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

March 7, 2012

MEMORANDUM

SUBJECT: Contract Laboratory Program Data Review

FROM: Raymond Flores, Alternate ESAT Regional Project Officer, Environmental Services Branch (6MD-H)

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

Site: **WEST COUNTY ROAD 112 GROUND WATER**

Case#: **42182**

SDG#: **MF5AW6**

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) 983-2139.

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ENVIRONMENTAL SERVICES ASSISTANCE TEAM

ESAT Region 6
10625 Fallstone Road
Houston, TX 77099

Alion Science and Technology

MEMORANDUM

DATE: March 5, 2012

TO: Marvelyn Humphrey, ESAT PO, Region 6 EPA

FROM: Sonya Meekins SM 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.:	A024-212-0125
TDF No.:	6-12-164A
ESAT File No.:	I-0470

Attached is the data review summary for Case # 42182
SDG # MF5AW6
Site West CR 112 Ground Water

COMMENTS:

I. LEVEL OF DATA REVIEW

Region 6 Standard review was performed for this data package.

II. CONTRACTUAL ASSESSMENT OF THE DATA PACKAGE

The CCS and hardcopy reviews found the data package contractually compliant.

III. TECHNICAL USABILITY ASSESSMENT OF THE DATA PACKAGE

Some results were qualified for technical problems. The significant problem is addressed below.

Laboratory blank readings caused one arsenic result to be qualified.

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INORGANIC REGIONAL DATA ASSESSMENT

CASE NO.	42182	SITE	West CR 112 Ground Water
LABORATORY	MITKEM	NO. OF SAMPLES	8
CONTRACT#	EP-W-09-039	MATRIX	Water
SDG#	MF5AW6	REVIEWER (IF NOT ESB)	ESAT
SOW#	ISM01.3	REVIEWER'S NAME	Sonya Meekins
SF#	303DD2A6R6	COMPLETION DATE	March 5, 2012

SAMPLE NO.					
	MF5AW6	MF5AX0			
	MF5AW7	MF5AX1			
	MF5AW8	MF5AX2			
	MF5AW9	MF5AX3			

DATA ASSESSMENT SUMMARY

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

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 one arsenic result. The potassium serial dilution difference was above the QC limit.

COMMENTS/CLARIFICATIONS
REGION 6 CLP QA REVIEW

CASE 42182 SDG MF5AW6 SITE West CR 112 Ground Water LAB MITKEM

COMMENTS: This SDG consisted of eight water samples for total metals (by ICP-AES) analysis following SOW ISM01.3. The sampler designated sample MF5AW8 for laboratory QC analyses and sample MF5AX3 as a rinsate sample.

The target analytes of concern were arsenic and chromium with an action level of 10 ug/l. Chromium was reported at concentrations over the action level for all field samples. The laboratory reported an arsenic concentration over the action level for sample MF5AW7, but this concentration was due to laboratory blank readings.

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

- Because of blank readings, the reviewer qualified the arsenic result above the CRQL for sample MF5AW7 as undetected ("U"), and the reported concentration should be used as a raised quantitation limit ("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: arsenic, beryllium, copper, manganese, and potassium.

- The reviewer qualified the potassium results as estimated because the potassium serial dilution difference exceeded the QC limit. The rinsate sample was not included in this evaluation because matrix effects are not expected in such a sample.

OVERALL ASSESSMENT: Some results were qualified for all samples because of problems with laboratory blank readings and a serial dilution difference. 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	VALDQAL	UNITS	ADJCRQL	SMPDATE	PRPDATE	LRDATE	LEVEL	PERSOLD	SMPW	FINVOL	METHOI	STATLOC
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440393	Barium	24.9	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440702	Calcium	167000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440473	Chromium	520		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7439954	Magnesium	32800		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440020	Nickel	0.44	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440097	Potassium	10200	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440235	Sodium	238000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440622	Vanadium	51.0		ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440666	Zinc	3.0	LJ	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440382	Arsenic	11.7	UC	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440393	Barium	24.0	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440702	Calcium	164000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440473	Chromium	510		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7439954	Magnesium	32300		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440020	Nickel	0.54	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440097	Potassium	10200	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440235	Sodium	235000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440622	Vanadium	50.1		ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440393	Barium	16.2	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440702	Calcium	185000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440473	Chromium	225		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7439954	Magnesium	45800		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440020	Nickel	2.3	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440097	Potassium	7280	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440235	Sodium	378000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440622	Vanadium	53.6		ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A

