UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
HOUSTON BRANCH
10625 FALLSTONE RD.
HOUSTON, TEXAS 77099

August 18, 2011

MEMORANDUM

SUBJECT: Contract Laboratory Program Data Review

FROM: for M. Elfelay Marvelyn Humphrey, ESAT Regional Project Officer
Environmental Services Branch (6MD-H)

TO: Vincent Malott, Superfund Project Manager (6SF-RA)

Site : **WEST CR 112 GROUND WATER**

Case#: **41486**

SDG#: **MF4N06**

The EPA Region 6 Environmental Services Branch ESAT data review team has completed a review of the submitted Contract Laboratory Program (CLP) data package for the referenced site. The samples analyzed and reviewed are detailed in the attached Regional data review report.

The data package is acceptable for regional use. Problems, if any, are listed in the report narrative. If you have any questions regarding the data review report, please contact me at (281) 983-2140.

667120

ENVIRONMENTAL SERVICES ASSISTANCE TEAM

ESAT Region 6
10625 Fallstone Road
Houston, TX 77099

Alion Science and Technology

MEMORANDUM

DATE: August 17, 2011

TO: Marvelyn Humphrey, ESAT PO, Region 6 EPA

FROM: Sonya Meekins, Data Reviewer, ESAT

THRU: Dominic G. Jarecki, ESAT Program Manager, ESAT DGJ

SUBJECT: CLP Data Review

Contract No.:	EP-W-06-030
TO No.:	024
Task/Sub-Task:	2-12
ESAT Doc. No.:	A024-212-0065
TDF No.:	6-10-529A
ESAT File No.:	I-0417

Attached is the data review summary for Case # 41486
SDG # MF4N06
Site West CR 112 Ground Water

COMMENTS:

I. LEVEL OF DATA REVIEW

Modified CADRE review was performed for this data package.

II. CONTRACTUAL ASSESSMENT OF THE DATA PACKAGE

The CCS found the data package contractually compliant.

III. TECHNICAL USABILITY ASSESSMENT OF THE DATA PACKAGE

Some results were qualified because of technical problems. The significant problems are addressed below.

A. Laboratory blank readings caused seven selenium results to be qualified.

B. The arsenic and selenium serial dilution differences were above the QC limit.

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INORGANIC REGIONAL DATA ASSESSMENT

CASE NO.	41486	SITE	West CR 112 Ground Water
LABORATORY	SENTIN	NO. OF SAMPLES	15
CONTRACT#	EP-W-09-040	MATRIX	Water
SDG#	MF4N06	REVIEWER (IF NOT ESB)	ESAT
SOW#	ISM01.2	REVIEWER'S NAME	Sonya Meekins
SF#	302DD2CA6R6	COMPLETION DATE	August 17, 2011

SAMPLE NO.					
	MF4N06	MF4N10	MF4N21	MF4N44	
	MF4N07	MF4N14	MF4N37	MF4N59	
	MF4N08	MF4N15	MF4N38	MF4N60	
	MF4N09	MF4N20	MF4N43		

DATA ASSESSMENT SUMMARY

	ICP
1. HOLDING TIMES	O
2. CALIBRATIONS	O
3. BLANKS	M
4. MATRIX SPIKES	O
5. DUPLICATE ANALYSIS	O
6. ICP QC	M
7. LCS	O
8. SAMPLE VERIFICATION	O
9. OTHER QC	N/A
10. OVERALL ASSESSMENT	M

O = Data had no problems.
M = Data qualified due to major or minor problems.
Z = Data unacceptable.
NA = Not applicable.

ACTION ITEMS:

AREAS OF CONCERN: Laboratory blank readings caused the qualification of seven results. Three analytes had serial dilution differences above the QC limit.

COMMENTS/CLARIFICATIONS
REGION 6 CLP QA REVIEW

CASE 41486 SDG MF4N06 SITE West CR 112 Ground Water LAB SENTIN

COMMENTS: This SDG consisted of 15 water samples for total metals (by ICP-MS) analysis, excluding calcium and sodium, following SOW ISM01.2. The laboratory requested and received a waiver from the Region to exclude calcium and sodium because of the negative impacts of high concentrations of these two analytes on the life of the ICP-MS's detector. The sampler designated sample MF4N43 for laboratory QC analyses.

The target analyte of concern was chromium with a desired detection limit of 2 ug/L. All samples met the user's desired detection limit criteria. Chromium was reported at concentrations over the user's desired detection limit for all samples.

Modified CADRE Review was performed for this package as requested by the Region. For this review option, the CCS and CADRE primarily determine the laboratory contractual compliance and the technical usability of the sample results, respectively. The reviewer performs supplemental hardcopy forms checking and applies Region 6 guidelines, where necessary, to account for known limitations of the electronic review process. Therefore, the reviewer's final assessments may deviate from those found in the CADRE report. The CADRE narrative for the SDG is attached to this report as an addendum for additional information.

DATA ASSESSMENT: The QC problems affecting data usability are addressed below.

- Because of blank readings, the reviewer qualified the selenium results above the CRQL for samples MF4N06, MF4N07, MF4N08, MF4N09, MF4N20, MF4N21, and MF4N59 as undetected ("U"), and the reported concentrations should be used as raised quantitation limits ("C").

- As a result of laboratory blank readings, all results below the CRQLs for the following analytes should be considered undetected and were flagged "U" at the CRQLs on the DST: antimony, beryllium, cadmium, cobalt, lead, manganese, selenium, and silver.

- The reviewer qualified the aluminum, arsenic, and selenium results as estimated because the associated serial dilution differences exceeded the QC limit.

OVERALL ASSESSMENT: Some results for all samples were qualified because of problems with laboratory blank readings and/or serial dilution differences. ESAT's final data qualifiers in the DST indicate the technical usability of all reported sample results. An Evidence Audit was conducted for the CSF, and the audit results were reported on the Evidence Inventory Checklist. The DST included in this report is the final version.

INORGANIC ACRONYMS

CADRE	Computer-Aided Data Review and Evaluation
CCB	Continuing Calibration Blank
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CN	Cyanide
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
DST	Data Summary Table
HG	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICP-AES	Inductively Coupled Plasma-Atomic Emission Spectroscopy
ICP-MS	Inductively Coupled Plasma-Mass Spectrometry
ICS	Interference Check Sample
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
MDL	Method Detection Limit
NFG	National Functional Guidelines
PE	Performance Evaluation
%D	Percent Difference
%R	Percent Recovery
%RI	Percent Relative Intensity
%RSD	Percent Relative Standard Deviation
QA	Quality Assurance
QC	Quality Control
QL	Quantitation Limit
RPD	Relative Percent Difference
RSCC	Regional Sample Control Center
SDG	Sample Delivery Group
SMO	Sample Management Office
SOW	Statement of Work
SQL	Sample Quantitation Limit
TAL	Target Analyte List

HEADER DEFINITIONS FOR INORGANIC EXCEL DST

CASE: Case Number
SDG: SDG Number
EPASAMP: EPA Sample Number
LABID: Laboratory File/Sample ID
MATRIX: Sample Matrix
QCCOD: Sample QC Code
SMPQUAL: Sample Qualifier
ANDATE: Sample Analysis Date
ANTIME: Sample Analysis Time
CASNUM: Compound CAS Number
ANALYTE: Compound Name
CONC: Compound Concentration
VALDQAL: Region 6 Inorganic Data Validation Qualifier (see Inorganic Data Qualifier Definitions on the next page)
UNITS: Concentration Units
ADJCRQL: Adjusted Contract Required Quantitation Limit Value
SMPDATE: Sampling Date
PRPDATE: Sample Preparation Date
LRDATE: Laboratory Receipt Date
LEVEL: Sample Level
PERSOLD: Sample Percent Solids
SMPWTVL: Sample Weight (Soil Samples)/Initial Sample Volume (Water Samples)
FINLVOL: Final Sample Volume
METHOD: Method of Analysis
STATLOC: Station Location

Disclaimer: **ESAT verified the accuracy of the information reported in the Excel DST only for the following data fields: CASE, SDG, EPASAMP, MATRIX, ANALYTE, CONC, UNITS, ADJCRQL, VALDQAL, and PERSOLD. The data qualifiers in the VALDQAL column indicate the technical usability of the reported results.**

INORGANIC DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the ESAT-Region 6 qualifiers assigned to results in the Data Summary Table.

U Not detected at reported quantitation limit.

L Reported concentration is between the MDL and the CRQL.

J Result is estimated because of outlying quality control parameters such as matrix spike, serial dilution, etc., or the result is below the CRQL.

R Result is unusable.

F A possibility of a false negative exists.

UC Reported concentration should be used as a raised quantitation limit because of blank effects and/or laboratory or field contamination.

+ High biased. Actual concentration may be lower than the concentration reported.

- Low biased. Actual concentration may be higher than the concentration reported.

W The result should be used with caution. The result was reported on a dry weight basis although the sample did not conform to the EPA Office of Water definition of a soil sample because of its high water content (>70% moisture).

CASE	SDG	EPASAMP	LABID	MATRIX	QCCODE	ANDATE	ANTIME	CASNUM	ANALYTE	CONC	VALDQAI	UNITS	ADJCR(	SMPDATE	PRPDATE	LRDATE	LEVEL	PERSOLD	SMPWTVL	FINVOL	METH	STATLOC
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7429905	Aluminum	100	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440382	Arsenic	18.6	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440393	Barium	43.4		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440473	Chromium	12.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440508	Copper	1.3	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7439896	Iron	30.4	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7439954	Magnesium	47800		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7439965	Manganese	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440020	Nickel	3.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440097	Potassium	1830		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7782492	Selenium	5.9	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440622	Vanadium	77.1		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440666	Zinc	2.6		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7429905	Aluminum	181	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440382	Arsenic	19.4	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440393	Barium	48.3		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440473	Chromium	72.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440508	Copper	1.5	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7439896	Iron	143	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7439954	Magnesium	48400		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7439965	Manganese	2.4		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440020	Nickel	5.7		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440097	Potassium	2580		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7782492	Selenium	6.4	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440622	Vanadium	72.0		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440666	Zinc	2.3		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7429905	Aluminum	114	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440382	Arsenic	22.0	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440393	Barium	39.2		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440473	Chromium	107		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440508	Copper	2.2		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7439896	Iron	170	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7439954	Magnesium	47100		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7439965	Manganese	5.0		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440020	Nickel	6.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440097	Potassium	2050		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7782492	Selenium	6.2	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440622	Vanadium	84.4		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440666	Zinc	1.5	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7429905	Aluminum	155	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440382	Arsenic	22.1	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440393	Barium	45.5		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP

41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440473	Chromium	113		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440508	Copper	2.6		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7439896	Iron	233		ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7439954	Magnesium	47500		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7439965	Manganese	5.7		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440020	Nickel	8.0		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440097	Potassium	2110		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7782492	Selenium	6.3	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440622	Vanadium	86.4		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440666	Zinc	2.6		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7429905	Aluminum	127	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440382	Arsenic	22.0	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440393	Barium	46.8		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440473	Chromium	60.3		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440508	Copper	1.5	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7439896	Iron	80.7	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7439954	Magnesium	48800		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7439965	Manganese	1.8		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440020	Nickel	5.7		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440097	Potassium	1920		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7782492	Selenium	6.9	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440622	Vanadium	86.7		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011	13:46:07	7440666	Zinc	2.9		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7429905	Aluminum	151	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440382	Arsenic	15.4	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440393	Barium	44.8		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440473	Chromium	24.0		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440484	Cobalt	3.3		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440508	Copper	2.2		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7439896	Iron	179	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7439954	Magnesium	39700		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7439965	Manganese	6.6		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440020	Nickel	25.1		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440097	Potassium	3640		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7782492	Selenium	5.0	UJ	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440622	Vanadium	63.4		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011	13:48:51	7440666	Zinc	1.3	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7429905	Aluminum	208	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440382	Arsenic	15.7	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440393	Barium	47.7		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440473	Chromium	26.4		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440484	Cobalt	3.4		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440508	Copper	2.2		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7439896	Iron	241		ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP

41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7439954	Magnesium	40200		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7439965	Manganese	7.8		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440020	Nickel	26.5		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440097	Potassium	3700		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7782492	Selenium	5.0	UJ	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440622	Vanadium	62.7		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011	13:51:33	7440666	Zinc	1.5	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7429905	Aluminum	97.3	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440382	Arsenic	10.3	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440393	Barium	38.5		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440473	Chromium	19.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440508	Copper	1.0	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7439896	Iron	39.4	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7439954	Magnesium	29300		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7439965	Manganese	1.1		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440020	Nickel	5.1		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440097	Potassium	7110		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7782492	Selenium	6.8	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440622	Vanadium	36.8		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011	13:54:15	7440666	Zinc	1.9	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7429905	Aluminum	113	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440382	Arsenic	20.5	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440393	Barium	44.0		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440473	Chromium	93.0		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440508	Copper	1.3	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7439896	Iron	23.1	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7439954	Magnesium	51200		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7439965	Manganese	1.7		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440020	Nickel	4.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440097	Potassium	3220		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7782492	Selenium	6.3	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440622	Vanadium	64.9		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011	13:56:58	7440666	Zinc	0.86	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7429905	Aluminum	280	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440382	Arsenic	9.0	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440393	Barium	55.7		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440473	Chromium	2.8		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440508	Copper	3.0		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7439896	Iron	133	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7439954	Magnesium	40200		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7439965	Manganese	27.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440020	Nickel	4.7		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440097	Potassium	11500		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7782492	Selenium	9.1	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A

41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440622	Vanadium	13.0		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011	13:59:40	7440666	Zinc	4.8		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7429905	Aluminum	210	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440382	Arsenic	9.5	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440393	Barium	46.3		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440473	Chromium	9.8		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440484	Cobalt	1.1		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440508	Copper	2.2		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7439896	Iron	175	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7439954	Magnesium	78400		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7439965	Manganese	13.8		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440020	Nickel	12.6		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440097	Potassium	8580		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7782492	Selenium	20.1	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440622	Vanadium	28.6		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011	14:02:23	7440666	Zinc	8.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7429905	Aluminum	562	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440382	Arsenic	6.8	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440393	Barium	68.8		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440473	Chromium	17.9		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440508	Copper	2.9		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7439896	Iron	342		ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7439954	Magnesium	40300		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7439965	Manganese	11.6		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440020	Nickel	16.3		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440097	Potassium	9730		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7782492	Selenium	12.6	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440622	Vanadium	14.5		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011	13:24:20	7440666	Zinc	7.9		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7429905	Aluminum	108	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440382	Arsenic	7.9	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440393	Barium	56.0		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440473	Chromium	5.9		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440508	Copper	1.3	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7439896	Iron	58.9	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7439954	Magnesium	45900		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7439965	Manganese	4.4		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440020	Nickel	8.3		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440097	Potassium	7620		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7782492	Selenium	14.2	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440622	Vanadium	20.4		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011	14:05:06	7440666	Zinc	5.2		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7429905	Aluminum	208	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440382	Arsenic	11.5	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A

41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440393	Barium	50.8		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440473	Chromium	63.0		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440508	Copper	1.6	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7439896	Iron	130	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7439954	Magnesium	44700		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7439965	Manganese	14.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440020	Nickel	5.0		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440097	Potassium	4220		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7782492	Selenium	5.8	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440622	Vanadium	43.1		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011	14:07:50	7440666	Zinc	5.5		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7429905	Aluminum	209	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440382	Arsenic	9.6	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440393	Barium	57.0		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440473	Chromium	59.4		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440484	Cobalt	1.3		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440508	Copper	8.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7439896	Iron	164	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7439954	Magnesium	47300		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7439965	Manganese	29.0		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440020	Nickel	19.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440097	Potassium	5860		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7782492	Selenium	6.9	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440622	Vanadium	29.6		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011	14:10:33	7440666	Zinc	8.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. 41486 SDG No. MF4N06 SDG Nos. To Follow Mod. Ref. No. Date Rec 07/06/11

EPA Lab ID: SENTIN

Lab location: Huntsville, AL

Region: 6 Audit No.: 41486/MF4N06

Resubmitted CSF? Yes ____ No X

Box No(s): 1

COMMENTS:

Over for additional comments.

ORIGINALS	YES	NO	N/A
CUSTODY SEALS			
1. Present on package?	X		
2. Intact upon receipt?	X		
FORM DC-2			
3. Numbering scheme accurate?	X		
4. Are enclosed documents listed?	X		
5. Are listed documents enclosed?	X		
FORM DC-1			
6. Present?	X		
7. Complete?	X		
8. Accurate?	X		
TRAFFIC REPORT/CHAIN-OF-CUSTODY RECORD(s)			
9. Signed?	X		
10. Dated?	X		
AIRBILLS/AIRBILL STICKER			
11. Present?	X		
12. Signed?	X		
13. Dated?	X		
SAMPLE TAGS			
14. Does DC-1 list tags as being included?	X		
15. Present?	X		
OTHER DOCUMENTS			
16. Complete?	X		
17. Legible?	X		
18. Original?	X		
18a. If "NO", does the copy indicate where original documents are located?			X

Audited [signature] Sonya Meekins/ESAT Data Reviewer Date 8/11/2011

Audited ____ ____ Date ____

Signature Printed Name/Title

DC-2

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41486
DAS No:
R

Region:	6	Date Shipped:	6/23/2011	Chain of Custody Record	Sampler Signature:
Project Code:	EP-W-06-004	Carrier Name:	FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:		Airbill:	7972 2041 4794	1 [illegible] 6/23/11 1600	
CERCLIS ID:		Shipped to:	Sentinel Inc. 4733 Commercial Drive Huntsville AL 35816 (256) 534-9800	2	
Spill ID:				3	
Site Name/State:	WEST COUNTY ROAD 112 GROUND WA			4	
Project Leader:	LUIS VEGA				
Action:	Combined RI/FS				
Sampling Co:	EA Engineering				

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
MF4N06	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455821 (HNO3) (1)	LMW-402	S: 6/23/2011 11:25		--
MF4N14	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455829 (HNO3) (1)	LMW-C	S: 6/23/2011 10:07		--
MF4N15	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455830 (HNO3) (1)	LMW-C DUP	S: 6/23/2011 10:07		Field Duplicate
MF4N20	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455835 (HNO3) (1)	LMW-D	S: 6/23/2011 13:45		--
MF4N37	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455852 (HNO3) (1)	WMW-10A	S: 6/23/2011 12:40		--
MF4N43	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455860 (HNO3), 6455861 (HNO3) (2)	WMW-15A	S: 6/23/2011 9:45		Lab QC
MF4N44	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455862 (HNO3) (1)	WMW-15B	S: 6/23/2011 10:25		--

Page 13 of 14

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC: MF4N43	Additional Sampler Signature(s): Dwaine Beard	Chain of Custody Seal Number:
Analysis Key: TM ISM01.2 = TM ISM01.2 / ICP-MS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 6-042412979-062311-0003

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PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41486 **R**
DAS No:

Region:	6	Date Shipped:	6/23/2011
Project Code:	EP-W-06-004	Carrier Name:	FedEx
Account Code:		Airbill:	7948 9943 5267
CERCLIS ID:		Shipped to:	Sentinel Inc. 4733 Commercial Drive Huntsville AL 35816 (256) 534-9800
Spill ID:			
Site Name/State:	WEST COUNTY ROAD 112 GROUND WA		
Project Leader:	LUIS VEGA		
Action:	Combined RI/FS		
Sampling Co:	EA Engineering		

Chain of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [signature]	6/23/11 1800		
2			
3			
4			

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		ORGANIC SAMPLE No.	QC Type
MF4N07	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455822 (HNO3) (1)	LMW-202	S: 6/23/2011	12:32		--
MF4N08	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455823 (HNO3) (1)	LMW-3	S: 6/23/2011	14:30		--
MF4N09	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455824 (HNO3) (1)	LMW-3 DUP	S: 6/23/2011	14:30		Field Duplicate
MF4N10	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455825 (HNO3) (1)	LMW-301	S: 6/23/2011	15:15		--
MF4N21	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455836 (HNO3) (1)	LMW-E	S: 6/23/2011	16:13		--
MF4N38	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455853 (HNO3) (1)	WMW-10B	S: 6/23/2011	12:45		--
MF4N59	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455877 (HNO3) (1)	WMW-25A	S: 6/23/2011	14:16		--
MF4N60	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455878 (HNO3) (1)	WMW-25B	S: 6/23/2011	15:08		--

Page 14 of 14

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): Dwaine Beard	Chain of Custody Seal Number:
Analysis Key: TM ISM01.2 = TM ISM01.2 / ICP-MS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 6-042412979-062311-0004

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PR provides preliminary results. Requests for preliminary results will increase analytical costs.

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ADDENDUM

CADRE NARRATIVE

National Functional Guidelines Report #03

Lab SENTIN(SENTINEL) **SDG** MF4N06 **Case** 41486 **Contract** EPW09040 **Region** 6 **DDTID** 125317 **SOW** ISM01.2

Data Review Reports

Blanks

Blanks	ICP_MS
ND03	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs.
	MF4N14, MF4N15, MF4N43L, PBW, MF4N09, MF4N10, MF4N20, MF4N21, MF4N37, MF4N43, MF4N44, MF4N06, MF4N59, MF4N07, MF4N08, MF4N38, MF4N43D, MF4N60
	Selenium MF4N14 , MF4N15 , MF4N43L , PBW
	Cobalt MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N43L , MF4N43 , MF4N44 , MF4N06 , MF4N59 , MF4N07 , MF4N08
	Nickel PBW
	Beryllium MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N59 , MF4N60 , PBW
	Antimony MF4N09 , MF4N10 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N06 , MF4N60 , MF4N07 , PBW , MF4N08
	Cadmium MF4N14 , MF4N15 , MF4N20 , MF4N38 , MF4N43 , MF4N43D , MF4N60
	Manganese MF4N06
	Silver MF4N43 , MF4N43D
	Lead MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , MF4N08
Blanks	**ICP_MS**
ND04	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated at CRQLs.
	MF4N43L, PBW, MF4N14, MF4N15, MF4N09, MF4N10, MF4N20, MF4N21, MF4N37, MF4N43, MF4N44, MF4N06, MF4N59, MF4N07, MF4N08, MF4N38, MF4N43D, MF4N60
	Vanadium MF4N43L , PBW
	Selenium MF4N14 , MF4N15 , MF4N43L , PBW
	Cobalt MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N43L , MF4N43 , MF4N44 , MF4N06 , MF4N59 , MF4N07 , MF4N08
	Nickel PBW
	Beryllium MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N59 , MF4N60 , PBW
	Antimony MF4N09 , MF4N10 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N06 , MF4N60 , MF4N07 , PBW , MF4N08
	Potassium PBW
	Cadmium MF4N14 , MF4N15 , MF4N20 , MF4N38 , MF4N43 , MF4N43D , MF4N60
	Manganese MF4N06
	Silver MF4N43 , MF4N43D
	Lead MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 ,

National Functional Guidelines Report #03

Lab SENTIN(SENTINEL) **SDG** MF4N06 **Case** 41486 **Contract** EPW09040 **Region** 6 **DDTID** 125317 **SOW** ISM01.2

Data Review Reports

Blanks

Blanks	ICP_MS
	MF4N59 , MF4N60 , MF4N07 , MF4N08
Blanks	**ICP_MS**
ND05	The following samples have analyte results greater than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes.
	MF4N09, MF4N10, MF4N14, MF4N15, MF4N20, MF4N21, MF4N37, MF4N38, MF4N43L, MF4N43S, MF4N43, MF4N43D, MF4N44, MF4N06, MF4N59, MF4N60, MF4N07, LCS, MF4N08
	Arsenic MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Nickel MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Lead MF4N43S , LCS
	Selenium MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Barium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Cobalt MF4N14 , MF4N15 , MF4N38 , MF4N43S , MF4N43D , MF4N60 , LCS
	Aluminum MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Beryllium MF4N43S , LCS
	Antimony MF4N43S , LCS
	Thallium MF4N43S , LCS
	Cadmium MF4N43S , LCS
	Magnesium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Manganese MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Silver MF4N43S , LCS
Blanks	**ICP_MS**
ND06	The following samples have analyte results greater than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes.
	MF4N09, MF4N10, MF4N14, MF4N15, MF4N20, MF4N21, MF4N37, MF4N38, MF4N43L, MF4N43S, MF4N43, MF4N43D, MF4N44, MF4N06, MF4N59, MF4N60, MF4N07, LCS, MF4N08
	Vanadium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Arsenic MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Nickel MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D ,

National Functional Guidelines Report #03

Lab SENTIN(SENTINEL) **SDG** MF4N06 **Case** 41486 **Contract** EPW09040 **Region** 6 **DDTID** 125317 **SOW** ISM01.2

Data Review Reports

Blanks

Blanks	ICP_MS
	MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Potassium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Lead MF4N43L , MF4N43S , LCS
	Selenium MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Barium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Cobalt MF4N14 , MF4N15 , MF4N38 , MF4N43L , MF4N43S , MF4N43D , MF4N60 , LCS
	Aluminum MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Beryllium MF4N43S , LCS
	Antimony MF4N43S , LCS
	Thallium MF4N43S , LCS
	Cadmium MF4N43S , LCS
	Magnesium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Manganese MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Silver MF4N43S , LCS
Blanks	**ICP_MS**
NE04	The following samples have analyte results greater than or equal to MDLs but less than or equal to CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs.
	MF4N14, MF4N15, MF4N38, MF4N43, MF4N43D, MF4N59, MF4N60, MF4N08, MF4N09, MF4N10, MF4N21, MF4N37, MF4N06, MF4N07
	Selenium MF4N14 , MF4N15
	Beryllium MF4N38 , MF4N43 , MF4N43D , MF4N59 , MF4N60
	Antimony MF4N08 , MF4N09 , MF4N10 , MF4N21 , MF4N37 , MF4N38 , MF4N43 , MF4N43D , MF4N06 , MF4N60 , MF4N07
Blanks	**ICP_MS**
NE05	The following samples have analyte results greater than CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualify detected and nondetected analytes.
	MF4N08, MF4N09, MF4N10, MF4N14, MF4N15, MF4N20, MF4N21, MF4N37, MF4N38, MF4N43S, MF4N43, MF4N43D, MF4N44, MF4N59, MF4N06, MF4N60, LCS, MF4N07, MF4N43L
	Vanadium MF4N08 , MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N06 , MF4N60 , LCS , MF4N07

National Functional Guidelines Report #03

Lab SENTIN(SENTINEL) **SDG** MF4N06 **Case** 41486 **Contract** EPW09040 **Region** 6 **DDTID** 125317 **SOW** ISM01.2

Data Review Reports

Blanks

Blanks	ICP_MS
	Selenium MF4N08 , MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N06 , MF4N60 , LCS , MF4N07
	Beryllium MF4N43S , LCS
	Nickel MF4N08 , MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N06 , MF4N60 , LCS , MF4N07
	Antimony MF4N43S , LCS
	Potassium MF4N08 , MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N06 , MF4N60 , LCS , MF4N07

National Functional Guidelines Report #03

Lab SENTIN(SENTINEL) **SDG** MF4N06 **Case** 41486 **Contract** EPW09040 **Region** 6 **DDTID** 125317 **SOW** ISM01.2

Data Review Reports

Detection Limit

Detection Limit	ICP_MS
NDL1	The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified J.
	MF4N43L, PBW, MF4N10, MF4N20, MF4N21, MF4N44, MF4N59, MF4N06, MF4N07, MF4N08, MF4N09, MF4N14, MF4N15, MF4N37, MF4N38, MF4N43, MF4N43D, MF4N60
	Vanadium MF4N43L , PBW
	Nickel PBW
	Potassium PBW
	Copper MF4N10 , MF4N20 , MF4N21 , MF4N43L , MF4N44 , MF4N59 , MF4N06 , MF4N07
	Lead MF4N08 , MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N06 , MF4N60 , MF4N07
	Selenium MF4N14 , MF4N15 , MF4N43L , PBW
	Cobalt MF4N08 , MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N43L , MF4N43 , MF4N44 , MF4N06 , MF4N59 , MF4N07
	Zinc MF4N08 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N43L
	Beryllium MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N59 , MF4N60 , PBW
	Antimony MF4N08 , MF4N09 , MF4N10 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N06 , MF4N60 , PBW , MF4N07
	Cadmium MF4N14 , MF4N15 , MF4N20 , MF4N38 , MF4N43 , MF4N43D , MF4N60
	Iron MF4N08 , MF4N10 , MF4N14 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N44 , MF4N59 , MF4N06 , MF4N60 , MF4N07
	Silver MF4N43 , MF4N43D
	Manganese MF4N06

National Functional Guidelines Report #03

Lab SENTIN(SENTINEL) **SDG** MF4N06 **Case** 41486 **Contract** EPW09040 **Region** 6 **DDTID** 125317 **SOW** ISM01.2

Data Review Reports

Serial Dilution

Serial Dilution	ICP_MS
NL032	The following ICP-MS Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. The detected analytes in samples with results greater than or equal to MDLs are qualified J. Nondetected analytes in samples are qualified UJ.
	MF4N06, MF4N07, MF4N08, MF4N09, MF4N10, MF4N14, MF4N15, MF4N20, MF4N21, MF4N37, MF4N38, MF4N43, MF4N44, MF4N59, MF4N60
	Selenium MF4N43L
	Arsenic MF4N43L
	Aluminum MF4N43L

CASE	SDG	EPASAMP	LABID	MATRIX	QCCODE	ANDATE	ANTIME	CASNUM	ANALYTE	CONC	VALDQAI	UNITS	ADJCR(	SMPDATE	PRPDATE	LRDATE	LEVEL	PERSOLD	SMPWTVL	FINVOL	METH	STATLOC
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7429905	Aluminum	100	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440382	Arsenic	18.6	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440393	Barium	43.4		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440473	Chromium	12.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440508	Copper	1.3	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7439896	Iron	30.4	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7439954	Magnesium	47800		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7439965	Manganese	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440020	Nickel	3.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440097	Potassium	1830		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7782492	Selenium	5.9	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440622	Vanadium	77.1		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N06	14925(S)	W	Field_Sample	06/28/2011	13:35:12	7440666	Zinc	2.6		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-402
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7429905	Aluminum	181	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440382	Arsenic	19.4	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440393	Barium	48.3		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440473	Chromium	72.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440508	Copper	1.5	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7439896	Iron	143	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7439954	Magnesium	48400		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7439965	Manganese	2.4		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440020	Nickel	5.7		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440097	Potassium	2580		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7782492	Selenium	6.4	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440622	Vanadium	72.0		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N07	14926(S)	W	Field_Sample	06/28/2011	13:37:55	7440666	Zinc	2.3		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-202
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7429905	Aluminum	114	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440382	Arsenic	22.0	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440393	Barium	39.2		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440473	Chromium	107		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440508	Copper	2.2		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7439896	Iron	170	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7439954	Magnesium	47100		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7439965	Manganese	5.0		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440020	Nickel	6.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440097	Potassium	2050		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7782492	Selenium	6.2	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440622	Vanadium	84.4		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N08	14927(S)	W	Field_Sample	06/28/2011	13:40:38	7440666	Zinc	1.5	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7429905	Aluminum	155	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440382	Arsenic	22.1	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440393	Barium	45.5		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011	13:43:23	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP

41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7440473	Chromium	113		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7440508	Copper	2.6		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7439896	Iron	233		ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7439954	Magnesium	47500		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7439965	Manganese	5.7		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7440020	Nickel	8.0		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7440097	Potassium	2110		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7782492	Selenium	6.3	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7440622	Vanadium	86.4		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N09	14928(S)	W	Field_Sample	06/28/2011 13:43:23	7440666	Zinc	2.6		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-3 DUP
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7429905	Aluminum	127	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440382	Arsenic	22.0	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440393	Barium	46.8		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440473	Chromium	60.3		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440508	Copper	1.5	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7439896	Iron	80.7	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7439954	Magnesium	48800		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7439965	Manganese	1.8		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440020	Nickel	5.7		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440097	Potassium	1920		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7782492	Selenium	6.9	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440622	Vanadium	86.7		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N10	14929(S)	W	Field_Sample	06/28/2011 13:46:07	7440666	Zinc	2.9		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-301
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7429905	Aluminum	151	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440382	Arsenic	15.4	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440393	Barium	44.8		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440473	Chromium	24.0		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440484	Cobalt	3.3		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440508	Copper	2.2		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7439896	Iron	179	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7439954	Magnesium	39700		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7439965	Manganese	6.6		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440020	Nickel	25.1		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440097	Potassium	3640		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7782492	Selenium	5.0	UJ	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440622	Vanadium	63.4		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N14	14930(S)	W	Field_Sample	06/28/2011 13:48:51	7440666	Zinc	1.3	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7429905	Aluminum	208	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440382	Arsenic	15.7	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440393	Barium	47.7		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440473	Chromium	26.4		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440484	Cobalt	3.4		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440508	Copper	2.2		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7439896	Iron	241		ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP

41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7439954	Magnesium	40200		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7439965	Manganese	7.8		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440020	Nickel	26.5		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440097	Potassium	3700		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7782492	Selenium	5.0	UJ	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440622	Vanadium	62.7		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N15	14931(S)	W	Field_Sample	06/28/2011 13:51:33	7440666	Zinc	1.5	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-C DUP
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7429905	Aluminum	97.3	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440382	Arsenic	10.3	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440393	Barium	38.5		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440473	Chromium	19.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440508	Copper	1.0	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7439896	Iron	39.4	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7439954	Magnesium	29300		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7439965	Manganese	1.1		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440020	Nickel	5.1		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440097	Potassium	7110		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7782492	Selenium	6.8	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440622	Vanadium	36.8		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N20	14932(S)	W	Field_Sample	06/28/2011 13:54:15	7440666	Zinc	1.9	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-D
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7429905	Aluminum	113	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440382	Arsenic	20.5	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440393	Barium	44.0		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440473	Chromium	93.0		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440508	Copper	1.3	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7439896	Iron	23.1	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7439954	Magnesium	51200		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7439965	Manganese	1.7		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440020	Nickel	4.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440097	Potassium	3220		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7782492	Selenium	6.3	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440622	Vanadium	64.9		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N21	14933(S)	W	Field_Sample	06/28/2011 13:56:58	7440666	Zinc	0.86	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	LMW-E
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7429905	Aluminum	280	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440382	Arsenic	9.0	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440393	Barium	55.7		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440473	Chromium	2.8		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440508	Copper	3.0		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7439896	Iron	133	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7439954	Magnesium	40200		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7439965	Manganese	27.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440020	Nickel	4.7		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440097	Potassium	11500		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7782492	Selenium	9.1	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A

41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440622	Vanadium	13.0		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N37	14934(S)	W	Field_Sample	06/28/2011 13:59:40	7440666	Zinc	4.8		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10A
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7429905	Aluminum	210	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440382	Arsenic	9.5	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440393	Barium	46.3		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440473	Chromium	9.8		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440484	Cobalt	1.1		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440508	Copper	2.2		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7439896	Iron	175	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7439954	Magnesium	78400		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7439965	Manganese	13.8		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440020	Nickel	12.6		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440097	Potassium	8580		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7782492	Selenium	20.1	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440622	Vanadium	28.6		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N38	14935(S)	W	Field_Sample	06/28/2011 14:02:23	7440666	Zinc	8.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-10B
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7429905	Aluminum	562	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440382	Arsenic	6.8	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440393	Barium	68.8		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440473	Chromium	17.9		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440508	Copper	2.9		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7439896	Iron	342		ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7439954	Magnesium	40300		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7439965	Manganese	11.6		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440020	Nickel	16.3		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440097	Potassium	9730		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7782492	Selenium	12.6	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440622	Vanadium	14.5		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N43	14936(S)	W	Field_Sample	06/28/2011 13:24:20	7440666	Zinc	7.9		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15A
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7429905	Aluminum	108	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440382	Arsenic	7.9	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440393	Barium	56.0		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440473	Chromium	5.9		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440508	Copper	1.3	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7439896	Iron	58.9	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7439954	Magnesium	45900		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7439965	Manganese	4.4		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440020	Nickel	8.3		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440097	Potassium	7620		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7782492	Selenium	14.2	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440622	Vanadium	20.4		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N44	14937(S)	W	Field_Sample	06/28/2011 14:05:06	7440666	Zinc	5.2		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-15B
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7429905	Aluminum	208	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440382	Arsenic	11.5	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A

41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440393	Barium	50.8		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440473	Chromium	63.0		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440484	Cobalt	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440508	Copper	1.6	LJ	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7439896	Iron	130	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7439954	Magnesium	44700		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7439965	Manganese	14.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440020	Nickel	5.0		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440097	Potassium	4220		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7782492	Selenium	5.8	J+	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440622	Vanadium	43.1		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N59	14938(S)	W	Field_Sample	06/28/2011 14:07:50	7440666	Zinc	5.5		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25A
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7429905	Aluminum	209	J	ug/L	20.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440360	Antimony	2.0	U	ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440382	Arsenic	9.6	J	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440393	Barium	57.0		ug/L	10.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440417	Beryllium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440439	Cadmium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440473	Chromium	59.4		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440484	Cobalt	1.3		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440508	Copper	8.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7439896	Iron	164	LJ	ug/L	200	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7439921	Lead	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7439954	Magnesium	47300		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7439965	Manganese	29.0		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440020	Nickel	19.2		ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440097	Potassium	5860		ug/L	500	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7782492	Selenium	6.9	J	ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440224	Silver	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440280	Thallium	1.0	U	ug/L	1.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440622	Vanadium	29.6		ug/L	5.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B
41486	MF4N06	MF4N60	14939(S)	W	Field_Sample	06/28/2011 14:10:33	7440666	Zinc	8.1		ug/L	2.0	06/23/2011	06/28/2011	06/25/2011	Low	0.0	50	50	MS	WMW-25B

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Data Review Reports

Blanks

Blanks	ICP_MS
ND03	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs.
	MF4N14, MF4N15, MF4N43L, PBW, MF4N09, MF4N10, MF4N20, MF4N21, MF4N37, MF4N43, MF4N44, MF4N06, MF4N59, MF4N07, MF4N08, MF4N38, MF4N43D, MF4N60
	Selenium MF4N14 , MF4N15 , MF4N43L , PBW
	Cobalt MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N43L , MF4N43 , MF4N44 , MF4N06 , MF4N59 , MF4N07 , MF4N08
	Nickel PBW
	Beryllium MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N59 , MF4N60 , PBW
	Antimony MF4N09 , MF4N10 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N06 , MF4N60 , MF4N07 , PBW , MF4N08
	Cadmium MF4N14 , MF4N15 , MF4N20 , MF4N38 , MF4N43 , MF4N43D , MF4N60
	Manganese MF4N06
	Silver MF4N43 , MF4N43D
	Lead MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , MF4N08
Blanks	**ICP_MS**
ND04	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated at CRQLs.
	MF4N43L, PBW, MF4N14, MF4N15, MF4N09, MF4N10, MF4N20, MF4N21, MF4N37, MF4N43, MF4N44, MF4N06, MF4N59, MF4N07, MF4N08, MF4N38, MF4N43D, MF4N60
	Vanadium MF4N43L , PBW
	Selenium MF4N14 , MF4N15 , MF4N43L , PBW
	Cobalt MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N43L , MF4N43 , MF4N44 , MF4N06 , MF4N59 , MF4N07 , MF4N08
	Nickel PBW
	Beryllium MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N59 , MF4N60 , PBW
	Antimony MF4N09 , MF4N10 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N06 , MF4N60 , MF4N07 , PBW , MF4N08
	Potassium PBW
	Cadmium MF4N14 , MF4N15 , MF4N20 , MF4N38 , MF4N43 , MF4N43D , MF4N60
	Manganese MF4N06
	Silver MF4N43 , MF4N43D
	Lead MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 ,

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Blanks

Blanks	ICP_MS
	MF4N59 , MF4N60 , MF4N07 , MF4N08
Blanks	**ICP_MS**
ND05	The following samples have analyte results greater than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes.
	MF4N09, MF4N10, MF4N14, MF4N15, MF4N20, MF4N21, MF4N37, MF4N38, MF4N43L, MF4N43S, MF4N43, MF4N43D, MF4N44, MF4N06, MF4N59, MF4N60, MF4N07, LCS, MF4N08
	Arsenic MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Nickel MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Lead MF4N43S , LCS
	Selenium MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Barium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Cobalt MF4N14 , MF4N15 , MF4N38 , MF4N43S , MF4N43D , MF4N60 , LCS
	Aluminum MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Beryllium MF4N43S , LCS
	Antimony MF4N43S , LCS
	Thallium MF4N43S , LCS
	Cadmium MF4N43S , LCS
	Magnesium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Manganese MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Silver MF4N43S , LCS
Blanks	**ICP_MS**
ND06	The following samples have analyte results greater than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes.
	MF4N09, MF4N10, MF4N14, MF4N15, MF4N20, MF4N21, MF4N37, MF4N38, MF4N43L, MF4N43S, MF4N43, MF4N43D, MF4N44, MF4N06, MF4N59, MF4N60, MF4N07, LCS, MF4N08
	Vanadium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Arsenic MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Nickel MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D ,

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Blanks

Blanks	ICP_MS
	MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Potassium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Lead MF4N43L , MF4N43S , LCS
	Selenium MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Barium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Cobalt MF4N14 , MF4N15 , MF4N38 , MF4N43L , MF4N43S , MF4N43D , MF4N60 , LCS
	Aluminum MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Beryllium MF4N43S , LCS
	Antimony MF4N43S , LCS
	Thallium MF4N43S , LCS
	Cadmium MF4N43S , LCS
	Magnesium MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N06 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Manganese MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N60 , MF4N07 , LCS , MF4N08
	Silver MF4N43S , LCS
Blanks	**ICP_MS**
NE04	The following samples have analyte results greater than or equal to MDLs but less than or equal to CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs.
	MF4N14, MF4N15, MF4N38, MF4N43, MF4N43D, MF4N59, MF4N60, MF4N08, MF4N09, MF4N10, MF4N21, MF4N37, MF4N06, MF4N07
	Selenium MF4N14 , MF4N15
	Beryllium MF4N38 , MF4N43 , MF4N43D , MF4N59 , MF4N60
	Antimony MF4N08 , MF4N09 , MF4N10 , MF4N21 , MF4N37 , MF4N38 , MF4N43 , MF4N43D , MF4N06 , MF4N60 , MF4N07
Blanks	**ICP_MS**
NE05	The following samples have analyte results greater than CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualify detected and nondetected analytes.
	MF4N08, MF4N09, MF4N10, MF4N14, MF4N15, MF4N20, MF4N21, MF4N37, MF4N38, MF4N43S, MF4N43, MF4N43D, MF4N44, MF4N59, MF4N06, MF4N60, LCS, MF4N07, MF4N43L
	Vanadium MF4N08 , MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N06 , MF4N60 , LCS , MF4N07

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Blanks

Blanks	ICP_MS
	Selenium MF4N08 , MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N06 , MF4N60 , LCS , MF4N07
	Beryllium MF4N43S , LCS
	Nickel MF4N08 , MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43S , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N06 , MF4N60 , LCS , MF4N07
	Antimony MF4N43S , LCS
	Potassium MF4N08 , MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N06 , MF4N60 , LCS , MF4N07

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Lab SENTIN(SENTINEL) **SDG** MF4N06 **Case** 41486 **Contract** EPW09040 **Region** 6 **DDTID** 125317 **SOW** ISM01.2

Data Review Reports

Detection Limit

Detection Limit	ICP_MS
NDL1	The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified J.
	MF4N43L, PBW, MF4N10, MF4N20, MF4N21, MF4N44, MF4N59, MF4N06, MF4N07, MF4N08, MF4N09, MF4N14, MF4N15, MF4N37, MF4N38, MF4N43, MF4N43D, MF4N60
	Vanadium MF4N43L , PBW
	Nickel PBW
	Potassium PBW
	Copper MF4N10 , MF4N20 , MF4N21 , MF4N43L , MF4N44 , MF4N59 , MF4N06 , MF4N07
	Lead MF4N08 , MF4N09 , MF4N10 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N44 , MF4N59 , MF4N06 , MF4N60 , MF4N07
	Selenium MF4N14 , MF4N15 , MF4N43L , PBW
	Cobalt MF4N08 , MF4N09 , MF4N10 , MF4N20 , MF4N21 , MF4N37 , MF4N43L , MF4N43 , MF4N44 , MF4N06 , MF4N59 , MF4N07
	Zinc MF4N08 , MF4N14 , MF4N15 , MF4N20 , MF4N21 , MF4N43L
	Beryllium MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N59 , MF4N60 , PBW
	Antimony MF4N08 , MF4N09 , MF4N10 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N43 , MF4N43D , MF4N06 , MF4N60 , PBW , MF4N07
	Cadmium MF4N14 , MF4N15 , MF4N20 , MF4N38 , MF4N43 , MF4N43D , MF4N60
	Iron MF4N08 , MF4N10 , MF4N14 , MF4N20 , MF4N21 , MF4N37 , MF4N38 , MF4N43L , MF4N44 , MF4N59 , MF4N06 , MF4N60 , MF4N07
	Silver MF4N43 , MF4N43D
	Manganese MF4N06

National Functional Guidelines Report #03

Lab SENTIN(SENTINEL) **SDG** MF4N06 **Case** 41486 **Contract** EPW09040 **Region** 6 **DDTID** 125317 **SOW** ISM01.2

Data Review Reports

Serial Dilution

Serial Dilution	ICP_MS
NL032	The following ICP-MS Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. The detected analytes in samples with results greater than or equal to MDLs are qualified J. Nondetected analytes in samples are qualified UJ.
	MF4N06, MF4N07, MF4N08, MF4N09, MF4N10, MF4N14, MF4N15, MF4N20, MF4N21, MF4N37, MF4N38, MF4N43, MF4N44, MF4N59, MF4N60
	Selenium MF4N43L
	Arsenic MF4N43L
	Aluminum MF4N43L

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41486
DAS No:
R

Region:	6	**Date Shipped:**	6/23/2011	**Chain of Custody Record**	**Sampler Signature:**
Project Code:	EP-W-06-004	**Carrier Name:**	FedEx	**Relinquished By (Date / Time)**	**Received By (Date / Time)**
Account Code:		**Airbill:**	7972 2041 4794	1 [illegible] 6/23/11 1000	
CERCLIS ID:		**Shipped to:**	Sentinel Inc. 4733 Commercial Drive Huntsville AL 35816 (256) 534-9800	2	
Spill ID:				3	
Site Name/State:	WEST COUNTY ROAD 112 GROUND WA			4	
Project Leader:	LUIS VEGA				
Action:	Combined RI/FS				
Sampling Co:	EA Engineering				

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
MF4N06	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455821 (HNO3) (1)	LMW-402	S: 6/23/2011 11:25		--
MF4N14	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455829 (HNO3) (1)	LMW-C	S: 6/23/2011 10:07		--
MF4N15	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455830 (HNO3) (1)	LMW-C DUP	S: 6/23/2011 10:07		Field Duplicate
MF4N20	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455835 (HNO3) (1)	LMW-D	S: 6/23/2011 13:45		--
MF4N37	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455852 (HNO3) (1)	WMW-10A	S: 6/23/2011 12:40		--
MF4N43	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455860 (HNO3), 6455861 (HNO3) (2)	WMW-15A	S: 6/23/2011 9:45		Lab QC
MF4N44	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455862 (HNO3) (1)	WMW-15B	S: 6/23/2011 10:25		--

Shipment for Case Complete? Y	**Sample(s) to be used for laboratory QC:** MF4N43	**Additional Sampler Signature(s):** Dwaine Beard	**Chain of Custody Seal Number:**
Analysis Key: TM ISM01.2 = TM ISM01.2 / ICP-MS	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?** _____

TR Number: 6-042412979-062311-0003

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41486 **R**
DAS No:

Region:	6	**Date Shipped:**	6/23/2011
Project Code:	EP-W-06-004	**Carrier Name:**	FedEx
Account Code:		**Airbill:**	7948 9943 5267
CERCLIS ID:		**Shipped to:**	Sentinel Inc. 4733 Commercial Drive Huntsville AL 35816 (256) 534-9800
Spill ID:			
Site Name/State:	WEST COUNTY ROAD 112 GROUND WA		
Project Leader:	LUIS VEGA		
Action:	Combined RI/FS		
Sampling Co:	EA Engineering		

Chain of Custody Record

Sampler Signature: [signature]

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	[signature]	6/23/11 1800		
2				
3				
4				

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	QC Type
MF4N07	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455822 (HNO3) (1)	LMW-202	S: 6/23/2011 12:32		--
MF4N08	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455823 (HNO3) (1)	LMW-3	S: 6/23/2011 14:30		--
MF4N09	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455824 (HNO3) (1)	LMW-3 DUP	S: 6/23/2011 14:30		Field Duplicate
MF4N10	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455825 (HNO3) (1)	LMW-301	S: 6/23/2011 15:15		--
MF4N21	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455836 (HNO3) (1)	LMW-E	S: 6/23/2011 16:13		--
MF4N38	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455853 (HNO3) (1)	WMW-10B	S: 6/23/2011 12:45		--
MF4N59	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455877 (HNO3) (1)	WMW-25A	S: 6/23/2011 14:16		--
MF4N60	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455878 (HNO3) (1)	WMW-25B	S: 6/23/2011 15:08		--

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s): Dwaine Beard	Chain of Custody Seal Number:
Analysis Key: TM ISM01.2 = TM ISM01.2 / ICP-MS	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

TR Number: 6-042412979-062311-0004

REGION COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

Randi Richey

From: "Blackmon, Jacqueline" <jblackmon3@fedcsc.com>
To: "Beverly Kilgore " <bkilgore@sentinellab.com>; "Melvin Kilgore" <mkilgore@sentinellab.com>; "Randi Richey" <rrichey@sentinellab.com>
Cc: "Marvelyn Humphrey" <humphrey.marvelyn@epa.gov>; "Mahmoud Elfeky" <Elfeky.Mahmoud@epamail.epa.gov>; "Myra Perez" <perez.myra@epa.gov>; "Raymond Flores" <Flores.Raymond@epamail.epa.gov>
Sent: Wednesday, June 29, 2011 10:18 AM
Subject: Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems | FINAL

Randi,
Please note that any waivers required for this issue will need to be submitted to the laboratory's PO.

Summary Start
Issue: Almost every sample in this case have a very high concentration of Ca and Na with ranges of 100-400 ppm. These samples were run undiluted. Please advise if the samples will require dilutions to be made for these analytes or can the number be reported from the original run undiluted. Repeated analysis will impact the life of the detector in the ICP-MS.
Resolution: Per Region 6, the Region will not pursue the required Na and Ca diluted analyses. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.
Summary End

Please let me know if you have any questions or problems. To waive any defect(s) associated with this issue, please contact your PO.
Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

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From: Blackmon, Jacqueline
Sent: Wednesday, June 29, 2011 11:13 AM
To: 'Raymond Flores'
Cc: 'Mahmoud Elfeky'; 'Myra Perez'
Subject: FW: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Ray,
Please note the responses to your previous questions for this issue below. I will proceed to inform the lab that Region 6 will not pursue the required Na and Ca diluted analyses. The laboratory will have to submit any required waivers to their PO.

1.) That is correct, any dilutions and/or reanalyses (unless it is an actual reanalysis request that is scheduled and marked as billable) are not billable.

2.) The delay that the Ca and Na diluted results would add to the data delivery would be: "It would delay package submittal by at least 5 days. If dilutions are not required then packages are ready to be put together.

However, all data would be submitted within the 21 day TAT."

I will inform the lab of the Region's resolution.
Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

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From: Flores.Raymond@epamail.epa.gov [mailto:Flores.Raymond@epamail.epa.gov]
Sent: Wednesday, June 29, 2011 10:46 AM
To: Blackmon, Jacqueline
Cc: Elfeky.Mahmoud@epamail.epa.gov; Perez.Myra@epamail.epa.gov
Subject: Re: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Jackie,

Region 6 will not pursue the required Na & Ca diluted analyses and agrees to related wavier requests for such.

Raymond Flores
Inorganics Program Manager
OSRTI/ASB

703-981-1917 cell
US Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
mail code - 5203P
Washington DC 20460
email: flores.raymond@epa.gov

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From: Randi Richey [mailto:rrichey@sentinellab.com]
Sent: Wednesday, June 29, 2011 11:01 AM
To: Blackmon, Jacqueline
Cc: Beverly Kilgore; Melvin Kilgore
Subject: Re: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

It would delay package submittal by at least 5 days. If dilutions are not required then packages are ready to be put together. However, all data would be submitted within the 21 day TAT.

Randi D. Richey
Laboratory Supervisor/ Environmental Chemist
Sentinel Inc.
(256) 534-9800 ext. 32

----- Original Message -----
From: Blackmon, Jacqueline
To: Randi Richey
Sent: Wednesday, June 29, 2011 9:35 AM
Subject: FW: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Randi,

The Region would like to know if you could you provide an estimate of how long a delay the Ca and Na diluted results would add to the data delivery?

Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

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From: Flores.Raymond@epamail.epa.gov [mailto:Flores.Raymond@epamail.epa.gov]
Sent: Wednesday, June 29, 2011 9:55 AM
To: Blackmon, Jacqueline
Subject: Re: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Jackie,

Checking on the need for Ca and Na results. In the meantime, please confirm that if the diluted Ca & Na analyses were run, they would not be billable. Also, could you get an estimate of how long a delay the Ca & Na diluted results would add to the data delivery by the lab. Thanks.

Raymond Flores
Inorganics Program Manager
OSRTI/ASB

703-981-1917 cell
US Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
mail code - 5203P
Washington DC 20460
email: flores.raymond@epa.gov

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From: Blackmon, Jacqueline
Sent: Tuesday, June 28, 2011 1:22 PM
To: 'Raymond Flores'
Cc: 'Mahmoud Elfeky'; 'Myra Perez'
Subject: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Ray,

SENTIN has confirmed that these samples were run undiluted. Out of 2 of the SDGs that the laboratory has analyzed so far, 3 samples are below the CRQL for Cr. The other samples ran at a range of 7 - 170 ppb for Cr.

Please advise if the samples will require dilutions to be made for these analytes or can the number be reported from the original run undiluted.

Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

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From: Randi Richey [mailto:rrichey@sentinellab.com]
Sent: Tuesday, June 28, 2011 1:16 PM
To: Blackmon, Jacqueline
Subject: Re: Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Yes these samples were run undiluted. Out of 2 of the SDGs that we have analyzed so far 3 samples are below the CRQL for Cr. The other samples ran at a range of 7 - 170 ppb for Cr.

Randi D. Richey
Laboratory Supervisor/ Environmental Chemist
Sentinel Inc.
(256) 534-9800 ext. 32

----- Original Message -----
From: Blackmon, Jacqueline
To: Randi Richey
Sent: Tuesday, June 28, 2011 9:05 AM
Subject: Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Randi,

Can you please confirm that these analyses were run undiluted? Also, did the lab achieve the CRQLs for Chromium, e.g, was Chromium quantified as a positive or reported down to the CRQL or MDL as undetected?

Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

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From: Flores.Raymond@epamail.epa.gov [mailto:Flores.Raymond@epamail.epa.gov]
Sent: Tuesday, June 28, 2011 9:57 AM
To: Blackmon, Jacqueline
Cc: Elfeky.Mahmoud@epamail.epa.gov; Perez.Myra@epamail.epa.gov
Subject: Re: Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Jackie,

Assuming these analyses were run undiluted, did the lab achieve the CRQLs for Chromium, e.g, was Chromium quantified as a positive or reported down to the CRQL or MDL as undetected?

Raymond Flores
Inorganics Program Manager
OSRTI/ASB

703-981-1917 cell
US Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
mail code - 5203P
Washington DC 20460
email: flores.raymond@epa.gov

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-----"Blackmon, Jacqueline" <jblackmon3@fedcsc.com> wrote: -----

To: Raymond Flores/R6/USEPA/US@EPA
From: "Blackmon, Jacqueline" <jblackmon3@fedcsc.com>

Date: 06/28/2011 08:13AM
Cc: Mahmoud Elfeky/R6/USEPA/US@EPA, Myra Perez/R6/USEPA/US@EPA
Subject: Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems
Ray,
SENTIN is reporting the following issue for Case 41486. Please advise.

Issue: Almost every sample in this case have a very high concentration of Ca and Na with ranges of 100-400 ppm. Please advise if the samples will require dilutions to be made for these analytes or can the number be reported from the original run undiluted. Repeated analysis will impact the life of the detector in the ICP-MS.

Please let me know if you have any questions or problems.
Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

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From: Randi Richey [mailto:rrichey@sentinellab.com]
Sent: Monday, June 27, 2011 5:01 PM
To: Blackmon, Jacqueline
Subject: Re: Region 06 | Case 41486 | Lab SENTIN | Shipping information

Almost every sample in this case have a very high concentration of Ca and Na with ranges of 100-400 ppm. Can you please ask the region if they will require dilutions to be made for these analytes or can the number be reported from the original run undiluted. Repeated analysis will impact the life of the detector in the ICP-MS.

Thanks
Randi D. Richey
Laboratory Supervisor/ Environmental Chemist
Sentinel Inc.
(256) 534-9800 ext. 32

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET R6

LABORATORY NAME Sentinel Inc.
CITY/STATE Huntsville, AL
CASE NO. 41486 SDG NO. MF4N06
SDG NOs. TO FOLLOW NA
MOD. REF. NO. NA
CONTRACT NO. ~~EPW09040~~ EPW09040 RR 6130111
SOW NO. ISM01.2

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - Exhibit B Section 2.6)

		PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1.	Inventory Sheet (DC-2)	1	2	✓	✓
2.	SDG Narrative	3	5	✓	✓
3.	Sample Log-In Sheet (DC-1)	6	6	✓	✓
4.	Traffic Report/Chain of Custody Record(s)	7	8	✓	✓
5.	Cover Page	9	9	✓	✓
Inorganic Analysis					
6.	Data Sheet (Form I-IN)	10	24	✓	✓
7.	Initial & Continuing Calibration Verification (Form IIA-IN)	25	26	✓	✓
8.	Blanks (Form III-IN)	27	28	✓	✓
9.	ICP-AES Interference Check Sample (Form IVA IN)				
10.	ICP-MS Interference Check Sample (Form IVB IN)	29	30	✓	✓
11.	Matrix Spike Sample Recovery (Form VA IN)	31	31	✓	✓
12.	Post-Digestion Spike Sample Recovery (Form VB IN)				
13.	Duplicates (Form VI-IN)	32	32	✓	✓
14.	Laboratory Control Sample (Form VII-IN)	33	33	✓	✓
15.	ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	34	34	✓	✓
16.	Method Detection Limit (Annually) (Form IX-IN)	35	35	✓	✓
17.	ICP-AES Interelement Correction Factors (Annually) (Form XA-IN)				
18.	ICP-AES Interelement Correction Factors (Annually) (Form XB-IN)				
19.	Internal Standard Association (Form XI-IN)	36	37	✓	✓
20.	Preparation Log (Form XII-IN)	38	38	✓	✓
21.	Analysis Run Log (Form XIII-IN)	39	41	✓	✓
22.	ICP-MS Tune (Form XIV-IN)	42	43	✓	✓

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

		PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
23.	ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)	44	47	—	✓
24.	Initial Calibration (Form XVI-IN)	48	51	—	✓
25.	ICP-AES Raw Data				
26.	ICP-MS Raw Data	52	195	—	✓
27.	Mercury Raw Data				
28.	Cyanide Raw Data				
29.	Preparation Logs Raw Data	196	196	—	✓
30.	Percent Solids Determination Log				
31.	USEPA Shipping/Receiving Documents				
	Airbill (No. of Shipments 2)	197	198	—	✓
	Sample Tags	199	203	—	✓
	Sample Log-In Sheet (Lab)	204	204	—	✓
32.	Misc. Shipping/Receiving Records (list all individual records)				
	Communication Logs				
	Custody Seal	205	206	—	✓
	SDG Cover Sheet	207	207	—	✓
33.	Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)				
	SDG Tracking Report				
	RK 6130111	208	208	—	✓
34.	Internal Original Sample Prep & Analysis Records (describe or list)				
	Prep Records	209	215	—	✓
	Analysis Records	216	216	—	✓
	PE Instructions				
	Description				
35.	Other Records (describe or list)				
	Communication Logs	217	222	—	✓
	Defect Report	223	241	—	✓

36. Comments:

Completed by: (CLP Lab) [signature] (Signature) Virginia Sturgis Lab tech (Print Name & Title) 6.30.11 (Date)

Audited by: ~~(USEPA)~~ ESAT [signature] (Signature) Sonya Meekins Data Reviewer (Print Name & Title) 8/11/11 (Date)

ISM01.2 (1/10) Form DC-2-2

SDG NARRATIVE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. SOW No.: ISM01.2 Contract:EPW09040

Lab Code: SENTIN Case No.: 41486 NRAS No.: SDG No.: MF4N06

SAMPLE RECEIPT: Temperature Blank: PRESENT ✓ ABSENT ____
If a blank is absent, a non-invasive laser measurement it taken using a sample.
Cooler temperature(s) recorded via laser measurement were: 4.1, 3.4°C
Refer to Record of Communication (ROC) regarding EPA Sample # discrepancies for samples:
None

Refer to ROC regarding tag discrepancies for samples:
None

Refer to ROC regarding sample preservation discrepancies for samples:
None

Refer to ROC regarding: - Analysis of Ca + Na

QC Specified: Yes ✓ No ____ If no, chose: ____

ANALYSIS: The following analyte(s) were estimated due to possible matrix interferences:
Al, As, Se

DOCUMENT CONTROL: The following invalid defects resulted due to CCS program anomalies:
Initial Assessment: None
Full Assessment: SAM-10-4011, SAM-08-5011

OTHER: 1. ICP-MS Mean Values in the raw data are incorrect due to TJA software anomalies.
2. Internal Standard calculations in the raw data are reported as the reciprocal values of the %RI (decimal form - not a percentage) with the control limits as stated in the SOW Exhibit D (ICP-MS) Section 12.10.

Signature: [signature]

Name & Title: [signature] Date: 6/30/11

SDG NARRATIVE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. SOW No.: ISM01.2 Contract:EPW09040

Lab Code: SENTIN Case No.: 41486 NRAS No.: SDG No.: MF4N06

EQUATIONS:

AES LW 200.7 Method: Concentration (µg/L) = C x (V_f/V) x DF

WHERE, C = Instrument value in µg/L (The average of all replicate exposures)
V_f = Final digestion volume (mL)
V = Initial aliquot amount (mL)
DF = Dilution Factor

AES LS 3050B Method: Concentration (dry wt.) (mg/kg) = C x ((V_f /(W x S)) x DF / 1000

WHERE, C = Instrument Value in ug/L (The average of all replicate exposures)
V_f = Final sample volume in Liters (mL)
W = Initial aliquot amount (g)
S = % Solids/100
DF = Dilution Factor

AES Wipe/Filter Method: Mass (ug) = C x V_f x DF/1000

WHERE, C = Instrument Value in ug/L (The average of all replicate exposures)
V_f = Final digestion volume (mL)
DF = Dilutions Factor

MS LW 200.8 Method: Concentration (µg/L) = C x (V_f/V) x DF

WHERE, C = Instrument value in µg/L (The average of all replicate integrations)
V_f = Final digestion volume (50 mL)
V = Initial aliquot amount (50 mL)
DF = Dilution Factor

MS LS 3050B Method: Concentration (dry wt.) (mg/kg) = C x ((V_f /(W x S)) x DF / 1000

WHERE, C = Instrument Value in ug/L (The average of all replicate exposures)
V_f = Final sample volume in Liters (mL)
W = Initial aliquot amount (g)
S = % Solids/100
DF = Dilution Factor

Signature: [signature]

Name & Title: Barrigove Chadin Date: 6/30/11

SDG NARRATIVE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Sentinel, Inc. SOW No.: ISM01.2 Contract:EPW09040

Lab Code: SENTIN Case No.: 44486 NRAS No.: SDG No.: MF4N06

EQUATIONS:

HG LW 7470A Method: Hg Concentration (µg/L) = C x DF

WHERE, C = Instrument response in µg/L Hg from the calibration curve
DF = Dilution Factor

HG LS 7471B Method: Hg Concentration (mg/kg) = (C x ((1/(W x S)) x DF x 0.1

WHERE, C = Instrument value in µg/L from the calibration curve
W = Initial aliquot amount (g)
S = % Solids/100
DF = Dilution Factor

CN LW Micro Distillation Method: CN Concentration (µg/L) = C x (V_f/V) x DF

WHERE, C = Instrument response in µg/L CN from the calibration curve
DF = Dilution factor
V_f = Final prepared volume (mL)
V = Initial aliquot amont (mL)

CN LS Micro Distillation Method: CN Concentration (mg/kg) = C x((V_f /(W x S)) x (1/1000) x DF

WHERE, C = Instrument response in µg/L CN from the calibration curve
DF = Dilution factor
V_f = Final prepared volume (mL)
S = % Solids/100
W = Initial aliquot amount (g)

Signature: [signature]

Name & Title: [signature] Date: 4/30/11

SAMPLE LOG-IN SHEET

Lab Name Sentinel	Page 1 of 1
Received By (Print Name) Randi Richey / Tom Yack	Log-in Date 06/25/2011
Received By (Signature) [signature] / [signature]	
Case Number 41486 / Sample Delivery Group No. MF4N06	Mod. Ref. No.

Remarks:	
1. Custody Seal(s)	Present/Absent* Intact/Broken
2. Custody Seal Nos.	NA
3 Traffic Reports/Chain of Custody Records or Packing Lists	Present/Absent*
4. Airbill	Airbill/Sticker Present/Absent*
5. Airbill No.	797220414794 794899435267
6. Sample Tags	Present/Absent*
Sample Tag Numbers	Listed/Not Listed on Traffic Report/Chain of Custody Record
7. Sample Condition	Intact/Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present/Absent*
9. Cooler Temperature	4.1, 3.4°C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	Yes/No*
11. Date Received at Lab	06/25/2011
12. Time Received	1050

Sample Transfer	
Fraction All	Fraction
Area # Cooler	Area #
By TY	By
On 6/25/11	On

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MF4N06	<2	6455821	14925	
2	MF4N07	<2	6455822	14926	
3	MF4N08	<2	6455823	14927	
4	MF4N09	<2	6455824	14928	
5	MF4N10	<2	6455825	14929	
6	MF4N14	<2	6455829	14930	
7	MF4N15	<2	6455830	14931	
8	MF4N20	<2	6455835	14932	
9	MF4N21	<2	6455836	14933	
10	MF4N37	<2	6455852	14934	
11	MF4N38	<2	6455853	14935	
12	MF4N43	<2	6455860,1	14936	QC
13	MF4N44	<2	6455862	14937	
14	MF4N59	<2	6455877	14938	
15	MF4N60	<2	6455878	14939	
16					
17					
18					
19					
20					
21					
22					

* Contact SMO and attach record of resolution

Reviewed By [signature]	Logbook No. 2
Date 6/30/11	Logbook Page No. 146

FORM DC-1 ISM01

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41486
DAS No:
SDG No: MF4N06

L

Date Shipped:	6/23/2011
Carrier Name:	FedEx
Airbill:	7972 2041 4794
Shipped to:	Sentinel Inc. 4733 Commercial Drive Huntsville AL 35816 (256) 534-9800

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1	6/23/11 1800		6/23/11 1050
2			
3			
4			

For Lab Use Only

Lab Contract No: EPW09040
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
MF4N06	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455821 (HNO3) (1)	LMW-402	S: 6/23/2011 11:25		
MF4N14	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455829 (HNO3) (1)	LMW-C	S: 6/23/2011 10:07		
MF4N15	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455830 (HNO3) (1)	LMW-C DUP	S: 6/23/2011 10:07		
MF4N20	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455835 (HNO3) (1)	LMW-D	S: 6/23/2011 13:45		
MF4N37	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455852 (HNO3) (1)	WMW-10A	S: 6/23/2011 12:40		
MF4N43	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455860 (HNO3), 6455861 (HNO3) (2)	WMW-15A	S: 6/23/2011 9:45		
MF4N44	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455862 (HNO3) (1)	WMW-15B	S: 6/23/2011 10:25		

Temp blk = 4.1°C

Shipment for Case Complete? Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
	MF4N43	Duaine Beard	4.1	NA

Analysis Key: Concentration: L = Low, M = Low/Medium, H = High Type/Designate: Composite = C, Grab = G Custody Seal Intact? ✓ Shipment Iced? ✓

TM ISM01.2 = TM ISM01.2 / ICP-MS

TR Number: 6-042412979-062311-0003

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

USEPA Contract Laboratory Program
Inorganic Traffic Report & Chain of Custody Record

Case No: 41486
DAS No:
SDG No: MF4N06

L

Date Shipped:	6/23/2011
Carrier Name:	FedEx
Airbill:	7948 9943 5267
Shipped to:	Sentinel Inc. 4733 Commercial Drive Huntsville AL 35816 (256) 534-9800

Chain of Custody Record

Sampler Signature:

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 Rishi Hooley	6/23/11 1800	[signature]	6/25/11 1050
2			
3			
4			

For Lab Use Only

Lab Contract No: EPW09040
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
MF4N07	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455822 (HNO3) (1)	LMW-202	S: 6/23/2011 12:32		
MF4N08	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455823 (HNO3) (1)	LMW-3	S: 6/23/2011 14:30		
MF4N09	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455824 (HNO3) (1)	LMW-3 DUP	S: 6/23/2011 14:30		
MF4N10	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455825 (HNO3) (1)	LMW-301	S: 6/23/2011 15:15		
MF4N21	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455836 (HNO3) (1)	LMW-E	S: 6/23/2011 16:13		
MF4N38	Ground Water/ DUANE THOMAS	L/G	TM ISM01.2 (21)	6455853 (HNO3) (1)	WMW-10B	S: 6/23/2011 12:45		
MF4N59	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455877 (HNO3) (1)	WMW-25A	S: 6/23/2011 14:16		
MF4N60	Ground Water/ DWAINE BEARD	L/G	TM ISM01.2 (21)	6455878 (HNO3) (1)	WMW-25B	S: 6/23/2011 15:08		

8

Temp blk = 3.4°C

Shipment for Case Complete?Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
		Dwaine Beard	3.4°C	NA

Analysis Key: TM ISM01.2 = TM ISM01.2 / ICP-MS

Concentration: L = Low, M = Low/Medium, H = High

Type/Designate: Composite = C, Grab = G

Custody Seal Intact? ✓ Shipment Iced? ✓

8 6-30-11

TR Number: 6-042412979-062311-0004

LABORATORY COPY

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

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COVER PAGE

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

SOW No.: ISM01.2

EPA SAMPLE NO.	Lab Sample ID.
MF4N06	14925
MF4N07	14926
MF4N08	14927
MF4N09	14928
MF4N10	14929
MF4N14	14930
MF4N15	14931
MF4N20	14932
MF4N21	14933
MF4N37	14934
MF4N38	14935
MF4N43	14936
MF4N43D	14936S2
MF4N43S	14936MS
MF4N44	14937
MF4N59	14938
MF4N60	14939

		ICP-AES	ICP-MS
Were ICP-AES and ICP-MS interelement corrections applied?	(Yes/No)		YES
Were ICP-AES and ICP-MS background corrections applied?	(Yes/No)		YES
If yes-were raw data generated before application of background corrections?	(Yes/No)		YES

The laboratory did not receive any instructions with this SDG to modify the SOW standard laboratory sample preparation procedures (e.g., subsampling). To aid in the determination of data usability with respect to project decisions, any modifications performed are described below.

