	0.00026	mg/L	0.000452	0.00051	mg/L	0.000904	175.74%
Cu 324.752†	44.2	0.00015	mg/L	0.000069	0.00030	mg/L	0.000139	46.65%
Fe 273.955†	2.3	0.00208	mg/L	0.001412	0.00415	mg/L	0.002825	68.04%
K 766.490†	-10.6	-0.00400	mg/L	0.018530	-0.00801	mg/L	0.037059	462.81%
Mg 279.077†	-0.6	-0.00074	mg/L	0.001257	-0.00148	mg/L	0.002514	170.27%
Mn 257.610†	1.4	0.00003	mg/L	0.000021	0.00007	mg/L	0.000042	61.37%
Mo 202.031†	-2.4	-0.00014	mg/L	0.000191	-0.00027	mg/L	0.000382	141.29%
Na 589.592†	-2.2	-0.00014	mg/L	0.000685	-0.00028	mg/L	0.001369	487.81%
Na 330.237†	-0.8	-0.03069	mg/L	0.099955	-0.06138	mg/L	0.199910	325.70%
Ni 231.604†	-2.4	-0.00069	mg/L	0.000267	-0.00138	mg/L	0.000535	38.69%
Pb 220.353†	8.5	0.00106	mg/L	0.000583	0.00211	mg/L	0.001165	55.18%
Sb 206.836†	4.9	0.00180	mg/L	0.001188	0.00361	mg/L	0.002376	65.84%
Se 196.026†	-0.6	-0.00047	mg/L	0.002520	-0.00094	mg/L	0.005039	536.82%
Si 288.158†	-3.2	-0.00243	mg/L	0.004928	-0.00487	mg/L	0.009857	202.48%
Sn 189.927†	1.2	0.00032	mg/L	0.000559	0.00064	mg/L	0.001118	174.60%
Sr 421.552†	67.3	0.00008	mg/L	0.000016	0.00016	mg/L	0.000033	20.81%
Ti 334.903†	15.6	0.00077	mg/L	0.000263	0.00155	mg/L	0.000526	33.96%
Tl 190.801†	-1.8	-0.00103	mg/L	0.003030	-0.00207	mg/L	0.006060	293.38%
V 292.402†	16.0	0.00011	mg/L	0.000079	0.00022	mg/L	0.000158	71.78%
Zn 206.200†	6.1	0.00191	mg/L	0.000966	0.00383	mg/L	0.001932	50.47%

Sequence No.: 33
Sample ID: AFF8 MB SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 325
Date Collected: 5/12/2015 11:37:16 AM
Data Type: Original

Nebulizer Parameters: AFF8 MB SWC

Analyte	Back Pressure	Flow
All	229.0 kPa	0.75 L/min

Mean Data: AFF8 MB SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2892968.7	100.3	%	0.38				0.38%
ScR 361.383	281559.9	103.0	%	1.12				1.09%
Ag 328.068†	30.2	0.00013	mg/L	0.000074	0.00025	mg/L	0.000148	59.09%
Al 308.215†	0.9	0.00081	mg/L	0.003419	0.00162	mg/L	0.006838	422.21%
As 188.979†	-0.6	-0.00048	mg/L	0.000681	-0.00096	mg/L	0.001361	142.07%
B 249.677†	7.8	0.00135	mg/L	0.000116	0.00271	mg/L	0.000232	8.59%
Ba 233.527†	2.0	0.00043	mg/L	0.000475	0.00086	mg/L	0.000950	110.21%
Be 313.042†	0.6	0.00000	mg/L	0.000023	0.00000	mg/L	0.000046	>999.9%
Ca 317.933†	84.8	0.01010	mg/L	0.000495	0.02019	mg/L	0.000990	4.90%
Cd 228.802†	1.5	0.00007	mg/L	0.000100	0.00013	mg/L	0.000199	148.21%
Co 228.616†	-4.1	-0.00012	mg/L	0.000104	-0.00024	mg/L	0.000208	87.30%
Cr 267.716†	4.4	0.00070	mg/L	0.000408	0.00140	mg/L	0.000816	58.22%
Cu 324.752†	63.7	0.00021	mg/L	0.000047	0.00043	mg/L	0.000093	21.71%
Fe 273.955†	1.5	0.00135	mg/L	0.000485	0.00270	mg/L	0.000970	35.97%
K 766.490†	-10.7	-0.00405	mg/L	0.006562	-0.00809	mg/L	0.013124	162.17%
Mg 279.077†	4.0	0.00517	mg/L	0.002349	0.01035	mg/L	0.004697	45.40%
Mn 257.610†	-0.2	-0.00001	mg/L	0.000036	-0.00001	mg/L	0.000072	651.19%
Mo 202.031†	-1.5	-0.00008	mg/L	0.000177	-0.00017	mg/L	0.000353	212.38%
Na 589.592†	7.8	0.00050	mg/L	0.001374	0.00099	mg/L	0.002748	276.37%
Na 330.237†	5.2	0.2061	mg/L	0.03634	0.4121	mg/L	0.07269	17.64%
Ni 231.604†	-3.7	-0.00109	mg/L	0.000981	-0.00218	mg/L	0.001962	89.86%
Pb 220.353†	2.5	0.00031	mg/L	0.000612	0.00061	mg/L	0.001224	199.31%
Sb 206.836†	5.7	0.00208	mg/L	0.001064	0.00415	mg/L	0.002128	51.25%
Se 196.026†	-2.0	-0.00150	mg/L	0.001939	-0.00299	mg/L	0.003877	129.58%
Si 288.158†	-7.2	-0.00540	mg/L	0.009269	-0.01081	mg/L	0.018537	171.51%
Sn 189.927†	-2.3	-0.00058	mg/L	0.000397	-0.00117	mg/L	0.000795	68.04%
Sr 421.552†	40.4	0.00005	mg/L	0.000012	0.00009	mg/L	0.000023	24.56%
Ti 334.903†	16.0	0.00080	mg/L	0.000301	0.00159	mg/L	0.000601	37.71%
Tl 190.801†	-1.1	-0.00066	mg/L	0.002184	-0.00132	mg/L	0.004368	331.39%
V 292.402†	21.1	0.00015	mg/L	0.000051	0.00029	mg/L	0.000103	34.89%
Zn 206.200†	6.0	0.00190	mg/L	0.000288	0.00379	mg/L	0.000577	15.21%

Sequence No.: 34
Sample ID: AFF8 B SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 326
Date Collected: 5/12/2015 11:41:30 AM
Data Type: Original

Nebulizer Parameters: AFF8 B SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AFF8 B SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2880456.4	99.86	%	0.229				0.23%
ScR 361.383	283221.6	103.6	%	0.59				0.57%
Ag 328.068†	-586.8	-0.00234	mg/L	0.000152	-0.00467	mg/L	0.000304	6.52%
Al 308.215†	222852.1	204.5	mg/L	2.96	409.1	mg/L	5.92	1.45%
As 188.979†	-165.9	0.1459	mg/L	0.00252	0.2918	mg/L	0.00503	1.72%
B 249.677†	51.5	0.00871	mg/L	0.001300	0.01743	mg/L	0.002599	14.91%
Ba 233.527†	8620.3	1.800	mg/L	0.0039	3.601	mg/L	0.0077	0.21%
Be 313.042†	2819.2	0.00596	mg/L	0.000072	0.01191	mg/L	0.000145	1.21%
Ca 317.933†	354874.9	42.27	mg/L	0.409	84.54	mg/L	0.817	0.97%
Cd 228.802†	75.4	0.00429	mg/L	0.000243	0.00857	mg/L	0.000486	5.67%
Co 228.616†	3610.6	0.08494	mg/L	0.000135	0.1699	mg/L	0.00027	0.16%
Cr 267.716†	1432.2	0.2354	mg/L	0.00173	0.4709	mg/L	0.00346	0.74%
Cu 324.752†	40001.0	0.1401	mg/L	0.00054	0.2801	mg/L	0.00108	0.38%
Fe 273.955†	196303.9	174.6	mg/L	2.53	349.1	mg/L	5.05	1.45%
K 766.490†	100827.4	38.23	mg/L	0.443	76.47	mg/L	0.887	1.16%
Mg 279.077†	29370.4	37.94	mg/L	0.485	75.87	mg/L	0.970	1.28%
Mn 257.610†	169061.4	4.049	mg/L	0.0508	8.098	mg/L	0.1016	1.25%
Mo 202.031†	114.2	0.00584	mg/L	0.000344	0.01168	mg/L	0.000688	5.89%
Na 589.592†	30691.8	1.948	mg/L	0.0260	3.895	mg/L	0.0521	1.34%
Na 330.237†	-20.1	1.669	mg/L	0.3101	3.339	mg/L	0.6203	18.58%
Ni 231.604†	576.2	0.1695	mg/L	0.00214	0.3390	mg/L	0.00428	1.26%
Pb 220.353†	476.2	0.1029	mg/L	0.00103	0.2058	mg/L	0.00207	1.01%
Sb 206.836†	-16.0	-0.00105	mg/L	0.002218	-0.00210	mg/L	0.004436	211.12%
Se 196.026†	21.9	-0.00853	mg/L	0.002488	-0.01706	mg/L	0.004975	29.15%
Si 288.158†	7100.5	5.345	mg/L	0.0365	10.69	mg/L	0.073	0.68%
Sn 189.927†	-59.0	-0.00749	mg/L	0.000441	-0.01497	mg/L	0.000882	5.89%
Sr 421.552†	471399.9	0.5490	mg/L	0.00792	1.098	mg/L	0.0158	1.44%
Ti 334.903†	213421.6	10.61	mg/L	0.146	21.22	mg/L	0.292	1.37%
Tl 190.801†	-22.0	0.00882	mg/L	0.005275	0.01763	mg/L	0.010549	59.83%
V 292.402†	52718.6	0.3487	mg/L	0.00227	0.6974	mg/L	0.00454	0.65%
Zn 206.200†	1971.1	0.6232	mg/L	0.00489	1.246	mg/L	0.0098	0.78%

Sequence No.: 35
Sample ID: AFF2 P SWC
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 327
Date Collected: 5/12/2015 11:45:31 AM
Data Type: Original

Nebulizer Parameters: AFF2 P SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AFF2 P SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2835918.1	98.32	%	0.228				0.23%
ScR 361.383	277026.6	101.3	%	1.26				1.25%
Ag 328.068†	1.1	0.00006	mg/L	0.000248	0.00028	mg/L	0.001242	443.02%
Al 308.215†	67929.2	62.35	mg/L	0.712	311.7	mg/L	3.56	1.14%
As 188.979†	-102.7	0.03115	mg/L	0.002761	0.1558	mg/L	0.01380	8.86%
B 249.677†	264.2	0.04562	mg/L	0.000646	0.2281	mg/L	0.00323	1.42%
Ba 233.527†	5042.6	1.054	mg/L	0.0127	5.268	mg/L	0.0636	1.21%
Be 313.042†	530.7	0.00106	mg/L	0.000023	0.00532	mg/L	0.000116	2.18%
Ca 317.933†	502920.0	59.91	mg/L	0.441	299.5	mg/L	2.21	0.74%
Cd 228.802†	47.5	0.00291	mg/L	0.000052	0.01454	mg/L	0.000260	1.79%
Co 228.616†	2188.2	0.05498	mg/L	0.000102	0.2749	mg/L	0.00051	0.19%
Cr 267.716†	1898.2	0.3069	mg/L	0.00333	1.535	mg/L	0.0167	1.09%
Cu 324.752†	52723.6	0.1809	mg/L	0.00052	0.9044	mg/L	0.00259	0.29%
Fe 273.955†	112216.7	99.79	mg/L	0.778	498.9	mg/L	3.89	0.78%
K 766.490†	48822.5	18.51	mg/L	0.149	92.57	mg/L	0.745	0.80%
Mg 279.077†	28378.6	36.70	mg/L	0.417	183.5	mg/L	2.08	1.14%
Mn 257.610†	120009.0	2.875	mg/L	0.0217	14.37	mg/L	0.109	0.76%
Mo 202.031†	456.4	0.02506	mg/L	0.000298	0.1253	mg/L	0.00149	1.19%
Na 589.592†	23724.5	1.506	mg/L	0.0150	7.528	mg/L	0.0748	0.99%
Na 330.237†	9.4	1.290	mg/L	0.0606	6.449	mg/L	0.3032	4.70%
Ni 231.604†	1076.2	0.3166	mg/L	0.00401	1.583	mg/L	0.0201	1.27%
Pb 220.353†	2304.5	0.2967	mg/L	0.00150	1.483	mg/L	0.0075	0.51%
Sb 206.836†	20.3	0.00697	mg/L	0.001981	0.03487	mg/L	0.009906	28.41%
Se 196.026†	20.7	0.00760	mg/L	0.003131	0.03798	mg/L	0.015655	41.22%
Si 288.158†	2008.8	1.515	mg/L	0.0172	7.576	mg/L	0.0861	1.14%
Sn 189.927†	-12.9	0.00595	mg/L	0.000825	0.02976	mg/L	0.004123	13.85%
Sr 421.552†	342603.9	0.3990	mg/L	0.00412	1.995	mg/L	0.0206	1.03%
Ti 334.903†	89668.7	4.455	mg/L	0.0393	22.27	mg/L	0.196	0.88%
Tl 190.801†	-7.7	0.00786	mg/L	0.002400	0.03929	mg/L	0.012002	30.55%
V 292.402†	28495.3	0.1897	mg/L	0.00074	0.9484	mg/L	0.00368	0.39%
Zn 206.200†	2184.0	0.6896	mg/L	0.00687	3.448	mg/L	0.0344	1.00%

Sequence No.: 36
Sample ID: AFG4 A SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 328
Date Collected: 5/12/2015 11:49:32 AM
Data Type: Original

Nebulizer Parameters: AFG4 A SWC

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFG4 A SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2863405.8	99.27	%	0.314				0.32%
ScR 361.383	284426.8	104.0	%	0.73				0.70%
Ag 328.068†	-192.9	-0.00068	mg/L	0.000143	-0.00137	mg/L	0.000286	20.94%
Al 308.215†	206232.0	189.3	mg/L	1.31	378.6	mg/L	2.63	0.69%
As 188.979†	-176.4	0.05120	mg/L	0.001839	0.1024	mg/L	0.00368	3.59%
B 249.677†	697.0	0.1204	mg/L	0.00164	0.2408	mg/L	0.00328	1.36%
Ba 233.527†	2353.7	0.4735	mg/L	0.00540	0.9469	mg/L	0.01080	1.14%
Be 313.042†	1206.1	0.00245	mg/L	0.000027	0.00490	mg/L	0.000053	1.09%
Ca 317.933†	259116.2	30.87	mg/L	0.417	61.73	mg/L	0.834	1.35%
Cd 228.802†	64.3	0.00399	mg/L	0.000239	0.00797	mg/L	0.000477	5.99%
Co 228.616†	3342.8	0.08324	mg/L	0.000684	0.1665	mg/L	0.00137	0.82%
Cr 267.716†	1973.9	0.3215	mg/L	0.00206	0.6430	mg/L	0.00412	0.64%
Cu 324.752†	63034.8	0.2179	mg/L	0.00071	0.4358	mg/L	0.00141	0.32%
Fe 273.955†	188003.7	167.2	mg/L	2.48	334.4	mg/L	4.96	1.48%
K 766.490†	38670.7	14.66	mg/L	0.072	29.33	mg/L	0.144	0.49%
Mg 279.077†	36989.0	47.81	mg/L	0.429	95.63	mg/L	0.858	0.90%
Mn 257.610†	62556.3	1.498	mg/L	0.0208	2.995	mg/L	0.0417	1.39%
Mo 202.031†	210.2	0.01149	mg/L	0.000658	0.02299	mg/L	0.001316	5.72%
Na 589.592†	616773.9	39.14	mg/L	0.295	78.28	mg/L	0.591	0.75%
Na 330.237†	969.2	39.99	mg/L	0.346	79.97	mg/L	0.692	0.87%
Ni 231.604†	1103.2	0.3246	mg/L	0.00475	0.6491	mg/L	0.00950	1.46%
Pb 220.353†	902.1	0.1521	mg/L	0.00062	0.3043	mg/L	0.00124	0.41%
Sb 206.836†	-2.4	0.00106	mg/L	0.001683	0.00212	mg/L	0.003367	158.84%
Se 196.026†	31.7	0.00042	mg/L	0.002129	0.00084	mg/L	0.004257	504.98%
Si 288.158†	6705.2	5.049	mg/L	0.0390	10.10	mg/L	0.078	0.77%
Sn 189.927†	-45.3	-0.00609	mg/L	0.000570	-0.01218	mg/L	0.001140	9.35%
Sr 421.552†	198171.7	0.2308	mg/L	0.00191	0.4616	mg/L	0.00382	0.83%
Ti 334.903†	146616.1	7.288	mg/L	0.0674	14.58	mg/L	0.135	0.92%
Tl 190.801†	-36.2	-0.00076	mg/L	0.007389	-0.00153	mg/L	0.014777	967.77%
V 292.402†	63935.9	0.4279	mg/L	0.00157	0.8558	mg/L	0.00314	0.37%
Zn 206.200†	1313.4	0.4156	mg/L	0.00510	0.8311	mg/L	0.01021	1.23%

