Work Orders #1201013, 1201015, 1202001, 1202003, 1202004, 1202005
Dimock Residential Groundwater Site

SUPPLEMENTAL REPORT CASE FILE

Due to a delayed request from the client, all samples from all Work Orders listed above, were reanalyzed for lithium after the original data had been submitted. The request was to report results as close to a trigger of 32 ug/L as possible, as opposed to the 200ug/L quantitation limit we were currently providing. The lab was able to accommodate with a 25ug/L quantitation limit. All resulting data and Supplemental Report are included in this Case File. All associated paperwork, such as, the COCs, requests, memos, and review forms will be found in each individual Case File.

Robin Costas Date: 4.3.12

Robin Costas

Chemist

DIM0210069

ICP-AES METALS Technical Review Checklist

(200.7, 6010) Hardness_____

For Internal Use Only

Site Name: Dimock WO#: 3/20/12 1202005

Analyst: JRDonsay Date given to Reviewer: 3/20/12

Matrix (circle): Solid / Aqueous / Other _____ SOP R3QA159-021511 / R3QA155-021511

(If TCLP is run: SOP R3QA135-021011)

Program (circle): ~~Superfund~~ / RCRA / Compliance NPDES or SDWA / Other: _____

Li only 005 (1-43)

The signature below indicates the following:

- This data meets the needs of the customer according to the request.
- The analysis was performed as per the SOP, or exceptions documented.
- All documentation needed to recreate the analyses has been reviewed.
- Data Review status set to Peer Reviewed in Element.

Peer Reviewer signature K Costa Date accepted 3.21.12

If any data for this case is stored with another case file, give Site Name and WO#_____

Peer Reviewer Completes Section Below:

General:	YES	NO	N/A	Comments
Raw data is identified with sample ID's, site name, WO#, analyst name, date of analysis.	✓			
Quality Control:				
First CCV ±5% and RSD <3;	✓			
All other CCV ±10%, every 10 samples and end of run;	✓			
For Compliance samples (SDWA and NPDES): SCV ±5% (each time, including PTs)	✓			
All other samples SCV ±10%			✓	
LCV ±30%;	✓			
IBL < |Reporting limit|, analyzed with each CCV ;	✓			
BS (LCS) ±15%;	✓			
SRM (soils) within vendor acceptance limits;			✓	
BLK < |Reporting limit| (if >Reporting Limit **and** >1/10 of sample - must qualify)	✓			
MS [±30%] unless spike is <30% of sample value;	✓			
RPDs from DUP ≤20% aqueous & 35% soils;	✓			
Sample results < CAL or within documented linear range;	✓			

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Interference Checks:

Spectral overlays or 2nd wavelength used or interfering elements not present above CAL ✓

IFA recovery at ±20%; ✓

Non-interfering elements ± | Reporting limit | or calculated range from 200.7; ✓

Calculations/Report:

Calculations and transcriptions checked. ✓

Element Draft Report reviewed. ✓

Deviations and problems documented. ✓

NOTE: When soils are being reported, the *sample qualifier* 'dry' or 'wet' must be entered so that it appears in the header of the Element report. This will signify that the data was report 'wet weight' or 'dry weight' as appropriate.

Additional Comments by Peer Reviewer:

Analyst Ensures that the Data Case File is Complete and Accurate:

- in file Bench sheet (TCLP prep log)
- NA IEC tables NO IEC'S
- ✓ Instrument run log
- ✓ Standard/Reagent Prep log
- ✓ TV sheets
- NA Element Peer Review report
- ✓ Raw data
- NA Data status set to analyzed

Additional Comments by Analyst on data issues:

On-Demand Data Checklist
(used in addition to routine TRC)
For Internal Use Only

Parameter: Li
Procedure/Method/Reference: 200.7

Site Name: Dimock WO#: 1202005
Analyst: JRDorsey

The signature below indicates the following:
• The analysis was performed as per the On-Demand requirements below.

Peer Reviewer signature [signature] Date accepted 3.21.12

Peer Reviewer Completes Section Below:

This is a special request which falls outside our routine protocols. Therefore, these samples were analyzed and the quality control (QC) were evaluated based on the "On Demand" criteria. These protocols include all the QC checks as per routine analyses plus special verification of the performance of the analytical method at the reported quantitation limit/s. These protocols are specified in the EPA Region III OASQA Laboratory Quality Manual, current version.

Quality Control:	**YES**	**NO**	**N/A**	**Comments**
A written procedure or reference must be available for the method being performed and referenced in the narrative. If the method to be performed is unique, the procedures must be fully documented.	✓			
Calibration of the instrumentation or analytical procedure must be according to the method or procedure.	✓			
Calibration verified by analysis of second source standard (SCV, SRM), if available. Concentration must be in the range of the calibration. Results must be within the method, procedure, client or in-house limits.	✓			
Analysis of one method blank (BLK) with each batch. Ideally, the results should be less than the expected quantitation levels set by the method, procedure, or in-house requirements.	✓			
Analysis of one matrix spike (MS) with each batch. For samples or parameters which do not lend themselves to matrix spiking, a BS or SRM sample must be analyzed. Results of spikes must be within the method, procedure, client or in-house limits.	✓			
Analysis of one duplicate analyses (DUP) or a quality control sample such as an SRM or BS with each batch. If duplicate analyses is not possible, e.g, insufficient sample quantity, a quality control sample must be analyzed in duplicate, if available. Results of duplicate analyses must be				

within the method, procedure, client or in-house limits. ✓

At least one blank spike (BS) must be carried through the entire method and analyzed with each batch. The concentration of the BS should be at the quantitation level or at the level of the expected sample results, if known. Results of the BS must be within the method, procedure, client or in-house limits. ✓

Any additional quality control items, such as surrogates, internal standards, etc., which the referenced method or procedure requires should be analyzed. Results must be within the method or, procedure limits. ✓

The analyst must document the impact on the usability of the reported data by applying qualifier codes if applicable and including a summary in the case file.

Additional Comments:

OASQA TRUE VALUES for ICP Standards and QC

CAL stock	ICP	CCV ±5% (ppm)	SCV ±5%/±10% (ppm) (First time ±5%, all others ±10%)	LCV ±30% (ppm)	BS/MS ±15/30% (ppm) (based on 0.5ml stock to 50 mL)	IFA1 ± 20% (ppm)	IFA2 ± 20% (ppm)	IFA2 ±20% (ppm)
AG	**Ag**	0.100	0.100	0.010	0.050			
B	**Al**	10.00	4.00	0.200	2.00	250 ((ag),as,cd, pb,sb,tl,zn)		
B	**As**	5.00	4.00	0.200	0.500			
A	**Ba**	2.50	4.00	0.200	2.00			
A	**Be**	2.50	4.00	0.005	0.050			
A	**B**	2.50	4.00	0.200	0.500			
B	**Ca**	25.00	4.00	0.500	10.00	250(al,b,cu,sn)		
A	**Cd**	2.50	4.00	0.005	0.050			
A	**Co**	2.50	4.00	0.050	0.500			
B	**Cr**	5.00	4.00	0.010	0.500			50 (as,be,cd,sb,zn)
B	**Cu**	5.00	4.00	0.025	0.500			20 (ag,pb,(cd))
B	**Fe**	10.00	4.00	0.100	5.00		250(as,ag,cd,cr,ni,pb,sb,tl,zn)	
B	**K**	25.00	40.00	2.000	20.00			
	Li	2.50*	4.00	0.200*	0.500 (HP)			
B	**Mg**	25.00	4.00	0.500	10.00		250	
B	**Mn**	5.00	4.00	0.015	0.500			50 (b)
A	**Mo**	0.500	4.00	0.200	0.500			
B	**Na**	25.00	4.00	1.000	10.00		250	
B	**Ni**	5.00	4.00	0.040	0.500	50 (cd,cr,pb,sb)		
A	**Pb**	2.50	4.00	0.050	0.500			
A	**Sb**	2.50	4.00	0.060	0.500			
A	**Se**	2.50	4.00	0.200	0.500			
A	**Sn**	2.50	1.00*	0.200	0.500			
	Sr	2.50*	4.00	0.200*	0.500			
A	**Ti**	0.500	4.00	0.200	0.500			
A	**Tl**	2.50	4.00	0.200	0.500			
	U				0.500			
A	**V**	1.25	4.00	0.050	0.500			
B	**Zn**	10.00	4.00	0.020	0.500			

* need to be added separately

( ) = most likely analytes to be interfered with

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TCLP ppm levels (As-5, Ba-100, Cd-1, Cr-5, Pb-5, Se-1, Ag-5)