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: [illegible]

Date: 6/3/5/11 Title: [illegible]

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N06

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14925

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	100		E	MS
7440-36-0	Antimony	0.11	J		MS
7440-38-2	Arsenic	18.6		E	MS
7440-39-3	Barium	43.4			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	12.1			MS
7440-48-4	Cobalt	0.24	J		MS
7440-50-8	Copper	1.3	J		MS
7439-89-6	Iron	30.4	J		MS
7439-92-1	Lead	0.15	J		MS
7439-95-4	Magnesium	47800			MS
7439-96-5	Manganese	0.71	J		MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	3.2			MS
7440-09-7	Potassium	1830			MS
7782-49-2	Selenium	5.9		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	77.1			MS
7440-66-6	Zinc	2.6			MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N07

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14926

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	181		E	MS
7440-36-0	Antimony	0.21	J		MS
7440-38-2	Arsenic	19.4		E	MS
7440-39-3	Barium	48.3			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	72.1			MS
7440-48-4	Cobalt	0.52	J		MS
7440-50-8	Copper	1.5	J		MS
7439-89-6	Iron	143	J		MS
7439-92-1	Lead	0.26	J		MS
7439-95-4	Magnesium	48400			MS
7439-96-5	Manganese	2.4			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	5.7			MS
7440-09-7	Potassium	2580			MS
7782-49-2	Selenium	6.4		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	72.0			MS
7440-66-6	Zinc	2.3			MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM IA-IN ISM01.2 (1/10)

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N08

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14927

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	114		E	MS
7440-36-0	Antimony	0.24	J		MS
7440-38-2	Arsenic	22.0		E	MS
7440-39-3	Barium	39.2			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	107			MS
7440-48-4	Cobalt	0.61	J		MS
7440-50-8	Copper	2.2			MS
7439-89-6	Iron	170	J		MS
7439-92-1	Lead	0.16	J		MS
7439-95-4	Magnesium	47100			MS
7439-96-5	Manganese	5.0			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	6.2			MS
7440-09-7	Potassium	2050			MS
7782-49-2	Selenium	6.2		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	84.4			MS
7440-66-6	Zinc	1.5	J		MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N09

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14928

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	155		E	MS
7440-36-0	Antimony	0.20	J		MS
7440-38-2	Arsenic	22.1		E	MS
7440-39-3	Barium	45.5			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	113			MS
7440-48-4	Cobalt	0.81	J		MS
7440-50-8	Copper	2.6			MS
7439-89-6	Iron	233			MS
7439-92-1	Lead	0.28	J		MS
7439-95-4	Magnesium	47500			MS
7439-96-5	Manganese	5.7			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	8.0			MS
7440-09-7	Potassium	2110			MS
7782-49-2	Selenium	6.3		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	86.4			MS
7440-66-6	Zinc	2.6			MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N10

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14929

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	127		E	MS
7440-36-0	Antimony	0.11	J		MS
7440-38-2	Arsenic	22.0		E	MS
7440-39-3	Barium	46.8			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	60.3			MS
7440-48-4	Cobalt	0.64	J		MS
7440-50-8	Copper	1.5	J		MS
7439-89-6	Iron	80.7	J		MS
7439-92-1	Lead	0.25	J		MS
7439-95-4	Magnesium	48800			MS
7439-96-5	Manganese	1.8			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	5.7			MS
7440-09-7	Potassium	1920			MS
7782-49-2	Selenium	6.9		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	86.7			MS
7440-66-6	Zinc	2.9			MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N14

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14930

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	151		E	MS
7440-36-0	Antimony	2.0	U		MS
7440-38-2	Arsenic	15.4		E	MS
7440-39-3	Barium	44.8			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.051	J		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	24.0			MS
7440-48-4	Cobalt	3.3			MS
7440-50-8	Copper	2.2			MS
7439-89-6	Iron	179	J		MS
7439-92-1	Lead	0.25	J		MS
7439-95-4	Magnesium	39700			MS
7439-96-5	Manganese	6.6			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	25.1			MS
7440-09-7	Potassium	3640			MS
7782-49-2	Selenium	3.0	J	E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	63.4			MS
7440-66-6	Zinc	1.3	J		MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM IA-IN ISM01.2 (1/10)

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N15

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14931

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	208		E	MS
7440-36-0	Antimony	2.0	U		MS
7440-38-2	Arsenic	15.7		E	MS
7440-39-3	Barium	47.7			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.074	J		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	26.4			MS
7440-48-4	Cobalt	3.4			MS
7440-50-8	Copper	2.2			MS
7439-89-6	Iron	241			MS
7439-92-1	Lead	0.30	J		MS
7439-95-4	Magnesium	40200			MS
7439-96-5	Manganese	7.8			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	26.5			MS
7440-09-7	Potassium	3700			MS
7782-49-2	Selenium	3.6	J	E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	62.7			MS
7440-66-6	Zinc	1.5	J		MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N20

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14932

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	97.3		E	MS
7440-36-0	Antimony	2.0	U		MS
7440-38-2	Arsenic	10.3		E	MS
7440-39-3	Barium	38.5			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	0.020	J		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	19.1			MS
7440-48-4	Cobalt	0.37	J		MS
7440-50-8	Copper	1.0	J		MS
7439-89-6	Iron	39.4	J		MS
7439-92-1	Lead	0.14	J		MS
7439-95-4	Magnesium	29300			MS
7439-96-5	Manganese	1.1			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	5.1			MS
7440-09-7	Potassium	7110			MS
7782-49-2	Selenium	6.8		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	36.8			MS
7440-66-6	Zinc	1.9	J		MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM IA-IN ISM01.2 (1/10)

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N21

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14933

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	113		E	MS
7440-36-0	Antimony	0.16	J		MS
7440-38-2	Arsenic	20.5		E	MS
7440-39-3	Barium	44.0			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	93.0			MS
7440-48-4	Cobalt	0.58	J		MS
7440-50-8	Copper	1.3	J		MS
7439-89-6	Iron	23.1	J		MS
7439-92-1	Lead	0.19	J		MS
7439-95-4	Magnesium	51200			MS
7439-96-5	Manganese	1.7			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	4.2			MS
7440-09-7	Potassium	3220			MS
7782-49-2	Selenium	6.3		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	64.9			MS
7440-66-6	Zinc	0.86	J		MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N37

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14934

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	280		E	MS
7440-36-0	Antimony	0.58	J		MS
7440-38-2	Arsenic	9.0		E	MS
7440-39-3	Barium	55.7			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	2.8			MS
7440-48-4	Cobalt	0.63	J		MS
7440-50-8	Copper	3.0			MS
7439-89-6	Iron	133	J		MS
7439-92-1	Lead	0.58	J		MS
7439-95-4	Magnesium	40200			MS
7439-96-5	Manganese	27.2			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	4.7			MS
7440-09-7	Potassium	11500			MS
7782-49-2	Selenium	9.1		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	13.0			MS
7440-66-6	Zinc	4.8			MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N38

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14935

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	210		E	MS
7440-36-0	Antimony	0.099	J		MS
7440-38-2	Arsenic	9.5		E	MS
7440-39-3	Barium	46.3			MS
7440-41-7	Beryllium	0.046	J		MS
7440-43-9	Cadmium	0.018	J		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	9.8			MS
7440-48-4	Cobalt	1.1			MS
7440-50-8	Copper	2.2			MS
7439-89-6	Iron	175	J		MS
7439-92-1	Lead	0.46	J		MS
7439-95-4	Magnesium	78400			MS
7439-96-5	Manganese	13.8			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	12.6			MS
7440-09-7	Potassium	8580			MS
7782-49-2	Selenium	20.1		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	28.6			MS
7440-66-6	Zinc	8.1			MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N43

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14936

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	562		E	MS
7440-36-0	Antimony	0.67	J		MS
7440-38-2	Arsenic	6.8		E	MS
7440-39-3	Barium	68.8			MS
7440-41-7	Beryllium	0.082	J		MS
7440-43-9	Cadmium	0.027	J		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	17.9			MS
7440-48-4	Cobalt	0.96	J		MS
7440-50-8	Copper	2.9			MS
7439-89-6	Iron	342			MS
7439-92-1	Lead	0.76	J		MS
7439-95-4	Magnesium	40300			MS
7439-96-5	Manganese	11.6			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	16.3			MS
7440-09-7	Potassium	9730			MS
7782-49-2	Selenium	12.6		E	MS
7440-22-4	Silver	0.030	J		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	14.5			MS
7440-66-6	Zinc	7.9			MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N44

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14937

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	108		E	MS
7440-36-0	Antimony	2.0	U		MS
7440-38-2	Arsenic	7.9		E	MS
7440-39-3	Barium	56.0			MS
7440-41-7	Beryllium	1.0	U		MS
7440-43-9	Cadmium	1.0	U		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	5.9			MS
7440-48-4	Cobalt	0.52	J		MS
7440-50-8	Copper	1.3	J		MS
7439-89-6	Iron	58.9	J		MS
7439-92-1	Lead	0.14	J		MS
7439-95-4	Magnesium	45900			MS
7439-96-5	Manganese	4.4			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	8.3			MS
7440-09-7	Potassium	7620			MS
7782-49-2	Selenium	14.2		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	20.4			MS
7440-66-6	Zinc	5.2			MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM IA-IN ISM01.2 (1/10)

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N59

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14938

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	208		E	MS
7440-36-0	Antimony	2.0	U		MS
7440-38-2	Arsenic	11.5		E	MS
7440-39-3	Barium	50.8			MS
7440-41-7	Beryllium	0.056	J		MS
7440-43-9	Cadmium	1.0	U		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	63.0			MS
7440-48-4	Cobalt	0.50	J		MS
7440-50-8	Copper	1.6	J		MS
7439-89-6	Iron	130	J		MS
7439-92-1	Lead	0.55	J		MS
7439-95-4	Magnesium	44700			MS
7439-96-5	Manganese	14.2			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	5.0			MS
7440-09-7	Potassium	4220			MS
7782-49-2	Selenium	5.8		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	43.1			MS
7440-66-6	Zinc	5.5			MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM IA-IN ISM01.2 (1/10)

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF4N60

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: (soil/water) WATER Lab Sample ID: 14939

% Solids: Date Received: 06/25/2011

Concentration Units (ug/L, ug, or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	209		E	MS
7440-36-0	Antimony	0.18	J		MS
7440-38-2	Arsenic	9.6		E	MS
7440-39-3	Barium	57.0			MS
7440-41-7	Beryllium	0.052	J		MS
7440-43-9	Cadmium	0.025	J		MS
7440-70-2	Calcium				NR
7440-47-3	Chromium	59.4			MS
7440-48-4	Cobalt	1.3			MS
7440-50-8	Copper	8.1			MS
7439-89-6	Iron	164	J		MS
7439-92-1	Lead	0.74	J		MS
7439-95-4	Magnesium	47300			MS
7439-96-5	Manganese	29.0			MS
7439-97-6	Mercury				NR
7440-02-0	Nickel	19.2			MS
7440-09-7	Potassium	5860			MS
7782-49-2	Selenium	6.9		E	MS
7440-22-4	Silver	1.0	U		MS
7440-23-5	Sodium				NR
7440-28-0	Thallium	1.0	U		MS
7440-62-2	Vanadium	29.6			MS
7440-66-6	Zinc	8.1			MS
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM IA-IN ISM01.2 (1/10)

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Initial Calibration Verification Source: USEPA 0307

Continuing Calibration Verification Source: INOR-VEN

Concentration Units: ug/L

Analyte	Initial Calibration Verification True	Found	%R(1)	Continuing Calibration Verification True	Found	%R(1)	Found	%R(1)	M
Aluminum	504	461	92.0	51000	49600	97.0	50200	98.0	MS
Antimony	199	179	90.0	1000	1000	100	1000	100	MS
Arsenic	200	195	97.0	1000	1020	102	1030	103	MS
Barium	99.0	90.5	91.0	1100	1100	100	1120	102	MS
Beryllium	99.0	91.9	93.0	1000	994	99.0	1030	103	MS
Cadmium	99.0	95.1	96.0	1000	1000	100	1010	101	MS
Calcium									NR
Chromium	98.0	97.6	100	1000	968	97.0	993	99.0	MS
Cobalt	100	102	102	1000	985	98.0	985	99.0	MS
Copper	98.0	102	104	1000	1010	101	1030	103	MS
Iron	1020	997	98.0	51000	50200	98.0	51000	100	MS
Lead	200	190	95.0	1000	1020	102	1090	109	MS
Magnesium	1220	1120	92.0	51000	49600	97.0	50400	99.0	MS
Manganese	100	97.4	97.0	1000	988	99.0	989	99.0	MS
Mercury									NR
Nickel	101	101	100	1000	1030	103	1030	103	MS
Potassium	2000	1930	96.0	10000	9950	99.0	9890	99.0	MS
Selenium	206	207	100	1000	1040	104	1050	105	MS
Silver	100	97.0	97.0	1000	986	99.0	1000	100	MS
Sodium									NR
Thallium	206	193	94.0	1000	998	100	1060	106	MS
Vanadium	100	93.0	93.0	1000	966	97.0	976	98.0	MS
Zinc	205	213	104	1000	1040	104	1050	105	MS
Cyanide									NR

(1) Control limits: Mercury 85-115; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Initial Calibration Verification Source: USEPA 0307

Continuing Calibration Verification Source: INOR-VEN

Concentration Units: ug/L

Analyte	Initial Calibration Verification True	Found	%R(1)	Continuing Calibration Verification True	Found	%R(1)	Found	%R(1)	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium	99.0	103	104	1100	1110	101	1130	103	MS
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

(1) Control limits: Mercury 85-115; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

3-IN
BLANKS

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Preparation Blank Matrix (soil/water/wipe/filter): WATER

Preparation Blank Concentration Units (ug/L, ug, or mg/kg): UG/L

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum	3.0	J	4.4	J	5.1	J			20.0	U	MS
Antimony	1.9	J	0.63	J	0.62	J			0.16	J	MS
Arsenic	0.051	J	0.20	J	0.29	J			-0.041	J	MS
Barium	0.059	J	0.065	J	0.085	J			10.0	U	MS
Beryllium	0.084	J	0.13	J	0.12	J			0.032	J	MS
Cadmium	0.054	J	0.075	J	0.066	J			1.0	U	MS
Calcium											NR
Chromium	2.0	U	2.0	U	0.12	J			-0.063	J	MS
Cobalt	0.063	J	0.075	J	0.076	J			1.0	U	MS
Copper	2.0	U	2.0	U	2.0	U			2.0	U	MS
Iron	200	U	200	U	200	U			200	U	MS
Lead	0.12	J	0.13	J	0.21	J			1.0	U	MS
Magnesium	3.5	J	5.1	J	5.4	J			500	U	MS
Manganese	0.069	J	0.077	J	0.080	J			1.0	U	MS
Mercury											NR
Nickel	0.11	J	0.078	J	0.14	J			0.043	J	MS
Potassium	500	U	8.6	J	4.2	J			3.8	J	MS
Selenium	0.38	J	1.0	J	0.43	J			0.40	J	MS
Silver	0.057	J	0.080	J	0.094	J			1.0	U	MS
Sodium											NR
Thallium	0.045	J	0.13	J	0.12	J			1.0	U	MS
Vanadium	5.0	U	0.15	J	0.18	J			0.20	J	MS
Zinc	2.0	U	2.0	U	2.0	U			2.0	U	MS
Cyanide											NR

USEPA - CLP

3-IN
BLANKS

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Preparation Blank Matrix (soil/water/wipe/filter):

Preparation Blank Concentration Units (ug/L, ug, or mg/kg):

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium	0.27	J	0.65	J	0.19	J					MS
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

USEPA - CLP

4B-IN
ICP-MS INTERFERENCE CHECK SAMPLE

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 ICS Source: EPA 0803
ICSB Source: EPA 0803

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Found Sol. A	%R	Found Sol. AB	%R
Aluminum	100000	100000	94600	95	94400	94
Antimony	1.5	22.0	1.8	120	22.4	102
Arsenic	0.10	19.0	1.4	1400	19.5	103
Barium	1.2	22.0	1.5	125	23.0	105
Beryllium	0	19.0	0.27		17.8	94
Cadmium	0.70	20.0	0.025	4	20.6	103
Calcium	100000	100000	104000	104	102000	102
Carbon						
Chloride						
Chromium	21.0	40.0	19.9	95	38.8	97
Cobalt	1.0	20.0	1.2	120	20.9	105
Copper	8.0	25.0	9.4	118	26.7	107
Iron	100000	100000	98600	99	96700	97
Lead	4.0	25.0	4.4	110	25.5	102
Magnesium	100000	100000	97700	98	97200	97
Manganese	7.0	27.0	7.7	110	27.4	101
Nickel	6.0	24.0	5.8	97	23.6	98
Phosphorus						
Potassium	100000	100000	102000	102	100000	100
Selenium	0.30	19.0	1.2	400	20.0	105
Silver	0	18.0	0.021		19.3	107
Sodium						
Sulfur						
Thallium	0	21.0	-0.0047		22.0	105
Titanium						
Vanadium	0.50	19.0	-0.99	-198	18.4	97
Zinc	11.0	29.0	12.1	110	29.5	102
Molybdenum						

USEPA - CLP

4B-IN
ICP-MS INTERFERENCE CHECK SAMPLE

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 ICS Source: EPA 0803
ICSB Source: EPA 0803

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Found Sol. A	%R	Found Sol. AB	%R
Aluminum	100000	100000	101000	101	100000	100
Antimony						
Arsenic						
Barium	1.2	22.0	1.7	142	23.9	109
Beryllium						
Cadmium						
Calcium	100000	100000	110000	110	111000	111
Carbon						
Chloride						
Chromium						
Cobalt						
Copper						
Iron	100000	100000	105000	105	106000	106
Lead						
Magnesium	100000	100000	103000	103	103000	103
Manganese						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silver						
Sodium						
Sulfur						
Thallium						
Titanium						
Vanadium						
Zinc						
Molybdenum						

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MF4N43S

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: WATER

% Solids for Sample:

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	99.4		0.67	J	100	99		MS
Arsenic	75-125	47.2		6.8		40.0	101		MS
Barium	75-125	2190		68.8		2000	106		MS
Beryllium	75-125	41.2		0.082	J	50.0	82		MS
Cadmium	75-125	49.5		0.027	J	50.0	99		MS
Calcium									NR
Chromium	75-125	197		17.9		200	90		MS
Cobalt	75-125	452		0.96	J	500	90		MS
Copper	75-125	215		2.9		250	85		MS
Iron									NR
Lead	75-125	22.6		0.76	J	20.0	109		MS
Magnesium									NR
Manganese	75-125	440		11.6		500	86		MS
Mercury									NR
Nickel	75-125	433		16.3		500	83		MS
Potassium									NR
Selenium	75-125	21.3		12.6		10.0	87		MS
Silver	75-125	49.6		0.030	J	50.0	99		MS
Sodium									NR
Thallium	75-125	55.4		1.0	U	50.0	111		MS
Vanadium	75-125	460		14.5		500	89		MS
Zinc	75-125	408		7.9		500	80		MS
Cyanide									NR

Comments:

FORM VA-IN ISM01.2 (1/10)

USEPA - CLP

6-IN
DUPLICATES

EPA SAMPLE NO.

MF4N43D

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: WATER

% Solids for Sample:

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		562		617		9		MS
Antimony		0.67	J	0.60	J	11		MS
Arsenic		6.8		7.5		10		MS
Barium		68.8		71.0		3		MS
Beryllium		0.082	J	0.084	J	2		MS
Cadmium		0.027	J	0.043	J	46		MS
Calcium								NR
Chromium		17.9		20.6		14		MS
Cobalt	1.0	0.96	J	1.1		14		MS
Copper	2.0	2.9		2.8		4		MS
Iron	200.0	342		386		12		MS
Lead		0.76	J	0.76	J	0		MS
Magnesium		40300		39400		2		MS
Manganese		11.6		12.3		6		MS
Mercury								NR
Nickel		16.3		16.8		3		MS
Potassium		9730		9410		3		MS
Selenium	5.0	12.6		12.9		2		MS
Silver		0.030	J	0.032	J	6		MS
Sodium								NR
Thallium		1.0	U	1.0	U			MS
Vanadium	5.0	14.5		13.5		7		MS
Zinc	2.0	7.9		7.3		8		MS
Cyanide								NR

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7-IN
LABORATORY CONTROL SAMPLE

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Analyte	Aqueous/Water (ug/L), Soil/Sediment (mg/kg), Wipe/Filter (ug) True		Found		%R
Aluminum	40.0	ug/L	38.3	ug/L	96
Antimony	4.0	ug/L	4.0	ug/L	100
Arsenic	2.0	ug/L	2.1	ug/L	105
Barium	20.0	ug/L	20.0	ug/L	100
Beryllium	2.0	ug/L	1.9	ug/L	95
Cadmium	2.0	ug/L	1.9	ug/L	95
Calcium					
Chromium	4.0	ug/L	4.2	ug/L	105
Cobalt	2.0	ug/L	2.3	ug/L	115
Copper	4.0	ug/L	4.3	ug/L	108
Iron	400	ug/L	415	ug/L	104
Lead	2.0	ug/L	2.1	ug/L	105
Magnesium	1000	ug/L	1010	ug/L	101
Manganese	2.0	ug/L	2.2	ug/L	110
Mercury					
Nickel	2.0	ug/L	2.3	ug/L	115
Potassium	1000	ug/L	974	ug/L	97
Selenium	10.0	ug/L	8.8	ug/L	88
Silver	2.0	ug/L	2.1	ug/L	105
Sodium					
Thallium	2.0	ug/L	2.2	ug/L	110
Vanadium	10.0	ug/L	10.5	ug/L	105
Zinc	4.0	ug/L	4.2	ug/L	105
Cyanide					

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8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS

EPA SAMPLE NO.

MF4N43L

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Matrix: WATER

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	562		788		40	E	MS
Antimony	0.67	J	0.74	J	10		MS
Arsenic	6.8		5.6		18	E	MS
Barium	68.8		63.9		7		MS
Beryllium	0.082	J	0.15	J	83		MS
Cadmium	0.027	J	5.0	U	100		MS
Calcium							NR
Chromium	17.9		17.8		1		MS
Cobalt	0.96	J	1.0	J	4		MS
Copper	2.9		3.8	J	31		MS
Iron	342		295	J	14		MS
Lead	0.76	J	1.0	J	32		MS
Magnesium	40300		38800		4		MS
Manganese	11.6		12.2		5		MS
Nickel	16.3		17.0		4		MS
Potassium	9730		9600		1		MS
Selenium	12.6		15.2	J	21	E	MS
Silver	0.030	J	5.0	U	100		MS
Sodium							NR
Thallium	1.0	U	5.0	U			MS
Vanadium	14.5		14.7	J	1		MS
Zinc	7.9		8.8	J	11		MS

USEPA - CLP

9-IN
METHOD DETECTION LIMIT (ANNUALLY)

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Instrument Type: MS Instrument ID: MS0 Date: 01/15/2011

Preparation Method: 200.8

Concentration Units (ug/L or mg/kg): UG/L

Analyte	Wavelength /Mass	MDL
Aluminum	27.0	2.4
Antimony	121	0.089
Arsenic	75.0	0.040
Barium	137	0.050
Beryllium	9.0	0.024
Cadmium	111	0.018
Calcium	0	68.7
Chromium	52.0	0.044
Cobalt	59.0	0.014
Copper	65.0	0.43
Iron	56.0	11.4
Lead	208	0.074
Magnesium	24.0	2.7
Manganese	55.0	0.063
Mercury		
Nickel	60.0	0.037
Potassium	39.0	3.7
Selenium	78.0	0.24
Silver	107	0.022
Sodium		
Thallium	205	0.035
Vanadium	51.0	0.094
Zinc	66.0	0.50
Cyanide		

Comments:
MS0: THERMO ELCTRO ICP-MS

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11-IN
INTERNAL STANDARDS ASSOCIATION

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Date: 06/28/2011

Analyte	Assoc. Internal Standard 1	Assoc. Internal Standard 2
Aluminum	LI6	Y89
Antimony	RH103	TB159
Arsenic	LI6	Y89
Barium	RH103	TB159
Beryllium	LI6	Y89
Cadmium	RH103	TB159
Calcium		
Chromium	LI6	Y89
Cobalt	LI6	Y89
Copper	LI6	Y89
Iron		Y89
Lead	HO165	BI209
Magnesium	LI6	Y89
Manganese	LI6	Y89
Nickel	LI6	Y89
Potassium	LI6	LI6
Selenium	LI6	Y89
Silver	RH103	TB159
Sodium		
Thallium	HO165	BI209
Vanadium	LI6	Y89
Zinc	LI6	Y89

Comments:

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11-IN
INTERNAL STANDARDS ASSOCIATION

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Date: 06/30/2011

Analyte	Assoc. Internal Standard 1	Assoc. Internal Standard 2
Aluminum		
Antimony		
Arsenic		
Barium	RH103	TB159
Beryllium		
Cadmium		
Calcium		
Chromium		
Cobalt		
Copper		
Iron		
Lead		
Magnesium		
Manganese		
Nickel		
Potassium		
Selenium		
Silver		
Sodium		
Thallium		
Vanadium		
Zinc		

Comments:

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Preparation Method: 200.8

EPA Sample No.	Preparation Date	Initial Weight/Volume (g) or (mL)	Final Volume (mL)
LCS	06/28/2011	50 mL	50
MF4N06	06/28/2011	50 mL	50
MF4N07	06/28/2011	50 mL	50
MF4N08	06/28/2011	50 mL	50
MF4N09	06/28/2011	50 mL	50
MF4N10	06/28/2011	50 mL	50
MF4N14	06/28/2011	50 mL	50
MF4N15	06/28/2011	50 mL	50
MF4N20	06/28/2011	50 mL	50
MF4N21	06/28/2011	50 mL	50
MF4N37	06/28/2011	50 mL	50
MF4N38	06/28/2011	50 mL	50
MF4N43	06/28/2011	50 mL	50
MF4N43D	06/28/2011	50 mL	50
MF4N43S	06/28/2011	50 mL	50
MF4N44	06/28/2011	50 mL	50
MF4N59	06/28/2011	50 mL	50
MF4N60	06/28/2011	50 mL	50
PBW	06/28/2011	50 mL	50

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13-IN
ANALYSIS RUN LOG

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Instrument ID: MS0 Analysis Method: MS

Start date: 06/28/2011 End date: 06/28/2011

EPA Sample No.	D/F	Time	Analytes																							
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	CN
TUNE	1.0	1009	_	_	_	_	X	_	_	_	X	_	_	X	X	_	_	_	_	_	_	_	_	_	_	_
S0	1.0	1232	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
S	1.0	1235	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
S	1.0	1238	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
S	1.0	1240	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
S	1.0	1243	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
S	1.0	1246	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
ICV	1.0	1259	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
ICB	1.0	1302	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
ICSA	1.0	1305	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
ICSAB	1.0	1307	X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
CCV	1.0	1310	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
CCB	1.0	1313	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
PBW	1.0	1316	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
LCS	1.0	1318	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N43L	5.0	1321	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N43	1.0	1324	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N43D	1.0	1327	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N43S	1.0	1329	_	X	X	_	X	X	_	X	X	X	_	X	_	X	_	X	_	X	X	_	X	X	X	_
MF4N43A	1.0	1332	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
MF4N06	1.0	1335	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N07	1.0	1337	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N08	1.0	1340	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N09	1.0	1343	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N10	1.0	1346	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N14	1.0	1348	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N15	1.0	1351	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N20	1.0	1354	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N21	1.0	1356	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N37	1.0	1359	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N38	1.0	1402	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N44	1.0	1405	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
MF4N59	1.0	1407	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_

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13-IN
ANALYSIS RUN LOG

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Instrument ID: MS0 Analysis Method: MS

Start date: 06/28/2011 End date: 06/28/2011

EPA Sample No.	D/F	Time	Analytes																							
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	CN
MF4N60	1.0	1410	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
CCV	1.0	1413	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_
CCB	1.0	1416	X	X	X	X	X	X	_	X	X	X	X	X	X	X	_	X	X	X	X	_	X	X	X	_

FORM XIII-IN ISM01.2 (1/10)

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13-IN
ANALYSIS RUN LOG

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

Instrument ID: MS0 Analysis Method: MS

Start date: 06/30/2011 End date: 06/30/2011

EPA Sample No.	D/F	Time	Analytes																							
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	CN
TUNE	1.0	0913					X				X			X	X											
S0	1.0	0955	X			X			X				X		X											
S	1.0	0959	X			X			X				X		X											
S	1.0	1001	X			X			X				X		X											
S	1.0	1004	X			X			X				X		X											
S	1.0	1007	X			X			X				X		X											
S	1.0	1009	X			X			X				X		X											
ICV	1.0	1012				X																				
ICB	1.0	1015				X																				
ICSA	1.0	1018	X			X			X				X		X											
ICSAB	1.0	1021	X			X			X				X		X											
CCV	1.0	1023				X																				
CCB	1.0	1026				X																				
ZZZZZZ	1.0	1029																								
ZZZZZZ	1.0	1031																								
ZZZZZZ	1.0	1034																								
ZZZZZZ	1.0	1037																								
MF4N43S	2.0	1040				X																				
CCV	1.0	1042				X																				
CCB	1.0	1045				X																				

FORM XIII-IN ISM01.2 (1/10)

USEPA - CLP

14-IN
ICP-MS TUNE

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Date: 06/28/2011

Element - Mass	Avg. Measured Mass (amu)	Average Peak Width (amu)	% Height	%RSD
Be - 9	9.0	0.82	5	.920
Mg - 24	24.0	0.77	5	1.40
Mg - 25	25.0	0.77	5	1.40
Mg - 26	26.0	0.77	5	1.50
Co - 59	59.0	0.82	5	1.70
In - 113	113	0.82	5	1.10
In - 115	115	0.82	5	1.10
Pb - 206	206	0.77	5	.620
Pb - 207	207	0.77	5	.400
Pb - 208	208	0.77	5	.490

Comments:

USEPA - CLP

14-IN
ICP-MS TUNE

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Date: 06/30/2011

Element - Mass	Avg. Measured Mass (amu)	Average Peak Width (amu)	% Height	%RSD
Be - 9	9.0	0.77	5	1.90
Mg - 24	24.0	0.77	5	2.10
Mg - 25	25.0	0.77	5	1.90
Mg - 26	26.0	0.77	5	2.40
Co - 59	59.0	0.77	5	1.90
In - 113	113	0.77	5	1.30
In - 115	115	0.77	5	1.30
Pb - 206	206	0.77	5	.780
Pb - 207	207	0.77	5	.650
Pb - 208	208	0.77	5	.800

Comments:

USEPA - CLP

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Start date: 06/28/2011 End date: 06/28/2011

EPA Sample No.	Time	Internal Standards %RI for:									
		Element LI6	Q	Element Y89	Q	Element RH103	Q	Element TB159	Q	Element HO165	Q
S0	1232	100.0		100.0		100.0		100.0		100.0	
S	1235	100.0		98.00		99.00		101.0		102.0	
S	1238	97.00		95.00		95.00		100.0		101.0	
S	1240	91.00		89.00		85.00		94.00		95.00	
S	1243	88.00		85.00		81.00		91.00		91.00	
S	1246	83.00		83.00		76.00		87.00		89.00	
ICV	1259	93.00		91.00		94.00		98.00		98.00	
ICB	1302	94.00		94.00		95.00		97.00		98.00	
ICSA	1305	84.00		79.00		71.00		85.00		84.00	
ICSAB	1307	84.00		80.00		72.00		86.00		86.00	
CCV	1310	87.00		88.00		82.00		94.00		95.00	
CCB	1313	95.00		94.00		97.00		99.00		99.00	
PBW	1316	99.00		97.00		99.00		100.0		100.0	
LCS	1318	100.0		98.00		99.00		103.0		102.0	
MF4N43L	1321	94.00		88.00		85.00		93.00		92.00	
MF4N43	1324	103.0		90.00		80.00		92.00		92.00	
MF4N43D	1327	106.0		92.00		83.00		93.00		94.00	
MF4N43S	1329	104.0		92.00		81.00		93.00		93.00	
MF4N43A	1332	108.0		94.00		84.00		95.00		95.00	
MF4N06	1335	105.0		90.00		82.00		93.00		93.00	
MF4N07	1337	104.0		89.00		80.00		92.00		90.00	
MF4N08	1340	106.0		91.00		82.00		91.00		91.00	
MF4N09	1343	105.0		91.00		82.00		91.00		93.00	
MF4N10	1346	105.0		90.00		81.00		93.00		92.00	
MF4N14	1348	105.0		90.00		81.00		92.00		91.00	
MF4N15	1351	103.0		89.00		79.00		91.00		90.00	
MF4N20	1354	100.0		92.00		84.00		92.00		94.00	
MF4N21	1356	104.0		88.00		80.00		90.00		90.00	
MF4N37	1359	100.0		91.00		81.00		91.00		90.00	
MF4N38	1402	101.0		91.00		80.00		90.00		90.00	
MF4N44	1405	101.0		94.00		85.00		95.00		95.00	
MF4N59	1407	100.0		92.00		84.00		93.00		93.00	
MF4N60	1410	99.00		92.00		84.00		92.00		92.00	
CCV	1413	83.00		83.00		79.00		88.00		87.00	
CCB	1416	87.00		86.00		90.00		91.00		91.00	

USEPA - CLP

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Start date: 06/28/2011 End date: 06/28/2011

EPA Sample No.	Time	Internal Standards %RI for:									
		Element BI209	Q	Element	Q	Element	Q	Element	Q	Element	Q
S0	1232	100.0									
S	1235	99.00									
S	1238	95.00									
S	1240	85.00									
S	1243	81.00									
S	1246	75.00									
ICV	1259	91.00									
ICB	1302	94.00									
ICSA	1305	70.00									
ICSAB	1307	70.00									
CCV	1310	81.00									
CCB	1313	95.00									
PBW	1316	96.00									
LCS	1318	94.00									
MF4N43L	1321	81.00									
MF4N43	1324	72.00									
MF4N43D	1327	73.00									
MF4N43S	1329	72.00									
MF4N43A	1332	73.00									
MF4N06	1335	73.00									
MF4N07	1337	71.00									
MF4N08	1340	71.00									
MF4N09	1343	71.00									
MF4N10	1346	71.00									
MF4N14	1348	71.00									
MF4N15	1351	69.00									
MF4N20	1354	71.00									
MF4N21	1356	69.00									
MF4N37	1359	68.00									
MF4N38	1402	65.00									
MF4N44	1405	70.00									
MF4N59	1407	69.00									
MF4N60	1410	69.00									
CCV	1413	71.00									
CCB	1416	81.00									

FORM XV - IN ISM01.2 (1/10)

USEPA - CLP

15-IN
ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Start date: 06/30/2011 End date: 06/30/2011

EPA Sample No.	Time	Internal Standards %RI for:									
		Element LI6	Q	Element SC45	Q	Element Y89	Q	Element RH103	Q	Element TB159	Q
S0	0955	100.0		100.0		100.0		100.0		100.0	
S	0959	99.00		99.00		102.0		102.0		101.0	
S	1001	98.00		100.0		100.0		97.00		100.0	
S	1004	91.00		94.00		95.00		89.00		96.00	
S	1007	86.00		90.00		91.00		84.00		93.00	
S	1009	81.00		89.00		88.00		79.00		91.00	
ICV	1012	92.00		97.00		99.00		98.00		100.0	
ICB	1015	94.00		97.00		97.00		96.00		99.00	
ICSA	1018	82.00		84.00		84.00		73.00		88.00	
ICSAB	1021	83.00		85.00		84.00		73.00		90.00	
CCV	1023	87.00		90.00		90.00		83.00		99.00	
CCB	1026	96.00		98.00		100.0		100.0		104.0	
ZZZZZZ	1029										
ZZZZZZ	1031										
ZZZZZZ	1034										
ZZZZZZ	1037										
MF4N43S	1040	101.0		105.0		96.00		86.00		101.0	
CCV	1042	85.00		88.00		89.00		81.00		96.00	
CCB	1045	89.00		90.00		92.00		90.00		97.00	

USEPA - CLP

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Start date: 06/30/2011 End date: 06/30/2011

EPA Sample No.	Time	Internal Standards %RI for:									
		Element HO165	Q	Element BI209	Q	Element	Q	Element	Q	Element	Q
S0	0955	100.0		100.0							
S	0959	101.0		102.0							
S	1001	100.0		98.00							
S	1004	98.00		91.00							
S	1007	94.00		85.00							
S	1009	92.00		80.00							
ICV	1012	101.0		100.0							
ICB	1015	98.00		100.0							
ICSA	1018	91.00		77.00							
ICSAB	1021	92.00		78.00							
CCV	1023	100.0		90.00							
CCB	1026	105.0		106.0							
ZZZZZZ	1029										
ZZZZZZ	1031										
ZZZZZZ	1034										
ZZZZZZ	1037										
MF4N43S	1040	103.0		89.00							
CCV	1042	99.00		88.00							
CCB	1045	100.0		99.00							

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Start date: 06/28/2011

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	0	0		20.0	20.3500	-2	5100.0	5069.000	1
Antimony	0	0		2.0	1.9807	1	100.0	97.8600	2
Arsenic	0	0		1.0	0.9913	1	100.0	110.6333	-11
Barium	0	0		10.0	10.2207	-2	110.0	106.3333	3
Beryllium	0	0		1.0	1.0650	-7	100.0	109.4333	-9
Cadmium	0	0		1.0	1.0033	0	100.0	100.9300	-1
Calcium									
Chromium	0	0		2.0	2.2363	-12	100.0	105.9667	-6
Cobalt	0	0		1.0	1.1623	-16	100.0	110.7000	-11
Copper	0	0		2.0	2.2567	-13	100.0	112.3333	-12
Iron	0	0		200.0	216.4000	-8	5100.0	5472.667	-7
Lead	0	0		1.0	1.0083	-1	100.0	96.9033	3
Magnesium	0	0		500.0	495.3667	1	5100.0	5268.000	-3
Manganese	0	0		1.0	1.1577	-16	100.0	107.3333	-7
Mercury									
Nickel	0	0		1.0	1.1873	-19	100.0	119.8667	-20
Potassium	0	-0.0003		500.0	476.5333	5	1000.0	983.9667	2
Selenium	0	0		5.0	6.2240	-24	100.0	114.5667	-15
Silver	0	0		1.0	1.0873	-9	100.0	103.9000	-4
Sodium									
Thallium	0	0.0003		1.0	1.1203	-12	100.0	98.1200	2
Vanadium	0	0		5.0	5.5880	-12	100.0	103.7333	-4
Zinc	0	0		2.0	2.5047	-25	100.0	120.3667	-20
Cyanide									

Control Limits 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Start date: 06/28/2011

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	25500	24216.67	5	51000	49586.67	3	102000	103033.3	-1
Antimony	500.0	480.2333	4	1000.0	986.6667	1	2000.0	2045.000	-2
Arsenic	500.0	520.9000	-4	1000.0	1021.667	-2	2000.0	1949.667	3
Barium	550.0	512.5667	7	1100.0	1105.667	-1	2200.0	2273.667	-3
Beryllium	500.0	514.5667	-3	1000.0	1015.333	-2	2000.0	1988.000	1
Cadmium	500.0	493.9333	1	1000.0	997.5000	0	2000.0	2002.667	0
Calcium									
Chromium	500.0	486.3000	3	1000.0	979.9000	2	2000.0	2010.333	-1
Cobalt	500.0	493.7667	1	1000.0	995.7000	0	2000.0	1980.000	1
Copper	500.0	518.0667	-4	1000.0	1016.333	-2	2000.0	1951.000	2
Iron	25500	24970.00	2	51000	50893.33	0	102000	102266.7	0
Lead	500.0	491.3333	2	1000.0	1004.400	0	2000.0	2107.667	-5
Magnesium	25500	24440.00	4	51000	49820.00	2	102000	102866.7	-1
Manganese	500.0	484.2333	3	1000.0	988.5333	1	2000.0	1999.667	0
Mercury									
Nickel	500.0	530.7000	-6	1000.0	1022.667	-2	2000.0	1980.000	1
Potassium	5000.0	4881.667	2	10000	9816.333	2	20000	20123.33	-1
Selenium	500.0	543.8333	-9	1000.0	1053.333	-5	2000.0	1961.333	2
Silver	500.0	479.5333	4	1000.0	987.4333	1	2000.0	1945.333	3
Sodium									
Thallium	500.0	477.3667	5	1000.0	993.1667	1	2000.0	2050.667	-3
Vanadium	500.0	479.6000	4	1000.0	958.8333	4	2000.0	2025.333	-1
Zinc	500.0	551.8667	-10	1000.0	1060.000	-6	2000.0	1956.333	2
Cyanide									

Control Limits 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Start date: 06/30/2011

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum									
Antimony									
Arsenic									
Barium	0	0.0003		10.0	10.3267	-3	110.0	110.2333	0
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Control Limits 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Sentinel Contract: EPW09040

Lab Code: SENTIN Case No.: 41486 Mod. Ref. No. SDG No.: MF4N06

ICP-MS Instrument ID: MS0 Start date: 06/30/2011

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum									
Antimony									
Arsenic									
Barium	550.0	529.0333	4	1100.0	1106.667	-1	2200.0	2250.333	-2
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Control Limits 30%

Sentinel, Inc. **Sample Analysis**

ICP-MS RUN LOG

SDG:	MF4N06
CASE NO.:	41486
EPA RUN#	___1___
EPA BATCH#	___1___
PREP METHOD:	200.8
AN. METHOD:	MS
MATRIX:	LW
SOURCE:	CAL Stds See Standards Log
SOURCE:	INIT. CAL VER USEPA ICV-1 0307
DATE PREP.	See Standards Log
PREPARER:	RR

VALID DATA for: For All Analytes

ANALYST: MVK

INSTRUMENT ID: **MS0**
RUN ID: **MS0-11062831**

RUN START DATE: **06/28/11** RUN START TIME: **1009**
RUN END DATE: **06/28/11** RUN END TIME: **1416**

Data Reviewed By:

6/30/11

Analyst Date

for MKilgore

Data Reviewed By:

6/30/11

Supervisor Date

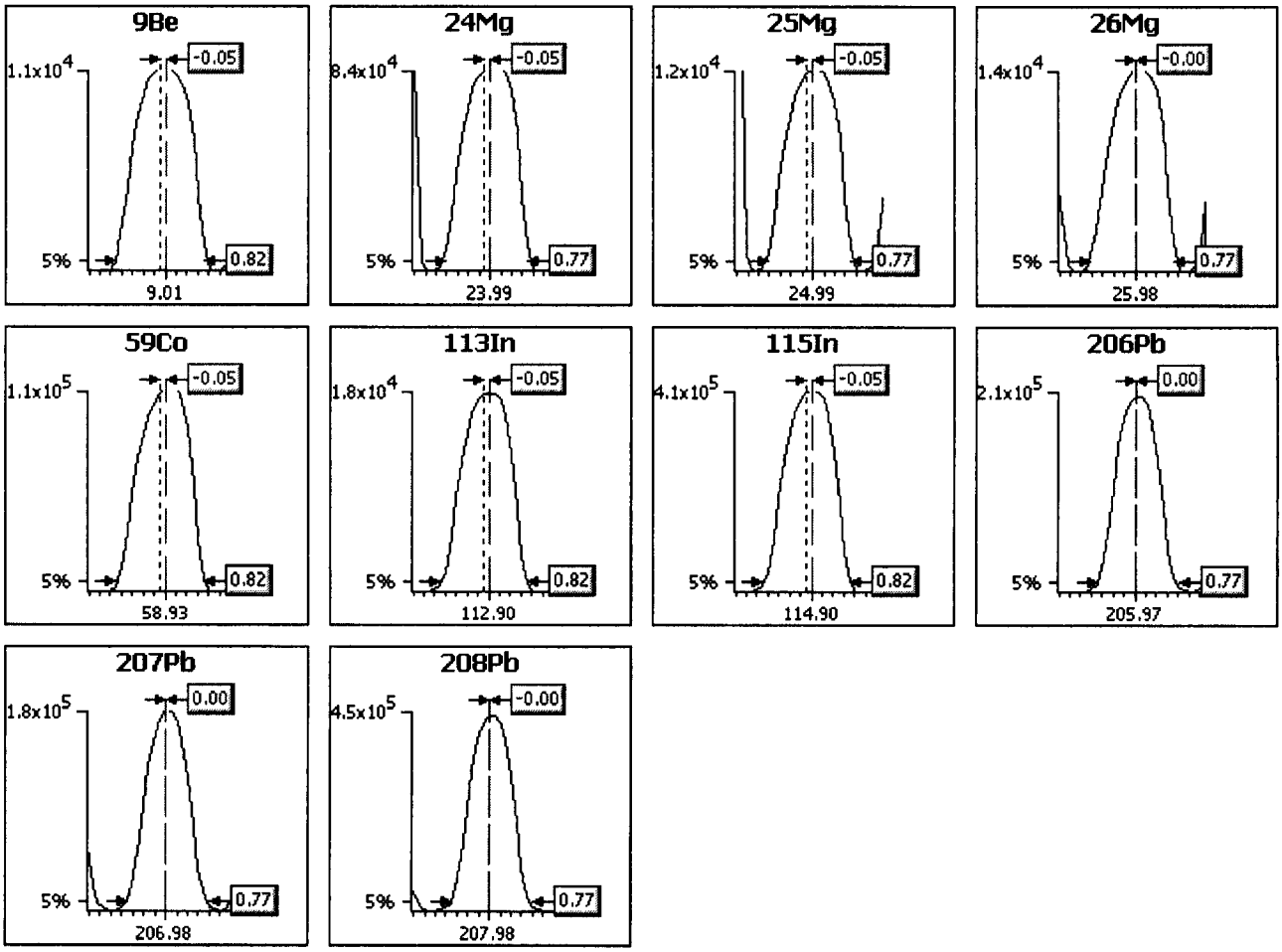
Performance Report

Tune Report

Sample details
Acquired at : 6/28/2011 10:08:56 AM
Report name : EPA Xt Screen Standard Mode CLP+ Y [5/19/2011 11:07:15 AM]

Mass Calibration verification

Acquisition parameters
Sweeps : 10
Dwell : 10.0 mSecs
Point spacing : 0.05 amu
Peak width measured at 5% of the peak maximum



Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.85	0.65	0.10	0.82	-0.05
24Mg	0.85	0.65	0.10	0.77	-0.05
25Mg	0.85	0.65	0.10	0.77	-0.05
26Mg	0.85	0.65	0.10	0.77	-0.00
59Co	0.85	0.65	0.10	0.82	-0.05
113In	0.85	0.65	0.10	0.82	-0.05
115In	0.85	0.65	0.10	0.82	-0.05
206Pb	0.85	0.65	0.10	0.77	0.00
207Pb	0.85	0.65	0.10	0.77	0.00
208Pb	0.85	0.65	0.10	0.77	-0.00

Sample details
Acquired at : 6/28/2011 10:08:56 AM
Report name : EPA Xt Screen Standard Mode CLP+ Y [5/19/2011 11:07:15 AM]

Tune Report

Tune conditions

Major	
Extraction	-121.6
Lens 1	-1192
Lens 2	-80.0
Focus	10.0
D1	-43.9
D2	-140
Pole Bias	-1.0
Hexapole Bias	-4.0
Nebuliser	0.95

Minor	
Lens 3	-195.3
Forward power	1404
Horizontal	70
Vertical	305
DA	-40.8
Cool	13.0
Auxiliary	0.90
Sampling Depth	130

Global	
Standard resolution	135
High resolution	90
Analogue Detector	2150
PC Detector	3400

Add. Gases	
CCT-He	0.00
Do Not Use	0.00

Sensitivity and stability results

Acquisition parameters
Sweeps : 102

Run	Time	5Bkg	7Li	7Li	9Be	24Mg	25Mg	26Mg	59Co	137Ba++
Dwell (mSecs)		100.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	30.0
Limits	%RSD	-	-	-	5.0%	5.0%	5.0%	5.0%	5.0%	-
	Countrate	<1	-	-	>5000	>10000	>5000	>5000	>50000	-
1	10:09:34 AM	0.000	56421.347	55273.648	11082.850	87967.118	11901.023	14031.000	107751.56	0.327
2	10:10:37 AM	0.000	56169.574	55033.693	10889.594	86966.155	11737.189	13873.034	106818.53	1.307
3	10:11:39 AM	0.098	55708.329	54961.904	11157.406	86172.123	11909.853	13737.635	105942.75	0.654
4	10:12:41 AM	0.098	55320.853	54166.341	10987.693	85528.846	11555.699	13524.728	104534.49	0.980
5	10:13:44 AM	0.000	55525.408	54383.667	11066.173	85006.754	11591.016	13595.369	103354.12	0.654
x		0.039	55829.102	54763.851	11036.743	86328.199	11738.956	13752.353	105680.29	0.784
σ		0.05	456.02	467.30	101.99	1172.88	166.54	205.48	1759.16	0.37
%RSD		136.931	0.817	0.853	0.924	1.359	1.419	1.494	1.665	47.507

Run	Time	101Bkg	113In	115In	137Ba	137Ba	140Ce	156Ce O	204Pb	206Pb
Dwell (mSecs)		100.0	10.0	10.0	10.0	10.0	10.0	30.0	10.0	10.0
Limits	%RSD	-	5.0%	5.0%	-	-	-	-	-	5.0%
	Countrate	<1	>5000	>100000	-	-	-	-	-	>10000
1	10:09:34 AM	0.000	18228.907	424236.06	86.275	94.118	51.961	2.614	11597.883	210892.91
2	10:10:37 AM	0.098	18268.163	420711.98	71.569	91.177	40.196	1.307	11549.812	209413.90
3	10:11:39 AM	0.000	17870.702	418790.14	74.510	67.647	63.726	1.961	11482.122	209882.09
4	10:12:41 AM	0.000	17888.367	414689.22	77.451	86.275	55.882	1.634	11348.703	207916.15
5	10:13:44 AM	0.000	17950.194	412921.51	76.471	81.373	52.941	1.961	11410.507	207922.11
x		0.020	18041.267	418269.78	77.255	84.118	52.941	1.895	11477.805	209205.43
σ		0.04	192.00	4562.24	5.52	10.41	8.49	0.48	101.02	1290.16
%RSD		223.607	1.064	1.091	7.145	12.373	16.038	25.573	0.880	0.617

Run	Time	207Pb	208Pb	220Bkg	238U
Dwell (mSecs)		10.0	10.0	100.0	10.0
Limits	%RSD	5.0%	5.0%	-	-
	Countrate	>10000	>10000	<1	-
1	10:09:34 AM	183877.15	454636.26	0.098	988458.89
2	10:10:37 AM	183986.10	449834.57	0.000	989711.78
3	10:11:39 AM	182944.11	451311.34	0.000	983622.08
4	10:12:41 AM	182564.77	451566.69	0.000	979729.34
5	10:13:44 AM	182418.18	448758.99	0.000	976064.02
x		183158.06	451221.57	0.020	983517.22
σ		732.79	2223.47	0.04	5759.81
%RSD		0.400	0.493	223.607	0.586

Ratio results

Run	Time	137Ba++/137Ba
Ratio limits		<0.0500
1	10:09:34 AM	0.003
2	10:10:37 AM	0.014
		0.010

Tune Report

3	10:11:39 AM	
4	10:12:41 AM	0.011
5	10:13:44 AM	0.008
x		0.0094
σ		0.00
%RSD		43.1066

Result : The performance report passed.

Experiment Details

Description	PlasmaLab Template BlankExperiment
Template Filename	C:\Program Files\Thermo Fisher\PlasmaLab\data\MF4N01.tee
Created By User	ThermoFisher
Analyte Database	Default.tea
Creation Timestamp	4/1/2008 3:31:44 PM
Last Edited By	labtech
Last Edit Timestamp	6/28/2011 2:20:49 PM
Instrument Detector	Simultaneous
Database Version	3,51
Acquisition Mode	Unknown

Numerical Results report key (text indicates meaning)

Blue text indicates that cell is a statistic.
Underlining indicates that a data warning flag is set.

Column headings	Result cells	Data warning flags
No flag	Internal Standard	I - Invalid calibration
Semi Quant	Excluded	T - Tripped
Standard Addition	QC Warning	F - Interference correction failed
Multi Element	QC Failure	M - Result over max
	Transient TRA only:	V - Valley integration failed
	Peak Not Found	D - Different method used
	Manually Edited	
	Merged Peak	

Setup

Survey Scan Setup

Sweeps	10
Dwell Time	600
Channels Per Mass	10
Acquisition Duration	13583

Main Run Setup

Main Run	Peak Jumping
Sweeps	10
Dwell Time	10000
Channels Per Mass	1
Acquisition Duration	19360
Channel Spacing	0.02

Survey Scan Regions

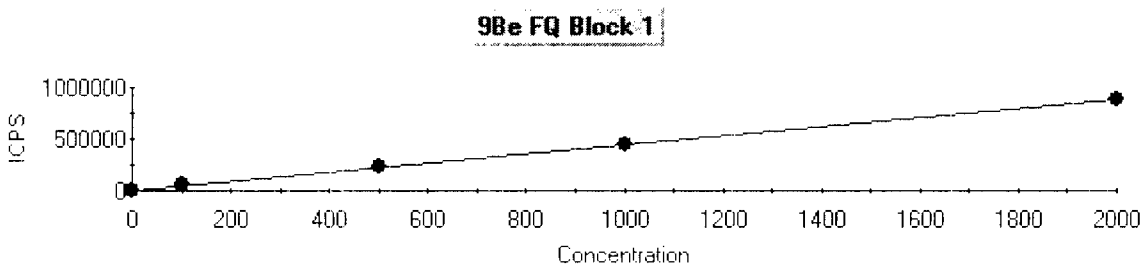
Start AMU	End AMU	Channels	Dwell ms	Resolution
4.59	11.50	69	600	
12.50	13.50	10	600	
22.59	29.41	68	600	
30.59	31.41	8	600	
32.59	34.50	19	600	
35.50	37.50	20	600	
38.59	39.41	8	600	
42.59	79.41	368	600	
80.59	245.50	1649	600	

Peak Jump Regions

Analyte	Channels	Dwell ms	Resolution
6Li	1	200000	Standard
7Li	1	200000	Standard
9Be	1	500000	Standard
11B	1	200000	Standard

23Na	1	50000	Standard
24Mg	1	50000	Standard
27Al	1	10000	Standard
39K	1	10000	Standard
44Ca	1	10000	Standard
45Sc	1	10000	Standard
47Ti	1	10000	Standard
51V	1	10000	Standard
52Cr	1	10000	Standard
53Cl O	1	10000	Standard
55Mn	1	10000	Standard
56Fe	1	10000	Standard
59Co	1	10000	Standard
60Ni	1	10000	Standard
65Cu	1	10000	Standard
66Zn	1	10000	Standard
75As	1	50000	Standard
77Se	1	10000	Standard
77Ar Cl	1	50000	Standard
78Se	1	50000	Standard
82Kr	1	10000	Standard
82Se	1	50000	Standard
83Kr	1	50000	Standard
89Y	1	10000	
94Mo	1	10000	Standard
95Mo	1	10000	Standard
96Mo	1	10000	Standard
97Mo	1	10000	Standard
98Mo	1	10000	Standard
103Rh	1	10000	
106Cd	1	10000	Standard
107Ag	1	10000	Standard
108Cd	1	10000	Standard
111Cd	1	10000	Standard
115In	1	10000	
118Sn	1	10000	Standard
121Sb	1	10000	Standard
137Ba	1	10000	Standard
159Tb	1	10000	
165Ho	1	10000	
203Tl	1	10000	Standard
205Tl	1	10000	Standard
206Pb	1	10000	Standard
207Pb	1	10000	Standard
208Pb	1	10000	Standard
209Bi	1	10000	

Fully Quant Calibration

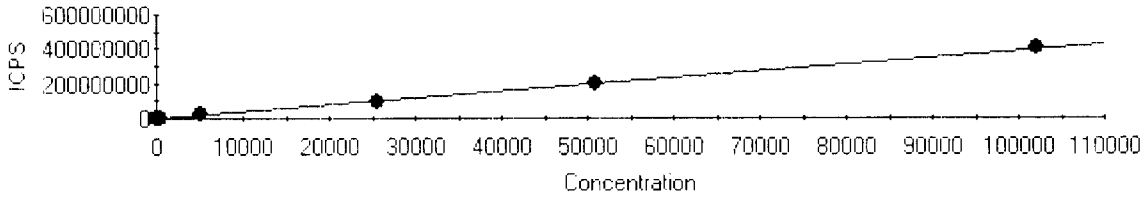


Intercept CPS=23.401414 Intercept Conc=0.053002
Sensitivity=441.515438 Correlation Coeff=0.999924

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	23.40	0.00
S1 S	1.000	1.065	0.065	493.53	6.48
S2 S	100.000	109.425	9.425	48336.41	9.43
S3 S	500.000	514.589	14.589	227222.48	2.92

S4 S	1000.000	1015.448	15.448	448359.40	1.54
S5 S	2000.000	1988.157	11.843	877825.57	0.59

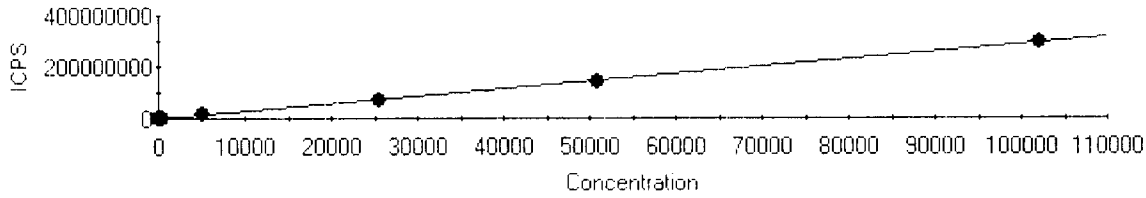
23Na FQ Block 1



Intercept CPS=52001.054410 Intercept Conc=13.331277
Sensitivity=3900.680600 Correlation Coeff=0.999707

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	52001.05	0.00
S1 S	500.000	504.949	4.949	2021645.68	0.99
S2 S	5100.000	5148.538	48.538	20134801.49	0.95
S3 S	25500.000	24099.478	1400.522	94056365.66	5.49
S4 S	51000.000	49439.965	1560.035	192901513.50	3.06
S5 S	102000.000	103127.697	1127.697	402320207.95	1.11

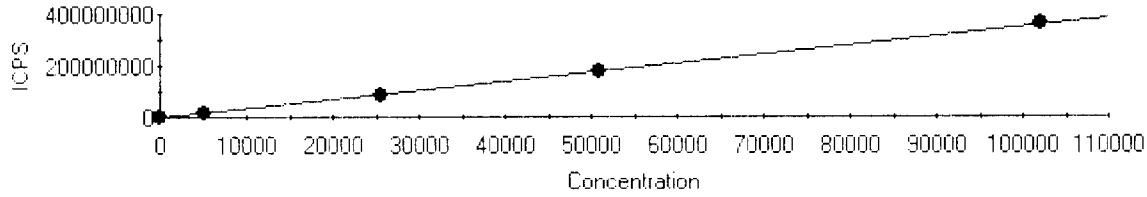
24Mg FQ Block 1



Intercept CPS=1929.287358 Intercept Conc=0.679400
Sensitivity=2839.690912 Correlation Coeff=0.999826

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	1929.29	0.00
S1 S	500.000	495.364	4.636	1408609.39	0.93
S2 S	5100.000	5267.980	167.980	14961364.36	3.29
S3 S	25500.000	24437.248	1062.752	69396150.30	4.17
S4 S	51000.000	49822.423	1177.577	141482211.03	2.31
S5 S	102000.000	102846.100	846.100	292053065.43	0.83

27Al FQ Block 1

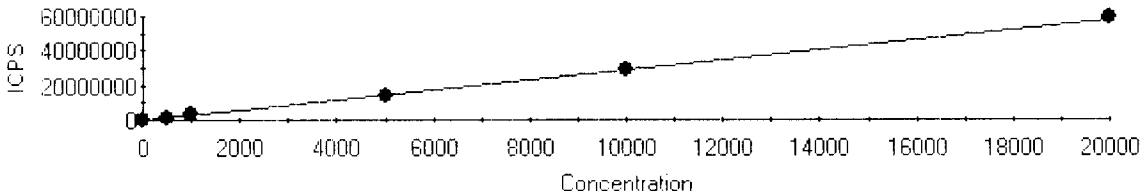


Intercept CPS=2428.831803 Intercept Conc=0.692772
Sensitivity=3505.961013 Correlation Coeff=0.999762

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	2428.83	0.00
S1 S	20.000	20.349	0.349	73771.10	1.74

S2 S	5100.000	5069.049	30.951	17774318.38	0.61
S3 S	25500.000	24216.856	1283.144	84905780.83	5.03
S4 S	51000.000	49586.691	1413.309	173851433.69	2.77
S5 S	102000.000	103028.988	1028.988	361218044.33	1.01

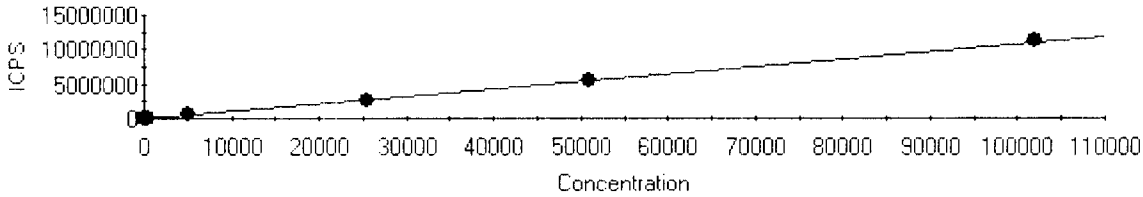
39K FQ Block 1



Intercept CPS=109118.728479 Intercept Conc=37.660417
Sensitivity=2897.438120 Correlation Coeff=0.999919

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	109118.73	0.00
S1 S	500.000	476.526	23.474	1489822.53	4.69
S2 S	1000.000	983.914	16.086	2959949.94	1.61
S3 S	5000.000	4881.670	118.330	14253454.33	2.37
S4 S	10000.000	9817.263	182.737	28554031.60	1.83
S5 S	20000.000	20122.342	122.342	58412359.78	0.61

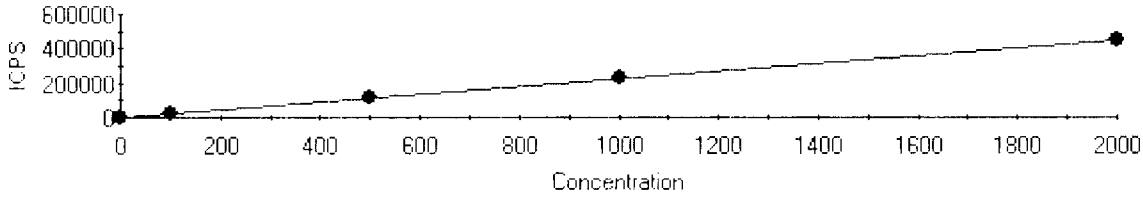
44Ca FQ Block 1



Intercept CPS=16329.365985 Intercept Conc=152.579109
Sensitivity=107.022292 Correlation Coeff=0.999448

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	16329.37	0.00
S1 S	500.000	493.201	6.799	69112.89	1.36
S2 S	5100.000	5012.912	87.088	552822.68	1.71
S3 S	25500.000	23232.202	2267.798	2502692.83	8.89
S4 S	51000.000	50851.571	148.429	5458581.00	0.29
S5 S	102000.000	105840.294	3840.294	11343600.26	3.76

47Ti FQ Block 1

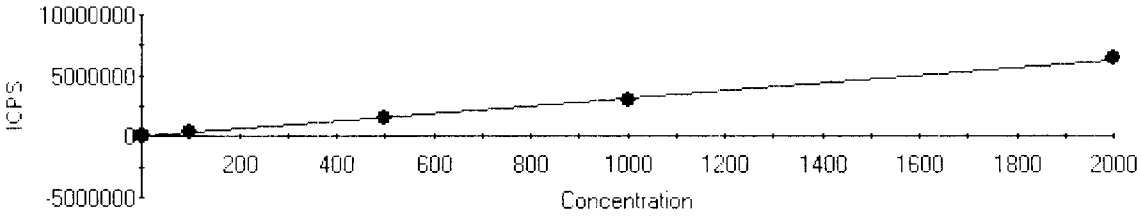


Intercept CPS=20.031328 Intercept Conc=0.089315
Sensitivity=224.278432 Correlation Coeff=0.999990

Label	Defined	Measured	Error	Mean CPS	% Error

S0 S0	0.000	0.000	0.000	20.03	0.00
S1 S	0.000	0.032	0.032	27.16	0.00
S2 S	100.000	107.980	7.980	24237.58	7.98
S3 S	500.000	501.037	1.037	112391.93	0.21
S4 S	1000.000	1004.771	4.771	225368.45	0.48
S5 S	2000.000	1996.956	3.044	447894.25	0.15

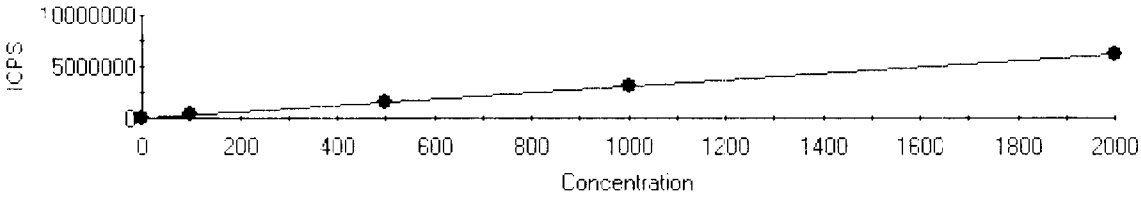
51V FQ Block 1



Intercept CPS=-361.809867 Intercept Conc=-0.114768
Sensitivity=3152.543935 Correlation Coeff=0.999603

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	-361.81	0.00
S1 S	5.000	5.588	0.588	17255.45	11.77
S2 S	100.000	103.743	3.743	326693.95	3.74
S3 S	500.000	479.571	20.429	1511506.67	4.09
S4 S	1000.000	958.865	41.135	3022502.72	4.11
S5 S	2000.000	2025.486	25.486	6385071.93	1.27

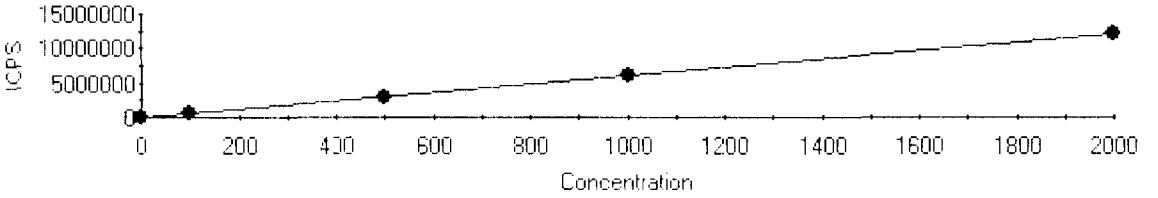
52Cr FQ Block 1



Intercept CPS=629.955412 Intercept Conc=0.204584
Sensitivity=3079.203392 Correlation Coeff=0.999891

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	629.96	0.00
S1 S	2.000	2.236	0.236	7515.47	11.81
S2 S	100.000	105.988	5.988	326988.32	5.99
S3 S	500.000	486.300	13.700	1498046.19	2.74
S4 S	1000.000	979.909	20.091	3017968.70	2.01
S5 S	2000.000	2010.423	10.423	6191131.36	0.52

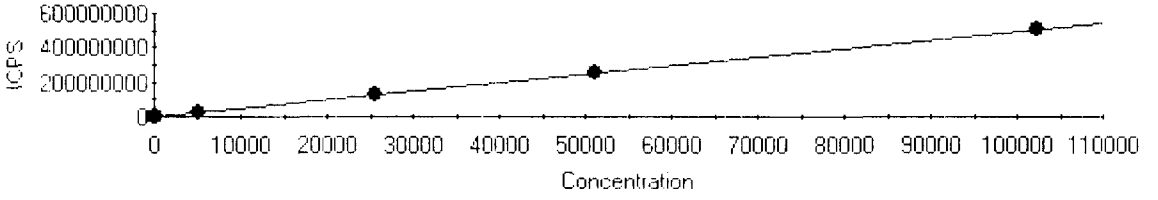
55Mn FQ Block 1



Intercept CPS=140.313317 Intercept Conc=0.022928
Sensitivity=6119.633445 Correlation Coeff=0.999944

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	140.31	0.00
S1 S	1.000	1.158	0.158	7224.46	15.76
S2 S	100.000	107.292	7.292	656730.87	7.29
S3 S	500.000	484.244	15.756	2963536.29	3.15
S4 S	1000.000	988.684	11.316	6050521.22	1.13
S5 S	2000.000	1999.810	0.190	12238241.72	0.01

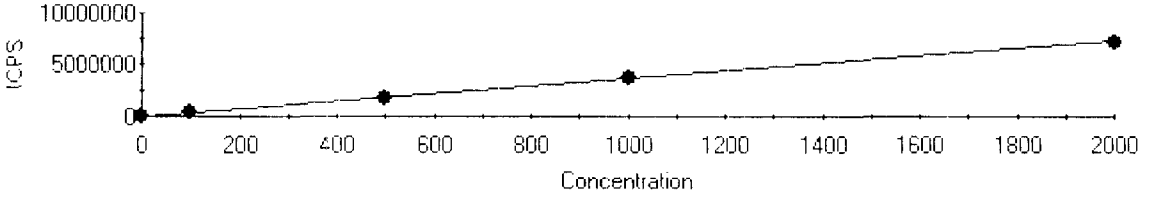
56Fe FQ Block 1



Intercept CPS=91130.949399 Intercept Conc=18.312427
Sensitivity=4976.453894 Correlation Coeff=0.999970

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	91130.95	0.00
S1 S	200.000	216.402	16.402	1168043.29	8.20
S2 S	5120.000	5472.518	352.518	27324866.63	6.89
S3 S	25600.000	24970.694	629.306	124356638.94	2.46
S4 S	51200.000	50892.333	307.667	253354479.78	0.60
S5 S	102430.000	102271.396	158.604	509040017.43	0.15

59Co FQ Block 1

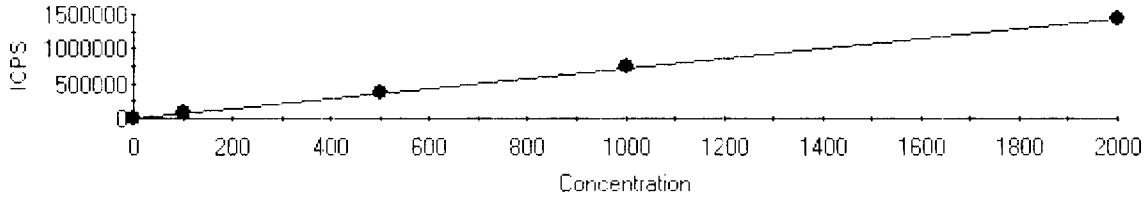


Intercept CPS=10.000478 Intercept Conc=0.002764
Sensitivity=3618.452687 Correlation Coeff=0.999980

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	10.00	0.00
S1 S	1.000	1.162	0.162	4215.94	16.24
S2 S	100.000	110.692	10.692	400542.54	10.69
S3 S	500.000	493.784	6.216	1786743.65	1.24
S4 S	1000.000	995.717	4.283	3602964.93	0.43

S5 S	2000.000	1980.181	19.819	7165200.89	0.99

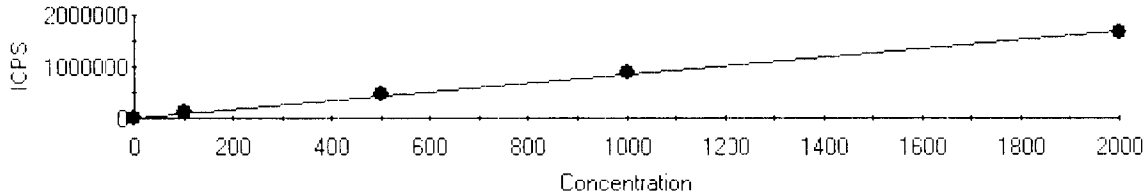
60Ni FQ Block 1



Intercept CPS=13.327079 Intercept Conc=0.018369
Sensitivity=725.528862 Correlation Coeff=0.999765

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	13.33	0.00
S1 S	1.000	1.188	0.188	874.99	18.76
S2 S	100.000	119.875	19.875	86985.74	19.87
S3 S	500.000	530.699	30.699	385051.03	6.14
S4 S	1000.000	1022.368	22.368	741770.74	2.24
S5 S	2000.000	1980.147	19.853	1436667.41	0.99

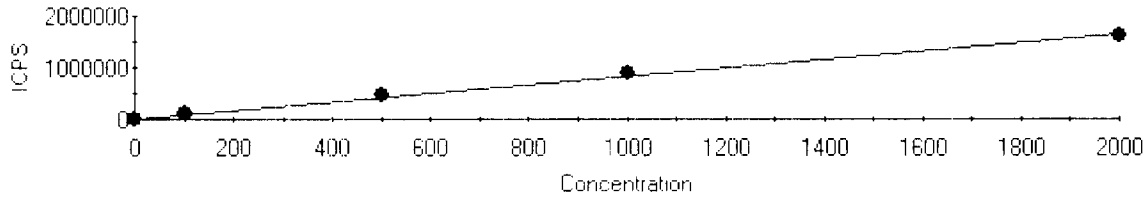
65Cu FQ Block 1



Intercept CPS=29.898561 Intercept Conc=0.034940
Sensitivity=855.701619 Correlation Coeff=0.999738

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	29.90	0.00
S1 S	2.000	2.256	0.256	1960.74	12.82
S2 S	100.000	112.342	12.342	96160.99	12.34
S3 S	500.000	518.066	18.066	443339.43	3.61
S4 S	1000.000	1016.237	16.237	869625.33	1.62
S5 S	2000.000	1950.999	49.001	1669502.98	2.45

66Zn FQ Block 1

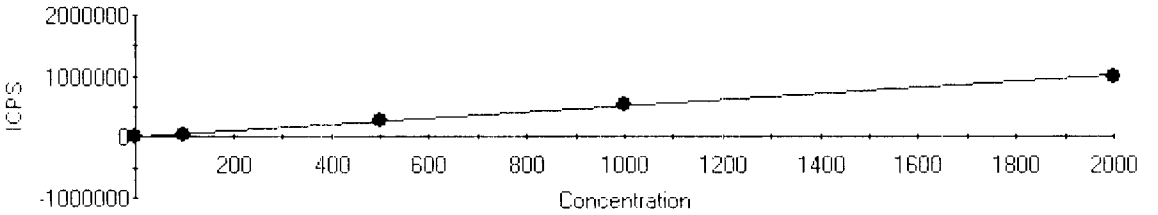


Intercept CPS=76.631926 Intercept Conc=0.092343
Sensitivity=829.860822 Correlation Coeff=0.998936

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	76.63	0.00
S1 S	2.000	2.505	0.505	2155.17	25.23
S2 S	100.000	120.363	20.363	99961.37	20.36

S3 S	500.000	551.906	51.906	458082.09	10.38
S4 S	1000.000	1059.740	59.740	879513.55	5.97
S5 S	2000.000	1956.135	43.865	1623396.11	2.19

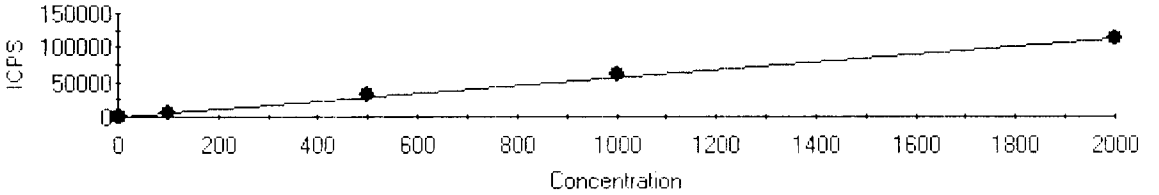
75As FQ Block 1



Intercept CPS=48.896767 Intercept Conc=0.095365
Sensitivity=512.732440 Correlation Coeff=0.999661

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	48.90	0.00
S1 S	1.000	0.991	0.009	557.26	0.85
S2 S	100.000	110.665	10.665	56790.32	10.66
S3 S	500.000	520.899	20.899	267130.68	4.18
S4 S	1000.000	1021.664	21.664	523889.24	2.17
S5 S	2000.000	1949.599	50.401	999671.78	2.52

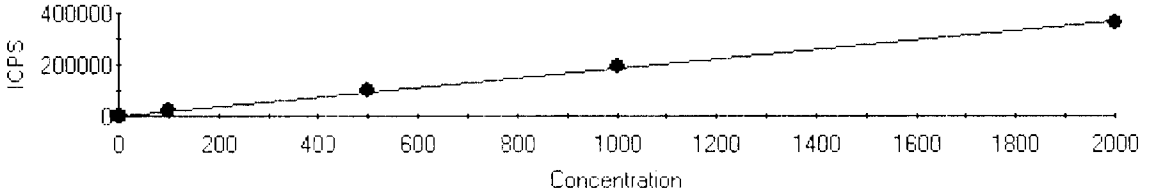
77Se FQ Block 1



Intercept CPS=70.139819 Intercept Conc=1.232290
Sensitivity=56.918285 Correlation Coeff=0.999178

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	70.14	0.00
S1 S	5.000	5.229	0.229	367.74	4.57
S2 S	100.000	114.733	14.733	6600.55	14.73
S3 S	500.000	534.012	34.012	30465.18	6.80
S4 S	1000.000	1058.702	58.702	60329.65	5.87
S5 S	2000.000	1961.409	38.591	111710.16	1.93

78Se FQ Block 1

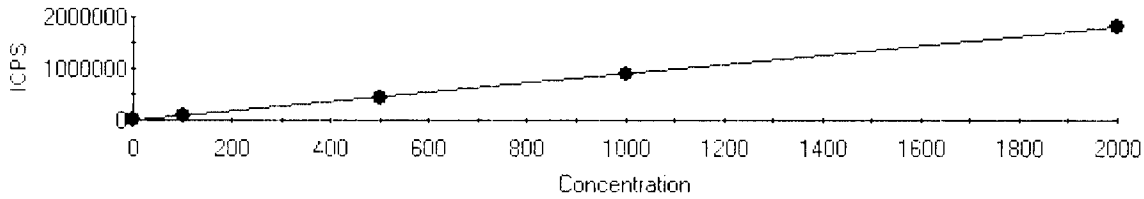


Intercept CPS=391.235329 Intercept Conc=2.114097
Sensitivity=185.060232 Correlation Coeff=0.999182

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	391.24	0.00

S1 S	5.000	6.224	1.224	1543.05	24.48
S2 S	100.000	114.543	14.543	21588.62	14.54
S3 S	500.000	543.869	43.869	101039.81	8.77
S4 S	1000.000	1053.689	53.689	195387.11	5.37
S5 S	2000.000	1961.458	38.542	363379.13	1.93

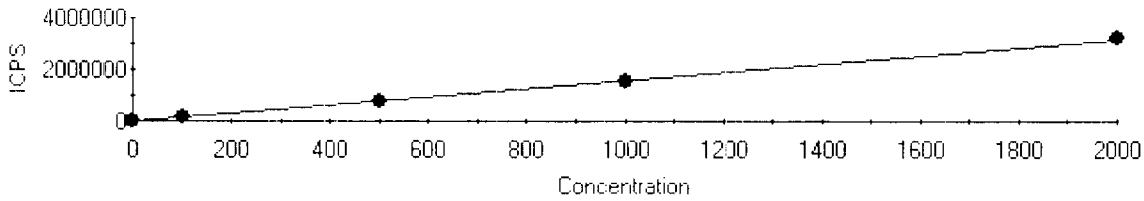
94Mo FQ Block 1



Intercept CPS=103.306085 Intercept Conc=0.115083
Sensitivity=897.665123 Correlation Coeff=0.999869

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	103.31	0.00
S1 S	0.000	-0.017	0.017	87.98	0.00
S2 S	100.000	98.189	1.811	88243.88	1.81
S3 S	500.000	474.626	25.374	426158.91	5.07
S4 S	1000.000	985.524	14.476	884773.64	1.45
S5 S	2000.000	2013.672	13.672	1807706.48	0.68

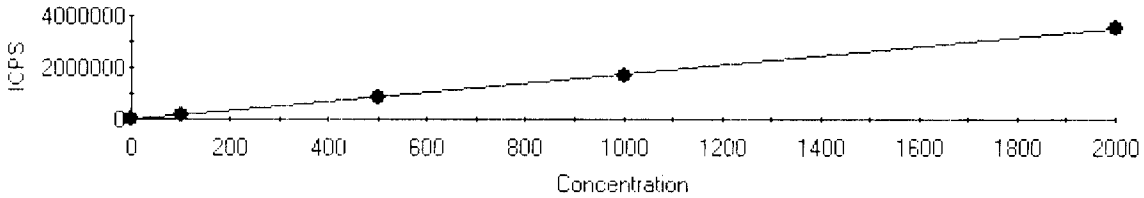
95Mo FQ Block 1



Intercept CPS=183.159240 Intercept Conc=0.115035
Sensitivity=1592.208588 Correlation Coeff=0.999902

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	183.16	0.00
S1 S	0.000	-0.060	0.060	87.75	0.00
S2 S	100.000	99.612	0.388	158786.63	0.39
S3 S	500.000	478.872	21.128	762646.99	4.23
S4 S	1000.000	986.872	13.128	1571489.35	1.31
S5 S	2000.000	2011.865	11.865	3203492.52	0.59

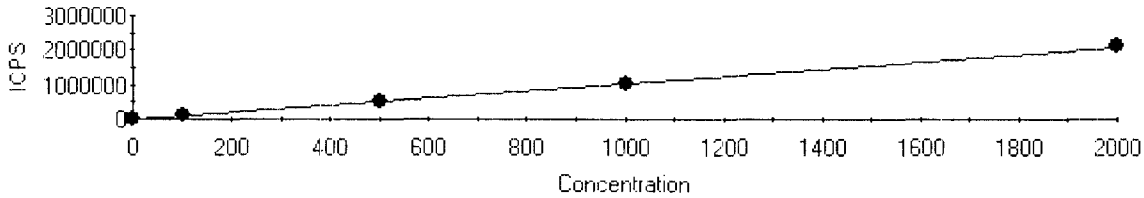
96Mo FQ Block 1



Intercept CPS=170.168390 Intercept Conc=0.097033
Sensitivity=1753.711951 Correlation Coeff=0.999801

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	170.17	0.00
S1 S	0.000	-0.029	0.029	118.44	0.00
S2 S	100.000	96.793	3.207	169917.61	3.21
S3 S	500.000	475.994	24.006	834927.00	4.80
S4 S	1000.000	974.826	25.174	1709734.08	2.52
S5 S	2000.000	2018.749	18.749	3540474.06	0.94

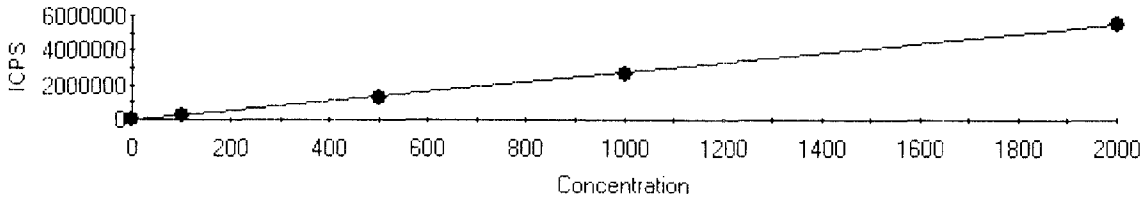
97Mo FQ Block 1



Intercept CPS=136.951581 Intercept Conc=0.130559
Sensitivity=1048.966594 Correlation Coeff=0.999748

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	136.95	0.00
S1 S	0.000	-0.053	0.053	81.21	0.00
S2 S	100.000	95.535	4.465	100350.26	4.46
S3 S	500.000	469.839	30.161	492982.36	6.03
S4 S	1000.000	973.995	26.005	1021825.41	2.60
S5 S	2000.000	2020.766	20.766	2119852.85	1.04

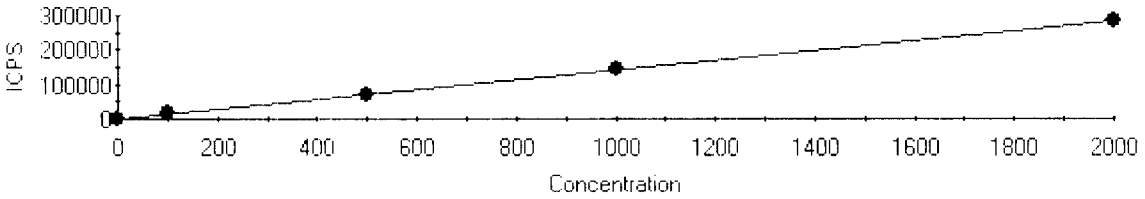
98Mo FQ Block 1



Intercept CPS=276.630964 Intercept Conc=0.100485
Sensitivity=2752.962504 Correlation Coeff=0.999665

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	276.63	0.00
S1 S	0.000	-0.030	0.030	195.41	0.00
S2 S	100.000	96.820	3.180	266818.05	3.18
S3 S	500.000	468.698	31.302	1290584.24	6.26
S4 S	1000.000	967.549	32.451	2663901.96	3.25
S5 S	2000.000	2024.210	24.210	5572851.38	1.21

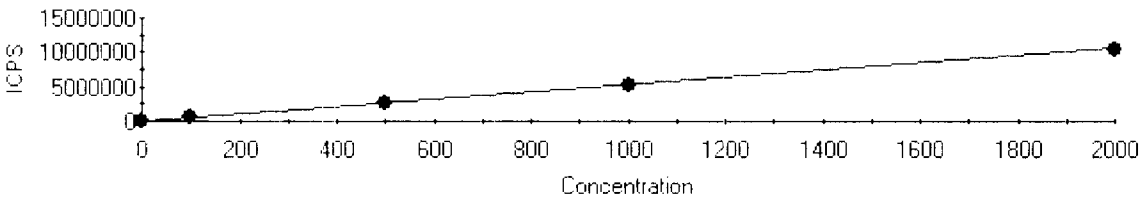
106Cd FQ Block 1



Intercept CPS=593.579589 Intercept Conc=4.184328
Sensitivity=141.857817 Correlation Coeff=0.999992

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	593.58	0.00
S1 S	1.000	1.388	0.388	790.55	38.85
S2 S	100.000	99.173	0.827	14662.03	0.83
S3 S	500.000	493.481	6.519	70597.73	1.30
S4 S	1000.000	1002.756	2.756	142842.34	0.28
S5 S	2000.000	2000.293	0.293	284350.77	0.01