42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440393	Barium	15.2	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440702	Calcium	195000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440473	Chromium	992		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7439954	Magnesium	46200		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440020	Nickel	3.1	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440097	Potassium	7330	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440235	Sodium	359000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440622	Vanadium	81.3		ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440393	Barium	37.2	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440702	Calcium	217000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440473	Chromium	386		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7439954	Magnesium	36600		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440020	Nickel	1.3	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440097	Potassium	9290	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440235	Sodium	255000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440622	Vanadium	34.9	LJ	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440393	Barium	22.5	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440702	Calcium	222000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440473	Chromium	157		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7439954	Magnesium	35000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440020	Nickel	4.7	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440097	Potassium	8910	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440235	Sodium	266000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440622	Vanadium	38.4	LJ	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A

42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440393	Barium	25.2	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440702	Calcium	221000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440473	Chromium	29.9		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7439954	Magnesium	32500		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440020	Nickel	17.8	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440097	Potassium	7630	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440235	Sodium	280000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440622	Vanadium	34.1	LJ	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440393	Barium	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440702	Calcium	5000	U	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440473	Chromium	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7439954	Magnesium	5000	U	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440020	Nickel	40.0	U	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440097	Potassium	5000	U	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440235	Sodium	703	LJ	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440622	Vanadium	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. 42182 SDG No. MF5AW6 SDG Nos. To Follow Mod. Ref. No. Date Rec 02/23/12

EPA Lab ID: MITKEM

Lab location: Warwick, RI

Region: 6 Audit No.: 42182/MF5AW6

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 02/29/12

Audited ____ ____ Date ____

Signature Printed Name/Title

DC-2

USEPA CLP Inorganics COC (REGION COPY)

DateShipped: 2/1/2012

CarrierName: FedEx

AirbillNo: 7979 9744 6610

CHAIN OF CUSTODY RECORD

WCR 112 Ground Water Plume Site/TX

Case #: 42182

Cooler #: 1

No: 6-013112-182428-0005

Lab: MITKEM

Lab_Address2: 175 Metro Center Blvd., Warwick, RI 02886

Lab Phone: 401-732-3400

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	Sample Type
MF5AW6	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449119 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-27A	01/31/2012 14:54	F5AW6	Field Sample
MF5AW7	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449123 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-27A DUP	01/31/2012 14:54	F5AW7	Field Duplicate
MF5AW8	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21), TM ICP-AES(21)	6-449127 (Ice to 4 C, HNO3 pH < 2), 6-449128 (Ice to 4 C, HNO3 pH < 2) (2)	WMW-29A	01/31/2012 11:41	F5AW8	Field Sample
MF5AW9	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449132 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-31A	01/31/2012 16:00	F5AW9	Field Sample
MF5AX0	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449136 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-32A	01/31/2012 14:02	F5AX0	Field Sample
MF5AX1	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449140 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-33A	01/31/2012 10:29	F5AX1	Field Sample
MF5AX2	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449144 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-34A	01/31/2012 09:33	F5AX2	Field Sample
MF5AX3	Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449148 (Ice to 4 C, HNO3 pH < 2) (1)	ER # 1	01/31/2012 10:50	F5AX3	Rinsate

Sample(s) to be used for Lab QC: MF5AW8

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: TM ICP-AES=Total Metals ISM01.3/ICP-AES

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Jeff Logan	1/31/12		1/31/12	1800						
		2/1/12									

Page 11 of 11

Report Date:
21-Feb-12 13:15

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Computer Science Corporation
15000 Conference Center Drive
Chantilly, VA 20151-3808

Work Order: L0213
SDG No: MF5AW6
Case No: 42182

Attn: Nazy Abousaeedi

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L0213-01	MF5AW6	Aqueous	31-Jan-12 14:54	02-Feb-12 08:50
L0213-02	MF5AW7	Aqueous	31-Jan-12 14:54	02-Feb-12 08:50
L0213-03	MF5AW8	Aqueous	31-Jan-12 11:41	02-Feb-12 08:50
L0213-04	MF5AW9	Aqueous	31-Jan-12 16:00	02-Feb-12 08:50
L0213-05	MF5AX0	Aqueous	31-Jan-12 14:02	02-Feb-12 08:50
L0213-06	MF5AX1	Aqueous	31-Jan-12 10:29	02-Feb-12 08:50
L0213-07	MF5AX2	Aqueous	31-Jan-12 09:33	02-Feb-12 08:50
L0213-08	MF5AX3	Aqueous	31-Jan-12 10:50	02-Feb-12 08:50