RUN LOG FOR 3300DV OPTIMA
DIMOCK RERUN FOR Li @ 25 PPB

JR DORSEY 03/20/12

3/20/12

```
IBL
CALA
IBL
LCV  LI/SR
CCV@A/B
SCV@LVM
IFA@1
IFA@2
IFA@3
BB21502-BLK2
BB21502-BS1
1202005-01
1202005-02
1202005-03
1202005-04
1202005-07
1202005-08
BB21502-DUP2
1202005-09
IBL
CCV@A/B
1202005-10
BB21502-MS1
BB21505-BLK2
BB21505-BS1
1202005-11
1202005-12
1202005-13
BB21505-DUP2
1202005-14
BB21505-MS1
IBL
CCV@A/B
1202005-15
1202005-16
1202005-17
1202005-18
BB21505-MS3
1202005-24
1202005-25
1202005-26
1202005-27
1202005-28
IBL
CCV@A/B
1202005-29
1202005-30
1202005-31
1202005-32
1202005-33
BB21505-DUP4
BB22103-BLK2
BB22103-BS1
1202005-34
BB22103-DUP2
IBL
CCV@A/B
1202005-35
1202005-36
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1202005-38
1202005-39
1202005-40
BB22103-MS1
1202005-41
1202005-43
IBL
CCV@A/B

Perkin Elmer 3300 OPTIMA

Analyst: JL Dorsey Date: 3/20/12 Pipets Logbook # SNB11

Run Filename: DV110320 (all electronic files saved using Run Filename) SOP #: R3-QA159

SITE/WO#: Dimock 1202005 Reagent Purity checked ✓

SCV in 2% nitric / 2% HCl matrix (**made daily**): (diluted with IBL) or alternate matrix of _____

* Stock Solution	Expiration Date	Stock Conc	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Ch use
QC-7A	1-12	100 mg/L 1000 mg/L (K)	Spex	13852	0.5 ml	12.5 ml	see TV sheet	
QC-21	1-12	100 mg/L	Spex	13853	0.5ml	12.5 ml	see TV sheet	✓
QC-7A (Ag)	1-12	50 mg/L	Spex	13853	0.05ml	25 ml	0.100 mg/L	

* See Certificate of Analysis for analytes.

Internal Standard in 2% nitric matrix (made as needed...no expiration date applicable)

Stock Solution	Stock Conc	Vendor	Bar Code	Stock Volume	Nitric Volume	Final Volume	Fi Co
Yttrium	1000 mg/L	High Purity	4004	5 mL	10 mL	500 mL	10

Calibration Standards (CAL) and IBL in 2% nitric / 2% HCl matrix (2 mL acid per 100 mL solution) or alternate matrix of _____

	* Stock Soln and Conc	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Date made/ Preparer
IBL	na	na	na	na	1000 mL	na	made daily
CAL A	CAL STD A-R Solution A+B (see certificate)	High Purity	11004 11002	10 mL A 10 mL B	1000 ml	see TV sheet	3/11 jrd
CAL B	CAL STD B: Solution A+B (see certificate)	High Purity	11010 11002	10 mL A 10 mL B	1000 ml	see TV sheet	10/11 jrd
CAL AG	Silver 1000 mg/L	High Purity	11884	0.02 mL	100 ml	0.20 mg/L	
CAL BS							
CAL A	CAL STD A-R Solution A+B (see certificate)	High Purity	11004 11002	2.5 mL A 2.5 mL B	200 ml	see TV sheet	2/17/12 jrd
	Li @ 10,000 ppm Sr @1000 ppm	High Purity High Purity	11008 11882	0.1ml 1.0 ml			
CAL B	CAL STD B: Solution A+B (see certificate)	High Purity	11010 11002	2.5 mL A 2.5 mL B	200 ml	see TV sheet	2/17/12 jrd

EPA - OASQA - ICP Standard/Reagent Preparation

Perkin Elmer 3300 OPTIMA

Other QC standards in 2% nitric / 2% HCl matrix (2 mL acid per 100 mL solution) or alternate matrix of _____

	*Stock Soln and Concentration	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Date made/ Preparer	C if
LCV (10:1)	EPA-CRDL-RR (See certificate) + 1000 mg/L (Ag)	High Purity EM	5759 3355 (Ag)	0.5 mL 0.01mL	100 mL 100 mL	See below^ 0.1 mg/L	1/11 JRD	
^LCV made daily by diluting the LCV(10:1) solution by 10X using the IBL. See TV sheet for final concs.								
LCV (Ag)	LCV Li	Dilute BS	1:1 TV =	25ppb			Jan 3/20/12	✓
LCV	Li & Sr made by diluting	the SCV @ 20X	TV = 0.200 mg/L	Made daily				
IFA 1	10,000 mg/L Ca 10,000 mg/L Al 10,000 mg/L Ni	High Purity High Purity High Purity	10171 11887 5971	5 mL 5 mL 1 mL	200 mL	250 mg/L 250 mg/L 50 mg/L	1/2012 jrd	✓
IFA 2	10,000 mg/L Na 10,000 mg/L Mg 10,000 mg/L Fe	High Purity High Purity High Purity	11808 10172 11886	5 mL 5 mL 5 mL	200 mL	250 mg/L 250 mg/L 250 mg/L	6/11 rc	✓
IFA 3	10,000 mg/L Mn 10,000 mg/L Cu 10,000 mg/L Cr	High Purity High Purity High Purity	5974 5972 5973	1 mL 0.4 mL 1 mL	200 mL	50 mg/L 20 mg/L 50 mg/L	1/2012 jrd	✓

* See Certificate of Analysis for analytes and initial concentrations.

Check standards (made daily) Matrix will be the same as the Calibration Standards (CAL) and IBL (lcb)

CCV Solution ID	Prepared by diluting 1:1	Final Conc	Check if used
CCV AB	CAL A plus CAL B	see TV sheet	✓
CCV AG	CAL AG plus IBL	0.10 mg/L	
CCV BS	CAL BS plus IBL	2.5 mg/L	

Reagent Acid Stocks

	Vendor	Bar Code		Vendor	Bar Code
Nitric Acid	Fisher	11152	HCl Acid	Fisher	11148

Certificates of Analysis Logbook # _____ SNB 2_____

Comments:_____

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Analysis Begun

Start Time: 3/20/2012 9:35:41 AM
Plasma On Time: 3/20/2012 8:38:16 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB21502,505,22103.sif
Batch ID: BB21502,21505,22103
Results Data Set: DV120320
Results Library: C:\pe\Administrator\Results\Results.mdb

Method Loaded
Method Name: Li & Sr
Method Last Saved: 3/20/2012 8:51:53 AM
IEC File: JOE 2010.iec
MSF File:
Method Description: 200.7 ver4.4 (analysis 200.7 or equivalent)

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Li 670.784	Lin, Calc Int	Peak Area	Radial	Y 371.029	No
Sr 421.552	Lin, Calc Int	Peak Area	Radial	Y 371.029	No
Y 371.029	Lin, Calc Int	Peak Area	Radial	n/a	n/a

Sequence No.: 1
Autosampler Location: 1
Sample ID: IBL
Date Collected: 3/20/2012 9:35:42 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	753394.8	1008.57	0.13%	100.0	%
Li 670.784†	1342.3	45.99	3.43%	[0.00]	mg/L
Sr 421.552†	-24.0	3.80	15.82%	[0.00]	mg/L

Sequence No.: 2
Autosampler Location: 3
Sample ID: CALA
Date Collected: 3/20/2012 9:37:51 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: CALA

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	759852.7	1477.31	0.19%	100.9	%
Li 670.784†	877291.9	1549.09	0.18%	[5]	mg/L
Sr 421.552†	4398900.1	21905.39	0.50%	[5]	mg/L

Sequence No.: 3
Autosampler Location: 1
Sample ID: IBL
Date Collected: 3/20/2012 9:40:14 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	757691.2	100.6	%	0.28				0.28%
Li 670.784†	846.5	0.0048	mg/L	0.00090	4.825	µg/L	0.8973	18.60%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	826.7	0.0009	mg/L	0.00012	0.9397	µg/L	0.11744	12.50%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 4
Sample ID: LCV LI/SR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/20/2012 9:42:23 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCV LI/SR

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	767859.8	101.9	%	0.83				0.81%
Li 670.784†	4386.8	0.0250	mg/L	0.00038	25.00	µg/L	0.378	1.51%
QC value within limits for Li 670.784 Recovery = 100.01%								
Sr 421.552†	22232.4	0.0253	mg/L	0.00008	25.27	µg/L	0.082	0.32%
QC value within limits for Sr 421.552 Recovery = 101.08%								

All analyte(s) passed QC.

Sequence No.: 5
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/20/2012 9:44:23 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	775625.3	103.0	%	0.58				0.56%
Li 670.784†	427803.3	2.438	mg/L	0.0040	2438	µg/L	4.0	0.16%
QC value within limits for Li 670.784 Recovery = 97.53%								
Sr 421.552†	2182064.8	2.480	mg/L	0.0082	2480	µg/L	8.2	0.33%
QC value within limits for Sr 421.552 Recovery = 99.21%								

All analyte(s) passed QC.

Sequence No.: 6
Sample ID: SCV@LVM
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/20/2012 9:46:31 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SCV@LVM

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	780696.5	103.6	%	0.35				0.34%
Li 670.784†	670282.7	3.820	mg/L	0.0207	3820	µg/L	20.7	0.54%
QC value within limits for Li 670.784 Recovery = 95.50%								
Sr 421.552†	3545966.5	4.031	mg/L	0.0124	4031	µg/L	12.4	0.31%
QC value within limits for Sr 421.552 Recovery = 100.76%								

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: IFA@1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 3/20/2012 9:48:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IFA@1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	746662.7	99.11	%	1.353				1.36%
Li 670.784†	1505.0	0.0086	mg/L	0.00121	8.578	µg/L	1.2119	14.13%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	2293.8	0.0026	mg/L	0.00030	2.607	µg/L	0.2995	11.49%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: IFA@2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 3/20/2012 9:51:03 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IFA@2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	732144.7	97.18	%	0.677				0.70%
Li 670.784†	2425.0	0.0138	mg/L	0.00178	13.82	µg/L	1.784	12.91%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	407.8	0.0005	mg/L	0.00003	0.4636	µg/L	0.02755	5.94%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: IFA@3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 3/20/2012 9:53:18 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IFA@3

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	787706.1	104.6	%	0.71				0.68%
Li 670.784†	1035.0	0.0059	mg/L	0.00058	5.899	µg/L	0.5833	9.89%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	-85.4	-0.0001	mg/L	0.00002	-0.0971	µg/L	0.02023	20.84%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: BB21502-BLK2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 3/20/2012 9:55:31 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21502-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	807396.4	107.2	%	0.36				0.34%
Li 670.784†	-78.3	-0.0004	mg/L	0.00041	-0.4461	µg/L	0.40797	91.45%
Sr 421.552†	34.9	0.0000	mg/L	0.00002	0.0396	µg/L	0.01633	41.19%

Sequence No.: 11
Sample ID: BB21502-BS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 3/20/2012 9:57:46 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21502-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	808261.8	107.3	%	0.65				0.60%
Li 670.784†	8002.6	0.0456	mg/L	0.00074	45.61	µg/L	0.743	1.63%
Sr 421.552†	42317.1	0.0481	mg/L	0.00037	48.10	µg/L	0.372	0.77%

Sequence No.: 12
Sample ID: 1202005-01
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 18
Date Collected: 3/20/2012 9:59:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-01

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	791637.5	105.1	%	1.38				1.31%
Li 670.784†	2000.1	0.0114	mg/L	0.00012	11.40	µg/L	0.124	1.09%
Sr 421.552†	284225.0	0.3231	mg/L	0.00318	323.1	µg/L	3.18	0.98%

Sequence No.: 13
Sample ID: 1202005-02
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 19
Date Collected: 3/20/2012 10:02:03 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-02

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	785107.5	104.2	%	0.39				0.37%
Li 670.784†	2041.1	0.0116	mg/L	0.00062	11.63	µg/L	0.624	5.36%
Sr 421.552†	289748.1	0.3293	mg/L	0.00196	329.3	µg/L	1.96	0.59%

Sequence No.: 14
Sample ID: 1202005-03
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 3/20/2012 10:04:13 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-03

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	784254.5	104.1	%	0.53				0.51%
Li 670.784†	3762.0	0.0214	mg/L	0.00024	21.44	µg/L	0.242	1.13%
Sr 421.552†	470347.0	0.5346	mg/L	0.00384	534.6	µg/L	3.84	0.72%

Sequence No.: 15
Sample ID: 1202005-04
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/20/2012 10:06:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-04

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	802401.0	106.5	%	1.61				1.51%
Li 670.784†	-316.8	-0.0018	mg/L	0.00020	-1.805	µg/L	0.2010	11.13%
Sr 421.552†	125.8	0.0001	mg/L	0.00004	0.1430	µg/L	0.03626	25.36%

Sequence No.: 16
Sample ID: 1202005-07
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 3/20/2012 10:08:31 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-07

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	787225.8	104.5	%	1.18				1.13%
Li 670.784†	1897.6	0.0108	mg/L	0.00009	10.82	µg/L	0.093	0.86%
Sr 421.552†	287496.9	0.3268	mg/L	0.00533	326.8	µg/L	5.33	1.63%

Sequence No.: 17
Sample ID: 1202005-08

Autosampler Location: 23
Date Collected: 3/20/2012 10:10:43 AM

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-08

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	798169.4	105.9	%	0.92				0.87%
Li 670.784†	1830.3	0.0104	mg/L	0.00056	10.43	µg/L	0.558	5.35%
Sr 421.552†	284111.5	0.3229	mg/L	0.00441	322.9	µg/L	4.41	1.36%

Sequence No.: 18
Sample ID: BB21502-DUP2
Analyst:
Initial Sample Wt:
Dilution:

RPD=NA

Autosampler Location: 24
Date Collected: 3/20/2012 10:12:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21502-DUP2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	791502.7	105.1	%	0.90				0.86%
Li 670.784†	1746.3	0.0100	mg/L	0.00012	9.953	µg/L	0.1228	1.23%
Sr 421.552†	279487.1	0.3177	mg/L	0.00331	317.7	µg/L	3.31	1.04%

Sequence No.: 19
Sample ID: 1202005-09
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 3/20/2012 10:15:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-09

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	806125.8	107.0	%	0.48				0.45%
Li 670.784†	-468.4	-0.0027	mg/L	0.00028	-2.670	µg/L	0.2776	10.40%
Sr 421.552†	83.0	0.0001	mg/L	0.00003	0.0943	µg/L	0.03351	35.52%

Sequence No.: 20
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/20/2012 10:17:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	799914.6	106.2	%	1.07				1.01%
Li 670.784†	43.5	0.0002	mg/L	0.00020	0.2477	µg/L	0.19709	79.57%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	73.8	0.0001	mg/L	0.00005	0.0839	µg/L	0.05016	59.83%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 21
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/20/2012 10:19:31 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	810358.7	107.6	%	0.57				0.53%

Li 670.784†	404044.1	2.303 mg/L	0.0225	2303 µg/L	22.5	0.98%
QC value less than the lower limit for Li 670.784 Recovery = 92.11%						
Sr 421.552†	2098827.8	2.386 mg/L	0.0213	2386 µg/L	21.3	0.89%
QC value within limits for Sr 421.552 Recovery = 95.43%						

QC Failed. Continue with analysis.

Sequence No.: 22
Sample ID: 1202005-10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 3/20/2012 10:21:39 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-10

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	791775.4	105.1	%	0.48				0.46%
Li 670.784†	3660.4	0.0209	mg/L	0.00013	20.86	µg/L	0.135	0.65%
Sr 421.552†	465106.9	0.5287	mg/L	0.00443	528.7	µg/L	4.43	0.84%

Sequence No.: 23
Sample ID: BB21502-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 3/20/2012 10:23:54 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21502-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	792679.2	105.2	%	0.78				0.74%
Li 670.784†	12079.8	0.0688	mg/L	0.00038	68.85	µg/L	0.381	0.55%
Sr 421.552†	521224.0	0.5924	mg/L	0.00893	592.4	µg/L	8.93	1.51%

Sequence No.: 24
Sample ID: BB21505-BLK2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 3/20/2012 10:26:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21505-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	810594.4	107.6	%	0.85				0.79%
Li 670.784†	-409.5	-0.0023	mg/L	0.00018	-2.334	µg/L	0.1828	7.83%
Sr 421.552†	107.6	0.0001	mg/L	0.00005	0.1224	µg/L	0.05022	41.05%

Sequence No.: 25
Sample ID: BB21505-BS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 3/20/2012 10:28:18 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21505-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	811912.5	107.8	%	0.91				0.85%
Li 670.784†	7756.2	0.0442	mg/L	0.00027	44.21	µg/L	0.269	0.61%
Sr 421.552†	42873.9	0.0487	mg/L	0.00030	48.73	µg/L	0.299	0.61%

Sequence No.: 26
Sample ID: 1202005-11
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 3/20/2012 10:30:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-11

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	814198.9	108.1	%	0.61				0.56%
Li 670.784†	-63.5	-0.0004	mg/L	0.00015	-0.3621	µg/L	0.14527	40.12%
Sr 421.552†	32077.1	0.0365	mg/L	0.00022	36.46	µg/L	0.224	0.61%

Sequence No.: 27
Sample ID: 1202005-12
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 3/20/2012 10:32:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-12

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	792106.2	105.1	%	0.21				0.20%
Li 670.784†	3457.6	0.0197	mg/L	0.00039	19.71	µg/L	0.387	1.97%
Sr 421.552†	431885.4	0.4909	mg/L	0.00396	490.9	µg/L	3.96	0.81%

Sequence No.: 28
Sample ID: 1202005-13
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 3/20/2012 10:34:16 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-13

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	789425.9	104.8	%	1.06				1.01%
Li 670.784†	2665.8	0.0152	mg/L	0.00065	15.19	µg/L	0.649	4.27%
Sr 421.552†	393406.2	0.4472	mg/L	0.00531	447.2	µg/L	5.31	1.19%

Sequence No.: 29
Sample ID: BB21505-DUP2
Analyst:
Initial Sample Wt:
Dilution:

RD: NA

Autosampler Location: 33
Date Collected: 3/20/2012 10:36:26 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21505-DUP2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	793446.4	105.3	%	0.79				0.75%
Li 670.784†	2613.0	0.0149	mg/L	0.00025	14.89	µg/L	0.252	1.69%
Sr 421.552†	393369.2	0.4471	mg/L	0.00504	447.1	µg/L	5.04	1.13%

Sequence No.: 30
Sample ID: 1202005-14
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 3/20/2012 10:38:39 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-14

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	811654.3	107.7	%	0.64				0.59%
Li 670.784†	967.8	0.0055	mg/L	0.00033	5.516	µg/L	0.3316	6.01%
Sr 421.552†	70841.4	0.0805	mg/L	0.00079	80.52	µg/L	0.794	0.99%

Sequence No.: 31
Sample ID: BB21505-MS1

Autosampler Location: 35
Date Collected: 3/20/2012 10:40:35 AM

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21505-MS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	793596.4	105.3	%	0.29				0.27%
Li 670.784†	9614.4	0.0548	mg/L	0.00044	54.80	µg/L	0.439	0.80%
Sr 421.552†	119781.3	0.1361	mg/L	0.00079	136.1	µg/L	0.79	0.58%

Sequence No.: 32
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/20/2012 10:42:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	795266.6	105.6	%	1.43				1.35%
Li 670.784†	-119.6	-0.0007	mg/L	0.00024	-0.6817	µg/L	0.23618	34.64%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	82.4	0.0001	mg/L	0.00001	0.0937	µg/L	0.01320	14.08%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 33
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/20/2012 10:44:44 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	799146.2	106.1	%	0.46				0.43%
Li 670.784†	400286.5	2.281	mg/L	0.0076	2281	µg/L	7.6	0.33%
QC value less than the lower limit for Li 670.784 Recovery = 91.26%								
Sr 421.552†	2111333.7	2.400	mg/L	0.0096	2400	µg/L	9.6	0.40%
QC value within limits for Sr 421.552 Recovery = 95.99%								

QC Failed. Continue with analysis.

Sequence No.: 34
Sample ID: 1202005-15
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 3/20/2012 10:46:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-15

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	800120.0	106.2	%	0.57				0.54%
Li 670.784†	1065.9	0.0061	mg/L	0.00052	6.075	µg/L	0.5233	8.61%
Sr 421.552†	69436.8	0.0789	mg/L	0.00087	78.93	µg/L	0.871	1.10%

Sequence No.: 35
Sample ID: 1202005-16
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 3/20/2012 10:48:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-16

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	809067.1	107.4	%	1.15				1.07%
Li 670.784†	-528.2	-0.0030	mg/L	0.00026	-3.010	µg/L	0.2567	8.53%
Sr 421.552†	113.7	0.0001	mg/L	0.00004	0.1292	µg/L	0.04265	33.01%

Sequence No.: 36
Sample ID: 1202005-17
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 3/20/2012 10:51:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-17

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	789737.8	104.8	%	0.49				0.47%
Li 670.784†	1124.6	0.0064	mg/L	0.00033	6.409	µg/L	0.3291	5.13%
Sr 421.552†	170522.6	0.1938	mg/L	0.00146	193.8	µg/L	1.46	0.75%

Sequence No.: 37
Sample ID: 1202005-18
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 3/20/2012 10:52:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-18

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	786788.2	104.4	%	1.04				0.99%
Li 670.784†	3921.0	0.0223	mg/L	0.00057	22.35	µg/L	0.572	2.56%
Sr 421.552†	802020.0	0.9116	mg/L	0.00683	911.6	µg/L	6.83	0.75%

Sequence No.: 38
Sample ID: BB21505-MS3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 3/20/2012 10:55:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21505-MS3

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	782924.7	103.9	%	0.56				0.54%
Li 670.784†	12144.8	0.0692	mg/L	0.00032	69.22	µg/L	0.319	0.46%
Sr 421.552†	860303.9	0.9779	mg/L	0.01207	977.9	µg/L	12.07	1.23%

Sequence No.: 39
Sample ID: 1202005-24
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 3/20/2012 10:57:17 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-24

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	805203.6	106.9	%	1.33				1.24%
Li 670.784†	-58.7	-0.0003	mg/L	0.00014	-0.3345	µg/L	0.13750	41.10%
Sr 421.552†	34309.3	0.0390	mg/L	0.00029	39.00	µg/L	0.287	0.74%

Sequence No.: 40
Sample ID: 1202005-25
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 3/20/2012 10:59:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-25

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	798688.8	106.0	%	0.29				0.27%
Li 670.784†	3427.2	0.0195	mg/L	0.00019	19.53	µg/L	0.191	0.98%
Sr 421.552†	438784.2	0.4987	mg/L	0.00640	498.7	µg/L	6.40	1.28%

Sequence No.: 41
Sample ID: 1202005-26
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 3/20/2012 11:01:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-26

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	789382.2	104.8	%	1.03				0.98%
Li 670.784†	2475.4	0.0141	mg/L	0.00011	14.11	µg/L	0.113	0.80%
Sr 421.552†	392681.2	0.4463	mg/L	0.00494	446.3	µg/L	4.94	1.11%

Sequence No.: 42
Sample ID: 1202005-27
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 3/20/2012 11:03:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-27

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	792716.9	105.2	%	0.23				0.22%
Li 670.784†	839.6	0.0048	mg/L	0.00004	4.785	µg/L	0.0415	0.87%
Sr 421.552†	70513.9	0.0801	mg/L	0.00034	80.15	µg/L	0.335	0.42%

Sequence No.: 43
Sample ID: 1202005-28
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 3/20/2012 11:05:30 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-28

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	790739.9	105.0	%	0.41				0.39%
Li 670.784†	886.2	0.0051	mg/L	0.00033	5.051	µg/L	0.3324	6.58%
Sr 421.552†	70865.2	0.0805	mg/L	0.00065	80.55	µg/L	0.653	0.81%

Sequence No.: 44
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/20/2012 11:07:27 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	794368.4	105.4	%	1.00				0.95%
Li 670.784†	-283.9	-0.0016	mg/L	0.00014	-1.618	µg/L	0.1386	8.56%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	92.8	0.0001	mg/L	0.00003	0.1055	µg/L	0.03077	29.18%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 45
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/20/2012 11:09:37 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	791257.5	105.0	%	1.15				1.09%
Li 670.784†	398589.3	2.272	mg/L	0.0208	2272	µg/L	20.8	0.91%
QC value less than the lower limit for Li 670.784 Recovery = 90.87%								
Sr 421.552†	2109492.1	2.398	mg/L	0.0187	2398	µg/L	18.7	0.78%
QC value within limits for Sr 421.552 Recovery = 95.91%								

QC Failed. Continue with analysis.

Sequence No.: 46
Sample ID: 1202005-29
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 3/20/2012 11:11:46 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-29

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	795375.9	105.6	%	1.45				1.38%
Li 670.784†	3938.3	0.0224	mg/L	0.00033	22.45	µg/L	0.329	1.47%
Sr 421.552†	793945.3	0.9024	mg/L	0.01946	902.4	µg/L	19.46	2.16%

Sequence No.: 47
Sample ID: 1202005-30
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 3/20/2012 11:14:00 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-30

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	823192.0	109.3	%	2.53				2.32%
Li 670.784†	-592.6	-0.0034	mg/L	0.00017	-3.378	µg/L	0.1654	4.90%
Sr 421.552†	156.4	0.0002	mg/L	0.00003	0.1778	µg/L	0.03139	17.65%

Sequence No.: 48
Sample ID: 1202005-31
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 3/20/2012 11:16:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-31

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	793019.1	105.3	%	0.22				0.21%
Li 670.784†	861.7	0.0049	mg/L	0.00026	4.911	µg/L	0.2645	5.38%
Sr 421.552†	171087.1	0.1945	mg/L	0.00113	194.5	µg/L	1.13	0.58%

Sequence No.: 49
Sample ID: 1202005-32
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 3/20/2012 11:17:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-32

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	786887.1	104.4	%	0.15				0.14%
Li 670.784†	512.2	0.0029	mg/L	0.00019	2.919	µg/L	0.1888	6.47%
Sr 421.552†	120068.7	0.1365	mg/L	0.00111	136.5	µg/L	1.11	0.81%

Sequence No.: 50
Sample ID: 1202005-33
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 3/20/2012 11:19:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-33

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	787630.9	104.5	%	0.62				0.59%
Li 670.784†	931.0	0.0053	mg/L	0.00052	5.306	µg/L	0.5218	9.83%
Sr 421.552†	127228.9	0.1446	mg/L	0.00138	144.6	µg/L	1.38	0.96%

Sequence No.: 51
Sample ID: BB21505-DUP4
Analyst:
Initial Sample Wt:
Dilution:

RPD=NA

Autosampler Location: 51
Date Collected: 3/20/2012 11:21:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21505-DUP4

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	779632.3	103.5	%	0.64				0.62%
Li 670.784†	948.7	0.0054	mg/L	0.00016	5.407	µg/L	0.1631	3.02%
Sr 421.552†	130449.8	0.1483	mg/L	0.00116	148.3	µg/L	1.16	0.78%

Sequence No.: 52
Sample ID: BB22103-BLK2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 3/20/2012 11:23:39 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB22103-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	788172.2	104.6	%	0.66				0.64%
Li 670.784†	-636.9	-0.0036	mg/L	0.00003	-3.630	µg/L	0.0309	0.85%
Sr 421.552†	54.0	0.0001	mg/L	0.00005	0.0613	µg/L	0.04724	77.03%

Sequence No.: 53
Sample ID: BB22103-BS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 3/20/2012 11:25:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB22103-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	790223.3	104.9	%	0.61				0.58%
Li 670.784†	7773.8	0.0443	mg/L	0.00007	44.31	µg/L 89%	0.070	0.16%
Sr 421.552†	43246.8	0.0492	mg/L	0.00024	49.16	µg/L	0.242	0.49%

Sequence No.: 54
Sample ID: 1202005-34
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 3/20/2012 11:27:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-34

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	776242.6	103.0	%	0.43				0.42%
Li 670.784†	4002.4	0.0228	mg/L	0.00018	22.81	µg/L	0.184	0.81%
Sr 421.552†	827184.4	0.9402	mg/L	0.00894	940.2	µg/L	8.94	0.95%

Sequence No.: 55
Sample ID: BB22103-DUP2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 3/20/2012 11:29:59 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

RIP = Na

Mean Data: BB22103-DUP2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	781776.7	103.8	%	0.55				0.53%
Li 670.784†	4085.5	0.0233	mg/L	0.00048	23.28	µg/L	0.480	2.06%
Sr 421.552†	829236.3	0.9425	mg/L	0.01090	942.5	µg/L	10.90	1.16%

Sequence No.: 56
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/20/2012 11:32:14 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	768164.9	102.0	%	0.57				0.56%
Li 670.784†	51.6	0.0003	mg/L	0.00038	0.2939	µg/L	0.37947	129.11%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	205.7	0.0002	mg/L	0.00007	0.2338	µg/L	0.07431	31.79%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 57
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/20/2012 11:34:23 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	782947.3	103.9	%	0.19				0.18%
Li 670.784†	416404.7	2.373	mg/L	0.0066	2373	µg/L	6.6	0.28%
QC value within limits for Li 670.784 Recovery = 94.93%								
Sr 421.552†	2159064.8	2.454	mg/L	0.0061	2454	µg/L	6.1	0.25%
QC value within limits for Sr 421.552 Recovery = 98.16%								

All analyte(s) passed QC.

Sequence No.: 58
Sample ID: 1202005-35
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 56
Date Collected: 3/20/2012 11:36:31 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-35

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	784007.0	104.1	%	1.85				1.78%

Li 670.784†	4224.7	0.0241 mg/L	0.00107	24.08 µg/L	1.071	4.45%
Sr 421.552†	818419.6	0.9303 mg/L	0.03393	930.3 µg/L	33.93	3.65%

Sequence No.: 59
Sample ID: 1202005-36
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 3/20/2012 11:38:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-36

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	775176.6	102.9	%	1.11				1.08%
Li 670.784†	4088.4	0.0233	mg/L	0.00020	23.30	µg/L	0.201	0.86%
Sr 421.552†	829452.1	0.9428	mg/L	0.01199	942.8	µg/L	11.99	1.27%

Sequence No.: 60
Sample ID: 1202005-38
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 3/20/2012 11:40:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-38

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	771488.8	102.4	%	0.20				0.20%
Li 670.784†	4118.1	0.0235	mg/L	0.00066	23.47	µg/L	0.656	2.79%
Sr 421.552†	836363.5	0.9507	mg/L	0.00910	950.7	µg/L	9.10	0.96%

Sequence No.: 61
Sample ID: 1202005-39
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 3/20/2012 11:42:58 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-39

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	787280.4	104.5	%	0.37				0.36%
Li 670.784†	-587.1	-0.0033	mg/L	0.00033	-3.346	µg/L	0.3298	9.86%
Sr 421.552†	147.2	0.0002	mg/L	0.00005	0.1673	µg/L	0.04845	28.95%

Sequence No.: 62
Sample ID: 1202005-40
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 3/20/2012 11:45:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-40

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	779444.3	103.5	%	0.74				0.71%
Li 670.784†	1322.8	0.0075	mg/L	0.00020	7.539	µg/L	0.2003	2.66%
Sr 421.552†	143060.4	0.1626	mg/L	0.00106	162.6	µg/L	1.06	0.65%

Sequence No.: 63
Sample ID: BB22103-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 3/20/2012 11:47:01 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB22103-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	794915.1	105.5	%	1.31				1.24%
Li 670.784†	9721.4	0.0554	mg/L	0.00087	55.41	µg/L	0.866	1.56%
Sr 421.552†	184461.9	0.2097	mg/L	0.00168	209.7	µg/L	1.68	0.80%

95%

Sequence No.: 64
Sample ID: 1202005-41
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 3/20/2012 11:48:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-41

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	786447.2	104.4	%	0.95				0.91%
Li 670.784†	-652.3	-0.0037	mg/L	0.00027	-3.718	µg/L	0.2663	7.16%
Sr 421.552†	80.2	0.0001	mg/L	0.00002	0.0911	µg/L	0.01666	18.28%

Sequence No.: 65
Sample ID: 1202005-43
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 3/20/2012 11:51:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202005-43

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	777277.7	103.2	%	0.84				0.82%
Li 670.784†	1219.1	0.0069	mg/L	0.00051	6.948	µg/L	0.5107	7.35%
Sr 421.552†	141722.1	0.1611	mg/L	0.00196	161.1	µg/L	1.96	1.22%

Sequence No.: 66
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/20/2012 11:53:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	781892.7	103.8	%	0.83				0.80%
Li 670.784†	-383.4	-0.0022	mg/L	0.00032	-2.185	µg/L	0.3165	14.49%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	79.4	0.0001	mg/L	0.00003	0.0902	µg/L	0.03450	38.24%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 67
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/20/2012 11:55:14 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	779359.1	103.4	%	0.96				0.93%
Li 670.784†	412464.6	2.351	mg/L	0.0276	2351	µg/L	27.6	1.18%
QC value less than the lower limit for Li 670.784 Recovery = 94.03%								
Sr 421.552†	2156382.6	2.451	mg/L	0.0263	2451	µg/L	26.3	1.07%
QC value within limits for Sr 421.552 Recovery = 98.04%								

QC Failed. Retry.

Sequence No.: 68
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 8
Date Collected: 3/20/2012 11:56:42 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Dimock Residential GW Site - Supplemental Report for All Work Orders - Lithium Re-Analysis Results

Cynthia Caporale to: Richard Fetzer 03/28/2012 10:35 AM

Cc: Robin Costas, Richard Rupert, Kelley Chase, Stevie Wilding, Jill Bilyeu

This e-mail serves as notification that the Office of Analytical Services and Quality Assurance (OASQA) Laboratory has issued a supplemental report for the Final Results for Lithium. This supplemental report affects all Work Orders issued to date for this project. Please refer to the attached memo for specifics.

Dimock Residential DW Site_Supplemental Report_Lithium_signed.PDF

Lithium attachment 3_28.docx

New EDD files are available and will be uploaded to the R03FTP Site for Dimock under the EPA Labratory directory/R3.

Please contact me at 410/305-2732, or Robin Costas 410/305-2659, if you experience delivery problems with your report or to provide feedback. A copy of this e-mail will be retained in the case file.

Cynthia Caporale
Laboratory Branch Chief
Office of Analytical Services and Quality Assurance
U.S. Environmental Protection Agency
Environmental Science Center
701 Mapes Road
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Environmental Science Center
Office of Analytical Services and Quality Assurance
701 Mapes Road
Fort Meade, Maryland 20755-5350

DATE: March 28, 2012

SUBJECT: Supplemental Report to Dimock Residential Groundwater Site Lithium Results

FROM: Cynthia Caporale, Chief
Laboratory Branch (3EA21)

TO: Richard Fetzer, On-Scene Coordinator
Hazardous Site Cleanup Division (3HS31)

As you requested, all samples for the six work orders listed below were rerun for Lithium using a lower quantitation limit. The quantitation limit was reduced to 25 ug/L from 200 ug/L. Results are included in the attached spreadsheet. All quality control results were within acceptance limits and were analyzed as an on-demand analysis. An electronic deliverable is also attached that includes the re-analysis lithium results for each Work Order.

Supplemental Information for the following Work Orders:

Case File WO# 1201013
Case File WO# 1201015
Case File WO# 1202001
Case File WO# 1202003
Case File WO# 1202004
Case File WO# 1202005

If you should have any questions please contact me at 410-305-2732.

Attachments:
Lithium Results Spreadsheet
EDD files for each Work Order

cc: Jill Bilyeu, Quality Assurance Officer
Rich Rupert, On-Scene Coordinator
Kelley Chase, On-Scene Coordinator
Case File for Work Orders listed above

Dimock Lithium Results
(EPA R3 Laboratory Supplemental Results per 3/28/2012 Memo)

sample_id	Lithium result	Result unit	Quantitation Limit	lab_sample_id	Units=ug/l	RPD or % Recovery
FB01	U	ug/l	25	1201013-01		
FB01-F	U	ug/l	25	1201013-02	DUP=U	RPD=NA
HW19	U	ug/l	25	1201013-03	MS=64.7	102%
HW19-F	U	ug/l	25	1201013-04		
HW19-P	U	ug/l	25	1201013-05	DUP=U	RPD=NA
HW19-PF	U	ug/l	25	1201013-06	MS=70.3	112%
FB02	U	ug/l	25	1201013-07		
FB02-F	U	ug/l	25	1201013-08		
HW04	28.9	ug/l	25	1201013-09	DUP=31	RPD=7
HW04-F	30.7	ug/l	25	1201013-10	MS=82.8	103%
FB03	U	ug/l	25	1201013-12		
HW02	39	ug/l	25	1201013-13	DUP=37.3	RPD=4
HW02z	39.6	ug/l	25	1201013-14	MS=88.5	98%
HW01	40.7	ug/l	25	1201013-15		
HW05	31	ug/l	25	1201013-16		
HW06	243.1	ug/l	25	1201013-17		
HW06-F	235.6	ug/l	25	1201013-18		
FB03F	U	ug/l	25	1201013-19		
HW02z-F	39.5	ug/l	25	1201013-21		
HW01-F	41	ug/l	25	1201013-22		
HW02-F	37.6	ug/l	25	1201013-23		
HW05-F	29.8	ug/l	25	1201013-24		
HW08a-F	U	ug/l	25	1201013-27	DUP=U	RPD=NA
HW08a	U	ug/l	25	1201013-28	MS=52.7	101%
FB04	U	ug/l	25	1201013-29		
FB05	U	ug/l	25	1201013-30		
HW24	211.1	ug/l	25	1201013-31	DUP=210.6	RPD=0
HW24-P	208.8	ug/l	25	1201013-32	MS=262.1	107%
HW12	36.1	ug/l	25	1201013-33		
HW17	31.9	ug/l	25	1201013-34		
HW14	U	ug/l	25	1201013-35		
HW14-P	U	ug/l	25	1201013-36		
FB04-F	U	ug/l	25	1201013-37		
FB05-F	U	ug/l	25	1201013-38		
HW12-F	36.8	ug/l	25	1201013-39		
HW17-F	29.3	ug/l	25	1201013-40		
HW14-F	U	ug/l	25	1201013-41		
HW24-PF	208.9	ug/l	25	1201013-42		
HW24-F	210.8	ug/l	25	1201013-43	DUP=213.8	RPD=1
HW14-PF	U	ug/l	25	1201013-44	MS=66.8	103%
BLK2	U	Ug/l	25	BA22503-BLK2		
BS1	50.6	ug/l	25	BA22503-BS1		101%
BLK2	0	ug/l	25	BA22602-BLK2		

BS1	50.4	ug/l	25	BA22602-BS1		101%
BLK2	U	ug/l	25	BA23002-BLK2		
BS1	50.2	ug/l	25	BA23002-BS1		100%
BLK2	0	ug/l	25	BA23003-BLK2		
BS1	49.5	ug/l	25	BA23003-BS1		100%
EB01	U	ug/l	25	1201015-01		
FB06	U	ug/l	25	1201015-02		
HW18	100	ug/l	25	1201015-03		
HW13	26.4	ug/l	25	1201015-04		
HW18-P	81.9	ug/l	25	1201015-05		
HW18-F	90.2	ug/l	25	1201015-06		
EB01-F	U	ug/l	25	1201015-07		
FB06-F	U	ug/l	25	1201015-08		
HW13-F	27.9	ug/l	25	1201015-09		
HW18-PF	83.1	ug/l	25	1201015-10		
HW25-P	48.3	ug/l	25	1201015-11		
HW25-PF	51.1	ug/l	25	1201015-12		
HW26-P	60.9	ug/l	25	1201015-13	DUP=62.9	RPD=3
HW26-PF	61.1	ug/l	25	1201015-14		
HW26	60.9	ug/l	25	1201015-15		
HW26-F	61.6	ug/l	25	1201015-16		
HW35	U	ug/l	25	1201015-17	MS=52.2	99%
HW35-F	U	ug/l	25	1201015-18		
HW20	U	ug/l	25	1201015-19	DUP=U	RPD=NA
HW20-F	U	ug/l	25	1201015-20		
HW20-P	U	ug/l	25	1201015-21		
HW20-PF	U	ug/l	25	1201015-22	MS=58.7	94%
HW32	U	ug/l	25	1201015-25		
HW32-P	U	ug/l	25	1201015-26		
HW32-PF	U	ug/l	25	1201015-27		
HW32-F	U	ug/l	25	1201015-29		
HW33	U	ug/l	25	1201015-30	DUP=U	RPD=NA
HW33a-P	U	ug/l	25	1201015-31		
HW33a-PF	U	ug/l	25	1201015-32		
HW33b-P	U	ug/l	25	1201015-33		
HW33-F	U	ug/l	25	1201015-34		
HW33b-PF	U	ug/l	25	1201015-36		
HW29z	498	ug/l	25	1201015-37		
HW29z-F	498	ug/l	25	1201015-38	MS=554.2	111%
HW29	512	ug/l	25	1201015-39		
HW29-F	533	ug/l	25	1201015-40	DUP=531.1	RPD=0
HW52	U	ug/l	25	1201015-41	MS=71.5	100%
HW52-F	U	ug/l	25	1201015-42		
FB07	U	ug/l	25	1201015-43		

FB07-F	U	ug/l	25	1201015-44		
BLK2	U	ug/l	25	BA23101-BLK1		
BLK4	U	ug/l	25	BA23101-BLK3		
BS1	52.9	ug/l	25	BA23101-BS1		
BS4	53	ug/l	25	BA23101-BS3		
BLK1	U	ug/l	25	BB20104-BLK1		
BLK2	47.8	ug/l	25	BB20104-BS1		96%
BS1	0	ug/l	25	BB20205-BLK1		
BLK2	47.7	ug/l	25	BB20205-BS1		96%
HW42	U	ug/l	25	1202001-01	DUP=U	RPD=NA
HW42-F	U	ug/l	25	1202001-02		
HW46	U	ug/l	25	1202001-03	DUP=U	RPD=NA
HW46-F	U	ug/l	25	1202001-04		
HW46-P	U	ug/l	25	1202001-05	MS=53.1	100%
FB09	U	ug/l	25	1202001-07		
FB08	U	ug/l	25	1202001-08		
FB08-F	U	ug/l	25	1202001-09		
HW34a	87.2	ug/l	25	1202001-10		
HW34a-F	85.9	ug/l	25	1202001-11		
FB09-F	U	ug/l	25	1202001-12		
HW42z	U	ug/l	25	1202001-13	MS=49.1	98%
HW42z-F	U	ug/l	25	1202001-14		
HW46-PF	U	ug/l	25	1202001-16		
HW34a-P	84	ug/l	25	1202001-17		
HW34a-PF	86	ug/l	25	1202001-18		
HW28a	U	ug/l	25	1202001-20	DUP=U	RPD=NA
HW28a-F	U	ug/l	25	1202001-21	DUP=U	RPD=NA
HW28a-P	U	ug/l	25	1202001-22		
HW39	134	ug/l	25	1202001-23	DUP=139.2	RPD=4
HW39-P	135	ug/l	25	1202001-24		
HW39-PF	138	ug/l	25	1202001-25		
HW40	U	ug/l	25	1202001-26		
HW40-F	U	ug/l	25	1202001-27		
HW40-P	U	ug/l	25	1202001-28		
HW40-PF	U	ug/l	25	1202001-29		
HW41	U	ug/l	25	1202001-30		
HW41-F	U	ug/l	25	1202001-31		
HW41-P	U	ug/l	25	1202001-32	MS=61.1	99%
HW41-PF	U	ug/l	25	1202001-33	MS=60.9	98%
HW28b-PF	U	ug/l	25	1202001-37		
HW28a-PF	U	ug/l	25	1202001-38		
HW39-F	133	ug/l	25	1202001-39	MS=187.2	109%
HW09-PF	U	ug/l	25	1202001-40		
FB10-F	U	ug/l	25	1202001-41		

HW09-F	U	ug/l	25	1202001-42	DUP=U	RPD=NA
HW28b-P	U	ug/l	25	1202001-43		
HW09	U	ug/l	25	1202001-44	MS=55	99%
HW09-P	U	ug/l	25	1202001-45		
FB10	U	ug/l	25	1202001-46		
HW39-RO	25	ug/l	25	1202001-51		
BLK2	U	ug/l	25	BB20303-BLK2		
BS2	488	ug/l	25	BB20303-BS2		98%
BLK2	U	ug/l	25	BB20603-BLK2		
BS1	48.4	ug/l	25	BB20603-BS1		97%
BLK2	U	ug/l	25	BB20706-BLK2		
BS1	47.5	ug/l	25	BB20706-BS1		95%
HW45	U	g/l	25	1202003-01	DUP=U	RPD=NA
HW45-P	U	ug/l	25	1202003-02		
HW43-P	U	ug/l	25	1202003-03		
HW43	U	ug/l	25	1202003-04	MS=68.2	98%
EB02	U	ug/l	25	1202003-05		
HW45-F	U	ug/l	25	1202003-06		
HW45-PF	U	ug/l	25	1202003-07		
HW43-F	U	ug/l	25	1202003-08		
EB02-F	U	ug/l	25	1202003-09		
HW43-PF	U	ug/l	25	1202003-10		
HW15a-P	33.5	ug/l	25	1202003-13		
HW31-P	43.8	ug/l	25	1202003-14	DUP=42.8	RPD=2
HW30	30.1	ug/l	25	1202003-15		
HW30-P	32.1	ug/l	25	1202003-16		
HW31	41.5	ug/l	25	1202003-17	MS=95.9	108%
FB11	U	ug/l	25	1202003-18		
HW31z	41.8	ug/l	25	1202003-19		
HW15a	32.3	ug/l	25	1202003-20		
HW30-PF	29.8	ug/l	25	1202003-24		
HW15a-F	29.1	ug/l	25	1202003-25		
HW31-F	42.9	ug/l	25	1202003-26	DUP=41.5	RPD=3
HW31z-F	42	ug/l	25	1202003-27		
HW30-F	27.8	ug/l	25	1202003-28	MS=80.7	106%
HW31-PF	40.8	ug/l	25	1202003-29		
HW15a-PF	31.6	ug/l	25	1202003-30		
FB11-F	U	ug/l	25	1202003-31		
HW38-P	U	ug/l	25	1202003-32		
FB13	U	ug/l	25	1202003-33		
FB12	U	ug/l	25	1202003-34		
HW47	115	ug/l	25	1202003-35	DUP=116.2	RPD-1
HW51	U	ug/l	25	1202003-36	MS=58.3	96%
HW38	U	ug/l	25	1202003-37		

HW51-P	U	ug/l	25	1202003-38		
HW47-P	U	ug/l	25	1202003-39		
HW51-PF	U	ug/l	25	1202003-40		
HW38-F	U	ug/l	25	1202003-41	DUP=U	RPD=NA
HW47-PF	U	ug/l	25	1202003-42		
HW38-PF	U	ug/l	25	1202003-43	MS=52.9	93%
FB13-F	U	ug/l	25	1202003-44		
FB12-F	U	ug/l	25	1202003-45		
HW51-F	U	ug/l	25	1202003-46		
HW47-F	128	ug/l	25	1202003-47		
BLK2	U	ug/l	25	BB20707-BLK2		
BS1	53.1	ug/l	25	BB20707-BS1		106%
BLK2	U	ug/l	25	BB20803-BLK2		
BS1	53.1	ug/l	25	BB20803-BS1		106%
BLK2	U	ug/l	25	BB20907-BLK2		
BS1	48.5	ug/l	25	BB20907-BS1		97%
HW48	U	ug/l	25	1202004-01	DUP=U	RPD=NA
HW48-F	U	ug/l	25	1202004-02		
HW48z	U	ug/l	25	1202004-03		
HW48z-F	U	ug/l	25	1202004-04		
HW21	U	ug/l	25	1202004-06	MS=49.3	95%
HW21-F	U	ug/l	25	1202004-07		
HW21z	U	ug/l	25	1202004-08		
HW21z-F	U	ug/l	25	1202004-09		
HW23-P	U	ug/l	25	1202004-11		
HW22	33.5	ug/l	25	1202004-13	DUP=33.1	RPD=1
HW22-F	U	ug/l	25	1202004-14		
HW23	U	ug/l	25	1202004-15	MS=60.3	94%
HW23-F	U	ug/l	25	1202004-16		
HW22-P	30.2	ug/l	25	1202004-17		
HW23-PF	U	ug/l	25	1202004-19		
HW22-PF	U	ug/l	25	1202004-20		
HW36n	U	ug/l	25	1202004-21		
HW49	U	ug/l	25	1202004-22		
HW16-P	100	ug/l	25	1202004-23		
HW54-P	U	ug/l	25	1202004-24		
FB14	U	ug/l	25	1202004-25		
HW16z	105	ug/l	25	1202004-26		
HW16	103	ug/l	25	1202004-27	DUP=103.8	RPD=1
HW44	U	ug/l	25	1202004-28		
HW49-P	U	ug/l	25	1202004-29		
HW36n-P	U	ug/l	25	1202004-30		
FB15	U	ug/l	25	1202004-31		
HW54	U	ug/l	25	1202004-32	MS=58.2	93%

HW36n-F	U	ug/l	25	1202004-33		
HW49-F	U	ug/l	25	1202004-34		
HW54-PF	U	ug/l	25	1202004-35	DUP=U	RPD=NA
HW16-PF	104	ug/l	25	1202004-36		
FB14-F	U	ug/l	25	1202004-37		
HW16z-F	102	ug/l	25	1202004-38		
HW16-F	104	ug/l	25	1202004-39		
HW44-F	U	ug/l	25	1202004-40	MS=52.6	90%
HW54-F	U	ug/l	25	1202004-41		
HW36n-PF	U	ug/l	25	1202004-42		
HW49-PF	U	ug/l	25	1202004-43		
FB15-F	U	ug/l	25	1202004-44		
BLK2	U	ug/l	25	BB21006-BLK2		
BS1	46.6	ug/l	25	BB21006-BS1		93%
BS1	47.9	ug/l	25	BB21302-BS1		96%
BLK2	U	ug/l	25	BB21302-BLK2		
HW27z-F	U	ug/l	25	1202005-01		
HW27-F	U	ug/l	25	1202005-02		
HW55-F	U	ug/l	25	1202005-03		
FB16-F	U	ug/l	25	1202005-04		
HW27z	U	ug/l	25	1202005-07		
HW27	U	ug/l	25	1202005-08	DUP=U	RPD=NA
FB16	U	ug/l	25	1202005-09		
HW55	U	ug/l	25	1202005-10	MS=68.8	96%
HW59	U	ug/l	25	1202005-11		
HW11-P	U	ug/l	25	1202005-12		
HW11	U	ug/l	25	1202005-13	DUP=U	RPD=NA
HW53	U	ug/l	25	1202005-14	MS=54.8	99%
HW53-P	U	ug/l	25	1202005-15		
FB17	U	ug/l	25	1202005-16		
HW57-P	U	ug/l	25	1202005-17		
HW58	U	ug/l	25	1202005-18	MS=69.2	93%
HW59-F	U	ug/l	25	1202005-24		
HW11-PF	U	ug/l	25	1202005-25		
HW11-F	U	ug/l	25	1202005-26		
HW53-F	U	ug/l	25	1202005-27		
HW53-PF	U	ug/l	25	1202005-28		
HW58-F	U	ug/l	25	1202005-29		
FB17-F	U	ug/l	25	1202005-30		
HW57-PF	U	ug/l	25	1202005-31		
HW57-F	U	ug/l	25	1202005-32		
HW57	U	ug/l	25	1202005-33	DUP=U	RPD=NA
HW03	U	ug/l	25	1202005-34	DUP=U	RPD=NA
HW03-F	U	ug/l	25	1202005-35		

Dimock Lithium Results
(EPA R3 Laboratory Supplemental Results per 3/28/2012 Memo)

HW03z	U	ug/l	25	1202005-36		
HW03z-F	U	ug/l	25	1202005-38		
FB18	U	ug/l	25	1202005-39		
HW07	U	ug/l	25	1202005-40	MS=55.4	95%
HW07-F	U	ug/l	25	1202005-41		
FB18-F	U	ug/l	25	1202005-43		
BLK2	U	ug/l	25	BB21502-BLK2		
BS1	45.6	ug/l	25	BB21502-BS1		91%
BLK2	U	ug/l	25	BB21505-BLK2		
BS1	44.2	ug/l	25	BB21505-BS1		88%
BLK2	U	ug/l	25	BB22103-BLK2		
BS1	44.3	ug/l	25	BB22103-BS1		89%

ICP-AES METALS Technical Review Checklist

(200.7, 6010) Hardness_____

For Internal Use Only

Site Name: Dimock WO#: 1201013

Analyst: JR Dorsey Date given to Reviewer: 3/13/12

Matrix (circle): Solid / Aqueous / Other _____ SOP R3QA159-021511 / R3QA155-021511

(If TCLP is run: SOP R3QA135-021011)

Program (circle): Superfund / RCRA / Compliance NPDES or SDWA / Other: _____

The signature below indicates the following:

- This data meets the needs of the customer according to the request.
- The analysis was performed as per the SOP, or exceptions documented.
- All documentation needed to recreate the analyses has been reviewed.
- Data Review status set to Peer Reviewed in Element.

1-16, 19-28 (not 17 + 18) Li only

Peer Reviewer signature _____ Date accepted 3/15/12

If any data for this case is stored with another case file, give Site Name and WO#_____

Peer Reviewer Completes Section Below:

General:	YES	NO	N/A	Comments
Raw data is identified with sample ID's, site name, WO#, analyst name, date of analysis.	✓			
Quality Control:				
First CCV ±5% and RSD <3;	✓			
All other CCV ±10%, every 10 samples and end of run;	✓			
For Compliance samples (SDWA and NPDES):				
SCV ±5% (each time, including PTs)	✓			
All other samples SCV ±10%			✓	
LCV ±30%;	✓			
IBL < |Reporting limit|, analyzed with each CCV ;	✓			
BS (LCS) ±15%;	✓			
SRM (soils) within vendor acceptance limits;			✓	
BLK < |Reporting limit| (if >Reporting Limit **and** >1/10 of sample - must qualify)	✓			
MS [±30%] unless spike is <30% of sample value;	✓			
RPDs from DUP ≤20% aqueous & 35% soils;	✓			
Sample results < CAL or within documented linear range;	✓			

Interference Checks:

Spectral overlays or 2nd wavelength used or interfering elements not present above CAL — ✓

IFA recovery at ±20%; — ✓

Non-interfering elements ± | Reporting limit | or calculated range from 200.7; — ✓

Calculations/Report:

Calculations and transcriptions checked. — ✓

Element Draft Report reviewed. — ✓

Deviations and problems documented. — ✓

NOTE: When soils are being reported, the *sample qualifier* 'dry' or 'wet' must be entered so that it appears in the header of the Element report. This will signify that the data was report 'wet weight' or 'dry weight' as appropriate.

Additional Comments by Peer Reviewer:

Analyst Ensures that the Data Case File is Complete and Accurate:

- ___ Bench sheet (TCLP prep log)
- NA IEC tables — NO IEC'S ONLY
- ___ Instrument run log
- ___ Standard/Reagent Prep log
- ___ TV sheets
- ___ Element Peer Review report
- ___ Raw data
- ___ Data status set to analyzed

Additional Comments by Analyst on data issues:

On-Demand Data Checklist
(used in addition to routine TRC)
For Internal Use Only

Parameter: Li
Procedure/Method/Reference: 200.7

Site Name: Dimock WO#: 1201013
Analyst: JR Donsey

Samples 01-28 except 17,18

The signature below indicates the following:
• The analysis was performed as per the On-Demand requirements below.

Peer Reviewer signature C Costa Date accepted 3·15·12

Peer Reviewer Completes Section Below:

This is a special request which falls outside our routine protocols. Therefore, these samples were analyzed and the quality control (QC) were evaluated based on the "On Demand" criteria. These protocols include all the QC checks as per routine analyses plus special verification of the performance of the analytical method at the reported quantitation limit/s. These protocols are specified in the EPA Region III OASQA Laboratory Quality Manual, current version.

Quality Control:	**YES**	**NO**	**N/A**	**Comments**
A written procedure or reference must be available for the method being performed and referenced in the narrative. If the method to be performed is unique, the procedures must be fully documented.	✓			
Calibration of the instrumentation or analytical procedure must be according to the method or procedure.	✓			
Calibration verified by analysis of second source standard (SCV, SRM), if available. Concentration must be in the range of the calibration. Results must be within the method, procedure, client or in-house limits.	✓			
Analysis of one method blank (BLK) with each batch. Ideally, the results should be less than the expected quantitation levels set by the method, procedure, or in-house requirements.	✓			
Analysis of one matrix spike (MS) with each batch. For samples or parameters which do not lend themselves to matrix spiking, a BS or SRM sample must be analyzed. Results of spikes must be within the method, procedure, client or in-house limits.	✓			
Analysis of one duplicate analyses (DUP) or a quality control sample such as an SRM or BS with each batch. If duplicate analyses is not possible, e.g, insufficient sample quantity, a quality control sample must be analyzed in duplicate, if available. Results of duplicate analyses must be				

within the method, procedure, client or in-house limits. ✓

At least one blank spike (BS) must be carried through the entire method and analyzed with each batch. The concentration of the BS should be at the quantitation level or at the level of the expected sample results, if known. Results of the BS must be within the method, procedure, client or in-house limits. ✓

Any additional quality control items, such as surrogates, internal standards, etc., which the referenced method or procedure requires should be analyzed. Results must be within the method or, procedure limits. ✓

The analyst must document the impact on the usability of the reported data by applying qualifier codes if applicable and including a summary in the case file. ✓

Additional Comments:

RUN LOG FOR 3300DV OPTIMA JR DORSEY 03/13/12
DIMOCK 1201013 RERUN FOR Li @ 25 PPB

3/14/12