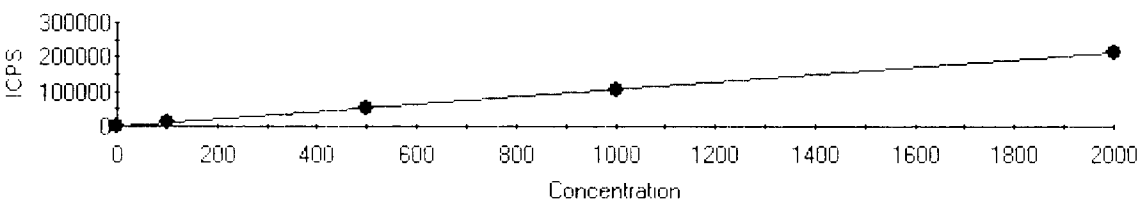
107Ag FQ Block 1



Intercept CPS=93.268180 Intercept Conc=0.017616
Sensitivity=5294.590826 Correlation Coeff=0.999954

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	93.27	0.00
S1 S	1.000	1.087	0.087	5849.96	8.73
S2 S	100.000	103.925	3.925	550334.89	3.93
S3 S	500.000	479.540	20.460	2539062.72	4.09
S4 S	1000.000	987.421	12.579	5228085.62	1.26
S5 S	2000.000	1945.293	54.707	10299624.13	2.74

108Cd FQ Block 1

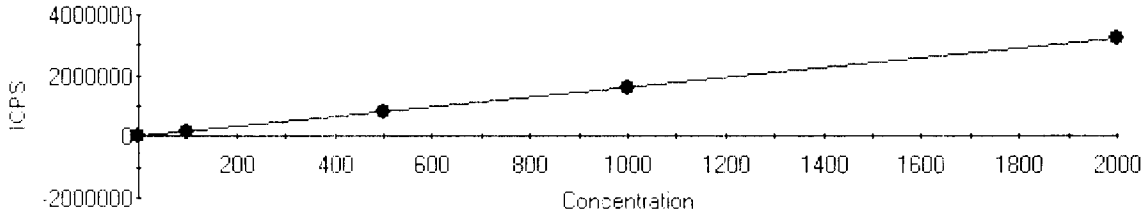


Intercept CPS=0.000000 Intercept Conc=0.000000
Sensitivity=106.312435 Correlation Coeff=0.999945

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	0.00	0.00
S1 S	1.000	1.263	0.263	134.25	26.27
S2 S	100.000	102.426	2.426	10889.17	2.43
S3 S	500.000	498.593	1.407	53006.65	0.28
S4 S	1000.000	983.446	16.554	104552.56	1.66

S5 S	2000.000	2008.507	8.507	213529.29	0.43

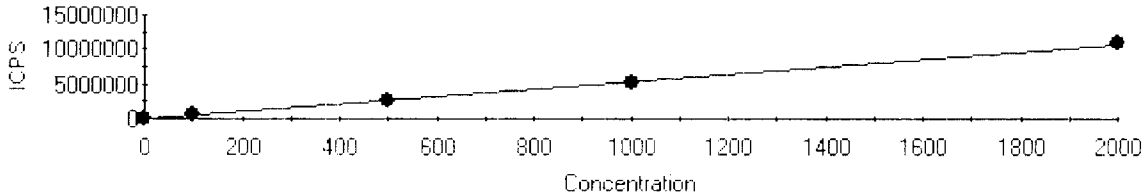
111Cd FQ Block 1



Intercept CPS=-0.274582 Intercept Conc=-0.000170
Sensitivity=1613.134767 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	-0.27	0.00
S1 S	1.000	1.003	0.003	1618.14	0.33
S2 S	100.000	100.931	0.931	162815.41	0.93
S3 S	500.000	493.923	6.077	796763.43	1.22
S4 S	1000.000	997.495	2.505	1609094.30	0.25
S5 S	2000.000	2002.725	2.725	3230665.16	0.14

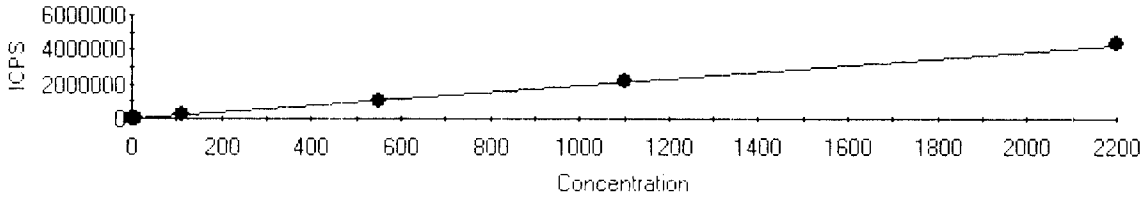
121Sb FQ Block 1



Intercept CPS=477.027797 Intercept Conc=0.088348
Sensitivity=5399.441881 Correlation Coeff=0.999786

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	477.03	0.00
S1 S	2.000	1.981	0.019	11172.51	0.96
S2 S	100.000	97.858	2.142	528853.96	2.14
S3 S	500.000	480.242	19.758	2593515.71	3.95
S4 S	1000.000	986.809	13.191	5328697.23	1.32
S5 S	2000.000	2044.697	44.697	11040697.22	2.23

137Ba FQ Block 1

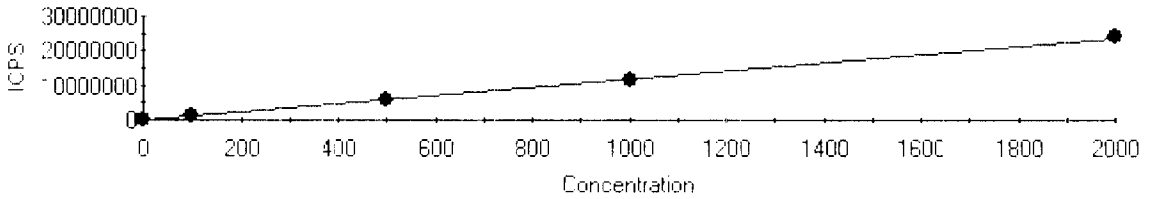


Intercept CPS=33.346821 Intercept Conc=0.017097
Sensitivity=1950.468284 Correlation Coeff=0.999667

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	33.35	0.00
S1 S	10.000	10.222	0.222	19971.27	2.22
S2 S	110.000	106.324	3.676	207415.38	3.34

S3 S	550.000	512.562	37.438	999769.63	6.81
S4 S	1100.000	1105.817	5.817	2156894.31	0.53
S5 S	2200.000	2273.805	73.805	4435018.72	3.35

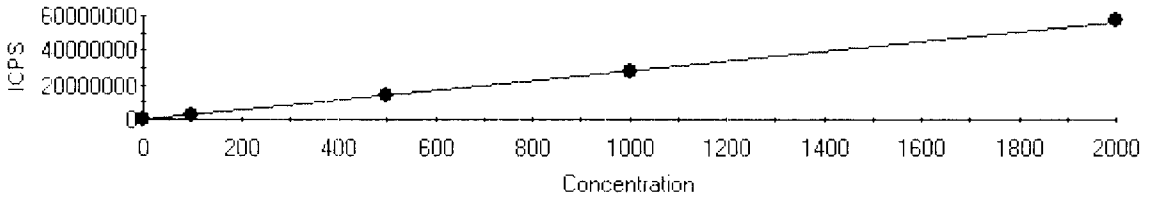
203Tl FQ Block 1



Intercept CPS=506.881158 Intercept Conc=0.043376
Sensitivity=11685.816016 Correlation Coeff=0.999492

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	506.88	0.00
S1 S	1.000	1.128	0.128	13686.15	12.78
S2 S	100.000	97.469	2.531	1139512.79	2.53
S3 S	500.000	472.599	27.401	5523214.61	5.48
S4 S	1000.000	967.332	32.668	11304566.88	3.27
S5 S	2000.000	2053.671	53.671	23999331.22	2.68

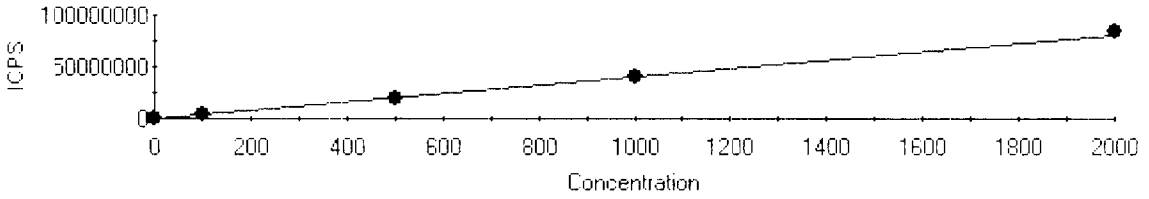
205Tl FQ Block 1



Intercept CPS=1269.211769 Intercept Conc=0.045016
Sensitivity=28194.453790 Correlation Coeff=0.999778

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	1269.21	0.00
S1 S	1.000	1.120	0.120	32858.71	12.04
S2 S	100.000	98.120	1.880	2767701.11	1.88
S3 S	500.000	477.339	22.661	13459572.49	4.53
S4 S	1000.000	993.130	6.870	28002031.45	0.69
S5 S	2000.000	2051.027	51.027	57828855.68	2.55

208Pb FQ Block 1



Intercept CPS=1173.215064 Intercept Conc=0.029365
Sensitivity=39953.260016 Correlation Coeff=0.999665

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	1173.22	0.00

S1 S	1.000	1.009	0.009	41469.06	0.86
S2 S	100.000	96.903	3.097	3872764.04	3.10
S3 S	500.000	491.341	8.659	19631861.20	1.73
S4 S	1000.000	1004.249	4.249	40124175.67	0.42
S5 S	2000.000	2107.825	107.825	84215647.47	5.39

Dilution Corrected Concentrations

S0 S0 6/28/2011 12:32:26 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:50	0.983	0.000	0.154	0.005	-0.175	-0.725	-1.884
2	12:33:15	1.007	-0.002	0.313	0.017	-0.129	-0.132	3.406
3	12:33:39	1.010	0.002	-0.467	-0.022	0.304	0.856	-1.523
x		-	0.000	0.000	0.000	0.000	-0.000	0.000
σ		-	0.002	0.412	0.020	0.264	0.799	2.956
%RSD		-	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:50	1.000	-0.045	-0.058	-0.003	-0.002	0.113	0.000
2	12:33:15	0.991	-0.001	0.060	0.005	-0.008	-0.246	-0.000
3	12:33:39	1.009	0.046	-0.002	-0.002	0.010	0.133	0.000
x		-	0.000	-0.000	0.000	0.000	-0.000	0.000
σ		-	0.045	0.059	0.004	0.009	0.214	0.000
%RSD		-	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:50	-0.018	0.000	-0.020	0.046	0.001	-0.164	0.000
2	12:33:15	0.009	0.023	0.015	0.054	-0.535	0.159	0.000
3	12:33:39	0.009	-0.023	0.005	-0.100	0.535	0.005	0.000
x		0.000	0.000	-0.000	0.000	-0.000	0.000	0.000
σ		0.016	0.023	0.018	0.087	0.535	0.161	0.000
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:50	0.000	1.003	-0.003	-0.033	0.024	0.062	-0.005
2	12:33:15	0.000	0.992	0.006	0.009	-0.007	-0.018	-0.000
3	12:33:39	0.000	1.004	-0.003	0.024	-0.017	-0.045	0.005
x		0.000	-	-0.000	0.000	0.000	0.000	0.000
σ		0.000	-	0.005	0.029	0.021	0.056	0.005
%RSD		0.000	-	0.000	0.000	0.000	0.000	0.000

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:50	1.016	0.397	-0.006	0.000	0.000	0.002	0.014
2	12:33:15	0.984	0.047	-0.003	0.000	-0.000	-0.010	-0.002
3	12:33:39	1.000	-0.445	0.009	0.000	-0.000	0.008	-0.012
x		-	0.000	0.000	0.000	-0.000	0.000	-0.000
σ		-	0.423	0.008	0.000	0.000	0.009	0.013
%RSD		-	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:50	0.999	1.002	0.003	-0.005	-0.000	1.013
2	12:33:15	0.991	1.009	-0.006	0.003	0.001	0.993
3	12:33:39	1.011	0.990	0.003	0.003	-0.001	0.995
x		-	-	0.000	0.000	-0.000	-
σ		-	-	0.005	0.004	0.001	-
%RSD		-	-	0.000	0.000	0.000	-

S1 S 6/28/2011 12:35:33 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:33	0.987	1.066	500.200	493.000	20.470	470.400	494.900
2	12:35:57	1.002	1.056	504.100	496.600	20.310	477.300	482.900
3	12:36:21	1.008	1.073	510.500	496.500	20.270	481.900	501.800
x		-	1.065	504.900	495.400	20.350	476.500	493.200
σ		-	0.008	5.161	2.051	0.108	5.781	9.575
%RSD		-	0.784	1.022	0.414	0.529	1.213	1.941

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:33	1.013	0.137	5.695	2.023	1.168	221.200	1.076
2	12:35:57	1.022	-0.089	5.510	2.423	1.118	215.000	1.188
3	12:36:21	1.028	0.048	5.559	2.263	1.187	213.000	1.223
x		-	0.032	5.588	2.236	1.158	216.400	1.162
σ		-	0.114	0.096	0.201	0.036	4.255	0.077
%RSD		-	358.100	1.712	9.001	3.096	1.966	6.635

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:33	1.200	2.415	2.483	0.909	5.759	6.390	0.000
2	12:35:57	1.198	1.983	2.311	1.092	4.566	6.661	0.000
3	12:36:21	1.164	2.372	2.720	0.973	5.361	5.621	0.000
x		1.188	2.256	2.505	0.992	5.229	6.224	0.000
σ		0.020	0.238	0.205	0.093	0.607	0.539	0.000
%RSD		1.692	10.540	8.193	9.360	11.620	8.662	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:33	0.000	1.023	-0.001	-0.076	-0.021	-0.072	-0.056
2	12:35:57	0.000	1.035	-0.046	-0.063	-0.033	-0.023	-0.015
3	12:36:21	0.000	1.009	-0.004	-0.040	-0.035	-0.064	-0.018
x		0.000	-	-0.017	-0.060	-0.029	-0.053	-0.030
σ		0.000	-	0.025	0.019	0.007	0.026	0.023
%RSD		0.000	-	148.600	30.990	24.490	49.500	77.660

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:33	1.022	0.566	1.081	1.535	1.049	2.060	10.570
2	12:35:57	1.017	1.896	1.105	1.144	1.059	1.881	10.240
3	12:36:21	0.982	1.704	1.076	1.109	0.902	2.001	9.852
x		-	1.388	1.087	1.263	1.003	1.981	10.220
σ		-	0.719	0.015	0.237	0.088	0.091	0.359
%RSD		-	51.780	1.412	18.740	8.746	4.615	3.513

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:35:33	0.999	0.987	1.168	1.124	0.996	1.022
2	12:35:57	0.973	0.988	1.102	1.158	1.001	1.001
3	12:36:21	0.988	0.968	1.113	1.079	1.028	1.003
x		-	-	1.128	1.120	1.009	-
σ		-	-	0.035	0.040	0.017	-
%RSD		-	-	3.138	3.536	1.715	-

S2 S 6/28/2011 12:38:15 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:15	1.030	110.900	τ5193.000	τ5353.000	τ5193.000	1011.000	5094.000
2	12:38:39	1.021	107.000	τ5089.000	τ5190.000	τ4963.000	968.100	4984.000
3	12:39:04	1.051	110.400	τ5164.000	τ5261.000	τ5051.000	972.800	4961.000
x		-	109.400	τ5149.000	τ5268.000	τ5069.000	983.900	5013.000
σ		-	2.080	τ53.500	τ81.350	τ115.900	23.430	71.070
%RSD		-	1.901	τ1.039	τ1.544	τ2.287	2.382	1.418

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:15	1.071	109.800	103.900	107.400	109.400	τ5606.000	112.900
2	12:38:39	1.059	106.500	104.400	104.100	105.900	τ5375.000	108.900
3	12:39:04	1.053	107.600	102.900	106.400	106.700	τ5437.000	110.300
x		-	108.000	103.700	106.000	107.300	τ5473.000	110.700
σ		-	1.669	0.753	1.706	1.824	τ119.400	2.045
%RSD		-	1.545	0.726	1.610	1.700	τ 2.182	1.848

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:15	121.600	116.100	122.300	112.400	123.500	119.600	0.000
2	12:38:39	120.400	110.000	118.200	107.800	112.200	110.000	0.000
3	12:39:04	117.600	110.900	120.600	111.700	108.400	114.100	0.000
x		119.900	112.300	120.400	110.700	114.700	114.500	0.000
σ		2.101	3.266	2.059	2.480	7.842	4.838	0.000
%RSD		1.753	2.907	1.711	2.241	6.835	4.224	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:15	0.000	1.071	101.500	102.500	97.430	98.230	100.100
2	12:38:39	0.000	1.023	93.810	95.880	95.300	91.550	93.540
3	12:39:04	0.000	1.057	99.260	100.500	97.650	96.830	96.830
x		0.000	-	98.190	99.610	96.790	95.540	96.820
σ		0.000	-	3.957	3.383	1.298	3.521	3.272
%RSD		0.000	-	4.030	3.396	1.341	3.685	3.379

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:15	1.066	101.900	107.500	110.500	104.000	100.700	110.400
2	12:38:39	1.030	96.350	100.500	98.590	98.490	94.390	102.600
3	12:39:04	1.052	99.270	103.700	98.150	100.300	98.490	106.000
x		-	99.170	103.900	102.400	100.900	97.860	106.300
σ		-	2.779	3.513	7.034	2.801	3.197	3.950
%RSD		-	2.803	3.380	6.867	2.775	3.267	3.715

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:38:15	1.021	1.013	99.100	99.560	99.920	1.075
2	12:38:39	0.979	0.978	93.900	95.640	93.590	1.022
3	12:39:04	0.996	0.991	99.410	99.160	97.200	1.058
x		-	-	97.470	98.120	96.900	-
σ		-	-	3.094	2.156	3.176	-
%RSD		-	-	3.174	2.198	3.277	-

S3 S 6/28/2011 12:40:58 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:58	1.072	507.400	τ23630.000	τ23870.000	τ23450.000	τ4851.000	22860.000
2	12:41:22	1.112	519.100	τ24350.000	τ24760.000	τ24570.000	τ4988.000	23640.000
3	12:41:47	1.122	517.200	τ24310.000	τ24690.000	τ24630.000	τ4806.000	23190.000
x		-	514.600	τ24100.000	τ24440.000	τ24220.000	τ4882.000	23230.000
σ		-	6.264	τ403.700	τ495.500	τ666.100	τ94.810	394.200
%RSD		-	1.217	τ1.675	τ2.028	τ2.751	τ1.942	1.697

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:58	1.093	496.200	471.400	477.500	484.400	τ24080.000	494.500
2	12:41:22	1.128	521.600	485.500	487.800	489.100	τ25110.000	502.100
3	12:41:47	1.112	485.300	481.900	493.600	479.200	τ25720.000	484.700
x		-	501.000	479.600	486.300	484.200	τ24970.000	493.800
σ		-	18.590	7.310	8.166	4.950	τ 826.300	8.737
%RSD		-	3.711	1.524	1.679	1.022	τ 3.309	1.769

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:58	532.900	509.700	542.100	509.100	542.600	538.300	0.000
2	12:41:22	539.500	517.700	554.200	528.300	530.800	552.600	0.000
3	12:41:47	519.700	526.800	559.300	525.300	528.700	540.600	0.000
x		530.700	518.100	551.900	520.900	534.000	543.900	0.000
σ		10.080	8.519	8.841	10.320	7.488	7.675	0.000
%RSD		1.900	1.644	1.602	1.982	1.402	1.411	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:58	0.000	1.109	458.400	474.900	471.200	456.400	465.400
2	12:41:22	0.000	1.145	472.200	489.400	474.300	471.600	476.800
3	12:41:47	0.000	1.134	493.300	472.300	482.400	481.500	463.900
x		0.000	-	474.600	478.900	476.000	469.800	468.700
σ		0.000	-	17.550	9.224	5.783	12.660	7.049
%RSD		0.000	-	3.698	1.926	1.215	2.695	1.504

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:58	1.140	465.200	465.200	479.800	476.500	464.700	497.100
2	12:41:22	1.198	493.000	483.500	515.100	495.700	482.700	513.700
3	12:41:47	1.205	522.200	489.900	500.800	509.600	493.300	526.900
x		-	493.500	479.500	498.600	493.900	480.200	512.600
σ		-	28.540	12.780	17.770	16.630	14.480	14.910
%RSD		-	5.784	2.666	3.564	3.368	3.014	2.909

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:40:58	1.028	1.025	τ467.300	τ469.900	τ482.700	1.157
2	12:41:22	1.081	1.072	τ464.800	τ471.500	τ490.200	1.165
3	12:41:47	1.079	1.057	τ485.700	τ490.700	τ501.100	1.193
x		-	-	τ472.600	τ477.300	τ491.300	-
σ		-	-	τ11.410	τ11.570	τ9.282	-
%RSD		-	-	τ2.415	τ2.425	τ1.889	-

S4 S 6/28/2011 12:43:42 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:42	1.125	1017.000	τ48910.000	τ49040.000	τ48660.000	τ9631.000	τ50930.000
2	12:44:06	1.159	1035.000	τ50640.000	τ50840.000	τ49910.000	τ10220.000	τ51760.000
3	12:44:30	1.130	994.000	τ48760.000	τ49580.000	τ50190.000	τ9598.000	τ49860.000
x		-	1015.000	τ49440.000	τ49820.000	τ49590.000	τ9817.000	τ50850.000
σ		-	20.650	τ1046.000	τ924.700	τ814.000	τ351.200	τ951.000
%RSD		-	2.034	τ2.115	τ1.856	τ1.642	τ3.577	τ1.870

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:42	1.123	978.900	953.800	973.500	τ980.700	τ50650.000	970.200
2	12:44:06	1.180	1037.000	982.800	990.600	τ1015.000	τ51510.000	998.900
3	12:44:30	1.117	998.600	939.900	975.600	τ969.900	τ50520.000	τ1018.000
x		-	1005.000	958.900	979.900	τ988.700	τ50890.000	τ995.700
σ		-	29.480	21.910	9.329	τ23.770	τ542.900	τ24.050
%RSD		-	2.934	2.285	0.952	τ2.405	τ1.067	τ2.415

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:42	1001.000	1014.000	1045.000	1003.000	1022.000	1042.000	0.000
2	12:44:06	1061.000	1018.000	1071.000	1042.000	1084.000	1077.000	0.000
3	12:44:30	1006.000	1017.000	1064.000	1020.000	1069.000	1041.000	0.000
x		1022.000	1016.000	1060.000	1022.000	1059.000	1054.000	0.000
σ		33.240	2.289	13.320	19.370	32.330	20.500	0.000
%RSD		3.251	0.225	1.257	1.896	3.054	1.946	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:42	0.000	1.167	997.600	975.800	984.700	989.100	957.100
2	12:44:06	0.000	1.194	969.600	995.600	981.800	954.200	967.800
3	12:44:30	0.000	1.156	989.300	989.200	958.000	978.700	977.700
x		0.000	-	985.500	986.900	974.800	974.000	967.500
σ		0.000	-	14.410	10.140	14.630	17.920	10.290
%RSD		0.000	-	1.462	1.027	1.501	1.840	1.064

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:42	1.261	1028.000	τ988.400	1009.000	1029.000	τ1009.000	τ1126.000
2	12:44:06	1.236	992.400	τ979.600	970.700	979.300	τ982.700	τ1092.000
3	12:44:30	1.223	988.000	τ994.300	971.000	984.200	τ968.300	τ1099.000
x		-	1003.000	τ987.400	983.400	997.500	τ986.800	τ1106.000
σ		-	21.930	τ7.403	21.750	27.400	τ20.860	τ17.810
%RSD		-	2.187	τ0.750	2.212	2.747	τ2.114	τ1.610

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:42	1.117	1.116	τ1000.000	τ1028.000	τ1034.000	1.280
2	12:44:06	1.117	1.098	τ969.900	τ983.700	τ1002.000	1.242
3	12:44:30	1.076	1.094	τ932.100	τ967.800	τ977.200	1.191
x		-	-	τ967.300	τ993.100	τ1004.000	-
σ		-	-	τ34.020	τ31.170	τ28.400	-
%RSD		-	-	τ3.517	τ3.138	τ2.828	-

S5 S 6/28/2011 12:46:25 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:25	1.168	1945.000	T 101700.000	T 101300.000	T 101400.000	T 20170.000	TM 106700.000
2	12:46:50	1.233	2024.000	T 103300.000	T 104100.000	T 103100.000	T 20030.000	TM 105900.000
3	12:47:14	1.222	1995.000	T 104400.000	T 103200.000	T 104600.000	T 20170.000	TM 104900.000
x		-	1988.000	T 103100.000	T 102800.000	T 103000.000	T 20120.000	TM 105800.000
σ		-	39.850	T 1334.000	T 1399.000	T 1618.000	T 77.870	TM 880.300
%RSD		-	2.004	T 1.294	T 1.360	T 1.571	T 0.387	TM 0.832

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:25	1.161	M 2008.000	T 2049.000	T 2014.000	T 2011.000	T 102500.000	T 1966.000
2	12:46:50	1.157	M 2004.000	T 2038.000	T 1996.000	T 2023.000	T 102300.000	T 1983.000
3	12:47:14	1.157	1979.000	T 1989.000	T 2021.000	T 1965.000	T 102000.000	T 1991.000
x		-	M 1997.000	T 2025.000	T 2010.000	T 2000.000	T 102300.000	T 1980.000
σ		-	M 16.040	T 31.990	T 13.390	T 30.470	T 265.400	T 12.990
%RSD		-	M 0.803	T 1.579	T 0.666	T 1.523	T 0.260	T 0.656

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:25	1997.000	1940.000	1949.000	1935.000	1941.000	1948.000	0.000
2	12:46:50	1989.000	1952.000	1944.000	1969.000	1985.000	1965.000	0.000
3	12:47:14	1954.000	1961.000	1976.000	1945.000	1959.000	1971.000	0.000
x		1980.000	1951.000	1956.000	1950.000	1961.000	1961.000	0.000
σ		22.920	10.740	16.910	17.530	22.180	12.320	0.000
%RSD		1.158	0.550	0.865	0.899	1.131	0.628	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:25	0.000	1.183	1965.000	1968.000	M 2003.000	1998.000	T 1990.000
2	12:46:50	0.000	1.208	M 2024.000	2042.000	M 2056.000	M 2020.000	TM 2043.000
3	12:47:14	0.000	1.206	M 2052.000	2025.000	1997.000	M 2045.000	TM 2040.000
x		0.000	-	M 2014.000	2012.000	M 2019.000	M 2021.000	TM 2024.000
σ		0.000	-	M 44.380	38.440	M 32.790	M 23.270	TM 29.550
%RSD		0.000	-	M 2.204	1.911	M 1.624	M 1.152	TM 1.460

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:25	1.304	1965.000	T 1914.000	1994.000	1981.000	T 2017.000	T 2222.000
2	12:46:50	1.323	M 2023.000	T 1945.000	M 2050.000	2023.000	T 2076.000	T 2297.000
3	12:47:14	1.329	M 2013.000	T 1977.000	1982.000	2004.000	T 2042.000	T 2302.000
x		-	M 2000.000	T 1945.000	M 2009.000	2003.000	T 2045.000	T 2274.000
σ		-	M 31.040	T 31.510	M 36.080	21.110	T 29.460	T 44.730
%RSD		-	M 1.552	T 1.620	M 1.797	1.054	T 1.441	T 1.967

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:46:25	1.131	1.111	T 2032.000	T 2031.000	TM 2065.000	1.322
2	12:46:50	1.172	1.140	T 2103.000	T 2100.000	TM 2186.000	1.381
3	12:47:14	1.131	1.139	T 2026.000	T 2021.000	TM 2072.000	1.319
x		-	-	T 2054.000	T 2051.000	TM 2108.000	-
σ		-	-	T 43.100	T 42.930	TM 67.710	-
%RSD		-	-	T 2.099	T 2.093	TM 3.212	-

ICV 6/28/2011 12:59:34 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	1.070	93.370	↹1878.000	1126.000	467.100	↹1922.000	1796.000
2	12:59:58	1.082	92.810	↹1874.000	1136.000	466.100	↹1956.000	1851.000
3	13:00:23	1.061	89.540	↹1825.000	1100.000	450.500	↹1915.000	1798.000
x		-	92.836%	↹92.068%	92.248%	91.515%	↹96.376%	90.524%
σ		-	n/a	↹n/a	n/a	n/a	↹n/a	n/a
%RSD		-	2.249	↹1.561	1.646	2.018	↹1.138	1.703

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	1.076	0.055	92.900	98.820	95.620	↹1013.000	103.800
2	12:59:58	1.107	0.108	94.240	98.130	100.300	↹1003.000	101.900
3	13:00:23	1.082	0.104	91.830	95.960	96.260	↹975.200	100.400
x		-	0.089	92.991%	99.628%	97.386%	↹98.134%	102.037%
σ		-	0.030	n/a	n/a	n/a	↹n/a	n/a
%RSD		-	33.310	1.296	1.532	2.591	↹1.959	1.641

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	99.450	103.400	218.900	197.300	212.500	208.300	0.000
2	12:59:58	102.600	104.800	212.500	197.400	211.100	213.500	0.000
3	13:00:23	101.100	98.360	208.500	189.900	195.100	197.800	0.000
x		100.051%	104.277%	104.049%	97.435%	206.200	100.266%	0.000
σ		n/a	n/a	n/a	n/a	9.651	n/a	0.000
%RSD		1.570	3.309	2.440	2.210	4.679	3.864	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	0.000	1.106	0.302	0.210	0.085	0.173	0.194
2	12:59:58	0.000	1.113	0.250	0.193	0.219	0.127	0.193
3	13:00:23	0.000	1.062	0.085	0.143	0.155	0.090	0.181
x		0.000	-	0.212	0.182	0.153	0.130	0.190
σ		0.000	-	0.114	0.035	0.067	0.042	0.007
%RSD		0.000	-	53.480	19.090	43.930	32.070	3.770

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	1.091	100.900	100.500	95.420	98.820	181.900	94.050
2	12:59:58	1.058	95.240	96.590	93.890	95.370	179.800	89.450
3	13:00:23	1.041	88.850	94.020	95.750	91.250	176.300	88.080
x		-	94.980	97.050%	95.020	96.110%	90.117%	91.440%
σ		-	6.003	n/a	0.995	n/a	n/a	n/a
%RSD		-	6.320	3.388	1.047	3.984	1.600	3.454

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	12:59:34	1.032	1.051	198.100	↹200.600	↹194.200	1.140
2	12:59:58	1.022	1.024	190.800	↹189.600	↹189.500	1.091
3	13:00:23	1.000	0.998	187.400	↹189.000	↹185.000	1.084
x		-	-	93.259%	↹93.721%	↹94.777%	-
σ		-	-	n/a	↹n/a	↹n/a	-
%RSD		-	-	2.834	↹3.379	↹2.423	-

ICB 6/28/2011 1:02:20 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:02:20	1.031	0.090	6.007	3.683	3.087	2.245	20.360
2	13:02:44	1.074	0.090	5.713	3.525	3.061	4.619	24.110
3	13:03:08	1.074	0.072	5.332	3.406	2.869	2.731	20.220
x		-	0.084	5.684	3.538	3.006	3.198	21.560
σ		-	0.011	0.338	0.139	0.119	1.254	2.204
%RSD		-	12.570	5.950	3.921	3.957	39.200	10.220

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:02:20	1.070	0.149	-0.020	-0.038	0.078	2.676	0.071
2	13:02:44	1.086	0.153	0.036	-0.025	0.080	3.963	0.054
3	13:03:08	1.098	0.008	0.235	0.026	0.048	3.345	0.063
x		-	0.103	0.083	-0.012	0.069	3.328	0.063
σ		-	0.082	0.134	0.034	0.018	0.644	0.008
%RSD		-	79.590	160.900	271.500	25.980	19.340	13.430

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:02:20	0.129	0.152	0.049	0.052	-0.297	0.497	0.000
2	13:02:44	0.086	0.079	0.064	0.008	-0.282	0.353	0.000
3	13:03:08	0.101	0.078	0.037	0.092	-1.045	0.304	0.000
x		0.105	0.103	0.050	0.050	-0.541	0.385	0.000
σ		0.022	0.042	0.013	0.042	0.436	0.101	0.000
%RSD		20.510	41.030	26.800	83.290	80.590	26.160	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:02:20	0.000	1.062	0.144	0.077	0.077	-0.010	0.128
2	13:02:44	0.000	1.080	0.123	0.073	0.103	0.072	0.084
3	13:03:08	0.000	1.055	0.180	0.064	0.114	0.071	0.054
x		0.000	-	0.149	0.071	0.098	0.044	0.089
σ		0.000	-	0.029	0.006	0.019	0.047	0.037
%RSD		0.000	-	19.180	8.858	19.570	106.900	42.260

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:02:20	1.042	-0.592	0.069	0.098	0.045	2.131	0.088
2	13:02:44	1.049	0.104	0.044	0.000	0.052	1.840	0.063
3	13:03:08	1.063	-0.664	0.057	0.000	0.066	1.593	0.026
x		-	-0.384	0.056	0.033	0.054	1.855	0.059
σ		-	0.424	0.013	0.056	0.011	0.269	0.031
%RSD		-	110.300	22.170	173.200	19.540	14.500	52.570

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:02:20	1.014	0.998	0.041	0.048	0.145	1.063
2	13:02:44	1.040	1.032	0.046	0.042	0.117	1.059
3	13:03:08	1.051	1.020	0.038	0.044	0.090	1.066
x		-	-	0.042	0.045	0.117	-
σ		-	-	0.004	0.003	0.028	-
%RSD		-	-	9.636	7.481	23.480	-

ICSA 6/28/2011 1:05:06 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:06	1.166	0.275	T 95600.000	T 95200.000	T 92660.000	TM 100300.000	T 101300.000
2	13:05:30	1.205	0.250	T 98400.000	T 97610.000	T 94750.000	TM 101500.000	TM 102300.000
3	13:05:55	1.211	0.276	T 100900.000	T 100200.000	T 96440.000	TM 104800.000	TM 108100.000
x		-	1.#IO%	T 98.289%	T 97.657%	T 94.618%	TM 102.187%	TM 103.907%
σ		-	n/a	T n/a	T n/a	T n/a	TM n/a	TM n/a
%RSD		-	5.617	T 2.686	T 2.540	T 2.005	TM 2.263	TM 3.540

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:06	1.202	M 2457.000	-2.032	19.670	7.615	T 98020.000	1.148
2	13:05:30	1.183	M 2466.000	0.191	19.320	7.641	T 97250.000	1.262
3	13:05:55	1.220	M 2511.000	-1.125	20.670	7.846	T 100600.000	1.297
x		-	M 2478.000	-197.720%	94.690%	110.011%	T 98.628%	123.577%
σ		-	M 28.830	n/a	n/a	n/a	T n/a	n/a
%RSD		-	M 1.163	113.100	3.540	1.642	T 1.784	6.323

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:06	5.829	9.037	11.660	1.328	6.471	1.465	0.000
2	13:05:30	5.547	9.660	11.940	1.569	5.374	0.858	0.000
3	13:05:55	6.046	9.396	12.680	1.429	8.563	1.168	0.000
x		96.785%	117.052%	109.930%	1441.929%	6.803	387.837%	0.000
σ		n/a	n/a	n/a	n/a	1.620	n/a	0.000
%RSD		4.310	3.343	4.383	8.389	23.810	26.080	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:06	0.000	1.272	1987.000	2017.000	1960.000	M 2000.000	TM 2060.000
2	13:05:30	0.000	1.280	M 2014.000	2063.000	M 2011.000	1999.000	TM 2094.000
3	13:05:55	0.000	1.246	1973.000	2002.000	M 2003.000	1984.000	TM 2026.000
x		0.000	-	M 1992.000	2027.000	M 1991.000	M 1995.000	TM 2060.000
σ		0.000	-	M 20.840	31.640	M 27.630	M 9.002	TM 34.060
%RSD		0.000	-	M 1.047	1.561	M 1.387	M 0.451	TM 1.654

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:06	1.413	-0.137	0.032	38.100	-0.065	1.720	1.558
2	13:05:30	1.426	-0.799	0.009	37.760	0.087	1.817	1.450
3	13:05:55	1.398	1.290	0.022	33.720	0.054	1.939	1.457
x		-	0.118	1.#IO%	36.530	3.601%	121.688%	124.036%
σ		-	1.068	n/a	2.432	n/a	n/a	n/a
%RSD		-	906.900	56.000	6.660	315.900	6.033	4.062

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:05:06	1.177	1.205	-0.009	0.000	4.512	1.458
2	13:05:30	1.172	1.180	-0.014	-0.011	4.341	1.404
3	13:05:55	1.181	1.181	0.006	-0.003	4.401	1.412
x		-	-	-1.#IO%	-1.#IO%	110.452%	-
σ		-	-	n/a	n/a	n/a	-
%RSD		-	-	186.600	131.100	1.963	-

ICSAB 6/28/2011 1:07:52 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:52	1.187	17.850	T 97050.000	T 96640.000	T 94710.000	TM 100500.000	T 100900.000
2	13:08:17	1.191	17.730	T 97530.000	T 96360.000	T 92950.000	TM 100100.000	T 100900.000
3	13:08:41	1.209	17.940	T 98980.000	T 98460.000	T 95550.000	TM 100000.000	TM 104100.000
x		-	93.894%	T 97.852%	T 97.152%	T 94.404%	TM 100.214%	TM 101.943%
σ		-	n/a	T n/a	T n/a	T n/a	TM n/a	TM n/a
%RSD		-	0.595	T 1.026	T 1.171	T 1.408	TM 0.266	TM 1.808

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:52	1.164	M 2413.000	17.580	38.470	27.110	T 97220.000	21.190
2	13:08:17	1.141	M 2410.000	18.420	38.240	27.090	T 94950.000	20.420
3	13:08:41	1.157	M 2384.000	19.330	39.770	27.860	T 97820.000	21.140
x		-	M 2402.000	97.058%	97.065%	101.294%	T 96.663%	104.581%
σ		-	M 16.220	n/a	n/a	n/a	T n/a	n/a
%RSD		-	M 0.675	4.752	2.126	1.602	T 1.562	2.063

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:52	23.560	26.810	29.510	18.710	30.500	19.580	0.000
2	13:08:17	23.940	26.200	29.030	19.550	27.110	19.220	0.000
3	13:08:41	23.340	27.070	29.900	20.200	28.030	21.200	0.000
x		98.373%	106.772%	101.660%	102.576%	28.550	105.274%	0.000
σ		n/a	n/a	n/a	n/a	1.753	n/a	0.000
%RSD		1.284	1.664	1.477	3.828	6.139	5.268	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:52	0.000	1.264	M 2026.000	2022.000	1983.000	M 2016.000	TM 2084.000
2	13:08:17	0.000	1.227	1935.000	1981.000	1955.000	1924.000	T 2000.000
3	13:08:41	0.000	1.237	M 2001.000	2002.000	M 2004.000	M 2033.000	TM 2060.000
x		0.000	-	M 1988.000	2002.000	M 1981.000	M 1991.000	TM 2048.000
σ		0.000	-	M 46.800	20.180	M 24.600	M 58.540	TM 43.520
%RSD		0.000	-	M 2.355	1.008	M 1.242	M 2.940	TM 2.125

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:52	1.420	19.120	19.720	60.490	21.620	22.220	23.460
2	13:08:17	1.342	19.370	18.900	57.940	19.220	21.890	22.060
3	13:08:41	1.422	21.910	19.360	58.530	21.050	23.120	23.590
x		-	20.140	107.382%	58.990	103.159%	101.855%	104.717%
σ		-	1.544	n/a	1.332	n/a	n/a	n/a
%RSD		-	7.668	2.124	2.259	6.071	2.842	3.681

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:07:52	1.170	1.191	21.610	22.230	25.550	1.450
2	13:08:17	1.151	1.160	21.690	21.760	25.550	1.411
3	13:08:41	1.159	1.157	22.330	22.140	25.490	1.421
x		-	-	104.166%	104.959%	102.123%	-
σ		-	-	n/a	n/a	n/a	-
%RSD		-	-	1.815	1.127	0.135	-

CCV1 CCV 6/28/2011 1:10:38 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:38	1.103	946.400	τ46970.000	τ46590.000	τ46780.000	τ9442.000	τ48880.000
2	13:11:03	1.163	1014.000	τ51010.000	τ51120.000	τ51040.000	τ10300.000	τ53610.000
3	13:11:27	1.178	1022.000	τ51290.000	τ51150.000	τ50940.000	τ10100.000	τ51250.000
x		-	99.409%	τ49760.000	τ49620.000	τ49590.000	τ9945.000	τ51250.000
σ		-	n/a	τ2416.000	τ2622.000	τ2433.000	τ447.300	τ2364.000
%RSD		-	4.176	τ4.855	τ5.284	τ4.905	τ4.497	τ4.614

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:38	1.050	943.400	916.300	908.000	τ933.600	τ47440.000	τ938.000
2	13:11:03	1.149	1027.000	1009.000	1006.000	τ1028.000	τ51870.000	992.400
3	13:11:27	1.111	1006.000	972.100	989.800	τ1001.000	τ51240.000	τ1024.000
x		-	992.100	96.582%	96.780%	τ98.730%	τ50180.000	τ98.494%
σ		-	43.440	n/a	n/a	τn/a	τ2397.000	τn/a
%RSD		-	4.379	4.837	5.410	τ4.908	τ4.776	τ4.432

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:38	979.300	958.600	979.300	974.900	962.200	995.100	0.000
2	13:11:03	1052.000	1039.000	1078.000	1041.000	1067.000	1067.000	0.000
3	13:11:27	1053.000	1030.000	1058.000	1034.000	1049.000	1059.000	0.000
x		102.808%	100.895%	103.857%	101.663%	1026.000	104.049%	0.000
σ		n/a	n/a	n/a	n/a	55.980	n/a	0.000
%RSD		4.110	4.340	5.033	3.566	5.456	3.795	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:38	0.000	1.107	934.200	949.400	954.100	927.400	916.700
2	13:11:03	0.000	1.159	984.100	988.900	999.600	986.100	965.800
3	13:11:27	0.000	1.160	1000.000	1004.000	999.400	977.400	978.300
x		0.000	-	972.800	980.700	984.400	963.600	953.600
σ		0.000	-	34.440	28.140	26.210	31.700	32.560
%RSD		0.000	-	3.540	2.869	2.663	3.289	3.414

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:38	1.170	966.800	τ944.200	950.900	963.400	τ954.300	τ1036.000
2	13:11:03	1.235	1027.000	τ995.400	990.800	1021.000	τ1034.000	τ1130.000
3	13:11:27	1.233	1030.000	τ1018.000	1023.000	1019.000	τ1025.000	τ1145.000
x		-	1008.000	τ98.580%	988.300	100.124%	τ100.448%	τ100.353%
σ		-	35.480	τn/a	36.210	n/a	τn/a	τn/a
%RSD		-	3.521	τ3.830	3.663	3.276	τ4.346	τ5.383

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:10:38	1.029	1.016	τ956.200	τ966.900	τ981.300	1.208
2	13:11:03	1.103	1.076	τ1011.000	τ1019.000	τ1044.000	1.259
3	13:11:27	1.077	1.062	τ1003.000	τ1009.000	τ1038.000	1.242
x		-	-	τ99.004%	τ99.846%	τ102.102%	-
σ		-	-	τn/a	τn/a	τn/a	-
%RSD		-	-	τ2.988	τ2.785	τ3.387	-

CCB1 CCB 6/28/2011 1:13:24 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:24	1.048	0.151	21.350	5.822	5.299	10.810	19.660
2	13:13:48	1.054	0.134	16.360	4.957	4.429	7.270	9.461
3	13:14:13	1.049	0.119	14.150	4.413	3.473	7.839	18.830
x		-	0.135	17.280	5.064	4.401	8.639	15.980
σ		-	0.016	3.687	0.711	0.913	1.901	5.664
%RSD		-	11.730	21.330	14.040	20.750	22.010	35.440

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:24	1.059	0.147	0.036	0.054	0.078	8.971	0.089
2	13:13:48	1.019	0.411	0.224	0.045	0.086	7.226	0.077
3	13:14:13	1.024	0.231	0.184	-0.054	0.068	6.698	0.060
x		-	0.263	0.148	0.015	0.077	7.632	0.075
σ		-	0.135	0.099	0.060	0.009	1.189	0.014
%RSD		-	51.410	66.660	400.400	12.050	15.590	19.240

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:24	0.144	0.103	0.101	0.253	-1.043	0.963	0.000
2	13:13:48	0.053	0.099	0.146	0.220	-1.047	1.126	0.000
3	13:14:13	0.038	0.050	0.194	0.113	-0.502	1.044	0.000
x		0.078	0.084	0.147	0.195	-0.864	1.045	0.000
σ		0.057	0.030	0.046	0.073	0.314	0.082	0.000
%RSD		72.660	35.370	31.560	37.290	36.300	7.811	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:24	0.000	1.085	1.127	0.920	1.072	0.895	0.868
2	13:13:48	0.000	1.068	0.910	0.919	0.846	0.851	0.856
3	13:14:13	0.000	1.045	0.688	0.666	0.832	0.687	0.754
x		0.000	-	0.909	0.835	0.916	0.811	0.826
σ		0.000	-	0.220	0.146	0.135	0.109	0.063
%RSD		0.000	-	24.170	17.540	14.700	13.480	7.571

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:24	1.050	0.688	0.101	0.000	0.096	0.629	0.088
2	13:13:48	1.037	-0.459	0.061	0.097	0.069	0.699	0.056
3	13:14:13	1.003	-0.154	0.079	0.094	0.061	0.569	0.050
x		-	0.025	0.080	0.064	0.075	0.632	0.065
σ		-	0.594	0.020	0.055	0.018	0.065	0.020
%RSD		-	2373.000	25.190	86.630	23.960	10.290	31.610

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:13:24	1.006	1.029	0.135	0.144	0.172	1.078
2	13:13:48	1.011	1.008	0.122	0.125	0.118	1.038
3	13:14:13	1.000	0.996	0.130	0.129	0.109	1.036
x		-	-	0.129	0.132	0.133	-
σ		-	-	0.007	0.010	0.034	-
%RSD		-	-	5.160	7.627	25.480	-

PBW 6/28/2011 1:16:10 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:10	1.015	0.031	4.610	0.468	-0.090	6.431	21.870
2	13:16:34	1.028	0.035	3.974	0.495	-0.035	2.638	22.030
3	13:16:59	0.986	0.031	2.767	0.417	0.137	2.283	16.230
x		-	0.032	3.784	0.460	0.004	3.784	20.040
σ		-	0.002	0.936	0.040	0.119	2.299	3.304
%RSD		-	6.781	24.750	8.649	3001.000	60.750	16.480

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:10	1.009	0.091	0.226	-0.079	0.004	0.781	0.009
2	13:16:34	1.030	0.094	0.245	-0.054	0.002	0.812	0.000
3	13:16:59	0.986	-0.045	0.126	-0.056	0.011	0.245	0.003
x		-	0.047	0.199	-0.063	0.006	0.613	0.004
σ		-	0.080	0.064	0.014	0.005	0.319	0.004
%RSD		-	170.700	31.990	22.050	83.600	51.990	114.000

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:10	0.024	0.085	0.119	-0.057	-0.319	0.485	0.000
2	13:16:34	0.081	0.025	0.181	-0.021	-0.328	0.410	0.000
3	13:16:59	0.023	0.000	0.138	-0.045	-0.697	0.304	0.000
x		0.043	0.037	0.146	-0.041	-0.448	0.400	0.000
σ		0.033	0.044	0.032	0.018	0.216	0.091	0.000
%RSD		77.860	118.300	21.780	44.130	48.130	22.730	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:10	0.000	1.052	0.152	0.127	0.093	0.057	0.061
2	13:16:34	0.000	1.029	0.112	0.140	0.105	0.082	0.222
3	13:16:59	0.000	1.027	0.214	0.108	0.134	0.111	0.072
x		0.000	-	0.159	0.125	0.111	0.083	0.119
σ		0.000	-	0.051	0.016	0.021	0.027	0.090
%RSD		0.000	-	32.300	12.740	19.320	32.100	75.810

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:10	1.028	0.593	0.010	0.097	-0.000	0.107	-0.001
2	13:16:34	0.999	-1.226	0.003	0.000	-0.000	0.201	-0.002
3	13:16:59	1.002	-0.233	-0.001	0.188	0.025	0.162	-0.002
x		-	-0.289	0.004	0.095	0.008	0.157	-0.002
σ		-	0.911	0.005	0.094	0.014	0.047	0.000
%RSD		-	315.100	127.500	99.150	177.300	30.340	14.200

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:16:10	1.009	1.014	0.024	0.011	0.026	1.070
2	13:16:34	1.008	1.004	0.015	0.010	0.010	1.033
3	13:16:59	0.975	0.986	0.014	0.020	0.014	1.015
x		-	-	0.017	0.014	0.017	-
σ		-	-	0.006	0.006	0.008	-
%RSD		-	-	32.080	41.100	49.930	-

LCS 6/28/2011 1:18:53 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:53	0.982	1.827	τ 1009.000	1001.000	37.800	980.300	1028.000
2	13:19:17	1.005	1.940	τ 1024.000	1028.000	37.810	989.200	1010.000
3	13:19:41	1.000	1.852	τ 1012.000	1012.000	39.310	953.200	979.800
x		-	93.647%	τ 101.498%	101.367%	95.764%	97.422%	1006.000
σ		-	n/a	τ n/a	n/a	n/a	n/a	24.360
%RSD		-	3.180	τ 0.760	1.340	2.268	1.927	2.421

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:53	1.001	0.179	10.370	4.297	2.195	410.900	2.344
2	13:19:17	0.999	0.134	10.700	4.333	2.248	419.300	2.208
3	13:19:41	0.975	-0.002	10.330	4.038	2.254	413.800	2.201
x		-	0.103	104.671%	105.565%	111.627%	103.671%	112.557%
σ		-	0.094	n/a	n/a	n/a	n/a	n/a
%RSD		-	91.100	1.944	3.813	1.448	1.038	3.583

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:53	2.437	4.655	4.369	2.210	6.419	8.573	0.000
2	13:19:17	2.223	4.278	4.089	2.146	7.103	8.723	0.000
3	13:19:41	2.209	3.974	4.083	1.825	7.824	9.216	0.000
x		114.490%	107.560%	104.505%	103.033%	7.115	88.372%	0.000
σ		n/a	n/a	n/a	n/a	0.703	n/a	0.000
%RSD		5.568	7.925	3.903	10.020	9.879	3.808	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:53	0.000	1.017	0.225	0.045	0.124	0.132	0.088
2	13:19:17	0.000	1.013	0.165	0.149	0.166	0.041	0.091
3	13:19:41	0.000	1.024	0.113	0.084	0.113	0.015	0.118
x		0.000	-	0.168	0.093	0.134	0.063	0.099
σ		0.000	-	0.056	0.053	0.028	0.061	0.016
%RSD		0.000	-	33.610	56.990	20.810	97.490	16.580

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:53	1.019	2.266	2.193	2.673	1.945	3.820	19.760
2	13:19:17	0.988	2.288	2.026	2.320	1.766	3.997	19.800
3	13:19:41	1.019	1.477	2.126	1.719	2.098	4.079	20.300
x		-	2.010	105.757%	2.237	96.812%	99.137%	99.766%
σ		-	0.462	n/a	0.483	n/a	n/a	n/a
%RSD		-	23.000	3.980	21.570	8.570	3.332	1.518

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:53	0.968	0.996	2.239	2.256	2.074	1.072
2	13:19:17	0.972	0.962	2.224	2.174	2.038	1.057
3	13:19:41	0.980	0.977	2.185	2.223	2.088	1.057
x		-	-	110.799%	110.892%	103.342%	-
σ		-	-	n/a	n/a	n/a	-
%RSD		-	-	1.262	1.873	1.245	-

14936L MF4N43L 6/28/2011 1:21:37 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:21:37	1.068	0.030	τ39260.000	τ7885.000	155.100	τ1918.000	τ35250.000
2	13:22:02	1.057	0.035	τ38000.000	τ7551.000	151.900	τ1880.000	30360.000
3	13:22:26	1.074	0.024	τ39090.000	τ7862.000	165.600	τ1959.000	τ35070.000
x		-	0.030	τ38780.000	τ7766.000	157.500	τ1919.000	τ33560.000
σ		-	0.005	τ681.200	τ186.700	7.169	τ39.490	τ2774.000
%RSD		-	17.100	τ1.756	τ2.404	4.552	τ2.058	τ8.266

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:21:37	1.113	2.446	3.647	3.660	2.491	61.140	0.228
2	13:22:02	1.049	2.770	2.415	3.462	2.327	54.480	0.213
3	13:22:26	1.092	2.594	2.745	3.535	2.488	61.170	0.181
x		-	2.603	2.935	3.552	2.435	58.930	0.207
σ		-	0.163	0.638	0.100	0.094	3.855	0.024
%RSD		-	6.245	21.720	2.820	3.860	6.542	11.610

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:21:37	3.421	1.092	1.878	1.012	4.414	3.597	0.000
2	13:22:02	3.353	0.505	1.774	1.194	2.215	2.627	0.000
3	13:22:26	3.448	0.667	1.613	1.159	3.712	2.902	0.000
x		3.407	0.755	1.755	1.122	3.447	3.042	0.000
σ		0.049	0.303	0.134	0.096	1.123	0.500	0.000
%RSD		1.438	40.150	7.624	8.603	32.590	16.440	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:21:37	0.000	1.161	2.889	1.648	1.923	1.578	1.762
2	13:22:02	0.000	1.105	2.862	1.632	1.719	1.760	1.778
3	13:22:26	0.000	1.138	2.863	1.935	1.767	1.683	1.833
x		0.000	-	2.871	1.738	1.803	1.674	1.791
σ		0.000	-	0.015	0.170	0.107	0.091	0.037
%RSD		0.000	-	0.538	9.795	5.913	5.441	2.077

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:21:37	1.193	0.256	0.007	0.000	-0.002	0.121	13.210
2	13:22:02	1.154	1.318	-0.002	0.430	0.005	0.183	12.720
3	13:22:26	1.164	-0.098	-0.004	0.109	-0.003	0.139	12.420
x		-	0.492	0.000	0.180	-0.000	0.148	12.780
σ		-	0.737	0.006	0.224	0.004	0.032	0.401
%RSD		-	149.700	21260.000	124.500	1762.000	21.530	3.139

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:21:37	1.111	1.108	-0.003	0.008	0.216	1.294
2	13:22:02	1.045	1.063	-0.002	-0.010	0.211	1.191
3	13:22:26	1.082	1.075	-0.020	-0.012	0.185	1.222
x		-	-	-0.008	-0.005	0.204	-
σ		-	-	0.010	0.011	0.017	-
%RSD		-	-	117.400	227.800	8.103	-

14936 MF4N43 6/28/2011 1:24:20 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:20	0.941	0.085	TM 198800.000	T 39740.000	T 570.000	T 9713.000TM	172500.000
2	13:24:44	0.968	0.087	TM 202300.000	T 39960.000	T 562.900	T 9622.000TM	169900.000
3	13:25:08	0.994	0.073	TM 207800.000	T 41150.000	T 553.000	T 9845.000TM	172100.000
x		-	0.082	TM 202900.000	T 40280.000	T 562.000	T 9727.000	TM 171500.000
σ		-	0.008	TM 4512.000	T 759.200	T 8.536	T 112.300	TM 1399.000
%RSD		-	9.564	TM 2.223	T 1.885	T 1.519	T 1.155	TM 0.816

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:20	0.919	16.260	15.740	18.250	11.450	T 368.400	1.014
2	13:24:44	0.927	23.580	13.570	17.390	11.530	T 341.700	0.845
3	13:25:08	0.924	18.350	14.170	18.100	11.820	317.100	1.021
x		-	19.400	14.500	17.910	11.600	T 342.400	0.960
σ		-	3.774	1.122	0.463	0.196	T 25.620	0.099
%RSD		-	19.460	7.740	2.587	1.687	T 7.482	10.360

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:20	16.420	3.049	8.256	6.165	30.250	13.100	0.000
2	13:24:44	16.500	2.686	7.504	6.735	28.090	12.050	0.000
3	13:25:08	16.110	2.870	7.855	7.386	24.690	12.770	0.000
x		16.340	2.868	7.872	6.762	27.680	12.640	0.000
σ		0.206	0.182	0.376	0.611	2.803	0.534	0.000
%RSD		1.261	6.341	4.781	9.036	10.130	4.228	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:20	0.000	1.122	14.500	10.540	10.250	9.787	10.600
2	13:24:44	0.000	1.105	14.340	10.220	10.690	10.090	10.240
3	13:25:08	0.000	1.123	14.300	10.750	11.010	10.140	10.720
x		0.000	-	14.380	10.500	10.650	10.010	10.520
σ		0.000	-	0.109	0.266	0.380	0.192	0.253
%RSD		0.000	-	0.759	2.530	3.567	1.919	2.406

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:20	1.246	1.747	0.038	1.043	0.029	0.670	67.500
2	13:24:44	1.241	0.075	0.027	0.924	0.014	0.692	68.080
3	13:25:08	1.274	0.536	0.025	0.709	0.037	0.642	70.880
x		-	0.786	0.030	0.892	0.027	0.668	68.820
σ		-	0.864	0.007	0.169	0.012	0.025	1.807
%RSD		-	109.900	24.050	18.940	43.250	3.775	2.626

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:24:20	1.084	1.096	0.014	0.039	0.730	1.400
2	13:24:44	1.084	1.082	0.030	0.018	0.748	1.381
3	13:25:08	1.086	1.092	0.037	0.019	0.789	1.390
x		-	-	0.027	0.025	0.756	-
σ		-	-	0.012	0.012	0.030	-
%RSD		-	-	45.140	45.230	3.996	-

14936D MF4N43D 6/28/2011 1:27:03 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:03	0.929	0.088	TM 194300.000	T 38460.000	T 593.300	T 9125.000	TM 161100.000
2	13:27:27	0.953	0.081	TM 200700.000	T 39870.000	T 658.500	T 9561.000	TM 167500.000
3	13:27:51	0.952	0.082	TM 201700.000	T 39920.000	T 599.500	T 9555.000	TM 167500.000
x		-	0.084	TM 198900.000	T 39420.000	T 617.100	T 9414.000	TM 165400.000
σ		-	0.004	TM 4001.000	T 824.600	T 35.990	T 250.100	TM 3692.000
%RSD		-	4.541	TM 2.012	T 2.092	T 5.832	T 2.656	TM 2.232

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:03	0.855	18.220	14.340	20.280	11.900	363.000	1.107
2	13:27:27	0.875	18.650	13.110	20.590	12.380	T 407.900	1.068
3	13:27:51	0.889	15.700	13.120	20.870	12.580	386.600	1.173
x		-	17.530	13.530	20.580	12.290	T 385.800	1.116
σ		-	1.593	0.708	0.293	0.348	T 22.460	0.053
%RSD		-	9.087	5.235	1.424	2.834	T 5.823	4.740

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:03	16.090	2.506	7.174	6.911	33.930	11.910	0.000
2	13:27:27	17.350	2.635	7.093	7.454	30.410	13.220	0.000
3	13:27:51	16.940	3.380	7.560	8.226	28.910	13.480	0.000
x		16.790	2.840	7.276	7.530	31.090	12.870	0.000
σ		0.642	0.472	0.250	0.661	2.579	0.842	0.000
%RSD		3.822	16.620	3.429	8.775	8.297	6.545	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:03	0.000	1.062	13.360	10.080	9.826	9.549	10.260
2	13:27:27	0.000	1.079	13.850	10.350	10.210	9.823	10.600
3	13:27:51	0.000	1.105	13.610	10.250	10.440	10.260	10.220
x		0.000	-	13.610	10.230	10.160	9.877	10.360
σ		0.000	-	0.248	0.138	0.308	0.358	0.210
%RSD		0.000	-	1.819	1.347	3.032	3.620	2.025

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:03	1.188	0.810	0.040	0.332	0.042	0.605	69.260
2	13:27:27	1.211	0.231	0.030	0.226	0.028	0.603	71.920
3	13:27:51	1.210	0.312	0.025	0.676	0.058	0.582	71.860
x		-	0.451	0.032	0.411	0.043	0.597	71.010
σ		-	0.314	0.008	0.236	0.015	0.012	1.521
%RSD		-	69.580	23.670	57.290	34.810	2.076	2.142

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:27:03	1.051	1.061	0.023	0.013	0.731	1.384
2	13:27:27	1.082	1.071	-0.001	0.011	0.752	1.355
3	13:27:51	1.079	1.077	0.019	0.014	0.795	1.369
x		-	-	0.014	0.013	0.759	-
σ		-	-	0.013	0.002	0.032	-
%RSD		-	-	91.290	14.030	4.277	-

14936S MF4N43S 6/28/2011 1:29:45 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:45	0.954	41.230	TM 194100.000	T 38510.000	T 2520.000	T 9215.000	TM 165400.000
2	13:30:09	0.965	41.130	TM 196900.000	T 38980.000	T 2574.000	T 9283.000	TM 163100.000
3	13:30:34	0.971	41.120	TM 198300.000	T 39580.000	T 2536.000	T 9336.000	TM 165200.000
x		-	41.160	TM 196500.000	T 39030.000	T 2543.000	T 9278.000	TM 164600.000
σ		-	0.058	TM 2117.000	T 535.600	T 28.070	T 60.530	TM 1246.000
%RSD		-	0.141	TM 1.078	T 1.373	T 1.104	T 0.653	TM 0.758

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:45	0.886	26.550	459.400	194.700	440.400	T 1356.000	446.200
2	13:30:09	0.890	22.230	457.800	197.400	437.600	T 1422.000	454.900
3	13:30:34	0.885	18.220	463.100	200.000	443.000	T 1365.000	454.300
x		-	22.330	460.100	197.400	440.300	T 1381.000	451.800
σ		-	4.162	2.746	2.629	2.675	T 35.650	4.855
%RSD		-	18.640	0.597	1.332	0.608	T 2.582	1.075

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:45	427.100	213.400	397.500	46.200	36.110	21.100	0.000
2	13:30:09	432.600	213.200	412.500	47.500	39.870	21.210	0.000
3	13:30:34	438.100	217.900	413.200	47.850	39.540	21.610	0.000
x		432.600	214.900	407.700	47.190	38.510	21.310	0.000
σ		5.470	2.656	8.869	0.870	2.081	0.264	0.000
%RSD		1.264	1.236	2.175	1.843	5.404	1.239	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:45	0.000	1.086	14.300	10.100	9.672	9.616	9.571
2	13:30:09	0.000	1.090	13.010	10.360	10.230	9.866	9.825
3	13:30:34	0.000	1.099	14.130	10.600	9.836	10.380	10.030
x		0.000	-	13.810	10.350	9.913	9.955	9.810
σ		0.000	-	0.702	0.254	0.288	0.392	0.232
%RSD		0.000	-	5.085	2.455	2.907	3.934	2.367

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:45	1.230	47.670	48.620	49.780	49.390	99.230	T 2191.000
2	13:30:09	1.230	49.330	49.720	52.090	49.040	98.820	T 2216.000
3	13:30:34	1.235	50.960	50.560	46.010	50.130	100.000	T 2222.000
x		-	49.320	49.630	49.290	49.520	99.350	T 2210.000
σ		-	1.645	0.972	3.067	0.560	0.605	T 16.480
%RSD		-	3.334	1.959	6.221	1.130	0.609	T 0.746

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:45	1.084	1.073	54.460	55.630	22.690	1.416
2	13:30:09	1.079	1.092	53.900	54.810	22.330	1.369
3	13:30:34	1.064	1.069	54.330	55.900	22.780	1.374
x		-	-	54.230	55.450	22.600	-
σ		-	-	0.291	0.572	0.236	-
%RSD		-	-	0.537	1.031	1.044	-

14936A MF4N43A 6/28/2011 1:32:28 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:32:28	0.911	1.775	TM 199500.000	T 39530.000	T 450.400	T 9548.000	TM 168800.000
2	13:32:52	0.930	1.730	TM 201200.000	T 39950.000	T 435.600	T 9401.000	TM 168300.000
3	13:33:17	0.937	1.789	TM 202900.000	T 40070.000	T 444.400	T 9492.000	TM 168600.000
x		-	1.765	TM 201200.000	T 39850.000	T 443.500	T 9480.000	TM 168600.000
σ		-	0.031	TM 1705.000	T 282.500	T 7.461	T 74.580	TM 245.500
%RSD		-	1.735	TM 0.847	T 0.709	T 1.682	T 0.787	TM 0.146

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:32:28	0.867	11.620	24.730	21.260	13.560	T 333.200	2.805
2	13:32:52	0.864	11.060	22.790	21.370	13.390	T 339.500	2.764
3	13:33:17	0.875	11.100	24.230	21.070	13.520	T 338.700	2.732
x		-	11.260	23.910	21.230	13.490	T 337.200	2.767
σ		-	0.310	1.009	0.151	0.090	T 3.411	0.036
%RSD		-	2.749	4.218	0.710	0.668	T 1.012	1.308

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:32:28	18.000	6.673	10.410	7.950	37.330	20.720	0.000
2	13:32:52	17.680	6.056	10.380	8.277	43.150	21.480	0.000
3	13:33:17	18.970	6.191	11.300	8.352	40.850	21.700	0.000
x		18.220	6.306	10.700	8.193	40.440	21.300	0.000
σ		0.667	0.324	0.523	0.214	2.930	0.512	0.000
%RSD		3.662	5.141	4.893	2.610	7.245	2.405	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:32:28	0.000	1.047	17.660	10.020	10.260	10.000	10.000
2	13:32:52	0.000	1.082	13.430	9.895	10.540	9.776	10.100
3	13:33:17	0.000	1.073	13.880	9.685	10.870	9.759	9.842
x		0.000	-	14.990	9.867	10.560	9.846	9.981
σ		0.000	-	2.319	0.170	0.309	0.135	0.129
%RSD		0.000	-	15.470	1.718	2.921	1.375	1.287

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:32:28	1.181	2.603	2.046	2.751	2.285	4.430	89.520
2	13:32:52	1.211	3.023	2.061	2.590	2.056	4.381	91.060
3	13:33:17	1.172	1.979	1.990	2.513	1.883	4.305	87.470
x		-	2.535	2.032	2.618	2.075	4.372	89.350
σ		-	0.525	0.038	0.122	0.202	0.063	1.802
%RSD		-	20.710	1.859	4.640	9.724	1.444	2.016

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:32:28	1.060	1.055	2.289	2.276	2.940	1.381
2	13:32:52	1.058	1.064	2.225	2.344	2.940	1.358
3	13:33:17	1.054	1.049	2.211	2.223	2.896	1.352
x		-	-	2.242	2.281	2.926	-
σ		-	-	0.042	0.061	0.025	-
%RSD		-	-	1.858	2.659	0.869	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:12	0.938	0.020	TM 142700.000	T 47490.000	98.910	T 1833.000	TM 122000.000
2	13:35:36	0.960	-0.002	TM 144900.000	T 47930.000	101.400	T 1828.000	TM 118900.000
3	13:36:00	0.958	0.009	TM 145100.000	T 47840.000	100.000	T 1826.000	TM 119800.000
x		-	0.009	TM 144200.000	T 47750.000	100.100	T 1829.000	TM 120200.000
σ		-	0.011	TM 1308.000	T 235.100	1.271	T 3.302	TM 1602.000
%RSD		-	120.900	TM 0.907	T 0.492	1.270	T 0.181	TM 1.333

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:12	0.800	7.634	77.780	12.190	0.697	31.230	0.239
2	13:35:36	0.786	7.414	77.600	12.150	0.707	29.970	0.222
3	13:36:00	0.798	5.924	75.980	11.850	0.719	30.110	0.246
x		-	6.990	77.120	12.060	0.708	30.440	0.236
σ		-	0.930	0.989	0.187	0.011	0.694	0.012
%RSD		-	13.310	1.283	1.553	1.528	2.279	5.283

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:12	3.163	1.260	2.709	17.600	26.250	6.537	0.000
2	13:35:36	3.208	1.402	2.370	19.490	27.000	5.568	0.000
3	13:36:00	3.159	1.256	2.590	18.680	28.500	5.455	0.000
x		3.177	1.306	2.557	18.590	27.250	5.853	0.000
σ		0.028	0.083	0.172	0.945	1.144	0.595	0.000
%RSD		0.866	6.376	6.720	5.080	4.198	10.160	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:12	0.000	1.088	6.004	3.954	4.280	4.398	4.159
2	13:35:36	0.000	1.122	6.545	4.775	4.193	4.357	4.200
3	13:36:00	0.000	1.120	6.651	4.290	4.667	4.323	4.541
x		0.000	-	6.400	4.340	4.380	4.359	4.300
σ		0.000	-	0.347	0.412	0.252	0.037	0.210
%RSD		0.000	-	5.424	9.502	5.755	0.853	4.882

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:12	1.206	-0.464	0.012	0.337	0.016	0.084	42.900
2	13:35:36	1.244	-0.703	0.003	0.347	0.015	0.127	43.330
3	13:36:00	1.230	0.212	0.003	0.229	0.001	0.116	44.010
x		-	-0.318	0.006	0.304	0.011	0.109	43.420
σ		-	0.475	0.005	0.065	0.009	0.022	0.560
%RSD		-	149.100	81.340	21.440	79.330	20.370	1.290

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:12	1.076	1.076	-0.015	-0.021	0.146	1.382
2	13:35:36	1.063	1.065	0.003	-0.018	0.148	1.336
3	13:36:00	1.098	1.101	-0.013	-0.021	0.143	1.374
x		-	-	-0.008	-0.020	0.146	-
σ		-	-	0.010	0.001	0.003	-
%RSD		-	-	123.300	7.395	1.789	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:37:55	0.941	0.017	TM 162900.000	T 47320.000	170.500	T 2550.000	TM 117600.000
2	13:38:19	0.953	0.026	TM 166500.000	T 48330.000	175.500	T 2558.000	TM 122100.000
3	13:38:44	0.984	0.023	TM 170900.000	T 49690.000	195.800	T 2638.000	TM 122400.000
x		-	0.022	TM 166800.000	T 48450.000	180.600	T 2582.000	TM 120700.000
σ		-	0.005	TM 3990.000	T 1192.000	13.410	T 48.200	TM 2652.000
%RSD		-	21.110	TM 2.393	T 2.461	7.426	T 1.867	TM 2.197

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:37:55	0.790	9.107	69.110	71.570	2.389	142.600	0.567
2	13:38:19	0.801	8.184	73.570	70.810	2.385	139.500	0.429
3	13:38:44	0.806	9.135	73.170	73.970	2.401	147.500	0.560
x		-	8.809	71.950	72.120	2.392	143.200	0.519
σ		-	0.541	2.465	1.650	0.008	4.030	0.078
%RSD		-	6.147	3.426	2.288	0.338	2.815	15.000

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:37:55	5.442	1.573	2.266	19.150	26.190	6.100	0.000
2	13:38:19	5.685	1.523	2.352	19.070	22.400	6.226	0.000
3	13:38:44	6.113	1.523	2.262	20.030	24.640	6.782	0.000
x		5.746	1.540	2.293	19.420	24.410	6.369	0.000
σ		0.340	0.029	0.051	0.529	1.903	0.363	0.000
%RSD		5.913	1.861	2.216	2.726	7.796	5.692	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:37:55	0.000	1.125	7.379	5.443	5.675	5.052	5.626
2	13:38:19	0.000	1.091	7.939	5.235	5.839	5.326	5.671
3	13:38:44	0.000	1.144	9.397	6.044	5.966	5.811	5.491
x		0.000	-	8.238	5.574	5.827	5.397	5.596
σ		0.000	-	1.042	0.420	0.146	0.384	0.094
%RSD		0.000	-	12.640	7.543	2.506	7.118	1.674

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:37:55	1.256	1.704	0.011	0.467	-0.001	0.189	48.110
2	13:38:19	1.210	1.074	-0.004	0.789	-0.001	0.217	46.620
3	13:38:44	1.289	0.685	0.004	1.077	0.006	0.217	50.100
x		-	1.154	0.004	0.778	0.002	0.208	48.270
σ		-	0.515	0.007	0.305	0.004	0.016	1.745
%RSD		-	44.570	206.000	39.280	253.700	7.816	3.616

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:37:55	1.076	1.110	-0.008	-0.006	0.249	1.409
2	13:38:19	1.088	1.077	0.003	-0.005	0.250	1.392
3	13:38:44	1.108	1.151	-0.014	-0.006	0.274	1.402
x		-	-	-0.007	-0.006	0.258	-
σ		-	-	0.009	0.001	0.014	-
%RSD		-	-	131.800	8.738	5.392	-

14927 MF4N08 6/28/2011 1:40:38 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:40:38	0.942	0.003	TM 169800.000	T 46440.000	115.000	T 2051.000	TM 118800.000
2	13:41:03	0.957	0.007	TM 175300.000	T 48360.000	118.400	T 2095.000	TM 123400.000
3	13:41:27	0.941	0.003	TM 169200.000	T 46580.000	109.000	T 2012.000	TM 118500.000
x		-	0.004	TM 171400.000	T 47130.000	114.100	T 2053.000	TM 120200.000
σ		-	0.002	TM 3351.000	T 1073.000	4.767	T 41.750	TM 2751.000
%RSD		-	44.280	TM 1.954	T 2.278	4.177	T 2.034	TM 2.288

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:40:38	0.798	9.113	84.030	106.200	4.999	169.400	0.627
2	13:41:03	0.814	9.314	84.900	109.900	5.094	173.100	0.588
3	13:41:27	0.795	9.467	84.310	105.400	4.961	166.500	0.629
x		-	9.298	84.410	107.200	5.018	169.600	0.615
σ		-	0.178	0.441	2.361	0.069	3.298	0.023
%RSD		-	1.915	0.523	2.202	1.367	1.944	3.724

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:40:38	6.440	2.019	1.345	21.350	25.770	5.926	0.000
2	13:41:03	6.160	2.187	1.491	22.400	26.680	6.883	0.000
3	13:41:27	6.056	2.419	1.622	22.240	24.130	5.727	0.000
x		6.218	2.208	1.486	22.000	25.530	6.179	0.000
σ		0.198	0.201	0.138	0.564	1.294	0.618	0.000
%RSD		3.190	9.100	9.304	2.565	5.071	10.010	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:40:38	0.000	1.110	9.697	7.701	8.482	7.248	7.782
2	13:41:03	0.000	1.104	9.836	7.587	7.983	8.204	8.158
3	13:41:27	0.000	1.090	8.865	7.520	7.787	7.588	7.432
x		0.000	-	9.466	7.602	8.084	7.680	7.791
σ		0.000	-	0.525	0.091	0.358	0.485	0.363
%RSD		0.000	-	5.545	1.200	4.431	6.314	4.654

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:40:38	1.238	0.676	0.006	0.115	0.018	0.224	39.110
2	13:41:03	1.239	-0.362	0.010	0.462	-0.004	0.234	39.850
3	13:41:27	1.195	-0.413	0.003	0.334	0.010	0.249	38.490
x		-	-0.033	0.006	0.304	0.008	0.235	39.150
σ		-	0.614	0.004	0.175	0.011	0.013	0.681
%RSD		-	1869.000	63.230	57.700	140.500	5.368	1.739

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:40:38	1.102	1.093	-0.008	-0.019	0.172	1.432
2	13:41:03	1.116	1.112	-0.020	-0.015	0.148	1.426
3	13:41:27	1.084	1.082	-0.025	-0.024	0.148	1.376
x		-	-	-0.018	-0.020	0.156	-
σ		-	-	0.009	0.005	0.014	-
%RSD		-	-	50.450	23.450	8.761	-

14928 MF4N09 6/28/2011 1:43:23 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:23	0.934	0.013	TM 171200.000	T 46930.000	157.800	T 2092.000	TM 120900.000
2	13:43:47	0.954	0.001	TM 172000.000	T 47430.000	154.800	T 2083.000	TM 119400.000
3	13:44:12	0.962	-0.001	TM 176100.000	T 48140.000	152.200	T 2156.000	TM 121500.000
x		-	0.004	TM 173100.000	T 47500.000	154.900	T 2110.000	TM 120600.000
σ		-	0.008	TM 2625.000	T 606.000	2.801	T 40.130	TM 1113.000
%RSD		-	178.000	TM 1.516	T 1.276	1.808	T 1.901	TM 0.923

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:23	0.804	7.867	86.990	114.500	5.645	233.700	0.816
2	13:43:47	0.801	8.368	86.030	112.100	5.568	235.700	0.779
3	13:44:12	0.801	8.996	86.190	112.700	5.795	230.800	0.836
x		-	8.410	86.400	113.100	5.669	233.400	0.810
σ		-	0.566	0.514	1.228	0.115	2.491	0.029
%RSD		-	6.730	0.595	1.086	2.031	1.067	3.598

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:23	8.013	2.673	2.434	22.020	35.340	6.611	0.000
2	13:43:47	7.833	2.500	2.574	22.120	26.240	6.182	0.000
3	13:44:12	8.052	2.633	2.645	22.090	30.560	6.085	0.000
x		7.966	2.602	2.551	22.080	30.720	6.293	0.000
σ		0.117	0.091	0.107	0.052	4.553	0.280	0.000
%RSD		1.465	3.482	4.212	0.234	14.820	4.444	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:23	0.000	1.115	11.040	8.107	8.259	7.900	7.932
2	13:43:47	0.000	1.087	10.700	8.319	8.665	8.296	7.758
3	13:44:12	0.000	1.105	10.710	8.514	8.455	7.592	8.125
x		0.000	-	10.810	8.313	8.460	7.929	7.938
σ		0.000	-	0.194	0.203	0.203	0.353	0.183
%RSD		0.000	-	1.794	2.445	2.399	4.448	2.310

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:23	1.225	-0.232	0.021	0.686	0.017	0.218	46.440
2	13:43:47	1.214	-0.692	0.007	0.453	-0.006	0.208	46.190
3	13:44:12	1.228	0.721	0.022	0.686	0.017	0.184	43.750
x		-	-0.068	0.017	0.608	0.010	0.203	45.460
σ		-	0.721	0.008	0.134	0.013	0.018	1.488
%RSD		-	1062.000	48.230	22.100	136.400	8.655	3.273

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:43:23	1.112	1.103	-0.027	-0.027	0.297	1.426
2	13:43:47	1.098	1.064	-0.010	-0.021	0.257	1.399
3	13:44:12	1.091	1.072	-0.011	-0.016	0.279	1.383
x		-	-	-0.016	-0.021	0.278	-
σ		-	-	0.009	0.005	0.020	-
%RSD		-	-	59.150	26.120	7.169	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:07	0.949	0.008	TM 171200.000	T 48470.000	128.200	T 1895.000	TM 118600.000
2	13:46:32	0.941	0.001	TM 173800.000	T 48720.000	127.200	T 1908.000	TM 122500.000
3	13:46:56	0.954	0.004	TM 176100.000	T 49180.000	126.700	T 1951.000	TM 122400.000
x		-	0.004	TM 173700.000	T 48790.000	127.400	T 1918.000	TM 121200.000
σ		-	0.004	TM 2454.000	T 360.400	0.793	T 29.200	TM 2176.000
%RSD		-	88.210	TM 1.413	T 0.739	0.623	T 1.522	TM 1.796