Sequence No.: 37
Sample ID: AFG4 B SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 329
Date Collected: 5/12/2015 11:53:33 AM
Data Type: Original

Nebulizer Parameters: AFG4 B SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AFG4 B SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2882621.8	99.94	%	0.444				0.44%
ScR 361.383	282852.9	103.5	%	0.95				0.91%
Ag 328.068†	-22.6	-0.00003	mg/L	0.000075	-0.00006	mg/L	0.000150	243.68%
Al 308.215†	71920.8	66.01	mg/L	0.392	132.0	mg/L	0.78	0.59%
As 188.979†	-142.7	0.01574	mg/L	0.001405	0.03149	mg/L	0.002811	8.93%
B 249.677†	127.6	0.02200	mg/L	0.000592	0.04401	mg/L	0.001184	2.69%
Ba 233.527†	616.7	0.1183	mg/L	0.00040	0.2365	mg/L	0.00081	0.34%
Be 313.042†	504.7	0.00099	mg/L	0.000015	0.00198	mg/L	0.000030	1.53%
Ca 317.933†	236958.1	28.23	mg/L	0.132	56.45	mg/L	0.263	0.47%
Cd 228.802†	34.9	0.00239	mg/L	0.000163	0.00478	mg/L	0.000326	6.82%
Co 228.616†	1491.5	0.03414	mg/L	0.000083	0.06829	mg/L	0.000166	0.24%
Cr 267.716†	1226.7	0.1982	mg/L	0.00072	0.3963	mg/L	0.00144	0.36%
Cu 324.752†	41365.6	0.1418	mg/L	0.00082	0.2836	mg/L	0.00163	0.57%
Fe 273.955†	92226.5	82.01	mg/L	0.682	164.0	mg/L	1.36	0.83%
K 766.490†	13857.9	5.255	mg/L	0.0195	10.51	mg/L	0.039	0.37%
Mg 279.077†	26627.8	34.44	mg/L	0.277	68.89	mg/L	0.554	0.80%
Mn 257.610†	46802.3	1.121	mg/L	0.0072	2.242	mg/L	0.0144	0.64%
Mo 202.031†	85.9	0.00445	mg/L	0.000031	0.00889	mg/L	0.000062	0.70%
Na 589.592†	256822.0	16.30	mg/L	0.099	32.60	mg/L	0.199	0.61%
Na 330.237†	391.2	16.61	mg/L	0.032	33.22	mg/L	0.065	0.19%
Ni 231.604†	625.4	0.1840	mg/L	0.00165	0.3680	mg/L	0.00331	0.90%
Pb 220.353†	1176.9	0.1587	mg/L	0.00164	0.3175	mg/L	0.00328	1.03%
Sb 206.836†	-0.1	0.00136	mg/L	0.002285	0.00272	mg/L	0.004569	167.85%
Se 196.026†	5.2	-0.00422	mg/L	0.006981	-0.00844	mg/L	0.013961	165.47%
Si 288.158†	6292.5	4.737	mg/L	0.0267	9.473	mg/L	0.0534	0.56%
Sn 189.927†	-6.1	0.00319	mg/L	0.001515	0.00637	mg/L	0.003030	47.55%
Sr 421.552†	109571.5	0.1276	mg/L	0.00065	0.2552	mg/L	0.00130	0.51%
Ti 334.903†	99193.3	4.930	mg/L	0.0259	9.861	mg/L	0.0518	0.53%
Tl 190.801†	-10.3	0.00393	mg/L	0.002253	0.00786	mg/L	0.004507	57.32%
V 292.402†	34848.9	0.2333	mg/L	0.00153	0.4667	mg/L	0.00306	0.66%
Zn 206.200†	810.1	0.2566	mg/L	0.00232	0.5133	mg/L	0.00465	0.91%

Sequence No.: 38
Sample ID: AFG4 C SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 330
Date Collected: 5/12/2015 11:57:33 AM
Data Type: Original

Nebulizer Parameters: AFG4 C SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AFG4 C SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2871030.5	99.54	%	0.521				0.52%
ScR 361.383	283831.0	103.8	%	0.65				0.63%
Ag 328.068†	-76.4	-0.00024	mg/L	0.000117	-0.00048	mg/L	0.000234	48.22%
Al 308.215†	91906.2	84.35	mg/L	0.431	168.7	mg/L	0.86	0.51%
As 188.979†	-64.5	0.09978	mg/L	0.004466	0.1996	mg/L	0.00893	4.48%
B 249.677†	370.7	0.06404	mg/L	0.000757	0.1281	mg/L	0.00151	1.18%
Ba 233.527†	939.0	0.1804	mg/L	0.00056	0.3608	mg/L	0.00113	0.31%
Be 313.042†	626.4	0.00124	mg/L	0.000007	0.00247	mg/L	0.000015	0.59%
Ca 317.933†	238213.0	28.38	mg/L	0.153	56.75	mg/L	0.307	0.54%
Cd 228.802†	93.2	0.00467	mg/L	0.000115	0.00933	mg/L	0.000230	2.47%
Co 228.616†	1932.8	0.04528	mg/L	0.000444	0.09056	mg/L	0.000889	0.98%
Cr 267.716†	1331.8	0.2171	mg/L	0.00104	0.4342	mg/L	0.00209	0.48%
Cu 324.752†	65257.0	0.2238	mg/L	0.00143	0.4477	mg/L	0.00286	0.64%
Fe 273.955†	138179.1	122.9	mg/L	1.22	245.7	mg/L	2.44	0.99%
K 766.490†	18418.4	6.984	mg/L	0.0403	13.97	mg/L	0.081	0.58%
Mg 279.077†	26813.2	34.66	mg/L	0.185	69.32	mg/L	0.371	0.53%
Mn 257.610†	69309.7	1.660	mg/L	0.0126	3.320	mg/L	0.0252	0.76%
Mo 202.031†	196.0	0.01072	mg/L	0.000113	0.02144	mg/L	0.000226	1.05%
Na 589.592†	277767.0	17.63	mg/L	0.095	35.25	mg/L	0.190	0.54%
Na 330.237†	420.0	17.93	mg/L	0.368	35.86	mg/L	0.736	2.05%
Ni 231.604†	684.9	0.2015	mg/L	0.00141	0.4030	mg/L	0.00282	0.70%
Pb 220.353†	1521.8	0.2040	mg/L	0.00071	0.4081	mg/L	0.00142	0.35%
Sb 206.836†	7.0	0.00439	mg/L	0.001856	0.00878	mg/L	0.003713	42.27%
Se 196.026†	11.0	-0.00218	mg/L	0.001671	-0.00436	mg/L	0.003343	76.65%
Si 288.158†	7199.4	5.419	mg/L	0.0334	10.84	mg/L	0.067	0.62%
Sn 189.927†	-34.5	-0.00390	mg/L	0.000519	-0.00780	mg/L	0.001038	13.30%
Sr 421.552†	173847.5	0.2024	mg/L	0.00109	0.4049	mg/L	0.00219	0.54%
Ti 334.903†	116910.4	5.811	mg/L	0.0265	11.62	mg/L	0.053	0.46%
Tl 190.801†	-18.5	0.00445	mg/L	0.001002	0.00889	mg/L	0.002004	22.53%
V 292.402†	41038.0	0.2734	mg/L	0.00231	0.5467	mg/L	0.00462	0.84%
Zn 206.200†	1249.1	0.3953	mg/L	0.00093	0.7906	mg/L	0.00186	0.24%

Sequence No.: 39
Sample ID: AFG4 D SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 331
Date Collected: 5/12/2015 12:01:33 PM
Data Type: Original

Nebulizer Parameters: AFG4 D SWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AFG4 D SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2895128.2	100.4	%	0.54				0.54%
ScR 361.383	285766.4	104.5	%	0.66				0.63%
Ag 328.068†	-62.7	-0.00020	mg/L	0.000219	-0.00041	mg/L	0.000438	107.62%
Al 308.215†	55262.8	50.72	mg/L	0.217	101.4	mg/L	0.43	0.43%
As 188.979†	-64.0	0.04029	mg/L	0.002329	0.08058	mg/L	0.004658	5.78%
B 249.677†	57.6	0.00988	mg/L	0.000411	0.01977	mg/L	0.000822	4.16%
Ba 233.527†	1068.2	0.2146	mg/L	0.00067	0.4291	mg/L	0.00134	0.31%
Be 313.042†	423.0	0.00083	mg/L	0.000012	0.00167	mg/L	0.000023	1.40%
Ca 317.933†	195145.2	23.25	mg/L	0.065	46.49	mg/L	0.131	0.28%
Cd 228.802†	64.7	0.00331	mg/L	0.000241	0.00661	mg/L	0.000481	7.28%
Co 228.616†	1492.9	0.03671	mg/L	0.000052	0.07343	mg/L	0.000105	0.14%
Cr 267.716†	740.3	0.1208	mg/L	0.00074	0.2416	mg/L	0.00148	0.61%
Cu 324.752†	37086.9	0.1275	mg/L	0.00109	0.2550	mg/L	0.00218	0.85%
Fe 273.955†	87835.2	78.10	mg/L	0.422	156.2	mg/L	0.84	0.54%
K 766.490†	7244.7	2.747	mg/L	0.0063	5.494	mg/L	0.0127	0.23%
Mg 279.077†	17230.7	22.27	mg/L	0.042	44.54	mg/L	0.083	0.19%
Mn 257.610†	59091.2	1.415	mg/L	0.0044	2.831	mg/L	0.0089	0.31%
Mo 202.031†	91.9	0.00487	mg/L	0.000207	0.00974	mg/L	0.000414	4.25%
Na 589.592†	22468.7	1.426	mg/L	0.0048	2.852	mg/L	0.0095	0.33%
Na 330.237†	16.9	1.394	mg/L	0.1298	2.788	mg/L	0.2595	9.31%
Ni 231.604†	398.3	0.1172	mg/L	0.00061	0.2343	mg/L	0.00122	0.52%
Pb 220.353†	688.2	0.09441	mg/L	0.000410	0.1888	mg/L	0.00082	0.43%
Sb 206.836†	7.8	0.00425	mg/L	0.001581	0.00850	mg/L	0.003162	37.20%
Se 196.026†	6.8	-0.00120	mg/L	0.006126	-0.00240	mg/L	0.012252	511.45%
Si 288.158†	5229.2	3.936	mg/L	0.0262	7.871	mg/L	0.0525	0.67%
Sn 189.927†	-38.3	-0.00594	mg/L	0.000760	-0.01187	mg/L	0.001520	12.80%
Sr 421.552†	130309.9	0.1517	mg/L	0.00065	0.3035	mg/L	0.00130	0.43%
Ti 334.903†	70684.1	3.513	mg/L	0.0109	7.026	mg/L	0.0219	0.31%
Tl 190.801†	-8.5	0.00455	mg/L	0.001885	0.00910	mg/L	0.003770	41.42%
V 292.402†	31303.1	0.2097	mg/L	0.00129	0.4194	mg/L	0.00258	0.62%
Zn 206.200†	1716.7	0.5426	mg/L	0.00117	1.085	mg/L	0.0023	0.22%

Sequence No.: 40
Sample ID: AFG4 E SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 332
Date Collected: 5/12/2015 12:05:33 PM
Data Type: Original

Nebulizer Parameters: AFG4 E SWC

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFG4 E SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2909878.3	100.9	%	0.29				0.29%
ScR 361.383	282749.2	103.4	%	0.88				0.85%
Ag 328.068†	-46.1	-0.00012	mg/L	0.000161	-0.00023	mg/L	0.000322	138.10%
Al 308.215†	93479.0	85.80	mg/L	0.656	171.6	mg/L	1.31	0.76%
As 188.979†	-62.5	0.09252	mg/L	0.001993	0.1850	mg/L	0.00399	2.15%
B 249.677†	299.0	0.05164	mg/L	0.001176	0.1033	mg/L	0.00235	2.28%
Ba 233.527†	940.4	0.1828	mg/L	0.00118	0.3656	mg/L	0.00236	0.65%
Be 313.042†	605.1	0.00119	mg/L	0.000037	0.00239	mg/L	0.000074	3.11%
Ca 317.933†	210263.6	25.05	mg/L	0.132	50.09	mg/L	0.264	0.53%
Cd 228.802†	74.8	0.00381	mg/L	0.000279	0.00763	mg/L	0.000558	7.31%
Co 228.616†	1900.9	0.04499	mg/L	0.000267	0.08997	mg/L	0.000534	0.59%
Cr 267.716†	1198.9	0.1952	mg/L	0.00137	0.3903	mg/L	0.00273	0.70%
Cu 324.752†	69541.6	0.2378	mg/L	0.00141	0.4755	mg/L	0.00283	0.59%
Fe 273.955†	122406.4	108.8	mg/L	0.76	217.7	mg/L	1.51	0.70%
K 766.490†	23039.2	8.737	mg/L	0.0345	17.47	mg/L	0.069	0.40%
Mg 279.077†	25628.2	33.13	mg/L	0.239	66.26	mg/L	0.479	0.72%
Mn 257.610†	54765.1	1.312	mg/L	0.0075	2.623	mg/L	0.0150	0.57%
Mo 202.031†	251.6	0.01394	mg/L	0.000217	0.02789	mg/L	0.000433	1.55%
Na 589.592†	282217.9	17.91	mg/L	0.092	35.82	mg/L	0.183	0.51%
Na 330.237†	429.0	18.22	mg/L	0.238	36.44	mg/L	0.477	1.31%
Ni 231.604†	618.7	0.1820	mg/L	0.00221	0.3641	mg/L	0.00443	1.22%
Pb 220.353†	1452.2	0.1964	mg/L	0.00200	0.3928	mg/L	0.00401	1.02%
Sb 206.836†	4.1	0.00340	mg/L	0.001893	0.00679	mg/L	0.003787	55.73%
Se 196.026†	15.0	0.00058	mg/L	0.004358	0.00115	mg/L	0.008715	756.52%
Si 288.158†	7933.6	5.971	mg/L	0.0518	11.94	mg/L	0.104	0.87%
Sn 189.927†	-30.8	-0.00350	mg/L	0.000356	-0.00700	mg/L	0.000712	10.17%
Sr 421.552†	143025.6	0.1666	mg/L	0.00088	0.3331	mg/L	0.00176	0.53%
Ti 334.903†	109905.9	5.463	mg/L	0.0358	10.93	mg/L	0.072	0.66%
Tl 190.801†	-9.0	0.00810	mg/L	0.002531	0.01619	mg/L	0.005062	31.27%
V 292.402†	41442.9	0.2769	mg/L	0.00182	0.5539	mg/L	0.00364	0.66%
Zn 206.200†	995.7	0.3154	mg/L	0.00310	0.6309	mg/L	0.00621	0.98%