```
IBL
CALA
IBL
LCV  LI/SR
CCV@A/B
SCV@LVM
IFA@1
IFA@2
IFA@3
BA22503-BLK2
BA22503-BS1
1201013-01
1201013-02
BA22503-DUP2
1201013-03
BA22503-MS1
BA22602-BLK2
BA22602-BS1
1201013-04
IBL
CCV@A/B
1201013-05
BA22602-DUP2
1201013-06
BA22602-MS1
BA23003-BLK2
BA23003-BS1
1201013-07
1201013-08
1201013-09
BA23003-DUP2
IBL
CCV@A/B
1201013-10
BA2303-MS1
BA23002-BLK2
BA23002-BS1
1201013-12
1201013-13
BA23002-DUP2
1201013-14
BA23002-MS1
1201013-15
1201013-16
1201013-19
IBL
CCV@A/B
1201013-21
1201013-22
1201013-23
1201013-24
1201013-27
BA23002-DUP4
1201013-28
BA23002-MS3
IBL
CCV@A/B
```

Perkin Elmer 3300 OPTIMA

Analyst: JRD Dorsey Date: 3/13/12 Pipets Logbook # SNB11

Run Filename: DV120313 (all electronic files saved using Run Filename) SOP #: R3-QA159

SITE/WO#: 1 Dimock 1201013 Reagent Purity checked ✓

SCV in 2% nitric / 2% HCl matrix (**made daily**): (diluted with IBL) or alternate matrix of _____

* Stock Solution	Expiration Date	Stock Conc	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Check used
QC-7A	1-12	100 mg/L 1000 mg/L (K)	Spex	13852	0.5 ml	12.5 ml	see TV sheet	
QC-21	1-12	100 mg/L	Spex	13853	0.5ml	12.5 ml	see TV sheet	✓
QC-7A (Ag)	1-12	50 mg/L	Spex	13853	0.05ml	25 ml	0.100 mg/L	

* See Certificate of Analysis for analytes.

Internal Standard in 2% nitric matrix (made as needed...no expiration date applicable)

Stock Solution	Stock Conc	Vendor	Bar Code	Stock Volume	Nitric Volume	Final Volume	Final Conc
Yttrium	1000 mg/L	High Purity	4004	5 mL	10 mL	500 mL	10mg

Calibration Standards (CAL) and IBL in 2% nitric / 2% HCl matrix (2 mL acid per 100 mL solution) or alternate matrix of _____

	* Stock Soln and Conc	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Date made/ Preparer	Ch if u
IBL	na	na	na	na	1000 mL	na	made daily	√
CAL A	CAL STD A-R Solution A+B (see certificate)	High Purity	11004 11002	10 mL A 10 mL B	1000 ml	see TV sheet	3/11 jrd	
CAL B	CAL STD B: Solution A+B (see certificate)	High Purity	11010 11002	10 mL A 10 mL B	1000 ml	see TV sheet	10/11 jrd	
CAL AG	Silver 1000 mg/L	High Purity	11884	0.02 mL	100 ml	0.20 mg/L		
CAL BS								
CAL A	CAL STD A-R Solution A+B (see certificate)	High Purity	11004 11002	2.5 mL A 2.5 mL B	200 ml	see TV sheet	2/17/12 jrd	✓
	Li @ 10,000 ppm Sr @1000 ppm	High Purity High Purity	11008 11882	0.1ml 1.0 ml				
CAL B	CAL STD B: Solution A+B (see certificate)	High Purity	11010 11002	2.5 mL A 2.5 mL B	200 ml	see TV sheet	2/17/12 jrd	

Perkin Elmer 3300 OPTIMA

Other QC standards in 2% nitric / 2% HCl matrix (2 mL acid per 100 mL solution) or alternate matrix of _____

	*Stock Soln and Concentration	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Date made/ Preparer	Che if us
LCV (10:1)	EPA-CRDL-RR (See certificate) + 1000 mg/L (Ag)	High Purity EM	5759 3355 (Ag)	0.5 mL 0.01mL	100 mL 100 mL	See below^ 0.1 mg/L	1/11 JRD	
^LCV made daily by diluting the LCV(10:1) solution by 10X using the IBL. See TV sheet for final concs.								
LCV (Ag)	LCV Li	Dilute BS 2x		TV = 25ppb			2/13/12	✓
LCV	Li & Sr made by diluting	the SCV @ 20X	TV = 0.200 mg/L	Made daily				
IFA 1	10,000 mg/L Ca 10,000 mg/L Al 10,000 mg/L Ni	High Purity High Purity High Purity	10171 11887 5971	5 mL 5 mL 1 mL	200 mL	250 mg/L 250 mg/L 50 mg/L	1/2012 jrd	✓
IFA 2	10,000 mg/L Na 10,000 mg/L Mg 10,000 mg/L Fe	High Purity High Purity High Purity	11808 10172 11886	5 mL 5 mL 5 mL	200 mL	250 mg/L 250 mg/L 250 mg/L	6/11 rc	✓
IFA 3	10,000 mg/L Mn 10,000 mg/L Cu 10,000 mg/L Cr	High Purity High Purity High Purity	5974 5972 5973	1 mL 0.4 mL 1 mL	200 mL	50 mg/L 20 mg/L 50 mg/L	1/2012 jrd	✓

* See Certificate of Analysis for analytes and initial concentrations.

Check standards (made daily) Matrix will be the same as the Calibration Standards (CAL) and IBL (lcb)

CCV Solution ID	Prepared by diluting 1:1	Final Conc	Check if used
CCV AB	CAL A plus CAL B	see TV sheet	✓
CCV AG	CAL AG plus IBL	0.10 mg/L	
CCV BS	CAL BS plus IBL	2.5 mg/L	

Reagent Acid Stocks

	Vendor	Bar Code		Vendor	Bar Code
Nitric Acid	Fisher	11152	HCl Acid	Fisher	11148

Certificates of Analysis Logbook # _____ SNB 2 _____

Comments: _____

OASQA TRUE VALUES for ICP Standards and QC

CAL stock	ICP	CCV ±5% (ppm)	SCV ±5%/±10% (ppm) (First time ±5%, all others ±10%)	LCV ±30% (ppm)	BS/MS ±15/30% (ppm) (based on 0.5ml stock to 50 mL)	IFA1 ± 20% (ppm)	IFA2 ± 20% (ppm)	IFA2 ±20% (ppm)
AG	**Ag**	0.100	0.100	0.010	0.050			
B	**Al**	10.00	4.00	0.200	2.00	250 ((ag),as,cd, pb,sb,tl,zn)		
B	**As**	5.00	4.00	0.200	0.500			
A	**Ba**	2.50	4.00	0.200	2.00			
A	**Be**	2.50	4.00	0.005	0.050			
A	**B**	2.50	4.00	0.200	0.500			
B	**Ca**	25.00	4.00	0.500	10.00	250(al,b,cu,sn)		
A	**Cd**	2.50	4.00	0.005	0.050			
A	**Co**	2.50	4.00	0.050	0.500			
B	**Cr**	5.00	4.00	0.010	0.500			50 (as,be,cd,sb,zn)
B	**Cu**	5.00	4.00	0.025	0.500			20 (ag,pb,(cd))
B	**Fe**	10.00	4.00	0.100	5.00		250(as,ag,cd,cr,ni,pb,sb,tl,zn)	
B	**K**	25.00	40.00	2.000	20.00			
	Li	2.50*	4.00	0.200*	0.500 (HP)			
B	**Mg**	25.00	4.00	0.500	10.00		250	
B	**Mn**	5.00	4.00	0.015	0.500			50 (b)
A	**Mo**	0.500	4.00	0.200	0.500			
B	**Na**	25.00	4.00	1.000	10.00		250	
B	**Ni**	5.00	4.00	0.040	0.500	50 (cd,cr,pb,sb)		
A	**Pb**	2.50	4.00	0.050	0.500			
A	**Sb**	2.50	4.00	0.060	0.500			
A	**Se**	2.50	4.00	0.200	0.500			
A	**Sn**	2.50	1.00*	0.200	0.500			
	Sr	2.50*	4.00	0.200*	0.500			
A	**Ti**	0.500	4.00	0.200	0.500			
A	**Tl**	2.50	4.00	0.200	0.500			
	U				0.500			
A	**V**	1.25	4.00	0.050	0.500			
B	**Zn**	10.00	4.00	0.020	0.500			

* need to be added separately

( ) = most likely analytes to be interfered with

I:\ASQAB_AT Team\FORMS\METALS\archive\TV table ICP metals.doc Jan 2012

TCLP ppm levels (As-5, Ba-100, Cd-1, Cr-5, Pb-5, Se-1, Ag-5)

3/13/12

D. Mock 1201013

Li only

==========

Analysis Begun

Start Time: 3/13/2012 2:00:10 PM
Plasma On Time: 3/13/2012 8:08:29 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BA22302-23003.sif
Batch ID: BA22602-BA23003
Results Data Set: DV120313
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 1
Autosampler Location: 1
Sample ID: IBL
Date Collected: 3/13/2012 2:00:10 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	732239.5	12016.35	1.64%	100.0	%
Li 670.784†	849.4	193.27	22.75%	[0.00]	mg/L
Sr 421.552†	-65.8	9.01	13.70%	[0.00]	mg/L

==========

Sequence No.: 2
Autosampler Location: 3
Sample ID: CALA
Date Collected: 3/13/2012 2:02:44 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: CALA

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	710069.4	3791.55	0.53%	96.97	%
Li 670.784†	828605.2	1906.22	0.23%	[5]	mg/L
Sr 421.552†	4218018.0	33557.16	0.80%	[5]	mg/L

==========

Sequence No.: 3
Autosampler Location: 1
Sample ID: IBL
Date Collected: 3/13/2012 2:05:32 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	718848.9	98.17	%	0.288				0.29%
Li 670.784†	197.3	0.0012	mg/L	0.00071	1.190	µg/L	0.7150	60.06%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	359.6	0.0004	mg/L	0.00009	0.4263	µg/L	0.09089	21.32%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

==========

Sequence No.: 4
Autosampler Location: 5
Sample ID: LCV LI/SR
Date Collected: 3/13/2012 2:08:06 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: LCV LI/SR

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD

TV = 25

Y 371.029	729701.9	99.65 %	0.370			0.37%
Li 670.784†	4152.7	0.0251 mg/L	0.00033	25.06 µg/L	0.331	1.32%
QC value within limits for Li 670.784 Recovery = 100.23%						
Sr 421.552†	21336.3	0.0253 mg/L	0.00004	~~25.29~~ µg/L	0.039	0.16%
QC value within limits for Sr 421.552 Recovery = 101.17%						

All analyte(s) passed QC.

Sequence No.: 5
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/13/2012 2:10:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	717147.0	97.94	%	0.100				0.10%
Li 670.784†	415283.8	2.506	mg/L	0.0252	2506	µg/L	25.2	1.01%
QC value within limits for Li 670.784 Recovery = 100.24%								
Sr 421.552†	2074863.1	2.460	mg/L	0.0069	2460	µg/L	6.9	0.28%
QC value within limits for Sr 421.552 Recovery = 98.38%								

All analyte(s) passed QC.

Sequence No.: 6
Sample ID: SCV@LVM
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/13/2012 2:13:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SCV@LVM

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	719887.6	98.31	%	0.409				0.42%
Li 670.784†	641481.7	3.871	mg/L	0.0222	3871	µg/L	22.2	0.57%
QC value within limits for Li 670.784 Recovery = 96.77%								
Sr 421.552†	3315055.8	3.930	mg/L	0.0301	3930	µg/L	30.1	0.77%
QC value within limits for Sr 421.552 Recovery = 98.24%								

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: IFA@1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 3/13/2012 2:15:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IFA@1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	698832.5	95.44	%	0.321				0.34%
Li 670.784†	695.2	0.0042	mg/L	0.00044	4.195	µg/L	0.4407	10.50%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	1981.6	0.0023	mg/L	0.00015	2.349	µg/L	0.1535	6.54%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: IFA@2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 3/13/2012 2:18:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IFA@2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD

Y 371.029	673613.3	91.99 %	0.811				0.88%
Li 670.784†	1562.0	0.0094 mg/L	0.00092	9.425 µg/L		0.9188	9.75%
QC value within limits for Li 670.784 Recovery = Not calculated							
Sr 421.552†	438.3	0.0005 mg/L	0.00002	0.5195 µg/L		0.02469	4.75%
QC value within limits for Sr 421.552 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 9 — **Autosampler Location: 15**
Sample ID: IFA@3 — **Date Collected: 3/13/2012 2:21:06 PM**
Analyst: — **Data Type: Original**
Initial Sample Wt: — **Initial Sample Vol:**
Dilution: — **Sample Prep Vol:**

Mean Data: IFA@3

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	717643.8	98.01	%	0.900				0.92%
Li 670.784†	660.1	0.0040	mg/L	0.00035	3.983	µg/L	0.3479	8.74%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	-73.0	-0.0001	mg/L	0.00004	-0.0866	µg/L	0.04298	49.65%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 10 — **Autosampler Location: 17**
Sample ID: BA22503-BLK2 — **Date Collected: 3/13/2012 2:23:44 PM**
Analyst: — **Data Type: Original**
Initial Sample Wt: — **Initial Sample Vol:**
Dilution: — **Sample Prep Vol:**

Mean Data: BA22503-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	728909.1	99.55	%	0.292				0.29%
Li 670.784†	248.8	0.0015	mg/L	0.00036	1.502	µg/L	0.3633	24.19%
Sr 421.552†	48.1	0.0001	mg/L	0.00004	0.0570	µg/L	0.04470	78.42%

Sequence No.: 11 — **Autosampler Location: 18**
Sample ID: BA22503-BS1 — **Date Collected: 3/13/2012 2:26:24 PM**
Analyst: — **Data Type: Original**
Initial Sample Wt: — **Initial Sample Vol:**
Dilution: — **Sample Prep Vol:**

Mean Data: BA22503-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	734790.9	100.3	%	1.00				0.99%
Li 670.784†	8385.8	0.0506	mg/L 101%	0.00040	50.60	µg/L	0.402	0.79%
Sr 421.552†	43047.6	0.0510	mg/L	0.00014	51.03	µg/L	0.142	0.28%

Sequence No.: 12 — **Autosampler Location: 19**
Sample ID: 1201013-01 — **Date Collected: 3/13/2012 2:28:49 PM**
Analyst: — **Data Type: Original**
Initial Sample Wt: — **Initial Sample Vol:**
Dilution: — **Sample Prep Vol:**

Mean Data: 1201013-01

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	736923.3	100.6	%	1.03				1.02%
Li 670.784†	188.1	0.0011	mg/L	0.00039	1.135	µg/L	0.3930	34.62%
Sr 421.552†	51.9	0.0001	mg/L	0.00002	0.0615	µg/L	0.02286	37.20%

Sequence No.: 13 — **Autosampler Location: 20**

Sample ID: 1201013-02
Analyst:
Initial Sample Wt:
Dilution:

Date Collected: 3/13/2012 2:31:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-02

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	742542.2	101.4	%	0.82				0.81%
Li 670.784†	-94.2	-0.0006	mg/L	0.00035	-0.5687	µg/L	0.35406	62.26%
Sr 421.552†	38.8	0.0000	mg/L	0.00001	0.0460	µg/L	0.01031	22.41%

Sequence No.: 14
Sample ID: BA22503-DUP2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/13/2012 2:33:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA22503-DUP2

RPD-NC

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	728399.1	99.48	%	0.837				0.84%
Li 670.784†	-134.7	-0.0008	mg/L	0.00050	-0.8130	µg/L	0.49579	60.98%
Sr 421.552†	3.4	0.0000	mg/L	0.00007	0.0040	µg/L	0.06792	>999.9%

Sequence No.: 15
Sample ID: 1201013-03
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 3/13/2012 2:36:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-03

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	722920.1	98.73	%	0.377				0.38%
Li 670.784†	2289.0	0.0138	mg/L	0.00036	13.81	µg/L	0.365	2.64%
Sr 421.552†	130826.6	0.1551	mg/L	0.00025	155.1	µg/L	0.25	0.16%

Sequence No.: 16
Sample ID: BA22503-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 3/13/2012 2:38:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA22503-MS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	736798.6	100.6	%	0.53				0.53%
Li 670.784†	10722.3	0.0647	mg/L	0.00137	64.70	µg/L	1.373	2.12%
Sr 421.552†	176857.6	0.2096	mg/L	0.00141	209.6	µg/L	1.41	0.67%

Sequence No.: 17
Sample ID: BA22602-BLK2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 3/13/2012 2:41:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA22602-BLK2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	736558.3	100.6	%	1.32				1.31%
Li 670.784†	77.4	0.0005	mg/L	0.00028	0.4672	µg/L	0.27797	59.50%
Sr 421.552†	60.6	0.0001	mg/L	0.00005	0.0718	µg/L	0.05472	76.19%

Sequence No.: 18
Sample ID: BA22602-BS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 3/13/2012 2:43:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA22602-BS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	725186.3	99.04	%	0.527				0.53%
Li 670.784†	8347.7	0.0504	mg/L	0.00034	50.37	µg/L	0.335	0.67%
Sr 421.552†	43207.4	0.0512	mg/L	0.00008	51.22	µg/L	0.077	0.15%

101%

Sequence No.: 19
Sample ID: 1201013-04
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 3/13/2012 2:46:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-04

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	741407.5	101.3	%	0.51				0.51%
Li 670.784†	2178.6	0.0131	mg/L	0.00059	13.15	µg/L	0.593	4.51%
Sr 421.552†	131844.2	0.1563	mg/L	0.00028	156.3	µg/L	0.28	0.18%

Sequence No.: 20
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/13/2012 2:48:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	729649.0	99.65	%	0.322				0.32%
Li 670.784†	13.5	0.0001	mg/L	0.00056	0.0812	µg/L	0.55885	688.05%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	19.1	0.0000	mg/L	0.00003	0.0226	µg/L	0.03330	147.32%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 21
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/13/2012 2:51:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	707961.8	96.68	%	0.354				0.37%
Li 670.784†	417077.6	2.517	mg/L	0.0041	2517	µg/L	4.1	0.16%
QC value within limits for Li 670.784 Recovery = 100.67%								
Sr 421.552†	2079926.0	2.466	mg/L	0.0032	2466	µg/L	3.2	0.13%
QC value within limits for Sr 421.552 Recovery = 98.62%								

All analyte(s) passed QC.

Sequence No.: 22
Sample ID: 1201013-05
Analyst:
Initial Sample Wt:

Autosampler Location: 27
Date Collected: 3/13/2012 2:53:45 PM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol:

Mean Data: 1201013-05

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	720970.3	98.46	%	0.652				0.66%
Li 670.784†	2715.1	0.0164	mg/L	0.00043	16.38	µg/L	0.430	2.62%
Sr 421.552†	144252.9	0.1710	mg/L	0.00036	171.0	µg/L	0.36	0.21%

Sequence No.: 23
Sample ID: BA22602-DUP2
Analyst:
Initial Sample Wt:
Dilution:

RPD = NA

Autosampler Location: 28
Date Collected: 3/13/2012 2:56:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA22602-DUP2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	720538.8	98.40	%	0.839				0.85%
Li 670.784†	2862.6	0.0173	mg/L	0.00081	17.27	µg/L	0.805	4.66%
Sr 421.552†	144636.5	0.1715	mg/L	0.00026	171.5	µg/L	0.26	0.15%

Sequence No.: 24
Sample ID: 1201013-06
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 3/13/2012 2:58:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-06

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	733721.9	100.2	%	0.42				0.42%
Li 670.784†	2359.9	0.0142	mg/L	0.00060	14.24	µg/L	0.597	4.19%
Sr 421.552†	145386.7	0.1723	mg/L	0.00032	172.3	µg/L	0.32	0.19%

Sequence No.: 25
Sample ID: BA22602-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 3/13/2012 3:00:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA22602-MS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	719381.6	98.24	%	0.961				0.98%
Li 670.784†	11650.2	0.0703	mg/L	0.00027	70.30	µg/L	0.274	0.39%
Sr 421.552†	193268.3	0.2291	mg/L	0.00056	229.1	µg/L	0.56	0.25%

112%

Sequence No.: 26
Sample ID: BA23003-BLK2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 3/13/2012 3:03:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA23003-BLK2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	734000.5	100.2	%	0.49				0.49%
Li 670.784†	-99.6	-0.0006	mg/L	0.00009	-0.6013	µg/L	0.09114	15.16%
Sr 421.552†	62.3	0.0001	mg/L	0.00004	0.0738	µg/L	0.04053	54.91%

Sequence No.: 27 Autosampler Location: 32

Sample ID: BA23003-BS1
Analyst:
Initial Sample Wt:
Dilution:

Date Collected: 3/13/2012 3:05:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA23003-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	736692.7	100.6	%	0.12				0.12%
Li 670.784†	8209.1	0.0495	mg/L	0.00015	49.54	µg/L	0.147	0.30%
Sr 421.552†	44639.8	0.0529	mg/L	0.00004	52.92	µg/L	0.037	0.07%

Sequence No.: 28
Sample ID: 1201013-07
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 3/13/2012 3:08:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-07

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	725468.1	99.08	%	0.616				0.62%
Li 670.784†	162.3	0.0010	mg/L	0.00055	0.9791	µg/L	0.54935	56.11%
Sr 421.552†	37.9	0.0000	mg/L	0.00004	0.0449	µg/L	0.03814	84.98%

Sequence No.: 29
Sample ID: 1201013-08
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 3/13/2012 3:10:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-08

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	723791.1	98.85	%	0.988				1.00%
Li 670.784†	191.3	0.0012	mg/L	0.00038	1.154	µg/L	0.3771	32.67%
Sr 421.552†	24.8	0.0000	mg/L	0.00002	0.0294	µg/L	0.02482	84.51%

Sequence No.: 30
Sample ID: 1201013-09
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 3/13/2012 3:13:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-09

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	730776.1	99.80	%	0.173				0.17%
Li 670.784†	4794.5	0.0289	mg/L	0.00020	28.93	µg/L	0.198	0.68%
Sr 421.552†	235351.7	0.2790	mg/L	0.00052	279.0	µg/L	0.52	0.19%

Sequence No.: 31
Sample ID: BA23003-DUP2
Analyst:
Initial Sample Wt:
Dilution:

RPD-7

Autosampler Location: 36
Date Collected: 3/13/2012 3:15:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA23003-DUP2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	718067.9	98.06	%	0.822				0.84%
Li 670.784†	5139.8	0.0310	mg/L	0.00087	31.01	µg/L	0.872	2.81%
Sr 421.552†	235393.2	0.2790	mg/L	0.00030	279.0	µg/L	0.30	0.11%

Sequence No.: 32
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/13/2012 3:18:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	730461.3	99.76	%	0.450				0.45%
Li 670.784†	215.4	0.0013	mg/L	0.00079	1.300	µg/L	0.7850	60.40%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	76.2	0.0001	mg/L	0.00004	0.0903	µg/L	0.03691	40.87%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 33
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/13/2012 3:20:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	701728.2	95.83	%	0.974				1.02%
Li 670.784†	419150.3	2.529	mg/L	0.0015	2529	µg/L	1.5	0.06%
QC value within limits for Li 670.784 Recovery = 101.17%								
Sr 421.552†	2081595.3	2.468	mg/L	0.0030	2468	µg/L	3.0	0.12%
QC value within limits for Sr 421.552 Recovery = 98.70%								

All analyte(s) passed QC.

Sequence No.: 34
Sample ID: 1201013-10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 3/13/2012 3:23:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-10

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	726277.2	99.19	%	0.495				0.50%
Li 670.784†	5094.8	0.0307	mg/L	0.00067	30.74	µg/L	0.670	2.18%
Sr 421.552†	236119.8	0.2799	mg/L	0.00026	279.9	µg/L	0.26	0.09%

Sequence No.: 35
Sample ID: BA2303-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 3/13/2012 3:25:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA2303-MS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	725896.0	99.13	%	0.188				0.19%
Li 670.784†	13721.5	0.0828	mg/L	0.00145	82.80	µg/L	1.448	1.75%
Sr 421.552†	284895.8	0.3377	mg/L	0.00139	337.7	µg/L	1.39	0.41%

User canceled analysis.

Analysis Begun

Start Time: 3/13/2012 3:29:48 PM
Plasma On Time: 3/13/2012 8:08:29 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BA22302-23003.sif
Batch ID: BA22602-BA23003
Results Data Set: DV120313
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Autosampler Location: 1
Sample ID: IBL
Date Collected: 3/13/2012 3:29:48 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:
User canceled analysis.

Analysis Begun

Start Time: 3/13/2012 3:30:16 PM
Plasma On Time: 3/13/2012 8:08:29 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BA22302-23003.sif
Batch ID: BA22602-BA23003
Results Data Set: DV120313
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 8
Autosampler Location: 17
Sample ID: BA23002-BLK2
Date Collected: 3/13/2012 3:30:16 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: BA23002-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	729932.9	99.68	%	1.004				1.01%
Li 670.784†	37.9	0.0002	mg/L	0.00048	0.2287	µg/L	0.48226	210.88%
Sr 421.552†	20.1	0.0000	mg/L	0.00003	0.0238	µg/L	0.02757	115.74%

Sequence No.: 9
Autosampler Location: 18
Sample ID: BA23002-BS1
Date Collected: 3/13/2012 3:32:56 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: BA23002-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	729483.5	99.62	% 100%	0.229				0.23%
Li 670.784†	8311.1	0.0502	mg/L	0.00077	50.15	µg/L	0.772	1.54%
Sr 421.552†	42723.3	0.0506	mg/L	0.00017	50.64	µg/L	0.167	0.33%

Sequence No.: 10
Autosampler Location: 19
Sample ID: 1201013-12
Date Collected: 3/13/2012 3:35:21 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: 1201013-12

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	738712.2	100.9	%	0.28				0.28%
Li 670.784†	-35.4	-0.0002	mg/L	0.00046	-0.2136	µg/L	0.46295	216.73%
Sr 421.552†	27.2	0.0000	mg/L	0.00002	0.0322	µg/L	0.01803	55.98%

Sequence No.: 11
Sample ID: 1201013-13
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 3/13/2012 3:37:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-13

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	729756.3	99.66	%	0.410				0.41%
Li 670.784†	6463.8	0.0390	mg/L	0.00027	39.00	µg/L	0.266	0.68%
Sr 421.552†	605757.9	0.7181	mg/L	0.00524	718.1	µg/L	5.24	0.73%

Sequence No.: 12
Sample ID: BA23002-DUP2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/13/2012 3:40:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

RPD=4

Mean Data: BA23002-DUP2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	731502.4	99.90	%	0.299				0.30%
Li 670.784†	6179.5	0.0373	mg/L	0.00053	37.29	µg/L	0.526	1.41%
Sr 421.552†	614605.3	0.7285	mg/L	0.00181	728.5	µg/L	1.81	0.25%

Sequence No.: 13
Sample ID: 1201013-14
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 3/13/2012 3:43:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-14

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	712687.3	97.33	%	0.179				0.18%
Li 670.784†	6570.7	0.0396	mg/L	0.00154	39.65	µg/L	1.535	3.87%
Sr 421.552†	619504.7	0.7344	mg/L	0.00411	734.4	µg/L	4.11	0.56%

Sequence No.: 14
Sample ID: BA23002-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 3/13/2012 3:45:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

98%

Mean Data: BA23002-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	717968.7	98.05	%	0.104				0.11%
Li 670.784†	14661.2	0.0885	mg/L	0.00020	88.47	µg/L	0.203	0.23%
Sr 421.552†	647665.0	0.7677	mg/L	0.01198	767.7	µg/L	11.98	1.56%

98 %

Sequence No.: 15
Sample ID: 1201013-15
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 3/13/2012 3:48:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-15

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	737689.2	100.7	%	1.92				1.91%
Li 670.784†	6740.9	0.0407	mg/L	0.00083	40.68	µg/L	0.827	2.03%
Sr 421.552†	584005.2	0.6923	mg/L	0.01497	692.3	µg/L	14.97	2.16%

Sequence No.: 16
Sample ID: 1201013-16
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 3/13/2012 3:51:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-16

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	717084.6	97.93	%	0.830				0.85%
Li 670.784†	5131.0	0.0310	mg/L	0.00047	30.96	µg/L	0.468	1.51%
Sr 421.552†	619144.9	0.7339	mg/L	0.00956	733.9	µg/L	9.56	1.30%

Sequence No.: 17
Sample ID: 1201013-19
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 3/13/2012 3:53:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-19

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	745973.3	101.9	%	0.91				0.90%
Li 670.784†	-59.0	-0.0004	mg/L	0.00039	-0.3561	µg/L	0.38922	109.29%
Sr 421.552†	99.4	0.0001	mg/L	0.00003	0.1178	µg/L	0.03054	25.93%

Sequence No.: 18
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/13/2012 3:56:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	716093.2	97.79	%	0.346				0.35%
Li 670.784†	134.1	0.0008	mg/L	0.00033	0.8090	µg/L	0.32933	40.71%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	57.3	0.0001	mg/L	0.00002	0.0679	µg/L	0.01987	29.27%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/13/2012 3:58:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	710118.5	96.98	%	0.192				0.20%
Li 670.784†	417098.9	2.517	mg/L	0.0173	2517	µg/L	17.3	0.69%
QC value within limits for Li 670.784 Recovery = 100.67%								
Sr 421.552†	2067475.2	2.451	mg/L	0.0075	2451	µg/L	7.5	0.31%

QC value within limits for Sr 421.552 Recovery = 98.03%
All analyte(s) passed QC.
User canceled analysis.

==========

Analysis Begun

Start Time: 3/13/2012 4:01:51 PM
Plasma On Time: 3/13/2012 8:08:29 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BA22302-23003.sif
Batch ID: BA22602-BA23003
Results Data Set: DV120313
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 1
Autosampler Location: 1
Sample ID: IBL
Date Collected: 3/13/2012 4:01:51 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:
User canceled analysis.

==========

Analysis Begun

Start Time: 3/13/2012 4:02:11 PM
Plasma On Time: 3/13/2012 8:08:29 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BA22302-23003.sif
Batch ID: BA22602-BA23003
Results Data Set: DV120313
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 22
Autosampler Location: 29
Sample ID: 1201013-23
Date Collected: 3/13/2012 4:02:11 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:
User canceled analysis.

==========

Analysis Begun

Start Time: 3/13/2012 4:02:46 PM
Plasma On Time: 3/13/2012 8:08:29 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BA22302-23003.sif
Batch ID: BA22602-BA23003
Results Data Set: DV120313
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 20
Autosampler Location: 27
Sample ID: 1201013-21
Date Collected: 3/13/2012 4:02:46 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: 1201013-21

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	720328.0	98.37	%	0.851				0.87%
Li 670.784†	6547.0	0.0395	mg/L	0.00058	39.51	µg/L	0.578	1.46%
Sr 421.552†	595619.9	0.7060	mg/L	0.00885	706.0	µg/L	8.85	1.25%

==========

Sequence No.: 21
Autosampler Location: 28
Sample ID: 1201013-22
Date Collected: 3/13/2012 4:05:28 PM
Analyst:
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1201013-22

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	719737.2	98.29	%	0.205				0.21%
Li 670.784†	6801.5	0.0410	mg/L	0.00067	41.04	µg/L	0.666	1.62%
Sr 421.552†	591698.1	0.7014	mg/L	0.00228	701.4	µg/L	2.28	0.33%

Sequence No.: 22 Autosampler Location: 29
Sample ID: 1201013-23 Date Collected: 3/13/2012 4:08:02 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1201013-23

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	722648.2	98.69	%	0.857				0.87%
Li 670.784†	6239.1	0.0376	mg/L	0.00061	37.65	µg/L	0.607	1.61%
Sr 421.552†	600001.3	0.7112	mg/L	0.00820	711.2	µg/L	8.20	1.15%

Sequence No.: 23 Autosampler Location: 30
Sample ID: 1201013-24 Date Collected: 3/13/2012 4:10:36 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1201013-24

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	723706.5	98.83	%	0.586				0.59%
Li 670.784†	4935.6	0.0298	mg/L	0.00056	29.78	µg/L	0.560	1.88%
Sr 421.552†	628998.8	0.7456	mg/L	0.00885	745.6	µg/L	8.85	1.19%

Sequence No.: 24 Autosampler Location: 31
Sample ID: 1201013-27 Date Collected: 3/13/2012 4:13:12 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1201013-27

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	731907.1	99.95	%	0.332				0.33%
Li 670.784†	245.2	0.0015	mg/L	0.00038	1.480	µg/L	0.3848	26.00%
Sr 421.552†	51672.7	0.0613	mg/L	0.00018	61.25	µg/L	0.181	0.30%

Sequence No.: 25 Autosampler Location: 32
Sample ID: BA23002-DUP4 Date Collected: 3/13/2012 4:15:31 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: LOD: NA Sample Prep Vol:

Mean Data: BA23002-DUP4

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	734299.6	100.3	%	0.48				0.48%
Li 670.784†	395.1	0.0024	mg/L	0.00022	2.384	µg/L	0.2170	9.10%
Sr 421.552†	52107.7	0.0618	mg/L	0.00018	61.77	µg/L	0.181	0.29%

Sequence No.: 26
Sample ID: 1201013-28
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 3/13/2012 4:17:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-28

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	733799.2	100.2	%	0.20				0.20%
Li 670.784†	364.7	0.0022	mg/L	0.00055	2.201	µg/L	0.5483	24.91%
Sr 421.552†	51710.4	0.0613	mg/L	0.00004	61.30	µg/L	0.038	0.06%

Sequence No.: 27
Sample ID: BA23002-MS3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 3/13/2012 4:20:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA23002-MS3

101%

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	727604.1	99.37	%	0.853				0.86%
Li 670.784†	8728.9	0.0527	mg/L	0.00070	52.67	µg/L	0.704	1.34%
Sr 421.552†	94821.5	0.1124	mg/L	0.00031	112.4	µg/L	0.31	0.28%

101%

Sequence No.: 28
Sample ID: Sample035
Analyst:
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 35
Date Collected: 3/13/2012 4:22:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analysis Begun

Start Time: 3/13/2012 4:23:53 PM
Logged In Analyst: Optima
Spectrometer Model: Optima 3300 DV, S/N 069N9033001

Plasma On Time: 3/13/2012 8:08:29 AM
Technique: ICP Continuous
Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BA22302-23003.sif
Batch ID: BA22602-BA23003
Results Data Set: DV120313
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 30
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/13/2012 4:23:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	744988.8	101.7	%	0.92				0.90%
Li 670.784†	330.0	0.0020	mg/L	0.00048	1.991	µg/L	0.4762	23.91%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	52.8	0.0001	mg/L	0.00005	0.0626	µg/L	0.04569	72.98%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 31
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:

Autosampler Location: 8
Date Collected: 3/13/2012 4:26:27 PM
Data Type: Original
Initial Sample Vol:

Dilution: **Sample Prep Vol:**

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	716742.0	97.88	%	0.654				0.67%
Li 670.784†	415872.4	2.509	mg/L	0.0083	2509	µg/L	8.3	0.33%
QC value within limits for Li 670.784 Recovery = 100.38%								
Sr 421.552†	2077329.4	2.462	mg/L	0.0032	2462	µg/L	3.2	0.13%
QC value within limits for Sr 421.552 Recovery = 98.50%								

All analyte(s) passed QC.

Sequence No.: 32
Sample ID: Sample037
Analyst:
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 37
Date Collected: 3/13/2012 4:29:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

ICP-AES METALS Technical Review Checklist

(200.7, 6010) Hardness_____

For Internal Use Only

120200

Site Name: Dimock WO#: 1201013, 1201015, 120200

Analyst: JR Dorsey Date given to Reviewer: 3/15/12

Matrix (circle): Solid / Aqueous / Other _____ SOP R3QA159-021511 / R3QA155-021511

(If TCLP is run: SOP R3QA135-021011)

Program (circle): Superfund / RCRA / Compliance NPDES or SDWA / Other: ~~3/15/11~~ JoD 3/15/12

The signature below indicates the following:

- This data meets the needs of the customer according to the request.
- The analysis was performed as per the SOP, or exceptions documented. 013 (17-18, 29-44) except 19-28