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:07	0.783	8.811	84.310	60.050	1.716	79.960	0.696
2	13:46:32	0.786	9.148	89.230	61.210	1.746	82.170	0.671
3	13:46:56	0.793	9.200	86.550	59.720	1.814	79.900	0.567
x		-	9.053	86.690	60.330	1.759	80.680	0.645
σ		-	0.211	2.464	0.784	0.050	1.293	0.068
%RSD		-	2.330	2.842	1.300	2.852	1.603	10.570

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:07	5.770	1.561	2.737	21.910	29.070	6.872	0.000
2	13:46:32	5.824	1.609	3.166	21.840	27.130	6.988	0.000
3	13:46:56	5.551	1.397	2.713	22.130	27.830	6.697	0.000
x		5.715	1.522	2.872	21.960	28.010	6.852	0.000
σ		0.144	0.111	0.255	0.155	0.983	0.147	0.000
%RSD		2.525	7.283	8.861	0.706	3.510	2.139	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:07	0.000	1.118	10.490	7.690	7.916	7.744	8.004
2	13:46:32	0.000	1.093	10.560	7.834	8.387	7.260	7.919
3	13:46:56	0.000	1.106	10.410	8.485	8.153	8.379	8.244
x		0.000	-	10.480	8.003	8.152	7.794	8.056
σ		0.000	-	0.073	0.424	0.235	0.562	0.169
%RSD		0.000	-	0.692	5.293	2.886	7.204	2.095

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:07	1.265	0.506	-0.003	0.470	0.003	0.128	47.700
2	13:46:32	1.230	1.757	0.010	0.343	-0.005	0.119	46.440
3	13:46:56	1.223	-0.159	0.008	0.797	-0.006	0.097	46.230
x		-	0.701	0.005	0.536	-0.002	0.115	46.790
σ		-	0.973	0.007	0.234	0.005	0.016	0.796
%RSD		-	138.700	151.700	43.610	215.900	14.120	1.702

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:07	1.080	1.099	-0.027	-0.020	0.255	1.421
2	13:46:32	1.078	1.077	-0.024	-0.024	0.236	1.392
3	13:46:56	1.079	1.080	-0.025	-0.021	0.254	1.394
x		-	-	-0.025	-0.022	0.248	-
σ		-	-	0.002	0.002	0.011	-
%RSD		-	-	6.305	8.055	4.308	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:51	0.936	0.016	TM 196500.000	T 39020.000	152.900	T 3562.000	TM 114500.000
2	13:49:15	0.963	0.009	TM 204000.000	T 40450.000	155.200	T 3712.000	TM 115400.000
3	13:49:39	0.971	0.024	TM 200700.000	T 39740.000	146.000	T 3659.000	TM 112500.000
x		-	0.016	TM 200400.000	T 39740.000	151.400	T 3644.000	TM 114200.000
σ		-	0.007	TM 3780.000	T 714.000	4.784	T 75.770	TM 1474.000
%RSD		-	45.490	TM 1.886	T 1.797	3.160	T 2.079	TM 1.292

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:51	0.823	8.917	63.950	23.680	6.496	179.300	3.348
2	13:49:15	0.844	10.480	62.770	24.590	6.643	181.900	3.491
3	13:49:39	0.840	10.800	63.460	23.800	6.606	175.500	3.175
x		-	10.070	63.390	24.030	6.582	178.900	3.338
σ		-	1.010	0.592	0.497	0.076	3.190	0.158
%RSD		-	10.030	0.933	2.067	1.160	1.783	4.734

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:51	24.810	2.267	1.325	14.540	26.390	2.594	0.000
2	13:49:15	26.040	2.157	1.237	15.450	23.070	3.551	0.000
3	13:49:39	24.580	2.117	1.382	16.130	25.470	2.973	0.000
x		25.140	2.180	1.314	15.370	24.980	3.039	0.000
σ		0.789	0.078	0.073	0.797	1.716	0.482	0.000
%RSD		3.138	3.564	5.549	5.184	6.872	15.850	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:51	0.000	1.086	6.754	4.497	5.016	4.457	4.263
2	13:49:15	0.000	1.102	6.911	4.404	4.725	4.141	4.472
3	13:49:39	0.000	1.146	7.257	4.664	4.993	4.194	4.669
x		0.000	-	6.974	4.522	4.911	4.264	4.468
σ		0.000	-	0.257	0.131	0.162	0.169	0.203
%RSD		0.000	-	3.684	2.907	3.291	3.970	4.547

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:51	1.224	1.049	-0.011	0.228	0.030	0.012	43.110
2	13:49:15	1.220	-0.848	-0.006	0.910	0.068	0.060	45.690
3	13:49:39	1.262	0.588	0.001	0.470	0.054	0.015	45.590
x		-	0.263	-0.005	0.536	0.051	0.029	44.800
σ		-	0.990	0.006	0.346	0.019	0.027	1.461
%RSD		-	376.400	116.500	64.510	37.290	92.870	3.262

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:48:51	1.088	1.084	-0.025	-0.019	0.251	1.405
2	13:49:15	1.091	1.124	-0.013	-0.018	0.263	1.399
3	13:49:39	1.099	1.105	-0.018	-0.022	0.247	1.410
x		-	-	-0.018	-0.020	0.254	-
σ		-	-	0.006	0.002	0.008	-
%RSD		-	-	31.800	9.915	3.304	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:33	0.957	0.019	TM 199800.000	T 39410.000	199.700	T 3604.000	TM 113700.000
2	13:51:57	0.974	0.023	TM 202600.000	T 40300.000	209.800	T 3751.000	TM 115100.000
3	13:52:22	0.971	0.020	TM 205600.000	T 40880.000	214.800	T 3749.000	TM 116700.000
x		-	0.021	TM 202700.000	T 40200.000	208.100	T 3701.000	TM 115200.000
σ		-	0.002	TM 2897.000	T 741.300	7.717	T 84.260	TM 1480.000
%RSD		-	11.690	TM 1.429	T 1.844	3.708	T 2.276	TM 1.285

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:33	0.833	10.760	61.980	26.040	7.705	235.600	3.288
2	13:51:57	0.852	13.910	63.550	26.110	7.824	237.100	3.513
3	13:52:22	0.870	11.760	62.430	26.920	7.800	251.200	3.312
x		-	12.140	62.660	26.360	7.776	241.300	3.371
σ		-	1.608	0.811	0.490	0.063	8.639	0.124
%RSD		-	13.240	1.294	1.858	0.812	3.580	3.672

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:33	25.530	2.281	1.591	15.670	22.710	3.206	0.000
2	13:51:57	27.780	2.216	1.366	15.880	25.410	3.770	0.000
3	13:52:22	26.300	2.145	1.625	15.670	26.690	3.793	0.000
x		26.540	2.214	1.528	15.740	24.930	3.589	0.000
σ		1.144	0.068	0.141	0.122	2.032	0.332	0.000
%RSD		4.309	3.084	9.224	0.772	8.149	9.258	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:33	0.000	1.107	9.043	5.069	4.975	4.843	4.543
2	13:51:57	0.000	1.128	8.057	4.944	4.960	4.644	5.092
3	13:52:22	0.000	1.150	8.024	5.139	5.335	5.001	4.931
x		0.000	-	8.375	5.051	5.090	4.829	4.856
σ		0.000	-	0.579	0.099	0.212	0.179	0.282
%RSD		0.000	-	6.915	1.956	4.173	3.704	5.804

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:33	1.240	1.548	0.017	0.346	0.098	0.044	46.710
2	13:51:57	1.255	0.738	0.001	0.234	0.076	0.052	48.140
3	13:52:22	1.283	0.304	0.004	0.119	0.047	0.034	48.390
x		-	0.864	0.007	0.233	0.074	0.044	47.750
σ		-	0.632	0.009	0.114	0.026	0.009	0.908
%RSD		-	73.130	114.800	48.730	34.980	20.500	1.902

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:51:33	1.101	1.093	-0.028	-0.012	0.303	1.448
2	13:51:57	1.098	1.113	-0.012	-0.015	0.277	1.435
3	13:52:22	1.110	1.125	-0.016	-0.013	0.323	1.483
x		-	-	-0.019	-0.014	0.301	-
σ		-	-	0.008	0.001	0.023	-
%RSD		-	-	42.330	10.410	7.608	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:15	0.993	0.007	TM 195700.000	T 28760.000	96.900	T 7148.000	TM 144800.000
2	13:54:39	1.007	0.007	TM 197800.000	T 29280.000	95.180	T 7011.000	TM 146700.000
3	13:55:04	1.008	0.007	TM 201200.000	T 29820.000	99.740	T 7171.000	TM 150300.000
x		-	0.007	TM 198200.000	T 29290.000	97.270	T 7110.000	TM 147200.000
σ		-	0.000	TM 2791.000	T 531.000	2.302	T 86.550	TM 2791.000
%RSD		-	1.630	TM 1.408	T 1.813	2.367	T 1.217	TM 1.895

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:15	0.891	4.846	36.150	18.440	1.046	37.620	0.365
2	13:54:39	0.891	6.124	36.820	19.180	1.014	38.760	0.335
3	13:55:04	0.920	7.195	37.330	19.610	1.122	41.790	0.397
x		-	6.055	36.770	19.080	1.061	39.390	0.366
σ		-	1.176	0.592	0.595	0.055	2.157	0.031
%RSD		-	19.430	1.610	3.116	5.229	5.475	8.541

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:15	4.646	1.005	1.931	9.934	25.890	6.866	0.000
2	13:54:39	5.234	1.099	1.973	10.340	25.760	6.925	0.000
3	13:55:04	5.326	0.890	1.702	10.520	25.920	6.704	0.000
x		5.069	0.998	1.869	10.260	25.860	6.832	0.000
σ		0.369	0.104	0.146	0.299	0.088	0.115	0.000
%RSD		7.279	10.460	7.798	2.917	0.342	1.680	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:15	0.000	1.081	3.244	1.551	1.458	1.378	1.418
2	13:54:39	0.000	1.065	2.438	1.453	1.444	1.499	1.240
3	13:55:04	0.000	1.101	2.926	1.519	1.704	1.662	1.457
x		0.000	-	2.870	1.508	1.535	1.513	1.372
σ		0.000	-	0.406	0.050	0.146	0.142	0.116
%RSD		0.000	-	14.140	3.322	9.538	9.411	8.436

Run	Time	103Rh	106Cd	107Ag	108Cd111	1Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:15	1.181	1.534	-0.004	0.220	0.005	0.016	37.340
2	13:54:39	1.169	-1.227	-0.000	0.219	0.034	-0.016	38.020
3	13:55:04	1.231	0.213	-0.011	0.687	0.020	0.013	40.170
x		-	0.173	-0.005	0.376	0.020	0.004	38.510
σ		-	1.381	0.005	0.270	0.014	0.018	1.478
%RSD		-	797.000	107.100	71.910	73.780	436.000	3.838

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:54:15	1.072	1.052	-0.032	-0.034	0.147	1.432
2	13:54:39	1.098	1.056	-0.031	-0.034	0.136	1.395
3	13:55:04	1.087	1.082	-0.030	-0.031	0.135	1.419
x		-	-	-0.031	-0.033	0.140	-
σ		-	-	0.001	0.002	0.007	-
%RSD		-	-	1.901	4.844	4.901	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:58	0.942	-0.004	TM 169000.000	T 50260.000	110.500	T 3234.000	TM 114400.000
2	13:57:22	0.998	-0.001	TM 182600.000	T 54380.000	118.000	T 3412.000	TM 124700.000
3	13:57:46	0.947	-0.004	TM 164100.000	T 48930.000	110.100	T 3006.000	TM 108400.000
x		-	-0.003	TM 171900.000	T 51190.000	112.900	T 3218.000	TM 115800.000
σ		-	0.002	TM 9597.000	T 2841.000	4.447	T 203.400	TM 8244.000
%RSD		-	65.860	TM 5.582	T 5.551	3.940	T 6.322	TM 7.116

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:58	0.823	8.870	65.660	91.340	1.746	22.580	0.504
2	13:57:22	0.862	7.288	69.010	98.240	1.800	25.390	0.648
3	13:57:46	0.792	8.718	60.110	89.330	1.671	21.360	0.600
x		-	8.292	64.920	92.970	1.739	23.110	0.584
σ		-	0.873	4.495	4.674	0.064	2.068	0.073
%RSD		-	10.530	6.924	5.027	3.705	8.949	12.550

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:58	4.692	1.362	0.902	20.760	27.490	6.233	0.000
2	13:57:22	4.473	1.365	0.876	20.960	30.450	6.588	0.000
3	13:57:46	3.507	1.284	0.813	19.680	30.020	6.006	0.000
x		4.224	1.337	0.864	20.470	29.320	6.276	0.000
σ		0.631	0.046	0.046	0.684	1.600	0.294	0.000
%RSD		14.930	3.440	5.282	3.344	5.455	4.681	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:58	0.000	1.132	6.887	5.131	5.082	5.011	5.288
2	13:57:22	0.000	1.162	7.257	5.517	5.552	5.756	5.419
3	13:57:46	0.000	1.101	7.415	4.914	5.304	5.429	4.907
x		0.000	-	7.186	5.187	5.312	5.399	5.204
σ		0.000	-	0.271	0.306	0.235	0.374	0.266
%RSD		0.000	-	3.773	5.894	4.421	6.920	5.111

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:58	1.239	-0.540	0.008	0.577	0.030	0.159	43.160
2	13:57:22	1.290	-0.204	-0.013	0.481	-0.009	0.188	46.060
3	13:57:46	1.232	1.420	-0.011	0.573	0.030	0.133	42.710
x		-	0.226	-0.005	0.543	0.017	0.160	43.970
σ		-	1.048	0.011	0.054	0.022	0.028	1.820
%RSD		-	464.500	219.400	9.915	130.000	17.240	4.139

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:56:58	1.096	1.111	-0.016	-0.017	0.180	1.451
2	13:57:22	1.171	1.152	-0.028	-0.022	0.207	1.501
3	13:57:46	1.072	1.085	-0.019	-0.022	0.172	1.402
x		-	-	-0.021	-0.020	0.187	-
σ		-	-	0.007	0.003	0.018	-
%RSD		-	-	31.440	14.500	9.666	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:59:40	0.984	0.021	TM 256200.000	T 39690.000	286.000	T 11500.000	TM 141600.000
2	14:00:04	1.001	0.021	TM 262400.000	T 40410.000	280.600	T 11660.000	TM 143600.000
3	14:00:29	1.004	0.016	TM 261100.000	T 40570.000	273.000	T 11460.000	TM 139100.000
x		-	0.019	TM 259900.000	T 40220.000	279.900	T 11540.000	TM 141400.000
σ		-	0.003	TM 3286.000	T 464.500	6.485	T 107.800	TM 2286.000
%RSD		-	14.690	TM 1.264	T 1.155	2.317	T 0.934	TM 1.616

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:59:40	0.898	7.958	12.580	2.872	27.480	133.000	0.627
2	14:00:04	0.914	6.817	14.120	2.885	27.320	132.300	0.582
3	14:00:29	0.901	11.810	12.190	2.758	26.720	133.700	0.672
x		-	8.861	12.960	2.838	27.170	133.000	0.627
σ		-	2.615	1.022	0.070	0.401	0.716	0.045
%RSD		-	29.510	7.884	2.451	1.476	0.538	7.111

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:59:40	4.880	2.922	4.873	8.692	30.830	9.113	0.000
2	14:00:04	4.553	3.142	4.547	8.822	30.720	9.022	0.000
3	14:00:29	4.528	3.030	5.063	9.354	32.310	9.017	0.000
x		4.654	3.031	4.828	8.956	31.290	9.051	0.000
σ		0.197	0.110	0.261	0.351	0.889	0.054	0.000
%RSD		4.223	3.636	5.404	3.917	2.842	0.598	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:59:40	0.000	1.097	9.623	7.979	8.280	7.772	7.913
2	14:00:04	0.000	1.094	9.264	7.712	8.248	7.878	7.268
3	14:00:29	0.000	1.112	9.761	8.307	8.318	7.926	7.925
x		0.000	-	9.549	7.999	8.282	7.859	7.702
σ		0.000	-	0.257	0.298	0.035	0.079	0.376
%RSD		0.000	-	2.687	3.729	0.418	1.007	4.880

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:59:40	1.229	1.156	-0.006	0.573	0.003	0.576	55.210
2	14:00:04	1.215	-0.176	0.005	0.454	0.018	0.593	54.850
3	14:00:29	1.263	0.324	0.004	0.352	0.018	0.565	56.940
x		-	0.435	0.001	0.460	0.013	0.578	55.670
σ		-	0.673	0.006	0.110	0.009	0.014	1.119
%RSD		-	154.800	668.000	24.010	68.890	2.441	2.011

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	13:59:40	1.103	1.110	0.024	0.019	0.600	1.483
2	14:00:04	1.116	1.103	0.033	0.024	0.582	1.471
3	14:00:29	1.093	1.114	0.030	0.019	0.560	1.447
x		-	-	0.029	0.021	0.581	-
σ		-	-	0.005	0.003	0.020	-
%RSD		-	-	15.990	14.810	3.430	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:23	0.996	0.055	TM 278600.000	T 78140.000	215.500	T 8530.000	TM 325300.000
2	14:02:47	0.991	0.043	TM 281500.000	T 78250.000	208.700	T 8505.000	TM 321300.000
3	14:03:12	0.993	0.041	TM 283400.000	T 78930.000	207.200	T 8714.000	TM 326400.000
x		-	0.047	TM 281100.000	T 78440.000	210.500	T 8583.000	TM 324300.000
σ		-	0.008	TM 2426.000	T 426.400	4.456	T 114.200	TM 2678.000
%RSD		-	16.540	TM 0.863	T 0.544	2.117	T 1.330	TM 0.826

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:23	0.861	8.236	28.450	9.832	13.890	176.800	1.145
2	14:02:47	0.851	7.596	28.490	10.010	13.590	175.900	1.119
3	14:03:12	0.864	8.725	28.720	9.683	13.900	171.800	1.137
x		-	8.186	28.550	9.842	13.790	174.800	1.133
σ		-	0.566	0.145	0.165	0.173	2.677	0.013
%RSD		-	6.920	0.506	1.674	1.257	1.531	1.175

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:23	13.000	2.144	7.823	9.271	49.260	20.950	0.000
2	14:02:47	12.010	2.299	8.199	9.206	51.550	19.260	0.000
3	14:03:12	12.810	2.190	8.184	10.010	46.820	19.980	0.000
x		12.610	2.211	8.069	9.495	49.210	20.060	0.000
σ		0.523	0.080	0.213	0.446	2.365	0.850	0.000
%RSD		4.146	3.613	2.636	4.692	4.805	4.238	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:23	0.000	1.114	5.136	2.803	3.583	3.094	2.902
2	14:02:47	0.000	1.081	5.653	3.209	3.353	2.862	2.963
3	14:03:12	0.000	1.100	5.667	2.937	3.403	2.855	3.013
x		0.000	-	5.485	2.983	3.446	2.937	2.959
σ		0.000	-	0.303	0.207	0.121	0.136	0.056
%RSD		0.000	-	5.519	6.932	3.517	4.631	1.886

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:23	1.294	0.348	0.016	0.482	0.027	0.089	46.970
2	14:02:47	1.255	-0.057	0.006	1.050	0.010	0.096	46.860
3	14:03:12	1.220	0.176	0.008	0.795	0.018	0.112	45.200
x		-	0.156	0.010	0.776	0.018	0.099	46.340
σ		-	0.203	0.006	0.285	0.008	0.012	0.991
%RSD		-	130.300	56.700	36.680	46.130	11.910	2.139

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:02:23	1.143	1.133	-0.021	-0.021	0.493	1.627
2	14:02:47	1.091	1.093	-0.016	-0.017	0.448	1.521
3	14:03:12	1.089	1.091	-0.018	-0.016	0.446	1.491
x		-	-	-0.018	-0.018	0.462	-
σ		-	-	0.002	0.003	0.027	-
%RSD		-	-	13.620	15.490	5.780	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:06	0.974	0.024	TM 138600.000	T 45330.000	107.000	T 7604.000	TM 237400.000
2	14:05:31	0.992	0.017	TM 140600.000	T 45960.000	107.200	T 7679.000	TM 240800.000
3	14:05:55	0.998	0.028	TM 141900.000	T 46360.000	109.900	T 7591.000	TM 239700.000
x		-	0.023	TM 140400.000	T 45880.000	108.000	T 7625.000	TM 239300.000
σ		-	0.005	TM 1651.000	T 521.600	1.643	T 47.470	TM 1730.000
%RSD		-	23.910	TM 1.176	T 1.137	1.521	T 0.623	TM 0.723

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:06	0.861	6.467	19.580	5.868	4.450	59.850	0.478
2	14:05:31	0.864	4.577	20.680	5.758	4.175	57.930	0.515
3	14:05:55	0.871	4.857	21.080	6.115	4.542	58.860	0.581
x		-	5.301	20.450	5.914	4.389	58.880	0.525
σ		-	1.020	0.776	0.182	0.191	0.961	0.052
%RSD		-	19.240	3.794	3.085	4.344	1.631	9.954

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:06	8.126	1.191	5.358	7.807	35.290	14.270	0.000
2	14:05:31	8.931	1.395	5.076	7.889	36.710	13.940	0.000
3	14:05:55	7.923	1.191	5.164	7.866	38.090	14.460	0.000
x		8.327	1.259	5.199	7.854	36.700	14.220	0.000
σ		0.534	0.118	0.144	0.042	1.398	0.267	0.000
%RSD		6.408	9.368	2.777	0.538	3.810	1.878	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:06	0.000	1.065	4.523	2.880	2.805	2.676	2.837
2	14:05:31	0.000	1.051	4.370	2.991	2.901	3.048	2.886
3	14:05:55	0.000	1.072	4.204	3.236	3.236	2.669	2.687
x		0.000	-	4.366	3.036	2.981	2.798	2.803
σ		0.000	-	0.160	0.182	0.226	0.217	0.104
%RSD		0.000	-	3.665	6.004	7.586	7.747	3.704

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:06	1.167	0.075	-0.011	0.218	0.010	0.078	56.890
2	14:05:31	1.163	-0.841	-0.011	0.434	-0.005	0.097	55.920
3	14:05:55	1.180	0.202	-0.013	0.550	0.009	0.081	55.160
x		-	-0.188	-0.012	0.401	0.005	0.085	55.990
σ		-	0.569	0.001	0.169	0.008	0.010	0.867
%RSD		-	302.700	10.450	42.100	168.600	12.210	1.549

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:05:06	1.065	1.057	-0.004	-0.020	0.163	1.444
2	14:05:31	1.045	1.040	-0.015	-0.018	0.133	1.409
3	14:05:55	1.065	1.048	-0.014	-0.021	0.135	1.450
x		-	-	-0.011	-0.020	0.144	-
σ		-	-	0.006	0.002	0.017	-
%RSD		-	-	55.220	8.219	11.610	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:07:50	0.980	0.048	TM 194200.000	T 44180.000	211.700	T 4161.000	TM 146500.000
2	14:08:14	1.008	0.059	TM 197500.000	T 44780.000	199.500	T 4205.000	TM 146500.000
3	14:08:38	0.999	0.060	TM 196600.000	T 45060.000	211.900	T 4301.000	TM 149000.000
x		-	0.056	TM 196100.000	T 44670.000	207.700	T 4222.000	TM 147300.000
σ		-	0.007	TM 1696.000	T 453.400	7.132	T 71.510	TM 1427.000
%RSD		-	12.260	TM 0.865	T 1.015	3.434	T 1.694	TM 0.968

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:07:50	0.862	10.650	43.680	63.810	14.150	130.500	0.501
2	14:08:14	0.854	12.780	42.370	62.770	14.280	129.700	0.488
3	14:08:38	0.878	12.930	43.330	62.440	14.260	129.200	0.519
x		-	12.120	43.130	63.010	14.230	129.800	0.502
σ		-	1.279	0.675	0.714	0.070	0.679	0.016
%RSD		-	10.560	1.565	1.133	0.494	0.523	3.107

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:07:50	4.669	1.646	5.486	11.110	27.280	5.908	0.000
2	14:08:14	5.053	1.693	5.362	11.680	24.420	5.901	0.000
3	14:08:38	5.169	1.531	5.764	11.750	25.830	5.633	0.000
x		4.964	1.623	5.538	11.510	25.840	5.814	0.000
σ		0.262	0.083	0.206	0.349	1.435	0.157	0.000
%RSD		5.270	5.125	3.715	3.030	5.551	2.698	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:07:50	0.000	1.089	4.472	1.673	1.953	1.796	1.600
2	14:08:14	0.000	1.074	3.781	1.393	1.978	1.616	1.582
3	14:08:38	0.000	1.082	3.714	1.697	1.831	1.481	1.636
x		0.000	-	3.989	1.588	1.920	1.631	1.606
σ		0.000	-	0.419	0.169	0.079	0.158	0.028
%RSD		0.000	-	10.520	10.650	4.099	9.694	1.737

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:07:50	1.215	-0.012	-0.006	0.679	0.012	0.018	51.140
2	14:08:14	1.186	-0.187	-0.006	0.665	0.005	0.034	51.870
3	14:08:38	1.186	0.808	-0.006	0.221	0.019	0.037	49.290
x		-	0.203	-0.006	0.522	0.012	0.030	50.770
σ		-	0.531	0.000	0.260	0.007	0.010	1.333
%RSD		-	261.900	2.252	49.890	57.720	34.750	2.625

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:07:50	1.078	1.061	-0.029	-0.030	0.571	1.472
2	14:08:14	1.093	1.080	-0.027	-0.027	0.541	1.457
3	14:08:38	1.072	1.071	-0.025	-0.027	0.547	1.410
x		-	-	-0.027	-0.028	0.553	-
σ		-	-	0.002	0.002	0.016	-
%RSD		-	-	7.763	6.493	2.849	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:33	0.995	0.054	TM 196400.000	T 47080.000	211.900	T 5867.000	TM 132100.000
2	14:10:57	1.017	0.051	TM 199800.000	T 48060.000	210.100	T 5920.000	TM 135900.000
3	14:11:22	1.007	0.050	TM 192300.000	T 46610.000	206.200	T 5784.000	TM 135200.000
x		-	0.052	TM 196200.000	T 47250.000	209.400	T 5857.000	TM 134400.000
σ		-	0.002	TM 3795.000	T 737.500	2.928	T 68.880	TM 2022.000
%RSD		-	4.119	TM 1.934	T 1.561	1.398	T 1.176	TM 1.505

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:33	0.894	10.960	30.180	60.240	28.850	163.700	1.354
2	14:10:57	0.891	10.740	28.610	59.230	29.160	165.000	1.320
3	14:11:22	0.907	9.370	29.880	58.750	28.970	161.900	1.204
x		-	10.360	29.550	59.410	28.990	163.500	1.293
σ		-	0.860	0.833	0.761	0.155	1.538	0.078
%RSD		-	8.308	2.819	1.282	0.536	0.940	6.065

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:33	19.490	8.029	8.385	9.732	24.330	6.872	0.000
2	14:10:57	18.820	8.150	8.315	9.632	27.130	6.850	0.000
3	14:11:22	19.180	8.226	7.736	9.569	25.050	6.845	0.000
x		19.160	8.135	8.145	9.644	25.500	6.856	0.000
σ		0.334	0.099	0.356	0.082	1.458	0.014	0.000
%RSD		1.744	1.223	4.376	0.851	5.715	0.210	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:33	0.000	1.114	10.450	6.989	7.279	6.560	7.151
2	14:10:57	0.000	1.089	10.400	7.026	7.431	7.236	6.777
3	14:11:22	0.000	1.059	9.507	7.134	6.763	6.423	6.493
x		0.000	-	10.120	7.050	7.157	6.740	6.807
σ		0.000	-	0.531	0.075	0.350	0.436	0.330
%RSD		0.000	-	5.251	1.067	4.892	6.461	4.852

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:33	1.218	1.190	-0.002	0.113	0.004	0.198	58.510
2	14:10:57	1.192	0.168	-0.006	0.780	0.040	0.179	57.140
3	14:11:22	1.175	0.680	0.002	0.548	0.032	0.168	55.480
x		-	0.679	-0.002	0.480	0.026	0.182	57.040
σ		-	0.511	0.004	0.338	0.019	0.015	1.519
%RSD		-	75.290	222.900	70.400	74.300	8.510	2.664

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:10:33	1.078	1.092	-0.024	-0.017	0.744	1.464
2	14:10:57	1.098	1.079	-0.015	-0.019	0.760	1.472
3	14:11:22	1.077	1.083	-0.019	-0.021	0.708	1.426
x		-	-	-0.019	-0.019	0.737	-
σ		-	-	0.004	0.002	0.026	-
%RSD		-	-	22.390	10.860	3.588	-

CCV2 CCV 6/28/2011 2:13:17 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:17	1.181	1028.000	τ49650.000	τ49840.000	τ49890.000	τ9794.000	τ51370.000
2	14:13:41	1.217	1040.000	τ50610.000	τ50290.000	τ50850.000	τ9845.000	τ50670.000
3	14:14:05	1.231	1035.000	τ50940.000	τ51060.000	τ49890.000	τ10020.000	τ51680.000
x		-	103.432%	τ50400.000	τ50400.000	τ50210.000	τ9886.000	τ51240.000
σ		-	n/a	τ670.500	τ617.800	τ552.500	τ117.200	τ519.000
%RSD		-	0.558	τ1.330	τ1.226	τ1.100	τ1.185	τ1.013

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:17	1.152	1011.000	970.300	988.900	τ975.300	τ51160.000	988.800
2	14:13:41	1.154	984.300	956.800	987.700	τ972.900	τ50630.000	980.200
3	14:14:05	1.210	1010.000	999.800	1003.000	τ1018.000	τ51160.000	987.000
x		-	1002.000	97.562%	99.328%	τ98.861%	τ50990.000	98.534%
σ		-	14.920	n/a	n/a	τn/a	τ306.100	n/a
%RSD		-	1.489	2.254	0.876	τ2.542	τ0.600	0.459

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:17	1035.000	1036.000	1062.000	1041.000	1073.000	1066.000	0.000
2	14:13:41	1007.000	1019.000	1046.000	1013.000	1041.000	1037.000	0.000
3	14:14:05	1061.000	1047.000	1052.000	1035.000	1052.000	1052.000	0.000
x		103.464%	103.388%	105.322%	102.973%	1055.000	105.136%	0.000
σ		n/a	n/a	n/a	n/a	16.050	n/a	0.000
%RSD		2.608	1.403	0.734	1.443	1.522	1.381	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:17	0.000	1.199	1015.000	994.300	986.600	1004.000	957.800
2	14:13:41	0.000	1.186	1007.000	989.600	976.800	994.700	969.600
3	14:14:05	0.000	1.211	990.200	984.300	995.200	976.500	963.800
x		0.000	-	1004.000	989.400	986.200	991.600	963.700
σ		0.000	-	12.480	5.044	9.236	13.850	5.904
%RSD		0.000	-	1.244	0.510	0.937	1.397	0.613

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:17	1.243	1002.000	τ997.300	976.400	1008.000	τ990.600	τ1120.000
2	14:13:41	1.280	1021.000	τ1015.000	1002.000	1017.000	τ999.600	τ1124.000
3	14:14:05	1.285	999.800	τ988.400	996.900	1017.000	τ1023.000	τ1120.000
x		-	1007.000	τ100.021%	991.700	101.420%	τ100.450%	τ101.954%
σ		-	11.390	τn/a	13.470	n/a	τn/a	τn/a
%RSD		-	1.131	τ1.347	1.359	0.490	τ1.689	τ0.212

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:13:17	1.113	1.135	τ1052.000	τ1080.000	τ1102.000	1.412
2	14:13:41	1.139	1.156	τ1044.000	τ1076.000	τ1097.000	1.405
3	14:14:05	1.172	1.141	τ1039.000	τ1037.000	τ1078.000	1.391
x		-	-	τ104.500%	τ106.448%	τ109.222%	-
σ		-	-	τn/a	τn/a	τn/a	-
%RSD		-	-	τ0.635	τ2.246	τ1.158	-

CCB2 CCB 6/28/2011 2:16:01 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:16:01	1.139	0.131	14.550	6.103	5.602	4.873	30.930
2	14:16:26	1.161	0.127	10.780	5.259	5.056	3.729	20.790
3	14:16:50	1.143	0.093	8.810	4.969	4.788	3.983	21.980
x		-	0.117	11.380	5.444	5.149	4.195	24.560
σ		-	0.021	2.919	0.589	0.415	0.601	5.544
%RSD		-	18.040	25.640	10.820	8.060	14.330	22.570

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:16:01	1.185	0.069	0.114	0.109	0.073	9.086	0.069
2	14:16:26	1.154	0.374	-0.155	0.142	0.083	7.281	0.094
3	14:16:50	1.159	0.221	0.591	0.100	0.085	6.520	0.064
x		-	0.221	0.183	0.117	0.080	7.629	0.076
σ		-	0.153	0.378	0.022	0.006	1.318	0.016
%RSD		-	69.020	206.200	19.010	7.854	17.270	21.260

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:16:01	0.127	0.102	0.133	0.435	-0.013	0.484	0.000
2	14:16:26	0.046	0.239	0.176	0.236	0.845	0.750	0.000
3	14:16:50	0.236	0.005	0.032	0.202	-0.225	0.042	0.000
x		0.136	0.115	0.114	0.291	0.202	0.425	0.000
σ		0.095	0.117	0.074	0.126	0.566	0.358	0.000
%RSD		69.940	101.800	64.750	43.260	279.900	84.060	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:16:01	0.000	1.146	0.758	0.847	0.936	0.635	0.740
2	14:16:26	0.000	1.193	0.983	0.671	0.807	0.766	0.766
3	14:16:50	0.000	1.143	0.537	0.562	0.567	0.401	0.587
x		0.000	-	0.759	0.693	0.770	0.601	0.697
σ		0.000	-	0.223	0.144	0.187	0.185	0.097
%RSD		0.000	-	29.340	20.740	24.350	30.750	13.880

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:16:01	1.119	1.255	0.103	0.105	0.096	0.614	0.120
2	14:16:26	1.137	1.096	0.109	0.107	0.048	0.702	0.057
3	14:16:50	1.096	0.062	0.071	0.000	0.053	0.529	0.078
x		-	0.804	0.094	0.071	0.066	0.615	0.085
σ		-	0.648	0.020	0.061	0.026	0.086	0.032
%RSD		-	80.490	21.330	86.610	39.650	14.050	37.730

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	14:16:01	1.108	1.114	0.138	0.131	0.285	1.277
2	14:16:26	1.092	1.099	0.134	0.120	0.190	1.223
3	14:16:50	1.087	1.084	0.094	0.097	0.144	1.199
x		-	-	0.122	0.116	0.206	-
σ		-	-	0.024	0.018	0.072	-
%RSD		-	-	19.780	15.100	35.050	-

Mass Uncorrected ICPS

S0 S0 6/28/2011 12:32:26 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	12:32:50	81688.418	23.800	53108.858	1960.108	1830.094	107311.480	16137.288
2	12:33:15	79740.141	22.200	53211.162	1978.110	1980.110	109444.360	16837.935
3	12:33:39	79534.728	24.200	49699.064	1850.096	3460.335	110561.210	16017.180
x		80321.096	23.400	52006.361	1929.438	2423.513	109105.680	16330.801
σ		1188.581	1.058	1998.833	69.299	901.042	1651.127	443.277
%RSD		1.480	4.523	3.843	3.592	37.179	1.513	2.714

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	12:32:50	187590.170	10.000	6231.087	620.011	130.000	91624.460	10.000
2	12:33:15	189257.630	20.000	5950.991	650.012	90.000	90689.706	10.000
3	12:33:39	185831.930	30.000	5680.904	620.011	200.001	91061.591	10.000
x		187559.910	20.000	5954.327	630.011	140.001	91125.252	10.000
σ		1713.049	10.000	275.107	17.321	55.678	470.617	0.000
%RSD		0.913	50.000	4.620	2.749	39.770	0.516	0.000

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	12:32:50	0.000	30.000	60.000	162.001	70.000	360.004	40.000
2	12:33:15	20.000	50.000	90.000	126.000	40.000	424.005	10.000
3	12:33:39	20.000	10.000	80.000	106.000	100.000	390.004	30.000
x		13.333	30.000	76.667	131.334	70.000	391.338	26.667
σ		11.547	20.000	15.275	28.379	30.000	32.022	15.275
%RSD		86.603	66.667	19.924	21.608	42.857	8.183	57.282

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	12:32:50	32.000	336592.630	100.000	130.000	210.001	200.001	260.002
2	12:33:15	16.000	340383.480	110.000	200.001	160.001	120.000	280.002
3	12:33:39	26.000	336317.520	100.000	220.001	140.001	90.000	290.002
x		24.667	337764.540	103.334	183.334	170.001	136.667	276.669
σ		8.083	2272.232	5.774	47.259	36.056	56.863	15.275
%RSD		32.769	0.673	5.587	25.777	21.209	41.607	5.521

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	12:32:50	295586.310	640.011	60.000	0.000	0.000	480.006	60.000
2	12:33:15	305429.900	610.010	80.000	0.000	0.000	430.005	30.000
3	12:33:39	300354.900	530.008	140.001	0.000	0.000	520.008	10.000
x		300457.040	593.343	93.334	0.000	0.000	476.673	33.333
σ		4922.587	56.864	41.634	0.000	0.000	45.094	25.166
%RSD		1.638	9.584	44.607	0.000	0.000	9.460	75.498

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	12:32:50	750746.460	799286.480	540.008	1110.035	620.011	608535.110
2	12:33:15	756793.870	794071.370	440.005	1350.051	740.015	620682.650
3	12:33:39	741408.200	809407.410	540.008	1350.051	610.010	619595.870
x		749649.510	800921.750	506.674	1270.045	656.679	616271.210
σ		7751.270	7797.698	57.737	138.574	72.345	6721.662
%RSD		1.034	0.974	11.395	10.911	11.017	1.091

S1 S 6/28/2011 12:35:33 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	12:35:33	81404.626	499.607	2007181.300	1403663.300	74143.605	1459274.900	68471.021
2	12:35:57	80173.073	488.007	1997469.500	1396756.000	72717.760	1464736.000	66593.942
3	12:36:21	79704.482	492.407	2009796.300	1388020.700	72135.405	1468616.000	68149.795
x		80427.394	493.340	2004815.700	1396146.700	72998.923	1464209.000	67738.253
σ		878.141	5.856	6494.985	7839.088	1033.202	4692.825	1003.933
%RSD		1.092	1.187	0.324	0.561	1.415	0.321	1.482

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	12:35:33	185195.370	50.000	22844.603	6761.280	7181.444	1173790.400	3840.413
2	12:35:57	183568.700	0.000	21813.315	7901.748	6811.299	1132731.900	4200.494
3	12:36:21	182427.090	30.000	21462.891	7411.538	7231.464	1124941.800	4340.528
x		183730.390	26.667	22040.270	7358.189	7074.736	1143821.300	4127.145
σ		1391.203	25.166	718.271	572.103	229.510	26244.591	257.999
%RSD		0.757	94.373	3.259	7.775	3.244	2.294	6.251

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	12:35:33	870.021	2060.119	2100.124	848.020	390.004	1542.067	590.010
2	12:35:57	860.021	1680.079	1940.105	876.021	320.003	1574.069	390.004
3	12:36:21	840.020	2020.114	2290.147	872.021	370.004	1412.056	530.008
x		856.687	1920.104	2110.125	865.354	360.004	1509.397	503.341
σ		15.276	208.828	175.235	15.144	36.056	85.805	102.635
%RSD		1.783	10.876	8.304	1.750	10.016	5.685	20.391

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	12:35:33	22.000	330123.540	100.000	60.000	130.000	60.000	120.000
2	12:35:57	22.000	326365.400	60.000	80.000	110.000	110.000	230.001
3	12:36:21	28.000	334748.450	100.000	120.000	110.000	70.000	230.001
x		24.000	330412.460	86.667	86.667	116.667	80.000	193.334
σ		3.464	4198.988	23.094	30.551	11.547	26.458	63.509
%RSD		14.434	1.271	26.647	35.251	9.897	33.072	32.849

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	12:35:33	293939.460	660.012	5700.910	160.001	1660.077	11433.659	20481.739
2	12:35:57	295423.660	850.020	5860.962	120.000	1690.080	10603.147	20211.432
3	12:36:21	305836.770	850.020	5890.972	120.000	1480.061	11463.678	19530.675
x		298399.960	786.684	5817.614	133.334	1610.073	11166.828	20074.615
σ		6483.079	109.701	102.177	23.094	113.588	488.393	490.071
%RSD		2.173	13.945	1.756	17.321	7.055	4.374	2.441

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	12:35:33	750329.470	811729.320	13915.420	32349.275	20932.261	602846.970
2	12:35:57	770512.230	810725.210	13395.022	33922.189	21653.120	615590.870
3	12:36:21	758963.080	827676.920	13535.128	31688.091	22113.684	614193.980
x		759934.930	816710.480	13615.190	32653.185	21566.355	610877.270
σ		10126.418	9510.470	269.279	1147.637	595.471	6989.431
%RSD		1.333	1.164	1.978	3.515	2.761	1.144

S2 S 6/28/2011 12:38:15 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	12:38:15	78018.059	47421.683	τ 19380860.000	τ 14494187.000	τ 17307915.000	2852708.000	524604.320
2	12:38:39	78691.505	46188.658	τ 19181082.000	τ 14193423.000	τ 16708646.000	2766142.500	519374.740
3	12:39:04	76416.155	46371.731	τ 19197354.000	τ 14201831.000	τ 16832402.000	2781065.900	519704.120
x		77708.573	46660.691	τ 19253099.000	τ 14296480.000	τ 16949654.000	2799972.100	521227.720
σ		1168.820	665.365	τ 110943.500	τ 171270.430	τ 316373.040	46276.120	2928.851
%RSD		1.504	1.426	τ 0.576	τ 1.198	τ 1.867	1.653	0.562

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	12:38:15	175063.940	23004.809	320347.890	309427.850	624833.720	τ 26128137.000	381440.870
2	12:38:39	177033.210	22604.298	321152.150	304839.950	616480.790	τ 25552324.000	375976.810
3	12:39:04	178113.880	22934.719	318342.510	311544.170	619357.820	τ 25752897.000	378468.620
x		176737.010	22847.942	319947.510	308603.990	620224.110	τ 25811119.000	378628.770
σ		1546.394	213.892	1446.979	3427.203	4243.310	τ 292288.710	2735.549
%RSD		0.875	0.936	0.452	1.111	0.684	τ 1.132	0.722

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	12:38:15	82409.720	92770.353	94811.029	59366.519	6631.231	21036.384	9152.345
2	12:38:39	83454.556	90307.778	94177.691	58652.164	6251.094	20093.298	8772.154
3	12:39:04	80892.808	89986.160	94961.827	59189.934	5910.978	20353.593	8692.115
x		82252.361	91021.430	94650.183	59069.539	6264.434	20494.425	8872.205
σ		1288.103	1523.124	416.078	372.085	360.312	487.060	245.887
%RSD		1.566	1.673	0.440	0.630	5.752	2.377	2.771

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	12:38:15	28.000	315492.590	85323.356	152821.130	160074.260	96590.528	258284.490
2	12:38:39	30.000	330103.160	82208.797	148958.700	162980.370	93644.900	250910.470
3	12:39:04	32.000	319452.060	84509.500	151812.590	162506.080	96449.770	253141.630
x		30.000	321682.600	84013.885	151197.470	161853.570	95561.733	254112.200
σ		2.000	7556.369	1615.347	2003.339	1559.068	1661.517	3781.607
%RSD		6.667	2.349	1.923	1.325	0.963	1.739	1.488

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	12:38:15	281765.570	14145.601	535706.740	11063.426	158510.410	517439.760	207417.660
2	12:38:39	291764.220	13885.396	518788.050	10222.925	155605.020	503407.100	200297.060
3	12:39:04	285504.250	13985.474	523832.140	9962.778	155181.360	514630.300	203088.330
x		286344.680	14005.490	526108.980	10416.377	156432.260	511825.720	203601.020
σ		5052.030	131.252	8686.110	575.260	1812.150	7424.837	3587.878
%RSD		1.764	0.937	1.651	5.523	1.158	1.451	1.762

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	12:38:15	734490.960	790424.820	1086508.100	2626702.800	1968379.600	573431.570
2	12:38:39	765931.340	819293.270	1080138.600	2649028.300	1942714.100	602712.550
3	12:39:04	752737.710	808058.320	1108340.400	2659912.100	1942136.000	582704.620
x		751053.340	805925.470	1091662.400	2645214.400	1951076.600	586282.910
σ		15787.723	14551.934	14790.562	16929.985	14987.697	14964.858
%RSD		2.102	1.806	1.355	0.640	0.768	2.552

S3 S 6/28/2011 12:40:58 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	12:40:58	74919.834	208662.240	τ85310695.000	τ62652465.000	τ75886805.000	τ12999789.000	2254496.700
2	12:41:22	72227.275	205872.940	τ84935181.000	τ62797371.000	τ76872623.000	τ12937747.000	2258780.800
3	12:41:47	71573.149	203615.070	τ84883212.000	τ62741663.000	τ77332947.000	τ12603758.000	2246857.800
x		72906.753	206050.080	τ85043029.000	τ62730500.000	τ76697459.000	τ12847098.000	2253378.400
σ		1773.794	2528.240	τ233256.800	τ73095.113	τ738812.260	τ213009.970	6039.621
%RSD		2.433	1.227	τ0.274	τ0.117	τ0.963	τ1.658	0.268

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	12:40:58	171620.760	101779.230	1393100.300	1342722.100	2703486.300	τ109349740.000	1629733.300
2	12:41:22	166290.680	103660.000	1394385.000	1329247.900	2644967.200	τ110451250.000	1603293.000
3	12:41:47	168703.150	97837.288	1382027.600	1363264.400	2625999.800	τ114632460.000	1567559.900
x		168871.530	101092.170	1389837.700	1345078.200	2658151.100	τ111477820.000	1600195.400
σ		2669.024	2971.537	6794.133	17130.178	40390.611	τ2786961.000	31202.224
%RSD		1.581	2.939	0.489	1.274	1.520	τ2.500	1.950

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	12:40:58	352005.560	396483.240	408857.630	259641.970	28021.969	90516.832	41337.791
2	12:41:22	345306.660	390156.150	404980.770	259702.840	26559.737	90014.302	39032.613
3	12:41:47	336867.750	401800.120	413625.570	261121.300	26740.006	89007.273	38731.959
x		344726.650	396146.510	409154.660	260155.370	27107.237	89846.136	39700.788
σ		7585.556	5829.284	4330.043	837.076	797.292	768.702	1425.635
%RSD		2.200	1.471	1.058	0.322	2.941	0.856	3.591

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	12:40:58	68.000	304575.490	367492.920	673827.810	735001.330	424977.500	1135201.500
2	12:41:22	72.000	295067.840	364278.040	667548.450	710270.100	421076.710	1113443.700
3	12:41:47	76.000	297843.360	382033.330	646038.610	723589.150	430149.140	1082824.100
x		72.000	299162.230	371268.100	662471.620	722953.530	425401.110	1110489.800
σ		4.000	4889.111	9460.528	14573.625	12377.864	4551.026	26313.336
%RSD		5.556	1.634	2.548	2.200	1.712	1.070	2.370

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	12:40:58	263530.310	58706.342	2175904.800	45136.974	684772.570	2272985.100	904438.550
2	12:41:22	250758.360	59177.894	2151529.600	46109.454	677772.980	2245965.300	888970.100
3	12:41:47	249369.110	62328.586	2168961.400	44605.641	693583.010	2288015.200	910631.690
x		254552.590	60070.941	2165465.200	45284.023	685376.190	2268988.500	901346.780
σ		7805.899	1969.343	12558.078	762.614	7922.279	21307.902	11156.856
%RSD		3.067	3.278	0.580	1.684	1.156	0.939	1.238

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	12:40:58	729211.050	781598.780	τ4793233.100	τ11567040.000	τ8851953.400	532420.620
2	12:41:22	693385.560	747348.280	τ4712860.100	τ11491723.000	τ8956008.600	528815.850
3	12:41:47	694715.790	757680.290	τ4834637.400	τ11722642.000	τ9013606.200	516760.510
x		705770.800	762209.120	τ4780243.500	τ11593801.000	τ8940522.700	525998.990
σ		20310.745	17568.635	τ61919.097	τ117762.980	τ81931.454	8201.264
%RSD		2.878	2.305	τ1.295	τ1.016	τ0.916	1.559

S4 S 6/28/2011 12:43:42 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	12:43:42	71404.978	399205.900	↹169750090.000	↹123878730.000	↹151780420.000	↹24937545.000	↹4867597.500
2	12:44:06	69352.914	393960.730	↹169185300.000	↹123562430.000	↹149524990.000	↹25261598.000	↹4710205.900
3	12:44:30	71113.318	388792.900	↹169252510.000	↹125288920.000	↹156734470.000	↹24956479.000	↹4791965.800
x		70623.737	393986.510	↹169395970.000	↹124243360.000	↹152679960.000	↹25051874.000	↹4789923.100
σ		1110.184	5206.551	↹308512.230	↹919192.700	↹3687959.200	↹181872.860	↹78715.669
%RSD		1.572	1.322	↹0.182	↹0.740	↹2.415	↹0.726	↹1.643

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	12:43:42	167007.330	195150.550	2716068.300	2653021.000	↹5296579.900	↹222312480.000	3087306.100
2	12:44:06	158934.150	196960.260	2697423.900	2580347.500	↹5251375.300	↹216660090.000	3051185.300
3	12:44:30	167956.160	200256.610	2719924.500	2675920.200	↹5273600.900	↹223252930.000	↹3262480.700
x		164632.550	197455.810	2711138.900	2636429.600	↹5273852.100	↹220741830.000	↹3133657.300
σ		4957.708	2588.852	12033.024	49899.800	↹22603.346	↹3566028.500	↹113016.680
%RSD		3.011	1.311	0.444	1.893	↹0.429	↹1.615	↹3.607

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	12:43:42	637852.060	758806.640	757930.590	487634.360	50431.112	167158.730	75127.705
2	12:44:06	649417.930	734303.480	748734.580	491814.690	51905.327	167764.370	73490.915
3	12:44:30	645862.400	767026.890	777474.470	501364.830	53219.186	168523.470	74183.771
x		644377.460	753379.010	761379.880	493604.630	51851.875	167815.520	74267.464
σ		5924.198	17023.507	14677.143	7038.065	1394.805	683.805	821.598
%RSD		0.919	2.260	1.928	1.426	2.690	0.407	1.106

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	12:43:42	84.000	289335.180	745816.180	1286672.800	1422216.600	849832.000	2146449.200
2	12:44:06	94.000	282811.920	719831.770	1307819.200	1416908.600	821710.630	2181769.900
3	12:44:30	110.000	292282.600	752904.530	1329861.200	1412801.500	859823.660	2245253.600
x		96.000	288143.230	739517.490	1308117.700	1417308.900	843788.770	2191157.600
σ		13.115	4846.545	17412.835	21595.724	4720.313	19762.117	50066.673
%RSD		13.661	1.682	2.355	1.651	0.333	2.342	2.285

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	12:43:42	238218.420	116800.740	↹4183282.700	85886.044	1339815.500	↹4486084.500	↹1870927.900
2	12:44:06	243042.770	114948.780	↹4224615.100	84208.081	1297731.600	↹4430198.400	↹1831083.700
3	12:44:30	245668.340	115824.410	↹4341735.600	85323.356	1322751.100	↹4447018.500	↹1890605.000
x		242309.840	115857.980	↹4249877.800	85139.160	1320099.400	↹4454433.800	↹1864205.500
σ		3778.654	926.436	↹82191.730	854.012	21166.887	↹28671.513	↹30324.706
%RSD		1.559	0.800	↹1.934	1.003	1.603	↹0.644	↹1.627

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	12:43:42	670911.010	717625.590	↹9289565.300	↹22902765.000	↹17509247.000	481289.670
2	12:44:06	671284.670	729117.330	↹9269845.200	↹22563168.000	↹17117781.000	496076.160
3	12:44:30	696721.710	732387.140	↹9246275.400	↹23075561.000	↹17676511.000	517244.220
x		679639.130	726376.690	↹9268562.000	↹22847165.000	↹17434513.000	498203.350
σ		14795.132	7753.015	↹21673.444	↹260681.910	↹286763.810	18071.417
%RSD		2.177	1.067	↹0.234	↹1.141	↹1.645	3.627

S5 S 6/28/2011 12:46:25 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	12:46:25	68823.873	735837.950	T 340600770.000	T 247015920.000	T 305278280.000	T 50377311.000	TM 9843969.800
2	12:46:50	65184.757	728282.060	T 335934730.000	T 246669130.000	T 303225350.000	T 49755950.000	TM 9796425.500
3	12:47:14	65792.981	723909.760	T 341044200.000	T 245752260.000	T 308952000.000	T 50145407.000	TM 9700928.300
x		66600.537	729343.260	T 339193230.000	T 246479100.000	T 305818540.000	T 50092889.000	TM 9780441.200
σ		1949.334	6034.487	T 2830639.400	T 652907.510	T 2901302.600	T 313991.980	TM 72848.050
%RSD		2.927	0.827	T 0.835	T 0.265	T 0.949	T 0.627	TM 0.745

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	12:46:25	161527.260	M 387580.980	T 5566998.100	T 5326433.200	T 10554467.000	T 437530520.000	T 6090313.200
2	12:46:50	162102.440	M 387703.600	T 5577426.900	T 5274419.400	T 10594720.000	T 435129990.000	T 6117558.800
3	12:47:14	162041.890	382676.900	T 5424818.700	T 5342888.700	T 10293733.000	T 434164830.000	T 6143756.400
x		161890.530	M 385987.160	T 5523081.200	T 5314580.400	T 10480974.000	T 435608450.000	T 6117209.500
σ		316.054	M 2867.425	T 85257.485	T 35740.415	T 163399.180	T 1733106.500	T 26723.315
%RSD		0.195	M 0.743	T 1.544	T 0.672	T 1.559	T 0.398	T 0.437

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	12:46:25	1239987.300	1417481.400	1380474.100	921365.830	93926.373	306495.930	132318.420
2	12:46:50	1229112.800	1415784.400	1366034.500	925438.530	94680.339	304667.030	135199.880
3	12:47:14	1207746.200	1422843.800	1388890.600	915072.280	93554.428	305989.360	132640.800
x		1225615.500	1418703.200	1378466.400	920625.550	94053.713	305717.440	133386.370
σ		16402.599	3684.841	11559.542	5222.627	573.655	944.284	1578.801
%RSD		1.338	0.260	0.839	0.567	0.610	0.309	1.184

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	12:46:25	250.002	285605.860	1438929.200	2538945.000	M 2826138.500	1674384.300	T 4346772.400
2	12:46:50	264.002	279662.900	M 1454974.300	2585683.000	M 2849781.200	M 1663252.600	TM 4386608.400
3	12:47:14	316.003	280170.770	M 1474047.300	2563006.100	2763391.400	M 1681016.000	TM 4371139.800
x		276.669	281813.180	M 1455983.600	2562544.700	M 2813103.700	M 1672884.300	TM 4368173.500
σ		34.776	3294.360	M 17580.839	23372.425	M 44645.613	M 8976.207	TM 20082.930
%RSD		12.570	1.169	M 1.207	0.912	M 1.587	M 0.537	TM 0.460

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	12:46:25	230457.560	215785.950	T 7846926.900	164544.620	2502028.200	T 8725089.800	T 3615740.900
2	12:46:50	227044.260	M 218630.230	T 7845944.400	M 166351.240	2510663.600	T 8791352.900	T 3638078.800
3	12:47:14	226132.800	M 217111.880	T 7962573.600	160720.030	2490272.400	T 8714306.000	T 3714966.300
x		227878.210	M 217176.020	T 7885148.300	M 163871.960	2500988.100	T 8743582.900	T 3656262.000
σ		2279.803	M 1423.226	T 67054.088	M 2875.240	10235.297	T 41719.930	T 52051.817
%RSD		1.000	M 0.655	T 0.850	M 1.755	0.409	T 0.477	T 1.424

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	12:46:25	662951.870	721111.900	T 18358596.000	T 43953047.000	TM 33288586.000	466032.900
2	12:46:50	639478.710	702553.670	T 18236818.000	T 43583402.000	TM 33940809.000	446380.280
3	12:47:14	662951.870	703063.140	T 18286001.000	T 43750598.000	TM 34082410.000	467202.880
x		655127.490	708909.570	T 18293805.000	T 43762349.000	TM 33770602.000	459872.020
σ		13552.236	10570.599	T 61262.608	T 185102.430	TM 423398.930	11698.824
%RSD		2.069	1.491	T 0.335	T 0.423	TM 1.254	2.544

ICV 6/28/2011 12:59:34 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	12:59:34	75095.570	38546.358	τ6878062.200	2982861.600	1528621.700	τ5283027.600	193917.220
2	12:59:58	74261.594	37837.645	τ6735019.500	2952258.100	1493780.300	τ5236013.900	193704.940
3	13:00:23	75706.140	37229.168	τ6702666.500	2920357.100	1475305.100	τ5246148.300	193027.660
x		75021.101	37871.057	τ6771916.000	2951825.600	1499235.700	τ5255063.300	193549.940
σ		725.147	659.230	τ93337.717	31254.468	27073.720	τ24742.228	464.594
%RSD		0.967	1.741	τ1.378	1.059	1.806	τ0.471	0.240

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	12:59:34	174336.880	30.000	278931.600	282182.070	540642.190	τ4736360.900	346020.270
2	12:59:58	169359.320	40.000	280912.280	273183.760	553579.640	τ4584483.000	332344.160
3	13:00:23	173357.410	40.000	280312.980	274493.620	546929.360	τ4591095.900	337958.060
x		172351.200	36.667	280052.290	276619.820	547050.390	τ4637313.300	338774.160
σ		2636.923	5.774	1015.751	4861.372	6469.576	τ85841.476	6874.484
%RSD		1.530	15.746	0.363	1.757	1.183	τ1.851	2.029

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	12:59:34	66453.420	81274.535	166684.330	101505.680	11083.439	35459.171	15246.506
2	12:59:58	67125.928	80792.355	158913.970	100073.630	10873.309	35890.030	15987.153
3	13:00:23	68230.101	78492.130	161466.720	99846.362	10473.070	34687.658	15296.549
x		67269.816	80186.340	162355.010	100475.220	10809.939	35345.620	15510.069
σ		897.038	1486.905	3960.608	899.606	310.079	609.176	413.924
%RSD		1.333	1.854	2.439	0.895	2.868	1.723	2.669

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	12:59:34	34.000	305490.930	340.003	470.006	290.002	290.002	740.015
2	12:59:58	30.000	303416.000	300.003	450.006	510.007	250.002	750.016
3	13:00:23	26.000	318149.100	170.001	390.004	420.005	220.001	740.015
x		30.000	309018.680	270.002	436.672	406.672	253.335	743.349
σ		4.000	7974.951	88.883	41.634	110.607	35.119	5.774
%RSD		13.333	2.581	32.919	9.534	27.198	13.863	0.777

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	12:59:34	275366.910	13695.250	489857.990	9342.443	147234.490	916563.930	173831.990
2	12:59:58	283970.080	13354.992	484587.070	9462.506	146115.360	928223.650	168390.220
3	13:00:23	288613.640	12704.518	479594.980	9812.695	142193.890	926255.290	169076.660
x		282650.210	13251.586	484680.010	9539.215	145181.250	923680.960	170432.960
σ		6721.274	503.395	5132.139	244.331	2646.949	6241.606	2963.592
%RSD		2.378	3.799	1.059	2.561	1.823	0.676	1.739

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	12:59:34	726139.610	761800.130	2052943.500	τ4997738.400	τ3801439.200	540621.580
2	12:59:58	733407.780	782120.910	2061735.100	τ4929598.200	τ3810021.100	564988.750
3	13:00:23	749443.400	802558.440	2044122.400	τ4954677.600	τ3718426.100	568765.860
x		736330.260	782159.830	2052933.700	τ4960671.400	τ3776628.800	558125.400
σ		11923.605	20379.179	8806.366	τ34463.269	τ50587.325	15275.942
%RSD		1.619	2.606	0.429	τ0.695	τ1.339	2.737

ICB 6/28/2011 1:02:20 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:02:20	77894.522	61.000	71962.710	11805.901	12594.440	108639.470	17308.384
2	13:02:44	74817.406	58.800	68848.468	11063.426	12184.155	113006.440	17418.491
3	13:03:08	74813.390	51.200	67152.026	10695.202	11493.698	106979.490	16857.954
x		75841.773	57.000	69321.068	11188.176	12090.764	109541.800	17194.943
σ		1777.734	5.142	2439.915	565.761	556.282	3113.149	296.989
%RSD		2.344	9.021	3.520	5.057	4.601	2.842	1.727

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:02:20	175235.610	50.000	2930.240	480.006	580.009	97766.904	250.002
2	13:02:44	172721.290	50.000	3270.299	510.007	580.009	102211.690	190.001
3	13:03:08	170873.650	20.000	3160.280	650.012	400.004	99164.579	220.001
x		172943.520	40.000	3120.273	546.675	520.008	99714.390	220.001
σ		2189.458	17.321	173.524	90.741	103.926	2272.828	30.000
%RSD		1.266	43.301	5.561	16.599	19.985	2.279	13.636

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:02:20	100.000	150.001	110.000	124.000	50.000	454.006	20.000
2	13:02:44	70.000	90.000	120.000	108.000	50.000	422.005	60.000
3	13:03:08	80.000	90.000	100.000	120.000	10.000	420.005	20.000
x		83.334	110.000	110.000	117.334	36.667	432.005	33.333
σ		15.275	34.641	10.000	8.327	23.094	19.079	23.094
%RSD		18.330	31.492	9.091	7.097	62.984	4.416	69.282

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:02:20	12.000	317925.170	220.001	290.002	290.002	120.000	600.010
2	13:02:44	18.000	312622.780	200.001	280.002	330.003	200.001	480.006
3	13:03:08	22.000	320307.170	250.002	270.002	350.003	200.001	400.004
x		17.333	316951.710	223.335	280.002	323.336	173.334	493.340
σ		5.033	3933.599	25.166	10.000	30.551	46.188	100.667
%RSD		29.038	1.241	11.268	3.571	9.449	26.647	20.405

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:02:20	288481.530	490.007	440.005	10.000	70.000	11603.769	200.001
2	13:02:44	286367.920	580.009	310.003	0.000	80.000	9952.773	150.001
3	13:03:08	282588.420	470.006	370.004	0.000	100.000	8572.057	80.000
x		285812.620	513.341	373.337	3.333	83.334	10042.866	143.334
σ		2985.542	58.596	65.065	5.774	15.275	1517.863	60.278
%RSD		1.045	11.415	17.428	173.205	18.330	15.114	42.054

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:02:20	739511.950	802307.530	930.024	2490.174	3560.355	579761.100
2	13:02:44	720768.440	775720.610	990.027	2320.151	2930.240	581816.350
3	13:03:08	713234.820	784972.020	900.023	2350.155	2140.128	578005.550
x		724505.070	787666.720	940.025	2386.826	2876.908	579861.000
σ		13531.208	13496.746	45.828	90.750	711.614	1907.366
%RSD		1.868	1.714	4.875	3.802	24.735	0.329

ICSA 6/28/2011 1:05:06 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:05:06	68920.244	123.800	T 315514620.000	T 228533070.000	T 273971930.000	TM 242899290.000	T 9037504.000
2	13:05:30	66691.304	111.000	T 321100820.000	T 231966810.000	T 278399550.000	TM 247960990.000	TM 9263735.200
3	13:05:55	66392.695	120.000	T 323972440.000	T 234112820.000	T 278157040.000	TM 249215130.000	TM 9500231.100
x		67334.748	118.267	T 320195960.000	T 231537570.000	T 276842840.000	TM 246691800.000	TM 9267156.800
σ		1381.174	6.574	T 4300901.500	T 2814528.100	T 2489233.200	TM 3343740.300	TM 231382.550
%RSD		2.051	5.558	T 1.343	T 1.216	T 0.899	TM 1.355	TM 2.497

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:05:06	155978.260	M 457147.600	32800.096	50421.084	38371.181	T 399983180.000	3400.324
2	13:05:30	158550.760	M 465745.540	34964.196	50160.351	38922.372	T 400993690.000	3770.398
3	13:05:55	153749.050	M 461189.560	34373.050	52517.112	39283.161	T 408314270.000	3830.411
x		156092.690	M 461360.900	34045.781	51032.849	38858.905	T 403097050.000	3667.044
σ		2402.902	M 4301.533	1118.553	1292.004	459.291	T 4546412.700	232.928
%RSD		1.539	M 0.932	3.285	2.532	1.182	T 1.128	6.352

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:05:06	3460.335	6291.108	7891.743	1052.031	350.003	528.008	20.000
2	13:05:30	3320.309	6761.280	8121.847	1082.033	300.003	438.005	30.000
3	13:05:55	3580.359	6551.202	8602.071	1180.039	450.006	490.007	50.000
x		3453.668	6534.530	8205.221	1104.701	366.671	485.340	33.333
σ		130.153	235.529	362.429	66.947	76.378	45.182	15.275
%RSD		3.769	3.604	4.417	6.060	20.830	9.309	45.826

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:05:06	180.001	265620.940	1349527.500	2410896.200	2560594.000	M 1551831.200	TM 4162583.600
2	13:05:30	152.001	263895.640	M 1357402.100	2446780.700	M 2607097.200	1538215.400	TM 4195730.400
3	13:05:55	178.001	271061.790	1362078.900	2431328.200	M 2656552.800	1561491.200	TM 4149444.300
x		170.001	266859.460	M 1356336.200	2429668.400	M 2608081.400	M 1550512.600	TM 4169252.800
σ		15.621	3740.168	M 6343.188	17999.751	M 47986.956	M 11693.823	TM 23852.866
%RSD		9.189	1.402	M 0.468	0.741	M 1.840	M 0.754	TM 0.572

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:05:06	212658.770	410.005	190.001	2910.237	3540.351	7301.492	2420.164
2	13:05:30	210705.820	340.003	100.000	2860.229	3770.398	7651.639	2250.142
3	13:05:55	214875.060	560.009	150.001	2600.189	3710.385	8241.902	2270.144
x		212746.550	436.672	146.667	2790.218	3673.712	7731.678	2313.483
σ		2086.006	112.401	45.093	166.459	119.328	475.286	92.928
%RSD		0.981	25.740	30.745	5.966	3.248	6.147	4.017

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:05:06	637075.050	664456.270	280.002	890.022	66162.342	422806.870
2	13:05:30	639406.180	678686.720	250.002	700.014	65158.662	438857.220
3	13:05:55	634868.510	677939.110	420.005	860.021	65248.991	436439.020
x		637116.580	673694.030	316.670	816.686	65523.332	432701.040
σ		2269.121	8008.868	90.739	102.148	555.239	8653.484
%RSD		0.356	1.189	28.654	12.508	0.847	2.000

ICSAB 6/28/2011 1:07:52 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:07:52	67695.071	6667.845	T 321634130.000	T 233240980.000	T 282645450.000	TM 249535870.000	T 9284468.800
2	13:08:17	67499.332	6614.625	T 325430740.000	T 234303700.000	T 279946150.000	TM 252529470.000	T 9463666.400
3	13:08:41	66502.101	6594.618	T 325545080.000	T 235974520.000	T 283708420.000	TM 248874620.000	TM 9629331.000
x		67232.168	6625.696	T 324203320.000	T 234506400.000	T 282100010.000	TM 250313320.000	TM 9459155.400
σ		639.787	37.848	T 2225712.900	T 1377995.800	T 1939539.200	TM 1947512.600	TM 172475.350
%RSD		0.952	0.571	T 0.687	T 0.588	T 0.688	TM 0.778	TM 1.823

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:07:52	161133.730	M 463231.400	84298.506	100934.450	139895.850	T 406940810.000	64134.966
2	13:08:17	164342.780	M 471955.430	86097.057	102483.240	142909.570	T 406463480.000	63231.753
3	13:08:41	162102.440	M 460615.010	86318.120	105219.080	145157.590	T 413619560.000	64676.915
x		162526.310	M 465267.280	85571.228	102878.920	142654.340	T 409007950.000	64014.545
σ		1645.979	M 5938.004	1107.737	2169.546	2640.142	T 4000895.100	730.068
%RSD		1.013	M 1.276	1.295	2.109	1.851	T 0.978	1.140

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:07:52	14275.704	18990.092	20271.500	9210.375	1460.060	3240.294	1310.048
2	13:08:17	14846.169	19020.124	20441.693	9678.622	1340.050	3274.300	1300.047
3	13:08:41	14305.728	19430.566	20822.133	9902.745	1370.053	3544.352	1350.051
x		14475.867	19146.927	20511.775	9597.247	1390.054	3352.982	1320.049
σ		321.042	246.097	281.927	353.285	62.455	166.601	26.459
%RSD		2.218	1.285	1.374	3.681	4.493	4.969	2.004

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:07:52	184.001	267143.400	M 1377734.100	2418418.800	2590605.800	M 1562722.300	TM 4204987.700
2	13:08:17	180.001	275194.280	1370034.200	2471926.400	2669797.200	1561687.300	T 4232102.400
3	13:08:41	188.001	272960.380	M 1378748.100	2421417.300	M 2644171.200	M 1588537.800	TM 4182770.300
x		184.001	271766.020	M 1375505.500	2437254.200	M 2634858.100	M 1570982.400	TM 4206620.100
σ		4.000	4156.204	M 4765.287	30064.427	M 40408.805	M 15212.146	TM 24706.494
%RSD		2.174	1.529	M 0.346	1.234	M 1.534	M 0.968	TM 0.587

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:07:52	211565.900	2350.155	74525.188	4600.593	28823.243	89895.707	36116.486
2	13:08:17	223955.620	2510.176	75428.971	4650.606	27300.853	92679.885	35124.511
3	13:08:41	211353.410	2630.194	73149.518	4450.555	28162.190	93695.163	36467.198
x		215624.980	2496.842	74367.892	4567.251	28095.429	92090.252	35902.732
σ		7215.330	140.495	1147.839	104.110	763.387	1967.160	696.398
%RSD		3.346	5.627	1.543	2.279	2.717	2.136	1.940

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:07:52	640908.630	672208.460	178800.690	440138.170	377171.610	424916.060
2	13:08:17	651221.870	690642.260	184397.170	442761.850	382513.450	436643.940
3	13:08:41	646536.140	692159.330	188792.750	447702.780	381267.220	433724.060
x		646222.210	685003.350	183996.870	443534.270	380317.430	431761.360
σ		5163.783	11106.633	5008.041	3841.000	2794.708	6105.323
%RSD		0.799	1.621	2.722	0.866	0.735	1.414

CCV1 CCV 6/28/2011 1:10:38 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:10:38	72845.278	380268.250	±169724960.000	±122675640.000	±152648340.000	±25955779.000	±4991233.100
2	13:11:03	69095.419	385339.850	±172027720.000	±125502360.000	±154870500.000	±26005659.000	±5004868.300
3	13:11:27	68233.113	384892.560	±174254210.000	±126660100.000	±156441530.000	±26191786.000	±4943842.000
x		70057.936	383500.220	±172002300.000	±124946030.000	±154653460.000	±26051075.000	±4979981.100
σ		2452.111	2807.886	±2264735.200	±2049658.900	±1905888.500	±124385.640	±32031.335
%RSD		3.500	0.732	±1.317	±1.640	±1.232	±0.477	±0.643

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:10:38	178618.890	201025.180	2795454.400	2640549.400	±5374611.700	±221889960.000	±3177600.300
2	13:11:03	163192.300	200337.510	2823751.300	2691051.200	±5461684.300	±224182180.000	3115986.400
3	13:11:27	168824.290	202683.770	2811587.400	2724673.300	±5457110.100	±227083430.000	±3290133.800
x		170211.820	201348.820	2810264.400	2685424.600	±5431135.400	±224385190.000	±3194573.500
σ		7806.334	1206.145	14194.799	42343.300	±49004.352	±2602680.200	±88305.654
%RSD		4.586	0.599	0.505	1.577	±0.902	±1.160	±2.764

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:10:38	664352.510	762426.020	754458.080	500564.850	50240.576	168870.730	74565.355
2	13:11:03	662412.400	770345.250	775355.240	505085.510	52577.289	171057.390	74053.231
3	13:11:27	677222.680	777401.390	774269.630	506315.620	52125.968	171142.200	75890.922
x		667995.860	770057.550	768027.650	503988.660	51647.944	170356.770	74836.503
σ		8049.325	7491.830	11764.124	3028.222	1239.531	1287.652	948.376
%RSD		1.205	0.973	1.532	0.601	2.400	0.756	1.267

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:10:38	128.000	305094.230	742418.920	1332992.200	1469580.800	851047.900	2199105.600
2	13:11:03	114.000	291428.810	744982.430	1321783.200	1464985.200	860589.250	2201990.800
3	13:11:27	112.000	291134.060	756929.430	1341570.200	1464573.400	853018.670	2231126.500
x		118.000	295885.700	748110.260	1332115.200	1466379.800	854885.280	2210741.000
σ		8.718	7976.183	7744.435	9922.599	2779.757	5037.112	17713.227
%RSD		7.388	2.696	1.035	0.745	0.190	0.589	0.801

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:10:38	256732.350	118461.630	±4308613.400	87322.988	1353114.300	±4580629.800	±1862454.900
2	13:11:03	243377.280	119126.030	±4301876.700	86147.298	1356658.700	±4683585.100	±1909581.800
3	13:11:27	243590.160	119730.050	±4408962.200	89202.242	1359794.200	±4678091.400	±1962380.600
x		247899.930	119105.900	±4339817.500	87557.509	1356522.400	±4647435.400	±1911472.400
σ		7649.840	634.448	±59975.798	1540.916	3342.037	±57920.564	±49989.660
%RSD		3.086	0.533	±1.382	1.760	0.246	±1.246	±2.615

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:10:38	728232.300	788565.250	±9453689.600	±22895983.000	±17367481.000	510051.710
2	13:11:03	679787.420	744315.470	±9570438.700	±23130294.000	±17768931.000	489375.020
3	13:11:27	696004.540	754312.100	±9628499.000	±23212788.000	±17866055.000	496148.120
x		701341.420	762397.610	±9550875.800	±23079688.000	±17667489.000	498524.950
σ		24659.442	23206.515	±89031.503	±164353.310	±264313.880	10541.271
%RSD		3.516	3.044	±0.932	±0.712	±1.496	2.114

CCB1 CCB 6/28/2011 1:13:24 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:13:24	76668.734	85.800	128528.890	17538.609	19941.128	132882.590	17418.491
2	13:13:48	76199.231	78.400	111507.060	15422.657	17348.423	127110.800	17008.096
3	13:14:13	76539.682	72.600	103249.630	13937.437	14105.569	128289.180	17908.976
x		76469.216	78.934	114428.530	15632.901	17131.707	129427.520	17445.188
σ		242.554	6.616	12890.363	1809.768	2923.810	3049.632	451.033
%RSD		0.317	8.382	11.265	11.577	17.067	2.356	2.585

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:13:24	177184.700	50.000	3610.365	750.016	580.009	127463.300	310.003
2	13:13:48	184114.280	110.000	3570.357	750.016	650.012	123263.970	280.002
3	13:14:13	183225.200	70.000	3580.359	450.006	540.008	120948.210	220.001
x		181508.060	76.667	3587.027	650.012	590.010	123891.830	270.002
σ		3770.435	30.551	20.821	173.211	55.680	3302.608	45.826
%RSD		2.077	39.849	0.580	26.647	9.437	2.666	16.973

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:13:24	110.000	110.000	150.001	192.001	10.000	528.008	40.000
2	13:13:48	50.000	110.000	190.001	178.001	10.000	568.009	50.000
3	13:14:13	40.000	70.000	230.001	154.001	40.000	562.009	30.000
x		66.667	96.667	190.001	174.668	20.000	552.675	40.000
σ		37.860	23.094	40.000	19.218	17.321	21.572	10.000
%RSD		56.789	23.890	21.053	11.003	86.603	3.903	25.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:13:24	18.000	311249.090	1040.030	1540.066	1920.103	1010.029	2510.176
2	13:13:48	16.000	316235.560	870.021	1560.068	1570.069	980.027	2510.176
3	13:14:13	18.000	323106.940	700.014	1210.041	1590.071	840.020	2310.149
x		17.333	316863.860	870.022	1436.725	1693.414	943.358	2443.501
σ		1.155	5953.839	170.008	196.569	196.573	90.742	115.486
%RSD		6.662	1.879	19.541	13.682	11.608	9.619	4.726

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:13:24	286276.470	660.012	600.010	0.000	150.001	3740.392	200.001
2	13:13:48	289599.410	510.007	400.004	10.000	110.000	4130.478	140.001
3	13:14:13	299470.230	570.009	510.007	10.000	100.000	3540.351	130.000
x		291782.040	580.010	503.341	6.667	120.000	3803.740	156.667
σ		6862.339	75.501	100.169	5.774	26.458	300.120	37.860
%RSD		2.352	13.017	19.901	86.603	22.048	7.890	24.166

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:13:24	744899.060	778226.170	1950.107	4960.689	3900.426	571945.020
2	13:13:48	741178.970	794834.210	1870.098	4620.598	3210.289	593491.280
3	13:14:13	749349.580	804063.940	1970.109	4740.629	2840.226	594865.900
x		745142.540	792374.770	1930.104	4773.972	3316.980	586767.400
σ		4090.745	13093.290	52.921	172.480	538.092	12854.945
%RSD		0.549	1.652	2.742	3.613	16.222	2.191

PBW 6/28/2011 1:16:10 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:16:10	79165.593	36.400	69159.667	3220.290	2090.122	126556.880	18509.588
2	13:16:34	78140.091	37.600	65624.362	3242.294	2240.141	113429.110	18149.218
3	13:16:59	81436.270	37.600	63669.304	3156.279	2950.244	117354.350	18319.392
x		79580.651	37.200	66151.111	3206.288	2426.836	119113.450	18326.066
σ		1686.832	0.693	2782.826	44.685	459.449	6738.353	180.277
%RSD		2.120	1.862	4.207	1.394	18.932	5.657	0.984

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:16:10	185973.390	40.000	3040.259	380.004	160.001	93212.647	40.000
2	13:16:34	182154.330	40.000	3190.285	450.006	150.001	92448.691	10.000
3	13:16:59	190187.430	10.000	3220.290	460.006	210.001	92679.885	20.000
x		186105.050	30.000	3150.278	430.005	173.334	92780.408	23.333
σ		4018.168	17.321	96.453	43.590	32.146	391.773	15.275
%RSD		2.159	57.735	3.062	10.137	18.546	0.422	65.465