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Mitkem Laboratories.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.mitkem.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

Authorized by:

Yihai Ding
Laboratory Director

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Spectrum Analytical, Inc., featuring Hanibal Technology Rhode Island Division

CITY/STATE Warwick, RI

CASE NO. 42182 SDG NO. MF5AW6

SDG NOs. TO FOLLOW — — —

MOD. REF. NO. —

CONTRACT NO. EP-W-09-039

SOW NO. ISM01.3

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	4 + JL 2/21/12	✓	✓
3.	Sample Log-In Sheet (DC-1)	4A	4A	✓	✓
4.	Traffic Report/Chain of Custody Record(s)	5	6	✓	✓
5.	Cover Page	7	7	✓	✓
Inorganic Analysis					
6.	Data Sheet (Form I-IN)	8	15	✓	✓
7.	Initial & Continuing Calibration Verification (Form IIA-IN)	16	17	✓	✓
8.	Blanks (Form III-IN)	18	19	✓	✓
9.	ICP-AES Interference Check Sample (Form IVA-IN)	20	20	✓	✓
10.	ICP-MS Interference Check Sample (Form IVB-IN)	N/A	N/A	N/A	
11.	Matrix Spike Sample Recovery (Form VA-IN)	21	21	✓	✓
12.	Post-Digestion Spike Sample Recovery (Form VB-IN)	N/A	N/A	N/A	
13.	Duplicates (Form VI-IN)	22	22	✓	✓
14.	Laboratory Control Sample (Form VII-IN)	23	23	✓	✓
15.	ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	24	24	✓	✓
16.	Method Detection Limit (Annually) (Form IX-IN)	25	25	✓	✓
17.	ICP-AES Interelement Correction Factors (Annually) (Form XA-IN)	26	26	✓	✓
18.	ICP-AES Interelement Correction Factors (Annually) (Form XB-IN)	27	28	✓	✓
19.	Internal Standard Association (Form XI-IN)	N/A	N/A	N/A	
20.	Preparation Log (Form XII-IN)	29	29	✓	✓
21.	Analysis Run Log (Form XIII-IN)	30	31	✓	✓
22.	ICP-MS Tune (Form XIV-IN)	N/A	N/A	N/A	

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)	N/A	N/A	N/A	
24.	Initial Calibration (Form XVI-IN)	32	34	✓	✓
25.	ICP-AES Raw Data	35	126	✓	✓
26.	ICP-MS Raw Data	N/A	N/A	N/A	
27.	Mercury Raw Data	↓	↓	N/A	
28.	Cyanide Raw Data	N/A	N/A	N/A	
29.	Preparation Logs Raw Data	127	128	✓	✓
30.	Percent Solids Determination Log	N/A	N/A	N/A	
31.	USEPA Shipping/Receiving Documents	129	129	✓	✓
	Airbill (No. of Shipments 1)	129	129	✓	✓
	Sample Tags	130	132	✓	✓
	Sample Log-In Sheet (Lab)	133	133	✓	✓
32.	Misc. Shipping/Receiving Records (list all individual records) Communication Logs	N/A	N/A		
		N/A	N/A		
33.	Internal Lab Sample Transfer Records & Tracking Sheets (describe or list) Primary and Working Standard Logbooks	134	134	✓	✓
		135	223	✓	✓
34.	Internal Original Sample Prep & Analysis Records (describe or list)	N/A	N/A	N/A	
	Prep Records	↓	↓	↓	
	Analysis Records	↓	↓	↓	
	PE Instructions	↓	↓	↓	
	Description	N/A	N/A	↓	
35.	Other Records (describe or list)	N/A	N/A	↓	
	Communication Logs	↓	↓	↓	
		N/A	N/A	N/A	

36. Comments:

Completed by: (CLP Lab) Jennifer Emerson (Signature) Jennifer Emerson/Data Reporting Specialist (Print Name & Title) 8/21/12 (Date)

Audited by: ~~(USEPA)~~ ESAT (Signature) Sonya Meekins/Data Review (Print Name & Title) 8/29/12 (Date)

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

SDG Narrative

Spectrum Analytical, Inc., featuring Hanibal Technology Rhode Island Division (Mitkem) submits the enclosed data package in response to USEPA Case # 42182 and SDG# MF5AW6. Analyses were performed eight aqueous samples that were received on February 2, 2012. The analyses were performed under USEPA Contract # EP-W-09-039. Please note that the sample shipping cooler received on February 2 was measured at 4.5°C.