- All documentation needed to recreate the analyses has been reviewed. 015 (1-44)
- Data Review status set to Peer Reviewed in Element. 001 (1-51) 003 (1-10)

Li only

Peer Reviewer signature R Costar Date accepted 3.15.12

If any data for this case is stored with another case file, give Site Name and WO#_____

Peer Reviewer Completes Section Below:

General:	YES	NO	N/A	Comments
Raw data is identified with sample ID's, site name, WO#, analyst name, date of analysis.	✓			
Quality Control:				
First CCV ±5% and RSD <3;	✓			
All other CCV ±10%, every 10 samples and end of run;	✓			
For Compliance samples (SDWA and NPDES): SCV ±5% (each time, including PTs)	✓			
All other samples SCV ±10%			✓	
LCV ±30%;	✓			
IBL < |Reporting limit|, analyzed with each CCV;	✓			
BS (LCS) ±15%;	✓			
SRM (soils) within vendor acceptance limits;			✓	
BLK < |Reporting limit| (if >Reporting Limit **and** >1/10 of sample - must qualify)	✓			
MS [±30%] unless spike is <30% of sample value;	✓			
RPDs from DUP ≤20% aqueous & 35% soils;	✓			
Sample results < CAL or within documented linear range;	✓			

Interference Checks:

Spectral overlays or 2nd wavelength used or interfering elements not present above CAL	✓			
IFA recovery at ±20%;	✓			
Non-interfering elements ± | Reporting limit | or calculated range from 200.7;	✓			

Calculations/Report:

Calculations and transcriptions checked.	✓			
Element Draft Report reviewed.	✓			
Deviations and problems documented.	✓			

NOTE: When soils are being reported, the *sample qualifier* 'dry' or 'wet' must be entered so that it appears in the header of the Element report. This will signify that the data was report 'wet weight' or 'dry weight' as appropriate.

Additional Comments by Peer Reviewer:

Analyst Ensures that the Data Case File is Complete and Accurate:

- ___ Bench sheet (TCLP prep log)
- NA IEC tables no iec's
- ✓ Instrument run log
- ✓ Standard/Reagent Prep log
- ✓ IV sheets
- ___ Element Peer Review report
- ✓ Raw data
- NA Data status set to analyzed

Additional Comments by Analyst on data issues:

On-Demand Data Checklist
(used in addition to routine TRC)
For Internal Use Only

Parameter: Li
Procedure/Method/Reference: 200.7

Site Name: Dimock WO#: 1201013, 1201015
Analyst: JRDorsey 1202001, 1202003

The signature below indicates the following:
• The analysis was performed as per the On-Demand requirements below.

Peer Reviewer signature L Gostop Date accepted 3.15.12

Peer Reviewer Completes Section Below:

This is a special request which falls outside our routine protocols. Therefore, these samples were analyzed and the quality control (QC) were evaluated based on the "On Demand" criteria. These protocols include all the QC checks as per routine analyses plus special verification of the performance of the analytical method at the reported quantitation limit/s. These protocols are specified in the EPA Region III OASQA Laboratory Quality Manual, current version.

Quality Control:	**YES**	**NO**	**N/A**	**Comments**
A written procedure or reference must be available for the method being performed and referenced in the narrative. If the method to be performed is unique, the procedures must be fully documented.	✓			
Calibration of the instrumentation or analytical procedure must be according to the method or procedure.	✓			
Calibration verified by analysis of second source standard (SCV, SRM), if available. Concentration must be in the range of the calibration. Results must be within the method, procedure, client or in-house limits.	✓			
Analysis of one method blank (BLK) with each batch. Ideally, the results should be less than the expected quantitation levels set by the method, procedure, or in-house requirements.	✓			
Analysis of one matrix spike (MS) with each batch. For samples or parameters which do not lend themselves to matrix spiking, a BS or SRM sample must be analyzed. Results of spikes must be within the method, procedure, client or in-house limits.	✓			
Analysis of one duplicate analyses (DUP) or a quality control sample such as an SRM or BS with each batch. If duplicate analyses is not possible, e.g, insufficient sample quantity, a quality control sample must be analyzed in duplicate, if available. Results of duplicate analyses must be				

within the method, procedure, client or in-house limits. ✓

At least one blank spike (BS) must be carried through the entire method and analyzed with each batch. The concentration of the BS should be at the quantitation level or at the level of the expected sample results, if known. Results of the BS must be within the method, procedure, client or in-house limits. ✓

Any additional quality control items, such as surrogates, internal standards, etc., which the referenced method or procedure requires should be analyzed. Results must be within the method or, procedure limits. ✓

The analyst must document the impact on the usability of the reported data by applying qualifier codes if applicable and including a summary in the case file. ✓

Additional Comments:

EPA - OASQA - ICP Standard/Reagent Preparation

Perkin Elmer 3300 OPTIMA

Other QC standards in 2% nitric / 2% HCl matrix (2 mL acid per 100 mL solution) or alternate matrix of _____

	*Stock Soln and Concentration	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Date made/ Preparer	Che if us
LCV (10:1)	EPA-CRDL-RR (See certificate) + 1000 mg/L (Ag)	High Purity EM	5759 3355 (Ag)	0.5 mL 0.01mL	100 mL 100 mL	See below^ 0.1 mg/L	1/11 JRD	
^LCV made daily by diluting the LCV(10:1) solution by 10X using the IBL. See TV sheet for final concs.								
LCV (Ag)	LCV Li	D. Lude	BB20803-BSI	1:1	TV =	85ppb	3/14/12 JAO	✓
LCV	Li & Sr made by diluting	the SCV @ 20X	TV = 0.200 mg/L	Made daily				
IFA 1	10,000 mg/L Ca 10,000 mg/L Al 10,000 mg/L Ni	High Purity High Purity High Purity	10171 11887 5971	5 mL 5 mL 1 mL	200 mL	250 mg/L 250 mg/L 50 mg/L	1/2012 jrd	✓
IFA 2	10,000 mg/L Na 10,000 mg/L Mg 10,000 mg/L Fe	High Purity High Purity High Purity	11808 10172 11886	5 mL 5 mL 5 mL	200 mL	250 mg/L 250 mg/L 250 mg/L	6/11 re	✓
IFA 3	10,000 mg/L Mn 10,000 mg/L Cu 10,000 mg/L Cr	High Purity High Purity High Purity	5974 5972 5973	1 mL 0.4 mL 1 mL	200 mL	50 mg/L 20 mg/L 50 mg/L	1/2012 jrd	✓

* See Certificate of Analysis for analytes and initial concentrations.

Check standards (made daily) Matrix will be the same as the Calibration Standards (CAL) and IBL (lcb)

CCV Solution ID	Prepared by diluting 1:1	Final Conc	Check if used
CCV AB	CAL A plus CAL B	see TV sheet	✓
CCV AG	CAL AG plus IBL	0.10 mg/L	
CCV BS	CAL BS plus IBL	2.5 mg/L	

Reagent Acid Stocks

	Vendor	Bar Code		Vendor	Bar Code
Nitric Acid	Fisher	11152	HCl Acid	Fisher	11148

Certificates of Analysis Logbook # _____ SNB 2 _____

Comments: _____

I:\ASQAB_AT Team\FORMS\METALS\standard_reagent form ICP.wpd JAN 2012

Perkin Elmer 3300 OPTIMA

Analyst: JRDonsey Date: 3/14/12 Pipets Logbook # SNB11

Run Filename: DV020313 (all electronic files saved using Run Filename) SOP #: R3-QA159

SITE/WO#: Dimock 1201013, 1201015, 1202001, 1202003 Reagent Purity checked ✓

SCV in 2% nitric / 2% HCl matrix (**made daily**): (diluted with IBL) or alternate matrix of _____

* Stock Solution	Expiration Date	Stock Conc	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Check if used
QC-7A	1-12	100 mg/L 1000 mg/L (K)	Spex	13852	0.5 ml	12.5 ml	see TV sheet	
QC-21	1-12	100 mg/L	Spex	13853	0.5ml	12.5 ml	see TV sheet	✓
QC-7A (Ag)	1-12	50 mg/L	Spex	13853	0.05ml	25 ml	0.100 mg/L	

* See Certificate of Analysis for analytes.

Internal Standard in 2% nitric matrix (made as needed...no expiration date applicable)

Stock Solution	Stock Conc	Vendor	Bar Code	Stock Volume	Nitric Volume	Final Volume	Final Conc
Yttrium	1000 mg/L	High Purity	4004	5 mL	10 mL	500 mL	10mg/L

Calibration Standards (CAL) and IBL in 2% nitric / 2% HCl matrix (2 mL acid per 100 mL solution) or alternate matrix of _____

	* Stock Soln and Conc	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Date made/ Preparer	Check if used
IBL	na	na	na	na	1000 mL	na	made daily	√
CAL A	CAL STD A-R Solution A+B (see certificate)	High Purity	11004 11002	10 mL A 10 mL B	1000 ml	see TV sheet	3/11 jrd	
CAL B	CAL STD B: Solution A+B (see certificate)	High Purity	11010 11002	10 mL A 10 mL B	1000 ml	see TV sheet	10/11 jrd	
CAL AG	Silver 1000 mg/L	High Purity	11884	0.02 mL	100 ml	0.20 mg/L		
CAL BS								
CAL A	CAL STD A-R Solution A+B (see certificate)	High Purity	11004 11002	2.5 mL A 2.5 mL B	200 ml	see TV sheet	2/17/12 jrd	✓
	Li @ 10,000 ppm Sr @1000 ppm	High Purity High Purity	11008 11882	0.1ml 1.0 ml				
CAL B	CAL STD B: Solution A+B (see certificate)	High Purity	11010 11002	2.5 mL A 2.5 mL B	200 ml	see TV sheet	2/17/12 jrd	

RUN LOG FOR 3300DV OPTIMA JR DORSEY 03/14/12
DIMOCK RE RUNS FOR Li @ 25 PPB

JRDorsey 3/14/12

IBL
CALA
IBL
LCV LI/SR
CCV@A/B
CCV@A/B
SCV@LVM
SCV@LVM
IFA@1
IFA@2
IFA@3
BA23101-BLK2
BA23101-BLK4
BA23101-BS1
BA23101-BS3
1201013-17
1201013-18
1201013-29
1201013-30
1201013-31
BA23101-DUP2
IBL
CCV@A/B
1201013-32
BA23101-MS1
1201013-33
1201013-34
1201013-35
1201013-36
1201013-37
1201013-38
1201013-39
1201013-40
IBL
CCV@A/B
1201013-41
1201013-42
1201013-43
BA23101-DUP4
1201013-44
BA23101-MS1
1201015-01
1201015-02
1201015-03
1201015-06
IBL
CCV@A/B
1201015-07
1201015-08
BB20104-BLK2
BB20104-BS1
1201015-04
1201015-05
1201015-09
1201015-10
1201015-11
1201015-12
1201015-13

BB20104-DUP4
IBL
CCV@A/B
1201015-14
1201015-15
1201015-16
1201015-17
BB20104-MS3
1201015-18
1201015-19
BB20104-DUP2
1201015-20
1201015-21
IBL
CCV@A/B
1201015-22
BB20104-MS1
BB20105-BLK2
BB20105-BS1
1201015-25
1201015-26
1201015-27
1201015-29
1201015-30
BB20105-DUP4
1201015-31
1201015-32
IBL
CCV@A/B
1201015-33
1201015-34
1201015-36
1201015-37
1201015-38
BB20105-MS1
1201015-39
1201015-40
BB20105-DUP2
1201015-41
IBL
CCV@A/B
BB20105-MS3
1201015-42
1201015-43
1201015-44
BB20303-BLK2
BB20303-BS1
1202001-01
BB20303-DUP4
1202001-02
1202001-03
BB20303-DUP2
1202001-04
1202001-05
BB20303-MS1
IBL
CCV@A/B
1202001-07
1202001-08
1202001-09
1202001-10
1202001-11
1202001-12

1202001-13
BB20303-MS3
1202001-14
1202001-16
IBL
CCV@A/B
1202001-17
1202001-18
BB20603-BLK2
BB20603-BS1
1202001-20
BB20603-DUP2
1202001-21
BB20303-DUP4
1202001-22
1202001-24
1202001-25
BB20603-MS1
IBL
CCV@A/B
1202001-26
1202001-27
1202001-28
1202001-29
1202001-30
1202001-31
1202001-32
1202001-33
BB20603-MS3
IBL
LCV LI/SR
CCV@A/B
BB20706-BLK2
BB20706-BS1
1202001-23
BB20706-DUP2
1202001-37
1202001-38
1202001-39
BB20706-MS1
1202001-40
1202001-41
IBL
CCV@A/B
1202001-42
BB20706-DUP4
1202001-43
1202001-44
BB20706-MS3
1202001-45
1202001-46
1202001-51
IBL
CCV@A/B
BB20707-BLK2
BB20707-BS1
1202003-01
BB20707-DUP2
1202003-02
1202003-03
1202003-04
BB20707-MS1
1202003-05

1202003-06
IBL
CCV@A/B
1202003-07
1202003-08
1202003-09
1202003-10
IBL
CCV@A/B

OASQA TRUE VALUES for ICP Standards and QC

CAL stock	ICP	CCV ±5% (ppm)	SCV ±5%/±10% (ppm) (First time ±5%, all others ±10%)	LCV ±30% (ppm)	BS/MS ±15/30% (ppm) (based on 0.5ml stock to 50 mL)	IFA1 ± 20% (ppm)	IFA2 ± 20% (ppm)	IFA2 ±20% (ppm)
AG	**Ag**	0.100	0.100	0.010	0.050			
B	**Al**	10.00	4.00	0.200	2.00	250 ((ag),as,cd, pb,sb,tl,zn)		
B	**As**	5.00	4.00	0.200	0.500			
A	**Ba**	2.50	4.00	0.200	2.00			
A	**Be**	2.50	4.00	0.005	0.050			
A	**B**	2.50	4.00	0.200	0.500			
B	**Ca**	25.00	4.00	0.500	10.00	250(al,b,cu,sn)		
A	**Cd**	2.50	4.00	0.005	0.050			
A	**Co**	2.50	4.00	0.050	0.500			
B	**Cr**	5.00	4.00	0.010	0.500			50 (as,be,cd,sb,zn)
B	**Cu**	5.00	4.00	0.025	0.500			20 (ag,pb,(cd))
B	**Fe**	10.00	4.00	0.100	5.00		250(as,ag,cd,cr,ni,p b,sb,tl,zn)	
B	**K**	25.00	40.00	2.000	20.00			
	Li	2.50*	4.00	0.200*	0.500 (HP)			
B	**Mg**	25.00	4.00	0.500	10.00		250	
B	**Mn**	5.00	4.00	0.015	0.500			50 (b)
A	**Mo**	0.500	4.00	0.200	0.500			
B	**Na**	25.00	4.00	1.000	10.00		250	
B	**Ni**	5.00	4.00	0.040	0.500	50 (cd,cr,pb,sb)	.	
A	**Pb**	2.50	4.00	0.050	0.500			
A	**Sb**	2.50	4.00	0.060	0.500			
A	**Se**	2.50	4.00	0.200	0.500			
A	**Sn**	2.50	1.00*	0.200	0.500			
	Sr	2.50*	4.00	0.200*	0.500			
A	**Ti**	0.500	4.00	0.200	0.500			
A	**Tl**	2.50	4.00	0.200	0.500			
	U				0.500			
A	**V**	1.25	4.00	0.050	0.500			
B	**Zn**	10.00	4.00	0.020	0.500			

* need to be added separately

( ) = most likely analytes to be interfered with

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TCLP ppm levels (As-5, Ba-100, Cd-1, Cr-5, Pb-5, Se-1, Ag-5)

3/14/12

Analysis Begun

Start Time: 3/14/2012 9:00:43 AM
Logged In Analyst: Optima
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Plasma On Time: 3/14/2012 8:11:08 AM
Technique: ICP Continuous

Sample Information File: C:\pe\Administrator\Sample Information\BA23101.sif
Batch ID: BA23101
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Dimock
wo#
120193
120195
120200 1

Method Loaded
Method Name: Li & Sr
IEC File: JOE 2010.iec
Method Description: 200.7 ver4.4 (analysis 200.7 or equivalent)

Method Last Saved: 3/14/2012 8:59:17 AM
MSF File:

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Li 670.784	Lin, Calc Int	Peak Area	Radial	Y 371.029	No
Sr 421.552	Lin, Calc Int	Peak Area	Radial	Y 371.029	No
Y 371.029	Lin, Calc Int	Peak Area	Radial	n/a	n/a

Sequence No.: 1
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 9:00:43 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	762994.0	435.70	0.06%	100.0	%
Li 670.784†	609.9	47.77	7.83%	[0.00]	mg/L
Sr 421.552†	-30.6	15.79	51.54%	[0.00]	mg/L

Sequence No.: 2
Sample ID: CALA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/14/2012 9:03:07 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALA

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	756701.0	3459.98	0.46%	99.18	%
Li 670.784†	851060.4	1762.31	0.21%	[5]	mg/L
Sr 421.552†	4336516.2	32594.48	0.75%	[5]	mg/L

Sequence No.: 3
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 9:05:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	741758.6	97.22	%	0.475				0.49%
Li 670.784†	863.6	0.0051	mg/L	0.00061	5.074	µg/L	0.6060	11.94%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	647.2	0.0007	mg/L	0.00010	0.7463	µg/L	0.10343	13.86%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 4
Sample ID: LCV LI/SR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/14/2012 9:08:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCV LI/SR

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	748829.7	98.14	%	0.681				0.69%
Li 670.784†	4436.3	0.0261	mg/L	0.00013	26.06	µg/L	0.135	0.52%
QC value within limits for Li 670.784 Recovery = 104.25%								
Sr 421.552†	22253.7	0.0257	mg/L	0.00010	25.66	µg/L	0.104	0.41%
QC value within limits for Sr 421.552 Recovery = 102.63%								

All analyte(s) passed QC.

Sequence No.: 5
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 9:10:24 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

made w now g
Remake & Rerun
JA 3/14/12

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	743753.4	97.48	%	0.686				0.70%
Li 670.784†	6632.3	0.0390	mg/L	0.00039	38.97	µg/L	0.385	0.99%
QC value less than the lower limit for Li 670.784 Recovery = 1.56%								
Sr 421.552†	31521.7	0.0363	mg/L	0.00007	36.34	µg/L	0.066	0.18%
QC value less than the lower limit for Sr 421.552 Recovery = 1.45%								

QC Failed. Continue with analysis.
User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 9:14:09 AM
Logged In Analyst: Optima
Spectrometer Model: Optima 3300 DV, S/N 069N9033001

Plasma On Time: 3/14/2012 8:11:08 AM
Technique: ICP Continuous
Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BA23101.sif
Batch ID: BA23101
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 5
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 9:14:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	753095.6	98.70	%	0.290				0.29%
Li 670.784†	416393.0	2.446	mg/L	0.0039	2446	µg/L	3.9	0.16%
QC value within limits for Li 670.784 Recovery = 97.85%								
Sr 421.552†	2130098.0	2.456	mg/L	0.0033	2456	µg/L	3.3	0.13%
QC value within limits for Sr 421.552 Recovery = 98.24%								

All analyte(s) passed QC.

Sequence No.: 6
Sample ID: SCV@LVM
Analyst:
Initial Sample Wt:

Autosampler Location: 10
Date Collected: 3/14/2012 9:16:32 AM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol:

Re Run 3/14/12

Mean Data: SCV@LVM

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	761970.8	99.87	%	0.436				0.44%
Li 670.784†	645034.6	3.790	mg/L	0.0120	3790	µg/L	12.0	0.32%
QC value less than the lower limit for Li 670.784 Recovery = 94.74%								
Sr 421.552†	3396293.2	3.916	mg/L	0.0175	3916	µg/L	17.5	0.45%
QC value within limits for Sr 421.552 Recovery = 97.90%								

QC Failed. Continue with analysis.
User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 9:24:46 AM
Plasma On Time: 3/14/2012 8:11:08 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BA23101.sif
Batch ID: BA23101
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 6
Autosampler Location: 10
Sample ID: SCV@LVM
Date Collected: 3/14/2012 9:24:46 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: SCV@LVM

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	722182.2	94.65	%	0.677				0.72%
Li 670.784†	650388.3	3.821	mg/L	0.0406	3821	µg/L	40.6	1.06%
QC value within limits for Li 670.784 Recovery = 95.53%								
Sr 421.552†	3435511.3	3.961	mg/L	0.0347	3961	µg/L	34.7	0.88%
QC value within limits for Sr 421.552 Recovery = 99.03%								

All analyte(s) passed QC.

Sequence No.: 7
Autosampler Location: 13
Sample ID: IFA@1
Date Collected: 3/14/2012 9:27:21 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: IFA@1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	691753.1	90.66	%	0.819				0.90%
Li 670.784†	897.9	0.0053	mg/L	0.00060	5.275	µg/L	0.6050	11.47%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	1981.9	0.0023	mg/L	0.00008	2.285	µg/L	0.0845	3.70%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 8
Autosampler Location: 14
Sample ID: IFA@2
Date Collected: 3/14/2012 9:29:48 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: IFA@2

Mean Corrected Calib Sample

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	699400.2	91.67	%	0.497				0.54%
Li 670.784†	1890.9	0.0111	mg/L	0.00037	11.11	µg/L	0.365	3.29%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	434.8	0.0005	mg/L	0.00006	0.5013	µg/L	0.06458	12.88%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: IFA@3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 3/14/2012 9:32:18 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IFA@3

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	730832.7	95.78	%	1.174				1.23%
Li 670.784†	955.1	0.0056	mg/L	0.00031	5.611	µg/L	0.3080	5.49%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	-68.7	-0.0001	mg/L	0.00002	-0.0792	µg/L	0.01761	22.24%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: BA23101-BLK2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 3/14/2012 9:34:46 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA23101-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	755002.6	98.95	%	0.176				0.18%
Li 670.784†	353.6	0.0021	mg/L	0.00028	2.077	µg/L	0.2837	13.66%
Sr 421.552†	80.8	0.0001	mg/L	0.00003	0.0931	µg/L	0.02981	32.01%

Sequence No.: 11
Sample ID: BA23101-BLK4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 18
Date Collected: 3/14/2012 9:37:16 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA23101-BLK4

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	750926.2	98.42	%	0.442				0.45%
Li 670.784†	527.2	0.0031	mg/L	0.00027	3.097	µg/L	0.2726	8.80%
Sr 421.552†	83.0	0.0001	mg/L	0.00005	0.0957	µg/L	0.05445	56.92%

Sequence No.: 12
Sample ID: BA23101-BS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 19
Date Collected: 3/14/2012 9:39:46 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA23101-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	763313.3	100.0	%	0.72				0.72%
Li 670.784†	8996.6	0.0529	mg/L	0.00091	52.85	µg/L	0.906	1.71%
Sr 421.552†	44288.4	0.0511	mg/L	0.00044	51.06	µg/L	0.441	0.86%

106 %

Sequence No.: 13
Sample ID: BA23101-BS3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 3/14/2012 9:41:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA23101-BS3

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	754555.3	98.89	%	0.549				0.56%
Li 670.784†	9014.8	0.0530	mg/L	0.00049	52.96	µg/L	0.491	0.93%
Sr 421.552†	44557.1	0.0514	mg/L	0.00002	51.37	µg/L	0.024	0.05%

Sequence No.: 14
Sample ID: 1201013-17
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/14/2012 9:44:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-17

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	740515.4	97.05	%	0.500				0.52%
Li 670.784†	41379.3	0.2431	mg/L	0.00130	243.1	µg/L	1.30	0.54%
Sr 421.552†	200512.9	0.2312	mg/L	0.00029	231.2	µg/L	0.29	0.13%

Sequence No.: 15
Sample ID: 1201013-18
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 3/14/2012 9:46:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-18

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	750249.6	98.33	%	0.132				0.13%
Li 670.784†	40109.7	0.2356	mg/L	0.00080	235.6	µg/L	0.80	0.34%
Sr 421.552†	186667.9	0.2152	mg/L	0.00025	215.2	µg/L	0.25	0.11%

Sequence No.: 16
Sample ID: 1201013-29
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 3/14/2012 9:48:27 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-29

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	737096.8	96.61	%	0.704				0.73%
Li 670.784†	668.7	0.0039	mg/L	0.00058	3.928	µg/L	0.5820	14.82%
Sr 421.552†	38.9	0.0000	mg/L	0.00005	0.0449	µg/L	0.04892	109.07%

Sequence No.: 17
Sample ID: 1201013-30
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 3/14/2012 9:50:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-30

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	745905.2	97.76	%	0.716				0.73%
Li 670.784†	407.4	0.0024	mg/L	0.00078	2.394	µg/L	0.7788	32.54%

Sr 421.552†	19.3	0.0000 mg/L	0.00002	0.0223 µg/L	0.02465	110.57%

Sequence No.: 18
Sample ID: 1201013-31
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 3/14/2012 9:53:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-31

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	735123.0	96.35	%	0.446				0.46%
Li 670.784†	35924.3	0.2111	mg/L	0.00101	211.1	µg/L	1.01	0.48%
Sr 421.552†	105211.0	0.1213	mg/L	0.00044	121.3	µg/L	0.44	0.37%

Sequence No.: 19
Sample ID: BA23101-DUP2
Analyst:
Initial Sample Wt:
Dilution:

RPD-0

Autosampler Location: 26
Date Collected: 3/14/2012 9:55:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BA23101-DUP2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	723340.7	94.80	%	0.910				0.96%
Li 670.784†	35854.5	0.2106	mg/L	0.00051	210.6	µg/L	0.51	0.24%
Sr 421.552†	104666.0	0.1207	mg/L	0.00012	120.7	µg/L	0.12	0.10%

Sequence No.: 20
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 9:57:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	707039.8	92.67	%	0.088				0.09%
Li 670.784†	377.2	0.0022	mg/L	0.00032	2.216	µg/L	0.3227	14.56%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	69.1	0.0001	mg/L	0.00002	0.0797	µg/L	0.01931	24.24%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 21
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 10:00:14 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	710289.3	93.09	%	0.457				0.49%
Li 670.784†	419549.2	2.465	mg/L	0.0041	2465	µg/L	4.1	0.16%
QC value within limits for Li 670.784 Recovery = 98.59%								
Sr 421.552†	2159113.8	2.489	mg/L	0.0027	2489	µg/L	2.7	0.11%
QC value within limits for Sr 421.552 Recovery = 99.58%								

All analyte(s) passed QC.

Sequence No.: 22
Sample ID: 1201013-32
Analyst:

Autosampler Location: 27
Date Collected: 3/14/2012 10:02:37 AM
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1201013-32

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	719620.5	94.32	%	0.302				0.32%
Li 670.784†	35533.2	0.2088	mg/L	0.00068	208.8	µg/L	0.68	0.33%
Sr 421.552†	106417.2	0.1227	mg/L	0.00023	122.7	µg/L	0.23	0.19%

Sequence No.: 23 Autosampler Location: 28
Sample ID: BA23101-MS1 Date Collected: 3/14/2012 10:04:54 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: BA23101-MS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	710722.5	93.15	%	0.873				0.94%
Li 670.784†	44611.9	0.2621	mg/L	0.00253	262.1	µg/L	2.53	0.96%
Sr 421.552†	151868.5	0.1751	mg/L	0.00075	175.1	µg/L	0.75	0.43%

10792

Sequence No.: 24 Autosampler Location: 29
Sample ID: 1201013-33 Date Collected: 3/14/2012 10:07:01 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1201013-33

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	718928.3	94.22	%	0.323				0.34%
Li 670.784†	6137.2	0.0361	mg/L	0.00069	36.06	µg/L	0.688	1.91%
Sr 421.552†	569489.0	0.6566	mg/L	0.00658	656.6	µg/L	6.58	1.00%

Sequence No.: 25 Autosampler Location: 30
Sample ID: 1201013-34 Date Collected: 3/14/2012 10:09:24 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1201013-34

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	707273.1	92.70	%	0.237				0.26%
Li 670.784†	5436.7	0.0319	mg/L	0.00064	31.94	µg/L	0.644	2.02%
Sr 421.552†	767345.3	0.8847	mg/L	0.00373	884.7	µg/L	3.73	0.42%

Sequence No.: 26 Autosampler Location: 31
Sample ID: 1201013-35 Date Collected: 3/14/2012 10:11:50 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1201013-35

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	726701.0	95.24	%	0.541				0.57%
Li 670.784†	2083.2	0.0122	mg/L	0.00032	12.24	µg/L	0.319	2.61%
Sr 421.552†	76117.4	0.0878	mg/L	0.00051	87.76	µg/L	0.513	0.58%

Sequence No.: 27
Sample ID: 1201013-36
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 3/14/2012 10:13:59 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-36

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	743023.8	97.38	%	0.575				0.59%
Li 670.784†	2801.9	0.0165	mg/L	0.00049	16.46	µg/L	0.494	3.00%
Sr 421.552†	86749.9	0.1000	mg/L	0.00013	100.0	µg/L	0.13	0.13%

Sequence No.: 28
Sample ID: 1201013-37
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 3/14/2012 10:16:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-37

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	727822.5	95.39	%	1.013				1.06%
Li 670.784†	466.1	0.0027	mg/L	0.00025	2.738	µg/L	0.2505	9.15%
Sr 421.552†	23.7	0.0000	mg/L	0.00007	0.0273	µg/L	0.06995	256.38%

Sequence No.: 29
Sample ID: 1201013-38
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 3/14/2012 10:18:37 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-38

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	740385.1	97.04	%	0.539				0.56%
Li 670.784†	652.4	0.0038	mg/L	0.00013	3.833	µg/L	0.1267	3.31%
Sr 421.552†	34.8	0.0000	mg/L	0.00006	0.0401	µg/L	0.05755	143.38%

Sequence No.: 30
Sample ID: 1201013-39
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 3/14/2012 10:21:03 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-39

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	741217.2	97.15	%	0.687				0.71%
Li 670.784†	6271.3	0.0368	mg/L	0.00072	36.84	µg/L	0.723	1.96%
Sr 421.552†	557514.1	0.6428	mg/L	0.00719	642.8	µg/L	7.19	1.12%

Sequence No.: 31
Sample ID: 1201013-40
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 3/14/2012 10:23:33 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-40

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	743575.0	97.45	%	0.315				0.32%
Li 670.784†	4990.6	0.0293	mg/L	0.00048	29.32	µg/L	0.482	1.65%

Sr 421.552†	749974.0	0.8647 mg/L	0.01075	864.7 µg/L	10.75	1.24%

Sequence No.: 32
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 10:26:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	738329.2	96.77	%	0.901				0.93%
Li 670.784†	175.8	0.0010	mg/L	0.00064	1.033	µg/L	0.6390	61.85%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	126.4	0.0001	mg/L	0.00002	0.1457	µg/L	0.02232	15.32%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 33
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 10:28:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	741633.5	97.20	%	0.262				0.27%
Li 670.784†	408218.8	2.398	mg/L	0.0147	2398	µg/L	14.7	0.61%
QC value within limits for Li 670.784 Recovery = 95.93%								
Sr 421.552†	2116047.0	2.440	mg/L	0.0062	2440	µg/L	6.2	0.25%
QC value within limits for Sr 421.552 Recovery = 97.59%								

All analyte(s) passed QC.

Sequence No.: 34
Sample ID: 1201013-41
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 3/14/2012 10:30:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-41

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	740869.6	97.10	%	0.484				0.50%
Li 670.784†	1554.2	0.0091	mg/L	0.00023	9.131	µg/L	0.2256	2.47%
Sr 421.552†	75098.1	0.0866	mg/L	0.00013	86.59	µg/L	0.130	0.15%

Sequence No.: 35
Sample ID: 1201013-42
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 3/14/2012 10:33:05 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201013-42

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	730081.1	95.69	%	1.357				1.42%
Li 670.784†	35563.5	0.2089	mg/L	0.00285	208.9	µg/L	2.85	1.37%
Sr 421.552†	105112.9	0.1212	mg/L	0.00047	121.2	µg/L	0.47	0.39%

Sequence No.: 36
Sample ID: 1201013-43
Analyst:

Autosampler Location: 39
Date Collected: 3/14/2012 10:35:13 AM
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1201013-43

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	722663.0	94.71	%	0.535				0.57%
Li 670.784†	35874.7	0.2108	mg/L	0.00118	210.8	µg/L	1.18	0.56%
Sr 421.552†	106231.5	0.1225	mg/L	0.00043	122.5	µg/L	0.43	0.35%

Sequence No.: 37 Autosampler Location: 40
Sample ID: BA23101-DUP4 Date Collected: 3/14/2012 10:37:22 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

FID=1

Mean Data: BA23101-DUP4

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	720283.9	94.40	%	0.970				1.03%
Li 670.784†	36396.9	0.2138	mg/L	0.00082	213.8	µg/L	0.82	0.39%
Sr 421.552†	106559.8	0.1229	mg/L	0.00113	122.9	µg/L	1.13	0.92%

Sequence No.: 38 Autosampler Location: 41
Sample ID: 1201013-44 Date Collected: 3/14/2012 10:39:31 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1201013-44

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	714473.5	93.64	%	0.301				0.32%
Li 670.784†	2605.7	0.0153	mg/L	0.00025	15.31	µg/L	0.254	1.66%
Sr 421.552†	84956.5	0.0980	mg/L	0.00062	97.95	µg/L	0.622	0.63%

Sequence No.: 39 Autosampler Location: 42
Sample ID: BA23101-MS1 Date Collected: 3/14/2012 10:41:39 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: BA23101-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	714854.9	93.69	%	0.290				0.31%
Li 670.784†	11362.4	0.0668	mg/L	0.00044	66.75	µg/L	0.439	0.66%
Sr 421.552†	133478.3	0.1539	mg/L	0.00014	153.9	µg/L	0.14	0.09%

103 ok

Sequence No.: 40 Autosampler Location: 43
Sample ID: 1201015-01 Date Collected: 3/14/2012 10:43:48 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1201015-01

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	711504.0	93.25	%	0.976				1.05%
Li 670.784†	86.9	0.0005	mg/L	0.00112	0.5106	µg/L	1.11879	219.12%
Sr 421.552†	100.1	0.0001	mg/L	0.00003	0.1155	µg/L	0.03379	29.26%

Sequence No.: 41
Sample ID: 1201015-02
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 3/14/2012 10:46:14 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-02

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	719043.9	94.24	%	0.507				0.54%
Li 670.784†	-94.7	-0.0006	mg/L	0.00019	-0.5565	µg/L	0.19125	34.37%
Sr 421.552†	37.6	0.0000	mg/L	0.00003	0.0434	µg/L	0.02752	63.44%

Sequence No.: 42
Sample ID: 1201015-03
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 3/14/2012 10:48:41 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-03

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	708390.3	92.84	%	0.916				0.99%
Li 670.784†	17021.5	0.1000	mg/L	0.00126	100.0	µg/L	1.26	1.26%
Sr 421.552†	884759.6	1.020	mg/L	0.0136	1020	µg/L	13.6	1.34%

Sequence No.: 43
Sample ID: 1201015-06
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 3/14/2012 10:51:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-06

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	705277.1	92.44	%	0.482				0.52%
Li 670.784†	15355.4	0.0902	mg/L	0.00088	90.21	µg/L	0.883	0.98%
Sr 421.552†	948863.0	1.094	mg/L	0.0148	1094	µg/L	14.8	1.35%

User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 10:53:08 AM
Logged In Analyst: Optima
Spectrometer Model: Optima 3300 DV, S/N 069N9033001

Plasma On Time: 3/14/2012 8:11:08 AM
Technique: ICP Continuous
Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20104.sif
Batch ID: BA23101
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 44
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 10:53:08 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	707928.8	92.78	%	0.240				0.26%