Sequence No.: 41
Sample ID: AFG4 MBSPK SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 333
Date Collected: 5/12/2015 12:09:33 PM
Data Type: Original

Nebulizer Parameters: AFG4 MBSPK SWC

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFG4 MBSPK SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2882602.0	99.94	%	0.738				0.74%
ScR 361.383	280576.5	102.6	%	0.67				0.66%
Ag 328.068†	130873.6	0.5422	mg/L	0.00857	1.084	mg/L	0.0171	1.58%
Al 308.215†	2295.3	2.099	mg/L	0.0071	4.198	mg/L	0.0142	0.34%
As 188.979†	2691.6	2.093	mg/L	0.0151	4.185	mg/L	0.0302	0.72%
B 249.677†	2.6	-0.00062	mg/L	0.001001	-0.00124	mg/L	0.002001	161.33%
Ba 233.527†	10490.9	2.223	mg/L	0.0099	4.446	mg/L	0.0199	0.45%
Be 313.042†	232301.7	0.5078	mg/L	0.00296	1.016	mg/L	0.0059	0.58%
Ca 317.933†	85669.3	10.20	mg/L	0.074	20.41	mg/L	0.147	0.72%
Cd 228.802†	12138.3	0.5345	mg/L	0.00930	1.069	mg/L	0.0186	1.74%
Co 228.616†	18280.8	0.5266	mg/L	0.00830	1.053	mg/L	0.0166	1.58%
Cr 267.716†	3387.2	0.5451	mg/L	0.00331	1.090	mg/L	0.0066	0.61%
Cu 324.752†	154701.5	0.5214	mg/L	0.00872	1.043	mg/L	0.0174	1.67%
Fe 273.955†	2407.1	2.137	mg/L	0.0210	4.274	mg/L	0.0420	0.98%
K 766.490†	27294.5	10.35	mg/L	0.081	20.70	mg/L	0.162	0.78%
Mg 279.077†	8298.3	10.75	mg/L	0.067	21.50	mg/L	0.134	0.63%
Mn 257.610†	21116.5	0.5063	mg/L	0.00227	1.013	mg/L	0.0045	0.45%
Mo 202.031†	29.5	0.00152	mg/L	0.000321	0.00304	mg/L	0.000641	21.10%
Na 589.592†	162764.7	10.33	mg/L	0.078	20.66	mg/L	0.157	0.76%
Na 330.237†	270.8	10.56	mg/L	0.213	21.12	mg/L	0.425	2.01%
Ni 231.604†	1813.0	0.5325	mg/L	0.00308	1.065	mg/L	0.0062	0.58%
Pb 220.353†	17031.1	2.109	mg/L	0.0367	4.217	mg/L	0.0734	1.74%
Sb 206.836†	13.3	-0.00025	mg/L	0.002116	-0.00050	mg/L	0.004232	843.51%
Se 196.026†	2852.4	2.082	mg/L	0.0276	4.164	mg/L	0.0552	1.33%
Si 288.158†	-10.0	-0.00423	mg/L	0.002228	-0.00846	mg/L	0.004456	52.66%
Sn 189.927†	-24.9	-0.00481	mg/L	0.000537	-0.00961	mg/L	0.001074	11.17%
Sr 421.552†	448349.4	0.5221	mg/L	0.00423	1.044	mg/L	0.0085	0.81%
Ti 334.903†	82.0	0.00338	mg/L	0.000361	0.00677	mg/L	0.000721	10.65%
Tl 190.801†	3590.2	2.099	mg/L	0.0191	4.199	mg/L	0.0382	0.91%
V 292.402†	76843.1	0.5301	mg/L	0.00914	1.060	mg/L	0.0183	1.73%
Zn 206.200†	1639.6	0.5176	mg/L	0.00331	1.035	mg/L	0.0066	0.64%

Sequence No.: 42
Sample ID: CV4
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 5/12/2015 12:13:33 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2857310.1	99.06	%	0.588				0.59%
ScR 361.383	272906.9	99.83	%	0.372				0.37%
Ag 328.068†	252470.3	1.046	mg/L	0.0072	1.046	mg/L	0.0072	0.68%
Al 308.215†	2225.9	2.011	mg/L	0.0029	2.011	mg/L	0.0029	0.14%
As 188.979†	2531.9	1.992	mg/L	0.0074	1.992	mg/L	0.0074	0.37%
B 249.677†	5807.7	1.004	mg/L	0.0063	1.004	mg/L	0.0063	0.63%
Ba 233.527†	5113.1	1.083	mg/L	0.0027	1.083	mg/L	0.0027	0.25%
Be 313.042†	448707.5	0.9809	mg/L	0.00493	0.9809	mg/L	0.00493	0.50%
Ca 317.933†	17644.0	2.102	mg/L	0.0075	2.102	mg/L	0.0075	0.36%
Cd 228.802†	23199.4	1.034	mg/L	0.0094	1.034	mg/L	0.0094	0.91%
Co 228.616†	34998.5	1.007	mg/L	0.0074	1.007	mg/L	0.0074	0.73%
Cr 267.716†	6593.5	1.063	mg/L	0.0037	1.063	mg/L	0.0037	0.35%
Cu 324.752†	290266.8	0.9777	mg/L	0.00542	0.9777	mg/L	0.00542	0.55%
Fe 273.955†	2313.1	2.050	mg/L	0.0092	2.050	mg/L	0.0092	0.45%
K 766.490†	53127.5	20.15	mg/L	0.247	20.15	mg/L	0.247	1.22%
Mg 279.077†	1567.8	2.038	mg/L	0.0054	2.038	mg/L	0.0054	0.27%
Mn 257.610†	41064.5	0.9842	mg/L	0.00652	0.9842	mg/L	0.00652	0.66%
Mo 202.031†	17888.2	1.020	mg/L	0.0115	1.020	mg/L	0.0115	1.13%
Na 589.592†	797744.9	50.62	mg/L	0.357	50.62	mg/L	0.357	0.70%
Na 330.237†	1307.3	51.62	mg/L	0.089	51.62	mg/L	0.089	0.17%
Ni 231.604†	3519.2	1.036	mg/L	0.0037	1.036	mg/L	0.0037	0.36%
Pb 220.353†	16214.5	2.008	mg/L	0.0163	2.008	mg/L	0.0163	0.81%
Sb 206.836†	5794.3	2.136	mg/L	0.0090	2.136	mg/L	0.0090	0.42%
Se 196.026†	2736.6	1.997	mg/L	0.0081	1.997	mg/L	0.0081	0.41%
Si 288.158†	2787.5	2.092	mg/L	0.0140	2.092	mg/L	0.0140	0.67%
Sn 189.927†	4099.7	1.048	mg/L	0.0037	1.048	mg/L	0.0037	0.35%
Sr 421.552†	870340.6	1.014	mg/L	0.0089	1.014	mg/L	0.0089	0.88%
Ti 334.903†	20398.1	1.013	mg/L	0.0080	1.013	mg/L	0.0080	0.79%
Tl 190.801†	3437.1	2.006	mg/L	0.0066	2.006	mg/L	0.0066	0.33%
V 292.402†	148001.7	1.021	mg/L	0.0078	1.021	mg/L	0.0078	0.76%
Zn 206.200†	3240.9	1.023	mg/L	0.0025	1.023	mg/L	0.0025	0.25%

Sequence No.: 43
Sample ID: CB4
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 5/12/2015 12:17:37 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2876368.6	99.72	%	0.363				0.36%
ScR 361.383	278930.0	102.0	%	0.65				0.63%
Ag 328.068†	10.2	0.00004	mg/L	0.000087	0.00004	mg/L	0.000087	203.87%
Al 308.215†	1.8	0.00159	mg/L	0.003421	0.00159	mg/L	0.003421	214.65%
As 188.979†	-1.0	-0.00077	mg/L	0.000526	-0.00077	mg/L	0.000526	68.68%
B 249.677†	10.3	0.00178	mg/L	0.000590	0.00178	mg/L	0.000590	33.14%
Ba 233.527†	2.2	0.00047	mg/L	0.000200	0.00047	mg/L	0.000200	42.59%
Be 313.042†	4.7	0.00001	mg/L	0.000027	0.00001	mg/L	0.000027	259.37%
Ca 317.933†	15.1	0.00180	mg/L	0.000425	0.00180	mg/L	0.000425	23.56%
Cd 228.802†	1.5	0.00007	mg/L	0.000036	0.00007	mg/L	0.000036	51.90%
Co 228.616†	-2.6	-0.00008	mg/L	0.000097	-0.00008	mg/L	0.000097	127.71%
Cr 267.716†	4.5	0.00072	mg/L	0.000957	0.00072	mg/L	0.000957	132.80%
Cu 324.752†	64.1	0.00022	mg/L	0.000019	0.00022	mg/L	0.000019	8.83%
Fe 273.955†	1.1	0.00099	mg/L	0.000614	0.00099	mg/L	0.000614	61.95%
K 766.490†	31.2	0.01184	mg/L	0.003629	0.01184	mg/L	0.003629	30.64%
Mg 279.077†	-0.8	-0.00104	mg/L	0.007775	-0.00104	mg/L	0.007775	745.96%
Mn 257.610†	2.4	0.00006	mg/L	0.000007	0.00006	mg/L	0.000007	12.00%
Mo 202.031†	22.7	0.00129	mg/L	0.000383	0.00129	mg/L	0.000383	29.58%
Na 589.592†	-79.4	-0.00504	mg/L	0.001528	-0.00504	mg/L	0.001528	30.35%
Na 330.237†	-4.1	-0.1626	mg/L	0.10482	-0.1626	mg/L	0.10482	64.46%
Ni 231.604†	-5.1	-0.00149	mg/L	0.000281	-0.00149	mg/L	0.000281	18.88%
Pb 220.353†	0.4	0.00005	mg/L	0.000451	0.00005	mg/L	0.000451	930.65%
Sb 206.836†	5.4	0.00200	mg/L	0.000951	0.00200	mg/L	0.000951	47.50%
Se 196.026†	-1.3	-0.00098	mg/L	0.002227	-0.00098	mg/L	0.002227	227.04%
Si 288.158†	-4.0	-0.00298	mg/L	0.004277	-0.00298	mg/L	0.004277	143.37%
Sn 189.927†	0.8	0.00021	mg/L	0.000375	0.00021	mg/L	0.000375	180.16%
Sr 421.552†	61.5	0.00007	mg/L	0.000035	0.00007	mg/L	0.000035	49.55%
Ti 334.903†	11.9	0.00059	mg/L	0.000469	0.00059	mg/L	0.000469	79.58%
Tl 190.801†	-1.1	-0.00062	mg/L	0.000646	-0.00062	mg/L	0.000646	104.05%
V 292.402†	8.2	0.00006	mg/L	0.000056	0.00006	mg/L	0.000056	94.76%
Zn 206.200†	3.7	0.00117	mg/L	0.000288	0.00117	mg/L	0.000288	24.56%

Sequence No.: 44
Sample ID: AFU2 MB TWC
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 334
Date Collected: 5/12/2015 12:21:52 PM
Data Type: Original

Nebulizer Parameters: AFU2 MB TWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AFU2 MB TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2936383.5	101.8	%	0.34				0.33%
ScR 361.383	278215.5	101.8	%	0.23				0.23%
Ag 328.068†	27.9	0.00012	mg/L	0.000118	0.00012	mg/L	0.000118	102.44%
Al 308.215†	2.0	0.00188	mg/L	0.001373	0.00188	mg/L	0.001373	73.15%
As 188.979†	-0.9	-0.00070	mg/L	0.002626	-0.00070	mg/L	0.002626	375.51%
B 249.677†	11.0	0.00190	mg/L	0.000842	0.00190	mg/L	0.000842	44.32%
Ba 233.527†	2.9	0.00061	mg/L	0.001048	0.00061	mg/L	0.001048	172.16%
Be 313.042†	-1.2	-0.00000	mg/L	0.000010	-0.00000	mg/L	0.000010	403.08%
Ca 317.933†	57.9	0.00689	mg/L	0.000242	0.00689	mg/L	0.000242	3.51%
Cd 228.802†	2.0	0.00010	mg/L	0.000069	0.00010	mg/L	0.000069	71.98%
Co 228.616†	2.7	0.00008	mg/L	0.000213	0.00008	mg/L	0.000213	272.67%
Cr 267.716†	5.0	0.00080	mg/L	0.000668	0.00080	mg/L	0.000668	83.23%
Cu 324.752†	52.4	0.00018	mg/L	0.000090	0.00018	mg/L	0.000090	50.74%
Fe 273.955†	11.6	0.01031	mg/L	0.000934	0.01031	mg/L	0.000934	9.06%
K 766.490†	-24.8	-0.00941	mg/L	0.008529	-0.00941	mg/L	0.008529	90.68%
Mg 279.077†	1.7	0.00224	mg/L	0.005633	0.00224	mg/L	0.005633	251.61%
Mn 257.610†	4.2	0.00010	mg/L	0.000024	0.00010	mg/L	0.000024	23.28%
Mo 202.031†	-2.8	-0.00016	mg/L	0.000091	-0.00016	mg/L	0.000091	56.53%
Na 589.592†	-64.1	-0.00407	mg/L	0.001413	-0.00407	mg/L	0.001413	34.74%
Na 330.237†	1.4	0.05335	mg/L	0.103459	0.05335	mg/L	0.103459	193.94%
Ni 231.604†	-2.9	-0.00084	mg/L	0.000901	-0.00084	mg/L	0.000901	106.97%
Pb 220.353†	2.4	0.00030	mg/L	0.000361	0.00030	mg/L	0.000361	118.59%
Sb 206.836†	-2.0	-0.00073	mg/L	0.001163	-0.00073	mg/L	0.001163	158.59%
Se 196.026†	-3.5	-0.00254	mg/L	0.002240	-0.00254	mg/L	0.002240	88.15%
Si 288.158†	13.3	0.00997	mg/L	0.002842	0.00997	mg/L	0.002842	28.51%
Sn 189.927†	-0.8	-0.00022	mg/L	0.000870	-0.00022	mg/L	0.000870	403.02%
Sr 421.552†	70.2	0.00008	mg/L	0.000010	0.00008	mg/L	0.000010	12.74%
Ti 334.903†	8.6	0.00043	mg/L	0.000357	0.00043	mg/L	0.000357	83.21%
Tl 190.801†	-1.3	-0.00079	mg/L	0.002503	-0.00079	mg/L	0.002503	317.10%
V 292.402†	15.5	0.00011	mg/L	0.000040	0.00011	mg/L	0.000040	37.21%
Zn 206.200†	9.5	0.00300	mg/L	0.000408	0.00300	mg/L	0.000408	13.60%

Sequence No.: 45
Sample ID: AFU2 A TWC
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 335
Date Collected: 5/12/2015 12:26:08 PM
Data Type: Original