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:16:10	30.000	100.000	170.001	86.000	50.000	462.006	20.000
2	13:16:34	70.000	50.000	220.001	100.000	50.000	454.006	20.000
3	13:16:59	30.000	30.000	190.001	74.000	30.000	440.005	40.000
x		43.333	60.000	193.334	86.667	43.333	452.006	26.667
σ		23.094	36.056	25.166	13.013	11.547	11.136	11.547
%RSD		53.294	60.093	13.017	15.015	26.647	2.464	43.301

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:16:10	26.000	321101.240	230.001	370.004	320.003	190.001	430.005
2	13:16:34	22.000	328300.380	200.001	400.004	350.003	220.001	880.022
3	13:16:59	24.000	328779.070	290.002	350.003	400.004	250.002	470.006
x		24.000	326060.230	240.002	373.337	356.670	220.001	593.344
σ		2.000	4301.275	45.826	25.167	40.415	30.000	249.074
%RSD		8.333	1.319	19.094	6.741	11.331	13.636	41.978

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:16:10	292353.750	660.012	140.001	10.000	0.000	1030.030	30.000
2	13:16:34	300863.350	420.005	110.000	0.000	0.000	1560.068	30.000
3	13:16:59	299765.110	560.009	90.000	20.000	40.000	1360.052	30.000
x		297660.740	546.675	113.334	10.000	13.333	1316.717	30.000
σ		4628.675	120.558	25.166	10.000	23.094	267.663	0.000
%RSD		1.555	22.053	22.205	100.000	173.205	20.328	0.000

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:16:10	742939.930	789578.580	740.015	1480.061	1200.040	576002.360
2	13:16:34	743763.160	797969.500	660.012	1500.063	630.011	596323.320
3	13:16:59	769145.150	812367.380	660.012	1810.092	970.026	607335.280
x		751949.410	799971.820	686.680	1596.739	933.359	593220.320
σ		14897.634	11525.590	46.190	185.040	286.778	15895.266
%RSD		1.981	1.441	6.727	11.589	30.725	2.679

LCS 6/28/2011 1:18:53 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:18:53	81809.972	844.020	T 4029046.100	2871617.900	136046.270	2956046.800	126325.250
2	13:19:17	79902.866	875.821	T 4035355.800	2914373.500	134736.400	2975670.900	124552.870
3	13:19:41	80346.852	843.020	T 4044477.300	2910330.900	142203.970	2933831.100	124260.840
x		80686.563	854.287	T 4036293.100	2898774.100	137662.210	2955182.900	125046.320
σ		997.906	18.656	T 7758.157	23604.657	3987.430	20933.254	1117.170
%RSD		1.237	2.184	T 0.192	0.814	2.897	0.708	0.893

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:18:53	187428.490	60.000	35054.373	13815.342	13515.112	2125501.700	8441.995
2	13:19:17	187772.070	50.000	36046.345	13955.451	13865.381	2172573.400	7971.779
3	13:19:41	192431.280	20.000	35525.302	13294.947	14135.593	2178718.900	8051.815
x		189210.610	43.333	35542.007	13688.580	13838.695	2158931.400	8155.196
σ		2794.463	20.817	496.197	348.020	311.100	29113.525	251.578
%RSD		1.477	48.038	1.396	2.542	2.248	1.349	3.085

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:18:53	1770.088	3980.444	3670.377	1540.066	430.005	1952.107	770.017
2	13:19:17	1620.074	3670.377	3450.333	1550.067	470.006	1986.110	720.015
3	13:19:41	1630.074	3440.331	3470.337	1410.056	510.007	2072.120	910.023
x		1673.412	3697.051	3530.349	1500.063	470.006	2003.446	800.018
σ		83.873	271.042	121.680	78.109	40.001	61.856	98.493
%RSD		5.012	7.331	3.447	5.207	8.511	3.087	12.311

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:18:53	18.000	332038.550	300.003	250.002	380.004	270.002	510.007
2	13:19:17	24.000	333301.760	250.002	420.005	460.006	180.001	530.008
3	13:19:41	14.000	329756.850	200.001	310.003	360.004	150.001	590.010
x		18.667	331699.060	250.002	326.670	400.005	200.001	543.342
σ		5.033	1796.674	50.001	86.218	52.916	62.451	41.635
%RSD		26.964	0.542	20.000	26.393	13.229	31.225	7.663

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:18:53	294712.040	900.023	11523.717	280.002	3100.269	21042.391	39032.613
2	13:19:17	304077.100	930.024	10963.364	250.002	2890.234	22444.096	39503.647
3	13:19:41	294976.350	790.017	11173.495	180.001	3340.312	22363.995	39834.380
x		297921.830	873.355	11220.192	236.668	3110.272	21950.161	39456.880
σ		5332.260	73.715	283.080	51.317	225.206	787.171	402.925
%RSD		1.790	8.440	2.523	21.683	7.241	3.586	1.021

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:18:53	774415.770	804461.250	25117.653	60903.682	43011.738	574680.780
2	13:19:17	771221.900	832461.820	25368.006	59649.460	41407.954	582787.260
3	13:19:41	765242.740	819837.410	24887.331	60913.717	43583.121	582911.200
x		770293.470	818920.160	25124.330	60488.953	42667.604	580126.410
σ		4656.456	14022.799	240.407	727.040	1127.679	4716.462
%RSD		0.605	1.712	0.957	1.202	2.643	0.813

14936L MF4N43L 6/28/2011 1:21:37 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:21:37	78554.403	34.000	↹140860460.000	↹20567937.000	500044.580	↹5123448.200	↹3409299.700
2	13:22:02	79320.277	36.600	↹140803190.000	↹20364831.000	508220.600	↹5292568.700	3112759.600
3	13:22:26	78115.986	31.800	↹140963690.000	↹20628580.000	537839.430	↹5310810.600	↹3452503.200
x		78663.556	34.133	↹140875780.000	↹20520449.000	515368.200	↹5242275.800	↹3324854.100
σ		609.520	2.403	↹81340.678	↹138138.580	19885.394	↹103311.190	↹184945.190
%RSD		0.775	7.039	↹0.058	↹0.673	3.858	↹1.971	↹5.563

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:21:37	168592.110	510.007	22924.706	10623.159	13695.250	351577.250	740.015
2	13:22:02	178830.990	610.010	23195.055	10673.189	13545.135	340791.140	730.015
3	13:22:26	171711.630	550.008	25408.063	10473.070	13935.435	358380.500	600.010
x		173044.910	556.675	23842.608	10589.806	13725.273	350249.630	690.013
σ		5248.038	50.334	1362.446	104.145	196.875	8869.512	78.105
%RSD		3.033	9.042	5.714	0.983	1.434	2.532	11.319

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:21:37	2210.137	850.020	1440.058	752.016	280.002	920.024	340.003
2	13:22:02	2290.147	430.005	1440.058	772.017	180.001	804.018	320.003
3	13:22:26	2270.144	540.008	1270.045	792.018	250.002	824.019	330.003
x		2256.809	606.678	1383.387	772.017	236.668	849.354	330.003
σ		41.639	217.800	98.157	20.001	51.317	62.014	10.000
%RSD		1.845	35.900	7.095	2.591	21.683	7.301	3.030

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:21:37	26.000	290940.950	2300.148	2390.160	3010.254	1520.065	4340.528
2	13:22:02	16.000	305572.300	2380.159	2470.171	2820.223	1750.086	4550.580
3	13:22:26	14.000	296785.970	2330.152	2840.226	2840.226	1650.076	4610.595
x		18.667	297766.410	2336.820	2566.852	2890.234	1640.076	4500.567
σ		6.429	7364.785	40.420	240.105	104.420	115.336	141.810
%RSD		34.442	2.473	1.730	9.354	3.613	7.032	3.151

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:21:37	251863.750	530.008	110.000	0.000	0.000	970.026	22574.260
2	13:22:02	260435.400	680.013	70.000	40.000	10.000	1310.048	22834.590
3	13:22:26	258183.040	500.007	60.000	10.000	0.000	1080.033	21763.254
x		256827.400	570.009	80.000	16.667	3.333	1120.036	22390.701
σ		4443.715	96.440	26.458	20.817	5.774	173.505	558.758
%RSD		1.730	16.919	33.072	124.900	173.205	15.491	2.495

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:21:37	675021.650	722631.520	370.004	1170.038	4240.503	476421.710
2	13:22:02	717521.530	753144.330	410.005	830.019	4360.532	517347.140
3	13:22:26	692606.170	744940.750	230.001	760.016	3730.390	504404.660
x		695049.780	740238.860	336.670	920.025	4110.475	499391.170
σ		21355.054	15790.462	94.518	219.329	334.590	20918.269
%RSD		3.072	2.133	28.074	23.839	8.140	4.189

14936 MF4N43 6/28/2011 1:24:20 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:24:20	104042.210	65.000	TM 832580990.000	T 121216030.000	T 2153168.800	T 30630496.000	TM 20096841.000
2	13:24:44	101395.050	64.200	TM 830605330.000	T 119594270.000	T 2089532.800	T 29999495.000	TM 19621347.000
3	13:25:08	99396.865	56.200	TM 841015600.000	T 121487140.000	T 2029502.200	T 30625355.000	TM 19908911.000
x		101611.380	61.800	TM 834733970.000	T 120765810.000	T 2090734.600	T 30418449.000	TM 19875700.000
σ		2330.217	4.866	TM 5529008.500	T 1023601.300	T 61842.055	T 362833.590	TM 239480.500
%RSD		2.293	7.874	TM 0.662	T 0.848	T 2.958	T 1.193	TM 1.205

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:24:20	204109.870	3950.437	102201.630	59759.828	72788.045	T 1984687.400	3740.392
2	13:24:44	202430.920	5680.904	99074.079	56719.937	73089.272	T 1844614.300	3120.273
3	13:25:08	202936.620	4430.550	104364.080	58957.166	74786.276	1714067.400	3750.394
x		203159.140	4687.297	101879.930	58478.977	73554.531	T 1847789.700	3537.019
σ		861.310	893.346	2659.635	1575.351	1077.303	T 135337.950	360.948
%RSD		0.424	19.059	2.611	2.694	1.465	T 7.324	10.205

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:24:20	12074.081	2610.191	6821.303	4454.556	1680.079	2628.193	2050.118
2	13:24:44	12134.121	2310.149	6231.087	4676.612	1580.070	2472.171	1820.093
3	13:25:08	11793.893	2450.168	6471.172	4782.640	1380.053	2566.184	1880.099
x		12000.698	2456.836	6507.854	4637.936	1546.734	2555.516	1916.770
σ		181.597	150.132	296.813	167.427	152.766	78.556	119.317
%RSD		1.513	6.111	4.561	3.610	9.877	3.074	6.225

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:24:20	36.000	301107.410	11253.545	14435.833	15326.574	8722.130	24506.805
2	13:24:44	36.000	305643.510	11243.539	14145.601	16117.270	9062.299	23855.924
3	13:25:08	28.000	300700.650	10993.383	14565.938	16247.388	8912.223	24426.695
x		33.333	302483.860	11163.489	14382.457	15897.078	8898.884	24263.141
σ		4.619	2743.887	147.401	215.192	498.335	170.477	354.928
%RSD		13.856	0.907	1.320	1.496	3.135	1.916	1.463

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:24:20	241157.470	680.013	240.002	90.000	60.000	3430.329	114717.300
2	13:24:44	242029.150	490.007	190.001	80.000	40.000	3540.351	115935.130
3	13:25:08	235928.310	530.008	180.001	60.000	70.000	3250.296	119216.630
x		239704.980	566.676	203.335	76.667	56.667	3406.992	116623.020
σ		3299.599	100.170	32.146	15.275	15.275	146.429	2327.205
%RSD		1.377	17.677	15.809	19.924	26.956	4.298	1.995

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:24:20	691255.310	730460.590	490.007	1720.083	11763.874	440107.430
2	13:24:44	691754.070	740501.720	640.011	1320.049	11964.007	446349.520
3	13:25:08	690070.790	733720.230	700.014	1330.050	12344.265	443489.580
x		691026.720	734894.180	610.011	1456.727	12024.048	443315.510
σ		864.610	5122.470	108.170	228.128	294.818	3124.687
%RSD		0.125	0.697	17.732	15.660	2.452	0.705

14936D MF4N43D 6/28/2011 1:27:03 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:27:03	105451.950	67.400	TM 844990180.000	T 122025990.000	T 2341643.100	T 30636330.000	TM 20137134.000
2	13:27:27	102876.490	62.400	TM 851472590.000	T 123420030.000	T 2536201.700	T 31340101.000	TM 20447525.000
3	13:27:51	102793.010	63.000	TM 850895660.000	T 122798740.000	T 2291888.100	T 30924986.000	TM 20145969.000
x		103707.150	64.267	TM 849119480.000	T 122748250.000	T 2389911.000	T 30967139.000	TM 20243542.000
σ		1511.616	2.730	TM 3587690.700	T 698387.500	T 129110.900	T 353773.920	TM 176709.350
%RSD		1.458	4.248	TM 0.423	T 0.569	T 5.402	T 1.142	TM 0.873

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:27:03	219338.840	4750.632	113851.790	71030.991	80902.853	2092190.700	4360.532
2	13:27:27	214247.590	4750.632	115029.300	70549.086	82329.351	T 2289645.500	4120.475
3	13:27:51	210968.900	3940.435	111969.950	70267.981	82238.936	2136753.200	4440.552
x		214851.780	4480.566	113617.010	70616.019	81823.713	T 2172863.200	4307.187
σ		4217.554	467.768	1543.130	385.883	798.768	T 103561.790	166.573
%RSD		1.963	10.440	1.358	0.546	0.976	T 4.766	3.867

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:27:03	12624.461	2290.147	6321.119	5284.782	1990.111	2568.185	1870.098
2	13:27:27	13334.977	2360.156	6131.052	5288.783	1760.087	2760.213	2100.124
3	13:27:51	12784.575	2960.245	6401.147	5508.850	1640.075	2746.211	2060.119
x		12914.671	2536.849	6284.439	5360.805	1796.758	2691.536	2010.113
σ		372.696	368.339	138.733	128.226	177.876	107.055	122.896
%RSD		2.886	14.520	2.208	2.392	9.900	3.977	6.114

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:27:03	42.000	317955.700	10923.340	14535.914	15466.695	8952.243	24947.414
2	13:27:27	24.000	313060.340	11133.470	14666.020	15776.966	9042.289	25307.921
3	13:27:51	42.000	305694.370	10783.255	14355.768	15957.126	9352.449	24226.423
x		36.000	312236.810	10946.688	14519.234	15733.596	9115.660	24827.253
σ		10.392	6172.015	176.271	155.797	248.075	209.949	550.671
%RSD		28.868	1.977	1.610	1.073	1.577	2.303	2.218

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:27:03	252888.080	600.010	260.002	30.000	80.000	3270.299	122257.080
2	13:27:27	248020.520	520.008	210.001	20.000	60.000	3190.285	123878.200
3	13:27:51	248233.450	530.008	190.001	60.000	100.000	3100.269	124019.170
x		249714.010	550.009	220.001	36.667	80.000	3186.951	123384.820
σ		2750.880	43.590	36.056	20.817	20.000	85.064	979.187
%RSD		1.102	7.925	16.389	56.773	25.000	2.669	0.794

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:27:03	712974.740	755094.130	580.009	1210.041	11743.860	445242.390
2	13:27:27	693073.800	748036.200	380.004	1180.039	12134.121	454809.000
3	13:27:51	694996.400	743471.370	550.008	1240.043	11723.847	450225.010
x		700348.310	748867.240	503.341	1210.041	11867.276	450092.140
σ		10976.982	5855.775	107.861	30.002	231.311	4784.689
%RSD		1.567	0.782	21.429	2.479	1.949	1.063

14936S MF4N43S 6/28/2011 1:29:45 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:29:45	102564.200	19207.124	TM 819122000.000	T 118506790.000	T 9628643.000	T 29893702.000	TM 19945476.000
2	13:30:09	101248.730	18956.456	TM 824079820.000	T 119007020.000	T 9765739.900	T 29968054.000	TM 19601533.000
3	13:30:34	100647.840	18850.344	TM 828675090.000	T 120691100.000	T 9617601.300	T 30236096.000	TM 19945271.000
x		101486.920	19004.642	TM 823958970.000	T 119401630.000	T 9670661.400	T 30032617.000	TM 19830760.000
σ		980.133	183.206	TM 4777688.900	T 1144375.100	T 82525.235	T 180096.350	TM 198516.630
%RSD		0.966	0.964	TM 0.580	T 0.958	T 0.853	T 0.600	TM 1.001

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:29:45	211606.380	6671.246	1658105.400	653803.690	2892712.800	T 7302217.700	1699520.700
2	13:30:09	210857.600	5570.869	1648471.800	660607.340	2864594.500	T 7627178.500	1726833.900
3	13:30:34	211940.300	4590.590	1661116.900	670807.220	2903793.800	T 7336812.400	1724690.900
x		211468.090	5610.902	1655898.000	661739.420	2887033.700	T 7422069.500	1717015.100
σ		554.441	1040.906	6605.231	8558.105	20207.303	T 178469.780	15188.493
%RSD		0.262	18.551	0.399	1.293	0.700	T 2.405	0.885

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:29:45	324685.180	186892.920	336072.980	24947.414	2060.119	4146.481	2660.198
2	13:30:09	327719.860	186155.270	347641.300	25686.461	2260.143	4152.483	2720.207
3	13:30:34	331804.260	189874.120	347417.000	25718.507	2230.139	4198.494	2540.181
x		328069.770	187640.770	343710.430	25450.794	2183.467	4165.819	2640.195
σ		3572.414	1968.990	6615.175	436.234	107.871	28.455	91.665
%RSD		1.089	1.049	1.925	1.714	4.940	0.683	3.472

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:29:45	40.000	310943.840	11373.621	14165.616	14796.127	8752.144	22594.285
2	13:30:09	40.000	310007.780	10332.989	14505.889	15616.826	8962.248	23155.003
3	13:30:34	36.000	307321.950	11143.476	14746.086	14926.236	9372.459	23515.473
x		38.667	309424.520	10950.028	14472.531	15113.063	9028.951	23088.254
σ		2.309	1880.072	546.622	291.669	441.095	315.491	464.207
%RSD		5.973	0.608	4.992	2.015	2.919	3.494	2.011

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:29:45	244370.710	6021.015	211242.100	4350.530	65941.528	453424.460	T 3745077.000
2	13:30:09	244188.240	6211.080	215917.530	4550.580	65459.760	451896.450	T 3796195.300
3	13:30:34	243275.920	6381.140	218994.660	4010.450	66824.802	458009.260	T 3831698.000
x		243944.960	6204.412	215384.760	4303.853	66075.363	454443.390	T 3790990.100
σ		586.546	180.155	3903.640	273.073	692.293	3181.239	T 43544.422
%RSD		0.240	2.904	1.812	6.345	1.048	0.700	T 1.149

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:29:45	691712.510	746722.920	465140.060	1133615.400	336806.610	435199.310
2	13:30:09	694819.720	733345.290	473608.340	1151028.000	347824.830	450245.520
3	13:30:34	704685.240	749464.250	476873.530	1171710.200	354687.860	448512.720
x		697072.490	743177.480	471873.980	1152117.900	346439.760	444652.520
σ		6773.414	8624.545	6055.954	19070.801	9020.730	8232.435
%RSD		0.972	1.160	1.283	1.655	2.604	1.851

14936A MF4N43A 6/28/2011 1:32:28 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:32:28	107400.510	889.222	TM 872809270.000	T 126035390.000	T 1782574.600	T 31791698.000	TM 20834672.000
2	13:32:52	105314.640	851.420	TM 870611820.000	T 126106790.000	T 1709789.800	T 31270940.000	TM 20818943.000
3	13:33:17	104612.530	872.221	TM 870045580.000	T 125265550.000	T 1727231.100	T 31227386.000	TM 20616101.000
x		105775.890	870.955	TM 871155560.000	T 125802580.000	T 1739865.200	T 31430008.000	TM 20756572.000
σ		1450.093	18.933	TM 1459873.800	T 466448.630	T 38001.607	T 313989.010	TM 121905.440
%RSD		1.371	2.174	TM 0.168	T 0.371	T 2.184	T 0.999	TM 0.587

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:32:28	216372.990	3000.252	144139.390	73812.236	91594.306	T 1918831.700	10993.383
2	13:32:52	216970.170	2860.229	140621.510	73882.526	89815.303	T 1938069.200	10723.219
3	13:33:17	214450.000	2840.226	143232.140	72286.012	90096.716	T 1922384.100	10553.117
x		215931.050	2900.236	142664.350	73326.925	90502.108	T 1926428.300	10756.573
σ		1316.926	87.192	1826.380	902.142	956.279	T 10236.569	222.020
%RSD		0.610	3.006	1.280	1.230	1.057	T 0.531	2.064

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:32:28	14085.553	6051.025	9152.345	6021.015	2200.136	4218.498	2570.185
2	13:32:52	13685.242	5410.820	8972.254	6305.113	2470.171	4248.505	2760.213
3	13:33:17	14615.979	5520.853	9752.663	6245.092	2350.155	4304.519	2500.175
x		14128.925	5660.899	9292.420	6190.407	2340.154	4257.174	2610.191
σ		466.882	342.309	408.626	149.736	135.295	43.661	134.556
%RSD		3.304	6.047	4.397	2.419	5.781	1.026	5.155

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:32:28	42.000	322709.850	14575.946	14615.979	16307.443	9462.506	24556.874
2	13:32:52	34.000	312195.400	10783.255	14015.498	16277.415	8992.264	24096.247
3	13:33:17	24.000	314678.410	11333.595	13985.474	17138.220	9182.360	24076.220
x		33.333	316527.890	12230.932	14205.651	16574.359	9212.377	24243.113
σ		9.019	5495.804	2049.399	355.672	488.549	236.554	271.909
%RSD		27.056	1.736	16.756	2.504	2.948	2.568	1.122

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:32:28	254480.460	820.019	9322.433	250.002	3190.285	21362.771	157662.950
2	13:32:52	248111.770	850.020	9172.355	230.001	2810.221	20772.074	158924.060
3	13:33:17	256336.730	750.016	9132.335	230.001	2650.197	20912.238	155050.230
x		252976.320	806.685	9209.041	236.668	2883.568	21015.694	157212.410
σ		4313.849	51.318	100.218	11.547	277.414	308.639	1975.825
%RSD		1.705	6.362	1.088	4.879	9.621	1.469	1.257

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:32:28	707004.250	758879.640	20391.636	48425.572	45558.041	446206.000
2	13:32:52	708886.720	752612.600	20111.319	50581.536	47172.224	453742.380
3	13:33:17	711081.450	763531.790	20101.307	48275.166	45748.527	455844.920
x		708990.810	758341.340	20201.421	49094.091	46159.597	451931.100
σ		2040.589	5479.462	164.808	1290.359	882.117	5068.307
%RSD		0.288	0.723	0.816	2.628	1.911	1.121

14925 MF4N06 6/28/2011 1:35:12 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:35:12	99061.509	34.600	TM 634082780.000	T 154193610.000	404203.460	T 6597629.700	TM 16266588.000
2	13:35:36	96802.672	23.800	TM 639235580.000	T 154699500.000	413287.880	T 6648845.400	TM 16116346.000
3	13:36:00	96918.297	29.000	TM 637038380.000	T 153646360.000	404970.550	T 6566979.400	TM 16004711.000
x		97594.159	29.133	TM 636785580.000	T 154179820.000	407487.290	T 6604484.800	TM 16129215.000
σ		1272.077	5.401	TM 2585687.700	T 526704.680	5038.076	T 41361.283	TM 131411.810
%RSD		1.303	18.540	TM 0.406	T 0.342	1.236	T 0.626	TM 0.815

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:35:12	234418.630	2130.127	372954.410	45126.948	5090.726	282781.440	980.027
2	13:35:36	238613.640	2100.124	373648.700	45337.481	5180.751	276240.240	910.023
3	13:36:00	235107.590	1660.077	365002.610	43723.463	5210.760	274381.920	1000.028
x		236046.620	1963.443	370535.240	44729.297	5160.746	277801.200	963.359
σ		2249.637	263.150	4803.954	877.415	62.468	4411.964	47.261
%RSD		0.953	13.402	1.296	1.962	1.210	1.588	4.906

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:35:12	2570.185	1190.040	2480.172	10431.046	1550.067	1576.070	1120.035
2	13:35:36	2600.189	1310.048	2160.131	11217.522	1560.068	1370.053	1150.037
3	13:36:00	2540.181	1170.038	2340.153	10829.283	1640.075	1348.051	1260.045
x		2570.185	1223.375	2326.819	10825.950	1583.404	1431.391	1176.706
σ		30.004	75.724	160.437	393.249	49.333	125.777	73.716
%RSD		1.167	6.190	6.895	3.632	3.116	8.787	6.265

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:35:12	46.000	310536.850	4860.661	5690.907	6691.253	4110.473	10072.840
2	13:35:36	40.000	301168.430	5130.737	6631.231	6361.133	3950.437	9862.723
3	13:36:00	16.000	301687.080	5240.769	6011.012	7111.416	3950.437	10733.225
x		34.000	304464.120	5077.389	6111.050	6721.267	4003.782	10222.929
σ		15.875	5265.530	195.589	478.078	376.041	92.397	454.245
%RSD		46.690	1.729	3.852	7.823	5.595	2.308	4.443

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:35:12	249044.620	440.005	130.000	30.000	30.000	800.018	74264.104
2	13:35:36	241491.950	400.004	90.000	30.000	30.000	980.027	74545.272
3	13:36:00	244289.620	510.007	90.000	20.000	10.000	930.024	74695.899
x		244942.060	450.006	103.334	26.667	23.333	903.356	74501.758
σ		3818.376	55.679	23.094	5.774	11.547	92.920	219.162
%RSD		1.559	12.373	22.349	21.651	49.487	10.286	0.294

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:35:12	696700.930	744680.210	250.002	510.007	2880.232	445939.470
2	13:35:36	705246.770	752310.250	420.005	580.009	2890.234	461353.720
3	13:36:00	682851.050	727243.180	270.002	510.007	2610.191	448646.010
x		694932.910	741411.220	313.336	533.341	2793.552	451979.730
σ		11302.053	12849.288	92.917	40.416	158.874	8230.131
%RSD		1.626	1.733	29.654	7.578	5.687	1.821

14926 MF4N07 6/28/2011 1:37:55 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:37:55	101353.320	33.200	TM 726123910.000	T 154195250.000	698072.980	T 9217144.500	TM 15870607.000
2	13:38:19	99980.107	37.000	TM 732515240.000	T 155509700.000	709209.150	T 9128752.900	TM 16261073.000
3	13:38:44	97339.579	34.800	TM 735764680.000	T 156540660.000	776075.540	T 9305733.800	TM 16183807.000
x		99557.667	35.000	TM 731467940.000	T 155415200.000	727785.890	T 9217210.400	TM 16105162.000
σ		2039.942	1.908	TM 4904971.500	T 1175557.000	42189.115	T 88490.458	TM 206771.990
%RSD		2.049	5.451	TM 0.671	T 0.756	5.797	T 0.960	TM 1.284

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:37:55	237296.260	2560.184	347264.070	261998.010	17038.124	916479.770	2300.148
2	13:38:19	234286.910	2280.146	355269.250	258274.350	17008.096	899435.090	1750.086
3	13:38:44	232828.020	2520.178	353984.100	265783.330	16807.906	926907.880	2230.139
x		234803.730	2453.502	352172.470	262018.560	16951.376	914274.250	2093.458
σ		2278.513	151.458	4299.094	3754.534	125.152	13868.553	299.422
%RSD		0.970	6.173	1.221	1.433	0.738	1.517	14.303

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:37:55	4380.537	1460.060	2060.119	10953.358	1510.064	1460.060	990.027
2	13:38:19	4600.593	1430.057	2160.131	10977.373	1330.050	1516.064	980.027
3	13:38:44	4830.653	1390.054	2020.114	11129.467	1400.055	1554.068	1060.032
x		4603.928	1426.724	2080.121	11020.066	1413.389	1510.064	1010.029
σ		225.077	35.122	72.119	95.502	90.745	47.290	43.591
%RSD		4.889	2.462	3.467	0.867	6.420	3.132	4.316

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:37:55	22.000	300293.890	5740.923	7491.571	8502.024	4530.575	13034.756
2	13:38:19	38.000	309712.720	6381.140	7461.559	9052.294	4940.683	13615.188
3	13:38:44	22.000	295271.160	7141.428	8131.851	8742.139	5080.723	12444.335
x		27.333	301759.260	6421.163	7694.994	8765.486	4850.660	13031.426
σ		9.238	7331.449	701.110	378.627	275.877	285.909	585.434
%RSD		33.796	2.430	10.919	4.920	3.147	5.894	4.492

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:37:55	239140.620	670.013	120.000	40.000	10.000	1250.044	81857.188
2	13:38:19	248405.820	620.011	60.000	70.000	10.000	1410.056	80079.153
3	13:38:44	233142.080	540.008	90.000	90.000	20.000	1340.050	82881.898
x		240229.500	610.011	90.000	66.667	13.333	1333.383	81606.080
σ		7689.910	65.577	30.000	25.166	5.774	80.214	1418.145
%RSD		3.201	10.750	33.333	37.749	43.301	6.016	1.738

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:37:55	696836.050	721850.880	300.003	800.018	4290.515	437330.440
2	13:38:19	688927.910	743315.060	400.004	820.019	4250.506	442690.100
3	13:38:44	676288.250	695765.490	250.002	790.017	4560.582	439666.770
x		687350.730	720310.480	316.670	803.351	4367.201	439895.770
σ		10364.295	23812.182	76.378	15.276	168.664	2687.160
%RSD		1.508	3.306	24.119	1.902	3.862	0.611

14927 MF4N08 6/28/2011 1:40:38 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:40:38	101675.140	26.800	TM 753535150.000	T 150644480.000	469358.310	T 7376296.100	TM 15868564.000
2	13:41:03	100313.470	27.800	TM 764389500.000	T 154146790.000	474398.910	T 7393104.400	TM 16176555.000
3	13:41:27	101392.540	26.600	TM 752249770.000	T 151356020.000	445693.440	T 7260615.900	TM 15896243.000
x		101127.050	27.067	TM 756724810.000	T 152049100.000	463150.220	T 7343338.800	TM 15980454.000
σ		718.609	0.643	TM 6668858.900	T 1851164.500	15326.655	T 72131.399	TM 170391.510
%RSD		0.711	2.375	TM 0.881	T 1.217	3.309	T 0.982	TM 1.066

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:40:38	234945.480	2540.181	409123.620	386640.920	35364.984	1066165.200	2540.181
2	13:41:03	230467.690	2550.182	408008.540	394142.270	35595.442	1074450.400	2360.156
3	13:41:27	235806.720	2650.197	407169.710	386273.090	35375.004	1058350.300	2570.185
x		233739.970	2580.187	408100.620	389018.760	35445.143	1066322.000	2490.174
σ		2866.401	60.836	980.202	4440.897	130.258	8051.174	113.594
%RSD		1.226	2.358	0.240	1.142	0.367	0.755	4.562

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:40:38	5180.751	1870.098	1260.045	12154.135	1500.063	1442.058	940.025
2	13:41:03	4910.675	2010.113	1380.053	12696.512	1550.067	1614.073	1200.040
3	13:41:27	4920.678	2260.143	1520.065	12698.513	1430.057	1428.057	1150.037
x		5004.035	2046.785	1386.721	12516.387	1493.396	1494.729	1096.701
σ		153.123	197.591	130.138	313.721	60.282	103.591	137.970
%RSD		3.060	9.654	9.385	2.506	4.037	6.930	12.580

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:40:38	38.000	304392.410	7621.626	10683.195	12814.596	6541.198	18199.269
2	13:41:03	22.000	305887.630	7751.682	10553.117	12094.094	7401.534	19090.199
3	13:41:27	24.000	309977.260	7151.432	10713.213	12104.101	7041.388	17918.986
x		28.000	306752.430	7508.247	10649.842	12337.597	6994.707	18402.818
σ		8.718	2891.113	315.779	85.100	413.124	432.063	611.563
%RSD		31.135	0.942	4.206	0.799	3.348	6.177	3.323

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:40:38	242617.040	560.009	100.000	10.000	40.000	1410.056	66041.897
2	13:41:03	242495.410	440.005	120.000	40.000	10.000	1450.059	66774.615
3	13:41:27	251447.950	450.006	90.000	30.000	30.000	1570.069	66614.017
x		245520.140	483.340	103.334	26.667	26.667	1476.728	66476.843
σ		5134.001	66.585	15.275	15.275	15.275	83.274	385.138
%RSD		2.091	13.776	14.783	57.282	57.282	5.639	0.579

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:40:38	680171.650	732668.330	300.003	520.008	2960.245	430425.680
2	13:41:03	671450.740	720352.140	200.001	600.010	2730.209	432064.550
3	13:41:27	691535.860	740282.930	160.001	430.005	2740.210	447969.340
x		681052.750	731101.130	220.001	516.674	2810.221	436819.860
σ		10071.510	10057.392	72.112	85.051	130.021	9690.441
%RSD		1.479	1.376	32.778	16.461	4.627	2.218

14928 MF4N09 6/28/2011 1:43:23 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:43:23	102590.850	31.600	TM 761180490.000	T 152467960.000	643074.440	T 7485994.600	TM 16035965.000
2	13:43:47	100463.810	25.200	TM 756265310.000	T 152492870.000	625558.440	T 7451883.800	TM 15891136.000
3	13:44:12	99630.160	24.200	TM 770120920.000	T 153963050.000	612331.630	T 7696839.100	TM 16171704.000
x		100894.940	27.000	TM 762522240.000	T 152974630.000	626988.170	T 7544905.800	TM 16032935.000
σ		1526.706	4.015	TM 7024575.600	T 856091.970	15421.193	T 132678.880	TM 140308.340
%RSD		1.513	14.870	TM 0.921	T 0.560	2.460	T 1.759	TM 0.875

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:43:23	233182.600	2180.133	413420.910	413584.630	39643.957	1422076.100	3280.301
2	13:43:47	234155.200	2330.152	417013.000	408653.030	39513.669	1449212.900	3170.281
3	13:44:12	234094.410	2500.175	415211.750	409082.700	40906.801	1413168.900	3380.320
x		233810.740	2336.820	415215.220	410440.120	40021.476	1428152.600	3276.968
σ		544.833	160.125	1796.047	2731.691	769.477	18774.606	105.059
%RSD		0.233	6.852	0.433	0.666	1.923	1.315	3.206

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:43:23	6401.147	2450.168	2200.136	12842.616	2020.114	1556.068	1050.031
2	13:43:47	6341.126	2330.152	2360.156	12730.536	1550.067	1512.064	1140.036
3	13:44:12	6471.172	2430.165	2400.161	12756.555	1770.088	1474.061	1030.030
x		6404.482	2403.495	2320.151	12776.569	1780.090	1514.064	1073.366
σ		65.087	64.300	105.844	58.659	235.183	41.040	58.598
%RSD		1.016	2.675	4.562	0.459	13.212	2.711	5.459

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:43:23	24.000	302826.110	8672.105	11263.551	12524.391	7151.432	18649.734
2	13:43:47	16.000	310791.220	8572.057	11763.874	13354.992	7621.626	18509.588
3	13:44:12	24.000	305551.960	8452.000	11863.940	12854.625	6891.330	19120.231
x		21.333	306389.760	8565.387	11630.455	12911.336	7221.462	18759.851
σ		4.619	4048.107	110.204	321.663	418.195	370.151	319.868
%RSD		21.651	1.321	1.287	2.766	3.239	5.126	1.705

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:43:23	245303.370	460.006	170.001	60.000	40.000	1390.054	78371.602
2	13:43:47	247402.030	410.005	110.000	40.000	10.000	1360.052	78803.497
3	13:44:12	244644.420	570.009	170.001	60.000	40.000	1240.043	74575.397
x		245783.270	480.007	150.001	53.333	30.000	1330.050	77250.166
σ		1440.078	81.856	34.641	11.547	17.321	79.378	2326.461
%RSD		0.586	17.053	23.094	21.651	57.735	5.968	3.012

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:43:23	674367.620	725910.570	140.001	370.004	4940.683	432146.500
2	13:43:47	682716.030	752393.660	290.002	500.007	4310.520	440568.590
3	13:44:12	687411.100	747389.970	280.002	610.010	4640.603	445549.920
x		681498.250	741898.070	236.668	493.340	4630.602	439421.670
σ		6606.459	14069.796	83.866	120.142	315.201	6774.917
%RSD		0.969	1.896	35.436	24.353	6.807	1.542

14929 MF4N10 6/28/2011 1:46:07 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:46:07	102054.790	29.000	TM 761936480.000	T 157797140.000	525819.280	T 6925242.100	TM 16144382.000
2	13:46:32	102274.040	25.600	TM 776583500.000	T 159133920.000	522998.220	T 6961132.600	TM 16613850.000
3	13:46:56	101021.950	26.600	TM 777062560.000	T 158710320.000	514661.170	T 7043344.700	TM 16442211.000
x		101783.590	27.067	TM 771860840.000	T 158547130.000	521159.560	T 6976573.100	TM 16400148.000
σ		668.654	1.747	TM 8598091.400	T 683168.700	5801.840	T 60546.373	TM 237543.790
%RSD		0.657	6.456	TM 1.114	T 0.431	1.113	T 0.868	TM 1.448

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:46:07	239464.920	2500.175	412888.810	221809.080	12384.293	564204.530	2840.226
2	13:46:32	238654.180	2590.188	426646.600	226588.520	12654.482	579761.100	2760.213
3	13:46:56	236445.080	2580.186	424639.600	218893.430	13004.734	560830.710	2310.149
x		238188.060	2556.850	421391.670	222430.340	12681.170	568265.450	2636.863
σ		1562.949	49.336	7431.756	3884.984	311.080	10097.436	285.756
%RSD		0.656	1.930	1.764	1.747	2.453	1.777	10.837

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:46:07	4680.613	1460.060	2490.174	12582.431	1680.079	1608.072	1140.036
2	13:46:32	4760.635	1520.065	2900.236	12642.474	1600.072	1658.077	1390.054
3	13:46:56	4490.565	1310.048	2470.171	12686.505	1620.074	1586.070	1110.035
x		4643.938	1430.058	2620.193	12637.137	1633.408	1617.407	1213.375
σ		138.720	108.175	242.730	52.242	41.637	36.900	153.742
%RSD		2.987	7.564	9.264	0.413	2.549	2.281	12.671

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:46:07	46.000	302154.890	8131.851	10523.100	11793.893	6871.322	18399.474
2	13:46:32	24.000	309163.330	8391.971	10993.383	12814.596	6621.227	18699.786
3	13:46:56	32.000	305318.010	8231.897	11843.926	12424.321	7611.622	19450.587
x		34.000	305545.410	8251.907	11120.136	12344.270	7034.724	18849.949
σ		11.136	3509.749	131.209	669.474	515.039	515.020	541.407
%RSD		32.752	1.149	1.590	6.020	4.172	7.321	2.872

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:46:07	237478.660	530.008	60.000	40.000	20.000	970.026	80722.038
2	13:46:32	244370.710	690.013	120.000	30.000	10.000	950.025	79657.272
3	13:46:56	245749.440	470.006	110.000	70.000	10.000	850.020	79466.425
x		242532.940	563.342	96.667	46.667	13.333	923.357	79948.578
σ		4431.086	113.729	32.146	20.817	5.774	64.294	676.598
%RSD		1.827	20.188	33.254	44.607	43.301	6.963	0.846

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:46:07	693811.640	728867.440	140.001	500.007	4160.485	433713.820
2	13:46:32	695349.760	743919.470	170.001	440.005	4330.525	442618.360
3	13:46:56	695069.150	741720.780	160.001	490.007	4090.468	441941.910
x		694743.520	738169.230	156.667	476.673	4193.826	439424.700
σ		819.137	8130.257	15.275	32.146	123.453	4957.315
%RSD		0.118	1.101	9.750	6.744	2.944	1.128

14930 MF4N14 6/28/2011 1:48:51 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:48:51	99689.992	33.000	TM 864477340.000	T 125381160.000	615570.170	T 12416494.000	TM 14862014.000
2	13:49:15	97014.819	28.600	TM 873121000.000	T 126426110.000	607728.320	T 12593524.000	TM 14597073.000
3	13:49:39	96232.603	35.200	TM 856700140.000	T 123945580.000	571191.470	T 12447787.000	TM 14295670.000
x		97645.805	32.267	TM 864766160.000	T 125250950.000	598163.320	T 12485935.000	TM 14584919.000
σ		1813.006	3.361	TM 8214238.700	T 1245385.000	23685.106	T 94479.586	TM 283367.620
%RSD		1.857	10.415	TM 0.950	T 0.994	3.960	T 0.757	TM 1.943

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:48:51	227996.270	2420.164	317864.100	85072.162	45207.151	1106618.400	13375.007
2	13:49:15	222133.070	2770.215	307555.920	86247.781	45177.075	1096140.900	13645.211
3	13:49:39	223206.330	2860.229	308095.100	83153.155	44585.591	1052202.500	12264.210
x		224445.220	2683.536	311171.710	84824.366	44989.939	1084987.300	13094.810
σ		3121.769	232.485	5802.045	1562.124	350.498	28871.711	731.898
%RSD		1.391	8.663	1.865	1.842	0.779	2.661	5.589

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:48:51	19740.906	2090.122	1240.043	8796.166	1550.067	854.020	940.025
2	13:49:15	20281.511	1950.107	1140.036	8952.243	1340.050	1010.029	1040.030
3	13:49:39	18889.986	1880.099	1240.043	9156.347	1430.057	880.022	920.024
x		19637.468	1973.443	1206.708	8968.252	1440.058	914.690	966.693
σ		701.506	106.939	57.739	180.623	105.365	83.583	64.295
%RSD		3.572	5.419	4.785	2.014	7.317	9.138	6.651

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:48:51	34.000	310984.540	5430.826	6411.151	7761.687	4130.478	10222.925
2	13:49:15	38.000	306375.900	5510.850	6241.090	7281.484	3830.411	10683.195
3	13:49:39	50.000	294630.720	5570.869	6361.133	7411.538	3740.392	10753.237
x		40.667	303997.050	5504.182	6337.791	7484.903	3900.427	10553.119
σ		8.327	8432.443	70.259	87.400	248.365	204.251	288.093
%RSD		20.475	2.774	1.276	1.379	3.318	5.237	2.730

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:48:51	245414.890	610.010	30.000	20.000	50.000	460.006	73671.658
2	13:49:15	246205.660	390.004	50.000	80.000	100.000	680.013	78060.243
3	13:49:39	237995.470	540.008	80.000	40.000	80.000	460.006	76473.399
x		243205.340	513.341	53.333	46.667	76.667	533.342	76068.433
σ		4529.169	112.401	25.166	30.551	25.166	127.021	2222.143
%RSD		1.862	21.896	47.187	65.465	32.825	23.816	2.921

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:48:51	688792.840	738730.580	160.001	530.008	4420.547	438560.050
2	13:49:15	686870.900	712319.350	260.002	550.008	4490.565	440466.110
3	13:49:39	682217.510	724515.600	220.001	470.006	3840.413	437166.500
x		685960.420	725188.510	213.335	516.674	4250.508	438730.890
σ		3380.898	13218.469	50.333	41.635	356.874	1656.427
%RSD		0.493	1.823	23.593	8.058	8.396	0.378

14931 MF4N15 6/28/2011 1:51:33 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:51:33	97751.821	33.400	TM 863366660.000	T 124414560.000	789432.330	T 12388019.000	TM 14582314.000
2	13:51:57	96117.988	35.000	TM 858495310.000	T 124702340.000	812660.260	T 12603066.000	TM 14414862.000
3	13:52:22	96247.684	33.600	TM 865087680.000	T 125583690.000	824369.050	T 12390244.000	TM 14330651.000
x		96705.831	34.000	TM 862316550.000	T 124900200.000	808820.550	T 12460443.000	TM 14442609.000
σ		908.172	0.872	TM 3419339.500	T 609159.150	17782.048	T 123520.030	TM 128105.420
%RSD		0.939	2.564	TM 0.397	T 0.488	2.199	T 0.991	TM 0.887

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:51:33	225251.770	2880.232	306070.730	92227.552	52838.057	1401965.400	12944.690
2	13:51:57	220067.730	3630.369	305429.900	90418.335	52487.024	1379783.600	13535.128
3	13:52:22	215583.530	3010.254	300578.620	91332.972	51273.506	1427072.000	12504.377
x		220301.010	3173.618	304026.420	91326.287	52199.529	1402940.400	12994.731
σ		4838.341	400.864	3003.024	904.627	820.941	23659.240	517.194
%RSD		2.196	12.631	0.988	0.991	1.573	1.686	3.980

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:51:33	20011.206	2070.120	1450.059	9044.290	1320.049	948.025	830.019
2	13:51:57	21312.711	1970.109	1230.042	9102.319	1440.058	1028.030	950.025
3	13:52:22	19780.950	1870.098	1420.057	8864.200	1480.061	1012.029	910.023
x		20368.289	1970.109	1366.719	9003.603	1413.389	996.028	896.689
σ		825.956	100.011	119.312	124.165	83.273	42.334	61.104
%RSD		4.055	5.076	8.730	1.379	5.892	4.250	6.814

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:51:33	30.000	305084.060	7121.420	7091.408	7581.609	4410.545	10723.219
2	13:51:57	44.000	299409.220	6251.094	6811.299	7441.550	4170.487	11813.907
3	13:52:22	30.000	293665.000	6101.042	6931.345	7831.717	4390.540	11213.520
x		34.667	299386.090	6491.185	6944.684	7618.292	4323.857	11250.215
σ		8.083	5709.565	550.932	140.530	197.653	133.199	546.269
%RSD		23.316	1.907	8.487	2.024	2.594	3.081	4.856

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:51:33	242394.050	660.012	150.001	30.000	140.001	600.010	78863.762
2	13:51:57	239343.310	560.009	80.000	20.000	110.000	630.011	80973.171
3	13:52:22	234236.260	500.007	90.000	10.000	70.000	540.008	80179.602
x		238657.870	573.343	106.667	20.000	106.667	590.010	80005.512
σ		4121.863	80.832	37.860	10.000	35.119	45.827	1065.426
%RSD		1.727	14.098	35.493	50.000	32.924	7.767	1.332

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:51:33	680742.800	733001.600	130.000	650.012	4960.689	425673.790
2	13:51:57	682653.720	719540.380	260.002	600.010	4540.577	429534.610
3	13:52:22	675634.180	711632.770	220.001	620.011	4860.661	415518.760
x		679676.900	721391.580	203.335	623.344	4787.309	423575.720
σ		3629.133	10804.024	66.584	25.167	219.451	7239.639
%RSD		0.534	1.498	32.746	4.037	4.584	1.709

14932 MF4N20 6/28/2011 1:54:15 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:54:15	85595.152	26.800	TM 804630580.000	T 86336990.000	364706.660	T 22956447.000	TM 17354438.000
2	13:54:39	84399.481	26.400	TM 806837700.000	T 87210017.000	355881.250	T 22470590.000	TM 17575001.000
3	13:55:04	84264.848	26.400	TM 809218190.000	T 87521614.000	366462.050	T 22371323.000	TM 17456013.000
x		84753.161	26.533	TM 806895490.000	T 87022874.000	362349.990	T 22599453.000	TM 17461817.000
σ		732.287	0.231	TM 2294350.100	T 614085.320	5670.428	T 313124.510	TM 110395.860
%RSD		0.864	0.870	TM 0.284	T 0.706	1.565	T 1.386	TM 0.632

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:54:15	210442.750	1230.042	193553.310	62298.482	7001.372	296531.800	1400.055
2	13:54:39	210493.340	1550.067	197880.340	64988.042	6821.303	303975.390	1290.047
3	13:55:04	203857.010	1760.087	195979.550	64315.614	7291.488	309906.030	1480.061
x		208264.370	1513.399	195804.400	63867.379	7038.054	303471.080	1390.054
σ		3816.966	266.918	2168.830	1399.685	237.230	6701.367	95.401
%RSD		1.833	17.637	1.108	2.192	3.371	2.208	6.863

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:54:15	3540.351	910.023	1710.082	6311.115	1500.063	1608.072	1200.040
2	13:54:39	4010.450	1000.028	1760.087	6563.206	1510.064	1638.075	1100.034
3	13:55:04	3950.437	790.017	1480.061	6467.171	1470.061	1546.067	1100.034
x		3833.746	900.023	1650.077	6447.164	1493.396	1597.405	1133.369
σ		255.853	105.362	149.345	127.231	20.818	46.923	57.739
%RSD		6.674	11.707	9.051	1.973	1.394	2.937	5.094

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:54:15	38.000	312480.320	2700.204	2360.156	2410.163	1390.054	3650.373
2	13:54:39	22.000	317273.730	2080.121	2250.142	2420.164	1520.065	3260.298
3	13:55:04	40.000	306894.690	2380.159	2250.142	2710.206	1600.072	3620.367
x		33.333	312216.250	2386.828	2286.813	2513.511	1503.397	3510.346
σ		9.866	5194.557	310.095	63.517	170.416	105.996	217.067
%RSD		29.597	1.664	12.992	2.778	6.780	7.050	6.184

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:54:15	254318.170	690.013	60.000	20.000	10.000	490.007	65329.283
2	13:54:39	256955.530	360.004	80.000	20.000	50.000	340.003	65901.380
3	13:55:04	244137.560	510.007	30.000	60.000	30.000	460.006	68551.328
x		251803.750	520.008	56.667	33.333	30.000	430.005	66593.997
σ		6768.812	165.232	25.166	23.094	20.000	79.374	1719.064
%RSD		2.688	31.775	44.411	69.282	66.667	18.459	2.581

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:54:15	699102.090	761403.760	100.000	220.001	2770.215	430302.770
2	13:54:39	682996.460	758326.890	110.000	230.001	2430.165	441695.930
3	13:55:04	689759.090	740168.320	110.000	280.002	2530.179	434359.230
x		690619.210	753299.650	106.667	243.335	2576.853	435452.640
σ		8087.195	11475.660	5.774	32.146	174.763	5774.748
%RSD		1.171	1.523	5.413	13.211	6.782	1.326

14933 MF4N21 6/28/2011 1:56:58 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:56:58	102457.590	23.400	TM 740668590.000	T 160881600.000	444073.830	T 11266712.000	TM 14842046.000
2	13:57:22	97700.039	23.400	TM 758858750.000	T 165100120.000	450009.690	T 11322377.000	TM 15443167.000
3	13:57:46	101524.280	23.200	TM 727759760.000	T 158671360.000	449784.110	T 10807748.000	TM 14592477.000
x		100560.640	23.333	TM 742429030.000	T 161551030.000	447955.880	T 11132279.000	TM 14959230.000
σ		2520.919	0.115	TM 15624056.000	T 3266242.300	3363.841	T 282426.730	TM 437284.530
%RSD		2.507	0.495	TM 2.104	T 2.022	0.751	T 2.537	TM 2.923

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:56:58	227854.480	2400.161	331529.220	323147.670	12114.108	226011.280	1990.111
2	13:57:22	217638.230	1890.100	338457.380	333322.140	11994.027	232199.920	2460.170
3	13:57:46	236759.200	2450.168	320846.730	327740.230	12024.047	227125.280	2450.168
x		227417.300	2246.810	330277.780	328070.010	12044.060	228445.490	2300.150
σ		9567.981	309.930	8871.774	5095.246	62.492	3298.795	268.548
%RSD		4.207	13.794	2.686	1.553	0.519	1.444	11.675

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:56:58	3680.379	1240.043	850.020	11649.799	1560.068	1464.060	1300.047
2	13:57:22	3380.320	1200.040	800.018	11545.731	1670.078	1482.062	1090.033
3	13:57:46	2850.227	1210.041	800.018	11583.756	1750.086	1468.060	1240.043
x		3303.642	1216.708	816.685	11593.095	1660.077	1471.394	1210.041
σ		420.354	20.818	28.869	52.659	95.403	9.452	108.174
%RSD		12.724	1.711	3.535	0.454	5.747	0.642	8.940

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:56:58	26.000	298290.730	5370.808	7091.408	7661.643	4520.572	12354.272
2	13:57:22	48.000	290768.170	5480.841	7371.521	8081.828	5000.700	12214.176
3	13:57:46	28.000	306864.180	5890.972	6921.341	8121.847	4960.689	11633.788
x		34.000	298641.030	5580.873	7128.090	7955.106	4827.320	12067.412
σ		12.166	8053.717	274.130	227.321	254.933	266.404	382.006
%RSD		35.781	2.697	4.912	3.189	3.205	5.519	3.166

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:56:58	242576.500	420.005	110.000	50.000	50.000	1120.035	73099.313
2	13:57:22	232949.590	440.005	20.000	40.000	0.000	1190.040	73812.236
3	13:57:46	243944.950	650.012	30.000	50.000	50.000	1010.029	73430.668
x		239823.680	503.341	53.333	46.667	33.333	1106.701	73447.406
σ		5992.330	127.414	49.329	5.774	28.868	90.743	356.756
%RSD		2.499	25.314	92.492	12.372	86.603	8.199	0.486

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:56:58	683993.550	721205.570	230.001	560.009	3030.257	424598.640
2	13:57:22	640276.550	694975.610	120.000	450.006	3230.292	410617.320
3	13:57:46	699258.020	738084.680	210.001	470.006	3070.264	439574.540
x		674509.370	718088.620	186.668	493.340	3110.271	424930.170
σ		30613.161	21722.902	58.595	58.596	105.849	14481.455
%RSD		4.539	3.025	31.390	11.877	3.403	3.408

14934 MF4N37 6/28/2011 1:59:40 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	13:59:40	91659.640	33.200	TM 1055743000.000	T 119366110.000	1071776.600	T 36680078.000	TM 16854585.000
2	14:00:04	90141.441	33.000	TM 1063232600.000	T 119455940.000	1033834.900	T 36567710.000	TM 16798461.000
3	14:00:29	89791.183	30.600	TM 1061809800.000	T 120437970.000	1011773.600	T 36342282.000	TM 16488785.000
x		90530.754	32.267	TM 1060261800.000	T 119753340.000	1039128.400	T 36530024.000	TM 16713944.000
σ		993.205	1.447	TM 3977542.500	T 594605.790	30349.767	T 172022.620	TM 197002.120
%RSD		1.097	4.484	TM 0.375	T 0.497	2.921	T 0.471	TM 1.179

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	13:59:40	208904.850	1990.111	117293.960	10192.908	178487.580	794865.560	2370.157
2	14:00:04	205262.980	1680.079	119065.630	10092.851	175235.610	781630.110	2180.133
3	14:00:29	208186.530	2930.240	115250.720	9762.668	172458.770	793298.110	2520.178
x		207451.450	2200.143	117203.440	10016.143	175393.990	789931.260	2356.823
σ		1929.005	651.008	1909.064	225.144	3017.523	7231.601	170.414
%RSD		0.930	29.589	1.629	2.248	1.720	0.915	7.231

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	13:59:40	3680.379	2560.184	4150.482	5822.949	1750.086	1984.110	1620.074
2	14:00:04	3400.324	2730.209	3850.415	5884.970	1740.085	1964.108	1620.074
3	14:00:29	3390.322	2630.194	4270.511	6153.060	1810.092	1944.106	1610.073
x		3490.342	2640.195	4090.469	5953.660	1766.754	1964.108	1616.740
σ		164.653	85.453	216.382	175.448	37.863	20.002	5.774
%RSD		4.717	3.237	5.290	2.947	2.143	1.018	0.357

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	13:59:40	24.000	307911.980	7641.635	11173.495	12634.468	7071.400	18669.755
2	14:00:04	44.000	308624.120	7401.534	10873.309	12674.496	7221.460	17308.384
3	14:00:29	28.000	303629.590	7601.618	11393.634	12424.321	7051.392	18269.341
x		32.000	306721.900	7548.262	11146.813	12577.762	7114.751	18082.493
σ		10.583	2701.587	128.636	261.186	134.383	92.953	699.654
%RSD		33.072	0.881	1.704	2.343	1.068	1.306	3.869

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	13:59:40	244543.050	620.011	50.000	50.000	20.000	3020.255	93484.061
2	14:00:04	247280.360	470.006	100.000	40.000	40.000	3110.271	92659.781
3	14:00:29	237873.870	510.007	90.000	30.000	40.000	2920.239	95796.267
x		243232.430	533.341	80.000	40.000	33.333	3016.922	93980.036
σ		4838.266	77.677	26.458	10.000	11.547	95.060	1626.001
%RSD		1.989	14.564	33.072	25.000	34.641	3.151	1.730

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	13:59:40	679714.730	721788.430	550.008	1250.044	9132.335	415457.360
2	14:00:04	671741.370	726097.970	630.011	1360.052	8562.052	418927.020
3	14:00:29	685967.130	718780.680	610.010	1270.045	8632.086	426011.710
x		679141.080	722222.360	596.677	1293.380	8775.491	420132.030
σ		7130.212	3677.892	41.635	58.599	311.013	5379.367
%RSD		1.050	0.509	6.978	4.531	3.544	1.280

14935 MF4N38 6/28/2011 2:02:23 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	14:02:23	93455.914	48.600	TM 1159654000.000	T 237684120.000	821176.900	T 28152121.000	TM 40286881.000
2	14:02:47	93539.852	43.200	TM 1180288500.000	T 239761800.000	801471.200	T 28357132.000	TM 40237550.000
3	14:03:12	93360.919	42.400	TM 1179983400.000	T 240098440.000	789108.470	T 28690726.000	TM 40292958.000
x		93452.228	44.733	TM 1173308600.000	T 239181450.000	803918.860	T 28399993.000	TM 40272463.000
σ		89.523	3.372	TM 11826215.000	T 1307604.600	16173.723	T 271848.660	TM 30388.264
%RSD		0.096	7.539	TM 1.008	T 0.547	2.012	T 0.957	TM 0.075

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	14:02:23	217840.670	2140.128	160528.310	34292.896	92679.885	1050655.200	4410.545
2	14:02:47	220320.820	2000.112	159206.560	35435.123	92227.552	1063429.100	4390.540
3	14:03:12	217101.750	2260.143	159933.010	33771.905	92840.717	1024859.000	4390.540
x		218421.080	2133.461	159889.290	34499.975	92582.718	1046314.500	4397.208
σ		1686.196	130.144	661.960	850.726	317.921	19648.018	11.550
%RSD		0.772	6.100	0.414	2.466	0.343	1.878	0.263

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	14:02:23	9972.784	1910.102	6691.253	6955.354	2750.212	4062.462	3060.262
2	14:02:47	9392.470	2090.122	7161.436	7213.457	2950.244	3864.418	3130.274
3	14:03:12	9852.717	1960.108	7031.384	7257.475	2640.195	3926.432	2890.234
x		9739.324	1986.777	6961.358	7142.095	2780.217	3951.104	3026.924
σ		306.325	92.926	242.787	163.213	157.187	101.301	123.444
%RSD		3.145	4.677	3.488	2.285	5.654	2.564	4.078

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:02:23	46.000	303192.250	4000.448	3900.426	5360.805	2780.216	6721.265
2	14:02:47	54.000	312490.490	4530.575	4580.587	5180.751	2660.198	7071.400
3	14:03:12	32.000	306945.560	4540.577	4220.499	5290.784	2680.201	7281.484
x		44.000	307542.770	4357.200	4233.837	5277.447	2706.872	7024.716
σ		11.136	4677.802	308.997	340.277	90.764	64.301	283.012
%RSD		25.308	1.521	7.092	8.037	1.720	2.375	4.029

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	14:02:23	232220.180	500.007	140.001	40.000	40.000	770.017	76232.372
2	14:02:47	239475.060	470.006	100.000	90.000	20.000	830.019	79155.047
3	14:03:12	246317.180	510.007	110.000	70.000	30.000	920.024	77317.020
x		239337.470	493.340	116.667	66.667	30.000	840.020	77568.146
σ		7049.509	20.817	20.817	25.166	10.000	75.502	1477.432
%RSD		2.945	4.220	17.843	37.749	33.333	8.988	1.905

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	14:02:23	655929.560	706619.460	170.001	420.005	7011.376	378723.950
2	14:02:47	687400.710	732866.210	220.001	530.008	6871.322	405164.880
3	14:03:12	688086.370	734386.810	210.001	560.009	6871.322	413195.790
x		677138.880	724624.160	200.001	503.341	6918.007	399028.210
σ		18371.011	15611.050	26.458	73.713	80.860	18036.656
%RSD		2.713	2.154	13.229	14.645	1.169	4.520

14937 MF4N44 6/28/2011 2:05:06 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	14:05:06	89834.902	35.200	TM 584872460.000	T 139662070.000	413543.700	T 25213102.000	TM 29436668.000
2	14:05:31	88138.479	31.400	TM 586005410.000	T 139893850.000	409839.760	T 25308167.000	TM 29746599.000
3	14:05:55	87643.552	36.000	TM 587122870.000	T 140137440.000	417176.760	T 24812868.000	TM 29345613.000
x		88538.978	34.200	TM 586000250.000	T 139897790.000	413520.070	T 25111379.000	TM 29509627.000
σ		1149.262	2.458	TM 1125210.700	T 237707.410	3668.554	T 262851.660	TM 210213.480
%RSD		1.298	7.186	TM 0.192	T 0.170	0.887	T 1.047	TM 0.712

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	14:05:06	217881.160	1690.080	131512.500	20932.261	30175.474	426605.640	1880.099
2	14:05:31	217162.490	1200.040	133215.050	20551.820	28352.490	416746.890	2030.115
3	14:05:55	215259.660	1260.045	134111.720	21542.987	30465.967	416767.360	2260.143
x		216767.770	1383.388	132946.420	21009.023	29664.644	420039.960	2056.786
σ		1354.595	267.292	1320.270	500.022	1145.603	5686.049	191.421
%RSD		0.625	19.322	0.993	2.380	3.862	1.354	9.307

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	14:05:06	6351.129	1100.034	4720.624	5770.932	2060.119	2990.250	2280.146
2	14:05:31	7001.372	1290.047	4500.567	5932.985	2160.131	2958.245	2160.131
3	14:05:55	6131.052	1090.033	4510.570	5870.965	2200.136	3002.252	1990.111
x		6494.518	1160.038	4577.253	5858.294	2140.128	2983.583	2143.462
σ		452.531	112.702	124.263	81.766	72.120	22.749	145.734
%RSD		6.968	9.715	2.715	1.396	3.370	0.762	6.799

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:05:06	24.000	317202.490	3780.400	4300.518	4560.582	2620.192	7151.432
2	14:05:31	26.000	321437.210	3690.381	4500.567	4750.632	2990.250	7321.501
3	14:05:55	12.000	315065.140	3490.341	4770.637	5190.754	2590.188	6721.265
x		20.667	317901.610	3653.708	4523.907	4833.990	2733.544	7064.732
σ		7.572	3243.051	148.466	235.927	323.250	222.820	309.368
%RSD		36.638	1.020	4.063	5.215	6.687	8.151	4.379

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	14:05:06	257381.600	520.008	30.000	20.000	20.000	790.017	100451.740
2	14:05:31	258335.220	410.005	30.000	40.000	0.000	890.022	99969.046
3	14:05:55	254571.750	530.008	20.000	50.000	20.000	800.018	96922.318
x		256762.850	486.673	26.667	36.667	13.333	826.686	99114.369
σ		1956.543	66.585	5.774	15.275	11.547	55.078	1913.652
%RSD		0.762	13.682	21.651	41.660	86.603	6.663	1.931

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	14:05:06	704165.320	757649.010	330.003	500.007	2690.203	426789.960
2	14:05:31	717292.600	770355.690	240.002	550.008	2590.188	437514.880
3	14:05:55	703790.990	764387.250	250.002	470.006	2380.159	425008.220
x		708416.300	764130.650	273.335	506.674	2553.516	429771.020
σ		7689.379	6357.227	49.330	40.416	158.242	6765.290
%RSD		1.085	0.832	18.047	7.977	6.197	1.574

14938 MF4N59 6/28/2011 2:07:50 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	14:07:50	91565.659	45.800	TM 815999030.000	T 135562010.000	812670.720	T 13822157.000	TM 18140222.000
2	14:08:14	89112.797	49.800	TM 818458420.000	T 135686130.000	758316.460	T 14000770.000	TM 18292558.000
3	14:08:38	89762.037	50.200	TM 810300050.000	T 135618680.000	797812.720	T 14012634.000	TM 18104372.000
x		90146.831	48.600	TM 814919170.000	T 135622270.000	789599.970	T 13945187.000	TM 18179050.000
σ		1270.899	2.433	TM 4185011.500	T 62136.593	28092.408	T 106711.890	TM 99920.990
%RSD		1.410	5.006	TM 0.514	T 0.046	3.558	T 0.765	TM 0.550

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	14:07:50	217587.610	2760.213	222143.190	219470.450	94951.774	806291.070	1950.107
2	14:08:14	219541.310	3340.312	223459.460	218093.730	96841.884	809993.090	1920.103
3	14:08:38	213508.820	3290.303	221626.830	211768.280	94519.490	789912.890	2000.112
x		216879.250	3130.276	222409.830	216444.150	95437.716	802065.680	1956.774
σ		3077.996	321.458	944.962	4107.514	1235.104	10686.157	40.419
%RSD		1.419	10.269	0.425	1.898	1.294	1.332	2.066

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	14:07:50	3620.367	1490.062	4770.637	6991.368	1580.070	1438.058	1030.030
2	14:08:14	3960.439	1550.067	4720.624	7213.457	1440.058	1456.059	1120.035
3	14:08:38	3970.441	1380.053	4980.695	7233.465	1500.063	1390.054	1340.050
x		3850.416	1473.394	4823.985	7146.097	1506.730	1428.057	1163.372
σ		199.291	86.224	137.999	134.372	70.244	34.120	159.489
%RSD		5.176	5.852	2.861	1.880	4.662	2.389	13.709

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:07:50	40.000	310099.350	3630.369	2490.174	3120.273	1740.085	4000.448
2	14:08:14	12.000	314637.710	3140.276	2140.128	3220.290	1610.073	4040.457
3	14:08:38	32.000	312052.940	3070.264	2560.184	2980.249	1480.061	4160.485
x		28.000	312263.330	3280.303	2396.829	3106.937	1610.073	4067.130
σ		14.422	2276.483	305.180	225.048	120.575	130.012	83.286
%RSD		51.508	0.729	9.303	9.389	3.881	8.075	2.048

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	14:07:50	247260.080	490.007	50.000	60.000	20.000	490.007	88167.120
2	14:08:14	253263.340	480.006	50.000	60.000	10.000	570.009	89594.197
3	14:08:38	253253.200	600.010	50.000	20.000	30.000	590.010	86117.153
x		251258.870	523.341	50.000	46.667	20.000	550.009	87959.490
σ		3463.058	66.585	0.000	23.094	10.000	52.917	1747.796
%RSD		1.378	12.723	0.000	49.487	50.000	9.621	1.987

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	14:07:50	695557.630	754927.300	120.000	290.002	8822.179	418599.470
2	14:08:14	685863.250	741845.820	140.001	360.004	8722.130	422960.450
3	14:08:38	699549.090	747608.850	160.001	360.004	8912.223	436961.570
x		693656.660	748127.320	140.001	336.670	8818.844	426173.830
σ		7038.168	6556.132	20.000	40.415	95.091	9593.541
%RSD		1.015	0.876	14.286	12.004	1.078	2.251

14939 MF4N60 6/28/2011 2:10:33 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	14:10:33	89587.664	48.000	TM 805524440.000	T 140946920.000	792242.780	T 18809212.000	TM 15783382.000
2	14:10:57	87749.069	45.800	TM 810684440.000	T 142400530.000	779082.320	T 18971708.000	TM 16286555.000
3	14:11:22	88446.497	45.600	TM 778394240.000	T 137743800.000	760777.910	T 18278368.000	TM 15916925.000
x		88594.410	46.467	TM 798201040.000	T 140363750.000	777367.670	T 18686429.000	TM 15995621.000
σ		928.179	1.332	TM 17346133.000	T 2382512.500	15802.357	T 362610.980	TM 260654.060
%RSD		1.048	2.866	TM 2.173	T 1.697	2.033	T 1.941	TM 1.630

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	14:10:33	209805.310	2740.210	173771.410	200347.630	187196.070	954432.460	5090.726
2	14:10:57	210614.760	2700.204	175619.350	198487.020	190884.810	970346.680	5020.706
3	14:11:22	206679.170	2320.151	175720.340	194867.480	188378.410	948951.640	4570.585
x		209033.080	2586.855	175037.030	197900.710	188819.760	957910.260	4894.005
σ		2078.332	231.837	1097.227	2786.721	1883.561	11113.426	282.270
%RSD		0.994	8.962	0.627	1.408	0.998	1.160	5.768

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	14:10:33	14605.971	6941.349	7041.388	5995.006	1380.053	1570.069	1050.031
2	14:10:57	14265.696	7141.428	7081.404	6173.067	1560.068	1596.071	1220.042
3	14:11:22	14525.906	7241.468	6631.231	6133.053	1470.061	1624.074	1240.043
x		14465.858	7108.082	6918.008	6100.375	1470.061	1596.738	1170.039
σ		177.908	152.813	249.160	93.420	90.007	27.009	104.410
%RSD		1.230	2.150	3.602	1.531	6.123	1.691	8.924

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:10:33	34.000	303131.230	8241.902	9762.668	11093.445	5981.002	16908.001
2	14:10:57	28.000	310150.220	8381.967	10032.818	11573.749	6731.268	16387.516
3	14:11:22	20.000	319055.050	7851.726	10413.035	10773.249	6111.046	16017.180
x		27.333	310778.830	8158.531	10069.507	11146.814	6274.439	16437.566
σ		7.024	7980.504	274.776	326.732	402.910	400.934	447.514
%RSD		25.697	2.568	3.368	3.245	3.615	6.390	2.723

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	14:10:33	246743.000	630.011	70.000	10.000	20.000	1320.049	100793.660
2	14:10:57	252005.730	520.008	50.000	70.000	70.000	1240.043	98229.432
3	14:11:22	255778.810	590.010	90.000	50.000	60.000	1210.041	97022.862
x		251509.180	580.009	70.000	43.333	50.000	1256.711	98681.985
σ		4538.324	55.679	20.000	30.551	26.458	56.866	1925.704
%RSD		1.804	9.600	28.571	70.501	52.915	4.525	1.951

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	14:10:33	695713.530	733272.380	160.001	550.008	11683.821	420902.670
2	14:10:57	682809.510	742095.900	230.001	510.007	12154.135	418640.420
3	14:11:22	695786.280	739428.600	210.001	480.006	10623.159	432126.010
x		691436.440	738265.630	200.001	513.341	11487.038	423889.700
σ		7471.231	4525.259	36.056	35.120	784.229	7221.986
%RSD		1.081	0.613	18.028	6.841	6.827	1.704

CCV2 CCV 6/28/2011 2:13:17 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	14:13:17	68050.417	385225.220	τ165821970.000	τ121214810.000	τ150089010.000	τ24629460.000	τ4782773.500
2	14:13:41	65991.712	378553.590	τ165958290.000	τ120203760.000	τ150655650.000	τ24605929.000	τ4706682.200
3	14:14:05	65245.980	371658.200	τ162668410.000	τ118717920.000	τ143416380.000	τ24020705.000	τ4584272.200
x		66429.370	378479.000	τ164816220.000	τ120045500.000	τ148053680.000	τ24418698.000	τ4691242.700
σ		1452.541	6783.815	τ1861308.200	τ1255945.900	τ4026002.600	τ344872.600	τ100147.280
%RSD		2.187	1.792	τ1.129	τ1.046	τ2.719	τ1.412	τ2.135

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	14:13:17	162778.550	196373.850	2711113.200	2626391.600	τ5133143.800	τ218850000.000	3066012.200
2	14:13:41	162536.350	191086.960	2650539.900	2624478.600	τ5127547.000	τ216940680.000	3046932.500
3	14:14:05	155070.400	187226.390	2662255.900	2554232.200	τ5147243.300	τ210522070.000	2951533.700
x		160128.430	191562.400	2674636.300	2601700.800	τ5135978.000	τ215437580.000	3021492.800
σ		4382.059	4592.229	32128.492	41120.118	τ10149.420	τ4362689.300	61332.866
%RSD		2.737	2.397	1.201	1.581	τ0.198	τ2.025	2.030

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	14:13:17	643209.170	755365.250	750256.500	493568.080	51534.255	166484.480	72185.607
2	14:13:41	627391.080	745951.660	742804.460	483397.470	50390.999	163216.520	71773.953
3	14:14:05	636298.070	740605.910	721153.530	479245.790	49518.563	161075.200	72165.526
x		635632.770	747307.610	738071.500	485403.780	50481.272	163592.070	72041.695
σ		7930.003	7472.511	15117.750	7368.920	1010.873	2724.121	232.089
%RSD		1.248	1.000	2.048	1.518	2.002	1.665	0.322

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	14:13:17	138.001	281796.050	750193.950	1300545.700	1417676.000	860452.910	2149303.900
2	14:13:41	130.000	284833.670	740918.490	1284934.100	1389279.200	841668.680	2141381.500
3	14:14:05	116.000	278911.280	718374.830	1261155.400	1398574.400	817378.450	2108255.700
x		128.000	281847.000	736495.760	1282211.700	1401843.200	839833.350	2132980.400
σ		11.136	2961.523	16364.124	19835.771	14477.884	21595.802	21775.542
%RSD		8.700	1.051	2.222	1.547	1.033	2.571	1.021

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	14:13:17	241796.020	115522.470	τ4281596.400	84328.648	1331001.600	τ4454411.200	τ1877510.300
2	14:13:41	234661.790	114214.090	τ4230229.100	84017.185	1303671.800	τ4370921.100	τ1835915.400
3	14:14:05	233800.600	111356.130	τ4098091.400	83123.015	1295079.100	τ4425654.200	τ1796351.300
x		236752.800	113697.560	τ4203305.600	83822.949	1309917.500	τ4416995.500	τ1836592.400
σ		4388.729	2130.658	τ94668.766	625.846	18758.038	τ42413.206	τ40583.722
%RSD		1.854	1.874	τ2.252	0.747	1.432	τ0.960	τ2.210

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	14:13:17	673827.810	705725.120	τ8949688.800	τ21965995.000	τ16922874.000	436582.470
2	14:13:41	658325.350	692990.660	τ8899249.400	τ21959055.000	τ16930878.000	438703.510
3	14:14:05	639799.920	702106.590	τ8950788.700	τ21374184.000	τ16656011.000	443161.580
x		657317.690	700274.120	τ8933242.300	τ21766411.000	τ16836588.000	439482.520
σ		17036.311	6562.015	τ29443.842	τ339696.190	τ156435.380	3358.026
%RSD		2.592	0.937	τ0.330	τ1.561	τ0.929	0.764

CCB2 CCB 6/28/2011 2:16:01 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	14:16:01	70486.841	71.000	93817.804	16595.708	18960.060	104605.490	16587.701
2	14:16:26	69182.254	68.600	81232.344	14565.938	17418.491	103830.990	16077.234
3	14:16:50	70275.009	56.200	75109.629	13945.443	16687.794	104343.970	16127.279
x		69981.368	65.267	83386.593	15035.697	17688.782	104260.150	16264.071
σ		700.111	7.943	9538.320	1386.175	1159.996	393.995	281.386
%RSD		1.000	12.170	11.439	9.219	6.558	0.378	1.730
Run	**Time**	**45Sc**	**47Ti**	**51V**	**52Cr**	**55Mn**	**56Fe**	**59Co**
1	14:16:01	158258.180	30.000	8952.243	820.019	500.007	116005.580	220.001
2	14:16:26	162546.450	90.000	7851.726	920.024	560.009	109454.420	300.003
3	14:16:50	161860.260	60.000	8311.934	810.018	570.009	107019.730	210.001
x		160888.300	60.000	8371.968	850.020	543.342	110826.580	243.335
σ		2303.438	30.000	552.710	60.831	37.861	4647.418	49.330
%RSD		1.432	50.000	6.602	7.156	6.968	4.193	20.272
Run	**Time**	**60Ni**	**65Cu**	**66Zn**	**75As**	**77Se**	**78Se**	**82Se**
1	14:16:01	90.000	100.000	160.001	310.003	60.000	416.005	30.000
2	14:16:26	40.000	200.001	190.001	236.002	100.000	448.006	30.000
3	14:16:50	160.001	30.000	90.000	196.001	50.000	348.003	70.000
x		96.667	110.000	146.667	247.335	70.000	404.005	43.333
σ		60.277	85.441	51.316	57.840	26.458	51.070	23.094
%RSD		62.356	77.673	34.988	23.385	37.797	12.641	53.294
Run	**Time**	**83Kr**	**89Y**	**94Mo**	**95Mo**	**96Mo**	**97Mo**	**98Mo**
1	14:16:01	26.000	294773.040	690.013	1350.051	1600.072	710.014	2050.118
2	14:16:26	10.000	283147.170	840.020	1070.032	1360.052	810.018	2060.119
3	14:16:50	22.000	295606.650	520.008	960.026	1040.030	500.007	1700.081
x		19.333	291175.620	683.347	1126.703	1333.385	673.347	1936.773
σ		8.327	6965.323	160.110	201.094	280.971	158.225	205.042
%RSD		43.069	2.392	23.430	17.848	21.072	23.498	10.587
Run	**Time**	**103Rh**	**106Cd**	**107Ag**	**108Cd**	**111Cd**	**121Sb**	**137Ba**
1	14:16:01	268554.330	690.013	570.009	10.000	140.001	3400.324	240.002
2	14:16:26	264159.500	660.012	590.010	10.000	70.000	3800.404	130.000
3	14:16:50	274188.990	550.008	430.005	0.000	80.000	3050.261	170.001
x		268967.610	633.345	530.008	6.667	96.667	3416.996	180.001
σ		5027.501	73.714	87.180	5.774	37.860	375.350	55.678
%RSD		1.869	11.639	16.449	86.603	39.165	10.985	30.932
Run	**Time**	**159Tb**	**165Ho**	**203Tl**	**205Tl**	**208Pb**	**209Bi**	
1	14:16:01	676527.040	718780.680	1690.080	3930.433	5050.714	482624.990	
2	14:16:26	686652.740	729002.800	1720.083	3840.413	3810.407	504044.710	
3	14:16:50	689883.770	739168.140	1360.052	3360.316	3250.296	513837.970	
x		684354.520	728983.870	1590.072	3710.387	4037.139	500169.220	
σ		6968.636	10193.744	199.767	306.493	921.375	15963.302	
%RSD		1.018	1.398	12.563	8.260	22.822	3.192	

Sentinel, Inc. **Sample Analysis**

ICP-MS RUN LOG

SDG:	MF4N06
CASE NO.:	41486
EPA RUN#	___2___
EPA BATCH#	___1___
PREP METHOD:	200.8
AN. METHOD:	MS
MATRIX:	LW
SOURCE:	CAL Stds See Standards Log
SOURCE:	INIT. CAL VER USEPA ICV-1 0307
DATE PREP.	See Standards Log
PREPARER:	RR

VALID DATA for: For All Analytes

ANALYST: MVK

INSTRUMENT ID: **MS0**
RUN ID: **MS0-11063030**

RUN START DATE: **06/30/11** RUN START TIME: **0913**
RUN END DATE: **06/30/11** RUN END TIME: **1045**

Data Reviewed By: 6/30/11
Analyst Date
for Mr. Kilgore

Data Reviewed By: 6/30/11
Supervisor Date

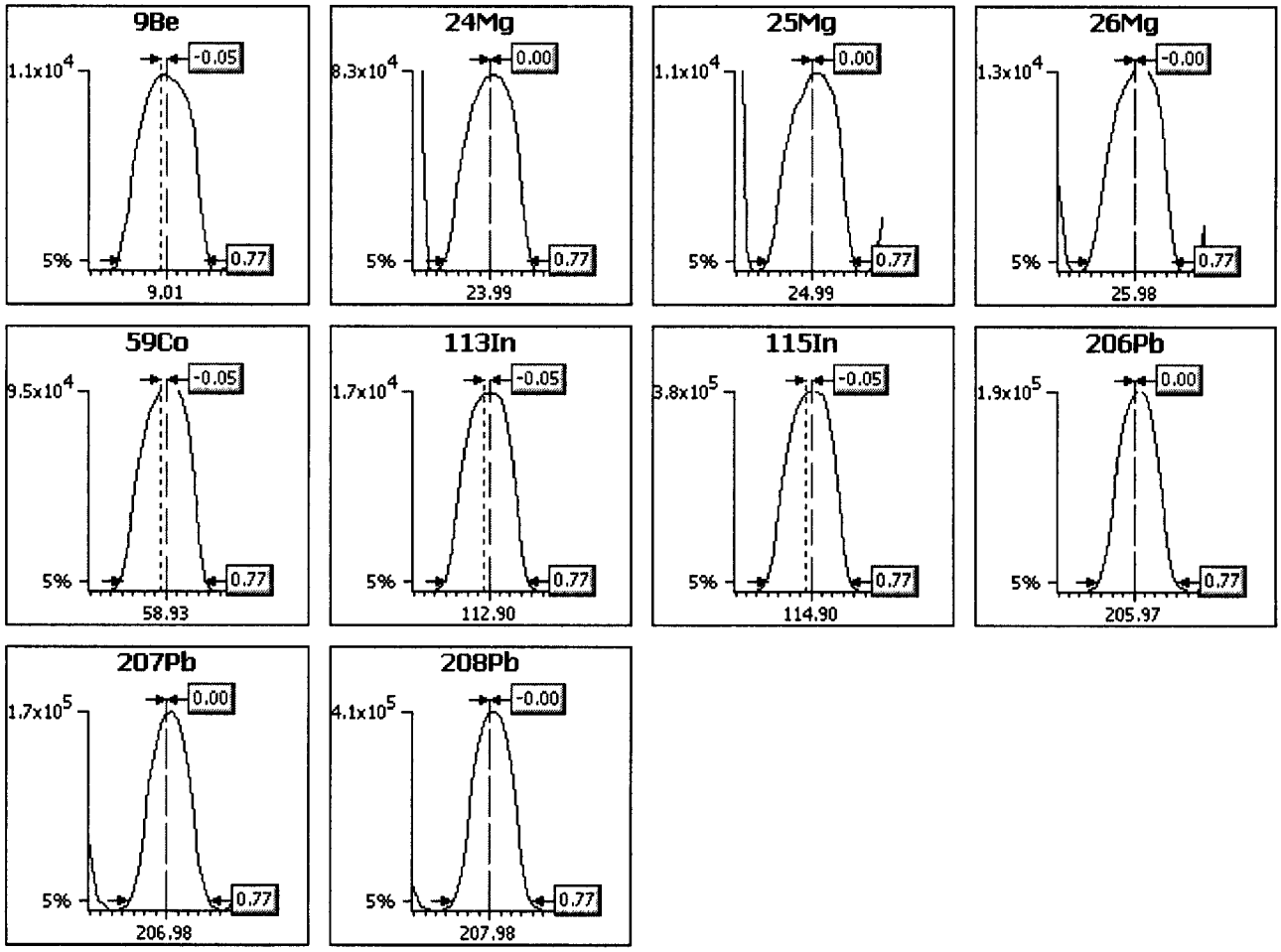
Tune Report

Performance Report

Sample details
Acquired at : 6/30/2011 9:12:37 AM
Report name : EPA Xt Screen Standard Mode CLP+ Y [5/19/2011 11:07:15 AM]

Mass Calibration verification

Acquisition parameters
Sweeps : 10
Dwell : 10.0 mSecs
Point spacing : 0.05 amu
Peak width measured at 5% of the peak maximum



Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.85	0.65	0.10	0.77	-0.05
24Mg	0.85	0.65	0.10	0.77	0.00
25Mg	0.85	0.65	0.10	0.77	0.00
26Mg	0.85	0.65	0.10	0.77	-0.00
59Co	0.85	0.65	0.10	0.77	-0.05
113In	0.85	0.65	0.10	0.77	-0.05
115In	0.85	0.65	0.10	0.77	-0.05
206Pb	0.85	0.65	0.10	0.77	0.00
207Pb	0.85	0.65	0.10	0.77	0.00
208Pb	0.85	0.65	0.10	0.77	-0.00

Sample details
Acquired at : 6/30/2011 9:12:37 AM
Report name : EPA Xt Screen Standard Mode CLP+ Y [5/19/2011 11:07:15 AM]

Tune Report

Tune conditions

Major	
Extraction	-121.6
Lens 1	-1192
Lens 2	-80.0
Focus	10.0
D1	-43.9
D2	-140
Pole Bias	-1.0
Hexapole Bias	-4.0
Nebuliser	0.95

Minor	
Lens 3	-195.3
Forward power	1404
Horizontal	70
Vertical	305
DA	-40.8
Cool	13.0
Auxiliary	0.90
Sampling Depth	130

Global	
Standard resolution	135
High resolution	90
Analogue Detector	2150
PC Detector	3400

Add. Gases	
CCT-He	0.00
Do Not Use	0.00

Sensitivity and stability results

Acquisition parameters
Sweeps : 102

Run	Time	5Bkg	7Li	7Li	9Be	24Mg	25Mg	26Mg	59Co	137Ba++
Dwell (mSecs)		100.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	30.0
Limits	%RSD	-	-	-	5.0%	5.0%	5.0%	5.0%	5.0%	-
	Countrate	<1	-	-	>5000	>10000	>5000	>5000	>50000	-
1	9:13:15 AM	0.000	40255.126	39478.886	10851.335	80593.223	10806.210	12828.135	96998.022	0.980
2	9:14:17 AM	0.000	40156.866	39255.846	10903.328	78823.585	10803.267	12500.452	96007.396	0.000
3	9:15:19 AM	0.000	39576.160	39229.318	10642.386	77986.589	10740.484	12251.260	94670.877	0.327
4	9:16:22 AM	0.098	39522.119	38972.875	10449.135	77291.420	10604.128	12409.212	94126.836	1.307
5	9:17:24 AM	0.098	38614.254	38205.533	10507.993	76276.284	10317.686	12046.219	92342.063	1.307
x		0.039	39624.905	39028.491	10670.835	78194.220	10654.355	12407.056	94829.039	0.784
σ		0.05	654.70	493.77	201.94	1634.62	205.26	291.77	1788.59	0.59
%RSD		136.931	1.652	1.265	1.892	2.090	1.927	2.352	1.886	75.691

Run	Time	101Bkg	113In	115In	137Ba	137Ba	140Ce	156Ce O	204Pb	206Pb
Dwell (mSecs)		100.0	10.0	10.0	10.0	10.0	10.0	30.0	10.0	10.0
Limits	%RSD	-	5.0%	5.0%	-	-	-	-	-	5.0%
	Countrate	<1	>5000	>100000	-	-	-	-	-	>10000
1	9:13:15 AM	0.000	16659.728	388287.85	182.354	147.059	32.353	1.307	10346.134	189514.05
2	9:14:17 AM	0.000	16302.536	382634.43	145.099	153.922	46.078	0.980	10393.220	189547.74
3	9:15:19 AM	0.000	16431.085	381948.41	154.903	156.863	26.471	0.654	10325.533	187135.24
4	9:16:22 AM	0.000	16287.817	379034.35	160.785	159.805	38.235	1.307	10427.553	188335.01
5	9:17:24 AM	0.098	16079.785	375056.58	164.707	159.805	35.294	0.980	10120.514	186201.04
x		0.020	16352.191	381392.32	161.569	155.491	35.686	1.046	10322.591	188146.62
σ		0.04	213.08	4876.01	13.77	5.31	7.26	0.27	119.80	1472.81
%RSD		223.607	1.303	1.278	8.521	3.413	20.337	26.146	1.161	0.783

Run	Time	207Pb	208Pb	220Bkg	238U
Dwell (mSecs)		10.0	10.0	100.0	10.0
Limits	%RSD	5.0%	5.0%	-	-
	Countrate	>10000	>10000	<1	-
1	9:13:15 AM	164608.14	407674.57	0.098	862483.52
2	9:14:17 AM	166083.48	408741.69	0.098	870319.94
3	9:15:19 AM	164244.03	403634.33	0.196	860204.91
4	9:16:22 AM	164917.84	405248.71	0.196	861385.31
5	9:17:24 AM	163128.98	400673.66	0.098	852593.79
x		164596.49	405194.59	0.137	861397.49
σ		1071.49	3225.23	0.05	6318.96
%RSD		0.651	0.796	39.123	0.734

Ratio results

Run	Time	137Ba++/137Ba
Ratio limits		<0.0500
1	9:13:15 AM	0.007
2	9:14:17 AM	0.000
		0.002

Tune Report

3	9:15:19 AM	
4	9:16:22 AM	0.008
5	9:17:24 AM	0.008
x		0.0050
σ		0.00
%RSD		74.8418

Result : The performance report passed.