Li 670.784†	263.3	0.0015	mg/L	0.00024	1.547	µg/L	0.2437	15.75%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	248.4	0.0003	mg/L	0.00005	0.2864	µg/L	0.05429	18.96%

QC value within limits for Sr 421.552 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 45 | **Autosampler Location: 8**
Sample ID: CCV@A/B | **Date Collected: 3/14/2012 10:55:34 AM**
Analyst: | **Data Type: Original**
Initial Sample Wt: | **Initial Sample Vol:**
Dilution: | **Sample Prep Vol:**

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	720700.9	94.46	%	0.165				0.17%
Li 670.784†	407207.9	2.392	mg/L	0.0047	2392	µg/L	4.7	0.20%
QC value within limits for Li 670.784 Recovery = 95.69%								
Sr 421.552†	2137474.8	2.465	mg/L	0.0043	2465	µg/L	4.3	0.17%
QC value within limits for Sr 421.552 Recovery = 98.58%								

All analyte(s) passed QC.

Sequence No.: 46 | **Autosampler Location: 47**
Sample ID: 1201015-07 | **Date Collected: 3/14/2012 10:57:58 AM**
Analyst: | **Data Type: Original**
Initial Sample Wt: | **Initial Sample Vol:**
Dilution: | **Sample Prep Vol:**

Mean Data: 1201015-07

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	712877.5	93.43	%	0.203				0.22%
Li 670.784†	30.9	0.0002	mg/L	0.00045	0.1813	µg/L	0.45114	248.85%
Sr 421.552†	186.7	0.0002	mg/L	0.00007	0.2153	µg/L	0.07289	33.85%

Sequence No.: 47 | **Autosampler Location: 48**
Sample ID: 1201015-08 | **Date Collected: 3/14/2012 11:00:19 AM**
Analyst: | **Data Type: Original**
Initial Sample Wt: | **Initial Sample Vol:**
Dilution: | **Sample Prep Vol:**

Mean Data: 1201015-08

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	712949.9	93.44	%	0.393				0.42%
Li 670.784†	-96.9	-0.0006	mg/L	0.00015	-0.5693	µg/L	0.14812	26.02%
Sr 421.552†	26.6	0.0000	mg/L	0.00004	0.0307	µg/L	0.03543	115.41%

User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 11:02:35 AM
Plasma On Time: 3/14/2012 8:11:08 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20104.sif
Batch ID: BA23101
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Autosampler Location: 1
Sample ID: IBL
Date Collected: 3/14/2012 11:02:35 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:
User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 11:02:58 AM
Plasma On Time: 3/14/2012 8:11:08 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20104.sif
Batch ID: BA23101
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 8
Autosampler Location: 17
Sample ID: BB20104-BLK2
Date Collected: 3/14/2012 11:02:58 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: BB20104-BLK2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	724022.8	94.89	%	0.199				0.21%
Li 670.784†	-84.8	-0.0005	mg/L	0.00034	-0.4981	µg/L	0.33864	67.99%
Sr 421.552†	55.5	0.0001	mg/L	0.00004	0.0640	µg/L	0.03660	57.15%

Sequence No.: 9
Autosampler Location: 18
Sample ID: BB20104-BS1
Date Collected: 3/14/2012 11:05:28 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: BB20104-BS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	723843.5	94.87	%	0.940				0.99%
Li 670.784†	8144.5	0.0478	mg/L	0.00011	47.85	µg/L	0.113	0.24%
Sr 421.552†	44129.6	0.0509	mg/L	0.00010	50.88	µg/L	0.097	0.19%

Sequence No.: 10
Autosampler Location: 19
Sample ID: 1201015-04
Date Collected: 3/14/2012 11:07:43 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: 1201015-04

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	711385.9	93.24	%	0.762				0.82%
Li 670.784†	4497.6	0.0264	mg/L	0.00025	26.42	µg/L	0.248	0.94%
Sr 421.552†	679152.0	0.7831	mg/L	0.00507	783.1	µg/L	5.07	0.65%

Sequence No.: 11
Sample ID: 1201015-05
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 3/14/2012 11:10:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-05

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	702035.2	92.01	%	0.591				0.64%
Li 670.784†	13936.2	0.0819	mg/L	0.00036	81.88	µg/L	0.361	0.44%
Sr 421.552†	998931.6	1.152	mg/L	0.0112	1152	µg/L	11.2	0.98%

Sequence No.: 12
Sample ID: 1201015-09
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/14/2012 11:12:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-09

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	708842.5	92.90	%	0.096				0.10%
Li 670.784†	4746.5	0.0279	mg/L	0.00038	27.89	µg/L	0.380	1.36%
Sr 421.552†	701157.9	0.8084	mg/L	0.00864	808.4	µg/L	8.64	1.07%

Sequence No.: 13
Sample ID: 1201015-10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 3/14/2012 11:15:01 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-10

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	710412.2	93.11	%	0.506				0.54%
Li 670.784†	14142.9	0.0831	mg/L	0.00098	83.09	µg/L	0.979	1.18%
Sr 421.552†	997530.3	1.150	mg/L	0.0060	1150	µg/L	6.0	0.52%

Sequence No.: 14
Sample ID: 1201015-11
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 3/14/2012 11:17:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-11

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	715637.2	93.79	%	0.135				0.14%
Li 670.784†	8213.3	0.0483	mg/L	0.00026	48.25	µg/L	0.261	0.54%
Sr 421.552†	689330.0	0.7948	mg/L	0.00498	794.8	µg/L	4.98	0.63%

Sequence No.: 15
Sample ID: 1201015-12
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 3/14/2012 11:19:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-12

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	700646.5	91.83	%	0.929				1.01%
Li 670.784†	8695.7	0.0511	mg/L	0.00066	51.09	µg/L	0.663	1.30%
Sr 421.552†	704552.1	0.8123	mg/L	0.00944	812.3	µg/L	9.44	1.16%

Sequence No.: 16
Sample ID: 1201015-13
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 3/14/2012 11:22:27 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-13

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	709129.8	92.94	%	0.425				0.46%
Li 670.784†	10373.4	0.0609	mg/L	0.00042	60.94	µg/L	0.416	0.68%
Sr 421.552†	764127.9	0.8810	mg/L	0.00698	881.0	µg/L	6.98	0.79%

Sequence No.: 17
Sample ID: BB20104-DUP4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 3/14/2012 11:24:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

LPD: 3

Mean Data: BB20104-DUP4

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	693125.8	90.84	%	0.461				0.51%
Li 670.784†	10707.4	0.0629	mg/L	0.00034	62.91	µg/L	0.340	0.54%
Sr 421.552†	769518.7	0.8873	mg/L	0.00843	887.3	µg/L	8.43	0.95%

Sequence No.: 18
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 11:27:26 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	699947.1	91.74	%	0.560				0.61%
Li 670.784†	187.8	0.0011	mg/L	0.00018	1.103	µg/L	0.1842	16.70%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	118.2	0.0001	mg/L	0.00008	0.1362	µg/L	0.07743	56.83%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 11:29:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	698091.8	91.49	%	0.394				0.43%
Li 670.784†	431917.7	2.538	mg/L	0.0153	2538	µg/L	15.3	0.60%
QC value within limits for Li 670.784 Recovery = 101.50%								
Sr 421.552†	2197191.5	2.533	mg/L	0.0074	2533	µg/L	7.4	0.29%

QC value within limits for Sr 421.552 Recovery = 101.33%
All analyte(s) passed QC.

Sequence No.: 20
Sample ID: 1201015-14
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 3/14/2012 11:32:14 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-14

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	704915.6	92.39	%	0.268				0.29%
Li 670.784†	10395.1	0.0611	mg/L	0.00032	61.07	µg/L	0.316	0.52%
Sr 421.552†	777477.7	0.8964	mg/L	0.00584	896.4	µg/L	5.84	0.65%

Sequence No.: 21
Sample ID: 1201015-15
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 3/14/2012 11:34:46 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-15

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	710829.3	93.16	%	0.355				0.38%
Li 670.784†	10374.1	0.0609	mg/L	0.00016	60.95	µg/L	0.157	0.26%
Sr 421.552†	769263.8	0.8870	mg/L	0.00816	887.0	µg/L	8.16	0.92%

Sequence No.: 22
Sample ID: 1201015-16
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 3/14/2012 11:37:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-16

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	709753.0	93.02	%	0.369				0.40%
Li 670.784†	10488.4	0.0616	mg/L	0.00064	61.62	µg/L	0.643	1.04%
Sr 421.552†	766078.2	0.8833	mg/L	0.00367	883.3	µg/L	3.67	0.42%

Sequence No.: 23
Sample ID: 1201015-17
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 3/14/2012 11:39:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-17

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	715866.0	93.82	%	1.136				1.21%
Li 670.784†	483.8	0.0028	mg/L	0.00058	2.842	µg/L	0.5770	20.30%
Sr 421.552†	38884.4	0.0448	mg/L	0.00011	44.83	µg/L	0.108	0.24%

Sequence No.: 24
Sample ID: BB20104-MS3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 3/14/2012 11:41:43 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20104-MS3

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	712175.9	93.34	%	0.876				0.94%
Li 670.784†	8884.3	0.0522	mg/L	0.00017	52.20	µg/L	0.174	0.33%
Sr 421.552†	82469.5	0.0951	mg/L	0.00019	95.09	µg/L	0.190	0.20%

99%

Sequence No.: 25
Sample ID: 1201015-18
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 3/14/2012 11:43:54 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-18

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	722926.1	94.75	%	0.538				0.57%
Li 670.784†	401.6	0.0024	mg/L	0.00041	2.360	µg/L	0.4111	17.42%
Sr 421.552†	39466.8	0.0455	mg/L	0.00014	45.51	µg/L	0.138	0.30%

Sequence No.: 26
Sample ID: 1201015-19
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 3/14/2012 11:46:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-19

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	715192.8	93.74	%	0.661				0.70%
Li 670.784†	1544.2	0.0091	mg/L	0.00023	9.072	µg/L	0.2273	2.51%
Sr 421.552†	76890.3	0.0887	mg/L	0.00001	88.65	µg/L	0.015	0.02%

Sequence No.: 27
Sample ID: BB20104-DUP2
Analyst:
Initial Sample Wt:
Dilution:

RPD = NA

Autosampler Location: 34
Date Collected: 3/14/2012 11:48:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20104-DUP2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	719969.6	94.36	%	0.335				0.36%
Li 670.784†	1542.9	0.0091	mg/L	0.00033	9.065	µg/L	0.3317	3.66%
Sr 421.552†	77530.2	0.0894	mg/L	0.00027	89.39	µg/L	0.271	0.30%

Sequence No.: 28
Sample ID: 1201015-20
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 3/14/2012 11:50:26 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-20

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	717927.8	94.09	%	0.442				0.47%
Li 670.784†	1593.6	0.0094	mg/L	0.00049	9.362	µg/L	0.4851	5.18%
Sr 421.552†	85161.8	0.0982	mg/L	0.00016	98.19	µg/L	0.159	0.16%

Sequence No.: 29
Sample ID: 1201015-21
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 3/14/2012 11:52:39 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-21

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	724941.8	95.01	%	0.639				0.67%
Li 670.784†	1509.7	0.0089	mg/L	0.00010	8.870	µg/L	0.0972	1.10%
Sr 421.552†	75806.8	0.0874	mg/L	0.00053	87.41	µg/L	0.531	0.61%

Sequence No.: 30
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 11:54:53 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	709792.6	93.03	%	0.446				0.48%
Li 670.784†	66.4	0.0004	mg/L	0.00045	0.3898	µg/L	0.44999	115.43%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	101.0	0.0001	mg/L	0.00004	0.1164	µg/L	0.03595	30.88%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 31
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 11:57:17 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	708491.6	92.86	%	0.557				0.60%
Li 670.784†	416503.2	2.447	mg/L	0.0048	2447	µg/L	4.8	0.19%
QC value within limits for Li 670.784 Recovery = 97.88%								
Sr 421.552†	2183857.8	2.518	mg/L	0.0077	2518	µg/L	7.7	0.31%
QC value within limits for Sr 421.552 Recovery = 100.72%								

All analyte(s) passed QC.

Sequence No.: 32
Sample ID: 1201015-22
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 3/14/2012 11:59:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-22

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	709489.7	92.99	%	0.083				0.09%
Li 670.784†	1565.5	0.0092	mg/L	0.00037	9.197	µg/L	0.3660	3.98%
Sr 421.552†	80374.7	0.0927	mg/L	0.00028	92.67	µg/L	0.282	0.30%

Sequence No.: 33
Sample ID: BB20104-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 3/14/2012 12:01:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20104-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	723675.2	94.85	%	0.652				0.69%

Li 670.784†	9999.7	0.0587 mg/L	0.00032	58.75 µg/L	0.316	0.54%
Sr 421.552†	125284.2	0.1445 mg/L	0.00034	144.5 µg/L	0.34	0.23%

User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 12:04:18 PM
Logged In Analyst: Optima
Plasma On Time: 3/14/2012 8:11:08 AM
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20105.sif
Batch ID: BB20205
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 3/14/2012 12:04:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 12:04:35 PM
Logged In Analyst: Optima
Plasma On Time: 3/14/2012 8:11:08 AM
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20105.sif
Batch ID: BB20205
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 8
Sample ID: BB20105-BLK2
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 17
Date Collected: 3/14/2012 12:04:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20105-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	721322.3	94.54	%	1.367				1.45%
Li 670.784†	-29.3	-0.0002	mg/L	0.00049	-0.1719	µg/L	0.49039	285.27%
Sr 421.552†	19.9	0.0000	mg/L	0.00006	0.0229	µg/L	0.06120	266.70%

Sequence No.: 9
Sample ID: BB20105-BS1
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 18
Date Collected: 3/14/2012 12:07:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20105-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	729491.1	95.61	%	0.617				0.65%
Li 670.784†	8127.3	0.0477	mg/L	0.00018	47.75	µg/L	0.184	0.38%
Sr 421.552†	44542.1	0.0514	mg/L	0.00030	51.36	µg/L	0.302	0.59%

Sequence No.: 10
Sample ID: 1201015-25
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 19
Date Collected: 3/14/2012 12:09:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-25

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	708970.7	92.92	%	0.456				0.49%
Li 670.784†	3080.9	0.0181	mg/L	0.00030	18.10	µg/L	0.299	1.65%
Sr 421.552†	483366.9	0.5573	mg/L	0.00485	557.3	µg/L	4.85	0.87%

Sequence No.: 11
Sample ID: 1201015-26
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 3/14/2012 12:11:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-26

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	721186.4	94.52	%	0.707				0.75%
Li 670.784†	3029.0	0.0178	mg/L	0.00018	17.80	µg/L	0.179	1.00%
Sr 421.552†	477852.6	0.5510	mg/L	0.00467	551.0	µg/L	4.67	0.85%

Sequence No.: 12
Sample ID: 1201015-27
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/14/2012 12:14:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-27

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	713122.1	93.46	%	0.913				0.98%
Li 670.784†	3120.3	0.0183	mg/L	0.00013	18.33	µg/L	0.130	0.71%
Sr 421.552†	484580.3	0.5587	mg/L	0.00440	558.7	µg/L	4.40	0.79%

Sequence No.: 13
Sample ID: 1201015-29
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 3/14/2012 12:16:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-29

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	717171.9	93.99	%	1.384				1.47%
Li 670.784†	3015.8	0.0177	mg/L	0.00025	17.72	µg/L	0.253	1.43%
Sr 421.552†	469029.9	0.5408	mg/L	0.01024	540.8	µg/L	10.24	1.89%

Sequence No.: 14
Sample ID: 1201015-30
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 3/14/2012 12:19:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-30

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	713388.4	93.50	%	0.634				0.68%
Li 670.784†	1514.8	0.0089	mg/L	0.00034	8.900	µg/L	0.3395	3.81%
Sr 421.552†	115595.9	0.1333	mg/L	0.00038	133.3	µg/L	0.38	0.28%

Sequence No.: 15
Sample ID: BB20105-DUP4
Analyst:
Initial Sample Wt:
Dilution:

RPD = NA

Autosampler Location: 24
Date Collected: 3/14/2012 12:21:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20105-DUP4

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	718081.2	94.11	%	0.785				0.83%
Li 670.784†	1574.8	0.0093	mg/L	0.00031	9.252	µg/L	0.3146	3.40%
Sr 421.552†	118426.0	0.1365	mg/L	0.00059	136.5	µg/L	0.59	0.43%

Sequence No.: 16
Sample ID: 1201015-31
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 3/14/2012 12:23:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-31

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	716962.0	93.97	%	0.210				0.22%
Li 670.784†	1663.5	0.0098	mg/L	0.00027	9.773	µg/L	0.2694	2.76%
Sr 421.552†	121209.4	0.1398	mg/L	0.00068	139.8	µg/L	0.68	0.49%

Sequence No.: 17
Sample ID: 1201015-32
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 3/14/2012 12:25:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-32

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	724404.6	94.94	%	0.824				0.87%
Li 670.784†	1551.3	0.0091	mg/L	0.00034	9.114	µg/L	0.3363	3.69%
Sr 421.552†	118793.2	0.1370	mg/L	0.00056	137.0	µg/L	0.56	0.41%

Sequence No.: 18
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 12:27:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	705132.2	92.42	%	0.465				0.50%
Li 670.784†	-47.0	-0.0003	mg/L	0.00034	-0.2760	µg/L	0.34162	123.80%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	104.7	0.0001	mg/L	0.00005	0.1207	µg/L	0.04932	40.87%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 12:30:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	715876.5	93.82	%	0.266				0.28%
Li 670.784†	409907.1	2.408	mg/L	0.0105	2408	µg/L	10.5	0.43%
QC value within limits for Li 670.784 Recovery = 96.33%								
Sr 421.552†	2166002.4	2.497	mg/L	0.0107	2497	µg/L	10.7	0.43%

QC value within limits for Sr 421.552 Recovery = 99.90%
All analyte(s) passed QC.

Sequence No.: 20
Sample ID: 1201015-33
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 3/14/2012 12:32:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-33

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	718975.1	94.23	%	1.142				1.21%
Li 670.784†	1914.1	0.0112	mg/L	0.00016	11.25	µg/L	0.163	1.45%
Sr 421.552†	131767.1	0.1519	mg/L	0.00013	151.9	µg/L	0.13	0.09%

Sequence No.: 21
Sample ID: 1201015-34
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 3/14/2012 12:34:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-34

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	721278.9	94.53	%	0.525				0.56%
Li 670.784†	1545.2	0.0091	mg/L	0.00046	9.078	µg/L	0.4607	5.07%
Sr 421.552†	112837.5	0.1301	mg/L	0.00021	130.1	µg/L	0.21	0.16%

Sequence No.: 22
Sample ID: 1201015-36
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 3/14/2012 12:37:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-36

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	725542.0	95.09	%	0.645				0.68%
Li 670.784†	1773.6	0.0104	mg/L	0.00027	10.42	µg/L	0.272	2.61%
Sr 421.552†	130007.3	0.1499	mg/L	0.00029	149.9	µg/L	0.29	0.19%

Sequence No.: 23
Sample ID: 1201015-37
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 3/14/2012 12:39:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-37

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	710228.8	93.08	%	0.547				0.59%
Li 670.784†	84723.1	0.4978	mg/L	0.00192	497.8	µg/L	1.92	0.39%
Sr 421.552†	330712.2	0.3813	mg/L	0.00102	381.3	µg/L	1.02	0.27%

Sequence No.: 24
Sample ID: 1201015-38
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 3/14/2012 12:41:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-38

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	708072.4	92.80	%	0.464				0.50%
Li 670.784†	84846.7	0.4985	mg/L	0.00267	498.5	µg/L	2.67	0.54%
Sr 421.552†	315823.5	0.3641	mg/L	0.00146	364.1	µg/L	1.46	0.40%

Sequence No.: 25
Sample ID: BB20105-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 3/14/2012 12:43:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20105-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	709687.3	93.01	%	0.669				0.72%
Li 670.784†	94333.3	0.5542	mg/L	0.00443	554.2	µg/L	4.43	0.80%
Sr 421.552†	360144.3	0.4152	mg/L	0.00122	415.2	µg/L	1.22	0.29%

111010

Sequence No.: 26
Sample ID: 1201015-39
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 3/14/2012 12:45:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-39

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	700361.6	91.79	%	0.261				0.28%
Li 670.784†	87214.0	0.5124	mg/L	0.00067	512.4	µg/L	0.67	0.13%
Sr 421.552†	324168.7	0.3738	mg/L	0.00076	373.8	µg/L	0.76	0.20%

Sequence No.: 27
Sample ID: 1201015-40
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 3/14/2012 12:48:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-40

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	708492.9	92.86	%	0.787				0.85%
Li 670.784†	90742.1	0.5331	mg/L	0.00169	533.1	µg/L	1.69	0.32%
Sr 421.552†	307900.6	0.3550	mg/L	0.00139	355.0	µg/L	1.39	0.39%

Sequence No.: 28
Sample ID: BB20105-DUP2
Analyst:
Initial Sample Wt:
Dilution:

RPD=0

Autosampler Location: 35
Date Collected: 3/14/2012 12:50:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20105-DUP2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	706301.9	92.57	%	0.360				0.39%
Li 670.784†	90399.2	0.5311	mg/L	0.00351	531.1	µg/L	3.51	0.66%
Sr 421.552†	306076.8	0.3529	mg/L	0.00202	352.9	µg/L	2.02	0.57%

Sequence No.: 29
Sample ID: 1201015-41
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 3/14/2012 12:52:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-41

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	713250.8	93.48	%	0.420				0.45%
Li 670.784†	3696.8	0.0217	mg/L	0.00051	21.72	µg/L	0.506	2.33%
Sr 421.552†	470448.2	0.5424	mg/L	0.00140	542.4	µg/L	1.40	0.26%

Sequence No.: 30
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 12:55:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	718716.5	94.20	%	0.199				0.21%
Li 670.784†	289.7	0.0017	mg/L	0.00025	1.702	µg/L	0.2518	14.79%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	133.6	0.0002	mg/L	0.00001	0.1541	µg/L	0.01200	7.79%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 31
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 12:57:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	716382.2	93.89	%	0.462				0.49%
Li 670.784†	410127.5	2.410	mg/L	0.0129	2410	µg/L	12.9	0.54%
QC value within limits for Li 670.784 Recovery = 96.38%								
Sr 421.552†	2150894.6	2.480	mg/L	0.0075	2480	µg/L	7.5	0.30%
QC value within limits for Sr 421.552 Recovery = 99.20%								

All analyte(s) passed QC.

Sequence No.: 32
Sample ID: BB20105-MS3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 3/14/2012 12:59:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20105-MS3

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	719552.5	94.31	%	0.448				0.47%
Li 670.784†	12177.5	0.0715	mg/L	0.00105	71.54	µg/L	1.052	1.47%
Sr 421.552†	535816.7	0.6178	mg/L	0.00513	617.8	µg/L	5.13	0.83%

100

Sequence No.: 33
Sample ID: 1201015-42
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 3/14/2012 1:02:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-42

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	717265.5	94.01	%	0.214				0.23%

Li 670.784†	3695.6	0.0217 mg/L	0.00019	21.71 µg/L	0.194	0.89%
Sr 421.552†	474465.0	0.5471 mg/L	0.00371	547.1 µg/L	3.71	0.68%

Sequence No.: 34
Sample ID: 1201015-43
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 3/14/2012 1:04:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-43

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	727353.5	95.33	%	1.103				1.16%
Li 670.784†	-60.3	-0.0004	mg/L	0.00020	-0.3540	µg/L	0.19500	55.08%
Sr 421.552†	72.2	0.0001	mg/L	0.00009	0.0833	µg/L	0.09171	110.10%

Sequence No.: 35
Sample ID: 1201015-44
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 3/14/2012 1:07:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1201015-44

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	722010.5	94.63	%	0.271				0.29%
Li 670.784†	-105.8	-0.0006	mg/L	0.00010	-0.6217	µg/L	0.10336	16.63%
Sr 421.552†	28.9	0.0000	mg/L	0.00005	0.0334	µg/L	0.04712	141.23%

User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 1:09:43 PM
Plasma On Time: 3/14/2012 8:11:08 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20303.sif
Batch ID: BB20303
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Autosampler Location: 1
Sample ID: IBL
Date Collected: 3/14/2012 1:09:43 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:
User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 1:10:01 PM
Plasma On Time: 3/14/2012 8:11:08 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20303.sif
Batch ID: BB20303
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 8
Autosampler Location: 17
Sample ID: BB20303-BLK2
Date Collected: 3/14/2012 1:10:01 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: BB20303-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	730904.9	95.79	%	0.310				0.32%
Li 670.784†	-90.3	-0.0005	mg/L	0.00050	-0.5305	µg/L	0.49706	93.70%
Sr 421.552†	13.3	0.0000	mg/L	0.00004	0.0153	µg/L	0.04301	280.47%

Sequence No.: 9
Autosampler Location: 18
Sample ID: BB20303-BS1
Date Collected: 3/14/2012 1:12:31 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

TV=500

Mean Data: BB20303-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	730657.7	95.76	%	0.476				0.50%
Li 670.784†	83104.4	0.4882	mg/L	0.00195	488.2	µg/L	1.95	0.40%
Sr 421.552†	442304.3	0.5100	mg/L	0.00163	510.0	µg/L	1.63	0.32%

98%

Sequence No.: 10
Autosampler Location: 19
Sample ID: 1202001-01
Date Collected: 3/14/2012 1:14:49 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: 1202001-01

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	725293.1	95.06	%	0.391				0.41%
Li 670.784†	246.4	0.0014	mg/L	0.00018	1.448	µg/L	0.1802	12.45%
Sr 421.552†	22096.9	0.0255	mg/L	0.00011	25.48	µg/L	0.111	0.43%

Sequence No.: 11
Sample ID: BB20303-DUP4
Analyst:
Initial Sample Wt:
Dilution:

RD=N/A

Autosampler Location: 20
Date Collected: 3/14/2012 1:16:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20303-DUP4

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	727204.6	95.31	%	0.627				0.66%
Li 670.784†	3.7	0.0000	mg/L	0.00036	0.0216	µg/L	0.36125	>999.9%
Sr 421.552†	21811.6	0.0251	mg/L	0.00013	25.15	µg/L	0.130	0.52%

Sequence No.: 12
Sample ID: 1202001-02
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/14/2012 1:19:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-02

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	723608.0	94.84	%	1.169				1.23%
Li 670.784†	16.8	0.0001	mg/L	0.00041	0.0987	µg/L	0.40502	410.17%
Sr 421.552†	21843.0	0.0252	mg/L	0.00004	25.18	µg/L	0.041	0.16%

Sequence No.: 13
Sample ID: 1202001-03
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 3/14/2012 1:21:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-03

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	727326.6	95.33	%	1.016				1.07%
Li 670.784†	589.3	0.0035	mg/L	0.00021	3.462	µg/L	0.2102	6.07%
Sr 421.552†	71307.6	0.0822	mg/L	0.00026	82.22	µg/L	0.262	0.32%

Sequence No.: 14
Sample ID: BB20303-DUP2
Analyst:
Initial Sample Wt:
Dilution:

RD=N/A

Autosampler Location: 23
Date Collected: 3/14/2012 1:23:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20303-DUP2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	719600.9	94.31	%	0.436				0.46%
Li 670.784†	567.7	0.0033	mg/L	0.00033	3.335	µg/L	0.3298	9.89%
Sr 421.552†	72230.0	0.0833	mg/L	0.00023	83.28	µg/L	0.235	0.28%

User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 1:25:33 PM
Logged In Analyst: Optima

Plasma On Time: 3/14/2012 8:11:08 AM
Technique: ICP Continuous

Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20303.sif
Batch ID: BB20303
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 15
Sample ID: 1202001-04
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 3/14/2012 1:25:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-04

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	725590.8	95.10	%	0.290				0.31%
Li 670.784†	748.4	0.0044	mg/L	0.00046	4.397	µg/L	0.4627	10.52%
Sr 421.552†	72629.7	0.0837	mg/L	0.00007	83.74	µg/L	0.075	0.09%

Sequence No.: 16
Sample ID: 1202001-05
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 3/14/2012 1:27:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-05

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	724432.8	94.95	%	0.392				0.41%
Li 670.784†	509.8	0.0030	mg/L	0.00037	2.995	µg/L	0.3737	12.48%
Sr 421.552†	72847.9	0.0840	mg/L	0.00024	83.99	µg/L	0.239	0.28%

Sequence No.: 17
Sample ID: BB20303-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 3/14/2012 1:29:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20303-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	722302.2	94.67	%	0.176				0.19%
Li 670.784†	9036.4	0.0531	mg/L	0.00078	53.09	µg/L	0.776	1.46%
Sr 421.552†	115691.3	0.1334	mg/L	0.00050	133.4	µg/L	0.50	0.38%

Sequence No.: 18
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 1:32:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	713190.6	93.47	%	0.904				0.97%
Li 670.784†	-7.9	0.0000	mg/L	0.00019	-0.0465	µg/L	0.19368	416.54%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	51.6	0.0001	mg/L	0.00004	0.0595	µg/L	0.04385	73.74%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 19
Autosampler Location: 8

Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Date Collected: 3/14/2012 1:34:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	724576.6	94.96	%	0.438				0.46%
Li 670.784†	409572.5	2.406	mg/L	0.0104	2406	µg/L	10.4	0.43%
QC value within limits for Li 670.784 Recovery = 96.25%								
Sr 421.552†	2140543.8	2.468	mg/L	0.0080	2468	µg/L	8.0	0.32%
QC value within limits for Sr 421.552 Recovery = 98.72%								

All analyte(s) passed QC.

Sequence No.: 20
Sample ID: 1202001-07
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 3/14/2012 1:37:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-07

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	728175.8	95.44	%	0.407				0.43%
Li 670.784†	-59.9	-0.0004	mg/L	0.00041	-0.3520	µg/L	0.41056	116.64%
Sr 421.552†	1370.7	0.0016	mg/L	0.00010	1.580	µg/L	0.0998	6.32%

Sequence No.: 21
Sample ID: 1202001-08
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 3/14/2012 1:39:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-08

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	727493.1	95.35	%	0.920				0.96%
Li 670.784†	-107.9	-0.0006	mg/L	0.00018	-0.6338	µg/L	0.18338	28.93%
Sr 421.552†	50.6	0.0001	mg/L	0.00004	0.0584	µg/L	0.04357	74.64%

Sequence No.: 22
Sample ID: 1202001-09
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 3/14/2012 1:41:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-09

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	738068.2	96.73	%	0.374				0.39%
Li 670.784†	-169.2	-0.0010	mg/L	0.00035	-0.9938	µg/L	0.35281	35.50%
Sr 421.552†	45.9	0.0001	mg/L	0.00003	0.0530	µg/L	0.02647	50.00%

Sequence No.: 23
Sample ID: 1202001-10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 3/14/2012 1:44:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-10

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD

Y 371.029	716765.5	93.94 %		0.841			0.90%
Li 670.784†	14848.5	0.0872 mg/L		0.00075	87.24 µg/L	0.750	0.86%
Sr 421.552†	990406.4	1.142 mg/L		0.0106	1142 µg/L	10.6	0.93%

Sequence No.: 24
Sample ID: 1202001-11
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 3/14/2012 1:46:42 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-11

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	709812.1	93.03	%	0.133				0.14%
Li 670.784†	14624.6	0.0859	mg/L	0.00110	85.92	µg/L	1.097	1.28%
Sr 421.552†	975601.6	1.125	mg/L	0.0066	1125	µg/L	6.6	0.59%

Sequence No.: 25
Sample ID: 1202001-12
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 3/14/2012 1:49:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-12

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	721943.7	94.62	%	0.336				0.36%
Li 670.784†	-134.3	-0.0008	mg/L	0.00032	-0.7889	µg/L	0.31902	40.44%
Sr 421.552†	462.4	0.0005	mg/L	0.00001	0.5331	µg/L	0.01048	1.97%

Sequence No.: 26
Sample ID: 1202001-13
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 3/14/2012 1:51:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-13

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	727200.3	95.31	%	0.506				0.53%
Li 670.784†	2.7	0.0000	mg/L	0.00020	0.0156	µg/L	0.20094	>999.9%
Sr 421.552†	21573.1	0.0249	mg/L	0.00013	24.87	µg/L	0.125	0.50%

Sequence No.: 27
Sample ID: BB20303-MS3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 3/14/2012 1:53:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20303-MS3

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	718258.9	94.14	%	0.556				0.59%
Li 670.784†	8353.7	0.0491	mg/L	0.00006	49.08	µg/L	0.057	0.12%
Sr 421.552†	66335.9	0.0765	mg/L	0.00014	76.49	µg/L	0.140	0.18%