Nebulizer Parameters: AFU2 A TWC

Analyte	Back Pressure	Flow
All	227.0 kPa	0.75 L/min

Mean Data: AFU2 A TWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2559572.6	88.74	%	0.467				0.53%
ScR 361.383	267703.5	97.92	%	0.338				0.35%
Ag 328.068†	26.7	0.00011	mg/L	0.000180	0.00055	mg/L	0.000901	162.96%
Al 308.215†	9.2	0.00717	mg/L	0.005401	0.03583	mg/L	0.027004	75.36%
As 188.979†	28.8	0.02047	mg/L	0.000958	0.1023	mg/L	0.00479	4.68%
B 249.677†	97071.9	16.80	mg/L	0.216	83.99	mg/L	1.081	1.29%
Ba 233.527†	13.4	0.00275	mg/L	0.000736	0.01373	mg/L	0.003680	26.81%
Be 313.042†	15.0	0.00003	mg/L	0.000009	0.00016	mg/L	0.000044	26.80%
Ca 317.933†	150536.2	17.93	mg/L	0.219	89.66	mg/L	1.097	1.22%
Cd 228.802†	1.3	-0.00005	mg/L	0.000137	-0.00025	mg/L	0.000687	274.01%
Co 228.616†	16.1	0.00047	mg/L	0.000131	0.00233	mg/L	0.000656	28.10%
Cr 267.716†	12.0	0.00180	mg/L	0.000360	0.00899	mg/L	0.001798	20.00%
Cu 324.752†	888.5	0.00299	mg/L	0.000051	0.01494	mg/L	0.000257	1.72%
Fe 273.955†	623.0	0.5540	mg/L	0.00495	2.770	mg/L	0.0248	0.89%
K 766.490†	2630.0	0.9973	mg/L	0.00614	4.987	mg/L	0.0307	0.62%
Mg 279.077†	277.8	0.3581	mg/L	0.00373	1.791	mg/L	0.0187	1.04%
Mn 257.610†	650.6	0.01553	mg/L	0.000180	0.07763	mg/L	0.000901	1.16%
Mo 202.031†	1414.1	0.08032	mg/L	0.000259	0.4016	mg/L	0.00130	0.32%
Na 589.592†	23309168.6	1479	mg/L	19.11	7396	mg/L	95.57	1.29%
Na 330.237†	40060.7	1583	mg/L	17.74	7913	mg/L	88.71	1.12%
Ni 231.604†	75.6	0.02224	mg/L	0.000399	0.1112	mg/L	0.00200	1.79%
Pb 220.353†	210.4	0.02601	mg/L	0.000655	0.1301	mg/L	0.00327	2.52%
Sb 206.836†	2.2	0.00074	mg/L	0.002990	0.00370	mg/L	0.014951	403.96%
Se 196.026†	1.9	0.00135	mg/L	0.003897	0.00675	mg/L	0.019486	288.70%
Si 288.158†	29.9	0.02261	mg/L	0.001495	0.1131	mg/L	0.00748	6.61%
Sn 189.927†	-23.7	-0.00348	mg/L	0.000794	-0.01739	mg/L	0.003971	22.84%
Sr 421.552†	27160.1	0.03163	mg/L	0.000362	0.1581	mg/L	0.00181	1.14%
Ti 334.903†	64.5	0.00210	mg/L	0.000245	0.01050	mg/L	0.001227	11.68%
Tl 190.801†	9.7	0.00589	mg/L	0.002996	0.02943	mg/L	0.014981	50.91%
V 292.402†	39.7	0.00029	mg/L	0.000082	0.00146	mg/L	0.000408	27.97%
Zn 206.200†	103.5	0.03259	mg/L	0.000633	0.1630	mg/L	0.00316	1.94%

Sequence No.: 46
Sample ID: AF05 A SWC
Analyst: CC
Dilution: 20.000000X

Autosampler Location: 336
Date Collected: 5/12/2015 12:30:51 PM
Data Type: Original

Nebulizer Parameters: AF05 A SWC

Analyte	Back Pressure	Flow
All	229.0 kPa	0.75 L/min

Mean Data: AF05 A SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2836496.3	98.34	%	1.074				1.09%
ScR 361.383	279403.6	102.2	%	0.14				0.14%
Ag 328.068†	1172.4	0.00487	mg/L	0.000072	0.09743	mg/L	0.001443	1.48%
Al 308.215†	16449.5	15.09	mg/L	0.156	301.8	mg/L	3.12	1.03%
As 188.979†	7013.5	5.468	mg/L	0.0448	109.4	mg/L	0.90	0.82%
B 249.677†	312.7	0.05428	mg/L	0.004411	1.086	mg/L	0.0882	8.13%
Ba 233.527†	2112.2	0.4211	mg/L	0.00377	8.421	mg/L	0.0754	0.90%
Be 313.042†	1930.9	0.00420	mg/L	0.000034	0.08401	mg/L	0.000672	0.80%
Ca 317.933†	372156.8	44.33	mg/L	0.543	886.6	mg/L	10.85	1.22%
Cd 228.802†	866.0	0.00694	mg/L	0.000163	0.1388	mg/L	0.00326	2.35%
Co 228.616†	8903.1	0.2554	mg/L	0.00149	5.107	mg/L	0.0299	0.59%
Cr 267.716†	902.2	0.1531	mg/L	0.00060	3.063	mg/L	0.0121	0.40%
Cu 324.752†	977937.7	3.302	mg/L	0.0180	66.04	mg/L	0.360	0.54%
Fe 273.955†	198138.1	176.2	mg/L	1.48	3524	mg/L	29.63	0.84%
K 766.490†	10061.1	3.815	mg/L	0.0665	76.30	mg/L	1.331	1.74%
Mg 279.077†	6129.7	7.828	mg/L	0.0371	156.6	mg/L	0.74	0.47%
Mn 257.610†	43700.9	1.047	mg/L	0.0107	20.95	mg/L	0.214	1.02%
Mo 202.031†	11044.5	0.6288	mg/L	0.00583	12.58	mg/L	0.117	0.93%
Na 589.592†	92140.6	5.847	mg/L	0.0940	116.9	mg/L	1.88	1.61%
Na 330.237†	246.7	6.198	mg/L	0.1688	124.0	mg/L	3.38	2.72%
Ni 231.604†	201.0	0.05986	mg/L	0.000582	1.197	mg/L	0.0116	0.97%
Pb 220.353†	25739.1	3.177	mg/L	0.0269	63.53	mg/L	0.539	0.85%
Sb 206.836†	3509.2	1.295	mg/L	0.0114	25.91	mg/L	0.227	0.88%
Se 196.026†	8.0	0.00386	mg/L	0.004534	0.07720	mg/L	0.090678	117.45%
Si 288.158†	514.1	0.3850	mg/L	0.00300	7.700	mg/L	0.0600	0.78%
Sn 189.927†	1298.9	0.3389	mg/L	0.00285	6.778	mg/L	0.0570	0.84%
Sr 421.552†	108321.9	0.1261	mg/L	0.00145	2.523	mg/L	0.0290	1.15%
Ti 334.903†	14418.5	0.7137	mg/L	0.00782	14.27	mg/L	0.156	1.10%
Tl 190.801†	-19.1	0.01177	mg/L	0.001475	0.2355	mg/L	0.02949	12.53%
V 292.402†	8426.2	0.04915	mg/L	0.000471	0.9830	mg/L	0.00942	0.96%
Zn 206.200†	43122.0	13.61	mg/L	0.142	272.2	mg/L	2.85	1.05%

Sequence No.: 47
Sample ID: AFO5 B SWC
Analyst: CC
Dilution: 20.000000X

Autosampler Location: 337
Date Collected: 5/12/2015 12:34:37 PM
Data Type: Original

Nebulizer Parameters: AFO5 B SWC

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFO5 B SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2816633.2	97.65	%	0.616				0.63%
ScR 361.383	270809.6	99.06	%	0.289				0.29%
Ag 328.068†	914.3	0.00380	mg/L	0.000056	0.07598	mg/L	0.001112	1.46%
Al 308.215†	11689.9	10.72	mg/L	0.037	214.4	mg/L	0.74	0.35%
As 188.979†	6436.4	5.018	mg/L	0.0437	100.4	mg/L	0.87	0.87%
B 249.677†	153.7	0.02685	mg/L	0.001645	0.5369	mg/L	0.03290	6.13%
Ba 233.527†	1073.6	0.2042	mg/L	0.00198	4.084	mg/L	0.0396	0.97%
Be 313.042†	3174.3	0.00692	mg/L	0.000022	0.1385	mg/L	0.00044	0.32%
Ca 317.933†	248366.8	29.58	mg/L	0.174	591.7	mg/L	3.49	0.59%
Cd 228.802†	815.2	0.00728	mg/L	0.000157	0.1457	mg/L	0.00315	2.16%
Co 228.616†	8283.5	0.2377	mg/L	0.00167	4.755	mg/L	0.0334	0.70%
Cr 267.716†	1188.1	0.1984	mg/L	0.00168	3.967	mg/L	0.0336	0.85%
Cu 324.752†	584863.4	1.977	mg/L	0.0108	39.53	mg/L	0.215	0.54%
Fe 273.955†	173922.0	154.7	mg/L	0.48	3093	mg/L	9.60	0.31%
K 766.490†	6432.9	2.439	mg/L	0.0025	48.79	mg/L	0.049	0.10%
Mg 279.077†	5477.9	6.999	mg/L	0.0346	140.0	mg/L	0.69	0.49%
Mn 257.610†	27697.8	0.6639	mg/L	0.00128	13.28	mg/L	0.026	0.19%
Mo 202.031†	11744.4	0.6689	mg/L	0.00545	13.38	mg/L	0.109	0.81%
Na 589.592†	74813.2	4.748	mg/L	0.0184	94.95	mg/L	0.368	0.39%
Na 330.237†	209.9	4.904	mg/L	0.1109	98.09	mg/L	2.217	2.26%
Ni 231.604†	167.1	0.04974	mg/L	0.001035	0.9948	mg/L	0.02071	2.08%
Pb 220.353†	20884.6	2.578	mg/L	0.0230	51.56	mg/L	0.460	0.89%
Sb 206.836†	2864.1	1.056	mg/L	0.0086	21.13	mg/L	0.172	0.81%
Se 196.026†	0.3	-0.00118	mg/L	0.003613	-0.02367	mg/L	0.072263	305.33%
Si 288.158†	601.2	0.4508	mg/L	0.00499	9.017	mg/L	0.0999	1.11%
Sn 189.927†	1086.4	0.2824	mg/L	0.00404	5.647	mg/L	0.0808	1.43%
Sr 421.552†	74085.5	0.08627	mg/L	0.000323	1.725	mg/L	0.0065	0.37%
Ti 334.903†	12019.9	0.5953	mg/L	0.00193	11.91	mg/L	0.039	0.32%
Tl 190.801†	-18.4	0.00942	mg/L	0.001663	0.1885	mg/L	0.03325	17.64%
V 292.402†	6644.8	0.03825	mg/L	0.000372	0.7651	mg/L	0.00744	0.97%
Zn 206.200†	40937.8	12.92	mg/L	0.072	258.4	mg/L	1.45	0.56%

Sequence No.: 48
Sample ID: AF05 C SWC
Analyst: CC
Dilution: 5.000000X

Autosampler Location: 338
Date Collected: 5/12/2015 12:38:22 PM
Data Type: Original

Nebulizer Parameters: AF05 C SWC

Analyte	Back Pressure	Flow
All	229.0 kPa	0.75 L/min

Mean Data: AF05 C SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2820782.5	97.79	%	1.335				1.37%
ScR 361.383	280571.6	102.6	%	0.95				0.93%
Ag 328.068†	333.2	0.00143	mg/L	0.000019	0.00714	mg/L	0.000095	1.33%
Al 308.215†	44425.5	40.77	mg/L	0.493	203.8	mg/L	2.46	1.21%
As 188.979†	2632.9	2.117	mg/L	0.0367	10.58	mg/L	0.184	1.73%
B 249.677†	218.1	0.03775	mg/L	0.000712	0.1888	mg/L	0.00356	1.89%
Ba 233.527†	1610.0	0.3150	mg/L	0.00230	1.575	mg/L	0.0115	0.73%
Be 313.042†	820.2	0.00172	mg/L	0.000029	0.00860	mg/L	0.000145	1.69%
Ca 317.933†	262143.4	31.23	mg/L	0.329	156.1	mg/L	1.64	1.05%
Cd 228.802†	364.2	0.00443	mg/L	0.000197	0.02217	mg/L	0.000983	4.44%
Co 228.616†	4340.7	0.1202	mg/L	0.00188	0.6008	mg/L	0.00941	1.57%
Cr 267.716†	869.7	0.1466	mg/L	0.00108	0.7330	mg/L	0.00540	0.74%
Cu 324.752†	364504.8	1.235	mg/L	0.0223	6.174	mg/L	0.1117	1.81%
Fe 273.955†	195288.1	173.7	mg/L	2.19	868.3	mg/L	10.97	1.26%
K 766.490†	10419.8	3.951	mg/L	0.0552	19.76	mg/L	0.276	1.40%
Mg 279.077†	15675.5	20.20	mg/L	0.259	101.0	mg/L	1.30	1.28%
Mn 257.610†	88961.3	2.131	mg/L	0.0234	10.66	mg/L	0.117	1.10%
Mo 202.031†	4223.8	0.2402	mg/L	0.00410	1.201	mg/L	0.0205	1.71%
Na 589.592†	170210.7	10.80	mg/L	0.106	54.01	mg/L	0.530	0.98%
Na 330.237†	297.8	10.97	mg/L	0.081	54.84	mg/L	0.407	0.74%
Ni 231.604†	353.8	0.1043	mg/L	0.00222	0.5217	mg/L	0.01109	2.13%
Pb 220.353†	11945.0	1.479	mg/L	0.0236	7.395	mg/L	0.1180	1.60%
Sb 206.836†	1255.7	0.4645	mg/L	0.00610	2.323	mg/L	0.0305	1.31%
Se 196.026†	9.6	0.00200	mg/L	0.007225	0.01002	mg/L	0.036124	360.62%
Si 288.158†	1528.9	1.151	mg/L	0.0104	5.757	mg/L	0.0522	0.91%
Sn 189.927†	478.7	0.1274	mg/L	0.00178	0.6370	mg/L	0.00892	1.40%
Sr 421.552†	139367.2	0.1623	mg/L	0.00170	0.8115	mg/L	0.00852	1.05%
Ti 334.903†	55493.0	2.757	mg/L	0.0303	13.79	mg/L	0.152	1.10%
Tl 190.801†	-26.4	0.00696	mg/L	0.000543	0.03480	mg/L	0.002715	7.80%
V 292.402†	26651.7	0.1734	mg/L	0.00303	0.8669	mg/L	0.01514	1.75%
Zn 206.200†	17135.6	5.408	mg/L	0.0730	27.04	mg/L	0.365	1.35%

Sequence No.: 49
Sample ID: AF05 D SWC
Analyst: CC
Dilution: 20.000000X

Autosampler Location: 339
Date Collected: 5/12/2015 12:42:22 PM
Data Type: Original