Experiment Details

Description	PlasmaLab Template BlankExperiment
Template Filename	C:\Program Files\Thermo Fisher\PlasmaLab\data\MF4N01.tee
Created By User	ThermoFisher
Analyte Database	Default.tea
Creation Timestamp	4/1/2008 3:31:44 PM
Last Edited By	labtech
Last Edit Timestamp	6/30/2011 10:58:04 AM
Instrument Detector	Simultaneous
Database Version	3,51
Acquisition Mode	Unknown

Numerical Results report key (text indicates meaning)

Blue text indicates that cell is a statistic.
Underlining indicates that a data warning flag is set.

Column headings	Result cells	Data warning flags
No flag	Internal Standard	I - Invalid calibration
Semi Quant	Excluded	T - Tripped
Standard Addition	QC Warning	F - Interference correction failed
Multi Element	QC Failure	M - Result over max
	Transient TRA only:	V - Valley integration failed
	Peak Not Found	D - Different method used
	Manually Edited	
	Merged Peak	

Setup

Survey Scan Setup

Sweeps	10
Dwell Time	600
Channels Per Mass	10
Acquisition Duration	13583

Main Run Setup

Main Run	Peak Jumping
Sweeps	10
Dwell Time	10000
Channels Per Mass	1
Acquisition Duration	19360
Channel Spacing	0.02

Survey Scan Regions

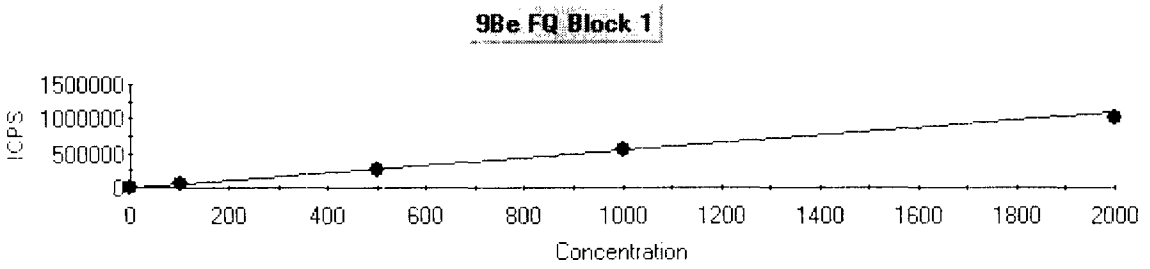
Start AMU	End AMU	Channels	Dwell ms	Resolution
4.59	11.50	69	600	
12.50	13.50	10	600	
22.59	29.41	68	600	
30.59	31.41	8	600	
32.59	34.50	19	600	
35.50	37.50	20	600	
38.59	39.41	8	600	
42.59	79.41	368	600	
80.59	245.50	1649	600	

Peak Jump Regions

Analyte	Channels	Dwell ms	Resolution
6Li	1	200000	Standard
7Li	1	200000	Standard
9Be	1	500000	Standard
11B	1	200000	Standard

23Na	1	50000	Standard
24Mg	1	50000	Standard
27Al	1	10000	Standard
39K	1	10000	Standard
44Ca	1	10000	Standard
45Sc	1	10000	Standard
47Ti	1	10000	Standard
51V	1	10000	Standard
52Cr	1	10000	Standard
53Cl O	1	10000	Standard
55Mn	1	10000	Standard
56Fe	1	10000	Standard
59Co	1	10000	Standard
60Ni	1	10000	Standard
65Cu	1	10000	Standard
66Zn	1	10000	Standard
75As	1	50000	Standard
77Se	1	10000	Standard
77Ar Cl	1	50000	Standard
78Se	1	50000	Standard
82Kr	1	10000	Standard
82Se	1	50000	Standard
83Kr	1	50000	Standard
89Y	1	10000	
94Mo	1	10000	Standard
95Mo	1	10000	Standard
96Mo	1	10000	Standard
97Mo	1	10000	Standard
98Mo	1	10000	Standard
103Rh	1	10000	
106Cd	1	10000	Standard
107Ag	1	10000	Standard
108Cd	1	10000	Standard
111Cd	1	10000	Standard
115In	1	10000	
118Sn	1	10000	Standard
121Sb	1	10000	Standard
137Ba	1	10000	Standard
159Tb	1	10000	
165Ho	1	10000	
203Tl	1	10000	Standard
205Tl	1	10000	Standard
206Pb	1	10000	Standard
207Pb	1	10000	Standard
208Pb	1	10000	Standard
209Bi	1	10000	

Fully Quant Calibration

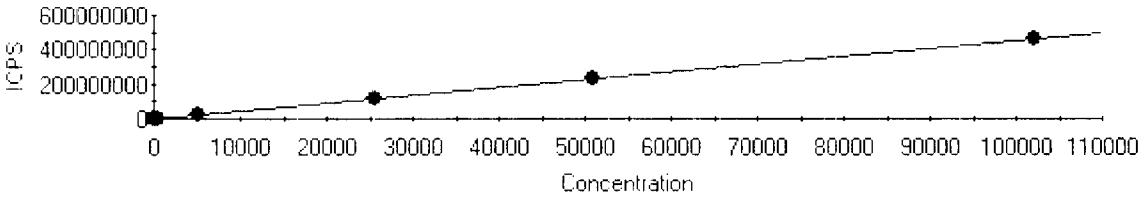


Intercept CPS=244.119646 Intercept Conc=0.447148
Sensitivity=545.947870 Correlation Coeff=0.999611

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	244.12	0.00
S1 S	1.000	0.650	0.350	599.17	34.97
S2 S	100.000	104.435	4.435	57260.11	4.43
S3 S	500.000	495.435	4.565	270725.99	0.91

S4 S	1000.000	984.344	15.656	537644.57	1.57
S5 S	2000.000	1867.082	132.918	1019573.56	6.65

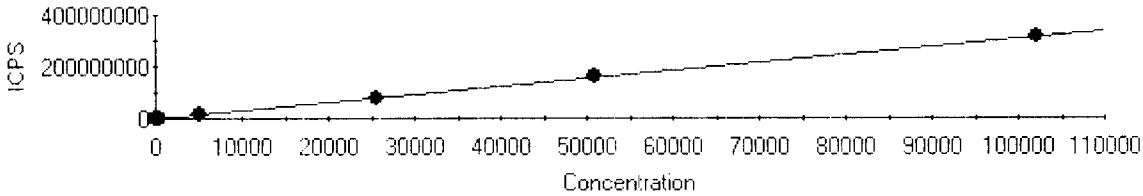
23Na FQ Block 1



Intercept CPS=33494.046598 Intercept Conc=7.487803
Sensitivity=4473.147422 Correlation Coeff=0.999967

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	33494.05	0.00
S1 S	500.000	489.288	10.712	2222152.59	2.14
S2 S	5100.000	5087.543	12.457	22790822.39	0.24
S3 S	25500.000	24746.723	753.277	110729232.56	2.95
S4 S	51000.000	50873.629	126.371	227598734.97	0.25
S5 S	102000.000	102252.180	252.180	457422571.18	0.25

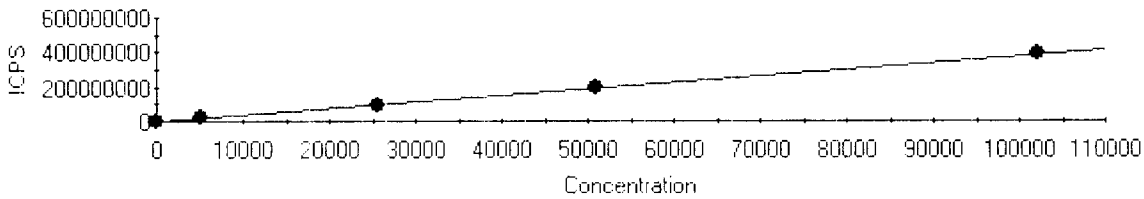
24Mg FQ Block 1



Intercept CPS=2929.266931 Intercept Conc=0.947334
Sensitivity=3092.115626 Correlation Coeff=0.999984

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	2929.27	0.00
S1 S	500.000	510.300	10.300	1580837.19	2.06
S2 S	5100.000	5259.353	159.353	16265457.89	3.12
S3 S	25500.000	25060.480	439.520	77492831.15	1.72
S4 S	51000.000	51186.219	186.219	158276637.77	0.37
S5 S	102000.000	102008.752	8.752	315425785.88	0.01

27Al FQ Block 1

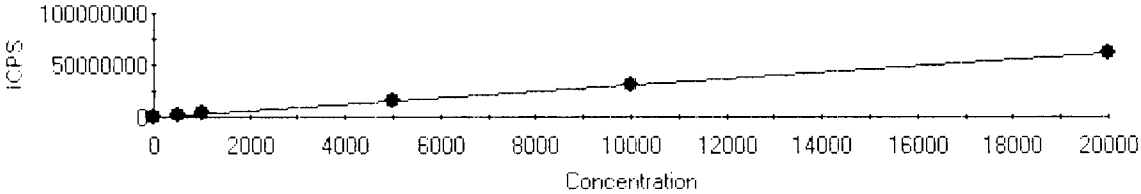


Intercept CPS=3108.028389 Intercept Conc=0.824479
Sensitivity=3769.687553 Correlation Coeff=0.999941

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	3108.03	0.00
S1 S	20.000	20.898	0.898	81885.73	4.49

S2 S	5100.000	5220.672	120.672	19683410.25	2.37
S3 S	25500.000	24836.504	663.496	93628968.01	2.60
S4 S	51000.000	51432.760	432.760	193888541.66	0.85
S5 S	102000.000	103656.023	1656.023	390753927.21	1.62

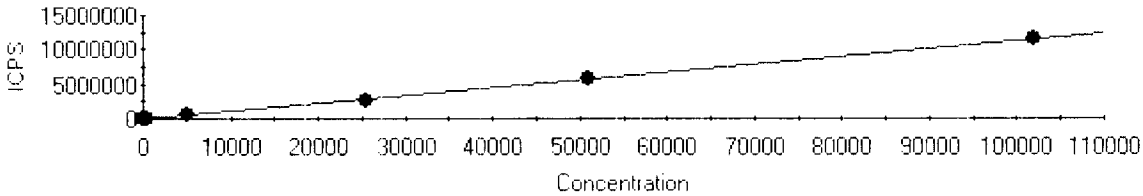
39K FQ Block 1



Intercept CPS=121919.125902 Intercept Conc=39.385012
Sensitivity=3095.571671 Correlation Coeff=0.999974

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	121919.13	0.00
S1 S	500.000	479.869	20.131	1607387.75	4.03
S2 S	1000.000	998.693	1.307	3213443.98	0.13
S3 S	5000.000	4946.835	53.165	15435201.00	1.06
S4 S	10000.000	10105.949	105.949	31405608.29	1.06
S5 S	20000.000	19960.885	39.115	61912270.71	0.20

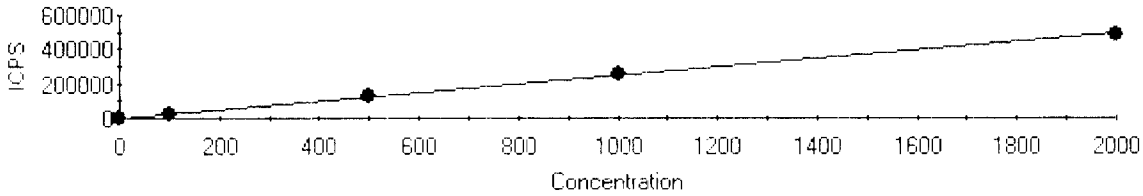
44Ca FQ Block 1



Intercept CPS=18209.411803 Intercept Conc=160.636272
Sensitivity=113.358033 Correlation Coeff=0.999751

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	18209.41	0.00
S1 S	500.000	490.236	9.764	73781.59	1.95
S2 S	5100.000	4802.979	297.021	562665.67	5.82
S3 S	25500.000	23469.581	2030.419	2678674.90	7.96
S4 S	51000.000	51626.783	626.783	5870519.98	1.23
S5 S	102000.000	102613.992	613.992	11650329.71	0.60

47Ti FQ Block 1

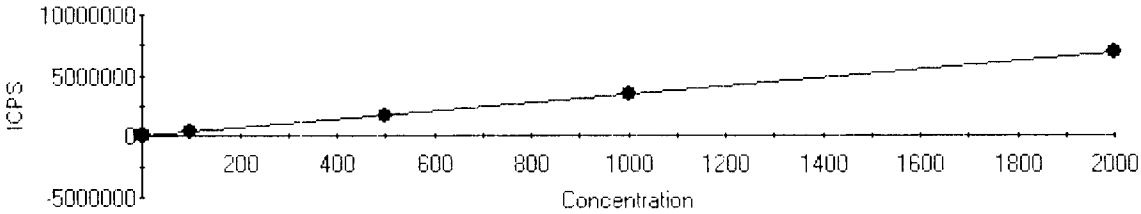


Intercept CPS=60.004968 Intercept Conc=0.244021
Sensitivity=245.901255 Correlation Coeff=0.999933

Label	Defined	Measured	Error	Mean CPS	% Error

S0 S0	0.000	-0.000	0.000	60.00	0.00
S1 S	0.000	-0.135	0.135	26.90	0.00
S2 S	100.000	100.633	0.633	24805.77	0.63
S3 S	500.000	503.619	3.619	123900.66	0.72
S4 S	1000.000	1018.435	18.435	250494.35	1.84
S5 S	2000.000	1989.846	10.154	489365.68	0.51

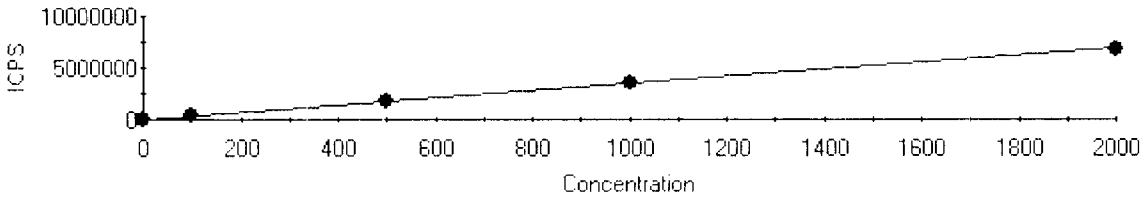
51V FQ Block 1



Intercept CPS=246.348710 Intercept Conc=0.071992
Sensitivity=3421.898137 Correlation Coeff=0.999935

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	246.35	0.00
S1 S	5.000	5.519	0.519	19131.86	10.38
S2 S	100.000	99.639	0.361	341199.66	0.36
S3 S	500.000	490.742	9.258	1679515.65	1.85
S4 S	1000.000	1016.678	16.678	3479216.61	1.67
S5 S	2000.000	1993.992	6.008	6823483.39	0.30

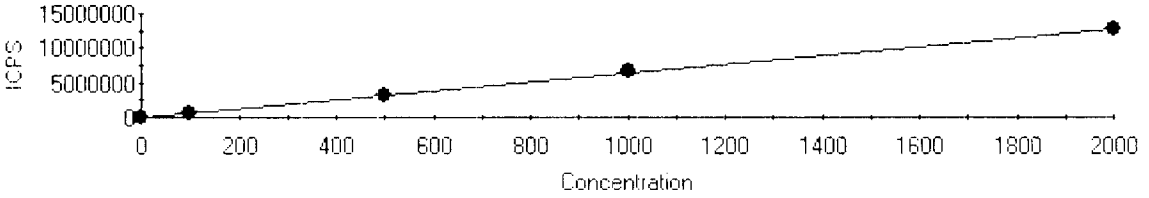
52Cr FQ Block 1



Intercept CPS=730.956804 Intercept Conc=0.212692
Sensitivity=3436.690665 Correlation Coeff=0.999966

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	730.96	0.00
S1 S	2.000	2.194	0.194	8271.38	9.70
S2 S	100.000	102.239	2.239	352093.48	2.24
S3 S	500.000	485.270	14.730	1668454.64	2.95
S4 S	1000.000	989.136	10.864	3400084.41	1.09
S5 S	2000.000	1947.340	52.660	6693135.10	2.63

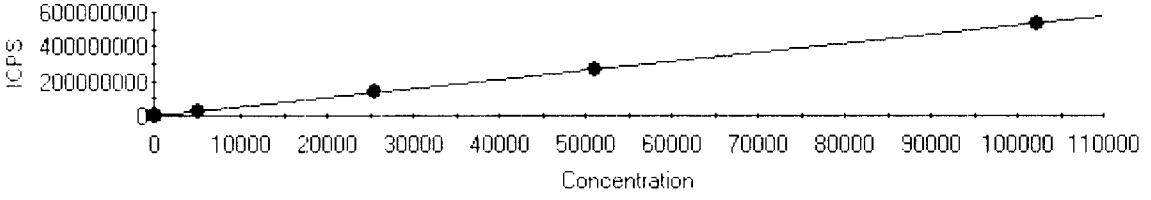
55Mn FQ Block 1



Intercept CPS=768.288594 Intercept Conc=0.119857
Sensitivity=6410.040047 Correlation Coeff=0.999924

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	768.29	0.00
S1 S	1.000	1.049	0.049	7495.60	4.95
S2 S	100.000	103.561	3.561	664600.41	3.56
S3 S	500.000	494.656	5.344	3171533.66	1.07
S4 S	1000.000	1019.451	19.451	6535489.08	1.95
S5 S	2000.000	1991.432	8.568	12765930.11	0.43

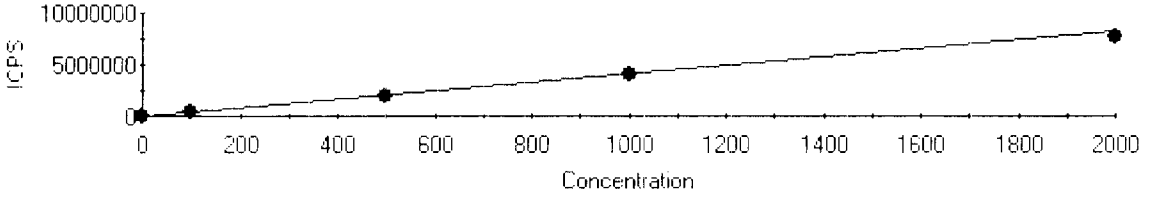
56Fe FQ Block 1



Intercept CPS=97904.587287 Intercept Conc=18.837350
Sensitivity=5197.365243 Correlation Coeff=0.999938

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	97904.59	0.00
S1 S	200.000	223.384	23.384	1258912.00	11.69
S2 S	5120.000	5488.693	368.693	28624647.26	7.20
S3 S	25600.000	25796.509	196.509	134171735.70	0.77
S4 S	51200.000	52108.173	908.173	270923113.95	1.77
S5 S	102430.000	101908.458	521.542	529753384.34	0.51

59Co FQ Block 1

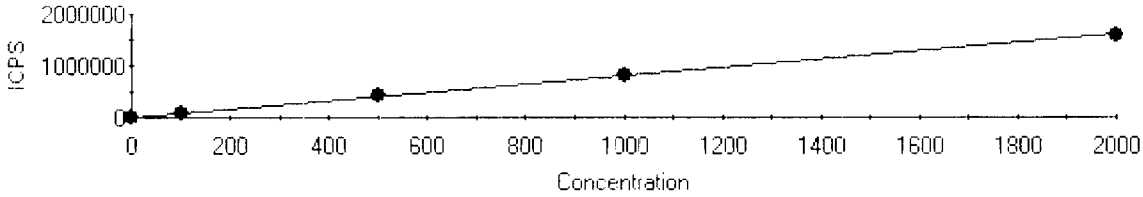


Intercept CPS=440.751272 Intercept Conc=0.107216
Sensitivity=4110.874882 Correlation Coeff=0.999630

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	440.75	0.00
S1 S	1.000	1.014	0.014	4609.91	1.42
S2 S	100.000	106.018	6.018	436266.69	6.02
S3 S	500.000	487.912	12.088	2006187.91	2.42
S4 S	1000.000	996.704	3.296	4097765.82	0.33

S5 S	2000.000	1887.274	112.726	7758787.45	5.64

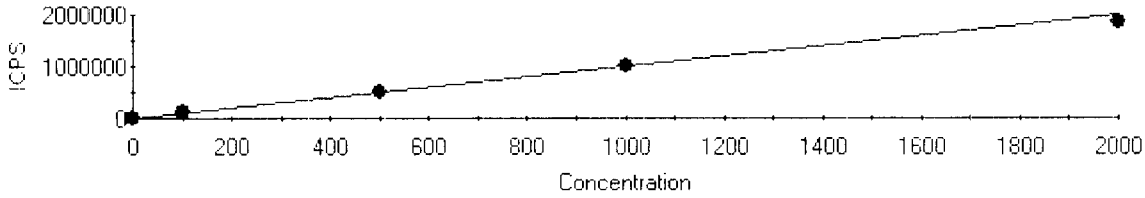
60Ni FQ Block 1



Intercept CPS=373.563974 Intercept Conc=0.466005
Sensitivity=801.630559 Correlation Coeff=0.999672

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	373.56	0.00
S1 S	1.000	0.690	0.310	926.70	31.00
S2 S	100.000	117.380	17.380	94468.57	17.38
S3 S	500.000	541.822	41.822	434714.52	8.36
S4 S	1000.000	1020.414	20.414	818368.63	2.04
S5 S	2000.000	1978.469	21.531	1586374.54	1.08

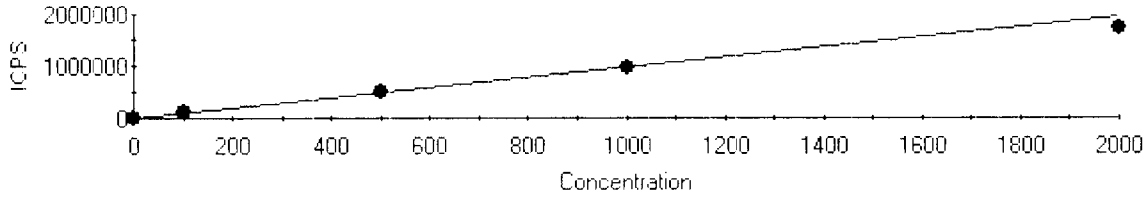
65Cu FQ Block 1



Intercept CPS=253.144128 Intercept Conc=0.254704
Sensitivity=993.876589 Correlation Coeff=0.999048

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	253.14	0.00
S1 S	2.000	1.992	0.008	2233.21	0.39
S2 S	100.000	109.312	9.312	108896.08	9.31
S3 S	500.000	509.385	9.385	506518.98	1.88
S4 S	1000.000	999.140	0.860	993275.23	0.09
S5 S	2000.000	1844.123	155.877	1833083.76	7.79

66Zn FQ Block 1

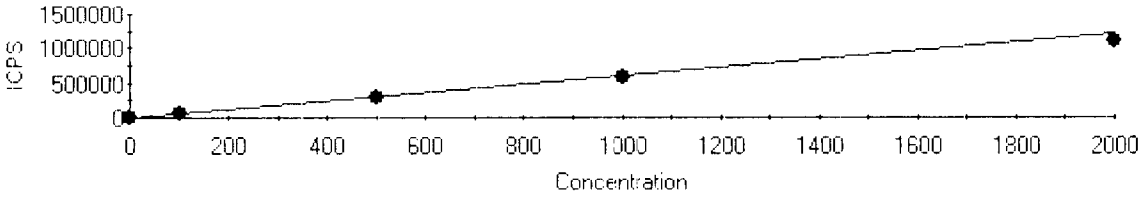


Intercept CPS=506.253747 Intercept Conc=0.511635
Sensitivity=989.481472 Correlation Coeff=0.998710

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	506.25	0.00
S1 S	2.000	1.736	0.264	2223.70	13.22
S2 S	100.000	108.520	8.520	107884.43	8.52

S3 S	500.000	493.001	6.999	488321.62	1.40
S4 S	1000.000	955.279	44.721	945737.34	4.47
S5 S	2000.000	1744.415	255.585	1726572.26	12.78

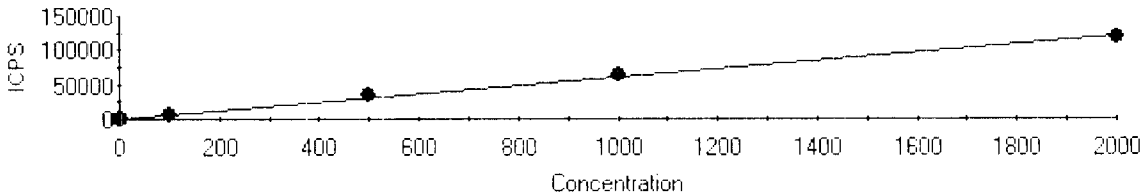
75As FQ Block 1



Intercept CPS=91.551565 Intercept Conc=0.150073
Sensitivity=610.047231 Correlation Coeff=0.999318

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	91.55	0.00
S1 S	1.000	0.804	0.196	581.85	19.63
S2 S	100.000	103.305	3.305	63112.61	3.31
S3 S	500.000	487.836	12.164	297694.34	2.43
S4 S	1000.000	960.218	39.782	585870.16	3.98
S5 S	2000.000	1793.537	206.463	1094233.61	10.32

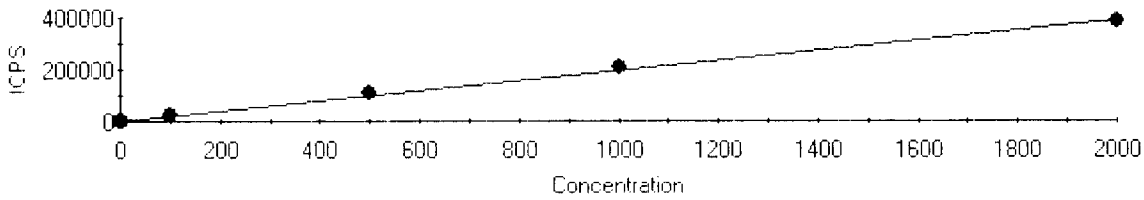
77Se FQ Block 1



Intercept CPS=73.238817 Intercept Conc=1.215255
Sensitivity=60.266237 Correlation Coeff=0.998702

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	73.24	0.00
S1 S	5.000	4.898	0.102	368.42	2.04
S2 S	100.000	115.257	15.257	7019.33	15.26
S3 S	500.000	560.523	60.523	33853.82	12.10
S4 S	1000.000	1063.094	63.094	64141.89	6.31
S5 S	2000.000	1952.560	47.440	117746.68	2.37

78Se FQ Block 1

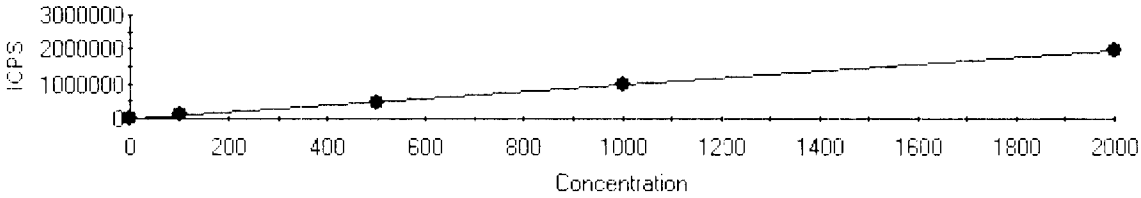


Intercept CPS=480.132708 Intercept Conc=2.459468
Sensitivity=195.218099 Correlation Coeff=0.998917

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	480.13	0.00

S1 S	5.000	5.235	0.235	1502.02	4.69
S2 S	100.000	117.539	17.539	23425.90	17.54
S3 S	500.000	547.216	47.216	107306.53	9.44
S4 S	1000.000	1063.178	63.178	208031.68	6.32
S5 S	2000.000	1955.730	44.270	382273.96	2.21

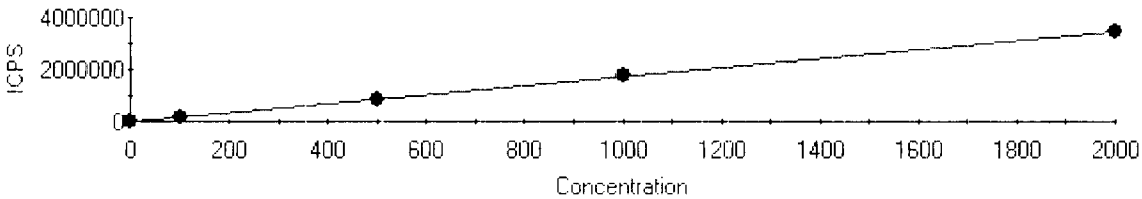
94Mo FQ Block 1



Intercept CPS=491.778109 Intercept Conc=0.501874
Sensitivity=979.882993 Correlation Coeff=0.999938

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	491.78	0.00
S1 S	0.000	-0.378	0.378	120.89	0.00
S2 S	100.000	99.909	0.091	98391.36	0.09
S3 S	500.000	479.838	20.162	470676.68	4.03
S4 S	1000.000	995.707	4.293	976168.07	0.43
S5 S	2000.000	2007.192	7.192	1967304.70	0.36

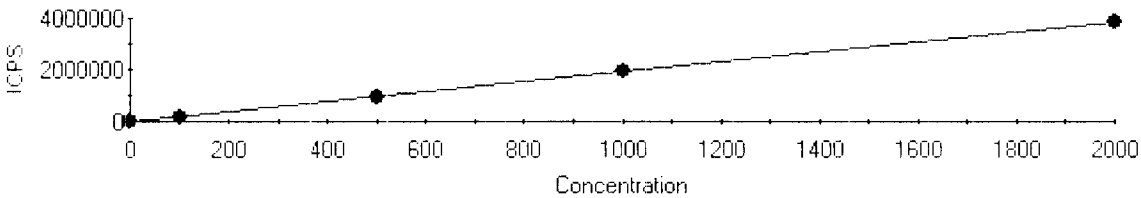
95Mo FQ Block 1



Intercept CPS=811.980937 Intercept Conc=0.465909
Sensitivity=1742.787555 Correlation Coeff=0.999977

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	811.98	0.00
S1 S	0.000	-0.366	0.366	173.53	0.00
S2 S	100.000	99.356	0.644	173968.31	0.64
S3 S	500.000	487.354	12.646	850166.37	2.53
S4 S	1000.000	999.154	0.846	1742125.59	0.08
S5 S	2000.000	2003.617	3.617	3492690.03	0.18

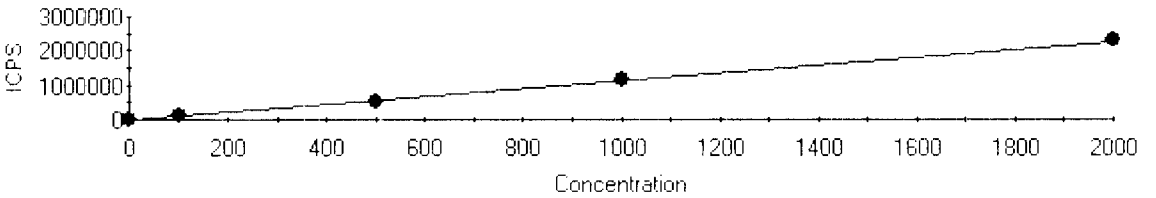
96Mo FQ Block 1



Intercept CPS=982.246032 Intercept Conc=0.511399
Sensitivity=1920.704039 Correlation Coeff=0.999939

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	982.25	0.00
S1 S	0.000	-0.394	0.394	225.88	0.00
S2 S	100.000	95.801	4.199	184987.73	4.20
S3 S	500.000	480.729	19.271	924320.41	3.85
S4 S	1000.000	992.315	7.685	1906925.17	0.77
S5 S	2000.000	2008.870	8.870	3859427.59	0.44

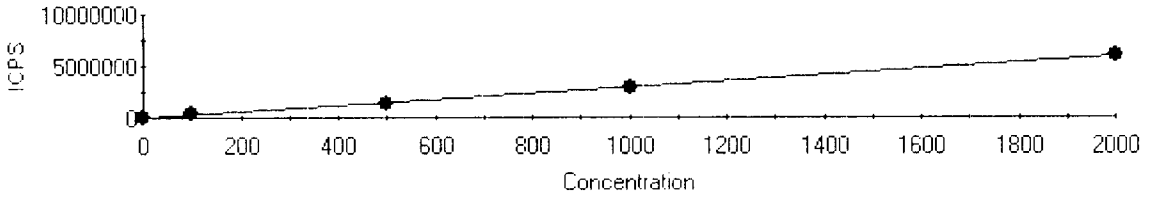
97Mo FQ Block 1



Intercept CPS=570.453529 Intercept Conc=0.501040
Sensitivity=1138.538918 Correlation Coeff=0.999909

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	570.45	0.00
S1 S	0.000	-0.366	0.366	153.72	0.00
S2 S	100.000	96.973	3.027	110977.45	3.03
S3 S	500.000	476.134	23.866	542667.94	4.77
S4 S	1000.000	991.757	8.243	1129724.89	0.82
S5 S	2000.000	2010.239	10.239	2289305.87	0.51

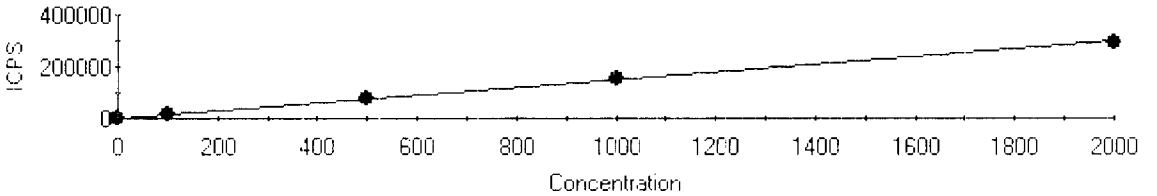
98Mo FQ Block 1



Intercept CPS=1487.459177 Intercept Conc=0.498530
Sensitivity=2983.689387 Correlation Coeff=0.999901

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	1487.46	0.00
S1 S	0.000	-0.387	0.387	333.60	0.00
S2 S	100.000	97.749	2.251	293138.79	2.25
S3 S	500.000	475.653	24.347	1420689.10	4.87
S4 S	1000.000	990.722	9.278	2957492.84	0.93
S5 S	2000.000	2010.838	10.838	6001204.88	0.54

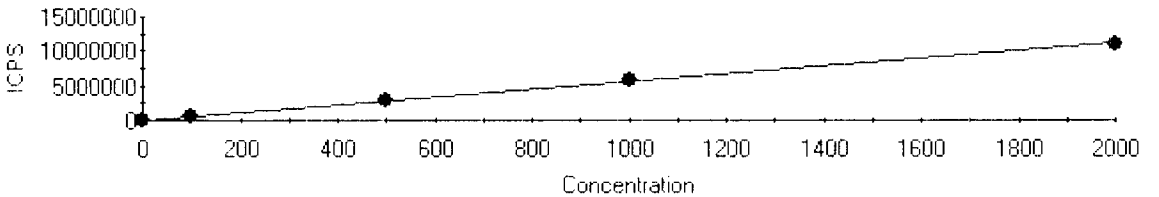
106Cd FQ Block 1



Intercept CPS=712.882193 Intercept Conc=4.816020
Sensitivity=148.023109 Correlation Coeff=0.999960

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	712.88	0.00
S1 S	1.000	0.892	0.108	844.87	10.84
S2 S	100.000	108.048	8.048	16706.53	8.05
S3 S	500.000	500.354	0.354	74776.86	0.07
S4 S	1000.000	1013.811	13.811	150780.36	1.38
S5 S	2000.000	1992.604	7.396	295664.25	0.37

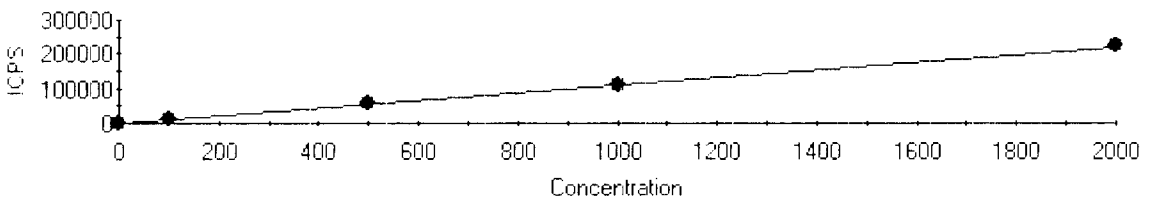
107Ag FQ Block 1



Intercept CPS=734.099480 Intercept Conc=0.128960
Sensitivity=5692.446419 Correlation Coeff=0.999937

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	734.10	0.00
S1 S	1.000	0.960	0.040	6201.24	3.96
S2 S	100.000	106.165	6.165	605072.85	6.17
S3 S	500.000	492.842	7.158	2806212.08	1.43
S4 S	1000.000	995.928	4.072	5670000.85	0.41
S5 S	2000.000	1947.471	52.529	11086605.60	2.63

108Cd FQ Block 1

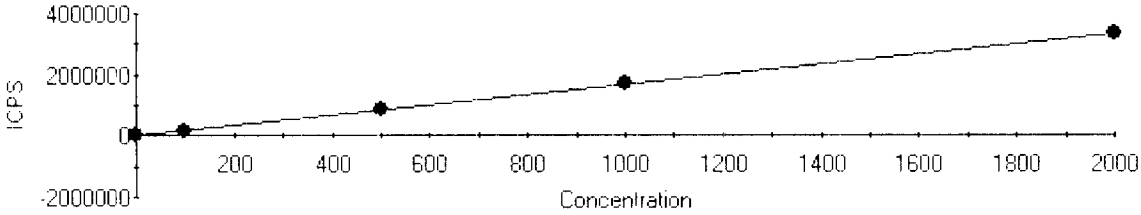


Intercept CPS=0.000000 Intercept Conc=0.000000
Sensitivity=110.754209 Correlation Coeff=0.999874

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	0.00	0.00
S1 S	1.000	1.360	0.360	150.65	36.02
S2 S	100.000	106.024	6.024	11742.65	6.02
S3 S	500.000	516.007	16.007	57149.94	3.20
S4 S	1000.000	978.542	21.458	108377.68	2.15

S5 S	2000.000	2006.426	6.426	222220.09	0.32

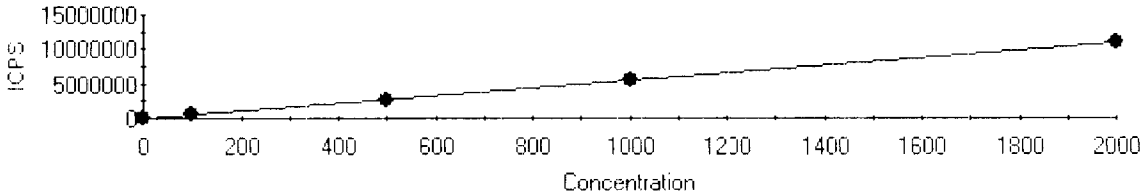
111Cd FQ Block 1



Intercept CPS=2.184060 Intercept Conc=0.001304
Sensitivity=1674.723010 Correlation Coeff=0.999916

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	2.18	0.00
S1 S	1.000	1.042	0.042	1747.25	4.20
S2 S	100.000	105.281	5.281	176318.77	5.28
S3 S	500.000	506.366	6.366	848024.57	1.27
S4 S	1000.000	1020.361	20.361	1708824.77	2.04
S5 S	2000.000	1987.964	12.036	3329290.95	0.60

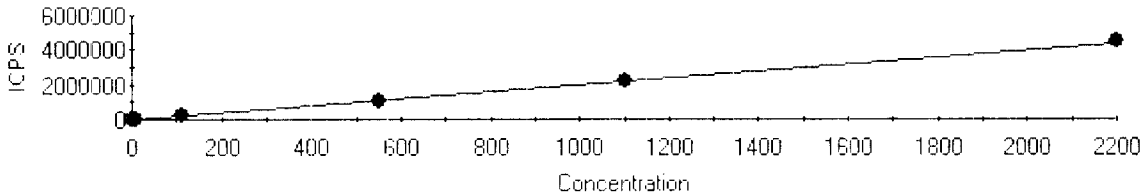
121Sb FQ Block 1



Intercept CPS=113.059327 Intercept Conc=0.020428
Sensitivity=5534.507640 Correlation Coeff=0.999984

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	113.06	0.00
S1 S	2.000	2.105	0.105	11764.70	5.26
S2 S	100.000	100.730	0.730	557603.17	0.73
S3 S	500.000	491.958	8.042	2722857.71	1.61
S4 S	1000.000	1005.913	5.913	5567345.09	0.59
S5 S	2000.000	1999.018	0.982	11063690.89	0.05

137Ba FQ Block 1

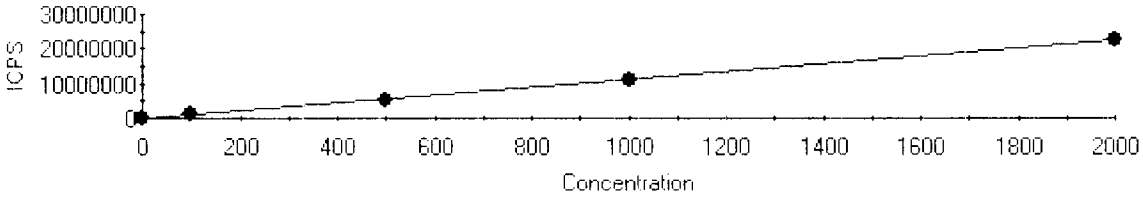


Intercept CPS=143.121221 Intercept Conc=0.071251
Sensitivity=2008.680402 Correlation Coeff=0.999874

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	143.12	0.00
S1 S	10.000	10.324	0.324	20880.11	3.24
S2 S	110.000	110.218	0.218	221536.65	0.20

S3 S	550.000	529.030	20.970	1062794.70	3.81
S4 S	1100.000	1106.695	6.695	2223138.69	0.61
S5 S	2200.000	2250.388	50.388	4520454.38	2.29

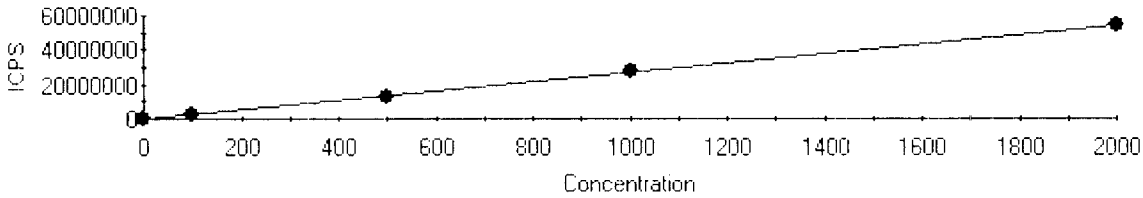
203Tl FQ Block 1



Intercept CPS=86.597826 Intercept Conc=0.007769
Sensitivity=11146.146958 Correlation Coeff=0.999959

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	86.60	0.00
S1 S	1.000	1.054	0.054	11836.82	5.42
S2 S	100.000	99.912	0.088	1113716.19	0.09
S3 S	500.000	482.899	17.101	5382545.79	3.42
S4 S	1000.000	1001.854	1.854	11166903.27	0.19
S5 S	2000.000	1999.564	0.436	22287524.12	0.02

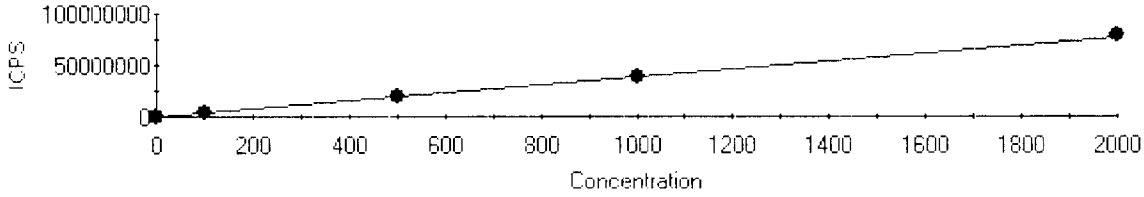
205Tl FQ Block 1



Intercept CPS=170.077361 Intercept Conc=0.006243
Sensitivity=27241.828731 Correlation Coeff=0.999909

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	-0.000	0.000	170.08	0.00
S1 S	1.000	1.035	0.035	28367.50	3.51
S2 S	100.000	100.283	0.283	2732073.29	0.28
S3 S	500.000	474.779	25.221	12934017.57	5.04
S4 S	1000.000	995.386	4.614	27116308.87	0.46
S5 S	2000.000	2005.289	5.289	54627917.32	0.26

208Pb FQ Block 1



Intercept CPS=5339.697862 Intercept Conc=0.139454
Sensitivity=38290.059756 Correlation Coeff=0.999956

Label	Defined	Measured	Error	Mean CPS	% Error
S0 S0	0.000	0.000	0.000	5339.70	0.00

S1 S	1.000	0.893	0.107	39540.73	10.68
S2 S	100.000	99.298	0.702	3807457.56	0.70
S3 S	500.000	492.904	7.096	18878679.15	1.42
S4 S	1000.000	1024.610	24.610	39237706.50	2.46
S5 S	2000.000	2046.837	46.837	78378842.27	2.34

Dilution Corrected Concentrations

S0 S0 6/30/2011 9:55:57 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:21	0.990	-0.312	-0.214	-0.145	-0.167	-1.573	-3.721
2	09:56:46	0.999	0.012	0.084	0.051	0.047	1.312	3.152
3	09:57:10	1.011	0.300	0.130	0.094	0.120	0.261	0.569
x		-	0.000	-0.000	0.000	-0.000	0.000	0.000
σ		-	0.306	0.186	0.127	0.149	1.461	3.472
%RSD		-	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:21	0.984	-0.003	-0.091	-0.057	-0.067	-0.062	-0.076
2	09:56:46	1.009	-0.039	-0.024	0.038	0.008	0.263	-0.003
3	09:57:10	1.007	0.042	0.116	0.018	0.059	-0.201	0.079
x		-	-0.000	0.000	-0.000	-0.000	0.000	0.000
σ		-	0.041	0.106	0.050	0.063	0.238	0.077
%RSD		-	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:21	-0.304	-0.224	-0.359	-0.086	-0.034	-0.091	0.000
2	09:56:46	0.118	0.045	0.070	-0.031	0.251	-0.087	0.000
3	09:57:10	0.186	0.179	0.290	0.117	-0.218	0.178	0.000
x		-0.000	0.000	-0.000	0.000	0.000	0.000	0.000
σ		0.265	0.206	0.330	0.105	0.236	0.154	0.000
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:21	0.000	1.030	0.137	0.099	0.092	0.039	0.116
2	09:56:46	0.000	0.972	-0.071	-0.003	-0.045	0.080	-0.001
3	09:57:10	0.000	1.000	-0.066	-0.096	-0.047	-0.118	-0.114
x		0.000	-	0.000	-0.000	0.000	0.000	0.000
σ		0.000	-	0.119	0.097	0.079	0.105	0.115
%RSD		0.000	-	0.000	0.000	0.000	0.000	0.000

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:21	1.020	-0.267	-0.086	0.000	0.004	-0.006	-0.025
2	09:56:46	0.998	0.038	0.008	0.000	-0.002	0.005	0.048
3	09:57:10	0.983	0.229	0.078	0.000	-0.002	0.001	-0.022
x		-	-0.000	-0.000	0.000	0.000	0.000	-0.000
σ		-	0.250	0.082	0.000	0.003	0.005	0.041
%RSD		-	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:21	1.025	1.028	-0.000	0.000	-0.090	1.029
2	09:56:46	0.995	1.006	-0.001	0.000	0.022	0.985
3	09:57:10	0.981	0.967	0.001	-0.000	0.068	0.987
x		-	-	0.000	-0.000	0.000	-
σ		-	-	0.001	0.000	0.081	-
%RSD		-	-	0.000	0.000	0.000	-

S1 S 6/30/2011 9:59:04 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:04	1.003	0.634	481.100	505.800	20.520	485.600	498.400
2	09:59:28	1.012	0.653	489.000	509.100	20.640	465.700	483.900
3	09:59:52	1.014	0.663	497.800	516.000	21.540	488.300	488.400
x		-	0.650	489.300	510.300	20.900	479.900	490.200
σ		-	0.015	8.360	5.180	0.557	12.380	7.433
%RSD		-	2.298	1.709	1.015	2.666	2.579	1.516

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:04	1.010	-0.080	5.857	2.128	1.135	225.600	1.078
2	09:59:28	1.013	-0.203	5.340	2.065	1.036	222.200	0.908
3	09:59:52	1.009	-0.121	5.360	2.389	0.977	222.300	1.056
x		-	-0.135	5.519	2.194	1.049	223.400	1.014
σ		-	0.063	0.293	0.172	0.080	1.935	0.092
%RSD		-	46.480	5.309	7.832	7.619	0.866	9.115

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:04	0.667	2.355	1.897	0.725	5.155	4.816	0.000
2	09:59:28	0.601	1.974	1.485	0.790	4.929	4.839	0.000
3	09:59:52	0.802	1.647	1.825	0.896	4.610	6.048	0.000
x		0.690	1.992	1.736	0.804	4.898	5.235	0.000
σ		0.102	0.354	0.220	0.087	0.274	0.705	0.000
%RSD		14.820	17.790	12.690	10.780	5.583	13.470	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:04	0.000	0.975	-0.402	-0.370	-0.414	-0.389	-0.377
2	09:59:28	0.000	0.960	-0.374	-0.394	-0.415	-0.373	-0.404
3	09:59:52	0.000	1.001	-0.360	-0.335	-0.351	-0.336	-0.379
x		0.000	-	-0.379	-0.366	-0.394	-0.366	-0.387
σ		0.000	-	0.022	0.030	0.037	0.027	0.015
%RSD		0.000	-	5.689	8.080	9.325	7.472	3.880

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:04	0.984	1.106	0.922	1.068	1.112	2.099	10.160
2	09:59:28	0.980	1.209	0.903	1.505	1.018	2.049	10.310
3	09:59:52	0.982	0.359	1.057	1.508	0.996	2.168	10.510
x		-	0.892	0.960	1.360	1.042	2.105	10.320
σ		-	0.464	0.084	0.253	0.062	0.060	0.175
%RSD		-	52.020	8.738	18.610	5.927	2.854	1.697

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	09:59:04	1.004	1.017	1.094	1.045	0.903	0.995
2	09:59:28	0.989	0.956	1.019	1.022	0.851	0.965
3	09:59:52	0.988	1.003	1.049	1.038	0.926	0.990
x		-	-	1.054	1.035	0.893	-
σ		-	-	0.038	0.012	0.038	-
%RSD		-	-	3.563	1.143	4.304	-

S2 S 6/30/2011 10:01:46 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:46	1.016	104.100	τ5084.000	τ5249.000	τ5149.000	τ1017.000	4847.000
2	10:02:11	1.021	104.700	τ5110.000	τ5289.000	τ5259.000	τ1038.000	4833.000
3	10:02:35	1.030	104.600	τ5069.000	τ5240.000	τ5254.000	940.500	4729.000
x		-	104.400	τ5088.000	τ5259.000	τ5221.000	τ998.700	4803.000
σ		-	0.318	τ20.560	τ25.810	τ62.100	τ51.410	64.260
%RSD		-	0.305	τ0.404	τ0.491	τ1.189	τ5.148	1.338

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:46	1.001	102.500	98.890	101.200	104.800	τ5448.000	105.800
2	10:02:11	1.017	99.360	101.100	103.200	104.400	τ5479.000	107.300
3	10:02:35	0.996	99.990	98.970	102.300	101.500	τ5540.000	104.900
x		-	100.600	99.640	102.200	103.600	τ5489.000	106.000
σ		-	1.687	1.227	0.986	1.832	τ46.660	1.239
%RSD		-	1.677	1.232	0.964	1.769	τ0.850	1.169

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:46	118.300	109.000	109.500	102.700	112.100	115.400	0.000
2	10:02:11	116.800	110.500	108.100	104.000	121.900	119.400	0.000
3	10:02:35	117.000	108.500	108.000	103.200	111.700	117.800	0.000
x		117.400	109.300	108.500	103.300	115.300	117.500	0.000
σ		0.835	1.047	0.889	0.679	5.745	1.996	0.000
%RSD		0.711	0.958	0.820	0.657	4.985	1.698	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:46	0.000	1.006	99.220	99.060	94.170	96.220	97.120
2	10:02:11	0.000	1.002	99.100	99.030	96.270	95.790	97.310
3	10:02:35	0.000	1.001	101.400	99.970	96.960	98.910	98.820
x		0.000	-	99.910	99.360	95.800	96.970	97.750
σ		0.000	-	1.301	0.536	1.456	1.688	0.933
%RSD		0.000	-	1.303	0.539	1.520	1.741	0.954

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:46	1.021	105.400	104.000	103.400	102.800	98.070	107.200
2	10:02:11	1.028	108.600	105.500	102.200	103.600	100.400	108.600
3	10:02:35	1.047	110.200	109.000	112.400	109.400	103.700	114.900
x		-	108.000	106.200	106.000	105.300	100.700	110.200
σ		-	2.432	2.571	5.571	3.617	2.827	4.123
%RSD		-	2.251	2.421	5.255	3.436	2.806	3.741

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:01:46	0.995	0.998	101.600	101.300	100.200	1.041
2	10:02:11	0.988	0.992	97.560	97.620	97.730	0.995
3	10:02:35	1.003	1.000	100.500	101.900	99.930	1.013
x		-	-	99.910	100.300	99.300	-
σ		-	-	2.110	2.328	1.368	-
%RSD		-	-	2.112	2.322	1.378	-

S3 S 6/30/2011 10:04:29 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:04:29	1.078	496.900	τ24890.000	τ25330.000	τ24930.000	τ5054.000	24020.000
2	10:04:54	1.103	496.400	τ24610.000	τ25120.000	τ24840.000	τ4916.000	23970.000
3	10:05:18	1.111	492.900	τ24740.000	τ24730.000	τ24740.000	τ4870.000	22410.000
x		-	495.400	τ24750.000	τ25060.000	τ24840.000	τ4947.000	23470.000
σ		-	2.170	τ138.900	τ304.300	τ97.930	τ96.000	915.400
%RSD		-	0.438	τ0.562	τ1.214	τ0.394	τ1.941	3.900

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:04:29	1.085	513.500	504.500	493.300	508.500	τ26170.000	500.600
2	10:04:54	1.070	505.300	499.000	488.000	494.200	τ26080.000	481.300
3	10:05:18	1.039	492.000	468.700	474.500	481.300	τ25140.000	481.900
x		-	503.600	490.700	485.300	494.700	τ25800.000	487.900
σ		-	10.820	19.300	9.709	13.620	τ 574.000	10.960
%RSD		-	2.148	3.933	2.001	2.754	τ 2.225	2.246

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:04:29	556.400	516.400	498.700	496.200	562.500	555.700	0.000
2	10:04:54	540.100	512.400	488.400	483.800	549.100	542.700	0.000
3	10:05:18	529.000	499.300	491.900	483.600	570.000	543.300	0.000
x		541.800	509.400	493.000	487.800	560.500	547.200	0.000
σ		13.760	8.952	5.254	7.208	10.600	7.312	0.000
%RSD		2.539	1.757	1.066	1.477	1.891	1.336	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:04:29	0.000	1.061	476.300	489.900	482.500	476.100	475.100
2	10:04:54	0.000	1.036	472.700	473.900	479.400	474.600	466.400
3	10:05:18	0.000	1.057	490.500	498.300	480.400	477.700	485.500
x		0.000	-	479.800	487.400	480.700	476.100	475.700
σ		0.000	-	9.430	12.390	1.574	1.566	9.601
%RSD		0.000	-	1.965	2.542	0.327	0.329	2.019

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:04:29	1.111	500.900	484.400	521.500	503.000	488.500	522.700
2	10:04:54	1.121	505.400	488.600	520.200	515.800	499.300	527.800
3	10:05:18	1.131	494.700	505.500	506.300	500.300	488.000	536.600
x		-	500.400	492.800	516.000	506.400	492.000	529.000
σ		-	5.349	11.120	8.430	8.313	6.365	7.071
%RSD		-	1.069	2.256	1.634	1.642	1.294	1.337

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:04:29	1.035	1.032	τ493.800	τ480.400	τ500.000	1.133
2	10:04:54	1.035	1.030	τ487.700	τ477.200	τ498.200	1.095
3	10:05:18	1.039	1.000	τ467.200	τ466.800	τ480.500	1.082
x		-	-	τ482.900	τ474.800	τ492.900	-
σ		-	-	τ13.910	τ7.124	τ10.760	-
%RSD		-	-	τ2.881	τ1.500	τ2.184	-

S4 S 6/30/2011 10:07:13 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:13	1.148	982.700	τ50200.000	τ50850.000	τ51340.000	τ9960.000	τ51370.000
2	10:07:37	1.169	987.700	τ51030.000	τ51340.000	τ51390.000	τ10220.000	τ51890.000
3	10:08:02	1.172	982.600	τ51390.000	τ51370.000	τ51570.000	τ10140.000	τ51620.000
x		-	984.300	τ50870.000	τ51190.000	τ51430.000	τ10110.000	τ51630.000
σ		-	2.884	τ613.300	τ289.900	τ120.800	τ132.200	τ261.100
%RSD		-	0.293	τ1.205	τ0.566	τ0.235	τ1.308	τ0.506

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:13	1.100	1010.000	989.400	977.100	τ1001.000	τ52420.000	τ992.600
2	10:07:37	1.127	1023.000	τ1032.000	987.600	τ1033.000	τ52240.000	τ998.600
3	10:08:02	1.116	1022.000	τ1029.000	τ1003.000	τ1025.000	τ51660.000	τ998.800
x		-	1018.000	τ1017.000	τ989.100	τ1019.000	τ52110.000	τ996.700
σ		-	7.495	τ23.680	τ12.850	τ16.840	τ395.600	τ3.518
%RSD		-	0.736	τ2.329	τ1.299	τ1.651	τ0.759	τ0.353

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:13	989.400	1001.000	949.000	956.400	1030.000	1060.000	0.000
2	10:07:37	1031.000	996.900	950.900	952.500	1081.000	1054.000	0.000
3	10:08:02	1041.000	999.800	965.900	971.700	1078.000	1076.000	0.000
x		1020.000	999.100	955.300	960.200	1063.000	1063.000	0.000
σ		27.300	1.950	9.291	10.170	28.380	11.380	0.000
%RSD		2.675	0.195	0.973	1.059	2.670	1.071	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:13	0.000	1.097	1009.000	995.500	991.200	1004.000	988.100
2	10:07:37	0.000	1.095	989.200	997.200	989.200	985.200	983.000
3	10:08:02	0.000	1.107	989.000	1005.000	996.600	986.400	1001.000
x		0.000	-	995.700	999.200	992.300	991.800	990.700
σ		0.000	-	11.520	4.944	3.836	10.400	9.309
%RSD		0.000	-	1.157	0.495	0.387	1.049	0.940

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:13	1.190	1023.000	τ1004.000	960.100	1036.000	τ1016.000	τ1118.000
2	10:07:37	1.195	987.600	τ983.200	1006.000	1012.000	τ1006.000	τ1097.000
3	10:08:02	1.189	1031.000	τ1001.000	970.000	1013.000	τ995.400	τ1105.000
x		-	1014.000	τ995.900	978.500	1020.000	τ1006.000	τ1107.000
σ		-	23.040	τ11.100	23.900	13.660	τ10.220	τ10.620
%RSD		-	2.273	τ1.114	2.442	1.339	τ1.016	τ0.960

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:07:13	1.089	1.074	τ1017.000	τ1012.000	τ1043.000	1.195
2	10:07:37	1.062	1.056	τ1002.000	τ998.800	τ1025.000	1.179
3	10:08:02	1.061	1.063	τ986.700	τ975.700	τ1006.000	1.146
x		-	-	τ1002.000	τ995.400	τ1025.000	-
σ		-	-	τ14.920	τ18.210	τ18.340	-
%RSD		-	-	τ1.489	τ1.829	τ1.790	-

S5 S 6/30/2011 10:09:57 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:57	1.212	1869.000	T 102600.000	T 101600.000	T 102900.000	T 20240.000	TM 103600.000
2	10:10:22	1.245	1891.000	T 103500.000	T 103200.000	T 106100.000	T 20160.000	TM 102900.000
3	10:10:46	1.226	1842.000	T 100700.000	T 101200.000	T 101900.000	T 19480.000	T 101400.000
x		-	1867.000	T 102300.000	T 102000.000	T 103700.000	T 19960.000	TM 102600.000
σ		-	24.360	T 1424.000	T 1053.000	T 2202.000	T 417.500	TM 1142.000
%RSD		-	1.304	T 1.393	T 1.033	T 2.124	T 2.091	TM 1.113

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:57	1.126	M 2014.000	T 2018.000	T 1950.000	T 2026.000	T 103200.000	T 1896.000
2	10:10:22	1.142	M 2012.000	T 1989.000	T 1978.000	T 1989.000	T 102000.000	T 1937.000
3	10:10:46	1.121	1944.000	T 1975.000	T 1913.000	T 1959.000	T 100600.000	T 1829.000
x		-	M 1990.000	T 1994.000	T 1947.000	T 1991.000	T 101900.000	T 1887.000
σ		-	M 39.940	T 21.790	T 32.530	T 33.590	T 1299.000	T 54.220
%RSD		-	M 2.007	T 1.093	T 1.671	T 1.687	T 1.274	T 2.873

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:57	2006.000	1848.000	1756.000	1824.000	M 2016.000	1990.000	0.000
2	10:10:22	2002.000	1863.000	1772.000	1817.000	1981.000	1987.000	0.000
3	10:10:46	1927.000	1821.000	1705.000	1740.000	1861.000	1890.000	0.000
x		1978.000	1844.000	1744.000	1794.000	M 1953.000	1956.000	0.000
σ		44.550	21.390	34.820	46.710	M 81.620	56.740	0.000
%RSD		2.252	1.160	1.996	2.604	M 4.180	2.901	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:57	0.000	1.162	M 2013.000	2024.000	TM 2043.000	M 2013.000	TM 2029.000
2	10:10:22	0.000	1.162	M 2061.000	2078.000	TM 2054.000	TM 2062.000	TM 2081.000
3	10:10:46	0.000	1.104	1947.000	1909.000	T 1930.000	1956.000	T 1923.000
x		0.000	-	M 2007.000	2004.000	TM 2009.000	TM 2010.000	TM 2011.000
σ		0.000	-	M 57.310	86.440	TM 68.920	TM 52.940	TM 80.580
%RSD		0.000	-	M 2.855	4.314	TM 3.431	TM 2.634	TM 4.007

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:57	1.268	1980.000	T 1945.000	M 2012.000	1997.000	T 1987.000	T 2260.000
2	10:10:22	1.308	M 2052.000	T 2013.000	M 2065.000	2016.000	T 2036.000	T 2288.000
3	10:10:46	1.234	1946.000	T 1885.000	1942.000	1950.000	T 1974.000	T 2203.000
x		-	M 1993.000	T 1947.000	M 2006.000	1988.000	T 1999.000	T 2250.000
σ		-	M 53.900	T 63.960	M 61.380	34.250	T 32.800	T 43.510
%RSD		-	M 2.705	T 3.284	M 3.059	1.723	T 1.641	T 1.934

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:09:57	1.108	1.097	T 2037.000	T 2034.000	TM 2074.000	1.263
2	10:10:22	1.089	1.088	T 2001.000	T 2022.000	TM 2062.000	1.247
3	10:10:46	1.092	1.062	T 1960.000	T 1960.000	TM 2004.000	1.220
x		-	-	T 2000.000	T 2005.000	TM 2047.000	-
σ		-	-	T 38.550	T 39.990	TM 37.330	-
%RSD		-	-	T 1.928	T 1.994	TM 1.824	-

ICV 6/30/2011 10:12:42 AM QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:42	1.075	94.930	τ2126.000	τ1306.000	563.600	τ2048.000	1962.000
2	10:13:07	1.088	95.670	τ2133.000	τ1332.000	580.900	τ2093.000	1972.000
3	10:13:31	1.101	96.990	τ2234.000	τ1405.000	637.100	τ2070.000	2066.000
x		-	96.833%	τ107.198%	τ110.908%	117.827%	τ103.308%	99.754%
σ		-	n/a	τn/a	τn/a	n/a	τn/a	n/a
%RSD		-	1.089	τ2.788	τ3.798	6.473	τ1.091	2.852

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:42	1.032	1.181	104.200	106.300	106.900	τ1184.000	105.800
2	10:13:07	1.030	1.681	100.400	100.700	104.100	τ1168.000	106.800
3	10:13:31	1.040	2.629	103.600	105.500	106.800	τ1234.000	110.100
x		-	1.830	102.738%	106.278%	105.932%	τ117.648%	107.555%
σ		-	0.735	n/a	n/a	n/a	τn/a	n/a
%RSD		-	40.180	2.006	2.882	1.480	τ2.887	2.081

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:42	106.700	107.500	199.900	189.700	217.800	216.700	0.000
2	10:13:07	108.900	105.000	202.500	188.500	216.300	216.000	0.000
3	10:13:31	109.200	109.100	203.800	191.500	209.700	217.500	0.000
x		107.191%	109.388%	98.564%	94.951%	214.600	105.221%	0.000
σ		n/a	n/a	n/a	n/a	4.302	n/a	0.000
%RSD		1.221	1.921	0.998	0.789	2.005	0.344	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:42	0.000	1.002	5.824	5.677	5.930	5.696	5.461
2	10:13:07	0.000	1.004	4.406	4.255	4.036	4.028	3.958
3	10:13:31	0.000	1.010	4.345	4.278	3.782	4.213	4.069
x		0.000	-	4.858	4.737	4.583	4.646	4.496
σ		0.000	-	0.837	0.815	1.174	0.914	0.837
%RSD		0.000	-	17.220	17.210	25.610	19.680	18.630

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:42	1.022	106.200	106.600	104.600	107.200	200.200	103.000
2	10:13:07	1.034	105.000	110.000	103.000	105.600	200.900	103.200
3	10:13:31	1.011	112.200	109.500	97.620	106.900	201.200	103.100
x		-	107.800	108.687%	101.700	107.651%	100.894%	104.135%
σ		-	3.893	n/a	3.642	n/a	n/a	n/a
%RSD		-	3.611	1.698	3.581	0.793	0.254	0.081

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:12:42	1.002	0.974	210.100	τ204.400	τ199.300	1.018
2	10:13:07	0.997	1.007	202.400	τ202.900	τ201.200	0.991
3	10:13:31	0.991	0.998	208.900	τ206.800	τ202.200	0.985
x		-	-	100.549%	τ99.376%	τ100.450%	-
σ		-	-	n/a	τn/a	τn/a	-
%RSD		-	-	2.014	τ0.954	τ0.740	-

ICB 6/30/2011 10:15:27 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:15:27	1.083	-0.250	10.960	2.905	2.452	0.855	10.670
2	10:15:52	1.067	-0.105	18.010	9.782	8.312	2.248	5.232
3	10:16:16	1.058	0.254	37.500	26.280	23.150	8.617	17.940
x		-	-0.034	22.160	12.990	11.300	3.907	11.280
σ		-	0.259	13.750	12.010	10.670	4.138	6.374
%RSD		-	762.900	62.060	92.480	94.370	105.900	56.510

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:15:27	1.059	-0.072	-0.140	0.006	-0.029	5.690	-0.025
2	10:15:52	1.008	0.002	0.097	0.122	0.104	10.950	0.082
3	10:16:16	1.015	0.375	0.568	0.367	0.392	25.640	0.444
x		-	0.102	0.175	0.165	0.156	14.090	0.167
σ		-	0.239	0.360	0.184	0.215	10.340	0.246
%RSD		-	235.400	206.300	111.700	138.400	73.370	147.200

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:15:27	-0.294	-0.095	-0.351	-0.046	0.186	0.287	0.000
2	10:15:52	-0.151	0.030	-0.185	0.243	-0.544	0.421	0.000
3	10:16:16	0.117	0.534	0.219	0.639	0.138	0.894	0.000
x		-0.109	0.156	-0.106	0.279	-0.073	0.534	0.000
σ		0.209	0.333	0.293	0.344	0.408	0.319	0.000
%RSD		191.200	213.200	276.900	123.400	556.800	59.730	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:15:27	0.000	1.054	-0.024	0.048	-0.006	-0.069	-0.053
2	10:15:52	0.000	1.012	0.244	0.187	0.213	0.142	0.190
3	10:16:16	0.000	1.021	0.488	0.512	0.318	0.377	0.353
x		0.000	-	0.236	0.249	0.175	0.150	0.163
σ		0.000	-	0.256	0.238	0.165	0.223	0.204
%RSD		0.000	-	108.600	95.820	94.230	148.800	125.300

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:15:27	1.081	-0.299	-0.038	0.195	0.088	3.260	0.018
2	10:15:52	1.019	1.167	0.148	0.459	0.271	2.853	0.179
3	10:16:16	1.020	0.687	0.611	0.184	0.664	2.537	0.606
x		-	0.518	0.240	0.279	0.341	2.883	0.268
σ		-	0.747	0.334	0.156	0.294	0.363	0.304
%RSD		-	144.200	139.100	55.910	86.410	12.580	113.500

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:15:27	1.038	1.047	0.244	0.243	-0.014	1.052
2	10:15:52	0.997	1.003	0.478	0.442	0.148	0.992
3	10:16:16	0.988	1.011	0.892	0.926	0.533	0.962
x		-	-	0.538	0.537	0.222	-
σ		-	-	0.328	0.351	0.281	-
%RSD		-	-	60.990	65.440	126.600	-