Sequence No.: 28
Sample ID: 1202001-14
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 3/14/2012 1:55:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-14

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	720074.4	94.37	%	0.566				0.60%
Li 670.784†	136.2	0.0008	mg/L	0.00015	0.8000	µg/L	0.14922	18.65%
Sr 421.552†	22247.4	0.0257	mg/L	0.00010	25.65	µg/L	0.098	0.38%

Sequence No.: 29
Sample ID: 1202001-16
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 3/14/2012 1:58:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-16

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	719699.3	94.33	%	0.248				0.26%
Li 670.784†	503.3	0.0030	mg/L	0.00020	2.957	µg/L	0.2036	6.88%
Sr 421.552†	69442.2	0.0801	mg/L	0.00026	80.07	µg/L	0.259	0.32%

Sequence No.: 30
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 2:00:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	708479.8	92.86	%	1.141				1.23%
Li 670.784†	66.4	0.0004	mg/L	0.00025	0.3903	µg/L	0.24915	63.83%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	12.0	0.0000	mg/L	0.00002	0.0138	µg/L	0.02319	167.52%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 31
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 2:02:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	716948.9	93.97	%	0.257				0.27%
Li 670.784†	409794.9	2.408	mg/L	0.0111	2408	µg/L	11.1	0.46%
QC value within limits for Li 670.784 Recovery = 96.30%								
Sr 421.552†	2140564.2	2.468	mg/L	0.0047	2468	µg/L	4.7	0.19%
QC value within limits for Sr 421.552 Recovery = 98.72%								

All analyte(s) passed QC.

Sequence No.: 32
Sample ID: 1202001-17
Analyst:
Initial Sample Wt:
Dilution:
User canceled analysis.

Autosampler Location: 37
Date Collected: 3/14/2012 2:05:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analysis Begun

Start Time: 3/14/2012 2:05:39 PM
Logged In Analyst: Optima
Spectrometer Model: Optima 3300 DV, S/N 069N9033001

Plasma On Time: 3/14/2012 8:11:08 AM
Technique: ICP Continuous
Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20603.sif
Batch ID: BB20603
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 32
Sample ID: 1202001-17
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 3/14/2012 2:05:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-17

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	721571.2	94.57	%	0.367				0.39%
Li 670.784†	14299.6	0.0840	mg/L	0.00111	84.01	µg/L	1.109	1.32%
Sr 421.552†	976526.0	1.126	mg/L	0.0112	1126	µg/L	11.2	0.99%

Sequence No.: 33
Sample ID: 1202001-18
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 3/14/2012 2:08:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-18

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	711757.1	93.28	%	0.299				0.32%
Li 670.784†	14638.4	0.0860	mg/L	0.00049	86.00	µg/L	0.488	0.57%
Sr 421.552†	987629.1	1.139	mg/L	0.0068	1139	µg/L	6.8	0.59%

User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 2:10:27 PM
Logged In Analyst: Optima
Spectrometer Model: Optima 3300 DV, S/N 069N9033001
Plasma On Time: 3/14/2012 8:11:08 AM
Technique: ICP Continuous
Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20603.sif
Batch ID: BB20603
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 3/14/2012 2:10:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 2:10:51 PM
Logged In Analyst: Optima
Spectrometer Model: Optima 3300 DV, S/N 069N9033001
Plasma On Time: 3/14/2012 8:11:08 AM
Technique: ICP Continuous
Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20603.sif
Batch ID: BB20603
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 8
Sample ID: BB20603-BLK2
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 17
Date Collected: 3/14/2012 2:10:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20603-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	727458.0	95.34	%	0.831				0.87%
Li 670.784†	-27.7	-0.0002	mg/L	0.00052	-0.1626	µg/L	0.51920	319.26%
Sr 421.552†	58.9	0.0001	mg/L	0.00003	0.0679	µg/L	0.03413	50.25%

Sequence No.: 9
Sample ID: BB20603-BS1
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 18
Date Collected: 3/14/2012 2:13:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20603-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	719999.1	94.36	%	0.785				0.83%
Li 670.784†	8244.9	0.0484	mg/L	0.00039	48.44	µg/L	0.389	0.80%
Sr 421.552†	44790.5	0.0516	mg/L	0.00016	51.64	µg/L	0.159	0.31%

97%

Sequence No.: 10
Sample ID: 1202001-20
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 19
Date Collected: 3/14/2012 2:15:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-20

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	733544.5	96.14	%	0.551				0.57%
Li 670.784†	372.0	0.0022	mg/L	0.00015	2.186	µg/L	0.1536	7.03%
Sr 421.552†	35187.0	0.0406	mg/L	0.00011	40.57	µg/L	0.106	0.26%

Sequence No.: 11
Sample ID: BB20603-DUP2
Analyst:
Initial Sample Wt:
Dilution:

RPD, NA

Autosampler Location: 20
Date Collected: 3/14/2012 2:17:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20603-DUP2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	728066.0	95.42	%	0.728				0.76%
Li 670.784†	365.6	0.0021	mg/L	0.00036	2.148	µg/L	0.3580	16.67%
Sr 421.552†	35561.4	0.0410	mg/L	0.00005	41.00	µg/L	0.050	0.12%

Sequence No.: 12
Sample ID: 1202001-21
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/14/2012 2:19:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-21

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	720180.3	94.39	%	0.678				0.72%
Li 670.784†	436.0	0.0026	mg/L	0.00043	2.561	µg/L	0.4304	16.80%
Sr 421.552†	35173.6	0.0406	mg/L	0.00007	40.56	µg/L	0.072	0.18%

Sequence No.: 13
Sample ID: BB20303-DUP4
Analyst:
Initial Sample Wt:
Dilution:

RPD NA

Autosampler Location: 22
Date Collected: 3/14/2012 2:22:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20303-DUP4

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	711077.5	93.20	%	0.336				0.36%
Li 670.784†	544.6	0.0032	mg/L	0.00058	3.200	µg/L	0.5768	18.03%
Sr 421.552†	35537.1	0.0410	mg/L	0.00002	40.97	µg/L	0.016	0.04%

Sequence No.: 14
Sample ID: 1202001-22
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 3/14/2012 2:24:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-22

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	724603.1	94.97	%	0.143				0.15%
Li 670.784†	428.1	0.0025	mg/L	0.00009	2.515	µg/L	0.0930	3.70%
Sr 421.552†	36041.0	0.0416	mg/L	0.00011	41.56	µg/L	0.113	0.27%

Sequence No.: 15
Sample ID: 1202001-24
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 3/14/2012 2:26:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-24

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	712189.9	93.34	%	0.183				0.20%
Li 670.784†	22976.2	0.1350	mg/L	0.00119	135.0	µg/L	1.19	0.88%
Sr 421.552†	2542999.9	2.932	mg/L	0.0079	2932	µg/L	7.9	0.27%

Sequence No.: 16
Sample ID: 1202001-25
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 3/14/2012 2:28:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-25

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	713611.0	93.53	%	0.958				1.02%
Li 670.784†	23506.5	0.1381	mg/L	0.00082	138.1	µg/L	0.82	0.60%
Sr 421.552†	2582856.6	2.978	mg/L	0.0491	2978	µg/L	49.1	1.65%

Sequence No.: 17
Sample ID: BB20603-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 3/14/2012 2:31:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Sample # 1202001-32 Source 11.50 JH 3/14/12

Mean Data: BB20603-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	712593.9	93.39	%	0.507				0.54%
Li 670.784†	10394.3	0.0611	mg/L	0.00025	61.07	µg/L 99.90	0.246	0.40%
Sr 421.552†	322152.2	0.3714	mg/L	0.00144	371.4	µg/L	1.44	0.39%

Sequence No.: 18
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 2:33:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	700829.3	91.85	%	0.351				0.38%
Li 670.784†	105.1	0.0006	mg/L	0.00031	0.6172	µg/L	0.31401	50.87%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	63.9	0.0001	mg/L	0.00007	0.0736	µg/L	0.06784	92.14%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 2:36:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	723684.8	94.85	%	0.537				0.57%
Li 670.784†	413506.4	2.429	mg/L	0.0022	2429	µg/L	2.2	0.09%
QC value within limits for Li 670.784 Recovery = 97.17%								
Sr 421.552†	2149992.7	2.479	mg/L	0.0066	2479	µg/L	6.6	0.27%

QC value within limits for Sr 421.552 Recovery = 99.16%
All analyte(s) passed QC.

Sequence No.: 20
Sample ID: 1202001-26
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 27
Date Collected: 3/14/2012 2:38:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-26

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	715971.9	93.84	%	0.847				0.90%
Li 670.784†	3554.0	0.0209	mg/L	0.00040	20.88	µg/L	0.398	1.91%
Sr 421.552†	465032.9	0.5362	mg/L	0.00643	536.2	µg/L	6.43	1.20%

Sequence No.: 21
Sample ID: 1202001-27
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 28
Date Collected: 3/14/2012 2:41:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-27

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	691767.0	90.66	%	5.368				5.92%
Li 670.784†	3769.5	0.0221	mg/L	0.00191	22.15	µg/L	1.913	8.64%
Sr 421.552†	486714.2	0.5612	mg/L	0.03662	561.2	µg/L	36.62	6.53%

Sequence No.: 22
Sample ID: 1202001-28
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 29
Date Collected: 3/14/2012 2:43:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-28

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	709706.3	93.02	%	0.351				0.38%
Li 670.784†	3713.5	0.0218	mg/L	0.00021	21.82	µg/L	0.209	0.96%
Sr 421.552†	482823.8	0.5567	mg/L	0.00331	556.7	µg/L	3.31	0.59%

Sequence No.: 23
Sample ID: 1202001-29
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 30
Date Collected: 3/14/2012 2:46:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-29

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	711731.6	93.28	%	0.160				0.17%
Li 670.784†	3635.1	0.0214	mg/L	0.00073	21.36	µg/L	0.734	3.44%
Sr 421.552†	481111.4	0.5547	mg/L	0.00305	554.7	µg/L	3.05	0.55%

Sequence No.: 24
Sample ID: 1202001-30
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 31
Date Collected: 3/14/2012 2:48:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-30

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	712086.7	93.33	%	0.822				0.88%
Li 670.784†	2016.1	0.0118	mg/L	0.00049	11.84	µg/L	0.490	4.13%
Sr 421.552†	282435.8	0.3256	mg/L	0.00202	325.6	µg/L	2.02	0.62%

Sequence No.: 25
Sample ID: 1202001-31
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 32
Date Collected: 3/14/2012 2:50:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-31

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	716365.7	93.89	%	0.275				0.29%
Li 670.784†	2171.2	0.0128	mg/L	0.00038	12.76	µg/L	0.376	2.95%
Sr 421.552†	287720.6	0.3317	mg/L	0.00070	331.7	µg/L	0.70	0.21%

Sequence No.: 26
Sample ID: 1202001-32
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 33
Date Collected: 3/14/2012 2:52:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-32

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	713513.4	93.51	%	0.246				0.26%
Li 670.784†	1957.7	0.0115	mg/L	0.00035	11.50	µg/L	0.346	3.01%
Sr 421.552†	275488.5	0.3176	mg/L	0.00031	317.6	µg/L	0.31	0.10%

Sequence No.: 27
Sample ID: 1202001-33
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 34
Date Collected: 3/14/2012 2:55:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-33

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	709631.7	93.01	%	0.437				0.47%
Li 670.784†	2051.5	0.0121	mg/L	0.00068	12.05	µg/L	0.685	5.68%
Sr 421.552†	278037.1	0.3206	mg/L	0.00219	320.6	µg/L	2.19	0.68%

Sequence No.: 28
Sample ID: BB20603-MS3
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 35
Date Collected: 3/14/2012 2:57:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20603-MS3

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	715215.5	93.74	%	0.330				0.35%
Li 670.784†	10373.7	0.0609	mg/L	0.00047	60.95	µg/L	0.467	0.77%
Sr 421.552†	320523.6	0.3696	mg/L	0.00237	369.6	µg/L	2.37	0.64%

User canceled analysis.

==========

Analysis Begun

Start Time: 3/14/2012 2:59:52 PM
Plasma On Time: 3/14/2012 8:11:08 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20706.sif
Batch ID: BB20706
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 1
Autosampler Location: 1
Sample ID: IBL
Date Collected: 3/14/2012 2:59:52 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	707420.8	92.72	%	0.502				0.54%
Li 670.784†	-21.0	-0.0001	mg/L	0.00014	-0.1232	µg/L	0.13675	110.97%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	59.2	0.0001	mg/L	0.00003	0.0683	µg/L	0.02593	37.97%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

==========

Sequence No.: 2
Autosampler Location: 5
Sample ID: LCV LI/SR
Date Collected: 3/14/2012 3:02:16 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: LCV LI/SR

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	717174.9	93.99	%	0.149				0.16%
Li 670.784†	4149.5	0.0244	mg/L	0.00009	24.38	µg/L	0.091	0.37%
QC value within limits for Li 670.784 Recovery = 97.51%								
Sr 421.552†	22607.8	0.0261	mg/L	0.00005	26.10	µg/L	0.050	0.19%
QC value within limits for Sr 421.552 Recovery = 104.41%								

All analyte(s) passed QC.
User canceled analysis.

==========

Analysis Begun

Start Time: 3/14/2012 3:04:01 PM
Plasma On Time: 3/14/2012 8:11:08 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20706.sif
Batch ID: BB20706
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 3
Autosampler Location: 8
Sample ID: CCV@A/B
Date Collected: 3/14/2012 3:04:01 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: CCV@A/B

Mean Corrected Calib Sample

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	719615.9	94.31	%	0.148				0.16%
Li 670.784†	411964.2	2.420	mg/L	0.0016	2420	µg/L	1.6	0.07%
QC value within limits for Li 670.784 Recovery = 96.81%								
Sr 421.552†	2150761.7	2.480	mg/L	0.0008	2480	µg/L	0.8	0.03%
QC value within limits for Sr 421.552 Recovery = 99.19%								

All analyte(s) passed QC.
User canceled analysis.

Analysis Begun

Start Time: 3/14/2012 3:05:57 PM **Plasma On Time: 3/14/2012 8:11:08 AM**
Logged In Analyst: Optima **Technique: ICP Continuous**
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20706.sif
Batch ID: BB20706
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 8 **Autosampler Location: 17**
Sample ID: BB20706-BLK2 **Date Collected: 3/14/2012 3:05:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: BB20706-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	723375.9	94.81	%	1.032				1.09%
Li 670.784†	-15.7	-0.0001	mg/L	0.00015	-0.0923	µg/L	0.15165	164.28%
Sr 421.552†	368.4	0.0004	mg/L	0.00013	0.4247	µg/L	0.12527	29.49%

Sequence No.: 9 **Autosampler Location: 18**
Sample ID: BB20706-BS1 **Date Collected: 3/14/2012 3:08:27 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: BB20706-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	727669.4	95.37	%	0.521				0.55%
Li 670.784†	8090.2	0.0475	mg/L	0.00015	47.53	µg/L	0.153	0.32%
Sr 421.552†	44282.4	0.0511	mg/L	0.00008	51.06	µg/L	0.084	0.16%

95%

Sequence No.: 10 **Autosampler Location: 19**
Sample ID: 1202001-23 **Date Collected: 3/14/2012 3:10:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: 1202001-23

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	704955.1	92.39	%	1.318				1.43%
Li 670.784†	22790.2	0.1339	mg/L	0.00319	133.9	µg/L	3.19	2.39%
Sr 421.552†	2417334.7	2.787	mg/L	0.0291	2787	µg/L	29.1	1.04%

Sequence No.: 11 **Autosampler Location: 20**
Sample ID: BB20706-DUP2 **Date Collected: 3/14/2012 3:13:10 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

RPD: A

Mean Data: BB20706-DUP2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	705906.4	92.52	%	0.299				0.32%
Li 670.784†	23686.3	0.1392	mg/L	0.00003	139.2	µg/L	0.03	0.02%
Sr 421.552†	2547967.6	2.938	mg/L	0.0174	2938	µg/L	17.4	0.59%

Sequence No.: 12
Sample ID: 1202001-37
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/14/2012 3:15:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-37

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	717852.5	94.08	%	0.708				0.75%
Li 670.784†	370.5	0.0022	mg/L	0.00012	2.177	µg/L	0.1228	5.64%
Sr 421.552†	36230.4	0.0418	mg/L	0.00002	41.77	µg/L	0.020	0.05%

Sequence No.: 13
Sample ID: 1202001-38
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 3/14/2012 3:17:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-38

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	728534.8	95.48	%	0.164				0.17%
Li 670.784†	355.3	0.0021	mg/L	0.00009	2.087	µg/L	0.0897	4.30%
Sr 421.552†	35219.1	0.0406	mg/L	0.00013	40.61	µg/L	0.131	0.32%

Sequence No.: 14
Sample ID: 1202001-39
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 3/14/2012 3:19:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-39

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	714515.4	93.65	%	0.623				0.66%
Li 670.784†	22583.4	0.1327	mg/L	0.00083	132.7	µg/L	0.83	0.63%
Sr 421.552†	2450468.4	2.825	mg/L	0.0418	2825	µg/L	41.8	1.48%

Sequence No.: 15
Sample ID: BB20706-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 3/14/2012 3:22:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

109%

Mean Data: BB20706-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	715897.4	93.83	%	0.247				0.26%
Li 670.784†	31866.1	0.1872	mg/L	0.00066	187.2	µg/L	0.66	0.36%
Sr 421.552†	2559926.6	2.952	mg/L	0.0151	2952	µg/L	15.1	0.51%

Sequence No.: 16
Sample ID: 1202001-40

Autosampler Location: 25
Date Collected: 3/14/2012 3:25:01 PM

Analyst:
Initial Sample Wt:
Dilution:
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-40

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	721549.9	94.57	%	0.317				0.34%
Li 670.784†	923.5	0.0054	mg/L	0.00034	5.426	µg/L	0.3351	6.18%
Sr 421.552†	59775.7	0.0689	mg/L	0.00039	68.92	µg/L	0.393	0.57%

Sequence No.: 17
Sample ID: 1202001-41
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 26
Date Collected: 3/14/2012 3:27:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-41

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	707673.5	92.75	%	0.240				0.26%
Li 670.784†	-169.9	-0.0010	mg/L	0.00027	-0.9982	µg/L	0.27066	27.11%
Sr 421.552†	81.6	0.0001	mg/L	0.00003	0.0941	µg/L	0.03413	36.28%

Sequence No.: 18
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 3/14/2012 3:29:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	707631.0	92.74	%	0.787				0.85%
Li 670.784†	12.0	0.0001	mg/L	0.00026	0.0703	µg/L	0.25989	369.43%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	59.1	0.0001	mg/L	0.00006	0.0681	µg/L	0.05799	85.10%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 8
Date Collected: 3/14/2012 3:32:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	713056.3	93.46	%	0.936				1.00%
Li 670.784†	413565.6	2.430	mg/L	0.0217	2430	µg/L	21.7	0.89%
QC value within limits for Li 670.784 Recovery = 97.19%								
Sr 421.552†	2164444.5	2.496	mg/L	0.0221	2496	µg/L	22.1	0.88%
QC value within limits for Sr 421.552 Recovery = 99.82%								

All analyte(s) passed QC.

Sequence No.: 20
Sample ID: 1202001-42
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 27
Date Collected: 3/14/2012 3:34:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-42

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	715985.6	93.84	%	1.607				1.71%
Li 670.784†	949.6	0.0056	mg/L	0.00053	5.579	µg/L	0.5277	9.46%
Sr 421.552†	52651.2	0.0607	mg/L	0.00067	60.71	µg/L	0.673	1.11%

Sequence No.: 21
Sample ID: BB20706-DUP4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 3/14/2012 3:36:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

FID: NG

Mean Data: BB20706-DUP4

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	721612.6	94.58	%	0.433				0.46%
Li 670.784†	767.1	0.0045	mg/L	0.00033	4.507	µg/L	0.3296	7.31%
Sr 421.552†	53218.0	0.0614	mg/L	0.00014	61.36	µg/L	0.135	0.22%

Sequence No.: 22
Sample ID: 1202001-43
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 3/14/2012 3:38:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-43

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	713700.2	93.54	%	0.708				0.76%
Li 670.784†	355.1	0.0021	mg/L	0.00042	2.086	µg/L	0.4171	20.00%
Sr 421.552†	35913.8	0.0414	mg/L	0.00009	41.41	µg/L	0.092	0.22%

Sequence No.: 23
Sample ID: 1202001-44
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 3/14/2012 3:41:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-44

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	711419.6	93.24	%	0.784				0.84%
Li 670.784†	923.7	0.0054	mg/L	0.00018	5.427	µg/L	0.1779	3.28%
Sr 421.552†	52740.2	0.0608	mg/L	0.00017	60.81	µg/L	0.168	0.28%

Sequence No.: 24
Sample ID: BB20706-MS3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 3/14/2012 3:43:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

99%

Mean Data: BB20706-MS3

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	710567.4	93.13	%	0.467				0.50%
Li 670.784†	9367.3	0.0550	mg/L	0.00046	55.03	µg/L	0.457	0.83%
Sr 421.552†	100090.5	0.1154	mg/L	0.00042	115.4	µg/L	0.42	0.36%

Sequence No.: 25
Sample ID: 1202001-45
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 3/14/2012 3:45:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-45

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	706122.6	92.55	%	0.057				0.06%
Li 670.784†	811.9	0.0048	mg/L	0.00035	4.770	µg/L	0.3455	7.24%
Sr 421.552†	60822.7	0.0701	mg/L	0.00013	70.13	µg/L	0.129	0.18%

Sequence No.: 26
Sample ID: 1202001-46
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 3/14/2012 3:47:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-46

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	717162.8	93.99	%	0.983				1.05%
Li 670.784†	-177.1	-0.0010	mg/L	0.00030	-1.040	µg/L	0.2995	28.78%
Sr 421.552†	57.2	0.0001	mg/L	0.00002	0.0659	µg/L	0.02293	34.77%

Sequence No.: 27
Sample ID: 1202001-51
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 3/14/2012 3:49:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202001-51

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	715425.2	93.77	%	0.176				0.19%
Li 670.784†	4209.2	0.0247	mg/L	0.00017	24.73	µg/L	0.170	0.69%
Sr 421.552†	206496.9	0.2381	mg/L	0.00034	238.1	µg/L	0.34	0.14%

User canceled analysis.

==========

Analysis Begun

Start Time: 3/14/2012 3:52:12 PM **Plasma On Time: 3/14/2012 8:11:08 AM**
Logged In Analyst: Optima **Technique: ICP Continuous**
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20707.sif
Batch ID: BB20707
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: IBL **Date Collected: 3/14/2012 3:52:12 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	711769.2	93.29	%	0.717				0.77%
Li 670.784†	330.4	0.0019	mg/L	0.00083	1.941	µg/L	0.8269	42.60%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	122.0	0.0001	mg/L	0.00002	0.1407	µg/L	0.02394	17.02%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.
User canceled analysis.

==========

Analysis Begun

Start Time: 3/14/2012 3:54:28 PM **Plasma On Time: 3/14/2012 8:11:08 AM**
Logged In Analyst: Optima **Technique: ICP Continuous**
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20707.sif
Batch ID: BB20707
Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 3 **Autosampler Location: 8**
Sample ID: CCV@A/B **Date Collected: 3/14/2012 3:54:28 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	716533.1	93.91	%	0.912				0.97%
Li 670.784†	420713.9	2.472	mg/L	0.0136	2472	µg/L	13.6	0.55%
QC value within limits for Li 670.784 Recovery = 98.87%								
Sr 421.552†	2179515.1	2.513	mg/L	0.0076	2513	µg/L	7.6	0.30%
QC value within limits for Sr 421.552 Recovery = 100.52%								

All analyte(s) passed QC.
User canceled analysis.

==========

Analysis Begun

Start Time: 3/14/2012 3:56:21 PM **Plasma On Time: 3/14/2012 8:11:08 AM**
Logged In Analyst: Optima **Technique: ICP Continuous**
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB20707.sif
Batch ID: BB20707

Results Data Set: DV120314
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 8
Sample ID: BB20707-BLK2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 3/14/2012 3:56:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20707-BLK2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	735668.2	96.42	%	0.416				0.43%
Li 670.784†	488.5	0.0029	mg/L	0.00080	2.870	µg/L	0.8011	27.91%
Sr 421.552†	465.2	0.0005	mg/L	0.00013	0.5364	µg/L	0.12817	23.89%

Sequence No.: 9
Sample ID: BB20707-BS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 18
Date Collected: 3/14/2012 3:58:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

10670

Mean Data: BB20707-BS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	733266.9	96.10	%	0.420				0.44%
Li 670.784†	9030.5	0.0531	mg/L	0.00029	53.05	µg/L	0.287	0.54%
Sr 421.552†	45193.7	0.0521	mg/L	0.00009	52.11	µg/L	0.090	0.17%

Sequence No.: 10
Sample ID: 1202003-01
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 19
Date Collected: 3/14/2012 4:01:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-01

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	737739.2	96.69	%	0.747				0.77%
Li 670.784†	2764.2	0.0162	mg/L	0.00019	16.24	µg/L	0.190	1.17%
Sr 421.552†	992373.2	1.144	mg/L	0.0081	1144	µg/L	8.1	0.71%

Sequence No.: 11
Sample ID: BB20707-DUP2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 3/14/2012 4:03:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

RPD = NA

Mean Data: BB20707-DUP2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	725505.4	95.09	%	0.711				0.75%
Li 670.784†	3081.4	0.0181	mg/L	0.00043	18.10	µg/L	0.426	2.35%
Sr 421.552†	1014067.5	1.169	mg/L	0.0098	1169	µg/L	9.8	0.84%

Sequence No.: 12
Sample ID: 1202003-02
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/14/2012 4:05:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-02

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	730054.9	95.68	%	0.398				0.42%
Li 670.784†	3015.1	0.0177	mg/L	0.00087	17.71	µg/L	0.869	4.91%
Sr 421.552†	1031048.4	1.189	mg/L	0.0075	1189	µg/L	7.5	0.64%

Sequence No.: 13
Sample ID: 1202003-03
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 3/14/2012 4:08:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-03

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	728303.3	95.45	%	0.858				0.90%
Li 670.784†	3620.5	0.0213	mg/L	0.00086	21.27	µg/L	0.860	4.04%
Sr 421.552†	423992.2	0.4889	mg/L	0.00769	488.9	µg/L	7.69	1.57%

Sequence No.: 14
Sample ID: 1202003-04
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 3/14/2012 4:10:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-04

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	734763.7	96.30	%	0.231				0.24%
Li 670.784†	3233.3	0.0190	mg/L	0.00035	19.00	µg/L	0.350	1.84%
Sr 421.552†	423038.2	0.4878	mg/L	0.00239	487.8	µg/L	2.39	0.49%

Sequence No.: 15
Sample ID: BB20707-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 3/14/2012 4:13:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

98%

Mean Data: BB20707-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	734369.8	96.25	%	0.816				0.85%
Li 670.784†	11613.9	0.0682	mg/L	0.00192	68.23	µg/L	1.917	2.81%
Sr 421.552†	468986.2	0.5407	mg/L	0.00671	540.7	µg/L	6.71	1.24%

Sequence No.: 16
Sample ID: 1202003-05
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 3/14/2012 4:15:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-05

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	734887.8	96.32	%	0.706				0.73%
Li 670.784†	190.5	0.0011	mg/L	0.00109	1.119	µg/L	1.0850	96.96%
Sr 421.552†	200.1	0.0002	mg/L	0.00003	0.2307	µg/L	0.03017	13.08%

Sequence No.: 17
Sample ID: 1202003-06
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 3/14/2012 4:18:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-06

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	725829.6	95.13	%	0.430				0.45%
Li 670.784†	3285.6	0.0193	mg/L	0.00018	19.30	µg/L	0.178	0.92%
Sr 421.552†	1017066.8	1.173	mg/L	0.0022	1173	µg/L	2.2	0.19%

Sequence No.: 18
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 4:20:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	721827.9	94.60	%	0.467				0.49%
Li 670.784†	551.8	0.0032	mg/L	0.00036	3.242	µg/L	0.3628	11.19%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	189.1	0.0002	mg/L	0.00003	0.2181	µg/L	0.03116	14.29%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 4:23:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	742654.5	97.33	%	0.976				1.00%
Li 670.784†	409824.0	2.408	mg/L	0.0233	2408	µg/L	23.3	0.97%
QC value within limits for Li 670.784 Recovery = 96.31%								
Sr 421.552†	2139853.6	2.467	mg/L	0.0242	2467	µg/L	24.2	0.98%
QC value within limits for Sr 421.552 Recovery = 98.69%								

All analyte(s) passed QC.

Sequence No.: 20
Sample ID: 1202003-07
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 3/14/2012 4:25:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-07

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	741366.7	97.17	%	0.589				0.61%
Li 670.784†	2942.2	0.0173	mg/L	0.00049	17.29	µg/L	0.489	2.83%
Sr 421.552†	1023401.2	1.180	mg/L	0.0140	1180	µg/L	14.0	1.19%

Sequence No.: 21
Sample ID: 1202003-08
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 3/14/2012 4:28:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-08

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	742497.0	97.31	%	0.204				0.21%

Li 670.784†	3289.8	0.0193 mg/L	0.00054	19.33 µg/L	0.542	2.81%
Sr 421.552†	408870.8	0.4714 mg/L	0.00279	471.4 µg/L	2.79	0.59%

Sequence No.: 22
Sample ID: 1202003-09
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 3/14/2012 4:30:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-09

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	736942.1	96.59	%	0.531				0.55%
Li 670.784†	214.7	0.0013	mg/L	0.00052	1.262	µg/L	0.5200	41.22%
Sr 421.552†	126.2	0.0001	mg/L	0.00003	0.1455	µg/L	0.02668	18.34%

Sequence No.: 23
Sample ID: 1202003-10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 3/14/2012 4:32:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-10

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	728115.7	95.43	%	0.382				0.40%
Li 670.784†	3428.6	0.0201	mg/L	0.00034	20.14	µg/L	0.337	1.67%
Sr 421.552†	423512.6	0.4883	mg/L	0.00165	488.3	µg/L	1.65	0.34%

Sequence No.: 24
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/14/2012 4:35:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	725852.6	95.13	%	0.570				0.60%
Li 670.784†	458.0	0.0027	mg/L	0.00059	2.691	µg/L	0.5911	21.97%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	128.8	0.0001	mg/L	0.00005	0.1485	µg/L	0.04967	33.45%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 25
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/14/2012 4:37:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	742225.0	97.28	%	0.461				0.47%
Li 670.784†	408439.7	2.400	mg/L	0.0112	2400	µg/L	11.2	0.47%
QC value within limits for Li 670.784 Recovery = 95.98%								
Sr 421.552†	2132181.5	2.458	mg/L	0.0111	2458	µg/L	11.1	0.45%
QC value within limits for Sr 421.552 Recovery = 98.34%								

All analyte(s) passed QC.

ICP-AES METALS Technical Review Checklist

(200.7, 6010) Hardness_____

For Internal Use Only

Site Name: Dimock WO#: 1202003, 1202004

Analyst: JR Dorsey Date given to Reviewer: 3/15/12

Matrix (circle): Solid / Aqueous / Other _____ SOP R3QA159-021511 / R3QA155-021511

(If TCLP is run: SOP R3QA135-021011)

Program (circle): Superfund / RCRA / Compliance NPDES or SDWA / Other: _____

The signature below indicates the following:

003 (13-46)
004 (1-44)

- This data meets the needs of the customer according to the request.
- The analysis was performed as per the SOP, or exceptions documented.
- All documentation needed to recreate the analyses has been reviewed.
- Data Review status set to Peer Reviewed in Element.

Li only

Peer Reviewer signature _____ Date accepted 3.16.12

If any data for this case is stored with another case file, give Site Name and WO#_____

Peer Reviewer Completes Section Below:

General:	YES	NO	N/A	Comments
Raw data is identified with sample ID's, site name, WO#, analyst name, date of analysis.	✓			
Quality Control:				
First CCV ±5% and RSD <3;	✓			
All other CCV ±10%, every 10 samples and end of run;	✓			
For Compliance samples (SDWA and NPDES):				
SCV ±5% (each time, including PTs)	✓		✓	
All other samples SCV ±10%			✓	
LCV ±30%;	✓			
IBL < |Reporting limit|, analyzed with each CCV ;	✓			
BS (LCS) ±15%;	✓			
SRM (soils) within vendor acceptance limits;			✓	
BLK < |Reporting limit| (if >Reporting Limit **and** >1/10 of sample - must qualify)	✓			
MS [±30%] unless spike is <30% of sample value;	✓			
RPDs from DUP ≤20% aqueous & 35% soils;	✓			
Sample results < CAL or within documented linear range;	✓			

Interference Checks:

Spectral overlays or 2nd wavelength used or interfering elements not present above CAL — ✓

IFA recovery at ±20%; — ✓

Non-interfering elements ± | Reporting limit | or calculated range from 200.7; — ✓

Calculations/Report:

Calculations and transcriptions checked. — ✓

Element Draft Report reviewed. — ✓

Deviations and problems documented. — ✓

NOTE: When soils are being reported, the *sample qualifier* 'dry' or 'wet' must be entered so that it appears in the header of the Element report. This will signify that the data was report 'wet weight' or 'dry weight' as appropriate.

Additional Comments by Peer Reviewer:

Analyst Ensures that the Data Case File is Complete and Accurate:

- in file Bench sheet (TCLP prep log)
- NA IEC tables - NO IECs on Li
- ✓ Instrument run log
- ✓ Standard/Reagent Prep log
- ✓ TV sheets
- NA Element Peer Review report
- ✓ Raw data
- NA Data status set to analyzed

Additional Comments by Analyst on data issues:

On-Demand Data Checklist
(used in addition to routine TRC)
For Internal Use Only

Parameter: Li
Procedure/Method/Reference: 200.7

Site Name: Dimock WO#: 1202003, 1202004
Analyst: JRDonsey

The signature below indicates the following:
• The analysis was performed as per the On-Demand requirements below.

Peer Reviewer signature [signature] Date accepted 3/6/12

Peer Reviewer Completes Section Below:

This is a special request which falls outside our routine protocols. Therefore, these samples were analyzed and the quality control (QC) were evaluated based on the "On Demand" criteria. These protocols include all the QC checks as per routine analyses plus special verification of the performance of the analytical method at the reported quantitation limit/s. These protocols are specified in the EPA Region III OASQA Laboratory Quality Manual, current version.

Quality Control:	**YES**	**NO**	**N/A**	**Comments**
A written procedure or reference must be available for the method being performed and referenced in the narrative. If the method to be performed is unique, the procedures must be fully documented.	✓			
Calibration of the instrumentation or analytical procedure must be according to the method or procedure.	✓			
Calibration verified by analysis of second source standard (SCV, SRM), if available. Concentration must be in the range of the calibration. Results must be within the method, procedure, client or in-house limits.	✓			
Analysis of one method blank (BLK) with each batch. Ideally, the results should be less than the expected quantitation levels set by the method, procedure, or in-house requirements.	✓			
Analysis of one matrix spike (MS) with each batch. For samples or parameters which do not lend themselves to matrix spiking, a BS or SRM sample must be analyzed. Results of spikes must be within the method, procedure, client or in-house limits.	✓			
Analysis of one duplicate analyses (DUP) or a quality control sample such as an SRM or BS with each batch. If duplicate analyses is not possible, e.g, insufficient sample quantity, a quality control sample must be analyzed in duplicate, if available. Results of duplicate analyses must be				

within the method, procedure, client or in-house limits. ✓

At least one blank spike (BS) must be carried through the entire method and analyzed with each batch. The concentration of the BS should be at the quantitation level or at the level of the expected sample results, if known. Results of the BS must be within the method, procedure, client or in-house limits. ✓

Any additional quality control items, such as surrogates, internal standards, etc., which the referenced method or procedure requires should be analyzed. Results must be within the method or, procedure limits. ✓

The analyst must document the impact on the usability of the reported data by applying qualifier codes if applicable and including a summary in the case file. ✓

Additional Comments:

RUN LOG FOR 3300DV OPTIMA JR DORSEY 03/15/12
DIMOCK Li RERUN

JNDorsey 3/15/12

IBL
CALA
IBL
LCV LI/SR
CCV@A/B
SCV@LVM
IFA@1
IFA@2
IFA@3
BB20803-BLK2
BB20803-BS1
1202003-13
1202003-14
BB20803-DUP2
1202003-15
1202003-16
1202003-17
BB20803-MS1
1202003-18
IBL
CCV@A/B
1202003-19
1202003-20
1202003-24
1202003-25
1202003-26
BB20803-DUP4
1202003-27
1202003-28
BB20803-MS3
1202003-29
IBL
CCV@A/B
1202003-30
1202003-31
BB20907-BLK2
BB20907-BS1
1202003-32
1202003-33
1202003-34
1202003-35
BB20907-DUP2
1202003-36
IBL
CCV@A/B
BB20907-MS1
1202003-37
1202003-38
1202003-39
1202003-40
1202003-41
BB20907-DUP4
1202003-42
1202003-43
BB20907-MS3
IBL
CCV@A/B
1202003-44
1202003-45
1202003-46

1202003-47
IBL
CCV@A/B
BB21006-BLK2
BB21006-BS1
1202004-01
BB21006-DUP2
1202004-02
1202004-03
1202004-04
1202004-06
BB21006-MS1
1202004-07
IBL
CCV@A/B
1202004-08
1202004-09
1202004-11
1202004-13
BB21006-DUP4
1202004-14
1202004-15
BB21006-MS3
1202004-16
1202004-17
IBL
CCV@A/B
1202004-19
1202004-20
1202004-21
1202004-22
1202004-23
1202004-24
BB21302-BLK1
BB21302-BS1
1202004-25
1202004-26
IBL
CCV@A/B
1202004-27
BB21302-DUP2
1202004-28
1202004-29
1202004-30
1202004-31
1202004-32
BB21302-MS1
1202004-33
1202004-34
IBL
CCV@A/B
1202004-35
BB21302-DUP4
1202004-36
1202004-37
1202004-38
1202004-39
1202004-40
BB21302-MS3
1202004-41
1202004-42
IBL
CCV@A/B

1202004-43
1202004-44
IBL
CCV@A/B

EPA - OASQA - ICP Standard/Reagent Preparation
Perkin Elmer 3300 OPTIMA

Analyst: JR Dorsey Date: 3/15/12 Pipets Logbook # SNB11

Run Filename: DV1203X5 (all electronic files saved using Run Filename) SOP #: R3-QA159

SITE/WO#: Dimock 1202003, 1202004 Reagent Purity checked ✓

SCV in 2% nitric / 2% HCl matrix (**made daily**): (diluted with IBL) or alternate matrix of _____

* Stock Solution	Expiration Date	Stock Conc	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Check if used
QC-7A	1-12	100 mg/L 1000 mg/L (K)	Spex	13852	0.5 ml	12.5 ml	see TV sheet	
QC-21	1-12	100 mg/L	Spex	13853	0.5ml	12.5 ml	see TV sheet	✓
QC-7A (Ag)	1-12	50 mg/L	Spex	13853	0.05ml	25 ml	0.100 mg/L	

* See Certificate of Analysis for analytes.

Internal Standard in 2% nitric matrix (made as needed...no expiration date applicable)

Stock Solution	Stock Conc	Vendor	Bar Code	Stock Volume	Nitric Volume	Final Volume	Final Conc
Yttrium	1000 mg/L	High Purity	4004	5 mL	10 mL	500 mL	10mg/L

Calibration Standards (CAL) and IBL in 2% nitric / 2% HCl matrix (2 mL acid per 100 mL solution) or alternate matrix of _____

	* Stock Soln and Conc	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Date made/ Preparer	Check if used
IBL	na	na	na	na	1000 mL	na	made daily	√
CAL A	CAL STD A-R Solution A+B (see certificate)	High Purity	11004 11002	10 mL A 10 mL B	1000 ml	see TV sheet	3/11 jrd	
CAL B	CAL STD B: Solution A+B (see certificate)	High Purity	11010 11002	10 mL A 10 mL B	1000 ml	see TV sheet	10/11 jrd	
CAL AG	Silver 1000 mg/L	High Purity	11884	0.02 mL	100 ml	0.20 mg/L		
CAL BS								
CAL A	CAL STD A-R Solution A+B (see certificate)	High Purity	11004 11002	2.5 mL A 2.5 mL B	200 ml	see TV sheet	2/17/12 jrd	✓
	Li @ 10,000 ppm Sr @1000 ppm	High Purity High Purity	11008 11882	0.1ml 1.0 ml				
CAL B	CAL STD B: Solution A+B (see certificate)	High Purity	11010 11002	2.5 mL A 2.5 mL B	200 ml	see TV sheet	2/17/12 jrd	

EPA - OASQA - ICP Standard/Reagent Preparation

Perkin Elmer 3300 OPTIMA

Other QC standards in 2% nitric / 2% HCl matrix (2 mL acid per 100 mL solution) or alternate matrix of _____

	*Stock Soln and Concentration	Vendor	Bar Code	Stock Volume	Final Volume	Final Conc	Date made/ Preparer	Check if used
LCV (10:1)	EPA-CRDL-RR (See certificate) + 1000 mg/L (Ag)	High Purity EM	5759 3355 (Ag)	0.5 mL 0.01mL	100 mL 100 mL	See below^ 0.1 mg/L	1/11 JRD	
^LCV made daily by diluting the LCV(10:1) solution by 10X using the IBL. See TV sheet for final concs.								
LCV (Ag)	LCV	Diluted	BS 1:1	TV =	25 ppb		3/15/12 JRD	✓
LCV	Li & Sr made by diluting	the SCV @ 20X	TV = 0.200 mg/L	Made daily				
IFA 1	10,000 mg/L Ca 10,000 mg/L Al 10,000 mg/L Ni	High Purity High Purity High Purity	10171 11887 5971	5 mL 5 mL 1 mL	200 mL	250 mg/L 250 mg/L 50 mg/L	1/2012 jrd	✓
IFA 2	10,000 mg/L Na 10,000 mg/L Mg 10,000 mg/L Fe	High Purity High Purity High Purity	11808 10172 11886	5 mL 5 mL 5 mL	200 mL	250 mg/L 250 mg/L 250 mg/L	6/11 rc	✓
IFA 3	10,000 mg/L Mn 10,000 mg/L Cu 10,000 mg/L Cr	High Purity High Purity High Purity	5974 5972 5973	1 mL 0.4 mL 1 mL	200 mL	50 mg/L 20 mg/L 50 mg/L	1/2012 jrd	✓

* See Certificate of Analysis for analytes and initial concentrations.

Check standards (made daily) Matrix will be the same as the Calibration Standards (CAL) and IBL (lcb)

CCV Solution ID	Prepared by diluting 1:1	Final Conc	Check if used
CCV AB	CAL A plus CAL B	see TV sheet	✓
CCV AG	CAL AG plus IBL	0.10 mg/L	
CCV BS	CAL BS plus IBL	2.5 mg/L	

Reagent Acid Stocks

	Vendor	Bar Code		Vendor	Bar Code
Nitric Acid	Fisher	11152	HCl Acid	Fisher	11148

Certificates of Analysis Logbook # _____ SNB 2 _____

Comments: _____

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OASQA TRUE VALUES for ICP Standards and QC

CAL stock	ICP	CCV ±5% (ppm)	SCV ±5%/±10% (ppm) (First time ±5%, all others ±10%)	LCV ±30% (ppm)	BS/MS ±15/30% (ppm) (based on 0.5ml stock to 50 mL)	IFA1 ± 20% (ppm)	IFA2 ± 20% (ppm)	IFA2 ±20% (ppm)
AG	**Ag**	0.100	0.100	0.010	0.050			
B	**Al**	10.00	4.00	0.200	2.00	250 ((ag),as,cd, pb,sb,tl,zn)		
B	**As**	5.00	4.00	0.200	0.500			
A	**Ba**	2.50	4.00	0.200	2.00			
A	**Be**	2.50	4.00	0.005	0.050			
A	**B**	2.50	4.00	0.200	0.500			
B	**Ca**	25.00	4.00	0.500	10.00	250(al,b,cu,sn)		
A	**Cd**	2.50	4.00	0.005	0.050			
A	**Co**	2.50	4.00	0.050	0.500			
B	**Cr**	5.00	4.00	0.010	0.500			50 (as,be,cd,sb,zn)
B	**Cu**	5.00	4.00	0.025	0.500			20 (ag,pb,(cd))
B	**Fe**	10.00	4.00	0.100	5.00		250(as,ag,cd,cr,ni,pb,sb,tl,zn)	
B	**K**	25.00	40.00	2.000	20.00			
	Li	2.50*	4.00	0.200*	0.500 (HP)			
B	**Mg**	25.00	4.00	0.500	10.00		250	
B	**Mn**	5.00	4.00	0.015	0.500			50 (b)
A	**Mo**	0.500	4.00	0.200	0.500			
B	**Na**	25.00	4.00	1.000	10.00		250	
B	**Ni**	5.00	4.00	0.040	0.500	50 (cd,cr,pb,sb)		
A	**Pb**	2.50	4.00	0.050	0.500			
A	**Sb**	2.50	4.00	0.060	0.500			
A	**Se**	2.50	4.00	0.200	0.500			
A	**Sn**	2.50	1.00*	0.200	0.500			
	Sr	2.50*	4.00	0.200*	0.500			
A	**Ti**	0.500	4.00	0.200	0.500			
A	**Tl**	2.50	4.00	0.200	0.500			
	U				0.500			
A	**V**	1.25	4.00	0.050	0.500			
B	**Zn**	10.00	4.00	0.020	0.500			

* need to be added separately

( ) = most likely analytes to be interfered with

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TCLP ppm levels (As-5, Ba-100, Cd-1, Cr-5, Pb-5, Se-1, Ag-5)

3/15/12
Dimock

Analysis Begun

Start Time: 3/15/2012 8:59:18 AM
Logged In Analyst: Optima
Spectrometer Model: Optima 3300 DV, S/N 069N9033001
Plasma On Time: 3/15/2012 7:54:59 AM
Technique: ICP Continuous
Autosampler Model: AS-91

1202003
1202004

Sample Information File: C:\pe\Administrator\Sample Information\BB20803-20907.si
Batch ID: BB20803
Results Data Set: DV120315
Results Library: C:\pe\Administrator\Results\Results.mdb

Li Only

Sequence No.: 1
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 3/15/2012 8:59:18 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	645167.5	1884.34	0.29%	100.0	%
Li 670.784†	453.3	27.03	5.96%	[0.00]	mg/L
Sr 421.552†	-46.7	9.16	19.60%	[0.00]	mg/L

Sequence No.: 2
Sample ID: CALA
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 3
Date Collected: 3/15/2012 9:01:43 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALA

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	656450.4	4356.62	0.66%	101.7	%
Li 670.784†	769099.7	2224.33	0.29%	[5]	mg/L
Sr 421.552†	3934203.1	54427.80	1.38%	[5]	mg/L

Sequence No.: 3
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 3/15/2012 9:04:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	650733.9	100.9	%	0.45				0.45%
Li 670.784†	687.7	0.0045	mg/L	0.00043	4.471	µg/L	0.4342	9.71%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	684.2	0.0009	mg/L	0.00027	0.8696	µg/L	0.27224	31.31%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 4
Sample ID: LCV LI/SR
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 5
Date Collected: 3/15/2012 9:06:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCV LI/SR

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD

Y 371.029	658270.8	102.0 %	1.21				1.18%
Li 670.784†	4435.6	0.0288 mg/L	0.00100	28.84 µg/L		0.997	3.46%
QC value within limits for Li 670.784 Recovery = 115.35%							
Sr 421.552†	20318.4	0.0258 mg/L	0.00023	25.82 µg/L		0.229	0.89%
QC value within limits for Sr 421.552 Recovery = 103.29%							

All analyte(s) passed QC.

Sequence No.: 5
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2012 9:09:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	671563.9	104.1	%	0.23				0.22%
Li 670.784†	382621.9	2.487	mg/L	0.0093	2487	µg/L	9.3	0.37%
QC value within limits for Li 670.784 Recovery = 99.50%								
Sr 421.552†	1961650.4	2.493	mg/L	0.0052	2493	µg/L	5.2	0.21%
QC value within limits for Sr 421.552 Recovery = 99.72%								

All analyte(s) passed QC.

Sequence No.: 6
Sample ID: SCV@LVM
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/15/2012 9:11:26 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: SCV@LVM

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	659689.6	102.3	%	0.49				0.48%
Li 670.784†	618949.8	4.024	mg/L	0.0133	4024	µg/L	13.3	0.33%
QC value within limits for Li 670.784 Recovery = 100.60%								
Sr 421.552†	3196756.6	4.063	mg/L	0.0517	4063	µg/L	51.7	1.27%
QC value within limits for Sr 421.552 Recovery = 101.57%								

All analyte(s) passed QC.

Sequence No.: 7
Sample ID: IFA@1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 3/15/2012 9:14:01 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IFA@1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	638747.7	99.00	%	0.880				0.89%
Li 670.784†	1174.4	0.0076	mg/L	0.00060	7.635	µg/L	0.5955	7.80%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	1857.2	0.0024	mg/L	0.00021	2.360	µg/L	0.2130	9.02%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: IFA@2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 3/15/2012 9:16:28 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IFA@2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD

Y 371.029	624501.9	96.80 %	0.985				1.02%
Li 670.784†	2413.1	0.0157 mg/L	0.00098	15.69 µg/L		0.979	6.24%
QC value within limits for Li 670.784 Recovery = Not calculated							
Sr 421.552†	392.2	0.0005 mg/L	0.00004	0.4984 µg/L		0.03523	7.07%
QC value within limits for Sr 421.552 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 9 — **Autosampler Location: 15**
Sample ID: IFA@3 — **Date Collected: 3/15/2012 9:18:58 AM**
Analyst: — **Data Type: Original**
Initial Sample Wt: — **Initial Sample Vol:**
Dilution: — **Sample Prep Vol:**

Mean Data: IFA@3

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	657282.9	101.9	%	1.06				1.04%
Li 670.784†	1231.1	0.0080	mg/L	0.00115	8.003	µg/L	1.1528	14.40%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	-64.5	-0.0001	mg/L	0.00001	-0.0819	µg/L	0.01402	17.11%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 10 — **Autosampler Location: 17**
Sample ID: BB20803-BLK2 — **Date Collected: 3/15/2012 9:21:27 AM**
Analyst: — **Data Type: Original**
Initial Sample Wt: — **Initial Sample Vol:**
Dilution: — **Sample Prep Vol:**

Mean Data: BB20803-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	671405.4	104.1	%	0.28				0.27%
Li 670.784†	426.0	0.0028	mg/L	0.00028	2.769	µg/L	0.2806	10.13%
Sr 421.552†	17.0	0.0000	mg/L	0.00000	0.0216	µg/L	0.00460	21.30%

Sequence No.: 11 — **Autosampler Location: 18**
Sample ID: BB20803-BS1 — **Date Collected: 3/15/2012 9:23:57 AM**
Analyst: — **Data Type: Original**
Initial Sample Wt: — **Initial Sample Vol:**
Dilution: — **Sample Prep Vol:**

110

Mean Data: BB20803-BS1

100

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	682385.0	105.8	%	0.44				0.42%
Li 670.784†	8173.4	0.0531	mg/L	0.00020	53.14	µg/L	0.198	0.37%
Sr 421.552†	40568.5	0.0516	mg/L	0.00024	51.56	µg/L	0.243	0.47%

Sequence No.: 12 — **Autosampler Location: 19**
Sample ID: 1202003-13 — **Date Collected: 3/15/2012 9:26:13 AM**
Analyst: — **Data Type: Original**
Initial Sample Wt: — **Initial Sample Vol:**
Dilution: — **Sample Prep Vol:**

Mean Data: 1202003-13

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	655767.2	101.6	%	0.60				0.59%
Li 670.784†	5152.5	0.0335	mg/L	0.00072	33.50	µg/L	0.722	2.16%
Sr 421.552†	25270.6	0.0321	mg/L	0.00010	32.12	µg/L	0.095	0.30%

Sequence No.: 13 — **Autosampler Location: 20**

Sample ID: 1202003-14
Analyst:
Initial Sample Wt:
Dilution:

Date Collected: 3/15/2012 9:28:23 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-14

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	659392.4	102.2	%	0.53				0.51%
Li 670.784†	6741.7	0.0438	mg/L	0.00084	43.83	µg/L	0.836	1.91%
Sr 421.552†	697336.7	0.8862	mg/L	0.01105	886.2	µg/L	11.05	1.25%

Sequence No.: 14
Sample ID: BB20803-DUP2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/15/2012 9:30:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20803-DUP2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	660867.1	102.4	%	1.40				1.37%
Li 670.784†	6579.1	0.0428	mg/L	0.00100	42.77	µg/L	1.004	2.35%
Sr 421.552†	694400.7	0.8825	mg/L	0.01122	882.5	µg/L	11.22	1.27%

Sequence No.: 15
Sample ID: 1202003-15
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 3/15/2012 9:33:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-15

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	665446.0	103.1	%	0.52				0.50%
Li 670.784†	4628.5	0.0301	mg/L	0.00011	30.09	µg/L	0.115	0.38%
Sr 421.552†	1010981.2	1.285	mg/L	0.0034	1285	µg/L	3.4	0.26%

Sequence No.: 16
Sample ID: 1202003-16
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 3/15/2012 9:35:48 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-16

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	659998.7	102.3	%	0.37				0.36%
Li 670.784†	4930.9	0.0321	mg/L	0.00145	32.06	µg/L	1.454	4.54%
Sr 421.552†	1073367.4	1.364	mg/L	0.0166	1364	µg/L	16.6	1.22%

Sequence No.: 17
Sample ID: 1202003-17
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 3/15/2012 9:38:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-17

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	666111.8	103.2	%	1.07				1.03%
Li 670.784†	6382.6	0.0415	mg/L	0.00069	41.49	µg/L	0.694	1.67%
Sr 421.552†	688140.4	0.8746	mg/L	0.01098	874.6	µg/L	10.98	1.26%

Sequence No.: 18
Sample ID: BB20803-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 3/15/2012 9:40:51 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

108%

Mean Data: BB20803-MS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	665137.2	103.1	%	0.90				0.87%
Li 670.784†	14692.7	0.0955	mg/L	0.00149	95.52	µg/L	1.490	1.56%
Sr 421.552†	741252.3	0.9421	mg/L	0.00185	942.1	µg/L	1.85	0.20%

Sequence No.: 19
Sample ID: 1202003-18
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 3/15/2012 9:43:20 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-18

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	666901.1	103.4	%	0.36				0.35%
Li 670.784†	256.7	0.0017	mg/L	0.00083	1.669	µg/L	0.8268	49.55%
Sr 421.552†	135.8	0.0002	mg/L	0.00007	0.1726	µg/L	0.07175	41.57%

Sequence No.: 20
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/15/2012 9:45:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	656595.9	101.8	%	0.48				0.47%
Li 670.784†	328.9	0.0021	mg/L	0.00045	2.139	µg/L	0.4528	21.17%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	95.7	0.0001	mg/L	0.00005	0.1216	µg/L	0.04995	41.07%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 21
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2012 9:48:14 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	661292.1	102.5	%	0.65				0.63%
Li 670.784†	384946.4	2.503	mg/L	0.0149	2503	µg/L	14.9	0.59%
QC value within limits for Li 670.784 Recovery = 100.10%								
Sr 421.552†	1955059.4	2.485	mg/L	0.0075	2485	µg/L	7.5	0.30%
QC value within limits for Sr 421.552 Recovery = 99.39%								

All analyte(s) passed QC.

Sequence No.: 22
Sample ID: 1202003-19
Analyst:
Initial Sample Wt:

Autosampler Location: 27
Date Collected: 3/15/2012 9:50:37 AM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol:

Mean Data: 1202003-19

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	678305.7	105.1	%	0.69				0.65%
Li 670.784†	6422.6	0.0418	mg/L ✓	0.00036	41.75	µg/L	0.360	0.86%
Sr 421.552†	688129.1	0.8745	mg/L	0.00777	874.5	µg/L	7.77	0.89%

Sequence No.: 23
Sample ID: 1202003-20
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 3/15/2012 9:53:10 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-20

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	668876.5	103.7	%	0.43				0.41%
Li 670.784†	4972.3	0.0323	mg/L ✓	0.00013	32.33	µg/L	0.130	0.40%
Sr 421.552†	630588.3	0.8014	mg/L	0.00610	801.4	µg/L	6.10	0.76%

Sequence No.: 24
Sample ID: 1202003-24
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 3/15/2012 9:55:34 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-24

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	671275.5	104.0	%	0.51				0.49%
Li 670.784†	4578.0	0.0298	mg/L ✓	0.00036	29.76	µg/L	0.357	1.20%
Sr 421.552†	1059167.2	1.346	mg/L	0.0189	1346	µg/L	18.9	1.40%

Sequence No.: 25
Sample ID: 1202003-25
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 3/15/2012 9:57:58 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-25

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	669156.7	103.7	%	0.88				0.84%
Li 670.784†	4468.8	0.0291	mg/L ✓	0.00026	29.05	µg/L	0.257	0.88%
Sr 421.552†	579343.2	0.7363	mg/L	0.00995	736.3	µg/L	9.95	1.35%

Sequence No.: 26
Sample ID: 1202003-26
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 3/15/2012 10:00:24 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-26

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	649958.7	100.7	%	0.55				0.55%
Li 670.784†	6598.3	0.0429	mg/L ✓	0.00183	42.90	µg/L	1.830	4.27%
Sr 421.552†	680336.6	0.8646	mg/L	0.00290	864.6	µg/L	2.90	0.34%

Sequence No.: 27 Autosampler Location: 32

Sample ID: BB20803-DUP4
Analyst:
Initial Sample Wt:
Dilution:

Date Collected: 3/15/2012 10:02:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

RPD = 3

Mean Data: BB20803-DUP4

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	667440.1	103.5	%	0.31				0.29%
Li 670.784†	6380.8	0.0415	mg/L	0.00045	41.48	µg/L	0.447	1.08%
Sr 421.552†	699313.0	0.8888	mg/L	0.00426	888.8	µg/L	4.26	0.48%

Sequence No.: 28
Sample ID: 1202003-27
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 3/15/2012 10:05:18 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-27

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	670114.3	103.9	%	1.09				1.05%
Li 670.784†	6453.7	0.0420	mg/L	0.00057	41.96	µg/L	0.569	1.36%
Sr 421.552†	697422.9	0.8864	mg/L	0.00448	886.4	µg/L	4.48	0.51%

Sequence No.: 29
Sample ID: 1202003-28
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 3/15/2012 10:07:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-28

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	670764.6	104.0	%	0.51				0.49%
Li 670.784†	4280.9	0.0278	mg/L	0.00024	27.83	µg/L	0.239	0.86%
Sr 421.552†	1003457.0	1.275	mg/L	0.0024	1275	µg/L	2.4	0.19%

Sequence No.: 30
Sample ID: BB20803-MS3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 3/15/2012 10:10:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

106%

Mean Data: BB20803-MS3

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	660528.0	102.4	%	1.38				1.35%
Li 670.784†	12409.0	0.0807	mg/L	0.00142	80.67	µg/L	1.418	1.76%
Sr 421.552†	1073282.5	1.364	mg/L	0.0220	1364	µg/L	22.0	1.62%

Sequence No.: 31
Sample ID: 1202003-29
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 3/15/2012 10:12:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-29

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	674652.2	104.6	%	0.42				0.40%
Li 670.784†	6270.9	0.0408	mg/L	0.00034	40.77	µg/L	0.335	0.82%
Sr 421.552†	697641.1	0.8866	mg/L	0.00247	886.6	µg/L	2.47	0.28%

Sequence No.: 32
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/15/2012 10:15:16 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	659908.5	102.3	%	1.30				1.28%
Li 670.784†	388.9	0.0025	mg/L	0.00066	2.528	µg/L	0.6578	26.02%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	200.2	0.0003	mg/L	0.00001	0.2544	µg/L	0.01194	4.69%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 33
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2012 10:17:40 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	678373.7	105.1	%	0.43				0.41%
Li 670.784†	371794.3	2.417	mg/L	0.0066	2417	µg/L	6.6	0.27%
QC value within limits for Li 670.784 Recovery = 96.68%								
Sr 421.552†	1948629.5	2.477	mg/L	0.0086	2477	µg/L	8.6	0.35%
QC value within limits for Sr 421.552 Recovery = 99.06%								

All analyte(s) passed QC.

Sequence No.: 34
Sample ID: 1202003-30
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 3/15/2012 10:20:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-30

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	670881.0	104.0	%	0.70				0.68%
Li 670.784†	4866.2	0.0316	mg/L	0.00067	31.64	µg/L	0.671	2.12%
Sr 421.552†	25567.3	0.0325	mg/L	0.00015	32.49	µg/L	0.146	0.45%

Sequence No.: 35
Sample ID: 1202003-31
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 3/15/2012 10:22:16 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-31

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	672236.2	104.2	%	0.78				0.74%
Li 670.784†	349.7	0.0023	mg/L	0.00062	2.274	µg/L	0.6183	27.20%
Sr 421.552†	143.7	0.0002	mg/L	0.00001	0.1826	µg/L	0.01113	6.09%

Sequence No.: 36
Sample ID: BB20907-BLK2
Analyst:
Initial Sample Wt:

Autosampler Location: 39
Date Collected: 3/15/2012 10:24:38 AM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol:

Mean Data: BB20907-BLK2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	677419.6	105.0	%	1.05				1.00%
Li 670.784†	129.1	0.0008	mg/L	0.00016	0.8395	µg/L	0.15903	18.94%
Sr 421.552†	87.2	0.0001	mg/L	0.00006	0.1108	µg/L	0.05860	52.89%

Sequence No.: 37
Sample ID: BB20907-BS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 3/15/2012 10:27:02 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20907-BS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	675779.0	104.7	%	0.13				0.12%
Li 670.784†	7465.8	0.0485	mg/L	0.00021	48.54	µg/L	0.214	0.44%
Sr 421.552†	39065.3	0.0496	mg/L	0.00004	49.65	µg/L	0.038	0.08%

Sequence No.: 38
Sample ID: 1202003-32
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 3/15/2012 10:29:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-32

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	688893.3	106.8	%	0.94				0.88%
Li 670.784†	885.2	0.0058	mg/L	0.00014	5.755	µg/L	0.1382	2.40%
Sr 421.552†	63768.1	0.0810	mg/L	0.00058	81.04	µg/L	0.584	0.72%

Sequence No.: 39
Sample ID: 1202003-33
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 3/15/2012 10:31:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-33

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	689374.5	106.9	%	1.03				0.97%
Li 670.784†	-40.9	-0.0003	mg/L	0.00034	-0.2660	µg/L	0.33607	126.33%
Sr 421.552†	62.6	0.0001	mg/L	0.00003	0.0796	µg/L	0.03443	43.24%

Sequence No.: 40
Sample ID: 1202003-34
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 3/15/2012 10:33:43 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-34

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	686408.0	106.4	%	0.40				0.37%
Li 670.784†	11.0	0.0001	mg/L	0.00027	0.0716	µg/L	0.27078	378.18%
Sr 421.552†	61.4	0.0001	mg/L	0.00000	0.0781	µg/L	0.00142	1.82%

Sequence No.: 41 Autosampler Location: 44

Sample ID: 1202003-35
Analyst:
Initial Sample Wt:
Dilution:

Date Collected: 3/15/2012 10:36:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-35

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	675909.2	104.8	%	0.53				0.50%
Li 670.784†	17630.6	0.1146	mg/L	0.00046	114.6	µg/L	0.46	0.40%
Sr 421.552†	574032.6	0.7295	mg/L	0.00297	729.5	µg/L	2.97	0.41%

Sequence No.: 42
Sample ID: BB20907-DUP2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 3/15/2012 10:38:38 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20907-DUP2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	686202.1	106.4	%	0.69				0.65%
Li 670.784†	17868.6	0.1162	mg/L	0.00005	116.2	µg/L	0.05	0.04%
Sr 421.552†	575970.9	0.7320	mg/L	0.00844	732.0	µg/L	8.44	1.15%

Sequence No.: 43
Sample ID: 1202003-36
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 3/15/2012 10:41:07 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-36

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	678727.0	105.2	%	0.59				0.56%
Li 670.784†	1610.9	0.0105	mg/L	0.00028	10.47	µg/L	0.284	2.71%
Sr 421.552†	161600.1	0.2054	mg/L	0.00043	205.4	µg/L	0.43	0.21%

Sequence No.: 44
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/15/2012 10:43:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	677859.9	105.1	%	0.40				0.38%
Li 670.784†	283.3	0.0018	mg/L	0.00040	1.842	µg/L	0.3997	21.70%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	99.9	0.0001	mg/L	0.00006	0.1270	µg/L	0.05987	47.14%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 45
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2012 10:45:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD

Y 371.029	673650.1	104.4 %	0.31			0.29%
Li 670.784†	367033.1	2.386 mg/L	0.0022	2386 µg/L	2.2	0.09%
QC value within limits for Li 670.784 Recovery = 95.44%						
Sr 421.552†	1925478.2	2.447 mg/L	0.0048	2447 µg/L	4.8	0.20%
QC value within limits for Sr 421.552 Recovery = 97.88%						

All analyte(s) passed QC.

Sequence No.: 46
Sample ID: BB20907-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 3/15/2012 10:48:08 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20907-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	681268.7	105.6	%	0.59				0.56%
Li 670.784†	8967.0	0.0583	mg/L	0.00015	58.30	µg/L	0.147	0.25%
Sr 421.552†	198337.6	0.2521	mg/L	0.00062	252.1	µg/L	0.62	0.25%

Sequence No.: 47
Sample ID: 1202003-37
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 3/15/2012 10:50:15 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-37

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	685446.2	106.2	%	0.27				0.25%
Li 670.784†	958.6	0.0062	mg/L	0.00042	6.232	µg/L	0.4236	6.80%
Sr 421.552†	64789.2	0.0823	mg/L	0.00027	82.34	µg/L	0.270	0.33%

Sequence No.: 48
Sample ID: 1202003-38
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 3/15/2012 10:52:21 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-38

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	676629.3	104.9	%	0.49				0.46%
Li 670.784†	1484.8	0.0097	mg/L	0.00022	9.653	µg/L	0.2203	2.28%
Sr 421.552†	161265.5	0.2050	mg/L	0.00084	205.0	µg/L	0.84	0.41%

Sequence No.: 49
Sample ID: 1202003-39
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 3/15/2012 10:54:29 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-39

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	675736.8	104.7	%	0.72				0.69%
Li 670.784†	820.7	0.0053	mg/L	0.00060	5.335	µg/L	0.5995	11.24%
Sr 421.552†	260.3	0.0003	mg/L	0.00004	0.3308	µg/L	0.04375	13.22%

Sequence No.: 50
Sample ID: 1202003-40
Analyst:
Initial Sample Wt:

Autosampler Location: 51
Date Collected: 3/15/2012 10:56:53 AM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol:

Mean Data: 1202003-40

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	674372.1	104.5	%	0.18				0.18%
Li 670.784†	1618.9	0.0105	mg/L	0.00064	10.52	µg/L	0.640	6.08%
Sr 421.552†	159642.6	0.2029	mg/L	0.00044	202.9	µg/L	0.44	0.22%

Sequence No.: 51
Sample ID: 1202003-41
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 3/15/2012 10:59:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-41

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	670163.4	103.9	%	0.49				0.47%
Li 670.784†	1020.5	0.0066	mg/L	0.00016	6.634	µg/L	0.1596	2.40%
Sr 421.552†	64471.4	0.0819	mg/L	0.00018	81.94	µg/L	0.177	0.22%

Sequence No.: 52
Sample ID: BB20907-DUP4
Analyst:
Initial Sample Wt:
Dilution:

FD = N/A

Autosampler Location: 53
Date Collected: 3/15/2012 11:01:14 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20907-DUP4

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	690710.2	107.1	%	0.73				0.68%
Li 670.784†	927.9	0.0060	mg/L	0.00040	6.032	µg/L	0.3988	6.61%
Sr 421.552†	64287.1	0.0817	mg/L	0.00011	81.70	µg/L	0.112	0.14%

Sequence No.: 53
Sample ID: 1202003-42
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 3/15/2012 11:03:25 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-42

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	687868.7	106.6	%	0.29				0.27%