Nebulizer Parameters: AF05 D SWC

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AF05 D SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2852426.2	98.89	%	0.438				0.44%
ScR 361.383	279037.6	102.1	%	1.78				1.74%
Ag 328.068†	1032.2	0.00429	mg/L	0.000137	0.08577	mg/L	0.002744	3.20%
Al 308.215†	12988.9	11.91	mg/L	0.164	238.2	mg/L	3.27	1.37%
As 188.979†	6794.9	5.296	mg/L	0.0204	105.9	mg/L	0.41	0.38%
B 249.677†	136.7	0.02386	mg/L	0.000673	0.4771	mg/L	0.01347	2.82%
Ba 233.527†	1315.3	0.2544	mg/L	0.00330	5.088	mg/L	0.0660	1.30%
Be 313.042†	1739.4	0.00379	mg/L	0.000086	0.07571	mg/L	0.001722	2.28%
Ca 317.933†	248026.6	29.54	mg/L	0.325	590.9	mg/L	6.50	1.10%
Cd 228.802†	867.8	0.00801	mg/L	0.000355	0.1602	mg/L	0.00710	4.43%
Co 228.616†	8128.2	0.2333	mg/L	0.00079	4.666	mg/L	0.0158	0.34%
Cr 267.716†	926.8	0.1566	mg/L	0.00207	3.133	mg/L	0.0413	1.32%
Cu 324.752†	673578.9	2.276	mg/L	0.0061	45.52	mg/L	0.121	0.27%
Fe 273.955†	181714.1	161.6	mg/L	2.60	3232	mg/L	51.92	1.61%
K 766.490†	7563.0	2.868	mg/L	0.0424	57.36	mg/L	0.848	1.48%
Mg 279.077†	4945.6	6.305	mg/L	0.0860	126.1	mg/L	1.72	1.36%
Mn 257.610†	28356.0	0.6797	mg/L	0.01009	13.59	mg/L	0.202	1.48%
Mo 202.031†	10941.0	0.6231	mg/L	0.00229	12.46	mg/L	0.046	0.37%
Na 589.592†	86121.0	5.465	mg/L	0.0847	109.3	mg/L	1.69	1.55%
Na 330.237†	239.5	5.810	mg/L	0.1517	116.2	mg/L	3.03	2.61%
Ni 231.604†	161.5	0.04818	mg/L	0.002003	0.9635	mg/L	0.04006	4.16%
Pb 220.353†	24355.5	3.007	mg/L	0.0120	60.14	mg/L	0.240	0.40%
Sb 206.836†	3251.7	1.200	mg/L	0.0044	24.00	mg/L	0.088	0.37%
Se 196.026†	3.1	0.00068	mg/L	0.002178	0.01352	mg/L	0.043555	322.17%
Si 288.158†	521.2	0.3903	mg/L	0.00899	7.806	mg/L	0.1797	2.30%
Sn 189.927†	1211.0	0.3143	mg/L	0.00101	6.285	mg/L	0.0202	0.32%
Sr 421.552†	81792.1	0.09525	mg/L	0.001497	1.905	mg/L	0.0299	1.57%
Ti 334.903†	11521.3	0.5705	mg/L	0.00970	11.41	mg/L	0.194	1.70%
Tl 190.801†	-16.0	0.01174	mg/L	0.002325	0.2348	mg/L	0.04650	19.80%
V 292.402†	7151.7	0.04120	mg/L	0.000122	0.8241	mg/L	0.00243	0.30%
Zn 206.200†	43908.1	13.86	mg/L	0.170	277.1	mg/L	3.40	1.23%

Sequence No.: 50
Sample ID: AFG4 FDUP SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 340
Date Collected: 5/12/2015 12:46:07 PM
Data Type: Original

Nebulizer Parameters: AFG4 FDUP SWC

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Del

Mean Data: AFG4 FDUP SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2826700.9	98.00	%	0.621				0.63%
ScR 361.383	283508.0	103.7	%	0.91				0.88%
Ag 328.068†	-101.6	-0.00028	mg/L	0.000166	-0.00057	mg/L	0.000332	58.57%
Al 308.215†	422893.3	388.2	mg/L	4.49	776.4	mg/L	8.98	1.16%
As 188.979†	-238.6	0.05209	mg/L	0.005917	0.1042	mg/L	0.01183	11.36%
B 249.677†	814.8	0.1408	mg/L	0.00068	0.2816	mg/L	0.00137	0.49%
Ba 233.527†	2294.7	0.4518	mg/L	0.00217	0.9036	mg/L	0.00435	0.48%
Be 313.042†	2417.3	0.00506	mg/L	0.000054	0.01012	mg/L	0.000108	1.07%
Ca 317.933†	158015.7	18.82	mg/L	0.202	37.64	mg/L	0.404	1.07%
Cd 228.802†	83.2	0.00533	mg/L	0.000270	0.01066	mg/L	0.000540	5.07%
Co 228.616†	3827.7	0.09391	mg/L	0.000615	0.1878	mg/L	0.00123	0.65%
Cr 267.716†	2937.5	0.4798	mg/L	0.00541	0.9597	mg/L	0.01082	1.13%
Cu 324.752†	84976.2	0.2940	mg/L	0.00250	0.5881	mg/L	0.00500	0.85%
Fe 273.955†	255910.3	227.6	mg/L	1.08	455.1	mg/L	2.15	0.47%
K 766.490†	37439.2	14.20	mg/L	0.159	28.39	mg/L	0.318	1.12%
Mg 279.077†	38062.1	49.17	mg/L	0.435	98.33	mg/L	0.869	0.88%
Mn 257.610†	80041.3	1.915	mg/L	0.0130	3.831	mg/L	0.0260	0.68%
Mo 202.031†	357.7	0.02009	mg/L	0.000253	0.04018	mg/L	0.000505	1.26%
Na 589.592†	301846.3	19.16	mg/L	0.214	38.31	mg/L	0.429	1.12%
Na 330.237†	432.9	19.15	mg/L	0.038	38.30	mg/L	0.076	0.20%
Ni 231.604†	1824.2	0.5367	mg/L	0.00725	1.073	mg/L	0.0145	1.35%
Pb 220.353†	-151.6	0.06963	mg/L	0.001054	0.1393	mg/L	0.00211	1.51%
Sb 206.836†	-12.7	-0.00333	mg/L	0.001132	-0.00666	mg/L	0.002265	34.00%
Se 196.026†	52.3	-0.00823	mg/L	0.003400	-0.01645	mg/L	0.006800	41.33%
Si 288.158†	8199.6	6.173	mg/L	0.0511	12.35	mg/L	0.102	0.83%
Sn 189.927†	-54.1	-0.00984	mg/L	0.001027	-0.01968	mg/L	0.002055	10.44%
Sr 421.552†	172757.6	0.2012	mg/L	0.00202	0.4024	mg/L	0.00405	1.01%
Ti 334.903†	183540.1	9.125	mg/L	0.0906	18.25	mg/L	0.181	0.99%
Tl 190.801†	-42.3	0.00341	mg/L	0.001470	0.00681	mg/L	0.002939	43.15%
V 292.402†	76228.2	0.5088	mg/L	0.00333	1.018	mg/L	0.0067	0.65%
Zn 206.200†	2545.9	0.8047	mg/L	0.00716	1.609	mg/L	0.0143	0.89%

Sequence No.: 51
Sample ID: AFG4 F SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 341
Date Collected: 5/12/2015 12:50:07 PM
Data Type: Original

Nebulizer Parameters: AFG4 F SWC

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Del

Mean Data: AFG4 F SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2845297.8	98.64	%	0.423				0.43%
ScR 361.383	283503.6	103.7	%	0.61				0.58%
Ag 328.068†	-237.2	-0.00082	mg/L	0.000190	-0.00164	mg/L	0.000379	23.05%
Al 308.215†	359321.5	329.8	mg/L	3.40	659.6	mg/L	6.80	1.03%
As 188.979†	-122.4	0.1035	mg/L	0.00517	0.2070	mg/L	0.01034	4.99%
B 249.677†	809.4	0.1399	mg/L	0.00086	0.2797	mg/L	0.00173	0.62%
Ba 233.527†	2880.0	0.5697	mg/L	0.00515	1.139	mg/L	0.0103	0.90%
Be 313.042†	3185.1	0.00674	mg/L	0.000030	0.01347	mg/L	0.000060	0.45%
Ca 317.933†	167906.0	20.00	mg/L	0.164	40.00	mg/L	0.329	0.82%
Cd 228.802†	95.0	0.00526	mg/L	0.000191	0.01052	mg/L	0.000381	3.63%
Co 228.616†	4112.2	0.1047	mg/L	0.00031	0.2095	mg/L	0.00062	0.30%
Cr 267.716†	2909.5	0.4776	mg/L	0.00282	0.9553	mg/L	0.00563	0.59%
Cu 324.752†	78701.3	0.2749	mg/L	0.00206	0.5498	mg/L	0.00413	0.75%
Fe 273.955†	301921.9	268.5	mg/L	4.15	537.0	mg/L	8.30	1.55%
K 766.490†	35912.2	13.62	mg/L	0.060	27.24	mg/L	0.121	0.44%
Mg 279.077†	35842.5	46.26	mg/L	0.280	92.53	mg/L	0.559	0.60%
Mn 257.610†	110655.7	2.649	mg/L	0.0301	5.298	mg/L	0.0603	1.14%
Mo 202.031†	554.5	0.03129	mg/L	0.000265	0.06257	mg/L	0.000531	0.85%
Na 589.592†	292519.5	18.56	mg/L	0.145	37.13	mg/L	0.289	0.78%
Na 330.237†	422.5	18.40	mg/L	0.093	36.80	mg/L	0.186	0.50%
Ni 231.604†	1609.8	0.4736	mg/L	0.00477	0.9472	mg/L	0.00954	1.01%
Pb 220.353†	120.1	0.08648	mg/L	0.000951	0.1730	mg/L	0.00190	1.10%
Sb 206.836†	1.6	0.00142	mg/L	0.001728	0.00284	mg/L	0.003455	121.65%
Se 196.026†	44.8	-0.00683	mg/L	0.002050	-0.01366	mg/L	0.004101	30.03%
Si 288.158†	4490.3	3.383	mg/L	0.0137	6.765	mg/L	0.0275	0.41%
Sn 189.927†	-51.3	-0.00916	mg/L	0.001129	-0.01831	mg/L	0.002258	12.33%
Sr 421.552†	196103.7	0.2284	mg/L	0.00221	0.4567	mg/L	0.00442	0.97%
Ti 334.903†	153880.1	7.650	mg/L	0.0827	15.30	mg/L	0.165	1.08%
Tl 190.801†	-56.1	0.00055	mg/L	0.003653	0.00110	mg/L	0.007306	666.25%
V 292.402†	89039.5	0.5956	mg/L	0.00420	1.191	mg/L	0.0084	0.70%
Zn 206.200†	2215.5	0.6999	mg/L	0.00332	1.400	mg/L	0.0066	0.47%

Sequence No.: 52
Sample ID: AFG4 FSPK SWC
Analyst: CC
Dilution: 2.000000X

Autosampler Location: 342
Date Collected: 5/12/2015 12:54:07 PM
Data Type: Original

Nebulizer Parameters: AFG4 FSPK SWC

Del

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: AFG4 FSPK SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2823271.2	97.88	%	0.297				0.30%
ScR 361.383	279615.4	102.3	%	0.19				0.18%
Ag 328.068†	126775.6	0.5254	mg/L	0.00259	1.051	mg/L	0.0052	0.49%
Al 308.215†	374939.1	344.2	mg/L	2.43	688.3	mg/L	4.86	0.71%
As 188.979†	2372.4	2.088	mg/L	0.0080	4.175	mg/L	0.0160	0.38%
B 249.677†	937.0	0.1610	mg/L	0.00083	0.3219	mg/L	0.00166	0.52%
Ba 233.527†	12737.3	2.661	mg/L	0.0214	5.321	mg/L	0.0427	0.80%
Be 313.042†	228054.7	0.4983	mg/L	0.00374	0.9966	mg/L	0.00749	0.75%
Ca 317.933†	249086.6	29.67	mg/L	0.118	59.34	mg/L	0.236	0.40%
Cd 228.802†	12131.6	0.5361	mg/L	0.00066	1.072	mg/L	0.0013	0.12%
Co 228.616†	20598.3	0.5766	mg/L	0.00084	1.153	mg/L	0.0017	0.15%
Cr 267.716†	6104.9	0.9918	mg/L	0.00652	1.984	mg/L	0.0130	0.66%
Cu 324.752†	241088.0	0.8212	mg/L	0.00313	1.642	mg/L	0.0063	0.38%
Fe 273.955†	286666.4	254.9	mg/L	1.32	509.8	mg/L	2.64	0.52%
K 766.490†	58295.3	22.11	mg/L	0.127	44.21	mg/L	0.254	0.58%
Mg 279.077†	38306.3	49.47	mg/L	0.226	98.93	mg/L	0.453	0.46%
Mn 257.610†	126254.6	3.023	mg/L	0.0097	6.046	mg/L	0.0193	0.32%
Mo 202.031†	565.9	0.03179	mg/L	0.000249	0.06357	mg/L	0.000498	0.78%
Na 589.592†	468902.8	29.76	mg/L	0.163	59.51	mg/L	0.327	0.55%
Na 330.237†	705.7	29.85	mg/L	0.230	59.70	mg/L	0.460	0.77%
Ni 231.604†	3169.1	0.9316	mg/L	0.00905	1.863	mg/L	0.0181	0.97%
Pb 220.353†	16014.5	2.058	mg/L	0.0038	4.117	mg/L	0.0075	0.18%
Sb 206.836†	-0.4	-0.00319	mg/L	0.004007	-0.00638	mg/L	0.008014	125.56%
Se 196.026†	2682.4	1.917	mg/L	0.0009	3.833	mg/L	0.0017	0.05%
Si 288.158†	8363.4	6.298	mg/L	0.0437	12.60	mg/L	0.087	0.69%
Sn 189.927†	-63.9	-0.01064	mg/L	0.001008	-0.02128	mg/L	0.002016	9.48%
Sr 421.552†	640433.1	0.7458	mg/L	0.00483	1.492	mg/L	0.0097	0.65%
Ti 334.903†	187917.2	9.341	mg/L	0.0551	18.68	mg/L	0.110	0.59%
Tl 190.801†	3121.4	1.857	mg/L	0.0057	3.713	mg/L	0.0113	0.30%
V 292.402†	157969.8	1.071	mg/L	0.0067	2.142	mg/L	0.0134	0.63%
Zn 206.200†	4057.7	1.282	mg/L	0.0105	2.564	mg/L	0.0210	0.82%

Sequence No.: 53
Sample ID: AFU2 MBSPK TWC
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 343
Date Collected: 5/12/2015 12:58:08 PM
Data Type: Original