ICSA 6/30/2011 10:18:13 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:18:13	1.196	-0.020	T 102600.000	T 102400.000	T 98780.000	TM 107300.000	TM 110000.000
2	10:18:37	1.222	-0.053	T 104700.000	T 103500.000	T 100800.000	TM 108000.000	TM 110400.000
3	10:19:02	1.219	-0.127	T 103800.000	T 103600.000	T 102500.000	TM 106800.000	TM 109100.000
x		-	-1.#IO%	T 103.703%	T 103.170%	T 100.692%	TM 107.376%	TM 109.834%
σ		-	n/a	T n/a	T n/a	T n/a	TM n/a	TM n/a
%RSD		-	82.410	T 0.984	T 0.666	T 1.864	TM 0.595	TM 0.619

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:18:13	1.185	M 2536.000	0.243	21.140	8.451	T 104800.000	1.241
2	10:18:37	1.192	M 2537.000	0.078	20.390	7.966	T 105100.000	1.273
3	10:19:02	1.181	M 2516.000	-0.470	20.340	8.268	T 105300.000	1.150
x		-	M 2530.000	-9.948%	98.205%	117.544%	T 105.080%	122.130%
σ		-	M 11.780	n/a	n/a	n/a	T n/a	n/a
%RSD		-	M 0.466	750.300	2.185	2.976	T 0.233	5.244

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:18:13	6.230	9.304	11.420	1.457	8.907	1.733	0.000
2	10:18:37	6.209	8.616	10.920	1.300	7.440	1.766	0.000
3	10:19:02	6.027	9.048	11.760	1.404	7.961	1.706	0.000
x		102.590%	112.369%	103.333%	1386.958%	8.103	578.348%	0.000
σ		n/a	n/a	n/a	n/a	0.744	n/a	0.000
%RSD		1.809	3.868	3.727	5.772	9.177	1.747	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:18:13	0.000	1.200	M 2021.000	2065.000	M 2058.000	M 2031.000	TM 2062.000
2	10:18:37	0.000	1.183	M 2028.000	2071.000	M 2039.000	M 2035.000	TM 2088.000
3	10:19:02	0.000	1.210	M 2084.000	2090.000	TM 2133.000	M 2116.000	TM 2150.000
x		0.000	-	M 2045.000	2075.000	TM 2076.000	M 2060.000	TM 2100.000
σ		0.000	-	M 34.650	13.180	TM 49.890	M 48.250	TM 45.060
%RSD		0.000	-	M 1.695	0.635	TM 2.403	M 2.342	TM 2.146

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:18:13	1.363	0.021	0.020	40.020	0.182	2.339	1.774
2	10:18:37	1.374	-0.220	-0.036	44.200	-0.315	2.364	1.664
3	10:19:02	1.391	-0.535	-0.078	42.030	0.166	2.226	1.590
x		-	-0.245	-1.#IO%	42.080	1.550%	153.986%	139.677%
σ		-	0.279	n/a	2.089	n/a	n/a	n/a
%RSD		-	114.000	157.200	4.964	2602.000	3.188	5.543

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:18:13	1.140	1.100	0.419	0.397	4.611	1.319
2	10:18:37	1.133	1.100	0.222	0.235	4.552	1.292
3	10:19:02	1.142	1.114	0.117	0.123	4.437	1.268
x		-	-	1.#IO%	1.#IO%	113.333%	-
σ		-	-	n/a	n/a	n/a	-
%RSD		-	-	60.590	54.660	1.951	-

ICSAB 6/30/2011 10:21:00 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:21:00	1.185	17.100	T 101900.000	T 101600.000	T 99150.000	TM 108000.000	TM 109100.000
2	10:21:24	1.200	17.020	T 103200.000	T 102800.000	T 101200.000	TM 107700.000	TM 111800.000
3	10:21:49	1.218	17.130	T 104600.000	T 103300.000	T 100700.000	TM 107300.000	TM 112200.000
x		-	89.924%	T 103.234%	T 102.561%	T 100.327%	TM 107.658%	TM 111.028%
σ		-	n/a	T n/a	T n/a	T n/a	TM n/a	TM n/a
%RSD		-	0.336	T 1.296	T 0.855	T 1.045	TM 0.330	TM 1.531

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:21:00	1.169	M 2516.000	19.510	40.880	30.020	T 104500.000	21.120
2	10:21:24	1.182	M 2541.000	20.580	41.130	30.050	T 107100.000	21.360
3	10:21:49	1.197	M 2507.000	20.890	41.410	30.050	T 106500.000	20.540
x		-	M 2521.000	106.979%	102.850%	111.254%	T 106.051%	105.037%
σ		-	M 17.790	n/a	n/a	n/a	T n/a	n/a
%RSD		-	M 0.706	3.580	0.645	0.069	T 1.293	2.010

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:21:00	24.700	24.550	26.680	18.690	25.930	20.520	0.000
2	10:21:24	25.660	25.830	27.770	18.980	27.280	19.440	0.000
3	10:21:49	25.420	25.990	27.830	18.470	27.010	20.640	0.000
x		105.257%	101.822%	94.566%	98.493%	26.740	106.317%	0.000
σ		n/a	n/a	n/a	n/a	0.715	n/a	0.000
%RSD		1.980	3.093	2.365	1.368	2.673	3.257	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:21:00	0.000	1.204	M 2065.000	2087.000	M 2071.000	M 2098.000	TM 2140.000
2	10:21:24	0.000	1.208	M 2060.000	2072.000	M 2084.000	M 2124.000	TM 2122.000
3	10:21:49	0.000	1.175	M 2015.000	2019.000	TM 2104.000	M 2057.000	TM 2066.000
x		0.000	-	M 2046.000	2059.000	TM 2087.000	M 2093.000	TM 2109.000
σ		0.000	-	M 27.630	35.710	TM 16.540	M 33.690	TM 38.640
%RSD		0.000	-	M 1.350	1.734	TM 0.793	M 1.610	TM 1.832

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:21:00	1.368	24.830	20.260	72.020	21.800	24.270	24.120
2	10:21:24	1.406	24.600	21.120	63.090	21.860	25.350	23.810
3	10:21:49	1.360	19.840	20.440	66.460	20.760	24.140	23.640
x		-	23.090	114.495%	67.190	107.373%	111.764%	108.435%
σ		-	2.816	n/a	4.509	n/a	n/a	n/a
%RSD		-	12.200	2.201	6.711	2.865	2.698	1.026

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:21:00	1.105	1.099	22.550	22.810	27.100	1.290
2	10:21:24	1.123	1.087	22.650	22.750	26.530	1.277
3	10:21:49	1.117	1.088	22.720	22.760	26.500	1.275
x		-	-	107.817%	108.448%	106.842%	-
σ		-	-	n/a	n/a	n/a	-
%RSD		-	-	0.388	0.131	1.254	-

CCV1 CCV 6/30/2011 10:23:45 AM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:45	1.144	921.600	τ48590.000	τ49290.000	τ50550.000	τ10050.000	τ52370.000
2	10:24:10	1.134	900.600	τ48920.000	τ49030.000	τ49990.000	τ9965.000	τ50480.000
3	10:24:34	1.173	934.400	τ50410.000	τ50710.000	τ51120.000	τ10460.000	τ52450.000
x		-	91.888%	τ49310.000	τ49670.000	τ50550.000	τ10160.000	τ51770.000
σ		-	n/a	τ970.000	τ903.300	τ566.200	τ263.700	τ1113.000
%RSD		-	1.858	τ1.967	τ1.818	τ1.120	τ2.596	τ2.150

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:45	1.094	980.100	959.600	953.100	τ1006.000	τ52220.000	τ944.700
2	10:24:10	1.107	996.100	933.900	948.600	τ1001.000	τ51530.000	τ963.800
3	10:24:34	1.123	1022.000	983.000	957.000	τ1037.000	τ51880.000	τ981.700
x		-	999.300	95.885%	95.289%	τ101.494%	τ51880.000	τ96.338%
σ		-	21.000	n/a	n/a	τn/a	τ345.600	τn/a
%RSD		-	2.102	2.562	0.437	τ1.919	τ0.666	τ1.922

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:45	955.100	955.600	920.900	927.200	1018.000	1049.000	0.000
2	10:24:10	1001.000	935.400	940.700	929.300	1036.000	1042.000	0.000
3	10:24:34	1017.000	956.100	950.200	940.900	1071.000	1060.000	0.000
x		99.119%	94.903%	93.729%	93.247%	1042.000	105.068%	0.000
σ		n/a	n/a	n/a	n/a	27.060	n/a	0.000
%RSD		3.255	1.245	1.594	0.791	2.597	0.860	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:45	0.000	1.101	996.700	972.400	977.000	988.500	964.000
2	10:24:10	0.000	1.112	981.500	978.400	946.700	960.900	982.800
3	10:24:34	0.000	1.107	971.100	992.200	977.200	951.500	985.200
x		0.000	-	983.100	981.000	967.000	966.900	977.400
σ		0.000	-	12.860	10.150	17.520	19.220	11.610
%RSD		0.000	-	1.308	1.035	1.812	1.987	1.188

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:45	1.217	1047.000	τ993.800	947.300	1046.000	τ1039.000	τ1141.000
2	10:24:10	1.198	986.500	τ992.000	922.900	992.900	τ986.700	τ1089.000
3	10:24:34	1.198	992.600	τ988.000	981.600	1004.000	τ1013.000	τ1093.000
x		-	1009.000	τ99.128%	950.600	101.433%	τ101.274%	τ100.702%
σ		-	33.190	τn/a	29.500	n/a	τn/a	τn/a
%RSD		-	3.291	τ0.298	3.103	2.762	τ2.570	τ2.638

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:23:45	1.034	1.014	τ1017.000	τ1022.000	τ1052.000	1.153
2	10:24:10	0.990	0.977	τ939.700	τ965.500	τ974.300	1.073
3	10:24:34	1.018	1.007	τ973.000	τ979.700	τ1005.000	1.110
x		-	-	τ97.665%	τ98.894%	τ101.052%	-
σ		-	-	τn/a	τn/a	τn/a	-
%RSD		-	-	τ3.984	τ2.950	τ3.889	-

CCB1 CCB 6/30/2011 10:26:31 AM QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:31	1.033	0.032	44.730	25.310	23.870	20.430	23.440
2	10:26:55	1.041	0.131	70.620	44.990	38.980	42.220	55.350
3	10:27:19	1.037	0.642	147.500	104.800	89.130	97.700	101.400
x		-	0.268	87.620	58.370	50.660	53.450	60.050
σ		-	0.327	53.470	41.400	34.170	39.840	39.170
%RSD		-	122.000	61.020	70.940	67.440	74.540	65.230

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:31	1.025	0.922	0.352	0.323	0.283	34.900	0.253
2	10:26:55	1.022	1.043	0.525	0.309	0.367	49.110	0.394
3	10:27:19	1.019	2.074	1.019	0.886	1.033	102.800	0.951
x		-	1.346	0.632	0.506	0.561	62.260	0.533
σ		-	0.633	0.346	0.330	0.411	35.800	0.369
%RSD		-	47.020	54.750	65.110	73.210	57.500	69.340

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:31	0.030	0.350	0.003	0.354	-0.205	0.939	0.000
2	10:26:55	-0.023	0.346	0.173	0.480	0.622	0.715	0.000
3	10:27:19	0.846	1.085	0.650	0.845	2.613	1.280	0.000
x		0.284	0.594	0.276	0.560	1.010	0.978	0.000
σ		0.487	0.426	0.336	0.255	1.449	0.284	0.000
%RSD		171.300	71.690	121.800	45.630	143.400	29.060	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:31	0.000	1.011	3.220	3.006	3.082	2.942	3.226
2	10:26:55	0.000	1.001	2.754	2.570	2.513	2.564	2.430
3	10:27:19	0.000	0.997	2.752	3.010	3.093	2.840	2.856
x		0.000	-	2.909	2.862	2.896	2.782	2.837
σ		0.000	-	0.270	0.253	0.332	0.196	0.398
%RSD		0.000	-	9.264	8.841	11.450	7.047	14.040

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:31	1.001	-0.430	0.299	0.270	0.344	1.492	0.334
2	10:26:55	0.999	1.446	0.483	0.449	0.504	1.734	0.390
3	10:27:19	0.995	1.624	1.153	1.612	0.880	1.976	1.211
x		-	0.880	0.645	0.777	0.576	1.734	0.645
σ		-	1.138	0.449	0.728	0.275	0.242	0.491
%RSD		-	129.300	69.640	93.730	47.760	13.970	76.100

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:26:31	0.968	0.954	0.526	0.466	0.260	0.955
2	10:26:55	0.961	0.951	0.702	0.719	0.421	0.939
3	10:27:19	0.964	0.948	1.621	1.507	1.000	0.933
x		-	-	0.950	0.897	0.560	-
σ		-	-	0.588	0.543	0.389	-
%RSD		-	-	61.920	60.560	69.390	-

zzzzzz 6/30/2011 10:29:15 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:29:15	0.962	-0.264	TM 343100.000	T 83760.000	179.900	T 11790.000	TM 381600.000
2	10:29:39	0.975	-0.308	TM 350400.000	T 85170.000	170.000	T 11520.000	TM 374700.000
3	10:30:03	0.967	-0.329	TM 347600.000	T 85470.000	168.500	T 11570.000	TM 375500.000
x		-	-0.300	TM 347000.000	T 84800.000	172.800	T 11630.000	TM 377300.000
σ		-	0.033	TM 3679.000	T 912.800	6.227	T 147.200	TM 3774.000
%RSD		-	10.980	TM 1.060	T 1.076	3.603	T 1.266	TM 1.000

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:29:15	0.868	5.204	45.100	9.102	T 554.200	64.740	19.430
2	10:29:39	0.847	5.180	44.320	9.240	T 547.800	60.850	19.270
3	10:30:03	0.829	4.217	43.210	9.346	T 540.600	56.780	19.010
x		-	4.867	44.210	9.229	T 547.600	60.790	19.240
σ		-	0.563	0.952	0.122	T 6.817	3.983	0.212
%RSD		-	11.570	2.153	1.326	T 1.245	6.551	1.103

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:29:15	54.970	1.461	10.720	15.590	81.800	60.440	0.000
2	10:29:39	54.170	1.448	10.100	16.360	82.990	60.240	0.000
3	10:30:03	56.060	1.575	10.640	17.130	82.000	59.890	0.000
x		55.070	1.495	10.490	16.360	82.260	60.190	0.000
σ		0.949	0.070	0.339	0.771	0.638	0.280	0.000
%RSD		1.724	4.663	3.231	4.714	0.775	0.466	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:29:15	0.000	1.031	6.653	4.577	4.824	4.583	4.430
2	10:29:39	0.000	1.029	7.277	4.781	4.399	4.232	4.568
3	10:30:03	0.000	1.005	6.559	4.440	4.505	4.232	4.065
x		0.000	-	6.830	4.599	4.576	4.349	4.354
σ		0.000	-	0.391	0.172	0.221	0.203	0.260
%RSD		0.000	-	5.718	3.735	4.836	4.663	5.976

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:29:15	1.201	0.337	-0.027	0.964	0.110	0.926	67.720
2	10:29:39	1.213	1.280	-0.043	0.324	0.103	0.986	70.330
3	10:30:03	1.194	-0.414	-0.060	0.425	0.018	0.823	69.960
x		-	0.401	-0.043	0.571	0.077	0.912	69.340
σ		-	0.849	0.017	0.344	0.051	0.082	1.413
%RSD		-	211.600	39.170	60.180	66.110	9.021	2.038

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:29:15	1.029	1.002	0.292	0.279	0.196	1.293
2	10:29:39	1.026	1.006	0.214	0.231	0.133	1.281
3	10:30:03	1.012	0.983	0.171	0.195	0.079	1.266
x		-	-	0.226	0.235	0.136	-
σ		-	-	0.062	0.042	0.058	-
%RSD		-	-	27.320	17.990	42.900	-

zzzzzz 6/30/2011 10:31:57 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:57	0.960	22.160	τ70620.000	τ22880.000	τ1315.000	τ3925.000	τ90440.000
2	10:32:21	0.993	22.520	τ72200.000	τ23310.000	τ1320.000	τ4023.000	τ93810.000
3	10:32:45	1.000	22.300	τ71480.000	τ23210.000	τ1316.000	τ3993.000	τ92710.000
x		-	22.330	τ71430.000	τ23130.000	τ1317.000	τ3980.000	τ92320.000
σ		-	0.185	τ794.000	τ224.100	τ2.728	τ50.360	τ1722.000
%RSD		-	0.828	τ1.112	τ0.969	τ0.207	τ1.265	τ1.865

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:57	0.841	5.919	256.600	287.200	244.500	τ584.800	236.500
2	10:32:21	0.865	5.976	261.200	286.400	250.300	τ590.600	233.000
3	10:32:45	0.887	5.299	261.700	284.400	249.100	τ591.200	233.700
x		-	5.731	259.800	286.000	248.000	τ588.900	234.400
σ		-	0.376	2.819	1.446	3.048	τ3.556	1.871
%RSD		-	6.557	1.085	0.505	1.229	τ0.604	0.798

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:57	235.300	114.200	220.900	24.640	19.620	9.395	0.000
2	10:32:21	241.800	114.200	212.900	24.700	18.700	8.755	0.000
3	10:32:45	245.300	114.600	216.000	24.180	18.950	9.919	0.000
x		240.800	114.400	216.600	24.510	19.090	9.356	0.000
σ		5.064	0.233	4.031	0.283	0.475	0.583	0.000
%RSD		2.103	0.204	1.861	1.155	2.489	6.232	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:57	0.000	0.973	5.444	1.233	1.395	1.431	1.147
2	10:32:21	0.000	0.955	5.149	1.017	1.471	1.161	1.223
3	10:32:45	0.000	0.973	4.955	0.898	1.534	1.415	1.063
x		0.000	-	5.183	1.049	1.467	1.336	1.144
σ		0.000	-	0.246	0.170	0.070	0.152	0.080
%RSD		0.000	-	4.752	16.210	4.760	11.350	6.999

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:57	1.061	25.940	27.200	26.900	27.150	52.010	1143.000
2	10:32:21	1.055	25.900	26.290	24.380	28.320	52.870	1104.000
3	10:32:45	1.063	29.160	26.600	23.270	26.600	51.330	1115.000
x		-	27.000	26.690	24.850	27.360	52.070	1121.000
σ		-	1.870	0.465	1.856	0.879	0.771	19.990
%RSD		-	6.928	1.742	7.470	3.214	1.480	1.784

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:57	0.927	0.931	26.970	27.790	11.140	1.067
2	10:32:21	0.918	0.892	27.570	26.920	10.910	1.053
3	10:32:45	0.944	0.926	27.460	26.810	10.830	1.054
x		-	-	27.330	27.170	10.960	-
σ		-	-	0.323	0.536	0.161	-
%RSD		-	-	1.183	1.972	1.466	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:34:39	0.976	-0.181	TM 152900.000	T 23880.000	381.400T	15120.000	TM 105600.000
2	10:35:03	1.022	-0.159	TM 158800.000	T 24570.000	398.900T	14990.000	TM 105600.000
3	10:35:27	1.035	-0.070	TM 159900.000	T 24890.000	T 427.700T	15600.000	TM 107100.000
x		-	-0.137	TM 157200.000	T 24450.000	T 402.600	T 15240.000	TM 106100.000
σ		-	0.059	TM 3773.000	T 516.300	T 23.370	T 320.400	TM 868.300
%RSD		-	42.910	TM 2.400	T 2.112	T 5.803	T 2.102	TM 0.818

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:34:39	0.932	6.119	12.870	47.930	14.020	300.700	1.059
2	10:35:03	0.936	5.838	14.130	49.200	13.630	306.200	1.056
3	10:35:27	0.942	6.140	13.700	49.040	14.350	317.300	1.178
x		-	6.032	13.560	48.720	14.000	308.100	1.098
σ		-	0.168	0.639	0.692	0.364	8.480	0.069
%RSD		-	2.792	4.712	1.419	2.597	2.753	6.316

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:34:39	23.080	3.142	3.681	4.397	16.820	6.054	0.000
2	10:35:03	24.200	3.321	3.398	4.305	16.610	6.898	0.000
3	10:35:27	23.750	3.218	3.689	4.951	15.270	7.402	0.000
x		23.680	3.227	3.589	4.551	16.230	6.784	0.000
σ		0.566	0.090	0.166	0.349	0.837	0.681	0.000
%RSD		2.392	2.786	4.619	7.678	5.154	10.040	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:34:39	0.000	1.034	12.160	8.308	8.345	8.373	7.925
2	10:35:03	0.000	1.043	12.440	7.924	8.539	8.389	7.799
3	10:35:27	0.000	1.027	12.660	8.328	8.362	8.081	8.005
x		0.000	-	12.420	8.187	8.415	8.281	7.909
σ		0.000	-	0.249	0.227	0.107	0.173	0.104
%RSD		0.000	-	2.002	2.778	1.276	2.096	1.313

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:34:39	1.154	0.987	0.032	0.411	0.146	0.915	36.360
2	10:35:03	1.188	0.432	0.121	1.162	0.200	0.862	38.020
3	10:35:27	1.157	0.145	0.181	0.927	0.477	1.052	38.130
x		-	0.521	0.111	0.834	0.275	0.943	37.500
σ		-	0.428	0.075	0.384	0.178	0.098	0.992
%RSD		-	82.130	67.620	46.060	64.800	10.410	2.645

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:34:39	0.983	0.978	0.342	0.352	0.548	1.149
2	10:35:03	0.986	0.976	0.346	0.360	0.593	1.132
3	10:35:27	0.978	0.978	0.469	0.492	0.717	1.132
x		-	-	0.386	0.401	0.619	-
σ		-	-	0.072	0.079	0.087	-
%RSD		-	-	18.730	19.670	14.100	-

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:21	0.999	-0.079	TM 244000.000	T 54120.000	T 841.900	T 4672.000	TM 146000.000
2	10:37:45	1.022	-0.106	TM 248900.000	T 55560.000	T 860.900	T 4643.000	TM 144900.000
3	10:38:10	1.022	-0.090	TM 250800.000	T 55680.000	T 852.800	T 4767.000	TM 145400.000
x		-	-0.092	TM 247900.000	T 55120.000	T 851.900	T 4694.000	TM 145400.000
σ		-	0.013	TM 3466.000	T 870.800	T 9.566	T 64.590	TM 554.500
%RSD		-	14.620	TM 1.398	T 1.580	T 1.123	T 1.376	TM 0.381

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:21	0.825	16.490	159.900	388.900	234.600	T 1180.000	6.274
2	10:37:45	0.834	16.660	155.900	390.200	235.800	T 1182.000	6.566
3	10:38:10	0.835	19.770	157.700	390.100	237.300	T 1176.000	6.685
x		-	17.640	157.900	389.700	235.900	T 1179.000	6.508
σ		-	1.847	2.010	0.738	1.311	T 3.038	0.212
%RSD		-	10.470	1.273	0.189	0.556	T 0.258	3.254

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:21	145.400	10.050	17.170	27.520	30.210	17.490	0.000
2	10:37:45	148.000	9.746	17.280	27.940	34.490	18.890	0.000
3	10:38:10	150.100	10.060	16.790	28.760	37.060	18.600	0.000
x		147.800	9.950	17.080	28.070	33.920	18.330	0.000
σ		2.384	0.177	0.256	0.633	3.460	0.738	0.000
%RSD		1.613	1.782	1.496	2.255	10.200	4.028	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:21	0.000	1.033	28.630	20.570	21.420	20.600	20.670
2	10:37:45	0.000	1.045	29.170	20.850	20.980	21.540	21.340
3	10:38:10	0.000	1.031	27.680	21.020	21.920	20.460	21.180
x		0.000	-	28.490	20.810	21.440	20.860	21.070
σ		0.000	-	0.752	0.225	0.473	0.587	0.351
%RSD		0.000	-	2.641	1.082	2.206	2.813	1.667

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:21	1.225	1.417	-0.059	1.525	0.049	0.459	39.990
2	10:37:45	1.275	2.339	-0.083	1.017	0.066	0.457	40.840
3	10:38:10	1.239	1.894	-0.080	1.099	0.063	0.401	40.340
x		-	1.883	-0.074	1.214	0.060	0.439	40.390
σ		-	0.461	0.013	0.273	0.009	0.033	0.426
%RSD		-	24.490	17.610	22.480	15.280	7.553	1.054

Run	Time	159Tb16	5Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:21	1.022	0.989	0.105	0.110	2.608	1.246
2	10:37:45	1.015	1.010	0.076	0.061	2.573	1.242
3	10:38:10	0.993	0.997	0.075	0.065	2.567	1.207
x		-	-	0.085	0.079	2.583	-
σ		-	-	0.017	0.027	0.022	-
%RSD		-	-	20.300	34.210	0.857	-

14936S;2 MF4N43S 6/30/2011 10:40:04 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:04	0.978	20.980	T 107300.000	T 21240.000	T 1490.000	T 5342.000	T 94360.000
2	10:40:28	0.997	21.110	T 108100.000	T 21480.000	T 1516.000	T 5400.000	T 92880.000
3	10:40:52	1.004	21.380	T 108500.000	T 21530.000	T 1513.000	T 5433.000	T 94870.000
x		-	21.160	T 108000.000	T 21420.000	T 1506.000	T 5392.000	T 94040.000
σ		-	0.205	T 625.600	T 155.800	T 14.280	T 46.060	T 1036.000
%RSD		-	0.967	T 0.579	T 0.727	T 0.948	T 0.854	T 1.101

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:04	0.948	7.382	260.800	108.400	257.300	T 740.800	235.800
2	10:40:28	0.949	8.482	260.800	107.900	260.500	T 738.700	243.100
3	10:40:52	0.959	6.965	259.500	107.000	257.700	T 745.600	232.000
x		-	7.610	260.400	107.800	258.500	T 741.700	237.000
σ		-	0.784	0.770	0.735	1.738	T 3.562	5.630
%RSD		-	10.300	0.296	0.682	0.672	T 0.480	2.376

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:04	244.700	112.700	212.400	23.180	24.600	11.530	0.000
2	10:40:28	243.700	113.100	218.100	23.960	17.470	12.360	0.000
3	10:40:52	241.200	112.700	213.600	23.940	20.150	12.060	0.000
x		243.200	112.800	214.700	23.690	20.740	11.980	0.000
σ		1.821	0.264	2.987	0.447	3.602	0.421	0.000
%RSD		0.749	0.234	1.391	1.885	17.370	3.516	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:04	0.000	1.024	10.100	5.549	5.673	5.163	5.071
2	10:40:28	0.000	1.052	10.120	5.071	5.739	5.215	5.125
3	10:40:52	0.000	1.045	9.951	5.189	5.855	5.235	5.219
x		0.000	-	10.060	5.270	5.756	5.204	5.138
σ		0.000	-	0.093	0.249	0.092	0.037	0.075
%RSD		0.000	-	0.925	4.729	1.605	0.718	1.456

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:04	1.160	28.350	26.100	27.240	28.050	52.070	1114.000
2	10:40:28	1.164	26.140	26.480	27.970	27.020	50.580	1086.000
3	10:40:52	1.150	28.960	26.220	28.820	27.020	50.460	1082.000
x		-	27.820	26.270	28.010	27.360	51.040	1094.000
σ		-	1.486	0.196	0.793	0.597	0.898	17.590
%RSD		-	5.340	0.746	2.832	2.180	1.759	1.607

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:40:04	1.011	0.977	28.110	27.820	11.680	1.153
2	10:40:28	0.971	0.987	26.970	27.110	11.280	1.106
3	10:40:52	0.997	0.958	27.390	26.490	11.060	1.099
x		-	-	27.490	27.140	11.340	-
σ		-	-	0.579	0.666	0.314	-
%RSD		-	-	2.107	2.453	2.766	-

CCV2 CCV 6/30/2011 10:42:47 AM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:47	1.145	925.000	τ50540.000	τ50590.000	τ50830.000	τ10370.000	τ54320.000
2	10:43:11	1.179	928.200	τ51070.000	τ50900.000	τ51160.000	τ10200.000	τ53410.000
3	10:43:35	1.195	931.300	τ50900.000	τ50990.000	τ51430.000	τ10350.000	τ52660.000
x		-	92.819%	τ50840.000	τ50820.000	τ51140.000	τ10310.000	τ53460.000
σ		-	n/a	τ271.600	τ207.900	τ301.300	τ95.590	τ830.300
%RSD		-	0.342	τ0.534	τ0.409	τ0.589	τ0.927	τ1.553

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:47	1.137	1012.000	996.100	959.300	τ1036.000	τ52130.000	τ945.700
2	10:43:11	1.146	1031.000	986.400	965.400	τ1036.000	τ53010.000	τ957.900
3	10:43:35	1.133	1020.000	955.400	944.800	τ1017.000	τ51850.000	τ966.900
x		-	1021.000	97.930%	95.650%	τ102.936%	τ52330.000	τ95.683%
σ		-	9.903	n/a	n/a	τn/a	τ603.800	τn/a
%RSD		-	0.970	2.170	1.103	τ1.058	τ1.154	τ1.114

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:47	995.100	953.000	929.000	919.600	1022.000	1034.000	0.000
2	10:43:11	991.800	954.500	951.800	927.900	1042.000	1050.000	0.000
3	10:43:35	981.600	946.900	944.300	933.900	1049.000	1056.000	0.000
x		98.951%	95.145%	94.170%	92.711%	1037.000	104.662%	0.000
σ		n/a	n/a	n/a	n/a	13.860	n/a	0.000
%RSD		0.714	0.422	1.233	0.774	1.336	1.069	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:47	0.000	1.103	968.900	969.300	970.400	956.800	959.500
2	10:43:11	0.000	1.125	968.000	973.600	964.400	966.500	965.000
3	10:43:35	0.000	1.145	970.100	986.400	971.400	971.600	976.400
x		0.000	-	969.000	976.400	968.700	965.000	967.000
σ		0.000	-	1.051	8.902	3.767	7.537	8.595
%RSD		0.000	-	0.109	0.912	0.389	0.781	0.889

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:47	1.221	1019.000	τ992.200	1027.000	1041.000	τ1038.000	τ1113.000
2	10:43:11	1.236	1028.000	τ988.800	1035.000	1034.000	τ1037.000	τ1132.000
3	10:43:35	1.242	1044.000	τ994.000	993.800	1028.000	τ1032.000	τ1141.000
x		-	1031.000	τ99.168%	1019.000	103.430%	τ103.557%	τ102.607%
σ		-	12.490	τn/a	21.810	n/a	τn/a	τn/a
%RSD		-	1.212	τ0.267	2.141	0.646	τ0.337	τ1.257

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:47	1.023	1.006	τ1004.000	τ1006.000	τ1036.000	1.134
2	10:43:11	1.050	1.010	τ1002.000	τ1003.000	τ1030.000	1.141
3	10:43:35	1.051	1.021	τ977.600	τ981.700	τ1020.000	1.126
x		-	-	τ99.469%	τ99.687%	τ102.863%	-
σ		-	-	τn/a	τn/a	τn/a	-
%RSD		-	-	τ1.490	τ1.323	τ0.782	-

CCB2 CCB 6/30/2011 10:45:33 AM QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:33	1.123	-0.071	31.330	18.100	16.810	9.728	33.040
2	10:45:57	1.116	-0.086	27.430	17.270	16.650	9.148	22.330
3	10:46:21	1.114	-0.101	28.450	18.550	16.760	9.423	18.250
x		-	-0.086	29.070	17.970	16.740	9.433	24.540
σ		-	0.015	2.020	0.650	0.081	0.290	7.639
%RSD		-	17.080	6.951	3.615	0.486	3.075	31.130

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:33	1.137	0.172	-0.150	0.232	0.143	21.270	0.087
2	10:45:57	1.090	0.643	0.387	0.203	0.174	21.060	0.094
3	10:46:21	1.114	0.660	0.073	0.184	0.165	21.330	0.177
x		-	0.491	0.103	0.206	0.161	21.220	0.120
σ		-	0.277	0.270	0.024	0.016	0.141	0.050
%RSD		-	56.420	260.900	11.730	10.120	0.665	41.700

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:33	-0.283	0.061	-0.024	0.192	-0.661	0.036	0.000
2	10:45:57	-0.099	0.074	-0.137	0.287	-0.131	0.074	0.000
3	10:46:21	-0.191	0.110	-0.058	0.229	-0.133	0.055	0.000
x		-0.191	0.082	-0.073	0.236	-0.309	0.055	0.000
σ		0.092	0.025	0.058	0.048	0.305	0.019	0.000
%RSD		48.250	30.500	79.330	20.220	99.050	34.730	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:33	0.000	1.104	0.922	0.907	0.862	0.873	0.949
2	10:45:57	0.000	1.089	0.869	1.045	0.798	0.892	0.841
3	10:46:21	0.000	1.077	0.599	0.455	0.537	0.414	0.515
x		0.000	-	0.797	0.803	0.733	0.727	0.768
σ		0.000	-	0.173	0.309	0.172	0.270	0.226
%RSD		0.000	-	21.750	38.460	23.490	37.220	29.370

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
		ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:33	1.113	-0.243	1.994	0.300	0.313	0.885	0.201
2	10:45:57	1.098	-0.386	1.829	0.197	0.236	0.910	0.177
3	10:46:21	1.113	-0.997	1.809	0.200	0.306	0.849	0.189
x		-	-0.542	1.877	0.232	0.285	0.881	0.189
σ		-	0.400	0.102	0.059	0.043	0.031	0.012
%RSD		-	73.860	5.417	25.300	14.970	3.501	6.292

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb
1	10:45:33	1.048	0.997	0.284	0.273	0.142	1.018
2	10:45:57	1.004	0.985	0.263	0.263	0.129	0.982
3	10:46:21	1.035	1.020	0.277	0.271	0.136	1.016
x		-	-	0.274	0.269	0.136	-
σ		-	-	0.011	0.005	0.007	-
%RSD		-	-	3.873	1.960	4.840	-

Mass Uncorrected ICPS

S0 S0 6/30/2011 9:55:57 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	09:56:21	93712.252	74.400	32952.376	2514.177	2510.176	118813.960	18069.137
2	09:56:46	92853.785	250.602	33745.856	3074.265	3270.299	125006.020	18399.474
3	09:57:10	91789.303	403.805	33763.890	3190.285	3530.349	121824.140	18149.218
x		92785.113	242.935	33487.374	2926.242	3103.608	121881.370	18205.943
σ		963.312	164.836	463.409	361.543	530.120	3096.425	172.319
%RSD		1.038	67.852	1.384	12.355	17.081	2.541	0.947

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	09:56:21	209694.020	60.000	2450.168	540.008	340.003	98008.221	130.000
2	09:56:46	204484.120	50.000	2630.194	860.021	820.019	99275.191	430.005
3	09:57:10	205010.100	70.000	3130.274	790.017	1140.036	96369.338	760.016
x		206396.080	60.000	2736.879	730.015	766.686	97884.250	440.007
σ		2868.181	10.000	352.381	168.233	402.674	1456.888	315.127
%RSD		1.390	16.667	12.875	23.045	52.521	1.488	71.619

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	09:56:21	130.000	30.000	150.001	126.000	70.000	454.006	30.000
2	09:56:46	470.006	300.003	580.009	182.001	90.000	472.006	30.000
3	09:57:10	520.008	430.005	790.017	240.002	60.000	514.007	30.000
x		373.338	253.336	506.676	182.668	73.333	480.006	30.000
σ		212.214	204.045	326.250	57.004	15.275	30.790	0.000
%RSD		56.842	80.543	64.390	31.206	20.830	6.415	0.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	09:56:21	30.000	351108.150	610.010	960.026	1130.036	600.010	1790.090
2	09:56:46	34.000	372066.170	430.005	820.019	910.023	670.013	1500.063
3	09:57:10	28.000	361594.320	430.005	650.012	900.023	440.005	1160.038
x		30.667	361589.540	490.007	810.019	980.027	570.009	1483.397
σ		3.055	10479.009	103.926	155.249	130.007	117.902	315.356
%RSD		9.962	2.898	21.209	19.166	13.266	20.684	21.259

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	09:56:21	326110.810	660.012	240.002	0.000	10.000	80.000	90.000
2	09:56:46	333301.760	720.015	780.017	0.000	0.000	140.001	240.002
3	09:57:10	338498.150	760.016	1200.040	0.000	0.000	120.000	100.000
x		332636.900	713.348	740.020	0.000	3.333	113.334	143.334
σ		6220.375	50.334	481.268	0.000	5.774	30.551	83.866
%RSD		1.870	7.056	65.034	0.000	173.205	26.956	58.511

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	09:56:21	754489.360	790947.200	80.000	170.001	1070.032	580039.940
2	09:56:46	776774.990	808026.950	80.000	180.001	3210.289	605473.630
3	09:57:10	788429.450	840757.210	100.000	160.001	4320.523	604305.030
x		773231.270	813243.790	86.667	170.001	2866.948	596606.200
σ		17245.314	25311.478	11.547	10.000	1652.221	14358.695
%RSD		2.230	3.112	13.324	5.882	57.630	2.407

S1 S 6/30/2011 9:59:04 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	09:59:04	92485.381	588.210	2172456.400	1557522.100	79918.435	1611243.000	74003.023
2	09:59:28	91684.265	593.810	2193933.600	1557824.800	79918.435	1543623.500	72125.364
3	09:59:52	91451.577	598.010	2233154.000	1579533.200	83333.995	1617437.200	72898.494
x		91873.741	593.343	2199848.000	1564960.000	81056.955	1590767.900	73008.961
σ		542.322	4.917	30777.987	12621.618	1971.974	40945.566	943.691
%RSD		0.590	0.829	1.399	0.807	2.433	2.574	1.293

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	09:59:04	204413.320	40.000	22093.659	8011.797	8031.806	1269271.200	4880.667
2	09:59:28	203745.750	10.000	20181.398	7791.699	7401.534	1253150.200	4190.492
3	09:59:52	204524.580	30.000	20561.831	8872.203	6981.364	1244559.500	4750.632
x		204227.880	26.667	20945.629	8225.233	7471.568	1255660.300	4607.264
σ		421.227	15.275	1012.256	570.998	528.711	12545.611	366.744
%RSD		0.206	57.282	4.833	6.942	7.076	0.999	7.960

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	09:59:04	910.023	2610.191	2400.161	886.022	390.004	1444.058	400.004
2	09:59:28	860.021	2240.141	2000.112	928.024	380.004	1464.060	510.007
3	09:59:52	1010.029	1880.099	2300.148	954.025	350.003	1656.077	710.014
x		926.691	2243.477	2233.474	922.691	373.337	1521.398	540.009
σ		76.380	365.057	208.192	34.314	20.817	117.063	157.167
%RSD		8.242	16.272	9.321	3.719	5.576	7.694	29.105

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	09:59:04	24.000	370932.950	100.000	170.001	190.001	130.000	370.004
2	09:59:28	28.000	376661.000	130.000	130.000	190.001	150.001	290.002
3	09:59:52	30.000	361288.210	140.001	230.001	310.003	190.001	360.004
x		27.333	369627.390	123.334	176.668	230.002	156.667	340.003
σ		3.055	7769.106	20.817	50.333	69.283	30.551	43.590
%RSD		11.177	2.102	16.878	28.490	30.123	19.500	12.820

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	09:59:04	338100.720	890.022	6071.032	120.000	1890.100	11843.926	20621.900
2	09:59:28	339568.180	910.023	5991.005	170.001	1740.085	11653.801	21162.532
3	09:59:52	338793.670	780.017	6871.322	170.001	1700.081	12314.244	21563.011
x		338820.860	860.021	6311.119	153.334	1776.755	11937.324	21115.815
σ		734.104	70.003	486.797	28.868	100.177	339.983	472.291
%RSD		0.217	8.140	7.713	18.827	5.638	2.848	2.237

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	09:59:04	769948.690	799704.590	12304.238	28733.098	21112.473	599538.330
2	09:59:28	781932.940	850408.490	11873.946	29043.600	21162.532	617950.300
3	09:59:52	782966.800	810997.150	11883.953	28703.050	21673.144	602929.690
x		778282.810	820370.080	12020.712	28826.582	21316.050	606806.110
σ		7236.049	26619.736	245.591	188.542	310.264	9798.983
%RSD		0.930	3.245	2.043	0.654	1.456	1.615

S2 S 6/30/2011 10:01:46 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:01:46	91329.454	56240.424	τ22562130.000	τ16088712.000	τ19259979.000	τ3259954.200	566701.770
2	10:02:11	90852.531	56218.556	τ22456074.000	τ16047842.000	τ19460183.000	τ3277413.000	556457.030
3	10:02:35	90098.223	55826.328	τ22374557.000	τ15981483.000	τ19585057.000	3030354.700	556157.930
x		90760.069	56095.103	τ22464254.000	τ16039346.000	τ19435073.000	τ3189240.600	559772.240
σ		620.801	233.022	τ94054.024	τ54117.191	τ163987.060	τ137875.850	6003.010
%RSD		0.684	0.415	τ0.419	τ0.337	τ0.844	τ4.323	1.072

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:01:46	206122.800	25237.822	351679.220	347947.180	671087.460	τ28344034.000	434277.270
2	10:02:11	202926.500	24096.247	351516.060	350251.570	660939.290	τ28193753.000	436295.580
3	10:02:35	207265.920	24747.136	351322.300	353412.950	653129.690	τ28974801.000	432761.120
x		205438.410	24693.735	351505.860	350537.230	661718.810	τ28504196.000	434444.660
σ		2249.205	572.658	178.680	2744.063	9004.227	τ414425.010	1773.166
%RSD		1.095	2.319	0.051	0.783	1.361	τ1.454	0.408

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:01:46	94971.881	108226.980	108528.800	68091.574	6801.295	22910.688	10453.059
2	10:02:11	92911.082	108921.180	106355.780	69207.853	7371.521	23647.648	10493.082
3	10:02:35	94368.695	108257.160	107522.740	68721.982	6811.299	23481.428	9832.706
x		94083.886	108468.440	107469.110	68673.803	6994.705	23346.588	10259.616
σ		1059.509	392.375	1087.500	559.697	326.371	386.541	370.255
%RSD		1.126	0.362	1.012	0.815	4.666	1.656	3.609

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:01:46	28.000	359543.530	96630.745	171348.160	179447.130	108548.920	286784.530
2	10:02:11	34.000	360716.840	96489.986	171126.050	183124.180	107804.430	286449.210
3	10:02:35	22.000	361318.820	98159.046	171499.600	182831.200	110168.800	287526.310
x		28.000	360526.400	97093.259	171324.600	181800.830	108840.720	286920.010
σ		6.000	902.841	925.678	187.890	2043.625	1208.889	551.186
%RSD		21.429	0.250	0.953	0.110	1.124	1.111	0.192

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:01:46	325764.570	15997.162	581444.530	11243.539	169490.560	535974.600	214217.230
2	10:02:11	323626.220	16367.498	586702.380	11053.420	169995.320	547671.590	217445.900
3	10:02:35	317629.980	16287.424	594958.930	11933.986	176316.170	555621.610	226304.960
x		322340.260	16217.361	587701.950	11410.315	171934.020	546422.600	219322.700
σ		4217.007	194.856	6812.420	463.368	3803.439	9882.878	6258.600
%RSD		1.308	1.202	1.159	4.061	2.212	1.809	2.854

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:01:46	776743.670	814783.820	1094260.700	2660281.600	1962068.500	572946.360
2	10:02:11	782601.290	819983.920	1093559.600	2673909.800	2026537.300	599662.390
3	10:02:35	770700.080	813329.730	1108106.600	2744364.700	2019615.000	588892.740
x		776681.680	816032.490	1098642.300	2692852.000	2002740.200	587167.160
σ		5950.844	3498.418	8203.801	45128.683	35392.419	13441.344
%RSD		0.766	0.429	0.747	1.676	1.767	2.289

S3 S 6/30/2011 10:04:29 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:04:29	86074.448	251791.750	↹103008860.000	↹72436016.000	↹86891704.000	↹14545917.000	2526707.900
2	10:04:54	84150.812	246606.330	↹101178010.000	↹71437300.000	↹86291369.000	↹14269402.000	2554771.900
3	10:05:18	83485.199	243628.680	↹102556340.000	↹70957164.000	↹86990148.000	↹14477949.000	2459549.400
x		84570.153	247342.250	↹102247740.000	↹71610160.000	↹86724407.000	↹14431089.000	2513676.400
σ		1344.596	4130.993	↹953637.930	↹754427.680	↹378238.240	↹144090.410	48930.532
%RSD		1.590	1.670	↹0.933	↹1.054	↹0.436	↹0.998	1.947

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:04:29	190197.540	116528.980	1636961.700	1568660.600	3019965.500	↹126139810.000	1910378.800
2	10:04:54	192896.250	116357.870	1630520.500	1575919.900	2982431.900	↹127795980.000	1868019.500
3	10:05:18	198739.810	116468.580	1591167.100	1566404.900	2959236.000	↹125322460.000	1897176.300
x		193944.530	116451.810	1619549.800	1570328.400	2987211.100	↹126419410.000	1891858.200
σ		4366.552	86.780	24790.232	4971.939	30645.522	↹1260240.300	21674.643
%RSD		2.251	0.075	1.531	0.317	1.026	↹0.997	1.146

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:04:29	414536.320	478116.100	460163.590	309625.230	31828.340	102133.240	47092.013
2	10:04:54	409338.460	483097.520	458963.290	308093.070	31718.144	101861.700	46319.997
3	10:05:18	406218.410	474203.830	465181.110	307663.760	32719.949	101218.050	45157.024
x		410031.070	478472.490	461436.000	308460.680	32088.811	101737.660	46189.678
σ		4201.986	4457.538	3298.423	1031.114	549.352	470.033	974.055
%RSD		1.025	0.932	0.715	0.334	1.712	0.462	2.109

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:04:29	66.000	340913.450	433232.340	789850.210	854507.380	498204.190	1298515.700
2	10:04:54	62.000	348875.020	434666.570	770616.590	854392.050	498594.870	1276886.400
3	10:05:18	48.000	342014.200	444094.330	798377.120	844309.050	495356.600	1313106.900
x		58.667	343934.220	437331.080	786281.310	851069.490	497385.220	1296169.700
σ		9.452	4314.107	5900.883	14220.216	5855.000	1767.667	18223.824
%RSD		16.111	1.254	1.349	1.809	0.688	0.355	1.406

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:04:29	299531.240	67657.930	2495960.500	52326.554	767172.970	2489402.800	986380.310
2	10:04:54	296684.300	67637.854	2495250.900	51744.862	780189.100	2526994.500	991756.140
3	10:05:18	294213.930	65690.605	2560398.800	49959.790	750944.530	2453164.000	1003030.400
x		296809.820	66995.463	2517203.400	51343.735	766102.200	2489853.700	993722.290
σ		2660.876	1130.085	37409.998	1233.317	14651.660	36917.331	8497.404
%RSD		0.896	1.687	1.486	2.402	1.912	1.483	0.855

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:04:29	747264.900	788220.520	↹4918578.800	↹11646714.000	↹8967125.500	526663.620
2	10:04:54	746858.410	789265.180	↹5004227.900	↹11935829.000	↹9332593.000	544816.210
3	10:05:18	744398.840	813110.060	↹4862097.100	↹11830100.000	↹9007441.300	551228.560
x		746174.050	796865.250	↹4928301.300	↹11804214.000	↹9102386.600	540902.800
σ		1550.753	14078.109	↹71562.448	↹146285.540	↹200381.130	12741.475
%RSD		0.208	1.767	↹1.452	↹1.239	↹2.201	2.356

S4 S 6/30/2011 10:07:13 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:07:13	80835.550	469129.820	τ199289910.000	τ139691010.000	τ172500410.000	τ27957314.000	τ5305727.900
2	10:07:37	79348.402	462563.620	τ198317620.000	τ138030760.000	τ168925250.000	τ27999800.000	τ5228769.800
3	10:08:02	79212.300	459804.110	τ200388580.000	τ138605710.000	τ170266720.000	τ28020841.000	τ5251726.800
x		79798.750	463832.520	τ199332040.000	τ138775830.000	τ170564130.000	τ27992652.000	τ5262074.800
σ		900.470	4790.595	τ1036121.500	τ843095.380	τ1806041.700	τ32361.585	τ39508.856
%RSD		1.128	1.033	τ0.520	τ0.608	τ1.059	τ0.116	τ0.751

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:07:13	187681.120	225879.630	3135643.000	3055403.500	τ5836443.200	τ247997020.000	τ3713825.300
2	10:07:37	183073.660	223580.970	τ3202722.400	3024906.400	τ5913078.300	τ242626380.000	τ3675043.400
3	10:08:02	184902.360	225272.020	τ3229109.500	τ3091564.600	τ5894794.800	τ241116850.000	τ3688128.600
x		185219.050	224910.870	τ3189158.300	τ3057291.500	τ5881438.800	τ243913420.000	τ3692332.400
σ		2319.998	1191.125	τ48186.953	τ33369.167	τ40025.306	τ3616145.400	τ19729.750
%RSD		1.253	0.530	τ1.511	τ1.091	τ0.681	τ1.483	τ0.534

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:07:13	722152.720	905563.460	855272.740	578222.400	56629.652	188879.660	82922.084
2	10:07:37	740585.070	890640.310	846562.040	574424.740	59067.530	186927.280	84007.138
3	10:08:02	749839.520	893623.970	859928.540	582359.640	58606.013	189710.400	83072.782
x		737525.770	896609.250	853921.110	578335.590	58101.065	188505.780	83334.001
σ		14094.652	7896.772	6784.982	3968.661	1295.007	1428.734	587.803
%RSD		1.911	0.881	0.795	0.686	2.229	0.758	0.705

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:07:13	150.001	329583.700	875141.530	1526642.700	1665542.000	993995.650	2549502.400
2	10:07:37	110.000	330143.910	857516.600	1527817.000	1659977.900	973934.290	2531110.900
3	10:08:02	126.000	326497.780	852913.840	1533265.700	1667557.700	973353.900	2575772.200
x		128.667	328741.800	861857.320	1529241.800	1664359.200	980427.950	2552128.500
σ		20.133	1963.455	11732.389	3533.882	3925.863	11753.560	22446.137
%RSD		15.647	0.597	1.361	0.231	0.236	1.199	0.880

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:07:13	279490.230	128399.970	τ4831021.300	90026.362	1478157.100	τ4856655.300	τ1989628.500
2	10:07:37	278352.670	123666.740	τ4721742.900	94127.427	1442933.700	τ4834210.700	τ1977436.300
3	10:08:02	279652.750	129648.950	τ4827297.500	91202.307	1451443.600	τ4798771.800	τ1997876.200
x		279165.210	127238.550	τ4793353.900	91785.365	1457511.500	τ4829879.300	τ1988313.600
σ		708.362	3155.688	τ62044.888	2111.789	18378.947	τ29183.829	τ10283.198
%RSD		0.254	2.480	τ1.294	2.301	1.261	τ0.604	τ0.517

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:07:13	710051.660	757430.000	τ9611230.900	τ23267703.000	τ17994301.000	499047.250
2	10:07:37	728086.530	769844.330	τ9615098.400	τ23306937.000	τ17879367.000	506194.250
3	10:08:02	729023.620	764835.850	τ9690514.700	τ23342368.000	τ18089162.000	520486.410
x		722387.270	764036.730	τ9638948.000	τ23305669.000	τ17987610.000	508575.970
σ		10693.221	6245.625	τ44699.937	τ37348.711	τ105057.160	10916.221
%RSD		1.480	0.817	τ0.464	τ0.160	τ0.584	2.146

S5 S 6/30/2011 10:09:57 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:09:57	76586.382	846623.660	T 390724440.000	T 268007130.000	T 332733140.000	T 55098604.000	TM 10426965.000
2	10:10:22	74576.904	834716.910	T 385812580.000	T 266545580.000	T 336419460.000	T 54025291.000	TM 10204230.000
3	10:10:46	75689.570	825621.990	T 381549030.000	T 265713040.000	T 328516480.000	T 53124143.000	T 10239761.000
x		75617.619	835654.190	T 386028680.000	T 266755250.000	T 332556360.000	T 54082679.000	TM 10290319.000
σ		1006.670	10532.161	T 4591519.200	T 1161329.200	T 3954454.500	T 988480.570	TM 119665.280
%RSD		1.331	1.260	T 1.189	T 0.435	T 1.189	T 1.828	TM 1.163

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:09:57	183306.030	M 439308.100	T 6226217.800	T 5923500.000	T 11452595.000	T 472557820.000	T 6852968.100
2	10:10:22	180760.270	M 432914.780	T 6049552.600	T 5938424.300	T 11122158.000	T 462228180.000	T 6934321.200
3	10:10:46	184073.860	426636.360	T 6085930.900	T 5879953.100	T 11241140.000	T 468145860.000	T 6740589.400
x		182713.390	M 432953.080	T 6120567.100	T 5913959.200	T 11271964.000	T 467643960.000	T 6842626.200
σ		1734.471	M 6335.960	T 93286.636	T 30380.775	T 167361.210	T 5183077.500	T 97279.096
%RSD		0.949	M 1.463	T 1.524	T 0.514	T 1.485	T 1.108	T 1.422

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:09:57	1413352.700	1608403.400	1520087.300	1054212.000	M 105520.850	337420.030	147103.420
2	10:10:22	1397548.500	1609167.900	1523587.600	1044719.800	103318.030	335685.800	146064.950
3	10:10:46	1385512.700	1625907.000	1516783.300	1040438.300	101226.100	333472.910	146296.830
x		1398804.700	1614492.700	1520152.700	1046456.700	M 103354.990	335526.250	146488.400
σ		13962.397	9892.424	3402.601	7049.177	M 2147.616	1978.389	545.096
%RSD		0.998	0.613	0.224	0.674	M 2.078	0.590	0.372

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:09:57	250.002	311177.870	M 1644455.600	2921878.500	TM 3230532.500	M 1875473.400	TM 4923350.500
2	10:10:22	234.002	311269.440	M 1664567.000	2959294.600	TM 3196590.300	TM 1885719.400	TM 4946135.300
3	10:10:46	248.002	327648.570	1659255.200	2869682.600	T 3171390.000	1890478.800	T 4831906.600
x		244.002	316698.630	M 1656092.600	2916951.900	TM 3199504.300	TM 1883890.500	TM 4900464.100
σ		8.718	9483.042	M 10422.043	45008.668	TM 29678.744	TM 7668.055	TM 60455.695
%RSD		3.573	2.994	M 0.629	1.543	TM 0.928	TM 0.407	TM 1.234

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:09:57	262414.050	233395.350	T 8814454.800	M 177831.080	2691687.200	T 9040319.300	T 3877272.600
2	10:10:22	254368.890	M 234874.560	T 8867446.900	M 177507.890	2650055.200	T 9107375.200	T 3912558.300
3	10:10:46	269498.390	235391.300	T 8765186.400	176093.990	2694405.000	T 9192428.500	T 3855111.400
x		262093.780	M 234553.730	T 8815696.000	M 177144.320	2678715.800	T 9113374.400	T 3881647.400
σ		7569.836	M 1035.926	T 51141.553	M 923.853	24857.973	T 76231.862	T 28972.257
%RSD		2.888	M 0.442	T 0.580	M 0.522	0.928	T 0.836	T 0.746

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:09:57	697761.140	741533.230	T 18310456.000	T 44415821.000	TM 33653167.000	472407.140
2	10:10:22	710155.680	747692.240	T 18205147.000	T 44693935.000	TM 34059967.000	478516.620
3	10:10:46	708179.470	765545.310	T 18236812.000	T 44292943.000	TM 33945202.000	489179.780
x		705365.430	751590.260	T 18250805.000	T 44467567.000	TM 33886112.000	480034.510
σ		6659.224	12471.602	T 54030.931	T 205442.770	TM 209738.510	8488.717
%RSD		0.944	1.659	T 0.296	T 0.462	TM 0.619	1.768

ICV 6/30/2011 10:12:42 AM QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:12:42	86314.101	48600.446	T9036254.400	T3831060.100	2023332.600	T6223613.100	233010.370
2	10:13:07	85241.467	48414.943	T9008572.600	T3882304.500	2074336.900	T6351476.200	234317.310
3	10:13:31	84243.246	48517.421	T9330372.200	T4050770.700	2251049.800	T6220938.700	242272.410
x		85266.271	48510.937	T9125066.400	T3921378.400	2116239.800	T6265342.700	236533.360
σ		1035.650	92.921	T178337.940	T114948.950	119501.740	T74605.794	5012.935
%RSD		1.215	0.192	T1.954	T2.931	5.647	T1.191	2.119

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:12:42	200074.590	340.003	351964.770	356319.870	669146.620	T6103252.100	425776.190
2	10:13:07	200297.060	460.006	345541.130	338009.010	652300.180	T6024783.700	430149.140
3	10:13:31	198436.460	680.013	350853.210	350843.010	663294.240	T6306330.300	439502.810
x		199602.710	493.341	349453.040	348390.630	661580.350	T6144788.700	431809.380
σ		1016.103	172.439	3433.098	9398.539	8552.997	T145296.550	7012.297
%RSD		0.509	34.953	0.982	2.698	1.293	T2.365	1.624

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:12:42	84127.703	105188.900	194837.160	125275.900	13064.778	42376.221	18189.259
2	10:13:07	85805.659	102734.680	197354.570	124391.750	12964.705	42217.847	19310.435
3	10:13:31	85353.500	105872.930	197132.140	124969.760	12484.363	42207.823	18019.087
x		85095.621	104598.830	196441.290	124879.140	12837.948	42267.297	18506.260
σ		868.193	1650.239	1393.665	448.987	310.275	94.464	701.614
%RSD		1.020	1.578	0.709	0.360	2.417	0.223	3.791

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:12:42	38.000	360757.650	6141.056	10593.141	12224.183	6961.357	17518.589
2	10:13:07	18.000	360278.110	4740.629	8091.833	8572.057	5050.714	12994.726
3	10:13:31	30.000	358033.640	4700.619	8181.874	8161.865	5310.790	13485.090
x		28.667	359689.800	5194.101	8955.616	9652.701	5774.287	14666.135
σ		10.066	1454.179	820.331	1418.853	2236.392	1036.224	2482.435
%RSD		35.116	0.404	15.794	15.843	23.169	17.945	16.926

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:12:42	325499.810	16097.252	595238.000	11353.608	176245.480	1091392.900	205030.330
2	10:13:07	321681.550	15746.940	607904.150	11063.426	171953.940	1087718.600	204969.640
3	10:13:31	329023.510	17158.239	617950.300	10713.213	177548.290	1108871.900	207559.290
x		325401.620	16334.144	607030.820	11043.416	175249.240	1095994.500	205853.090
σ		3671.966	734.867	11381.307	320.666	2927.209	11302.533	1477.930
%RSD		1.128	4.499	1.875	2.904	1.670	1.031	0.718

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:12:42	771775.050	834818.080	2314414.500	T5492055.400	T4191739.200	585999.870
2	10:13:07	775543.150	807326.300	2270213.500	T5567448.700	T4262715.300	601750.920
3	10:13:31	780377.050	815265.050	2359514.100	T5712491.600	T4385864.800	605670.130
x		775898.420	819136.480	2314714.000	T5590665.200	T4280106.400	597806.970
σ		4311.992	14148.866	44651.055	T112036.960	T98224.325	10411.333
%RSD		0.556	1.727	1.929	T2.004	T2.295	1.742

ICB 6/30/2011 10:15:27 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:15:27	85656.948	99.400	76937.386	11113.457	11543.730	117233.560	18329.402
2	10:15:52	86920.029	175.601	109514.790	31900.468	33260.947	126677.730	18619.702
3	10:16:16	87686.764	362.804	193706.960	81103.762	87353.135	145510.450	19931.117
x		86754.580	212.602	126719.710	41372.562	44052.604	129807.250	18960.074
σ		1024.972	135.544	60256.039	35943.721	39039.869	14395.864	853.383
%RSD		1.181	63.755	47.551	86.878	88.621	11.090	4.501

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:15:27	194928.140	40.000	2450.168	710.014	550.008	120525.370	320.003
2	10:15:52	204696.530	60.000	2730.209	1140.036	1420.056	153385.950	770.017
3	10:16:16	203442.320	150.001	4150.482	1960.108	3230.292	227469.620	2230.139
x		201022.330	83.334	3110.286	1270.053	1733.452	167126.980	1106.720
σ		5314.851	58.595	911.653	635.108	1367.349	54780.289	998.590
%RSD		2.644	70.314	29.311	50.006	78.880	32.778	90.230

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:15:27	130.000	150.001	150.001	172.001	80.000	508.007	10.000
2	10:15:52	250.002	280.002	320.003	296.002	40.000	556.009	50.000
3	10:16:16	460.006	770.017	710.014	568.009	80.000	642.012	140.001
x		280.003	400.006	393.339	345.337	66.667	568.676	66.667
σ		167.036	326.964	287.119	202.561	23.094	67.894	66.584
%RSD		59.655	81.740	72.995	58.656	34.641	11.939	99.875

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:15:27	46.000	342992.700	440.005	840.020	910.023	460.006	1240.043
2	10:15:52	26.000	357156.330	720.015	1120.035	1370.053	720.015	2020.114
3	10:16:16	30.000	353984.100	950.025	1670.078	1560.068	980.027	2490.174
x		34.000	351377.710	703.348	1210.044	1280.048	720.016	1916.777
σ		10.583	7432.839	255.418	422.286	334.238	260.010	631.439
%RSD		31.127	2.115	36.315	34.898	26.111	36.112	32.943

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:15:27	307779.730	620.011	480.006	20.000	140.001	17018.105	170.001
2	10:15:52	326385.760	870.021	1550.067	50.000	450.006	15716.914	500.007
3	10:16:16	326171.910	800.018	4140.480	20.000	1100.034	14015.498	1360.052
x		320112.470	763.350	2056.851	30.000	563.347	15583.506	676.687
σ		10680.998	128.976	1882.124	17.321	489.950	1505.743	614.383
%RSD		3.337	16.896	91.505	57.735	86.971	9.662	90.793

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:15:27	745274.240	776962.910	2670.200	6451.165	2540.181	567310.650
2	10:15:52	775731.050	810746.130	5450.832	12294.231	5890.971	601306.310
3	10:16:16	782256.670	804283.510	10353.000	26269.308	14515.898	620113.380
x		767753.990	797330.850	6158.011	15004.901	7649.017	596243.450
σ		19739.559	17932.684	3889.914	10183.344	6178.389	26762.967
%RSD		2.571	2.249	63.168	67.867	80.774	4.489

ICSA 6/30/2011 10:18:13 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:18:13	77610.288	195.201	T 385464080.000	T 265851270.000	T 312949260.000	TM 280152150.000	TM 10542585.000
2	10:18:37	75945.654	176.401	T 387197780.000	T 264886010.000	T 314950650.000	TM 279558960.000	TM 10505801.000
3	10:19:02	76175.631	143.801	T 386300080.000	T 266703150.000	T 322524000.000	TM 278569910.000	TM 10475905.000
x		76577.191	171.801	T 386320650.000	T 265813480.000	T 316807970.000	TM 279427010.000	TM 10508097.000
σ		902.048	26.007	T 867031.920	T 909157.320	T 5050357.400	TM 799331.770	TM 33399.051
%RSD		1.178	15.138	T 0.224	T 0.342	T 1.594	TM 0.286	TM 0.318

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:18:13	174246.000	M 526107.590	31507.772	61826.847	46239.790	T 458468470.000	4660.608
2	10:18:37	173135.270	M 523564.460	33491.377	59468.859	43553.048	T 459228600.000	4770.637
3	10:19:02	174750.900	M 523286.490	34342.993	59559.159	45267.303	T 460656580.000	4340.528
x		174044.060	M 524319.510	33114.047	60284.955	45020.047	T 459451220.000	4590.591
σ		826.526	M 1554.745	1454.786	1336.081	1360.330	T 1110911.800	223.440
%RSD		0.475	M 0.297	4.393	2.216	3.022	T 0.242	4.867

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:18:13	4510.570	7971.779	9902.745	1452.059	510.007	684.013	70.000
2	10:18:37	4500.567	7421.542	9522.538	1320.049	440.005	696.014	90.000
3	10:19:02	4370.535	7741.678	10162.891	1400.055	460.006	676.013	30.000
x		4460.557	7711.666	9862.725	1390.721	470.006	685.346	63.333
σ		78.122	276.344	322.047	66.498	36.056	10.067	30.551
%RSD		1.751	3.583	3.265	4.782	7.671	1.469	48.238

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:18:13	212.001	301209.110	M 1574295.600	2833581.200	M 3084449.800	M 1788029.400	TM 4716337.600
2	10:18:37	212.001	305653.680	M 1588843.200	2855133.700	M 3064019.700	M 1793686.800	TM 4773360.500
3	10:19:02	232.002	298799.120	M 1602670.700	2829341.200	TM 3150771.500	M 1834684.800	TM 4837024.000
x		218.668	301887.300	M 1588603.200	2839352.000	TM 3099747.000	M 1805467.000	TM 4775574.000
σ		11.547	3477.239	M 14189.109	13830.750	TM 45353.818	M 25460.968	TM 60373.682
%RSD		5.281	1.152	M 0.893	0.487	TM 1.463	M 1.410	TM 1.264

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:18:13	244066.600	530.008	630.011	3300.305	4480.562	10112.863	3020.255
2	10:18:37	242181.190	500.007	390.004	3620.367	3890.424	10182.903	2840.226
3	10:19:02	239130.490	460.006	210.001	3400.324	4450.555	9482.517	2690.203
x		241792.760	496.674	410.006	3440.332	4273.847	9926.094	2850.228
σ		2490.875	35.120	210.718	163.739	332.393	385.742	165.254
%RSD		1.030	7.071	51.394	4.759	7.777	3.886	5.798

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:18:13	678416.750	739574.460	3690.381	8452.000	73741.947	452306.640
2	10:18:37	682560.240	739397.340	2020.114	5160.746	73008.944	461753.860
3	10:19:02	676807.370	729846.220	1120.035	2810.221	74193.813	470538.770
x		679261.450	736272.670	2276.844	5474.322	73648.235	461533.090
σ		2968.001	5566.176	1304.263	2833.931	597.967	9118.073
%RSD		0.437	0.756	57.284	51.768	0.812	1.976

ICSAB 6/30/2011 10:21:00 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:21:00	78361.056	8097.035	T 387180830.000	T 266829510.000	T 317822020.000	TM 285518110.000	TM 10591942.000
2	10:21:24	77363.220	7957.172	T 387193560.000	T 266778240.000	T 320424810.000	TM 281609000.000	TM 10738867.000
3	10:21:49	76242.415	7892.144	T 387209760.000	T 264413760.000	T 314584690.000	TM 276862630.000	TM 10636396.000
x		77322.230	7982.117	T 387194720.000	T 266007170.000	T 317610510.000	TM 281329920.000	TM 10655735.000
σ		1059.915	104.699	T 14499.572	T 1380171.700	T 2925798.600	TM 4334486.300	TM 75347.444
%RSD		1.371	1.312	T 0.004	T 0.519	T 0.921	TM 1.541	TM 0.707

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:21:00	176609.040	M 528661.370	95253.374	120273.680	164171.210	T 461367720.000	73962.858
2	10:21:24	174649.920	M 528259.750	95353.908	119790.450	162798.730	T 468497660.000	74153.646
3	10:21:49	172478.970	M 515597.610	94258.114	119881.050	162284.080	T 464911100.000	71332.188
x		174579.310	M 524172.910	94955.132	119981.730	163084.670	T 464925490.000	73149.564
σ		2065.943	M 7429.139	605.725	256.865	975.520	T 3564992.200	1576.782
%RSD		1.183	M 1.417	0.638	0.214	0.598	T 0.767	2.156

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:21:00	17088.172	20812.121	22694.412	11003.389	1370.053	3754.395	1720.083
2	10:21:24	17588.658	21713.193	23425.355	11123.463	1430.057	3558.354	1310.048
3	10:21:49	17448.520	21973.511	23635.632	11037.410	1440.058	3818.408	1370.053
x		17375.117	21499.608	23251.799	11054.754	1413.389	3710.386	1466.728
σ		258.191	609.443	494.029	61.888	37.862	135.497	221.454
%RSD		1.486	2.835	2.125	0.560	2.679	3.652	15.098

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:21:00	238.002	300395.580	M 1602812.700	2855273.600	M 3094271.500	M 1841008.600	TM 4876806.100
2	10:21:24	220.001	299266.860	M 1578503.800	2793257.100	M 3063347.700	M 1830849.500	TM 4742777.700
3	10:21:49	244.002	307616.960	M 1590730.700	2806002.700	TM 3189235.200	M 1829390.700	TM 4765379.800
x		234.002	302426.470	M 1590682.400	2818177.800	TM 3115618.100	M 1833749.600	TM 4794987.900
σ		12.490	4530.391	M 12154.485	32751.919	TM 65602.392	M 6328.650	TM 71752.229
%RSD		5.338	1.498	M 0.764	1.162	TM 2.106	M 0.345	TM 1.496

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:21:00	243073.180	3240.294	86016.671	5930.985	31718.144	104736.250	40215.232
2	10:21:24	236576.810	3130.274	87292.841	5060.717	30996.879	106758.170	38852.220
3	10:21:49	244644.420	2710.206	87222.498	5500.847	30455.950	104333.910	39283.161
x		241431.470	3026.925	86844.003	5497.516	31056.991	105276.110	39450.205
σ		4277.034	279.749	717.354	435.143	633.241	1299.173	696.691
%RSD		1.772	9.242	0.826	7.915	2.039	1.234	1.766

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:21:00	699964.920	739939.110	198851.040	488193.330	431132.430	462307.930
2	10:21:24	688252.600	748202.980	201925.250	492314.170	424639.600	467326.040
3	10:21:49	692273.640	747139.820	202805.140	493095.290	424373.380	468013.700
x		693497.050	745093.970	201193.810	491200.930	426715.140	465882.560
σ		5951.234	4495.778	2076.048	2633.779	3827.801	3114.756
%RSD		0.858	0.603	1.032	0.536	0.897	0.669

CCV1 CCV 6/30/2011 10:23:45 AM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:23:45	81141.432	441653.710	↹193727060.000	↹135983130.000	↹170597600.000	↹28354375.000	↹5436061.100
2	10:24:10	81856.685	434773.120	↹195078430.000	↹135211270.000	↹168357370.000	↹27874510.000	↹5182960.200
3	10:24:34	79080.216	436437.180	↹195867170.000	↹136331270.000	↹168116370.000	↹28742203.000	↹5304527.900
x		80692.778	437621.340	↹194890890.000	↹135841890.000	↹169023780.000	↹28323696.000	↹5307849.700
σ		1441.584	3589.889	↹1082311.700	↹573199.590	↹1368282.800	↹434659.260	↹126583.160
%RSD		1.787	0.820	↹0.555	↹0.422	↹0.810	↹1.535	↹2.385

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:23:45	188631.050	220260.080	3049017.500	2991262.300	↹5886347.700	↹247745000.000	↹3542711.300
2	10:24:10	186448.310	221282.610	2983605.900	2943717.200	↹5794207.700	↹241750870.000	↹3574506.500
3	10:24:34	183790.970	223925.240	3088628.100	2935658.000	↹5940086.800	↹241034020.000	↹3609913.500
x		186290.110	221822.640	3040417.200	2956879.200	↹5873547.400	↹243509960.000	↹3575710.500
σ		2423.915	1891.318	53036.704	30048.064	↹73777.136	↹3685121.400	↹33617.280
%RSD		1.301	0.853	1.744	1.016	↹1.256	↹1.513	↹0.940

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:23:45	698603.120	865844.360	830849.260	561001.970	55897.350	186816.120	82248.982
2	10:24:10	724390.680	838410.660	839615.330	557158.400	56298.607	183661.650	78873.806
3	10:24:34	729856.630	851718.780	843250.760	564012.610	58144.508	186676.680	82098.291
x		717616.810	851991.270	837905.110	560724.330	56780.155	185718.150	81073.693
σ		16691.601	13718.882	6375.180	3435.530	1198.477	1782.343	1906.647
%RSD		2.326	1.610	0.761	0.613	2.111	0.960	2.352

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:23:45	116.000	328453.150	855367.110	1473526.900	1620016.000	964639.600	2448116.600
2	10:24:10	138.001	325255.420	842129.670	1484838.800	1575113.200	942534.830	2513035.000
3	10:24:34	104.000	326497.780	835205.580	1509047.300	1628825.900	934856.580	2522603.800
x		119.334	326735.450	844234.120	1489137.700	1607985.000	947343.670	2494585.100
σ		17.243	1612.063	10244.182	18146.220	28806.636	15462.880	40526.365
%RSD		14.450	0.493	1.213	1.219	1.791	1.632	1.625

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:23:45	273325.910	128943.870	↹4699543.500	87383.282	1473245.000	↹4963944.800	↹2073324.600
2	10:24:10	277550.320	123586.180	↹4771655.800	86629.623	1424974.000	↹4826428.000	↹2040333.800
3	10:24:34	277580.790	124200.420	↹4744944.900	91956.158	1436353.700	↹4915094.700	↹2016451.400
x		276152.340	125576.830	↹4738714.700	88656.354	1444857.600	↹4901822.500	↹2043369.900
σ		2447.809	2932.073	↹36457.595	2882.452	25234.111	↹69712.466	↹28557.884
%RSD		0.886	2.335	↹0.769	3.251	1.746	↹1.422	↹1.398

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:23:45	747890.280	801816.180	↹9999109.300	↹24407661.000	↹18852875.000	517501.520
2	10:24:10	781087.110	832053.430	↹9878008.100	↹24703895.000	↹18742091.000	555786.630
3	10:24:34	759515.850	807744.600	↹9893961.500	↹24244013.000	↹18393647.000	537355.170
x		762831.080	813871.400	↹9923693.000	↹24451856.000	↹18662871.000	536881.110
σ		16844.893	16022.673	↹65797.759	↹233104.820	↹239643.980	19146.959
%RSD		2.208	1.969	↹0.663	↹0.953	↹1.284	3.566

CCB1 CCB 6/30/2011 10:26:31 AM QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:26:31	89781.635	253.202	226894.370	78875.815	90498.741	180477.430	20361.602
2	10:26:55	89105.762	303.803	338402.360	137628.330	145611.260	246570.650	23956.058
3	10:27:19	89435.404	574.009	673788.360	317904.810	330143.910	415426.660	29143.763
x		89440.934	377.005	413028.360	178136.320	188751.300	280824.910	24487.141
σ		337.970	172.477	232605.550	124556.770	125511.950	121162.290	4415.102
%RSD		0.378	45.749	56.317	69.922	66.496	43.145	18.030

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:26:31	201439.810	280.002	4320.523	1800.091	2530.179	273457.910	1450.059
2	10:26:55	202046.610	310.003	4860.661	1760.087	3070.264	347437.390	2030.115
3	10:27:19	202623.090	560.009	6611.224	3720.387	7291.488	623767.390	4300.518
x		202036.500	383.338	5264.136	2426.855	4297.310	414887.560	2593.564
σ		591.702	153.735	1197.465	1120.411	2607.057	184638.370	1506.448
%RSD		0.293	40.104	22.748	46.167	60.667	44.503	58.084

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:26:31	390.004	590.010	500.007	388.004	60.000	654.012	40.000
2	10:26:55	350.003	590.010	670.013	492.007	110.000	616.011	60.000
3	10:27:19	1040.030	1320.049	1140.036	828.019	230.001	728.015	110.000
x		593.346	833.356	770.019	569.343	133.334	666.012	70.000
σ		387.357	421.488	331.527	229.976	87.370	56.958	36.056
%RSD		65.283	50.577	43.054	40.393	65.527	8.552	51.508

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:26:31	36.000	357584.780	3620.367	6011.011	6861.318	3900.426	11063.426
2	10:26:55	20.000	361226.990	3190.285	5290.784	5810.945	3490.341	8742.139
3	10:27:19	34.000	362512.660	3200.287	6081.035	6951.353	3820.409	10052.829
x		30.000	360441.480	3336.980	5794.277	6541.205	3737.059	9952.798
σ		8.718	2556.124	245.472	437.441	634.024	217.377	1163.872
%RSD		29.059	0.709	7.356	7.550	9.693	5.817	11.694

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:26:31	332435.840	650.012	2440.167	30.000	590.010	8452.000	830.019
2	10:26:55	333087.820	930.024	3500.343	50.000	860.021	9842.712	950.025
3	10:27:19	334452.990	960.026	7351.513	180.001	1500.063	11223.526	2640.195
x		333325.550	846.687	4430.674	86.667	983.364	9839.413	1473.413
σ		1029.371	170.985	2584.467	81.446	467.397	1385.766	1012.243
%RSD		0.309	20.195	58.331	93.976	47.530	14.084	68.701

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:26:31	798826.570	852861.420	6231.087	13455.067	8522.033	624605.950
2	10:26:55	804199.860	855503.410	8411.981	21012.355	12414.314	635251.790
3	10:27:19	802474.800	858019.940	19430.566	44154.522	24306.531	639779.190
x		801833.740	855461.590	11357.878	26207.315	15080.959	633212.310
σ		2743.409	2579.511	7075.683	15995.463	8223.190	7789.506
%RSD		0.342	0.302	62.298	61.034	54.527	1.230

zzzzzz 6/30/2011 10:29:15 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:29:15	116126.870	104.600	TM 1666039900.000	T 281896500.000	747546.310	T 41503991.000	TM 49710983.000
2	10:29:39	114757.560	78.600	TM 1705442100.000	T 287592770.000	710998.230	T 41288228.000	TM 49998781.000
3	10:30:03	115551.660	67.600	TM 1714601400.000	T 292552800.000	714732.980	T 42259261.000	TM 51124874.000
x		115478.690	83.600	TM 1695361100.000	T 287347360.000	724425.840	T 41683827.000	TM 50278213.000
σ		687.564	19.000	TM 25802605.000	T 5332387.500	20109.807	T 509884.280	TM 747216.910
%RSD		0.595	22.727	TM 1.522	T 1.856	2.776	T 1.223	TM 1.486

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:29:15	237752.270	1530.065	222234.310	35805.862	T 3925843.400	477951.790	87292.841
2	10:29:39	243792.900	1560.068	225950.510	37098.496	T 3954852.500	464195.970	88066.626
3	10:30:03	248862.110	1310.048	229161.040	38321.074	T 3987751.800	450071.210	88780.146
x		243469.090	1466.727	225781.960	37075.144	T 3956149.200	464072.990	88046.538
σ		5561.994	136.515	3466.437	1257.769	T 30974.524	13940.699	743.856
%RSD		2.284	9.307	1.535	3.392	T 0.783	3.004	0.845

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:29:15	48114.734	1810.092	11753.867	14037.515	5070.720	12398.303	7551.596
2	10:29:39	48184.922	1820.093	11243.539	14682.033	5180.751	12442.333	6891.329
3	10:30:03	50962.618	2000.112	12084.087	15496.721	5240.769	12666.491	7111.416
x		49087.425	1876.766	11693.831	14738.757	5164.080	12502.376	7184.780
σ		1624.344	106.938	423.478	731.255	86.242	143.823	336.192
%RSD		3.309	5.698	3.621	4.961	1.670	1.150	4.679