The following samples are submitted in this data package:

Client ID	Lab ID	Analysis
MF5AW6	L0213-01A	P
MF5AW7	L0213-02A	P
MF5AW8	L0213-03A	P
MF5AW8S	L0213-03AMS	P
MF5AW8D	L0213-03ADUP	P
MF5AW9	L0213-04A	P
MF5AX0	L0213-05A	P
MF5AX1	L0213-06A	P
MF5AX2	L0213-07A	P
MF5AX3	L0213-08A	P

P = ICP-AES

The analyses were performed using USEPA CLP Multi-Media, Multi-Concentration (ISM01.3) protocols. The analyses were performed with strict adherence to the SOW with the following exceptions and observations:

1. ICP-AES:

The following equation was used to calculate the concentration of target analytes for aqueous samples:

$$\text{Concentration } (\mu\text{g/L}) = \text{C} \times \frac{\text{Vf}}{\text{V}} \times DF$$

where: C = instrument value in ug/L (average of all replicate exposures)
Vf = final digestion volume (mL)
V = initial aliquot amount (mL)
DF = dilution factor

A weighted linear curve was used for quantitation of all elements. The weighting factor is the reciprocal of the square of the true concentration value of the standard ($1/x^2$).

A full list of target analytes is reported for the samples in this SDG.

Spike recoveries were within the QC limits in the laboratory control samples.

Matrix spike was performed on sample MF5AW8. Spike recoveries were within the QC limits.

Duplicate analysis was performed on sample MF5AW8. Replicate RPDs were within the QC limits.

Serial dilution was performed on sample MF5AW8. Percent differences were within the QC limits with the exception of Potassium.

No unusual observation was made for the analysis.

All of the submittals to the region are originals other than logbook pages. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. Tunes, calibration verifications and initial calibrations that are shared among several cases are photocopies indicating the location of the originals.

I certify that this Sample Data Package is in compliance with the terms and condition 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 deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Agnes Huntley
CLP Project Manager
02/21/12

SAMPLE LOG-IN SHEET

Lab Name: Mitkem Laboratories	Page 01 of 01
Received By (Print Name) Veronica Brizard	Log-in Date 02/02/2012
Received By (Signature) Veronica Brizard	
Case Number 42182	Sample Delivery Group No. MF5AW6 / Mod. Ref. No. —

Remarks: (1) Please see associated sample/extract transfer logbook pages submitted with this data package.
CoolantCondition: ICE

1. Custody Seal(s) EPA	Present / Absent*
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records or Packing Lists	Present / Absent*
4. Airbill	AirBill / Sticker
	Present / Absent*
5. Airbill No.	FedEx 7979 9744 6610
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	4.5 °C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	Yes / No*
11. Date Received at Lab	02/02/2012
12. Time Received	08:50

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MF5AW6	<2	6-449119	L0213-01	Good
2	MF5AW7	<2	6-449123	L0213-02	
3	MF5AW8	<2	6-449127,6-449128	L0213-03	
4	MF5AW9	<2	6-449132	L0213-04	
5	MF5AX0	<2	6-449136	L0213-05	
6	MF5AX1	<2	6-449140	L0213-06	
7	MF5AX2	<2	6-449144	L0213-07	
8	MF5AX3	<2	6-449148	L0213-08	Good

Sample Transfer

Fraction (1) Metals	Fraction
Area # R1	Area #
By VEB	By
On 2/2/12	On

* Contact SMO and attach record of resolution

Reviewed By		Logbook No.
Date 2/2/12		Logbook Page No.

Contract Laboratory Program

Sample Delivery Group (SDG) Cover Sheet

SDG Number	MF5AW6	Case Number	42182	Contract Number	EP-W-09-039
Lab Code	MITKEM	SDG Turnaround	21 days	Deilvery CLIN(s)	—

First Sample Received in SDG	MF5AW6	Last Sample Received in SDG	MF5AX3
First Sample Receipt Date	02/02/2012	Last Sample Receipt Date	02/02/2012

USEPA Sample Numbers in SDG (Listed in Numerical Order)