Nebulizer Parameters: AFU2 MBSPK TWC

Analyte	Back Pressure	Flow
All	229.0 kPa	0.75 L/min

Mean Data: AFU2 MBSPK TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2851654.4	98.86	%	1.141				1.15%
ScR 361.383	278724.1	102.0	%	0.60				0.59%
Ag 328.068†	130734.2	0.5417	mg/L	0.00564	0.5417	mg/L	0.00564	1.04%
Al 308.215†	2281.2	2.086	mg/L	0.0059	2.086	mg/L	0.0059	0.28%
As 188.979†	2661.3	2.069	mg/L	0.0270	2.069	mg/L	0.0270	1.31%
B 249.677†	26.9	0.00360	mg/L	0.001529	0.00360	mg/L	0.001529	42.48%
Ba 233.527†	10396.0	2.203	mg/L	0.0036	2.203	mg/L	0.0036	0.16%
Be 313.042†	229798.3	0.5024	mg/L	0.00463	0.5024	mg/L	0.00463	0.92%
Ca 317.933†	85064.1	10.13	mg/L	0.088	10.13	mg/L	0.088	0.87%
Cd 228.802†	12003.3	0.5286	mg/L	0.00514	0.5286	mg/L	0.00514	0.97%
Co 228.616†	18012.3	0.5189	mg/L	0.00450	0.5189	mg/L	0.00450	0.87%
Cr 267.716†	3361.2	0.5409	mg/L	0.00090	0.5409	mg/L	0.00090	0.17%
Cu 324.752†	154375.5	0.5203	mg/L	0.00564	0.5203	mg/L	0.00564	1.08%
Fe 273.955†	2373.7	2.107	mg/L	0.0062	2.107	mg/L	0.0062	0.29%
K 766.490†	27142.4	10.29	mg/L	0.099	10.29	mg/L	0.099	0.96%
Mg 279.077†	8213.5	10.64	mg/L	0.021	10.64	mg/L	0.021	0.20%
Mn 257.610†	20901.7	0.5011	mg/L	0.00642	0.5011	mg/L	0.00642	1.28%
Mo 202.031†	30.1	0.00155	mg/L	0.000134	0.00155	mg/L	0.000134	8.65%
Na 589.592†	162011.8	10.28	mg/L	0.087	10.28	mg/L	0.087	0.84%
Na 330.237†	272.7	10.63	mg/L	0.124	10.63	mg/L	0.124	1.17%
Ni 231.604†	1799.1	0.5284	mg/L	0.00098	0.5284	mg/L	0.00098	0.19%
Pb 220.353†	16838.9	2.085	mg/L	0.0160	2.085	mg/L	0.0160	0.77%
Sb 206.836†	15.6	0.00063	mg/L	0.001680	0.00063	mg/L	0.001680	264.59%
Se 196.026†	2817.4	2.056	mg/L	0.0241	2.056	mg/L	0.0241	1.17%
Si 288.158†	11.1	0.01156	mg/L	0.003156	0.01156	mg/L	0.003156	27.30%
Sn 189.927†	-26.7	-0.00527	mg/L	0.000348	-0.00527	mg/L	0.000348	6.60%
Sr 421.552†	445834.5	0.5192	mg/L	0.00442	0.5192	mg/L	0.00442	0.85%
Ti 334.903†	90.5	0.00381	mg/L	0.000400	0.00381	mg/L	0.000400	10.50%
Tl 190.801†	3562.9	2.084	mg/L	0.0188	2.084	mg/L	0.0188	0.90%
V 292.402†	76920.3	0.5306	mg/L	0.00518	0.5306	mg/L	0.00518	0.98%
Zn 206.200†	1612.7	0.5092	mg/L	0.00161	0.5092	mg/L	0.00161	0.32%

Sequence No.: 54
Sample ID: CV5
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 5/12/2015 1:02:08 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2820828.2	97.80	%	0.617				0.63%
ScR 361.383	273097.1	99.89	%	1.043				1.04%
Ag 328.068†	251239.2	1.041	mg/L	0.0049	1.041	mg/L	0.0049	0.47%
Al 308.215†	2196.5	1.984	mg/L	0.0210	1.984	mg/L	0.0210	1.06%
As 188.979†	2522.3	1.984	mg/L	0.0121	1.984	mg/L	0.0121	0.61%
B 249.677†	5704.7	0.9862	mg/L	0.00956	0.9862	mg/L	0.00956	0.97%
Ba 233.527†	5053.3	1.070	mg/L	0.0139	1.070	mg/L	0.0139	1.30%
Be 313.042†	440704.2	0.9634	mg/L	0.01270	0.9634	mg/L	0.01270	1.32%
Ca 317.933†	17297.7	2.060	mg/L	0.0234	2.060	mg/L	0.0234	1.13%
Cd 228.802†	23724.2	1.057	mg/L	0.0053	1.057	mg/L	0.0053	0.50%
Co 228.616†	35776.4	1.029	mg/L	0.0054	1.029	mg/L	0.0054	0.53%
Cr 267.716†	6461.1	1.042	mg/L	0.0087	1.042	mg/L	0.0087	0.84%
Cu 324.752†	298078.8	1.004	mg/L	0.0067	1.004	mg/L	0.0067	0.66%
Fe 273.955†	2262.8	2.006	mg/L	0.0132	2.006	mg/L	0.0132	0.66%
K 766.490†	52457.9	19.89	mg/L	0.234	19.89	mg/L	0.234	1.18%
Mg 279.077†	1537.4	1.999	mg/L	0.0188	1.999	mg/L	0.0188	0.94%
Mn 257.610†	40222.8	0.9640	mg/L	0.00521	0.9640	mg/L	0.00521	0.54%
Mo 202.031†	18259.7	1.041	mg/L	0.0051	1.041	mg/L	0.0051	0.49%
Na 589.592†	786311.0	49.90	mg/L	0.587	49.90	mg/L	0.587	1.18%
Na 330.237†	1280.0	50.54	mg/L	0.510	50.54	mg/L	0.510	1.01%
Ni 231.604†	3434.2	1.011	mg/L	0.0068	1.011	mg/L	0.0068	0.67%
Pb 220.353†	16576.1	2.053	mg/L	0.0112	2.053	mg/L	0.0112	0.55%
Sb 206.836†	5736.9	2.115	mg/L	0.0084	2.115	mg/L	0.0084	0.40%
Se 196.026†	2706.8	1.975	mg/L	0.0126	1.975	mg/L	0.0126	0.64%
Si 288.158†	2735.9	2.053	mg/L	0.0398	2.053	mg/L	0.0398	1.94%
Sn 189.927†	4066.7	1.040	mg/L	0.0044	1.040	mg/L	0.0044	0.42%
Sr 421.552†	855206.9	0.9959	mg/L	0.01075	0.9959	mg/L	0.01075	1.08%
Ti 334.903†	20057.4	0.9960	mg/L	0.01237	0.9960	mg/L	0.01237	1.24%
Tl 190.801†	3419.8	1.996	mg/L	0.0101	1.996	mg/L	0.0101	0.51%
V 292.402†	146990.3	1.014	mg/L	0.0050	1.014	mg/L	0.0050	0.50%
Zn 206.200†	3161.5	0.9976	mg/L	0.00586	0.9976	mg/L	0.00586	0.59%

Sequence No.: 55
Sample ID: CB5
Analyst: CC
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 5/12/2015 1:06:11 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	228.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2910840.3	100.9	%	0.56				0.55%
ScR 361.383	274770.2	100.5	%	0.34				0.34%
Ag 328.068†	46.1	0.00019	mg/L	0.000223	0.00019	mg/L	0.000223	116.89%
Al 308.215†	2.3	0.00213	mg/L	0.003376	0.00213	mg/L	0.003376	158.69%
As 188.979†	0.9	0.00072	mg/L	0.001745	0.00072	mg/L	0.001745	242.89%
B 249.677†	20.0	0.00346	mg/L	0.000711	0.00346	mg/L	0.000711	20.53%
Ba 233.527†	2.5	0.00053	mg/L	0.000599	0.00053	mg/L	0.000599	112.65%
Be 313.042†	24.7	0.00005	mg/L	0.000012	0.00005	mg/L	0.000012	22.43%
Ca 317.933†	14.6	0.00174	mg/L	0.000293	0.00174	mg/L	0.000293	16.86%
Cd 228.802†	2.0	0.00009	mg/L	0.000061	0.00009	mg/L	0.000061	69.64%
Co 228.616†	1.4	0.00004	mg/L	0.000061	0.00004	mg/L	0.000061	151.42%
Cr 267.716†	3.1	0.00049	mg/L	0.000813	0.00049	mg/L	0.000813	165.06%
Cu 324.752†	43.1	0.00014	mg/L	0.000024	0.00014	mg/L	0.000024	16.44%
Fe 273.955†	3.2	0.00288	mg/L	0.001441	0.00288	mg/L	0.001441	50.06%
K 766.490†	46.0	0.01743	mg/L	0.019948	0.01743	mg/L	0.019948	114.45%
Mg 279.077†	-0.3	-0.00037	mg/L	0.006144	-0.00037	mg/L	0.006144	>999.9%
Mn 257.610†	1.2	0.00003	mg/L	0.000081	0.00003	mg/L	0.000081	282.77%
Mo 202.031†	23.2	0.00132	mg/L	0.000312	0.00132	mg/L	0.000312	23.60%
Na 589.592†	-58.7	-0.00373	mg/L	0.003733	-0.00373	mg/L	0.003733	100.14%
Na 330.237†	1.6	0.06447	mg/L	0.062649	0.06447	mg/L	0.062649	97.17%
Ni 231.604†	-0.2	-0.00007	mg/L	0.001221	-0.00007	mg/L	0.001221	>999.9%
Pb 220.353†	3.2	0.00040	mg/L	0.000470	0.00040	mg/L	0.000470	116.45%
Sb 206.836†	7.2	0.00266	mg/L	0.001053	0.00266	mg/L	0.001053	39.59%
Se 196.026†	0.1	0.00010	mg/L	0.001482	0.00010	mg/L	0.001482	>999.9%
Si 288.158†	-8.2	-0.00619	mg/L	0.000614	-0.00619	mg/L	0.000614	9.93%
Sn 189.927†	-0.3	-0.00008	mg/L	0.000729	-0.00008	mg/L	0.000729	964.79%
Sr 421.552†	48.4	0.00006	mg/L	0.000019	0.00006	mg/L	0.000019	33.73%
Ti 334.903†	16.2	0.00081	mg/L	0.000057	0.00081	mg/L	0.000057	7.08%
Tl 190.801†	0.1	0.00006	mg/L	0.000909	0.00006	mg/L	0.000909	>999.9%
V 292.402†	28.4	0.00020	mg/L	0.000059	0.00020	mg/L	0.000059	29.97%
Zn 206.200†	0.8	0.00025	mg/L	0.000512	0.00025	mg/L	0.000512	205.34%

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 5-11-15

	Analyst 5-11-15 TR/LS	Peer 5-12-15	Comment
Logbook			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
Samples			
RSD's & SD's	✓	✓	
Internal Standards	–	—	
Carry-over	–	—	
Method QC			
CRI/CRA	✓	✓	
ICSA/ICSAB	–	—	
Post Spikes/Serial Dilutions	–	—	
Analytic Spikes	–	—	
Matrix QC			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	see log
Matrix Duplicates	✓	✓	See log
Method Blanks	✓	✓	
Data Distribution			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysis Notes and CAFs	✓	✓	See CAF1

Mercury Analysis Log

Analyst: TH / CB

Date: 5-11-15

Instrument: CETAC

Page: 3 of 7

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments	
CCV6		TWM	10	4.02	%R=101	✓
CCB6		↓	10-12-15	-0.02	End CLP	✓
STA	0.0	SMM				
"	0.1					
"	0.5				low	X
"	1.0				High	X
"	2.0					
"	5.0					
"	10.0				low	X
STA	0.0					
"	0.1					
"	0.5					
"	1.0					
"	2.0					
"	5.0					
"	10.0					
ICV				8.95	%R=112	High X
ICB				-0.03		✓
ICV				8.60	Re-run %R=108	✓
ICB				-0.03		✓
CCV1				3.92	%R=98	✓
CCB1				-0.00		✓
CRA				0.10		✓
AFC4	MB			-0.01		✓
"	MBSA			2.10	%R=105	✓
"	A					
"	B					
"	C					
"	D					
"	E	↓	↓			

Chemical/Reagent ID:

10% $SnCl_2$: D1833

14% $NH_2OH/NaCl$: D1433

Standard ID:

Standard: 3062-9 (SMM)

ICV/CCV: D0176

3062-8 (TWM)

5026F

AF05 : 00090

MANSON009922

Mercury Analysis Log

Analyst: TH/CB **Date:** 5-11-15

Instrument: CETAC **Page:** 4 of 7

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments	
AFC4	F	Sm	1x			
"	G					
CCV2				3.90	%R=98	✓
CCB2				-0.02		✓
AFM4	MB			0.01		✓
"	MBSOL			2.22	%R=111	✓
"	A			2.13		
"	ADUP			1.79	RPD: 17.3%	✓
"	PSOL			5.38	%R=325 High	X
"	B					
"	C					
CCV3				3.93	%R=98	✓
CCB3				-0.03	End Cal	✓
AER6	MB			-0.01		
"	C			22.37	Sat'd	X
"	C		5x	8.19		✓
"	C		10x	3.95		✓
AFE7	MB		1x	-0.00		✓
"	MBSOL			2.16	%R=108	✓
"	A					
"	B					
AFT9	MB			-0.02		✓
"	MBSOL			2.16	%R=108	✓
CCV4				3.87	%R=97	✓
CCB4				-0.03		✓
AFT9	A					
"	B					
AFM3	MB			0.00		✓
"	MBSOL			2.11	%R=106	✓
"	A					

Chemical/Reagent ID:

10% $SnCl_2$: 01833 **14% $NH_2OH/NaCl$:** 01433

Standard ID:

Standard: 3062-9 **ICV/CCV:** 10176

5026F

Mercury Analysis Log

Analyst: TH/CA **Date:** 5-11-15

Instrument: CETAC **Page:** 5 of 7

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments	
AFF8	MB	5mm	1X	-0.02		✓
"	MBSOL			2.18	%R=109	✓
"	A			0.07		
"	ADD			0.09	No RPD: undetected	✓
"	ASOL			1.18	%R=118	✓
CCV5				3.96	%R=98	✓
CCB8				-0.02		✓
AFF8	B					
AF05	MB			-0.01		✓
"	MBSOL			2.15	%R=108	✓
"	A					
"	B					
"	C					
"	D			15.02	High	✓
"	E					
CCV6				3.94	%R=99	✓
CCB6				-0.00		✓
AFF2	MB			0.01		✓
"	MBSOL			2.16	%R=108	✓
"	A			0.03		
"	ADD			0.02	No RPD; undetected	✓
"	ASOL			1.21	%R=121	✓
"	B					
"	C					
"	D					
"	E					
"	F					
CCV7				3.93	%R=98	
CCB7				0.00		
AFF2	G					

Chemical/Reagent ID:

10% $SnCl_2$: 01433 **14% $NH_2OH/NaCl$:** 01433

Standard ID:

Standard: 3062-9 **ICV/CCV:** 00178

Mercury Analysis Log

Analyst: TH/CB

Date: 5-11-15

Instrument: LETA1

Page: 6 of 7

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments	
AFF2	H	5mm	1x			
"	I					
"	J					
"	K					
"	L					
"	M					
"	N					
"	O					
"	P					
CCV8				4.31	%R= 108	✓
CCB8				-0.02		✓
AFF2	Q					
"	R					
"	S					
"	T					
AFG4	R			0.00		✓
"	RDUP			2.08	%R=104	✓
"	A					
"	B					
"	C					
"	D					
CCV9				4.09	%R: 102	✓
CCB9				-0.00		✓
AFG4	E					
"	F			0.18		
"	FDUP			0.21		✓
"	FSPK			1.29	%R=111	✓
"	G					
"	H					
"	I	✓	✓			

Chemical/Reagent ID:

10% $SnCl_2$: 01833

14% $NH_2OH/NaCl$: 01433

Standard ID:

Standard: 3062-9

ICV/CCV: 06171

5026F

Mercury Analysis Log

Analyst: TH/CA **Date:** 5/11/15

Instrument: CET4C **Page:** 7 of 7

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments
AFL44	J	5mm	1x		
"	K				
"	L				
CCV10				4.01	%R=100 ✓
CCB10				-0.02	✓
AFL44	M				
"	N				
"	O				
"	P				
"	Q				
"	R				
"	S				
"	T				
CCV11				3.93	%R=98 ✓
CCB11				<0.01	✓
AFM44	A			1.98	
"	A20			1.59	RPD: 21.8% High X
"	A201		✓	5.01	%R=303 High X
AF05	D		2x		
CCV12			1x	3.97	%R=99 ✓
CCB12		↓	↓	-0.02	✓
		CB 5-11-15			

Chemical/Reagent ID:

10% $SnCl_2$: 01833 **14% $NH_2OH/NaCl$:** 01433

Standard ID:

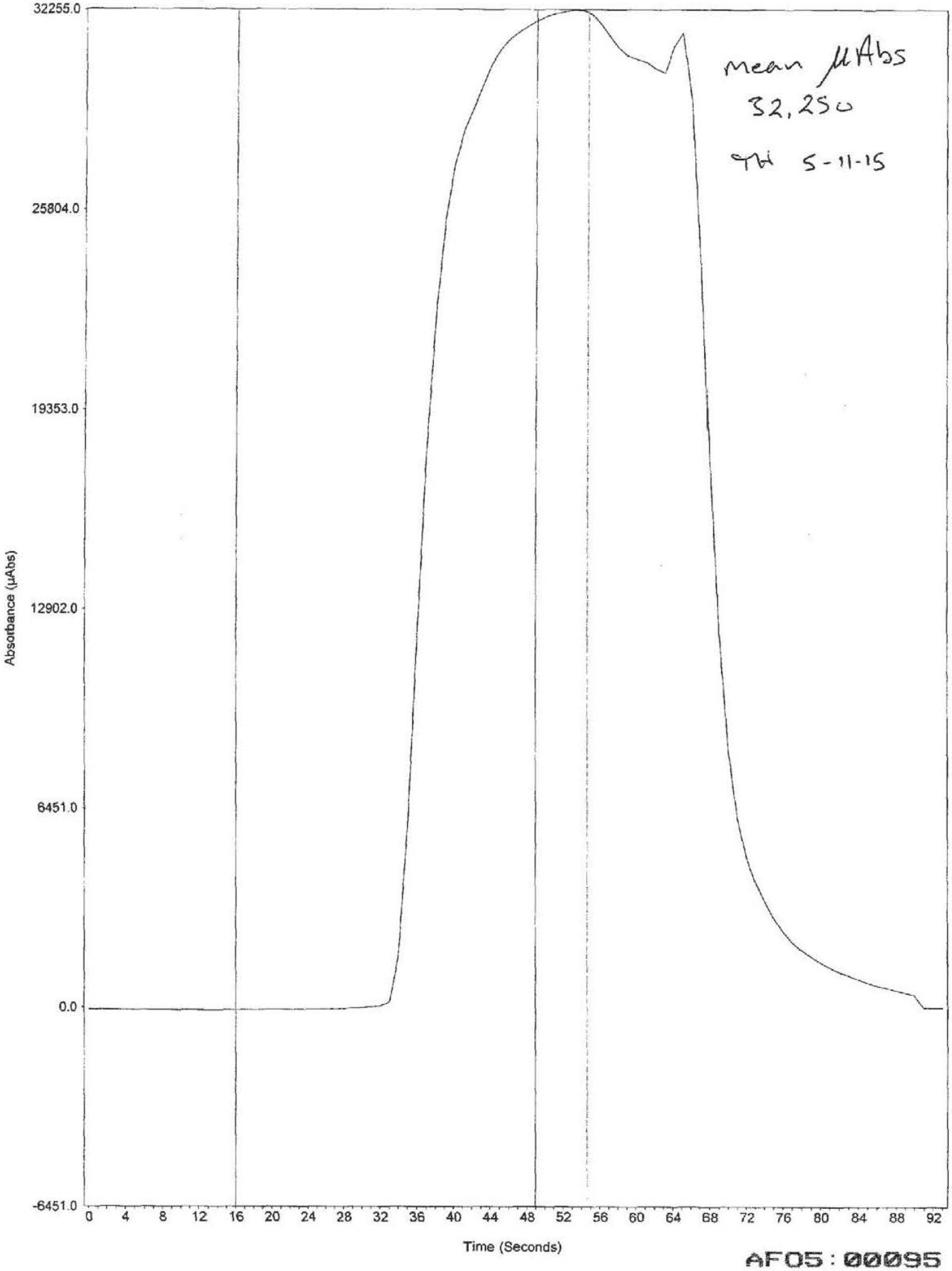
Standard: 30629 **ICV/CCV:** 00176

5026F

1/26/05

AF05 : 00094

Std Tube 6 05/11/2015, 9:31 AM



AF05 : 00095

MANSON009927

CETAC Hg Analysis Report - 15051100.DB - Monday, May 11, 2015, 3:23:59 PM

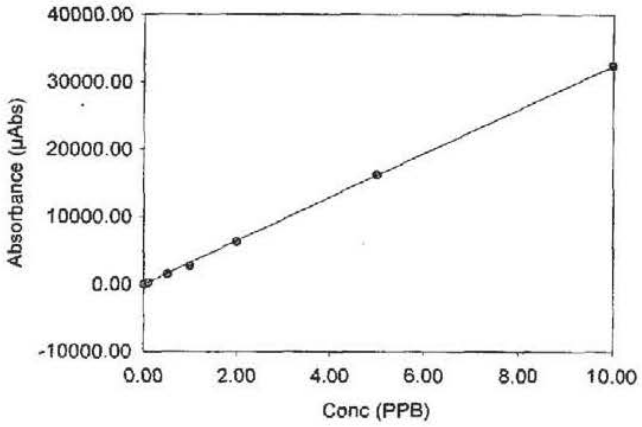
Analyst
Date Started Monday, May 11, 2015, 09:30:55
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Std Tube 6	11-May-2015, 09:30	10.00	0.34	32300.00	1.00	

Information about this calibration could not be retrieved from the Master File.

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	11-May-2015, 09:34	0.00	51.10	-14.30	1.00	
Standard #1	11-May-2015, 09:37	0.10	6.01	279.00	1.00	
Standard #2	11-May-2015, 09:39	0.50	1.57	1480.00	1.00	
Standard #3	11-May-2015, 09:40	1.00	0.17	2720.00	1.00	
Standard #4	11-May-2015, 09:42	2.00	0.59	6320.00	1.00	HT?
Standard #5	11-May-2015, 09:44	5.00	1.02	16300.00	1.00	
Standard #6	11-May-2015, 09:45	10.00	0.60	32500.00	1.00	

Calibration Data



Int.		0.000
Slope	Tum	3242.818
Correlation		0.99981

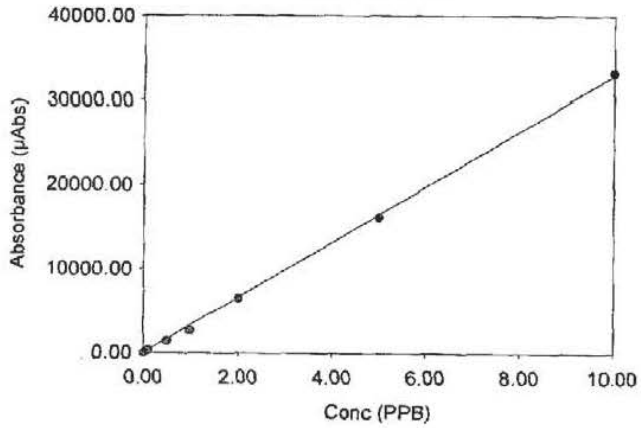
AF05 : 00096

CETAC Hg Analysis Report - 15051100.DB - Monday, May 11, 2015, 3:23:59 PM

Analyst
Date Started Monday, May 11, 2015, 09:50:19
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	11-May-2015, 09:50	0.00	61.90	9.09	1.00	
Standard #1	11-May-2015, 09:51	0.10	4.64	305.00	1.00	
Standard #2	11-May-2015, 09:53	0.50	0.25	1470.00	1.00	
Standard #3	11-May-2015, 09:55	1.00	2.02	2660.00	1.00	
Standard #4	11-May-2015, 09:56	2.00	0.51	6460.00	1.00	
Standard #5	11-May-2015, 09:58	5.00	0.09	16200.00	1.00	
Standard #6	11-May-2015, 10:00	10.00	0.91	33300.00	1.00	

Calibration Data



Int.		0.000
Slope		3298.900
Correlation	TWM	0.99964

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
ICV	11-May-2015, 10:02	7.79	0.36	25700.00	1.00	Begin CLA
ICB	11-May-2015, 10:05	-0.02	4.18	-60.20	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 10:06	3.95	1.04	13000.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 10:08	-0.03	5.78	-86.20	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
CRA	11-May-2015, 10:10	0.08	1.51	270.00	1.00	
AFL5 MB1 TWM	11-May-2015, 10:11	-0.01	37.50	-33.20	1.00	
AFL5 MB1SPK TWM	11-May-2015, 10:13	2.01	1.01	6630.00	1.00	
AFL5 A TWM	11-May-2015, 10:14	0.86	0.67	2840.00	1.00	
AFL5 ADUP TWM	11-May-2015, 10:16	0.74	1.32	2440.00	1.00	
AFL5 ASPK TWM	11-May-2015, 10:17	1.33	0.38	4400.00	1.00	recalcu
AFN0 MB1 TWM	11-May-2015, 10:19	-0.00	934.00	-0.79	1.00	
AFN0 MB1SPK TWM	11-May-2015, 10:21	1.94	0.43	6400.00	1.00	
AFN0 A TWM	11-May-2015, 10:22	-0.01	28.60	-21.10	1.00	
AFN0 ADUP TWM	11-May-2015, 10:24	-0.01	47.40	-19.80	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 10:26	3.97	0.09	13100.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 10:27	-0.02	5.08	-66.20	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFN0 ASPK TWM	11-May-2015, 10:29	0.96	0.92	3180.00	1.00	
AFN0 B TWM	11-May-2015, 10:31	-0.01	6.33	-26.70	1.00	
AFN0 C TWM	11-May-2015, 10:32	-0.00	93.80	-7.38	1.00	
AFN0 D TWM	11-May-2015, 10:34	0.02	6.98	54.60	1.00	

CETAC Hg Analysis Report - 15051100.DB - Monday, May 11, 2015, 3:23:59 PM

Analyst
Date Started Monday, May 11, 2015, 10:35:49
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFN0 E TWM	11-May-2015, 10:35	-0.02	6.35	-74.70	1.00	
AFN0 F TWM	11-May-2015, 10:37	-0.00	174.00	-7.37	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 10:39	3.98	0.79	13100.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 10:40	-0.01	6.48	-40.80	1.00	

End CLP
JB 5/12/15

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFK1 MB TWM	11-May-2015, 10:42	-0.02	8.33	-58.20	1.00	
AFK1 MBSPK TWM	11-May-2015, 10:44	2.07	1.02	6820.00	1.00	
AFK1 A TWM	11-May-2015, 10:45	0.01	30.40	25.10	1.00	
AFO7 MB TWM	11-May-2015, 10:47	0.00	45.90	8.92	1.00	
AFO7 MBSPK TWM	11-May-2015, 10:48	1.99	0.92	6570.00	1.00	
AFO7 B TWM	11-May-2015, 10:50	-0.00	11.00	-12.90	1.00	
AFM3 MB2 LEM	11-May-2015, 10:52	0.01	41.90	17.60	1.00	
AFM3 At LEM	11-May-2015, 10:53	-0.01	14.80	-21.30	1.00	
AFM3 AtDUP LEM	11-May-2015, 10:55	0.00	14.30	12.00	1.00	
AFM3 AtSPK LEM	11-May-2015, 10:56	1.09	0.48	3600.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 10:58	3.99	1.41	13100.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 11:00	-0.02	5.33	-51.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFM7 MB LEM	11-May-2015, 11:01	-0.01	40.00	-22.50	1.00	
AFM7 A LEM	11-May-2015, 11:03	-0.00	36.80	-15.10	1.00	
AFM7 B LEM	11-May-2015, 11:05	-0.00	102.00	-6.28	1.00	
AFM7 BDUP LEM	11-May-2015, 11:06	-0.01	26.30	-22.30	1.00	
AFM7 BSPK LEM	11-May-2015, 11:08	0.99	1.58	3270.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 11:10	4.00	0.88	13200.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 11:11	-0.02	9.12	-52.70	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFL5 A TWM	11-May-2015, 11:14	0.85	1.02	2810.00	1.00	
AFL5 ADUP TWM	11-May-2015, 11:15	0.75	0.25	2480.00	1.00	
AFL5 ASPK TWM	11-May-2015, 11:17	1.36	0.81	4480.00	1.00	Over ICV

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 11:19	4.02	2.50	13300.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 11:20	-0.02	16.40	-71.20	1.00	

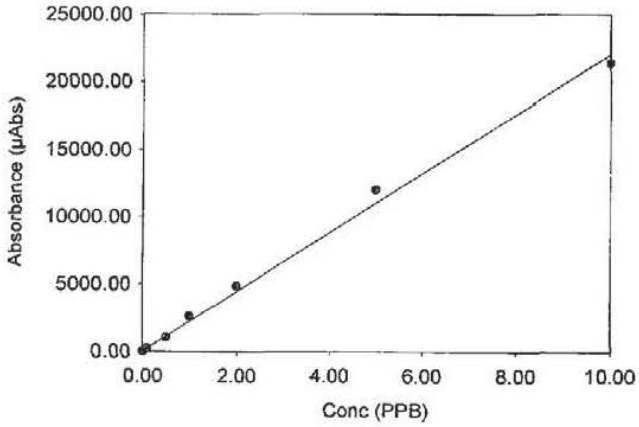
End CLP

CETAC Hg Analysis Report - 15051100.DB - Monday, May 11, 2015, 3:23:59 PM

Analyst
Date Started Monday, May 11, 2015, 11:23:46
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	11-May-2015, 11:23	0.00	25.00	18.00	1.00	
Standard #1	11-May-2015, 11:25	0.10	0.36	250.00	1.00	
Standard #2	11-May-2015, 11:26	0.50	0.28	1070.00	1.00	Vapor
Standard #3	11-May-2015, 11:28	1.00	0.49	2630.00	1.00	High
Standard #4	11-May-2015, 11:30	2.00	0.37	4840.00	1.00	
Standard #5	11-May-2015, 11:31	5.00	0.91	12100.00	1.00	
Standard #6	11-May-2015, 11:33	10.00	0.71	21500.00	1.00	low

Calibration Data

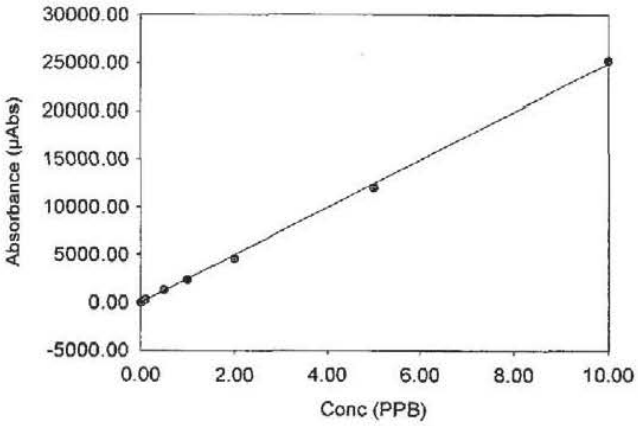


Int.	0.000
Slope	2208.578
Correlation	0.99765

Sm

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	11-May-2015, 11:40	0.00	4.09	-21.70	1.00	
Standard #1	11-May-2015, 11:44	0.10	3.67	306.00	1.00	
Standard #2	11-May-2015, 11:45	0.50	1.48	1350.00	1.00	
Standard #3	11-May-2015, 11:47	1.00	0.18	2380.00	1.00	
Standard #4	11-May-2015, 11:48	2.00	0.48	4600.00	1.00	
Standard #5	11-May-2015, 11:50	5.00	1.01	12100.00	1.00	
Standard #6	11-May-2015, 11:52	10.00	1.37	25200.00	1.00	

Calibration Data



Int.	0.000
Slope	2494.387
Correlation	0.99957

Sm

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
ICV	11-May-2015, 11:55	8.95	0.39	22300.00	1.00	
ICV	11-May-2015, 12:00	8.60	0.34	21400.00	1.00	
ICB	11-May-2015, 12:02	-0.01	34.50	-22.30	1.00	Basis CLA