Li 670.784†	736.9	0.0048	mg/L	0.00034	4.790	µg/L	0.3379	7.05%
Sr 421.552†	250.8	0.0003	mg/L	0.00008	0.3188	µg/L	0.07853	24.63%

Sequence No.: 54
Sample ID: 1202003-43
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 55
Date Collected: 3/15/2012 11:05:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-43

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	708521.3	109.8	%	0.19				0.17%
Li 670.784†	993.5	0.0065	mg/L	0.00018	6.459	µg/L	0.1780	2.76%
Sr 421.552†	62322.2	0.0792	mg/L	0.00013	79.21	µg/L	0.131	0.17%

Sequence No.: 55 Autosampler Location: 56

Sample ID: BB20907-MS3
Analyst:
Initial Sample Wt:
Dilution:

Date Collected: 3/15/2012 11:08:04 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB20907-MS3

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	707027.6	109.6	%	0.65				0.59%
Li 670.784†	8139.8	0.0529	mg/L	0.00006	52.92	µg/L	0.063	0.12%
Sr 421.552†	101212.0	0.1286	mg/L	0.00039	128.6	µg/L	0.39	0.31%

Sequence No.: 56
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/15/2012 11:10:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	695056.3	107.7	%	0.81				0.75%
Li 670.784†	295.9	0.0019	mg/L	0.00013	1.924	µg/L	0.1255	6.52%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	108.0	0.0001	mg/L	0.00005	0.1373	µg/L	0.04847	35.31%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 57
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2012 11:12:35 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	705651.5	109.4	%	1.04				0.95%
Li 670.784†	361020.6	2.347	mg/L	0.0327	2347	µg/L	32.7	1.40%
QC value less than the lower limit for Li 670.784 Recovery = 93.88%								
Sr 421.552†	1896247.0	2.410	mg/L	0.0240	2410	µg/L	24.0	1.00%
QC value within limits for Sr 421.552 Recovery = 96.40%								

QC Failed. Continue with analysis.

Sequence No.: 58
Sample ID: 1202003-44
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 3/15/2012 11:14:58 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-44

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	718204.5	111.3	%	0.96				0.86%
Li 670.784†	122.4	0.0008	mg/L	0.00048	0.7957	µg/L	0.48425	60.86%
Sr 421.552†	335.2	0.0004	mg/L	0.00006	0.4260	µg/L	0.05943	13.95%

Sequence No.: 59
Sample ID: 1202003-45
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 3/15/2012 11:17:20 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-45

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	703852.2	109.1	%	0.40				0.37%
Li 670.784†	-4.2	0.0000	mg/L	0.00038	-0.0276	µg/L	0.38458	>999.9%
Sr 421.552†	136.2	0.0002	mg/L	0.00002	0.1731	µg/L	0.02420	13.98%

Sequence No.: 60
Sample ID: 1202003-46
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 3/15/2012 11:19:44 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-46

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	699824.5	108.5	%	1.12				1.03%
Li 670.784†	1389.3	0.0090	mg/L	0.00051	9.032	µg/L	0.5050	5.59%
Sr 421.552†	160619.8	0.2041	mg/L	0.00092	204.1	µg/L	0.92	0.45%

Sequence No.: 61
Sample ID: 1202003-47
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 3/15/2012 11:21:52 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202003-47

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	704799.0	109.2	%	1.02				0.93%
Li 670.784†	19638.3	0.1277	mg/L	0.00057	127.7	µg/L	0.57	0.44%
Sr 421.552†	557659.7	0.7087	mg/L	0.00088	708.7	µg/L	0.88	0.12%

User canceled analysis.

==========

Analysis Begun

Start Time: 3/15/2012 11:24:20 AM
Plasma On Time: 3/15/2012 7:54:59 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB21006-21302.sif
Batch ID: BB21006-21302
Results Data Set: DV120315
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 1
Autosampler Location: 1
Sample ID: IBL
Date Collected: 3/15/2012 11:24:20 AM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:
User canceled analysis.

==========

Analysis Begun

Start Time: 3/15/2012 12:42:48 PM
Plasma On Time: 3/15/2012 7:54:59 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB21006-21302.sif
Batch ID: BB21006-21302
Results Data Set: DV120315
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 1
Autosampler Location: 1
Sample ID: IBL
Date Collected: 3/15/2012 12:42:48 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	687031.9	106.5	%	0.24				0.23%
Li 670.784†	-6.2	0.0000	mg/L	0.00012	-0.0401	µg/L	0.12495	311.60%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	69.6	0.0001	mg/L	0.00003	0.0884	µg/L	0.03085	34.89%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.
User canceled analysis.

==========

Analysis Begun

Start Time: 3/15/2012 12:45:04 PM
Plasma On Time: 3/15/2012 7:54:59 AM
Logged In Analyst: Optima
Technique: ICP Continuous
Spectrometer Model: Optima 3300 DV, S/N 069N9033001Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB21006-21302.sif
Batch ID: BB21006-21302
Results Data Set: DV120315
Results Library: C:\pe\Administrator\Results\Results.mdb

==========

Sequence No.: 3
Autosampler Location: 8
Sample ID: CCV@A/B
Date Collected: 3/15/2012 12:45:04 PM
Analyst:
Data Type: Original
Initial Sample Wt:
Initial Sample Vol:
Dilution:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	698107.9	108.2	%	1.01				0.94%
Li 670.784†	359423.8	2.337	mg/L	0.0040	2337	µg/L	4.0	0.17%
QC value less than the lower limit for Li 670.784 Recovery = 93.47%								
Sr 421.552†	1891302.3	2.404	mg/L	0.0032	2404	µg/L	3.2	0.13%
QC value within limits for Sr 421.552 Recovery = 96.15%								

QC Failed. Continue with analysis.
User canceled analysis.

Analysis Begun

Start Time: 3/15/2012 12:46:58 PM
Logged In Analyst: Optima
Spectrometer Model: Optima 3300 DV, S/N 069N9033001
Plasma On Time: 3/15/2012 7:54:59 AM
Technique: ICP Continuous
Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB21006-21302.sif
Batch ID: BB21006-21302
Results Data Set: DV120315
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 8
Sample ID: BB21006-BLK2
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 17
Date Collected: 3/15/2012 12:46:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21006-BLK2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	710301.4	110.1	%	1.02				0.93%
Li 670.784†	112.6	0.0007	mg/L	0.00052	0.7322	µg/L	0.52009	71.03%
Sr 421.552†	511.1	0.0006	mg/L	0.00018	0.6496	µg/L	0.17661	27.19%

Sequence No.: 9
Sample ID: BB21006-BS1
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 18
Date Collected: 3/15/2012 12:49:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

93% D

Mean Data: BB21006-BS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	707954.2	109.7	%	0.79				0.72%
Li 670.784†	7173.9	0.0466	mg/L	0.00091	46.64	µg/L	0.912	1.96%
Sr 421.552†	36940.8	0.0469	mg/L	0.00013	46.95	µg/L	0.127	0.27%

Sequence No.: 10
Sample ID: 1202004-01
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 19
Date Collected: 3/15/2012 12:51:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-01

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	698619.5	108.3	%	1.27				1.17%
Li 670.784†	1468.5	0.0095	mg/L	0.00075	9.547	µg/L	0.7495	7.85%
Sr 421.552†	112279.8	0.1427	mg/L	0.00082	142.7	µg/L	0.82	0.57%

Sequence No.: 11
Sample ID: BB21006-DUP2
Analyst:
Autosampler Location: 20
Date Collected: 3/15/2012 12:53:52 PM
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: RPD=NA Sample Prep Vol:

Mean Data: BB21006-DUP2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	699548.4	108.4	%	0.30				0.28%
Li 670.784†	1293.8	0.0084	mg/L	0.00036	8.411	µg/L	0.3643	4.33%
Sr 421.552†	112298.1	0.1427	mg/L	0.00040	142.7	µg/L	0.40	0.28%

Sequence No.: 12 Autosampler Location: 21
Sample ID: 1202004-02 Date Collected: 3/15/2012 12:56:02 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1202004-02

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	707038.5	109.6	%	0.65				0.60%
Li 670.784†	1270.1	0.0083	mg/L	0.00018	8.257	µg/L	0.1753	2.12%
Sr 421.552†	109462.1	0.1391	mg/L	0.00037	139.1	µg/L	0.37	0.27%

Sequence No.: 13 Autosampler Location: 22
Sample ID: 1202004-03 Date Collected: 3/15/2012 12:58:11 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1202004-03

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	700512.3	108.6	%	0.29				0.27%
Li 670.784†	1304.5	0.0085	mg/L	0.00014	8.481	µg/L	0.1374	1.62%
Sr 421.552†	110551.1	0.1405	mg/L	0.00027	140.5	µg/L	0.27	0.19%

Sequence No.: 14 Autosampler Location: 23
Sample ID: 1202004-04 Date Collected: 3/15/2012 1:00:22 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1202004-04

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	703016.1	109.0	%	0.48				0.44%
Li 670.784†	1297.7	0.0084	mg/L	0.00005	8.437	µg/L	0.0514	0.61%
Sr 421.552†	111624.5	0.1419	mg/L	0.00023	141.9	µg/L	0.23	0.16%

Sequence No.: 15 Autosampler Location: 24
Sample ID: 1202004-06 Date Collected: 3/15/2012 1:02:33 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1202004-06

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	699758.6	108.5	%	0.75				0.69%
Li 670.784†	242.8	0.0016	mg/L	0.00011	1.578	µg/L	0.1143	7.24%
Sr 421.552†	29842.2	0.0379	mg/L	0.00025	37.93	µg/L	0.252	0.66%

Sequence No.: 16
Sample ID: BB21006-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 25
Date Collected: 3/15/2012 1:04:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21006-MS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	702052.7	108.8	%	0.42				0.39%
Li 670.784†	7583.0	0.0493	mg/L	0.00022	49.30	µg/L	0.223	0.45%
Sr 421.552†	69341.8	0.0881	mg/L	0.00009	88.13	µg/L	0.091	0.10%

Sequence No.: 17
Sample ID: 1202004-07
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 26
Date Collected: 3/15/2012 1:07:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-07

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	711034.7	110.2	%	0.76				0.69%
Li 670.784†	258.4	0.0017	mg/L	0.00038	1.680	µg/L	0.3757	22.36%
Sr 421.552†	29227.8	0.0371	mg/L	0.00013	37.15	µg/L	0.130	0.35%

Sequence No.: 18
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/15/2012 1:09:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	688559.6	106.7	%	0.36				0.34%
Li 670.784†	168.7	0.0011	mg/L	0.00031	1.097	µg/L	0.3062	27.91%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	46.3	0.0001	mg/L	0.00005	0.0589	µg/L	0.05390	91.58%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2012 1:11:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	705028.0	109.3	%	0.61				0.55%
Li 670.784†	360832.9	2.346	mg/L	0.0112	2346	µg/L	11.2	0.48%
QC value less than the lower limit for Li 670.784 Recovery = 93.83%								
Sr 421.552†	1886924.5	2.398	mg/L	0.0098	2398	µg/L	9.8	0.41%
QC value within limits for Sr 421.552 Recovery = 95.92%								

QC Failed. Continue with analysis.

Sequence No.: 20
Sample ID: 1202004-08
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 3/15/2012 1:14:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-08

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	708841.9	109.9	%	0.80				0.73%
Li 670.784†	386.2	0.0025	mg/L ✓	0.00043	2.511	µg/L	0.4312	17.18%
Sr 421.552†	29549.0	0.0376	mg/L	0.00008	37.55	µg/L	0.076	0.20%

Sequence No.: 21
Sample ID: 1202004-09
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 3/15/2012 1:16:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-09

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	697956.5	108.2	%	0.51				0.47%
Li 670.784†	272.3	0.0018	mg/L ✓	0.00023	1.770	µg/L	0.2288	12.92%
Sr 421.552†	29461.8	0.0374	mg/L	0.00008	37.44	µg/L	0.083	0.22%

Sequence No.: 22
Sample ID: 1202004-11
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 3/15/2012 1:18:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-11

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	689882.9	106.9	%	1.11				1.03%
Li 670.784†	2025.1	0.0132	mg/L ✓	0.00008	13.17	µg/L	0.085	0.65%
Sr 421.552†	277826.1	0.3531	mg/L	0.00423	353.1	µg/L	4.23	1.20%

Sequence No.: 23
Sample ID: 1202004-13
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 3/15/2012 1:20:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-13

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	686834.2	106.5	%	0.38				0.36%
Li 670.784†	5155.7	0.0335	mg/L ✓	0.00050	33.52	µg/L	0.499	1.49%
Sr 421.552†	323960.2	0.4117	mg/L	0.00452	411.7	µg/L	4.52	1.10%

Sequence No.: 24
Sample ID: BB21006-DUP4
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 3/15/2012 1:23:12 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21006-DUP4

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	690373.5	107.0	%	0.62				0.58%
Li 670.784†	5095.5	0.0331	mg/L	0.00030	33.13	µg/L	0.299	0.90%
Sr 421.552†	316643.3	0.4024	mg/L	0.00074	402.4	µg/L	0.74	0.18%

Sequence No.: 25
Sample ID: 1202004-14
Analyst:

Autosampler Location: 32
Date Collected: 3/15/2012 1:25:37 PM
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1202004-14

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	698812.8	108.3	%	0.51				0.47%
Li 670.784†	3044.3	0.0198	mg/L	0.00029	19.79	µg/L	0.285	1.44%
Sr 421.552†	309341.5	0.3931	mg/L	0.00200	393.1	µg/L	2.00	0.51%

Sequence No.: 26 Autosampler Location: 33
Sample ID: 1202004-15 Date Collected: 3/15/2012 1:28:04 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1202004-15

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	693299.8	107.5	%	0.83				0.77%
Li 670.784†	2025.8	0.0132	mg/L	0.00008	13.17	µg/L	0.079	0.60%
Sr 421.552†	273983.5	0.3482	mg/L	0.00307	348.2	µg/L	3.07	0.88%

Sequence No.: 27 Autosampler Location: 34
Sample ID: BB21006-MS3 Date Collected: 3/15/2012 1:30:31 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

94%

Mean Data: BB21006-MS3

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	687888.1	106.6	%	0.28				0.26%
Li 670.784†	9270.7	0.0603	mg/L	0.00052	60.27	µg/L	0.516	0.86%
Sr 421.552†	313135.4	0.3980	mg/L	0.00318	398.0	µg/L	3.18	0.80%

Sequence No.: 28 Autosampler Location: 35
Sample ID: 1202004-16 Date Collected: 3/15/2012 1:32:58 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1202004-16

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	704346.8	109.2	%	0.55				0.50%
Li 670.784†	1954.9	0.0127	mg/L	0.00039	12.71	µg/L	0.395	3.11%
Sr 421.552†	266073.6	0.3382	mg/L	0.00298	338.2	µg/L	2.98	0.88%

Sequence No.: 29 Autosampler Location: 36
Sample ID: 1202004-17 Date Collected: 3/15/2012 1:35:27 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1202004-17

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	682928.7	105.9	%	0.39				0.36%
Li 670.784†	4642.8	0.0302	mg/L	0.00019	30.18	µg/L	0.186	0.62%
Sr 421.552†	379835.6	0.4827	mg/L	0.00585	482.7	µg/L	5.85	1.21%

Sequence No.: 30
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/15/2012 1:37:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	671016.2	104.0	%	0.65				0.63%
Li 670.784†	164.1	0.0011	mg/L	0.00060	1.067	µg/L	0.6025	56.48%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	138.7	0.0002	mg/L	0.00004	0.1763	µg/L	0.03609	20.46%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 31
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2012 1:40:22 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	684437.6	106.1	%	0.98				0.92%
Li 670.784†	357546.3	2.324	mg/L	0.0020	2324	µg/L	2.0	0.08%
QC value less than the lower limit for Li 670.784 Recovery = 92.98%								
Sr 421.552†	1888260.4	2.400	mg/L	0.0009	2400	µg/L	0.9	0.04%
QC value within limits for Sr 421.552 Recovery = 95.99%								

QC Failed. Continue with analysis.

Sequence No.: 32
Sample ID: 1202004-19
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 3/15/2012 1:42:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-19

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	691366.6	107.2	%	0.51				0.48%
Li 670.784†	2059.4	0.0134	mg/L	0.00008	13.39	µg/L	0.085	0.63%
Sr 421.552†	275252.0	0.3498	mg/L	0.00192	349.8	µg/L	1.92	0.55%

Sequence No.: 33
Sample ID: 1202004-20
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 3/15/2012 1:45:14 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-20

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	682158.7	105.7	%	0.42				0.40%
Li 670.784†	3703.9	0.0241	mg/L	0.00020	24.08	µg/L	0.201	0.83%
Sr 421.552†	371275.9	0.4719	mg/L	0.00124	471.9	µg/L	1.24	0.26%

Sequence No.: 34
Sample ID: 1202004-21
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 3/15/2012 1:47:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-21

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	682154.8	105.7	%	0.40				0.38%
Li 670.784†	865.6	0.0056	mg/L	0.00019	5.627	µg/L	0.1924	3.42%
Sr 421.552†	51078.8	0.0649	mg/L	0.00012	64.92	µg/L	0.120	0.18%

Sequence No.: 35
Sample ID: 1202004-22
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 40
Date Collected: 3/15/2012 1:49:49 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-22

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	678901.9	105.2	%	0.89				0.84%
Li 670.784†	1729.5	0.0112	mg/L	0.00068	11.24	µg/L	0.685	6.09%
Sr 421.552†	221329.7	0.2813	mg/L	0.00073	281.3	µg/L	0.73	0.26%

Sequence No.: 36
Sample ID: 1202004-23
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 41
Date Collected: 3/15/2012 1:51:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-23

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	679182.5	105.3	%	0.95				0.91%
Li 670.784†	15453.6	0.1005	mg/L	0.00118	100.5	µg/L	1.18	1.17%
Sr 421.552†	1357502.5	1.725	mg/L	0.0199	1725	µg/L	19.9	1.15%

Sequence No.: 37
Sample ID: 1202004-24
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 42
Date Collected: 3/15/2012 1:54:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-24

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	671247.3	104.0	%	0.93				0.89%
Li 670.784†	1873.2	0.0122	mg/L	0.00064	12.18	µg/L	0.641	5.27%
Sr 421.552†	144146.9	0.1832	mg/L	0.00038	183.2	µg/L	0.38	0.21%

Sequence No.: 38
Sample ID: BB21302-BLK1
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 43
Date Collected: 3/15/2012 1:56:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21302-BLK1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	682402.0	105.8	%	1.09				1.04%
Li 670.784†	51.9	0.0003	mg/L	0.00055	0.3375	µg/L	0.54806	162.39%
Sr 421.552†	92.4	0.0001	mg/L	0.00004	0.1175	µg/L	0.03528	30.03%

Sequence No.: 39
Sample ID: BB21302-BS1
Analyst:
Autosampler Location: 44
Date Collected: 3/15/2012 1:59:00 PM
Data Type: Original

Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: BB21302-BS1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	686531.0	106.4	%	1.02				0.95%
Li 670.784†	7371.2	0.0479	mg/L	0.00126	47.92	µg/L	1.263	2.64%
Sr 421.552†	38878.2	0.0494	mg/L	0.00029	49.41	µg/L	0.288	0.58%

Sequence No.: 40 Autosampler Location: 45
Sample ID: 1202004-25 Date Collected: 3/15/2012 2:01:12 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1202004-25

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	685919.0	106.3	%	0.72				0.68%
Li 670.784†	-51.1	-0.0003	mg/L	0.00011	-0.3322	µg/L	0.11006	33.13%
Sr 421.552†	58.6	0.0001	mg/L	0.00003	0.0745	µg/L	0.03262	43.78%

Sequence No.: 41 Autosampler Location: 46
Sample ID: 1202004-26 Date Collected: 3/15/2012 2:03:39 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 1202004-26

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	676599.2	104.9	%	0.45				0.43%
Li 670.784†	16093.5	0.1046	mg/L	0.00052	104.6	µg/L	0.52	0.50%
Sr 421.552†	1392553.5	1.770	mg/L	0.0153	1770	µg/L	15.3	0.87%

Sequence No.: 42 Autosampler Location: 1
Sample ID: IBL Date Collected: 3/15/2012 2:06:11 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	674258.3	104.5	%	0.29				0.28%
Li 670.784†	272.3	0.0018	mg/L	0.00017	1.770	µg/L	0.1742	9.84%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	228.4	0.0003	mg/L	0.00008	0.2902	µg/L	0.08059	27.77%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 43 Autosampler Location: 8
Sample ID: CCV@A/B Date Collected: 3/15/2012 2:08:35 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	682437.3	105.8	%	0.39				0.37%
Li 670.784†	359865.3	2.340	mg/L	0.0104	2340	µg/L	10.4	0.45%

QC value less than the lower limit for Li 670.784 Recovery = 93.58%

Sr 421.552†	1881253.4	2.391 mg/L	0.0116	2391 µg/L	11.6	0.48%

QC value within limits for Sr 421.552 Recovery = 95.64%

QC Failed. Continue with analysis.

User canceled analysis.

Analysis Begun

Start Time: 3/15/2012 2:16:11 PM
Logged In Analyst: Optima
Spectrometer Model: Optima 3300 DV, S/N 069N9033001
Plasma On Time: 3/15/2012 7:54:59 AM
Technique: ICP Continuous
Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB21006-21302.sif
Batch ID: BB21006-21302
Results Data Set: DV120315
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 1
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 3/15/2012 2:16:11 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

User canceled analysis.

Analysis Begun

Start Time: 3/15/2012 2:16:30 PM
Logged In Analyst: Optima
Spectrometer Model: Optima 3300 DV, S/N 069N9033001
Plasma On Time: 3/15/2012 7:54:59 AM
Technique: ICP Continuous
Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\BB21006-21302.sif
Batch ID: BB21006-21302
Results Data Set: DV120315
Results Library: C:\pe\Administrator\Results\Results.mdb

Sequence No.: 8
Sample ID: 1202004-27
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 17
Date Collected: 3/15/2012 2:16:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-27

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	675802.0	104.7	%	0.38				0.36%
Li 670.784†	15848.0	0.1030	mg/L	0.00162	103.0	µg/L	1.62	1.58%
Sr 421.552†	1365265.9	1.735	mg/L	0.0052	1735	µg/L	5.2	0.30%

Sequence No.: 9
Sample ID: BB21302-DUP2
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 18
Date Collected: 3/15/2012 2:19:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

RD=1

Mean Data: BB21302-DUP2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	671716.9	104.1	%	0.87				0.84%
Li 670.784†	15969.3	0.1038	mg/L	0.00131	103.8	µg/L	1.31	1.26%
Sr 421.552†	1358853.1	1.727	mg/L	0.0121	1727	µg/L	12.1	0.70%

Sequence No.: 10
Sample ID: 1202004-28
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 19
Date Collected: 3/15/2012 2:21:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-28

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	696708.9	108.0	%	1.08				1.00%
Li 670.784†	929.0	0.0060	mg/L	0.00026	6.040	µg/L	0.2582	4.27%
Sr 421.552†	31281.7	0.0398	mg/L	0.00002	39.76	µg/L	0.019	0.05%

Sequence No.: 11
Sample ID: 1202004-29
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 3/15/2012 2:23:44 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-29

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	685476.2	106.2	%	0.44				0.41%
Li 670.784†	1877.1	0.0122	mg/L	0.00016	12.20	µg/L	0.157	1.28%
Sr 421.552†	224578.4	0.2854	mg/L	0.00099	285.4	µg/L	0.99	0.35%

Sequence No.: 12
Sample ID: 1202004-30
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 3/15/2012 2:25:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-30

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	697067.5	108.0	%	1.23				1.14%
Li 670.784†	990.6	0.0064	mg/L	0.00045	6.440	µg/L	0.4480	6.96%
Sr 421.552†	50664.9	0.0644	mg/L	0.00009	64.39	µg/L	0.092	0.14%

Sequence No.: 13
Sample ID: 1202004-31
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 3/15/2012 2:28:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-31

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	706642.9	109.5	%	1.34				1.22%
Li 670.784†	124.5	0.0008	mg/L	0.00038	0.8096	µg/L	0.37584	46.43%
Sr 421.552†	85.3	0.0001	mg/L	0.00005	0.1084	µg/L	0.04839	44.66%

Sequence No.: 14
Sample ID: 1202004-32
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 23
Date Collected: 3/15/2012 2:30:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-32

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	704711.6	109.2	%	0.43				0.39%
Li 670.784†	1786.0	0.0116	mg/L	0.00009	11.61	µg/L	0.092	0.79%
Sr 421.552†	142268.2	0.1808	mg/L	0.00031	180.8	µg/L	0.31	0.17%

Sequence No.: 15
Sample ID: BB21302-MS1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 24
Date Collected: 3/15/2012 2:32:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

93%0

Mean Data: BB21302-MS1

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	707623.2	109.7	%	0.15				0.14%
Li 670.784†	8950.1	0.0582	mg/L	0.00023	58.19	µg/L	0.231	0.40%
Sr 421.552†	181314.8	0.2304	mg/L	0.00074	230.4	µg/L	0.74	0.32%

Sequence No.: 16
Sample ID: 1202004-33
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 25
Date Collected: 3/15/2012 2:34:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-33

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	708635.5	109.8	%	0.47				0.43%
Li 670.784†	1179.1	0.0077	mg/L	0.00033	7.665	µg/L	0.3273	4.27%
Sr 421.552†	51487.5	0.0654	mg/L	0.00032	65.44	µg/L	0.322	0.49%

Sequence No.: 17
Sample ID: 1202004-34
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 26
Date Collected: 3/15/2012 2:37:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-34

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	703621.7	109.1	%	0.55				0.50%
Li 670.784†	2007.1	0.0130	mg/L	0.00071	13.05	µg/L	0.708	5.42%
Sr 421.552†	230002.7	0.2923	mg/L	0.00050	292.3	µg/L	0.50	0.17%

Sequence No.: 18
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 3/15/2012 2:39:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	703291.3	109.0	%	0.57				0.52%
Li 670.784†	578.2	0.0038	mg/L	0.00043	3.759	µg/L	0.4344	11.56%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	126.1	0.0002	mg/L	0.00002	0.1602	µg/L	0.01896	11.83%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 8
Date Collected: 3/15/2012 2:41:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	710110.4	110.1	%	0.66				0.60%
Li 670.784†	354931.0	2.307	mg/L	0.0041	2307	µg/L	4.1	0.18%
QC value less than the lower limit for Li 670.784 Recovery = 92.30%								
Sr 421.552†	1872873.5	2.380	mg/L	0.0058	2380	µg/L	5.8	0.25%

QC value within limits for Sr 421.552 Recovery = 95.21%
QC Failed. Continue with analysis.

Sequence No.: 20
Sample ID: 1202004-35
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 3/15/2012 2:44:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-35

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	711261.3	110.2	%	0.10				0.09%
Li 670.784†	2013.8	0.0131	mg/L	0.00034	13.09	µg/L	0.337	2.57%
Sr 421.552†	141389.9	0.1797	mg/L	0.00016	179.7	µg/L	0.16	0.09%

Sequence No.: 21
Sample ID: BB21302-DUP4
Analyst:
Initial Sample Wt:
Dilution:

RPD = NA

Autosampler Location: 28
Date Collected: 3/15/2012 2:46:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: BB21302-DUP4

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	702703.0	108.9	%	0.25				0.23%
Li 670.784†	2258.5	0.0147	mg/L	0.00041	14.68	µg/L	0.414	2.82%
Sr 421.552†	146551.0	0.1863	mg/L	0.00055	186.3	µg/L	0.55	0.30%

Sequence No.: 22
Sample ID: 1202004-36
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 3/15/2012 2:48:28 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-36

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	696509.8	108.0	%	0.28				0.26%
Li 670.784†	15945.3	0.1037	mg/L	0.00027	103.7	µg/L	0.27	0.26%
Sr 421.552†	1392718.9	1.770	mg/L	0.0108	1770	µg/L	10.8	0.61%

Sequence No.: 23
Sample ID: 1202004-37
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 3/15/2012 2:50:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-37

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	713288.9	110.6	%	0.71				0.64%
Li 670.784†	137.4	0.0009	mg/L	0.00096	0.8930	µg/L	0.95995	107.49%
Sr 421.552†	235.3	0.0003	mg/L	0.00005	0.2991	µg/L	0.04612	15.42%

Sequence No.: 24
Sample ID: 1202004-38
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 3/15/2012 2:53:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-38

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	706434.6	109.5	%	0.52				0.48%
Li 670.784†	15765.0	0.1025	mg/L	0.00105	102.5	µg/L	1.05	1.02%
Sr 421.552†	1377095.2	1.750	mg/L	0.0070	1750	µg/L	7.0	0.40%

Sequence No.: 25
Sample ID: 1202004-39
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 3/15/2012 2:55:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-39

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	705855.7	109.4	%	0.34				0.31%
Li 670.784†	15973.8	0.1038	mg/L	0.00075	103.8	µg/L	0.75	0.72%
Sr 421.552†	1389650.3	1.766	mg/L	0.0175	1766	µg/L	17.5	0.99%

Sequence No.: 26
Sample ID: 1202004-40
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 3/15/2012 2:58:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-40

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	709402.9	110.0	%	0.46				0.42%
Li 670.784†	1135.9	0.0074	mg/L	0.00028	7.384	µg/L	0.2775	3.76%
Sr 421.552†	31774.1	0.0404	mg/L	0.00009	40.38	µg/L	0.088	0.22%

Sequence No.: 27
Sample ID: BB21302-MS3
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 3/15/2012 3:00:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

90%

Mean Data: BB21302-MS3

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	710578.8	110.1	%	1.46				1.32%
Li 670.784†	8088.4	0.0526	mg/L	0.00048	52.58	µg/L	0.480	0.91%
Sr 421.552†	69054.8	0.0878	mg/L	0.00016	87.76	µg/L	0.157	0.18%

Sequence No.: 28
Sample ID: 1202004-41
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 35
Date Collected: 3/15/2012 3:02:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-41

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	701957.6	108.8	%	0.36				0.33%
Li 670.784†	2042.7	0.0133	mg/L	0.00013	13.28	µg/L	0.134	1.01%
Sr 421.552†	141557.9	0.1799	mg/L	0.00105	179.9	µg/L	1.05	0.58%

Sequence No.: 29
Sample ID: 1202004-42
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 3/15/2012 3:04:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-42

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	720229.9	111.6	%	0.43				0.39%
Li 670.784†	1070.4	0.0070	mg/L	0.00028	6.958	µg/L	0.2777	3.99%
Sr 421.552†	50539.7	0.0642	mg/L	0.00006	64.23	µg/L	0.061	0.10%

Sequence No.: 30
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/15/2012 3:07:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	702902.3	108.9	%	0.56				0.51%
Li 670.784†	341.6	0.0022	mg/L	0.00024	2.221	µg/L	0.2446	11.01%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	111.4	0.0001	mg/L	0.00008	0.1416	µg/L	0.08125	57.38%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 31
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2012 3:09:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	711051.5	110.2	%	0.59				0.54%
Li 670.784†	354507.3	2.305	mg/L	0.0122	2305	µg/L	12.2	0.53%
QC value less than the lower limit for Li 670.784 Recovery = 92.19%								
Sr 421.552†	1867591.2	2.374	mg/L	0.0127	2374	µg/L	12.7	0.54%
QC value within limits for Sr 421.552 Recovery = 94.94%								

QC Failed. Continue with analysis.

Sequence No.: 32
Sample ID: 1202004-43
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 3/15/2012 3:11:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-43

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	705728.8	109.4	%	0.28				0.25%
Li 670.784†	1911.0	0.0124	mg/L	0.00022	12.42	µg/L	0.220	1.77%
Sr 421.552†	219425.5	0.2789	mg/L	0.00025	278.9	µg/L	0.25	0.09%

Sequence No.: 33
Sample ID: 1202004-44
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 3/15/2012 3:14:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1202004-44

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	729883.1	113.1	%	0.87				0.77%

Li 670.784†	40.7	0.0003 mg/L	0.00040	0.2648 µg/L	0.39512	149.20%
Sr 421.552†	96.9	0.0001 mg/L	0.00001	0.1231 µg/L	0.00672	5.46%

==========

Sequence No.: 34
Sample ID: IBL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/15/2012 3:16:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: IBL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	700721.3	108.6	%	0.86				0.79%
Li 670.784†	570.1	0.0037	mg/L	0.00083	3.706	µg/L	0.8325	22.46%
QC value within limits for Li 670.784 Recovery = Not calculated								
Sr 421.552†	125.9	0.0002	mg/L	0.00003	0.1600	µg/L	0.02938	18.36%
QC value within limits for Sr 421.552 Recovery = Not calculated								

All analyte(s) passed QC.

==========

Sequence No.: 35
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2012 3:18:54 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV@A/B

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	712676.7	110.5	%	0.57				0.52%
Li 670.784†	357798.9	2.326	mg/L	0.0171	2326	µg/L	17.1	0.74%
QC value less than the lower limit for Li 670.784 Recovery = 93.04%								
Sr 421.552†	1874533.2	2.382	mg/L	0.0113	2382	µg/L	11.3	0.47%
QC value within limits for Sr 421.552 Recovery = 95.29%								

QC Failed. Retry.

==========

Sequence No.: 36
Sample ID: CCV@A/B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2012 3:20:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

User canceled analysis.