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:29:15	60.000	350669.660	6421.154	7961.775	9182.360	5130.737	12894.654
2	10:29:39	50.000	351261.110	6961.357	8251.906	8411.981	4750.632	13174.858
3	10:30:03	74.000	359890.410	6451.165	7871.735	8762.149	4840.656	12084.087
x		61.333	353940.390	6611.225	8028.472	8785.497	4907.342	12717.867
σ		12.055	5161.344	303.594	198.668	385.720	198.633	566.468
%RSD		19.656	1.458	4.592	2.475	4.390	4.048	4.454

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:29:15	276951.130	640.011	490.007	90.000	170.001	4570.585	124160.150
2	10:29:39	274199.150	750.016	410.005	30.000	160.001	4830.653	128621.560
3	10:30:03	278474.550	550.008	330.003	40.000	40.000	4110.473	129789.960
x		276541.610	646.679	410.005	53.333	123.334	4503.904	127523.890
σ		2166.921	100.170	80.002	32.146	72.342	364.691	2971.089
%RSD		0.784	15.490	19.512	60.273	58.656	8.097	2.330

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:29:15	751340.680	811718.860	2670.200	6131.052	5520.853	461507.620
2	10:29:39	753801.190	808706.710	1990.111	5140.740	4520.572	465725.020
3	10:30:03	763865.620	827143.010	1620.074	4410.545	3410.326	471175.230
x		756335.830	815856.190	2093.461	5227.446	4483.917	466135.960
σ		6636.024	9890.018	532.637	863.525	1055.741	4846.888
%RSD		0.877	1.212	25.443	16.519	23.545	1.040

ZZZZZZ 6/30/2011 10:31:57 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:31:57	99279.716	12985.520	τ348025600.000	τ78214329.000	τ5537786.100	τ14287163.000	τ12172532.000
2	10:32:21	95938.024	12753.753	τ344599930.000	τ77178989.000	τ5387495.200	τ14215108.000	τ12268586.000
3	10:32:45	95250.358	12524.591	τ336327300.000	τ75703387.000	τ5285551.600	τ13801697.000	τ11831516.000
x		96822.699	12754.621	τ342984280.000	τ77032235.000	τ5403611.000	τ14101323.000	τ12090878.000
σ		2155.439	230.466	τ6014176.400	τ1261887.500	τ126887.150	τ261972.510	τ229691.220
%RSD		2.226	1.807	τ1.753	τ1.638	τ2.348	τ1.858	τ1.900

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:31:57	245526.410	1790.090	1098361.300	1146351.100	1800956.700	τ3590641.800	1101952.700
2	10:32:21	238613.640	1760.087	1086242.700	1120431.000	1812822.000	τ3569332.900	1072264.700
3	10:32:45	232716.580	1530.065	1070089.900	1086179.000	1762542.700	τ3490473.000	1051450.000
x		238952.210	1693.414	1084897.900	1117653.700	1792107.200	τ3550149.200	1075222.500
σ		6411.621	142.257	14183.602	30182.041	26281.878	τ 52767.967	25380.932
%RSD		2.683	8.401	1.307	2.700	1.467	τ1.486	2.361

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:31:57	213397.500	126305.110	242394.050	17394.468	1340.050	2462.170	1170.038
2	10:32:21	216879.070	125620.300	232595.010	17456.528	1290.047	2348.154	1480.061
3	10:32:45	215037.000	123314.310	230923.530	16773.874	1280.046	2540.181	1310.048
x		215104.520	125079.910	235304.190	17208.290	1303.381	2450.168	1320.049
σ		1741.767	1566.918	6196.609	377.493	32.148	96.574	155.253
%RSD		0.810	1.253	2.633	2.194	2.466	3.942	11.761

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:31:57	46.000	371616.960	5800.942	2930.240	3600.363	2150.129	4770.637
2	10:32:21	30.000	378713.740	5590.875	2590.188	3790.402	1870.098	5040.711
3	10:32:45	22.000	371698.630	5320.793	2350.155	3860.417	2130.127	4520.572
x		32.667	374009.770	5570.870	2623.528	3750.394	2050.118	4777.307
σ		12.220	4073.956	240.699	291.476	134.564	156.223	260.134
%RSD		37.409	1.089	4.321	11.110	3.588	7.620	5.445

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:31:57	313589.510	4320.523	147990.700	2840.226	43663.316	282923.670	2343314.500
2	10:32:21	315390.820	4340.528	143897.450	2590.188	45818.707	289568.920	2281698.400
3	10:32:45	313019.640	4760.635	144310.770	2450.168	42600.755	277448.760	2262217.800
x		313999.990	4473.895	145399.640	2626.861	44027.593	283313.780	2295743.600
σ		1237.737	248.525	2253.421	197.598	1639.612	6069.489	42333.455
%RSD		0.394	5.555	1.550	7.522	3.724	2.142	1.844

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:31:57	833886.010	873682.630	286804.850	718021.020	214257.710	559242.040
2	10:32:21	841909.650	911252.170	298067.040	706130.690	212567.700	566361.220
3	10:32:45	819523.490	878017.680	295342.330	700796.610	207458.130	566082.590
x		831773.050	887650.830	293404.740	708316.100	211427.850	563895.280
σ		11341.673	20553.971	5875.792	8817.716	3540.202	4032.235
%RSD		1.364	2.316	2.003	1.245	1.674	0.715

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:34:39	100154.080	149.201	TM 714846110.000	T 77281114.000	1513121.400	T 49985846.000	TM 12850494.000
2	10:35:03	95749.014	155.201	TM 721442080.000	T 77344569.000	1544505.000	T 49034643.000	TM 12775988.000
3	10:35:27	94579.305	200.201	TM 719483300.000	T 77605307.000	T 1640307.100	T 50637928.000	TM 12877416.000
x		96827.466	168.201	TM 718590490.000	T 77410330.000	T 1565977.800	T 49886139.000	TM 12834633.000
σ		2939.697	27.875	TM 3387407.800	T 171809.700	T 66256.034	T 806279.250	TM 52541.443
%RSD		3.036	16.572	TM 0.471	T 0.222	T 4.231	T 1.616	TM 0.409

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:34:39	221404.100	1670.078	99777.981	174458.050	94901.508	1734385.800	4970.692
2	10:35:03	220563.790	1590.071	99868.485	178224.980	91785.282	1754979.400	4930.681
3	10:35:27	219146.500	1660.077	102322.320	177184.700	96520.149	1814213.200	5450.832
x		220371.470	1640.075	100656.260	176622.580	94402.313	1767859.500	5117.401
σ		1141.019	43.593	1443.557	1945.358	2406.582	41443.039	289.451
%RSD		0.518	2.658	1.434	1.101	2.549	2.344	5.656

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:34:39	19520.664	3450.333	4230.501	3696.383	1080.033	1648.076	1090.033
2	10:35:03	20341.579	3610.365	3920.430	3590.361	1060.032	1798.091	1150.037
3	10:35:27	19991.184	3520.347	4230.501	3962.440	990.027	1914.103	1200.040
x		19951.142	3527.015	4127.144	3749.728	1043.364	1786.756	1146.704
σ		411.920	80.224	179.019	191.690	47.261	133.375	55.079
%RSD		2.065	2.275	4.338	5.112	4.530	7.465	4.803

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:34:39	38.000	349762.120	11523.717	14085.553	15546.765	9162.350	22614.310
2	10:35:03	24.000	346795.090	11583.756	13234.903	15586.800	8992.263	21793.290
3	10:35:27	36.000	352066.750	12014.040	14155.608	15606.817	8872.203	22844.603
x		32.667	349541.320	11707.171	13825.355	15580.127	9008.939	22417.401
σ		7.572	2642.758	267.446	512.545	30.577	145.790	552.625
%RSD		23.179	0.756	2.284	3.707	0.196	1.618	2.465

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:34:39	288125.860	750.016	800.018	40.000	240.002	4710.621	69655.589
2	10:35:03	280048.880	660.012	1210.041	110.000	310.003	4350.530	71824.154
3	10:35:27	287505.990	640.011	1540.066	90.000	730.015	5400.817	73199.723
x		285226.910	683.346	1183.375	80.000	426.673	4820.656	71559.822
σ		4495.002	58.597	370.744	36.056	265.023	533.719	1786.792
%RSD		1.576	8.575	31.329	45.069	62.114	11.072	2.497

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:34:39	786402.960	831770.700	3460.335	8602.071	11733.854	519179.170
2	10:35:03	784366.250	833362.400	3550.353	8922.228	13284.940	527240.270
3	10:35:27	790644.220	831885.890	4780.640	12144.128	15426.661	526931.350
x		787137.810	832339.660	3930.443	9889.476	13481.818	524450.260
σ		3202.845	887.585	737.667	1959.137	1854.259	4567.511
%RSD		0.407	0.107	18.768	19.810	13.754	0.871

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User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:37:21	102720.090	204.001	TM 1182794000.000	T 182182960.000	T 3509595.900	T 17121243.000	TM 19977390.000
2	10:37:45	100356.710	185.001	TM 1184370600.000	T 183719420.000	T 3528796.700	T 16805824.000	TM 19617383.000
3	10:38:10	100329.560	193.401	TM 1192605100.000	T 183992950.000	T 3492421.200	T 17220092.000	TM 19642635.000
x		101135.450	194.134	TM 1186589900.000	T 183298440.000	T 3510271.300	T 17049053.000	TM 19745803.000
σ		1372.404	9.521	TM 5268651.800	T 975668.130	T 18197.176	T 216363.400	TM 200957.660
%RSD		1.357	4.904	TM 0.444	T 0.532	T 0.518	T 1.269	TM 1.018

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:37:21	250160.050	4930.681	736740.860	1558245.200	1725152.400	T 7102088.100	29434.239
2	10:37:45	247625.090	4930.681	724192.900	1547422.100	1715703.900	T 7041461.100	30455.950
3	10:38:10	247118.140	5830.952	742783.620	1548325.600	1729845.500	T 7023731.600	31117.088
x		248301.090	5230.771	734572.460	1551331.000	1723567.300	T 7055760.300	30335.759
σ		1629.740	519.772	9483.154	6004.952	7202.821	T 41088.762	847.838
%RSD		0.656	9.937	1.291	0.387	0.418	T 0.582	2.795

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:37:21	130474.930	11133.470	18930.028	19110.220	1940.105	3970.441	2170.132
2	10:37:45	131411.760	10693.201	18839.933	19366.496	2180.133	4202.494	2380.159
3	10:38:10	133849.770	11093.445	18439.516	20183.400	2360.156	4186.491	2140.128
x		131912.150	10973.372	18736.492	19553.372	2160.132	4119.809	2230.140
σ		1742.177	243.459	261.105	560.465	210.738	129.603	130.784
%RSD		1.321	2.219	1.394	2.866	9.756	3.146	5.864

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:37:21	56.000	350047.630	25918.796	32880.243	37318.955	21022.367	54623.417
2	10:37:45	44.000	346112.020	25798.622	32489.529	35585.422	21332.735	54643.478
3	10:38:10	30.000	350822.620	24987.470	33431.265	37960.305	20752.051	55536.226
x		43.333	348994.090	25568.296	32933.679	36954.894	21035.718	54934.373
σ		13.013	2525.844	506.586	473.136	1228.586	290.572	521.316
%RSD		30.030	0.724	1.981	1.437	3.325	1.381	0.949

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:37:21	271579.570	760.016	330.003	140.001	120.000	2290.147	73049.108
2	10:37:45	260942.720	840.020	210.001	90.000	140.001	2220.138	73561.204
3	10:38:10	268402.060	810.018	230.001	100.000	140.001	2010.113	74464.938
x		266974.780	803.351	256.669	110.000	133.334	2173.466	73691.750
σ		5460.171	40.416	64.292	26.458	11.547	145.734	716.886
%RSD		2.045	5.031	25.049	24.052	8.660	6.705	0.973

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:37:21	756731.300	822369.970	1040.030	2580.186	45949.041	478834.990
2	10:37:45	761862.720	805130.420	770.017	1500.063	44675.816	480406.360
3	10:38:10	778445.420	815955.540	780.017	1640.075	46239.790	494328.690
x		765679.810	814485.310	863.355	1906.775	45621.549	484523.350
σ		11349.162	8713.306	153.087	587.378	831.830	8527.951
%RSD		1.482	1.070	17.732	30.805	1.823	1.760

14936S;2 MF4N43S 6/30/2011 10:40:04 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:40:04	106011.240	11991.225	τ497534660.000	τ68122835.000	τ5841959.400	τ17482025.000	τ11289105.000
2	10:40:28	103935.600	11852.532	τ495648040.000	τ68143513.000	τ5889109.500	τ17606356.000	τ11099292.000
3	10:40:52	103185.260	11907.569	τ493124680.000	τ67698580.000	τ5820870.800	τ17530415.000	τ11214129.000
x		104377.370	11917.109	τ495435790.000	τ67988310.000	τ5850646.500	τ17539599.000	τ11200842.000
σ		1463.869	69.837	τ2212639.800	τ251125.860	τ34938.943	τ62672.170	τ95601.378
%RSD		1.402	0.586	τ0.447	τ0.369	τ0.597	τ0.357	τ0.854

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:40:04	217628.100	1970.109	989495.780	388715.230	1708719.400	τ4080915.400	997049.010
2	10:40:28	217496.520	2250.142	983465.980	385057.250	1718032.600	τ4039639.800	1018426.200
3	10:40:52	215117.960	1840.095	971021.940	378591.180	1688088.900	τ4050825.600	967086.780
x		216747.530	2020.115	981327.900	384121.220	1704947.000	τ4057126.900	994187.330
σ		1412.777	209.547	9420.680	5126.523	15324.192	τ 21347.106	25789.063
%RSD		0.652	10.373	0.960	1.335	0.899	τ0.526	2.594

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:40:04	201702.750	114173.840	213984.470	15532.753	1550.067	2716.207	1480.061
2	10:40:28	198911.710	113187.590	216747.490	15380.621	1100.034	2820.223	1670.078
3	10:40:52	195918.890	112442.900	211818.880	15494.720	1260.045	2768.215	1700.081
x		198844.450	113268.110	214183.610	15469.364	1303.382	2768.215	1616.740
σ		2892.517	868.270	2470.335	79.172	228.125	52.008	119.314
%RSD		1.455	0.767	1.153	0.512	17.503	1.879	7.380

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:40:04	32.000	352943.810	9682.624	9682.624	10873.309	5850.958	14946.252
2	10:40:28	42.000	343797.960	9532.544	8772.154	10833.285	5830.952	14926.236
3	10:40:52	22.000	345989.690	9462.506	9042.289	11143.476	5910.978	15336.583
x		32.000	347577.150	9559.225	9165.689	10950.023	5864.296	15069.690
σ		10.000	4775.109	112.458	467.611	168.726	41.647	231.352
%RSD		31.250	1.374	1.176	5.102	1.541	0.710	1.535

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:40:04	286672.750	4260.508	129870.550	2630.194	41257.606	259157.000	2092302.800
2	10:40:28	285656.660	3970.441	131663.610	2700.204	39814.336	254074.740	2084124.200
3	10:40:52	289335.180	4380.537	131734.120	2810.221	40135.052	253861.750	2056768.400
x		287221.530	4203.829	131089.430	2713.540	40402.331	255697.830	2077731.800
σ		1899.668	210.841	1056.168	90.752	757.850	2997.621	18609.712
%RSD		0.661	5.015	0.806	3.344	1.876	1.172	0.896

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:40:04	764522.870	832618.890	277722.980	666832.420	208429.340	517604.430
2	10:40:28	796516.750	824201.580	275823.880	674139.240	210027.910	539189.230
3	10:40:52	775689.290	849150.710	282740.800	664279.880	205303.440	542703.310
x		778909.640	835323.730	278762.550	668417.180	207920.230	533165.660
σ		16238.226	12692.591	3573.723	5117.158	2403.028	13590.474
%RSD		2.085	1.519	1.282	0.766	1.156	2.549

CCV2 CCV 6/30/2011 10:42:47 AM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:42:47	81056.046	441564.540	τ198074900.000	τ137074210.000	τ168003980.000	τ28312898.000	τ5430687.100
2	10:43:11	78683.469	430825.350	τ196126490.000	τ135211140.000	τ166066220.000	τ27525889.000	τ5294405.900
3	10:43:35	77635.397	427272.500	τ194957310.000	τ135147760.000	τ166903090.000	τ28157383.000	τ5278231.700
x		79124.971	433220.800	τ196386230.000	τ135811040.000	τ166991090.000	τ27998724.000	τ5334441.600
σ		1752.542	7441.053	τ1574939.500	τ1094399.800	τ971872.050	τ416803.940	τ83742.441
%RSD		2.215	1.718	τ0.802	τ0.806	τ0.582	τ1.489	τ1.570

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:42:47	181528.000	219126.260	3086562.500	2914249.500	τ5878845.400	τ240189100.000	τ3452536.000
2	10:43:11	180093.590	221515.470	3018565.800	2903945.800	τ5818159.700	τ241578440.000	τ3456680.600
3	10:43:35	182194.740	221333.230	2966894.500	2862015.900	τ5739801.700	τ237314690.000	τ3496942.700
x		181272.110	220658.320	3024007.600	2893403.700	τ5812268.900	τ239694080.000	τ3468719.800
σ		1073.695	1329.927	60019.298	27666.537	τ69708.747	τ2174551.600	τ24529.491
%RSD		0.592	0.603	1.985	0.956	τ1.199	τ0.907	τ0.707

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:42:47	709198.750	844780.580	820695.510	549519.070	55445.946	182075.530	79355.935
2	10:43:11	698457.590	834933.280	829446.240	546088.190	55576.350	181820.960	80380.502
3	10:43:35	692346.380	826860.360	820988.530	544958.460	55415.852	180839.060	79426.247
x		700000.910	835524.740	823710.090	546855.240	55479.383	181578.520	79720.895
σ		8531.529	8974.739	4969.807	2375.093	85.314	652.914	572.318
%RSD		1.219	1.074	0.603	0.434	0.154	0.360	0.718

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:42:47	102.000	327882.820	829540.470	1465136.900	1604832.500	931171.320	2429776.800
2	10:43:11	100.000	321406.660	814804.740	1447610.400	1569772.200	926265.810	2407455.000
3	10:43:35	114.000	315736.850	806092.390	1449180.400	1563768.100	921782.530	2413585.800
x		105.334	321675.440	816812.530	1453975.900	1579457.600	926406.560	2416939.200
σ		7.572	6077.441	11852.278	9697.533	22179.436	4695.980	11532.532
%RSD		7.189	1.889	1.451	0.667	1.404	0.507	0.477

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:42:47	272391.800	125237.630	τ4680065.300	94559.702	1463695.600	τ4962624.500	τ2031512.400
2	10:43:11	269061.880	124703.910	τ4603083.500	93956.531	1434114.000	τ4880281.200	τ2024125.300
3	10:43:35	267762.570	126013.060	τ4605947.900	89835.404	1418573.200	τ4834419.100	τ2034883.200
x		269738.750	125318.200	τ4629698.900	92783.879	1438794.300	τ4892441.600	τ2030173.600
σ		2387.687	658.280	τ43642.092	2571.202	22922.405	τ64961.989	τ5502.457
%RSD		0.885	0.525	τ0.943	2.771	1.593	τ1.328	τ0.271

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:42:47	756022.190	808392.970	τ10029485.000	τ24416155.000	τ18739974.000	526220.850
2	10:43:11	736407.520	805140.880	τ9944803.100	τ24207044.000	τ18538903.000	522957.040
3	10:43:35	735428.390	796328.630	τ9803075.200	τ23956435.000	τ18633001.000	529907.500
x		742619.370	803287.490	τ9925787.900	τ24193211.000	τ18637293.000	526361.800
σ		11617.505	6242.064	τ114396.550	τ230172.260	τ100604.010	3477.372
%RSD		1.564	0.777	τ1.153	τ0.951	τ0.540	0.661

CCB2 CCB 6/30/2011 10:45:33 AM QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	23Na	24Mg	27Al	39K	44Ca
1	10:45:33	82592.562	182.601	153787.380	52144.021	58796.638	134000.900	19320.446
2	10:45:57	83133.564	177.001	141395.590	51020.783	59769.861	137295.780	19010.113
3	10:46:21	83226.495	169.801	144298.670	54115.875	59519.025	135663.380	18209.279
x		82984.207	176.468	146493.880	52426.893	59361.842	135653.350	18846.613
σ		342.342	6.417	6480.995	1566.815	505.293	1647.466	573.343
%RSD		0.413	3.636	4.424	2.989	0.851	1.214	3.042

Run	Time	45Sc	47Ti	51V	52Cr	55Mn	56Fe	59Co
1	10:45:33	181578.510	90.000	5800.942	1350.051	1490.062	184710.390	710.014
2	10:45:57	189287.950	200.001	5910.978	1310.048	1730.084	190258.180	760.016
3	10:46:21	185346.930	200.001	5520.853	1230.042	1650.076	189065.610	1060.032
x		185404.460	163.334	5744.258	1296.714	1623.407	188011.390	843.354
σ		3855.041	63.509	201.145	61.105	122.213	2920.279	189.306
%RSD		2.079	38.883	3.502	4.712	7.528	1.553	22.447

Run	Time	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	10:45:33	130.000	280.002	430.005	244.002	30.000	438.005	40.000
2	10:45:57	270.002	300.003	340.003	308.003	60.000	454.006	70.000
3	10:46:21	200.001	330.003	410.005	284.002	60.000	452.006	10.000
x		200.001	303.336	393.338	278.669	50.000	448.006	40.000
σ		70.001	25.167	47.259	32.332	17.321	8.718	30.000
%RSD		35.000	8.297	12.015	11.602	34.641	1.946	75.000

Run	Time	83Kr	89Y	94Mo	95Mo	96Mo	97Mo	98Mo
1	10:45:33	32.000	327546.730	1260.045	2160.131	2380.159	1410.056	3890.424
2	10:45:57	14.000	332069.110	1230.042	2410.163	2300.148	1450.059	3650.373
3	10:46:21	22.000	335869.200	990.027	1470.061	1840.095	950.025	2750.212
x		22.667	331828.350	1160.038	2013.451	2173.467	1270.047	3430.336
σ		9.019	4166.454	147.996	486.913	291.467	277.867	601.110
%RSD		39.788	1.256	12.758	24.183	13.410	21.879	17.523

Run	Time	103Rh	106Cd	107Ag	108Cd	111Cd	121Sb	137Ba
1	10:45:33	298839.800	610.010	10903.328	30.000	480.006	4590.590	510.007
2	10:45:57	302948.160	600.010	10212.920	20.000	370.004	4820.651	480.006
3	10:46:21	298941.480	510.007	9962.778	20.000	470.006	4420.547	490.007
x		300243.140	573.343	10359.675	23.333	440.005	4610.596	493.340
σ		2343.162	55.077	487.146	5.774	60.829	200.801	15.276
%RSD		0.780	9.606	4.702	24.744	13.825	4.355	3.096

Run	Time	159Tb	165Ho	203Tl	205Tl	208Pb	209Bi
1	10:45:33	737792.990	815505.670	3200.287	7491.571	5680.904	586289.130
2	10:45:57	769917.380	825813.550	3070.264	7471.563	5680.904	607728.320
3	10:46:21	746847.990	797039.300	3120.273	7431.546	5580.872	587342.930
x		751519.450	812786.180	3130.274	7464.893	5647.560	593786.790
σ		16563.849	14578.617	65.586	30.563	57.753	12085.206
%RSD		2.204	1.794	2.095	0.409	1.023	2.035

Sentinel, Inc. SAMPLE PREPARATION

HOT BLOCK

ICP-MS

BATCH SHEET FOR WATER/AQUEOUS

DATE: 6/28/11 PREP METHOD: **200.8** SAMPLE TYPE: **LW**

SDG NO.: MF4N06 ANALYSIS METHOD: **MS** ANALYST: MM

CASE NO.: 41486 BATCH NO: 1 RUN NO.: 1-2

NITRIC ACID LOT / EXP. DATE: 1116670 / 4/14

HYDROCHLORIC ACID LOT / EXP. DATE: 502667 / 4/14

BATCH NO.	LAB ID NUMBER	SAMPLE DESCRIPTION	Initial Volume,mL	Final Volume, mL	Sample pH	Date Analyzed	Sample Weigh/Pour Initials	Sample Prep Initials
1	PBW	PBW	50	50	N/A	6/28/11	RR	RR
2	LCS	LCS	50	50	N/A			
3 QC	14936	MF4N43	50	50	<2			
4 QC	14936D	MF4N43D	50	50	<2			
5 QC	14936S	MF4N43S	50	50	<2			
6	14925	MF4N06	50	50	<2			
7	14926	MF4N07	50	50	<2			
8	14927	MF4N08	50	50	<2			
9	14928	MF4N09	50	50	<2			
10	14929	MF4N10	50	50	<2			
11	14930	MF4N14	50	50	<2			
12	14931	MF4N15	50	50	<2			
13	14932	MF4N20	50	50	<2			
14	14933	MF4N21	50	50	<2			
15	14934	MF4N37	50	50	<2			
16	14935	MF4N38	50	50	<2			
17	14937	MF4N44	50	50	<2			
18	14938	MF4N59	50	50	<2			
19	14939	MF4N60	50	50	<2			
20								
21								
22								
23								
24								
25								
26								

* - Denotes that the pH of the sample has been adjusted in sample receipt and pH should be rechecked by analyst before sample is prepped for analysis.

Sample Relinquished by: RR 6/25/11 / / Sample Received by: MM 6/28/11 / /

Reviewed By: 6/30/11 for M. Kilgore
Analyst/Date

Reviewed By: 6/30/11
QA Officer/Supervisor/Date

From: (972) 315-3922
Reshma Hooda
EA Engineering, Science, & Tec
405 S. Hwy 121 Bypass
Suite C-100
Lewisville, TX 75067

Origin ID: JMDA

FedEx Express

J11201104290225

Ship Date: 23JUN11
ActWgt: 20.0 LB
CAD: 1247365/INET3180

Dims: 24 X 15 X 15 IN

Delivery Address Bar Code

Ref # 1434265 A 3
Invoice #
PO #
Dept #

6/25/10
1050

SHIP TO: (256) 534-9800

BILL SENDER

Randi Richey
Sentinel
4733 COMMERCIAL DR NW

HUNTSVILLE, AL 35816

FRI - 24 JUN A4
PRIORITY OVERNIGHT

TRK# 0201 7972 2041 4794

XX HSVA

35816
AL-US
MEM

50FG1/0CB0/F5F4

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197

From: (972) 315-3922
Reshma Hooda
EA Engineering, Science, & Tec
405 S. Hwy 121 Bypass
Suite C-100
Lewisville, TX 75067

Origin ID: JMDA

FedEx Express

J11201104290225

Ship Date: 23JUN11
ActWgt: 60.0 LB
CAD: 1247365/INET3180

Delivery Address Bar Code

Ref # 1434265 A 3
Invoice #
PO #
Dept #

RP 6/27/11 10:50

SHIP TO: (256) 534-9800 BILL SENDER

Randi Richey
Sentinel
4733 COMMERCIAL DR NW

HUNTSVILLE, AL 35816

FRI - 24 JUN A4
PRIORITY OVERNIGHT

TRK# 7948 9943 5267
0201

XX HSVA

35816
AL-US
MEM

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198

6-23-11 1232

Comp. Grab

Tag Number 6- 455822

Station Location

Samplers (Signatures) Dwain Beard

Case No: 41486
Sample No: MF4N07
Station Location: LMW-202
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455822

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Project Code CLP Case No. | Station No. | Month/Day/Year 06/23/11 | Time 1430 | Designate: Comp. Grab

Tag Number 6- 455823

Station Location

Samplers (Signatures)

Case No: 41486
Sample No: MF4N08
Station Location: LMW-3
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455823

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Project Code CLP Case No. | Station No. | Month/Day/Year 06/23/11 | Time 1430 | Designate: Comp. Grab

Tag Number 6- 455824

Station Location

Samplers (Signatures)

Case No: 41486
Sample No: MF4N09
Station Location: LMW-3 DUP
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455824

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Month/Day/Year 06/23/11 Time 1515

Tag Number 6-

Case No: 41486
Sample No: MF4N10
Station Location: LMW-301
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455825

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Month/Day/Year 6-23-11 Time 1613

Tag Number 6-

Dwaine Beard

Case No: 41486
Sample No: MF4N21
Station Location: LMW-E
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455836

☐ L ☐ M ☐ H

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Project Code CLP Case No. Station No. Month/Day/Year 06/23/11 Time 1245 Designate Comp Grab

Tag Number 6-

Station Location Samplers (Signature)

Case No: 41486
Sample No: MF4N38
Station Location: WMW-10B
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455853

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Project Code
CLP Case No.

Station No.

Month/Day/Year: 6-23-11

Time: 1116

Designate: Comp. / Grab

Station Location

Samplers (Signatures): Dwain Beard

Tag Number 6-

Case No: 41486
Sample No: MF4N59
Station Location: WMW-25A
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455877

L M H

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Project Code
CLP Case No.

Station No.

Month/Day/Year: 6-23-11

Time: 1508

Designate: Comp. / Grab

Station Location

Samplers (Signatures): Dwain Beard

Tag Number 6-

Case No: 41486
Sample No: MF4N60
Station Location: WMW-25B
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455878

L M H

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

6-23-11 1125

Tag Number 6-

Dwaine Beard

Case No: 41486
Sample No: MF4N06
Station Location: LMW-402
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455821

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

6-23-11 1007

Tag Number 6-

Dwaine Beard

Case No: 41486
Sample No: MF4N14
Station Location: LMW-C
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455829

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

6-23-11 1007

Tag Number 6-

Dwaine Beard

Case No: 41486
Sample No: MF4N15
Station Location: LMW-C DUP
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455830

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

201A

Oct 23/11 1345

Tag Number 6-

Case No: 41486
Sample No: MF4N20
Station Location: LMW-D
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455835

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Oct/23/11 1240

Tag Number 6-

Case No: 41486
Sample No: MF4N37
Station Location: WMW-10A
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455852

Volatile Organics (VOA)

Preservative: Yes ☐ No ☐

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Oct/23/11 0945

Tag Number 6-

Case No: 41486
Sample No: MF4N43
Station Location: WMW-15A
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L

Volatile Organics (V

Preservative: Yes ☐

GPO U.S. GOVERNMENT PRINTING OFFICE

06/23/11 0945

Tag Number 6-

Case No: 41486
Sample No: MF4N43
Station Location: WMW-15A
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455860

Preservative: Yes ☐ No ☐

Volatile Organics (VOA)

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

06/23/11 1025

Tag Number 6-

Case No: 41486
Sample No: MF4N44
Station Location: WMW-15B
Sample Type: Grab
Preservative: HNO3
Analysis: TM ISM01.2 / ICP-MS
Concentration: L
Tag No: 6455862

Preservative: Yes ☐ No ☐

Volatile Organics (VOA)

GPO U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

LAB ID #	EPA SAMPLE #	CASE #	SDG #	SAMP TYPE	DATE REC'D	TIME REC'D	CLIENT NAME	PARA-METERS	SAMPLE DESCR.	COMMENTS/ NOTES	TEMP °C	COLOR/ TEXTURE	SUL-FIDES	OXID.	PH	INIT
14925	MF-44Ø6	41486	MF-44Ø6	LW	6/21/11	1010	R46	MS	LW		4.1/3.4	Clear	NA	NA	L2	[illegible]
14926	Ø7															
14927	Ø8															
14928	Ø9															
14929	10															
14930	14															
14931	15															
14932	2Ø															
14933	21															
14934	37															
14935	38															
14936	43									QC						
14937	44															
14938	59															
14939	60															
14940																
14941																
14942																
14943																
14944																
14945																

[illegible] 6/25/11
Signed Date

* pH adjusted for this SDG to: TM/DM <2; CN >12

[illegible] 6/25/11
Reviewed By Date

205

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SAMPLE SEAL

SAMPLE NO. Cooler

DATE 06/23/11

SIGNATURE

PRINT NAME AND TITLE (Inspector, Analyst or Technician)
Diane Thompson SCTF

SEAL BROKEN BY

DATE

EPA FORM 7500-2(R7-75)

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SAMPLE SEAL

SAMPLE NO. Cooler

DATE 06/23/11

SIGNATURE

PRINT NAME AND TITLE (Inspector, Analyst or Technician)
Diane Thompson SCTF

SEAL BROKEN BY

DATE

EPA FORM 7500-2(R7-75)

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SAMPLE SEAL

SAMPLE NO. Sample Cooler | DATE 6/23/11

SIGNATURE [signature]

PRINT NAME AND TITLE (Inspector, Analyst or Technician) Reshma Hooda

SEAL BROKEN BY | DATE

EPA FORM 7500-2(R7-75)

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SAMPLE SEAL

SAMPLE NO Sample Cooler | DATE 6/23/11

SIGNATURE [signature]

PRINT NAME AND TITLE (Inspector, Analyst or Technician) Reshma Hooda, EI-G

206

Contract Laboratory Program

Sample Delivery Group (SDG) Cover Sheet

SDG Number MF4N Ø6 Case Number 41486 Contract Number EPW09040
Lab Code Sentin SDG Turnaround 21 Delivery CLIN(s) NA

First Sample Received in SDG MF4NØ6 Last Sample Received in SDG MF4N60
First Sample Receipt Date 6/27/11 Last Sample Receipt Date 6/27/11

USEPA Sample Numbers in SDG (Listed in Numerical Order)

CLP Sample ID	Sample Type	Requested Analytical CLIN(s)/SubCLIN(s)	Solicitation Number	MA Number(s)
1 MF4NØ6	LW	0018C	NA	NA
2 Ø7				
3 Ø8				
4 Ø9				
5 10				
6 14				
7 15				
8 20				
9 21				
10 37				
11 38				
12 43				
13 44				
14 59				
15 60				
16				
17				
18				
19				
20				

Note: *There are a maximum of 20* ***field*** *samples (excluding PE samples) in an SDG. Attach TR/COC Records to this form in alphanumeric order (the order listed above on this form).*

Signature _____ Date 6/27/11

February 2010

SOW: ISM01.2 - MS

Sentinel, Inc. Sample Receipt

SDG TRACKING REPORT

Case No.: 41486 Sample Delivery Group: MF4N06

Laboratory ID Number	EPA Sample	Tracking Number	Date Received	pH TM	pH CN	QC FB PE	Matrix	Parameters	Initials
14925	MF4N06	6455821	06/25/2011	<2	NA		LW	MS	RR
14926	MF4N07	6455822	06/25/2011	<2	NA		LW		RR
14927	MF4N08	6455823	06/25/2011	<2	NA		LW		RR
14928	MF4N09	6455824	06/25/2011	<2	NA		LW		RR
14929	MF4N10	6455825	06/25/2011	<2	NA		LW		RR
14930	MF4N14	6455829	06/25/2011	<2	NA		LW		RR
14931	MF4N15	6455830	06/25/2011	<2	NA		LW		RR
14932	MF4N20	6455835	06/25/2011	<2	NA		LW		RR
14933	MF4N21	6455836	06/25/2011	<2	NA		LW		RR
14934	MF4N37	6455852	06/25/2011	<2	NA		LW		RR
14935	MF4N38	6455853	06/25/2011	<2	NA		LW		RR
14936	MF4N43	6455860,1	06/25/2011	<2	NA	QC	LW		RR
14937	MF4N44	6455862	06/25/2011	<2	NA		LW		RR
14938	MF4N59	6455877	06/25/2011	<2	NA		LW		RR
14939	MF4N60	6455878	06/25/2011	<2	NA		LW		RR

Notes: * See Digestate Transfer Report

SDG Completion Date: 06/25/2011 Report Deadline: 07/16/2011

Analyst Check Out	Analyst Check Out	Analyst Check Out	Analyst Check Out	Analyst Check Out
RR 1000/6/28/11	/ /	/ /	/ /	/ /
Analyst Check In	Analyst Check In	Analyst Check In	Analyst Check In	Analyst Check In
RR 1000 /6/28/11	/ /	/ /	/ /	/ /
Transfer to Lab	Transfer to Storage - Sample	Final Disposal - Sample	Transfer to Storage - Digestates	Final Disposal - Digestates
Area: Center	Area:	Area:	Area:	Area:
Date: ~~6/28/11~~ 6/25/11	Date:	Date:	Date:	Date:
By: TFY	By:	By:	By:	By:

TFY 6/25/11

Sentinel, Inc.

ISM01.2 **Sample Preparation**

DEENA HOTBLOCK USAGE LOG
95°C (±3°C)

AES Spike Sol'n Vendor/Lot #'s /Exp. Date: CLPP-SPK-1 IV-02MEB324145|6|12 CLPP-SPK-5 IV|B2MEB263096|6|12
Spike Vol. Added - Waters: 50uL of each spike solution, Soils : 200 uL of each spike solution
AES - LCS Vendor /Lot #/ Exp. Date: CLP-AES-CRQL-2 IV|A2MEB194195|3|12 (1 mL)
MS Spike Sol'n Vendor/Lot #'s /Exp. Date: CLPP-SPK-1 IV|02-MEB324145|6|12 CLPP-SPK-4 IV|A2-MEB194140|6|12
Spike Vol. Added - Waters: 50 uL of each spike solution, Soils : 500 uL of each spike solution
MS - LCSS Vendor /Lot #/ Exp. Date: CLP-MS-CRQL-3 IV|C2-MEB296009|4|12 (1 mL)
MS - LCSW : 50 mL of MS-LCSW solution (see MS-LCSW log)
IV: Inorganic Ventures

BATCH #	DATE	TIME IN/OUT	METHOD	TEMP SETTING (Deg C)	TEMP READING (Deg C)	HOT BLOCK #	ANALYST INITIALS	SUPER-VISORY INITIALS
MF4N05	6/24/11	952 - 1202	200.8	95	95	D-1	RR	—
↓ 61	↓	↓	↓	↓	↓	↓	↓	↓
MC079	6/24/11	1311 - 1522	200.7	95	95	D-1	RR	—
↓ C1	↓	↓	↓	↓	↓	↓	↓	↓
MB9F J8	6/28/11	815 - 1025	200.7	95	95	D-1	RR	—
MF4N01			200.8					
↓ 06	↓	↓	↓	↓	↓	↓	↓	↓
MB9EM1 MS	6/29/11		3050 A/LS	95	95	D-1	RR	—
↓ MES								
MC1JR4 MES	↓	↓	↓	↓	↓	↓	↓	↓
MB9EQ6 MES	6/30/11	956 - 1100	3050 A/LS	95	95	D-1	RR	—
↓ MS	↓	↓	↓	↓	↓	↓	↓	↓
MB9F01 MS	6/30/11	1140 -	200.8	95	95	D-1	RR	—
MC1JR2								
MYZYR0 ↓								
↓ MES								
MC01G7								
↓ G4 ↓	↓	↓	↓	↓	↓	↓	↓	↓

Sentinel, Inc.

ISM01.2 **Sample Preparation**

ICP-AES / ICP-MS Reagents Log

1. 50% Trace Metal Nitric Acid: 1000 mL Trace Metal Concentrated HNO_3 --> 2 L DI H_2O
   Vendor: LD Lot: 1110070D Exp: 2/12
2. 50% Trace Metal Hydrochloric Acid: 1000 mL Trace Metal Concentrated HCL --> 2 L DI H_2O
   Vendor: LD Lot: 50267 Exp: 2/12
3. 50% Optima Nitric Acid: 1000 mL Optima Concentrated HNO_3 --> 2 L DI H_2O
   Vendor: LD Lot: 50181 Exp: 2/12
4. 50% Optima Hydrochloric Acid: 1000 mL Optima Concentrated HCL --> 2 L DI H_2O
   Vendor: LD Lot: P563492 Exp: 7/11

Date	50% Trace Metal Nitric Acid	50% Trace Metal Hydrochloric Acid	50% Optima Nitric Acid	50% Optima Hydrochloric Acid	Comments	Analyst Initials	Supervisor Initials
6/24/11	✓	✓			None	RR	L
6/28/11	✓	✓			None	RR	L
6/30/11	✓	✓			None		

MS-LCSW LOG

CLP-MS-CRQL-3 VENDOR/ LOT / EXP. DATE: IV/C2-MEB296009/6/11
Al VENDOR/ LOT / EXP. DATE: CPI/10B031/11/18/11
Ca VENDOR/ LOT / EXP. DATE: CPI/10B041/11/18/11
Mg VENDOR/ LOT / EXP. DATE: CPI/10A1401/11/18/11
Na VENDOR/ LOT / EXP. DATE: CPI/10B067/11/18/11
K VENDOR/ LOT / EXP. DATE: CPI/09L174/11/10/11
Fe VENDOR/ LOT / EXP. DATE: CPI/10C186/11/18/11
Optima Nitric Acid VENDOR/ LOT / EXP. DATE: LD/120126001/11/11

IV: Inorganic Ventures

Fill a 1 L plastic flask approximately half full with MS Blank Solution.
Add 2 mL of CLP-MS-CRQL-3
Add 1 mL each of Ca, Mg, Na, and K
Add 40uL of Al
Add 400 µL of Fe.
Fill to volume with MS Blank Solution

DATE	MS-LCSW	ANALYST INITIALS	SUPERVISORY INITIALS
9/21/10	✓	RR	—
9/24/10	✓	[illegible]	↓
10/30/10	✓	[illegible]	—
12/15/10	✓	[illegible]	[illegible]
~~1/4/11~~ 1/6/11	✓	[illegible]	RR
1/25/11	✓	RR	—
3/3/11	✓	[illegible]	RR
3/31/11	✓	[illegible]	RR
5/9/11	✓	[illegible]	RR

Sentinel, Inc.

ISM01.2

MS BLANK SOLUTION LOG

Preparation: Make a 1% Nitric soultion using 18 megaohm water.

Note: Always start out fresh. (i.e. empty residual blank solution and rinse container with 18 megaohm water before preparing the fresh solution).

Note: Vendor is Lab Depot

DATE	AMOUNT (L)	HNO_3 LOT#	ANALYST INITIALS	SUPERVISORY INITIALS
9/21/10	3L	1206120	[illegible]	[illegible]
9/27/10	2L	1206120	[illegible]	[illegible]
9/29/10	3L	1206120	[illegible]	[illegible]
10/20/10	3.8L	1206120	[illegible]	[illegible]
10/22/10	1.0L	1206120	[illegible]	[illegible]
10/31/10	3.8L	1206120	[illegible]	[illegible]
11/2/10	3.8L	1206120	[illegible]	[illegible]
11/9/10	3.8L	1110070	[illegible]	[illegible]
11/17/10	3.8L	1110070	[illegible]	[illegible]
11/24/10	3.8L	1110070	[illegible]	[illegible]
11/30/10	3.8L	1110070	[illegible]	[illegible]
12/10/10	3.8L	1110070	[illegible]	RR
~~12/6~~ RR 7/13/11				
12/16/10	3.8L	1110070	[illegible]	RR
1/5/11	3.8L	1110070	[illegible]	RR
1/28/11	3.8L x2	1110070	[illegible]	RR
3/2/11	3.8L x2	1110070	[illegible]	RR
3/8/11	3.8L x2	1110070	[illegible]	RR
3/15/11	20L	1110070	[illegible]	RR
5/9/11	20L	1110070	[illegible]	RR

Sentinel, Inc.

ISM01.2

ICP MS STANDARDS LOG

Analysis Preparation

TUNE SOLN. VENDOR/LOT/EXP.DATE: Be: CPI/0C0002/11/11 Mg: CPI/0A140/11/11 Co: CPI/0B0431/11/11
VENDOR/LOT /EXP.DATE: In: CPI/09L0931/11/11 Pb: CPI/0C0441/11/11 Li: CPI/A2-0L0244/11/11 U: CPI/0BJ200/11/11
ICV VENDOR/LOT /EXP.DATE: EPA/0307/NA
ICSA VENDOR/LOT /EXP.DATE: EPA/0803/NA
ICSAB VENDOR/LOT #/EXP.DATE: EPA/0803/NA EPA/0803/NA
ISS VENDOR/LOT /EXP. DATE: IV/D2-MEB324 0211/11
IV: Inorganic Ventures EPA: Environmental Protection Agency

ICB, and CCB are the Blank Solution; the acid lot number used in making up this solution is included in the MS Blank Solution Log.

TUNE: 50 uL Be, Mg, Co, In, Pb, Li, U --> 500 mL MS Blank Solution

ICV: 10 mL ICV1 (0307) --> 500 mL MS Blank Solution

ICSA: 10mL ICS Part AMS --> 500mL MS Blank Solution

ICSAB: 10mL ICS Part AMS + 10mL ICS Part BMS --> 500mL MS Blank Solution

CCV: 250 mL of S2000 --> 500 mL MS Blank Solution

Internal Standard: 10mL 6020 ISS --> 500mL MS Blank Solution

DATE	TUNE CRITERIA MET	TUNE SOLN.	ICV	ICSA	ICSAB	CCV	Internal Standard Solution	COMMENTS	ANALYST INITIALS	SUPERVISORY INITIALS
6/28/11	✓		✓					None	[illegible]	RR
6/30/11	✓							None	[illegible]	RR

Sentinel, Inc.

ISM01.2 **Analysis Preparation**

ICP-MS S1 STANDARDS LOG

Primary Standards:

CLP-MS-CRQL-3 (Vendor / Lot # / Exp.Date): IV/CZ-MEB296DD911/10/11
CGAL1-1 (Vendor / Lot # / Exp.Date): CPI / 10A2571/11/11
CGCA1-1 (Vendor / Lot # / Exp.Date): CPI / 10B0411/11/11
CGMG1-1 (Vendor / Lot # / Exp.Date): CPI / 10A0401/11/11
CGNA1-1 (Vendor / Lot # / Exp.Date): CPI / 10B0607/11/11
CGK1-1 (Vendor / Lot # / Exp.Date): CPI / 09L174/11/11
CGFE1-1 (Vendor / Lot # / Exp.Date): CPI / 10C18601/11/11

ICP-MS Blank Solution - see ICP-MS Blank solution log for acid lot numbers and expiration dates.

Al(0.1): 1mL CGAL1-1 --> 100mL MS Blank Solution
S1: 100uL CLP-MS-CRQL-3 + 200uL Al(0.1) + 50uL CGCA1 + 50uL CGMG1 + 50uL CGNA1 + 50uL CGK1 + 20uL CGFE1 --> 100mL MS Blank Sol.

((Primary Standard Analyte Concentration, ug/mL * Spike Amount mL) / (100 mL)) * 1000mL/L) = S1 Analyte Concentration, ug/L

Primary Standard Analyte	Primary Std. Analyte Conc. (ug/mL)	Spike Amount (mL)	S1 Analyte Conc. (ug/L)
AL(0.1)			
Al	10	0.2	20
CGCA1-1			
Ca	1000	0.05	500
CGMG1-1			
Mg	1000	0.05	500
CGNA1-1			
NA	1000	0.05	500
CGK1-1			
K	1000	0.05	500
CGFE1-1			
Fe	1000	0.02	200
CLP-MS-CRQL-3			
Ba	10	0.1	10
Cu	2	0.1	2
Zn	2	0.1	2
Sb	2	0.1	2
Be	1	0.1	1
Cr	2	0.1	2
Mn	1	0.1	1
Se	5	0.1	5
Tl	1	0.1	1
As	1	0.1	1
Cd	1	0.1	1
Co	1	0.1	1
Pb	1	0.1	1
Ni	1	0.1	1
Ag	1	0.1	1
V	5	0.1	5

6/27/11 — Date Prepared
[illegible] 6/27/11 — Analyst, Date
[illegible] 6/27/11 — Supervisor, Date

ISM01.2

Analysis Preparation

ICP-MS S2000 - S100 STANDARDS LOG

Primary Standards:

IV-26 (Vendor / Lot # / Exp.Date): IV / C2-M0B297091 / 11/11

CGFe10-1 (Vendor / Lot # / Exp.Date): CPI / 10U8061 / 11/11

CGNa10-1 (Vendor / Lot # / Exp.Date): CPI / 10B0671 / 11/11

CGAl10-1 (Vendor / Lot # / Exp.Date): CPI / 10A2571 / 11/11

CGCa10-1 (Vendor / Lot # / Exp.Date): CPI / 10B0411 / 11/11

CGMg10-1 (Vendor / Lot # / Exp.Date): CPI / 10A0401 / 11/11

CGK10-1 (Vendor / Lot # / Exp.Date): CPI / 09U474 / 11/11

CBa1-1 (Vendor / Lot # / Exp.Date): CPI / 09B0004 / 11/11

ICP-MS Blank Solution: see ICP-MS Blank Solution Log for acid lot numbers and expiration dates.

S2000: 10mL IV-26 + 5.0mL CGFe10 + 5.0 mL CGNa10 + 5.0 mL CGAl10 + 5.0 mL CGCa10 + 5.0 mL CGMg10 + 4.0 mL CGK10 + 100 uL CGBa1 --> 500mL MS Blank Solution

S1000: 50mL S2000 --> 100mL MS Blank Solution

S500: 25mL S2000 --> 100mL MS Blank Solution

S100: 10mL S1000 --> 100mL MS Blank Solution

((Primary Standard Analyte Concentration, ug/mL * Spike Amount mL) / (500 mL)) * 1000mL) = S2000 Analyte Concentration, ug/L

Primary Standard Analyte	Primary Std. Analyte Conc. (ug/mL)	Spike Amount (mL)	S2000 Analyte Conc. (ug/L)	S1000 Analyte Conc. (ug/L) (1:2 Dil. of S2000)	S500 Analyte Conc. (ug/L) (1:4 Dil. of S2000)	S100 Analyte Conc. (ug/L) (1:10 Dil. of S1000)
CGFE10-1						
Fe	10000	5	100000	50000	25000	5000
CGNA10-1						
Na	10000	5	100000	50000	25000	5000
CGAL10-1						
Al	10000	5	100000	50000	25000	5000
CGCA10-1						
Ca	10000	5	100000	50000	25000	5000
CGMG10-1						
Mg	10000	5	100000	50000	25000	5000
CGK10-1						
K	10000	4	80000	40000	20000	8000
CGBA1-1						
Ba	1000	0.1	200	100	50	10
IV-26						
Al	100	10	2000	1000	500	100
Ba	100	10	2000	1000	500	100
Cd	100	10	2000	1000	500	100
Co	100	10	2000	1000	500	100
Pb	100	10	2000	1000	500	100
Se	100	10	2000	1000	500	100
Na	100	10	2000	1000	500	100
V	100	10	2000	1000	500	100
Sb	100	10	2000	1000	500	100
Be	100	10	2000	1000	500	100
Ca	100	10	2000	1000	500	100
Cu	100	10	2000	1000	500	100
Mg	100	10	2000	1000	500	100
Ni	100	10	2000	1000	500	100
Tl	100	10	2000	1000	500	100
Zn	100	10	2000	1000	500	100
As	100	10	2000	1000	500	100
Cr	100	10	2000	1000	500	100
Fe	100	10	2000	1000	500	100
Mn	100	10	2000	1000	500	100
K	1000	10	20000	10000	5000	1000
Ag	100	10	2000	1000	500	100

6/27/11 — Date Prepared

[illegible] 6/27/11 — Analyst, Date

[illegible] 6/27/11 — Supervisor, Date

Sentinel, Inc.

ISM01.2 Sample Analysis

ICP MS USE LOG

DATE	SDG NUMBER	RUN NUMBER	MATRIX	ICP #	START TIME	END TIME	COMMENTS	ANALYST INITIALS	SUPER-VISORY INITIALS
6/23/11	MB96T2	11062332	LW	MSϕ	0913	1548	RE/DIL	[illegible]	RR
6/23/11	MB9EP3	11062333	LS	MSϕ	0913	1548	PS	[illegible]	↓
6/23/11	MB96T5	11062334	LW	MSϕ	0913	1723	None	[illegible]	↓
6/23/11	MY7H07	11062335	LW	MSϕ	0913	1836	None	[illegible]	↓
6/23/11	MY7H09	11062336	LW	MSϕ	0913	1948	RE	[illegible]	↓
6/27/11	MF4N61	11062730	LW	MSϕ	1042	1352	None	[illegible]	RR
6/27/11	MF4N05	11062731	LW	MSϕ	1042	1537	None	[illegible]	↓
6/28/11	MF4N01	11062830	LW	MSϕ	1009	1228	None	[illegible]	RR
6/28/11	MF4N06	11062831	LW	MSϕ	1009	1416	None	[illegible]	↓
6/30/11	MF4N06	11063030	LW	MSϕ	0913	1045	DIL	[illegible]	RR
6/30/11	MF4N01	11063031	LW	MSϕ	0913	1045	DIL	[illegible]	↓
6/30/11	MF4N05	11063032	LW	MSϕ	0913	1045	PS	[illegible]	↓

Randi Richey

From: "Blackmon, Jacqueline" <jblackmon3@fedcsc.com>
To: "Beverly Kilgore " <bkilgore@sentinellab.com>; "Melvin Kilgore" <mkilgore@sentinellab.com>; "Randi Richey" <rrichey@sentinellab.com>
Cc: "Marvelyn Humphrey" <humphrey.marvelyn@epa.gov>; "Mahmoud Elfeky" <Elfeky.Mahmoud@epamail.epa.gov>; "Myra Perez" <perez.myra@epa.gov>; "Raymond Flores" <Flores.Raymond@epamail.epa.gov>
Sent: Wednesday, June 29, 2011 10:18 AM
Subject: Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems | FINAL

Randi,
Please note that any waivers required for this issue will need to be submitted to the laboratory's PO.

Summary Start
Issue: Almost every sample in this case have a very high concentration of Ca and Na with ranges of 100-400 ppm. These samples were run undiluted. Please advise if the samples will require dilutions to be made for these analytes or can the number be reported from the original run undiluted. Repeated analysis will impact the life of the detector in the ICP-MS.
Resolution: Per Region 6, the Region will not pursue the required Na and Ca diluted analyses. The laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.
Summary End

Please let me know if you have any questions or problems. To waive any defect(s) associated with this issue, please contact your PO.
Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

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From: Blackmon, Jacqueline
Sent: Wednesday, June 29, 2011 11:13 AM
To: 'Raymond Flores'
Cc: 'Mahmoud Elfeky'; 'Myra Perez'
Subject: FW: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Ray,
Please note the responses to your previous questions for this issue below. I will proceed to inform the lab that Region 6 will not pursue the required Na and Ca diluted analyses. The laboratory will have to submit any required waivers to their PO.

1.) That is correct, any dilutions and/or reanalyses (unless it is an actual reanalysis request that is scheduled and marked as billable) are not billable.

2.) The delay that the Ca and Na diluted results would add to the data delivery would be: "It would delay package submittal by at least 5 days. If dilutions are not required then packages are ready to be put together.

However, all data would be submitted within the 21 day TAT."

I will inform the lab of the Region's resolution.
Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

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From: Flores.Raymond@epamail.epa.gov [mailto:Flores.Raymond@epamail.epa.gov]
Sent: Wednesday, June 29, 2011 10:46 AM
To: Blackmon, Jacqueline
Cc: Elfeky.Mahmoud@epamail.epa.gov; Perez.Myra@epamail.epa.gov
Subject: Re: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Jackie,

Region 6 will not pursue the required Na & Ca diluted analyses and agrees to related wavier requests for such.

Raymond Flores
Inorganics Program Manager
OSRTI/ASB

703-981-1917 cell
US Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
mail code - 5203P
Washington DC 20460
email: flores.raymond@epa.gov

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From: Randi Richey [mailto:rrichey@sentinellab.com]
Sent: Wednesday, June 29, 2011 11:01 AM
To: Blackmon, Jacqueline
Cc: Beverly Kilgore; Melvin Kilgore
Subject: Re: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

It would delay package submittal by at least 5 days. If dilutions are not required then packages are ready to be put together. However, all data would be submitted within the 21 day TAT.

Randi D. Richey
Laboratory Supervisor/ Environmental Chemist
Sentinel Inc.
(256) 534-9800 ext. 32

----- Original Message -----
From: Blackmon, Jacqueline
To: Randi Richey
Sent: Wednesday, June 29, 2011 9:35 AM
Subject: FW: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Randi,

The Region would like to know if you could you provide an estimate of how long a delay the Ca and Na diluted results would add to the data delivery?

Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

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From: Flores.Raymond@epamail.epa.gov [mailto:Flores.Raymond@epamail.epa.gov]
Sent: Wednesday, June 29, 2011 9:55 AM
To: Blackmon, Jacqueline
Subject: Re: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Jackie,

Checking on the need for Ca and Na results. In the meantime, please confirm that if the diluted Ca & Na analyses were run, they would not be billable. Also, could you get an estimate of how long a delay the Ca & Na diluted results would add to the data delivery by the lab. Thanks.

Raymond Flores
Inorganics Program Manager
OSRTI/ASB

703-981-1917 cell
US Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
mail code - 5203P
Washington DC 20460
email: flores.raymond@epa.gov

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From: Blackmon, Jacqueline
Sent: Tuesday, June 28, 2011 1:22 PM
To: 'Raymond Flores'
Cc: 'Mahmoud Elfeky'; 'Myra Perez'
Subject: UPDATED Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Ray,

SENTIN has confirmed that these samples were run undiluted. Out of 2 of the SDGs that the laboratory has analyzed so far, 3 samples are below the CRQL for Cr. The other samples ran at a range of 7 - 170 ppb for Cr.

Please advise if the samples will require dilutions to be made for these analytes or can the number be reported from the original run undiluted.

Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

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From: Randi Richey [mailto:rrichey@sentinellab.com]
Sent: Tuesday, June 28, 2011 1:16 PM
To: Blackmon, Jacqueline
Subject: Re: Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Yes these samples were run undiluted. Out of 2 of the SDGs that we have analyzed so far 3 samples are below the CRQL for Cr. The other samples ran at a range of 7 - 170 ppb for Cr.

Randi D. Richey
Laboratory Supervisor/ Environmental Chemist
Sentinel Inc.
(256) 534-9800 ext. 32

----- Original Message -----
From: Blackmon, Jacqueline
To: Randi Richey
Sent: Tuesday, June 28, 2011 9:05 AM
Subject: Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Randi,

Can you please confirm that these analyses were run undiluted? Also, did the lab achieve the CRQLs for Chromium, e.g, was Chromium quantified as a positive or reported down to the CRQL or MDL as undetected?

Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

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From: Flores.Raymond@epamail.epa.gov [mailto:Flores.Raymond@epamail.epa.gov]
Sent: Tuesday, June 28, 2011 9:57 AM
To: Blackmon, Jacqueline
Cc: Elfeky.Mahmoud@epamail.epa.gov; Perez.Myra@epamail.epa.gov
Subject: Re: Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems

Jackie,

Assuming these analyses were run undiluted, did the lab achieve the CRQLs for Chromium, e.g, was Chromium quantified as a positive or reported down to the CRQL or MDL as undetected?

Raymond Flores
Inorganics Program Manager
OSRTI/ASB

703-981-1917 cell
US Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
mail code - 5203P
Washington DC 20460
email: flores.raymond@epa.gov

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-----"Blackmon, Jacqueline" <jblackmon3@fedcsc.com> wrote: -----

To: Raymond Flores/R6/USEPA/US@EPA
From: "Blackmon, Jacqueline" <jblackmon3@fedcsc.com>

Date: 06/28/2011 08:13AM
Cc: Mahmoud Elfeky/R6/USEPA/US@EPA, Myra Perez/R6/USEPA/US@EPA
Subject: Region 06 | Case 41486 | Lab SENTIN | Issue Laboratory problems
Ray,
SENTIN is reporting the following issue for Case 41486. Please advise.

Issue: Almost every sample in this case have a very high concentration of Ca and Na with ranges of 100-400 ppm. Please advise if the samples will require dilutions to be made for these analytes or can the number be reported from the original run undiluted. Repeated analysis will impact the life of the detector in the ICP-MS.

Please let me know if you have any questions or problems.
Thanks,
Jackie (Blackmon) Washington
Environmental Coordinator- Regions 6, 9 and ASB (QB/PE)
CSC

15000 Conference Center Drive, Chantilly VA 20151
Civil Division | office phone 703-818-4184 | fax 703-818-4601 | jblackmon3@fedcsc.com | www.csc.com

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From: Randi Richey [mailto:rrichey@sentinellab.com]
Sent: Monday, June 27, 2011 5:01 PM
To: Blackmon, Jacqueline
Subject: Re: Region 06 | Case 41486 | Lab SENTIN | Shipping information

Almost every sample in this case have a very high concentration of Ca and Na with ranges of 100-400 ppm. Can you please ask the region if they will require dilutions to be made for these analytes or can the number be reported from the original run undiluted. Repeated analysis will impact the life of the detector in the ICP-MS.

Thanks
Randi D. Richey
Laboratory Supervisor/ Environmental Chemist
Sentinel Inc.
(256) 534-9800 ext. 32

Initial Assesment Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09

DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Cover Page

Uploaded	EXES Method	EDD Method	EXES Case	EDD Case	EXES Contract	EDD Contract	EXES Sdg	EDD Sdg	File Name	Mod/Flex
30June2011:13:38:41	ICP_MS	ICP_MS	41486	41486	EPW09040	EPW09040	MF4N06	MF4N06	41486_MF4N06_EPW09040_1_SEDD_5-2_GENERAL_2B_3_ICP_MS.zip	DEFAULT

Initial Assesment Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09
DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Sample Summary and Lab Receipt Date

Sample Number	ICP_AES	ICP_MS	Hg	CN	Automated
LCS_LCSWMS(LCSW)		X			
MF4N06		06/25/2011			X
MF4N07		06/25/2011			X
MF4N08		06/25/2011			X
MF4N09		06/25/2011			X
MF4N10		06/25/2011			X
MF4N14		06/25/2011			X
MF4N15		06/25/2011			X
MF4N20		06/25/2011			X
MF4N21		06/25/2011			X
MF4N37		06/25/2011			X
MF4N38		06/25/2011			X
MF4N43		06/25/2011			X
MF4N43A		06/25/2011			
MF4N43D		06/25/2011			
MF4N43L		06/25/2011			
MF4N43S		06/25/2011			
MF4N44		06/25/2011			X
MF4N59		06/25/2011			X
MF4N60		06/25/2011			X
PBW_PBW(PBW)		X			
Totals	**0**	**21**	**0**	**0**	

Initial Assesment Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09
DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Grace Period Notification

Some defects have been modified/enhanced in the CCS automated screening system. CLP laboratories are allowed a two-week grace period to make necessary changes for future submissions. If any of these defects are applicable to this SDG, they will be listed in the CCS Notification section following the defect detail.

NONE FOUND

Initial Assesment Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09

DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

File Skeleton

METHOD = ICP MS

#	QC	Analysis	Type	Date	M	L	DF	File ID	Inst	Col	Run	AB	ABE	PREP	Clean	Store
1	Tune	121920110628100934		06282011T10:09:34			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
2	ICAL	121920110628123226		06282011T12:32:26			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
3	ICAL	121920110628123533		06282011T12:35:33			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
4	ICAL	121920110628123815		06282011T12:38:15			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
5	ICAL	121920110628124058		06282011T12:40:58			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
6	ICAL	121920110628124342		06282011T12:43:42			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
7	ICAL	121920110628124625		06282011T12:46:25			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
8	ICV	121920110628125934		06282011T12:59:34			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
9	ICB	121920110628130220		06282011T13:02:20			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
10	ICSA	121920110628130506		06282011T13:05:06			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
11	ICSAB	121920110628130752		06282011T13:07:52			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
12	CCV	121920110628131038		06282011T13:10:38			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628131324			
13	CCB	121920110628131324		06282011T13:13:24			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628131324			
14	MB	121920110628131610	I	06282011T13:16:10	W		1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
15	LCS	121920110628131853	I	06282011T13:18:53	W		1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
16	SD	121920110628132137	I	06282011T13:21:37	W	L	5.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
17	FS	121920110628132420	I	06282011T13:24:20	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
18	Dup	121920110628132703	I	06282011T13:27:03	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
19	MS	121920110628132945	I	06282011T13:29:45	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
20	PDS	121920110628133228	I	06282011T13:32:28	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
21	FS	121920110628133512	I	06282011T13:35:12	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
22	FS	121920110628133755	I	06282011T13:37:55	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
23	FS	121920110628134038	I	06282011T13:40:38	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
24	FS	1219201106	I	06282011T	W	L	1.0	MS0 11062831	MS0		121920110628	121920110628131	121920110628	121920110628131610		

Initial Assesment Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09

DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

File Skeleton

METHOD = ICP MS

#	QC	Analysis	Type	Date	M	L	DF	File ID	Inst	Col	Run	AB	ABE	PREP	Clean	Store
		28134323		13:43:23							00934	038	141601			
25	FS	121920110628134607	I	06282011T13:46:07	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	12192011062813161 0		
26	FS	121920110628134851	I	06282011T13:48:51	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	12192011062813161 0		
27	FS	121920110628135133	I	06282011T13:51:33	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	12192011062813161 0		
28	FS	121920110628135415	I	06282011T13:54:15	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	12192011062813161 0		
29	FS	121920110628135658	I	06282011T13:56:58	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	12192011062813161 0		
30	FS	121920110628135940	I	06282011T13:59:40	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	12192011062813161 0		
31	FS	121920110628140223	I	06282011T14:02:23	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	12192011062813161 0		
32	FS	121920110628140506	I	06282011T14:05:06	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	12192011062813161 0		
33	FS	121920110628140750	I	06282011T14:07:50	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	12192011062813161 0		
34	FS	121920110628141033	I	06282011T14:10:33	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	12192011062813161 0		
35	CCV	121920110628141317		06282011T14:13:17			1	MS0 11062831	MS0		121920110628100934	121920110628141317	121920110628141601			
36	CCB	121920110628141601		06282011T14:16:01			1	MS0 11062831	MS0		121920110628100934	121920110628141317	121920110628141601			
37	Tune	122820110630091315		06302011T09:13:15			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
38	ICAL	122820110630095557		06302011T09:55:57			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
39	ICAL	122820110630095904		06302011T09:59:04			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
40	ICAL	122820110630100146		06302011T10:01:46			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
41	ICAL	122820110630100429		06302011T10:04:29			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
42	ICAL	122820110630100713		06302011T10:07:13			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
43	ICAL	122820110630100957		06302011T10:09:57			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
44	ICV	122820110630101242		06302011T10:12:42			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
45	ICB	122820110630101527		06302011T10:15:27			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
46	ICSA	122820110630101813		06302011T10:18:13			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
47	ICSAB	122820110630102100		06302011T10:21:00			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			

Initial Assesment Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09

DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

File Skeleton

METHOD = ICP_MS

#	QC	Analysis	Type	Date	M	L	DF	File ID	Inst	Col	Run	AB	ABE	PREP	Clean	Store
48	CCV	122820110630102345		06302011T10:23:45			1	MS0 11063030	MS0		1228201106300 91315	122820110630102 345	122820110630102631			
49	CCB	122820110630102631		06302011T10:26:31			1	MS0 11063030	MS0		1228201106300 91315	122820110630102 345	122820110630102631			
50	MS	122820110630104004	DL-01	06302011T10:40:04	W	L	2.0	MS0 11063030	MS0		1228201106300 91315	122820110630102 345	122820110630104533	121920110628131610		
51	CCV	122820110630104247		06302011T10:42:47			1	MS0 11063030	MS0		1228201106300 91315	122820110630104 247	122820110630104533			
52	CCB	122820110630104533		06302011T10:45:33			1	MS0 11063030	MS0		1228201106300 91315	122820110630104 247	122820110630104533			

Initial Assesment Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09
DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Automated Defect Detail

METHOD = ICP MS

Defect Analysis	Column ID	Analyte	Peak	Peak Comparison	Reported/Recalculated Value	Expected Value
Test IAT-04-12 **Defect TR.1.3** **Associated Samples:** **Comments:**	**Required analyte data are missing for the sample.** **MF4N60, MF4N38, MF4N14, MF4N15, MF4N21, MF4N10, MF4N20, MF4N07, MF4N44, MF4N43, MF4N08, MF4N59, MF4N06, MF4N37, MF4N09**					
MF4N06					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N07					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N08					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N09					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N10					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N14					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N15					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N20					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N21					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N37					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N38					CAS Number =7440-70-2, CAS Number =7440-23-5	Analysis/Analyte for each requested analyte
MF4N43					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N44					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N59					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
MF4N60					CAS Number =7440-23-5, CAS Number =7440-70-2	Analysis/Analyte for each requested analyte
Test IAT-04-120 **Defect TR.1.4** **Associated Samples:** **Comments:**	**Required Reported Result data are missing for the sample.** **MF4N60, MF4N38, MF4N14, MF4N15, MF4N21, MF4N10, MF4N20, MF4N07, MF4N44, MF4N43, MF4N08, MF4N59, MF4N06, MF4N37, MF4N09**					
MF4N06					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N07					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N08					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N09					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N10					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N14					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N15					7440-23-5, 7440-70-2	ReportedResult for each analyte

Initial Assesment Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09
DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Automated Defect Detail

METHOD = ICP_MS

Defect Analysis	Column ID	Analyte	Peak	Peak Comparison	Reported/Recalculated Value	Expected Value
MF4N20					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N21					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N37					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N38					7440-70-2, 7440-23-5	ReportedResult for each analyte
MF4N43					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N44					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N59					7440-23-5, 7440-70-2	ReportedResult for each analyte
MF4N60					7440-23-5, 7440-70-2	ReportedResult for each analyte

Initial Assesment Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09

DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Grace Period Defect Detail

NONE FOUND

CCS Semi-Automated Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09

DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Cover Page

Uploaded	EXES Method	EDD Method	EXES Case	EDD Case	EXES Contract	EDD Contract	EXES Sdg	EDD Sdg	File Name	Mod/Flex
30June2011:13:38:41	ICP_MS	ICP_MS	41486	41486	EPW09040	EPW09040	MF4N06	MF4N06	41486_MF4N06_EPW09040_1_SEDD_5-2_GENERAL_2B_3_ICP_MS.zip	DEFAULT

CCS Semi-Automated Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09
DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Sample Summary and Lab Receipt Date

Sample Number	ICP_AES	ICP_MS	Hg	CN	Automated	Manual
LCS_LCSWMS(LCSW)		X				
MF4N06		06/25/2011			X	
MF4N07		06/25/2011			X	
MF4N08		06/25/2011			X	
MF4N09		06/25/2011			X	
MF4N10		06/25/2011			X	
MF4N14		06/25/2011			X	
MF4N15		06/25/2011			X	
MF4N20		06/25/2011			X	
MF4N21		06/25/2011			X	
MF4N37		06/25/2011			X	
MF4N38		06/25/2011			X	
MF4N43		06/25/2011			X	
MF4N43A		06/25/2011				
MF4N43D		06/25/2011				
MF4N43L		06/25/2011				
MF4N43S		06/25/2011				
MF4N44		06/25/2011			X	
MF4N59		06/25/2011			X	
MF4N60		06/25/2011			X	
PBW_PBW(PBW)		X				
Totals	**0**	**21**	**0**	**0**		

CCS Semi-Automated Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09
DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Defect Summary

Method	Defect	Defect Message	Samples with defect	Percent of Total Defect
ICP MS	A2.14.3	AnalyteType is incorrect.	15	50.0
	A7.14.3	AnalyteType is incorrect.	15	50.0
			30	100%

CCS Semi-Automated Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09

DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Grace Period Notification

Some defects have been modified/enhanced in the CCS automated screening system. CLP laboratories are allowed a two-week grace period to make necessary changes for future submissions. If any of these defects are applicable to this SDG, they will be listed in the CCS Notification section following the defect detail.

NONE FOUND

CCS Semi-Automated Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09

DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

File Skeleton

METHOD = ICP MS

#	QC	Analysis	Type	Date	M	L	DF	File ID	Inst	Col	Run	AB	ABE	PREP	Clean	Store
1	Tune	121920110628100934		06282011T10:09:34			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
2	ICAL	121920110628123226		06282011T12:32:26			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
3	ICAL	121920110628123533		06282011T12:35:33			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
4	ICAL	121920110628123815		06282011T12:38:15			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
5	ICAL	121920110628124058		06282011T12:40:58			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
6	ICAL	121920110628124342		06282011T12:43:42			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
7	ICAL	121920110628124625		06282011T12:46:25			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
8	ICV	121920110628125934		06282011T12:59:34			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
9	ICB	121920110628130220		06282011T13:02:20			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
10	ICSA	121920110628130506		06282011T13:05:06			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
11	ICSAB	121920110628130752		06282011T13:07:52			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601			
12	CCV	121920110628131038		06282011T13:10:38			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628131324			
13	CCB	121920110628131324		06282011T13:13:24			1	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628131324			
14	MB	121920110628131610	I	06282011T13:16:10	W		1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
15	LCS	121920110628131853	I	06282011T13:18:53	W		1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
16	SD	121920110628132137	I	06282011T13:21:37	W	L	5.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
17	FS	121920110628132420	I	06282011T13:24:20	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
18	Dup	121920110628132703	I	06282011T13:27:03	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
19	MS	121920110628132945	I	06282011T13:29:45	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
20	PDS	121920110628133228	I	06282011T13:32:28	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
21	FS	121920110628133512	I	06282011T13:35:12	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
22	FS	121920110628133755	I	06282011T13:37:55	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
23	FS	121920110628134038	I	06282011T13:40:38	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
24	FS	1219201106	I	06282011T	W	L	1.0	MS0 11062831	MS0		1219201106281	121920110628131	121920110628	121920110628131610		

CCS Semi-Automated Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09

DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

File Skeleton

METHOD = ICP MS

#	QC	Analysis	Type	Date	M	L	DF	File ID	Inst	Col	Run	AB	ABE	PREP	Clean	Store
		28134323		13:43:23							00934	038	141601			
25	FS	121920110628134607	I	06282011T13:46:07	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
26	FS	121920110628134851	I	06282011T13:48:51	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
27	FS	121920110628135133	I	06282011T13:51:33	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
28	FS	121920110628135415	I	06282011T13:54:15	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
29	FS	121920110628135658	I	06282011T13:56:58	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
30	FS	121920110628135940	I	06282011T13:59:40	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
31	FS	121920110628140223	I	06282011T14:02:23	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
32	FS	121920110628140506	I	06282011T14:05:06	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
33	FS	121920110628140750	I	06282011T14:07:50	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
34	FS	121920110628141033	I	06282011T14:10:33	W	L	1.0	MS0 11062831	MS0		121920110628100934	121920110628131038	121920110628141601	121920110628131610		
35	CCV	121920110628141317		06282011T14:13:17			1	MS0 11062831	MS0		121920110628100934	121920110628141317	121920110628141601			
36	CCB	121920110628141601		06282011T14:16:01			1	MS0 11062831	MS0		121920110628100934	121920110628141317	121920110628141601			
37	Tune	122820110630091315		06302011T09:13:15			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
38	ICAL	122820110630095557		06302011T09:55:57			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
39	ICAL	122820110630095904		06302011T09:59:04			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
40	ICAL	122820110630100146		06302011T10:01:46			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
41	ICAL	122820110630100429		06302011T10:04:29			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
42	ICAL	122820110630100713		06302011T10:07:13			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
43	ICAL	122820110630100957		06302011T10:09:57			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
44	ICV	122820110630101242		06302011T10:12:42			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
45	ICB	122820110630101527		06302011T10:15:27			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
46	ICSA	122820110630101813		06302011T10:18:13			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			
47	ICSAB	122820110630102100		06302011T10:21:00			1	MS0 11063030	MS0		122820110630091315	122820110630102345	122820110630104533			

CCS Semi-Automated Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09
DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

File Skeleton

METHOD = ICP_MS

#	QC	Analysis	Type	Date	M	L	DF	File ID	Inst	Col	Run	AB	ABE	PREP	Clean	Store
48	CCV	122820110630102345		06302011T10:23:45			1	MS0 11063030	MS0		1228201106300 91315	122820110630102345	122820110630102631			
49	CCB	122820110630102631		06302011T10:26:31			1	MS0 11063030	MS0		1228201106300 91315	122820110630102345	122820110630102631			
50	MS	122820110630104004	DL-01	06302011T10:40:04	W	L	2.0	MS0 11063030	MS0		1228201106300 91315	122820110630102345	122820110630104533	121920110628131610		
51	CCV	122820110630104247		06302011T10:42:47			1	MS0 11063030	MS0		1228201106300 91315	122820110630104247	122820110630104533			
52	CCB	122820110630104533		06302011T10:45:33			1	MS0 11063030	MS0		1228201106300 91315	122820110630104247	122820110630104533			

CCS Semi-Automated Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09
DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Automated Defect Detail

METHOD = ICP MS

Defect Analysis	Column ID	Analyte	Peak	Peak Comparison	Reported/Recalculated Value	Expected Value
Test SAM-08-1041 **Defect** A2.14.3 **Associated Samples:**	**AnalyteType is incorrect.** **MF4N60, MF4N38, MF4N14, MF4N15, MF4N21, MF4N10, MF4N20, MF4N07, MF4N44, MF4N08, MF4N43, MF4N59, MF4N06, MF4N09, MF4N37**					
Comments:						
121920110628131853		7439-95-4			CASRegistryNumber =7439-95-4, AnalyteType =Spike	
		7440-09-7			CASRegistryNumber =7440-09-7, AnalyteType =Spike	
Test SAM-10-5011 **Defect** A7.14.3 **Associated Samples:**	**AnalyteType is incorrect.** **MF4N60, MF4N38, MF4N14, MF4N15, MF4N21, MF4N10, MF4N20, MF4N07, MF4N44, MF4N08, MF4N43, MF4N59, MF4N06, MF4N09, MF4N37**					
Comments:						
121920110628131853		7439-95-4	24		Spike	[Instrument_Performance, Target]
		7440-09-7	39		Spike	[Target]

CCS Semi-Automated Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09

DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Manual Defect Detail

NONE FOUND

CCS Semi-Automated Screening Results

13:39 Thu, Jun 30, 2011

SDG MF4N06 **Lab** SENTIN **Case** 41486 **Contract** EPW09040 **Client** EPA Region 6 **SOW** ISM01.2 **Stage** 2b **Tracking ID** 125102 **Version** 7.09

DRD __/__/____ **LRD** 06/25/2011 **Mailed** __/__/____ **Submission Type** Self Inspection **Screening Type** Semi-Automated

Grace Period Defect Detail

NONE FOUND

https://www.campusship.ups.com/cship/create?ActionOriginPair=default___PrintWindow... 8/22/2011

MEGJOU
281-983-2100 2133
USEPA ENVIRONMENTAL SVCS DIV
10625 FALLSTONE RD
HOUSTON TX 77099

SHIP TO:
V. MALOTT, 6SF-RA
281-983-2100 2133
US EPA REGION 6
SUITE 1200
1445 ROSS AVENUE
DALLAS TX 75

T

UPS GROUND
TRACKING #: 1Z A42 00W

BILLING: P/P

Reference # 1: CSA_9173

VINCENT MALOTT
Location:
SUPERFUND
Sender:
EPA R6 HOUSTON LAB

08/24/11 07:03 1 of 1

082420070348

13 LBS 1 OF 1
DWT: 12,9,7

202-2750

X 752 9-33

/ 03 9732 1950

CS 13.6 WXPR70 18.0A 07/2011

SITE NAME: West CR 112 GWP

CASE NUMBER: 41486

This box contains the following SDGs:

MF4N61	SDMS DocID	667118
MF4N01		667119
MF4N06		667120
MF4N05		667121