AF05 : 00099

CETAC Hg Analysis Report - 15051100.DB - Monday, May 11, 2015, 3:23:59 PM

Analyst
Date Started Monday, May 11, 2015, 12:04:10
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 12:04	3.92	0.91	9780.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 12:05	-0.00	157.00	-3.28	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
CRA	11-May-2015, 12:07	0.10	1.52	253.00	1.00	
AFC4 MB1 SMM	11-May-2015, 12:09	-0.01	32.50	-13.00	1.00	
AFC4 MB1SPK SMM	11-May-2015, 12:10	2.10	1.14	5250.00	1.00	
AFC4 A SMM	11-May-2015, 12:12	0.39	0.31	975.00	1.00	
AFC4 B SMM	11-May-2015, 12:13	0.73	0.62	1820.00	1.00	
AFC4 C SMM	11-May-2015, 12:15	0.17	1.05	423.00	1.00	
AFC4 D SMM	11-May-2015, 12:17	0.46	0.20	1160.00	1.00	
AFC4 E SMM	11-May-2015, 12:18	0.32	2.03	801.00	1.00	
AFC4 F SMM	11-May-2015, 12:20	0.63	1.76	1580.00	1.00	
AFC4 G SMM	11-May-2015, 12:21	0.31	0.79	763.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 12:23	3.90	1.32	9720.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 12:25	-0.02	10.40	-62.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFM4 MB1 SMM	11-May-2015, 12:26	0.01	12.80	21.90	1.00	
AFM4 MB1SPK SMM	11-May-2015, 12:28	2.22	0.80	5550.00	1.00	
AFM4 A SMM	11-May-2015, 12:30	2.13	0.73	5320.00	1.00	
AFM4 ADUP SMM	11-May-2015, 12:31	1.79	0.53	4470.00	1.00	
AFM4 ASPK SMM	11-May-2015, 12:33	5.38	0.47	13400.00	1.00	0/0 a 14:31
AFM4 B SMM	11-May-2015, 12:34	3.93	0.76	9800.00	1.00	
AFM4 C SMM	11-May-2015, 12:36	3.42	0.36	8530.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 12:38	3.93	1.05	9800.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 12:39	-0.03	5.26	-63.70	1.00	End CL/

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AER6 MB SMM	11-May-2015, 12:41	-0.01	13.50	-25.30	1.00	
AER6 C SMM	11-May-2015, 12:43	Sat'd.	0.00	55800.00	1.00	SO Sat'd
AER6 C SMM	11-May-2015, 12:45	8.13	0.10	20300.00	5.00	
AER6 C SMM	11-May-2015, 12:47	3.95	1.12	9850.00	10.00	
AFE7 MB SMM	11-May-2015, 12:48	-0.00	69.50	-9.46	1.00	
AFE7 MBSPK SMM	11-May-2015, 12:50	2.16	0.80	5380.00	1.00	
AFE7 A SMM	11-May-2015, 12:52	0.29	1.21	724.00	1.00	
AFE7 B SMM	11-May-2015, 12:53	0.26	1.96	647.00	1.00	
AFT9 MB SMM	11-May-2015, 12:55	-0.02	20.70	-38.30	1.00	
AFT9 MBSPK SMM	11-May-2015, 12:56	2.16	0.43	5380.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 12:58	3.87	0.65	9650.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 13:00	-0.03	15.50	-65.60	1.00	

CETAC Hg Analysis Report - 15051100.DB - Monday, May 11, 2015, 3:23:59 PM

Analyst
Date Started Monday, May 11, 2015, 13:01:53
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFT9 A SMM	11-May-2015, 13:01	0.05	9.90	114.00	1.00	
AFT9 B SMM	11-May-2015, 13:03	0.13	4.73	315.00	1.00	
AFM3 MB1 SMM	11-May-2015, 13:05	0.00	135.00	2.86	1.00	
AFM3 MB1SPK SMM	11-May-2015, 13:06	2.11	0.74	5250.00	1.00	
AFM3 A SMM	11-May-2015, 13:08	0.16	7.51	406.00	1.00	
AFF8 MB SMM	11-May-2015, 13:10	-0.02	9.35	-40.40	1.00	
AFF8 MBSPK SMM	11-May-2015, 13:11	2.18	0.76	5450.00	1.00	
AFF8 A SMM	11-May-2015, 13:13	0.07	3.53	172.00	1.00	
AFF8 ADUP SMM	11-May-2015, 13:14	0.09	1.85	235.00	1.00	
AFF8 ASPK SMM	11-May-2015, 13:16	1.18	0.73	2950.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 13:18	3.90	0.20	9730.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 13:19	-0.02	9.44	-45.10	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFF8 B SMM	11-May-2015, 13:21	0.02	3.12	60.90	1.00	
AFO5 MB SMM	11-May-2015, 13:23	-0.01	7.50	-17.70	1.00	
AFO5 MBSPK SMM	11-May-2015, 13:24	2.15	0.20	5380.00	1.00	
AFO5 A SMM	11-May-2015, 13:26	0.60	1.55	1490.00	1.00	
AFO5 B SMM	11-May-2015, 13:27	0.20	1.40	487.00	1.00	
AFO5 C SMM	11-May-2015, 13:29	0.43	0.23	1070.00	1.00	
AFO5 D SMM	11-May-2015, 13:31	15.00	0.45	37500.00	1.00	O Hi-51
AFO5 E SMM	11-May-2015, 13:34	0.40	0.28	996.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 13:35	3.94	0.25	9840.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 13:37	-0.00	334.00	-3.63	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFF2 MB SMM	11-May-2015, 13:39	0.01	9.14	14.70	1.00	
AFF2 MBSPK SMM	11-May-2015, 13:41	2.16	0.12	5390.00	1.00	
AFF2 A SMM	11-May-2015, 13:43	0.03	2.27	65.80	1.00	
AFF2 ADUP SMM	11-May-2015, 13:44	0.02	3.83	58.60	1.00	
AFF2 ASPK SMM	11-May-2015, 13:46	1.21	0.71	3020.00	1.00	
AFF2 B SMM	11-May-2015, 13:47	0.03	9.48	67.60	1.00	
AFF2 C SMM	11-May-2015, 13:49	0.05	6.97	130.00	1.00	
AFF2 D SMM	11-May-2015, 13:51	0.04	2.57	101.00	1.00	
AFF2 E SMM	11-May-2015, 13:52	0.05	3.67	119.00	1.00	
AFF2 F SMM	11-May-2015, 13:54	0.01	72.60	18.10	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 13:56	3.93	0.33	9810.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 13:57	0.00	32.70	11.80	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFF2 G SMM	11-May-2015, 13:59	0.02	18.20	53.70	1.00	
AFF2 H SMM	11-May-2015, 14:01	0.04	3.86	96.90	1.00	
AFF2 I SMM	11-May-2015, 14:02	0.03	2.27	65.50	1.00	
AFF2 J SMM	11-May-2015, 14:04	0.02	16.90	38.50	1.00	
AFF2 K SMM	11-May-2015, 14:05	0.09	0.53	226.00	1.00	
AFF2 L SMM	11-May-2015, 14:07	0.16	0.32	409.00	1.00	
AFF2 M SMM	11-May-2015, 14:09	0.11	0.45	273.00	1.00	
AFF2 N SMM	11-May-2015, 14:10	0.11	1.86	285.00	1.00	
AFF2 O SMM	11-May-2015, 14:12	0.13	2.86	312.00	1.00	

CETAC Hg Analysis Report - 15051100.DB - Monday, May 11, 2015, 3:23:59 PM

Analyst
Date Started Monday, May 11, 2015, 14:13:53
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFF2 P SMM	11-May-2015, 14:13	0.14	0.76	346.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 14:15	4.31	0.25	10800.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 14:17	-0.02	8.15	-40.20	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFF2 Q SMM	11-May-2015, 14:18	0.07	3.44	186.00	1.00	
AFF2 R SMM	11-May-2015, 14:20	0.05	3.18	132.00	1.00	
AFF2 S SMM	11-May-2015, 14:22	0.07	8.25	167.00	1.00	
AFF2 T SMM	11-May-2015, 14:23	0.09	6.11	212.00	1.00	
AFG4 MB SMM	11-May-2015, 14:25	0.00	26.60	10.50	1.00	
AFG4 MBSPK SMM	11-May-2015, 14:26	2.08	0.21	5180.00	1.00	
AFG4 A SMM	11-May-2015, 14:28	0.24	3.56	594.00	1.00	
AFG4 B SMM	11-May-2015, 14:30	0.05	2.75	135.00	1.00	
AFG4 C SMM	11-May-2015, 14:31	0.27	0.51	681.00	1.00	
AFG4 D SMM	11-May-2015, 14:33	0.14	2.02	342.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 14:35	4.08	0.21	10200.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 14:36	-0.00	150.00	-4.59	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFG4 E SMM	11-May-2015, 14:38	0.40	0.39	987.00	1.00	
AFG4 F SMM	11-May-2015, 14:39	0.18	0.17	447.00	1.00	
AFG4 FDUP SMM	11-May-2015, 14:41	0.21	0.60	533.00	1.00	
AFG4 FSPK SMM	11-May-2015, 14:43	1.29	0.53	3210.00	1.00	
AFG4 G SMM	11-May-2015, 14:44	0.31	0.81	774.00	1.00	
AFG4 H SMM	11-May-2015, 14:46	0.29	3.29	715.00	1.00	
AFG4 I SMM	11-May-2015, 14:48	0.34	1.48	851.00	1.00	
AFG4 J SMM	11-May-2015, 14:49	0.21	1.56	534.00	1.00	
AFG4 K SMM	11-May-2015, 14:51	0.13	0.94	325.00	1.00	
AFG4 L SMM	11-May-2015, 14:52	0.18	0.90	440.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 14:54	4.01	0.57	10000.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 14:56	-0.02	8.11	-44.70	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFG4 M SMM	11-May-2015, 14:57	0.17	0.49	428.00	1.00	
AFG4 N SMM	11-May-2015, 14:59	0.30	0.41	745.00	1.00	
AFG4 O SMM	11-May-2015, 15:01	0.14	2.83	359.00	1.00	
AFG4 P SMM	11-May-2015, 15:02	0.53	0.29	1330.00	1.00	
AFG4 Q SMM	11-May-2015, 15:04	0.55	0.28	1370.00	1.00	
AFG4 R SMM	11-May-2015, 15:06	0.35	1.19	880.00	1.00	
AFG4 S SMM	11-May-2015, 15:07	0.07	1.33	165.00	1.00	
AFG4 T SMM	11-May-2015, 15:09	0.06	2.61	158.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 15:11	3.93	0.18	9810.00	1.00	

CETAC Hg Analysis Report - 15051100.DB - Monday, May 11, 2015, 3:23:59 PM

Analyst
Date Started Monday, May 11, 2015, 15:12:42
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 15:12	-0.01	7.66	-35.50	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
AFM4 A SMM	11-May-2015, 15:15	1.98	0.30	4940.00	1.00	
AFM4 ADUP SMM	11-May-2015, 15:16	1.59	0.14	3960.00	1.00	RPD Hi-L
AFM4 ASPK SMM	11-May-2015, 15:18	5.01	0.41	12500.00	1.00	%R IOL
AFO5 D SMM	11-May-2015, 15:19	6.83	0.55	17000.00	2.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	11-May-2015, 15:21	3.97	0.23	9910.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	11-May-2015, 15:23	-0.02	9.17	-55.10	1.00	

Analyst	
Date Created:	Thursday, July 13, 2000
Worksheet	ARI 10ppb CALIB
Comment	
Sip Duration (Sec.):	30
Rinse Duration (Sec.):	60
Read Delay:	49
Integration Time/Replicate:	1.40
# of Replicates:	4
# of Repeats:	1
Baseline Correction Enabled:	True
Baseline Point 1 Start Time:	10
Baseline Point 1 End Time:	16
2-Point Baseline Corr. Enabled:	False
Baseline Point 2 Start Time:	
Baseline Point 2 End Time:	
Gas Flow (ml/min):	180
Calibration Algorithm:	Linear, Zero Intercept
Recalibration Frequency:	0
Reslope Frequency:	0
Reslope Standard:	5
Calibration Standard #1 Conc.:	0.10 PPB
Calibration Standard #2 Conc.:	0.50 PPB
Calibration Standard #3 Conc.:	1.00 PPB
Calibration Standard #4 Conc.:	2.00 PPB
Calibration Standard #5 Conc.:	5.00 PPB
Calibration Standard #6 Conc.:	10.00 PPB
QC Enabled:	True
QC-RSD Enabled:	True
Limit Condition & Error Action:	If %RSD > 5.0%, if µAbs. > 1500, Flag and Continue
QC-Std Enabled:	True
Limit Condition & Error Action:	If outside 80% .. 120%,Stop
QC-Blank Enabled:	True
Limit Condition & Error Action:	If outside -100 .. 100,Stop

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Mercury Standard Prep Log

Prep Code: Smm
Instrument: CETAC
Analyst: TH
Date: 5-08-15
Bath Temp: 95°C
Start Time: 1135
End Time: 1205

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	—	0.00	50.0	0.0	3
STD1	3062-9	0.01	↓	0.1	2
STD2	↓	0.05	↓	0.5	2
STD3	↓	0.10	↓	1.0	2
STD4	↓	0.20	↓	2.0	2
STD5	↓	0.50	↓	5.0	2
STD6	↓	1.00	↓	10.0	2
CRA	↓	0.01	↓	0.1	1
ICB/CCB	—	0.00	↓	0.0	3
ICV/LCS	D0176	0.08	↓	8.0	2
CCV	↓	0.04	50.0	4.0	3

Chemical/Reagent ID:

HNO_3: D1439
H_2SO_4: C3708
HCl: —
5% $K_2S_2O_8$: D1432
5% $KMnO_4$: D1835

Prep Code:
Instrument:
Analyst:
Date:
Bath Temp:
Start Time:
End Time:

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0		0.00			
STD1					
STD2		0.05			
STD3		0.10			
STD4		0.20			
STD5		0.50			
STD6		1.00			
CRA					
ICB/CCB		0.00			
ICV/LCS					
CCV					

Chemical/Reagent ID:

HNO_3: D1439
H_2SO_4:
HCl:
5% $K_2S_2O_8$:
5% $KMnO_4$:

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SMM
Analyst: MB
Bath Temp: 90°C
Start Time: 0910
Matrix: Soil
Date: 5/8/15
End Time: 0940

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) ~~Volume (mL)~~	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
~~AFF9 A~~	~~1~~	~~–~~					
~~" MB1~~	~~–~~	~~–~~		~~MB 5/8/15~~			
~~" MB1SPK~~	~~–~~	~~–~~					
AFF8 A	5	–	0.224	50.0	5/11 ~~X~~ 1	~~X~~ N	
" ADUP	5	–	0.221		1		
" ASPK	5	–	0.223		1		VB 5/8/15
" B	5	–	0.210		1		
" MB	–	–	–		1		
" MBSPK	–	–	–		~~X~~ 1	~~X~~ N	
AF05 A	1	–	0.243		5/12 ~~X~~ 1	N	
" B	1	–	0.253		1		
" C	1	–	0.210		1		
" D	1	–	0.278		1		
" E	1	–	0.241		1		
" MB	–	–	–		1		
" MBSPK	–	–	–	50.0	1	N	
				~~MB 5/8/15~~			

Chemical/Reagent ID:

HNO_3: D1439
H_2SO_4: C3708
HCl: –
5% $K_2S_2O_8$: D1432
5% $KMnO_4$: D1835
Digest Tube Lot: 1408268