CLP Sample ID		Sample Type	Requested Analytical CLIN(s)/SubCLINS(s)	Solicitation Number	MA Numbers(s)
1	MF5AW6	FIELD SAMPLE	0017C	N/A	N/A
2	MF5AW7	FIELD SAMPLE			
3	MF5AW8	FIELD SAMPLE			
4	MF5AW8D	DUPLICATE			
5	MF5AW8S	MATRIX SPIKE			
6	MF5AW9	FIELD SAMPLE			
7	MF5AX0	FIELD SAMPLE			
8	MF5AX1	FIELD SAMPLE			
9	MF5AX2	FIELD SAMPLE			
10	MF5AX3	FIELD SAMPLE	0017C	N/A	N/A

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 Agnes R Shirley Date 02/02/2012

SDG MF5AW6

USEPA CLP Inorganics COC (LAB COPY)

DateShipped: 2/1/2012

CarrierName: FedEx

AirbillNo: 7979 9744 6610

CHAIN OF CUSTODY RECORD

Case #: 42182

Cooler #: 1

No: 6-013112-182428-0005

Lab: MITKEM

Lab_Address2: 175 Metro Center Blvd., Warwick, RI 02886

Lab Phone: 401-732-3400

	Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	For Lab Use Only
L0213 - 01	MF5AW6	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449119 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-27A	01/31/2012 14:54	F5AW6	Good
- 02	MF5AW7	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449123 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-27A DUP	01/31/2012 14:54	F5AW7	
- 03	MF5AW8	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21), TM ICP-AES(21)	6-449127 (Ice to 4 C, HNO3 pH < 2), 6-449128 (Ice to 4 C, HNO3 pH < 2) (2)	WMW-29A	01/31/2012 11:41	F5AW8	
- 04	MF5AW9	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449132 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-31A	01/31/2012 16:00	F5AW9	
- 05	MF5AX0	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449136 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-32A	01/31/2012 14:02	F5AX0	
- 06	MF5AX1	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449140 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-33A	01/31/2012 10:29	F5AX1	
- 07	MF5AX2	Ground Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449144 (Ice to 4 C, HNO3 pH < 2) (1)	WMW-34A	01/31/2012 09:33	F5AX2	
- 08	MF5AX3	Water/ Jeff Logan	Grab	TM ICP-AES(21)	6-449148 (Ice to 4 C, HNO3 pH < 2) (1)	ER # 1	01/31/2012 10:50	F5AX3	Good
	SDG - Final Sample								

Sample(s) to be used for Lab QC: MF5AW8

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: TM ICP-AES=Total Metals ISM01.3/ICP-AES

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Jeff Logan	1/31/12	[illegible]	1/31/12	1800						
	[illegible]	2/1/12	Veronica Brizuela	2/2/12	8:50						

4.5°C
Iced

USEPA - CLP
COVER PAGE

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: SDG No.: MF5AW6

SOW No.: ISM01.3

EPA Sample No.	Lab Sample ID
MF5AW6	L0213-01
MF5AW7	L0213-02
MF5AW8	L0213-03
MF5AW8D	L0213-03DUP
MF5AW8S	L0213-03MS
MF5AW9	L0213-04
MF5AX0	L0213-05
MF5AX1	L0213-06
MF5AX2	L0213-07
MF5AX3	L0213-08

		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)	No	

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 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: Dawne Smart Name: Dawne E. Smart

Date: 2/17/12 Title: CLP Project Manager

USEPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5AW6

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod Ref. No.: SDG No.: MF5AW6

Matrix: WATER Lab Sample ID: L0213-01

% Solids: Date Received: 02/02/2012

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200	U		P
7440-36-0	Antimony	60.0	U		P
7440-38-2	Arsenic	7.8	J		P
7440-39-3	Barium	24.9	J		P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	167000			P
7440-47-3	Chromium	520			P
7440-48-4	Cobalt	50.0	U		P
7440-50-8	Copper	2.2	J		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	32800			P
7439-96-5	Manganese	15.0	U		P
7440-02-0	Nickel	0.44	J		P
7440-09-7	Potassium	10200		E	P
7782-49-2	Selenium	35.0	U		P
7440-22-4	Silver	10.0	U		P
7440-23-5	Sodium	238000			P
7440-28-0	Thallium	25.0	U		P
7440-62-2	Vanadium	51.0			P
7440-66-6	Zinc	3.0	J		P

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.

MF5AW7

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod Ref. No.: SDG No.: MF5AW6

Matrix: WATER Lab Sample ID: L0213-02

% Solids: Date Received: 02/02/2012

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200	U		P
7440-36-0	Antimony	60.0	U		P
7440-38-2	Arsenic	11.7			P
7440-39-3	Barium	24.0	J		P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	164000			P
7440-47-3	Chromium	510			P
7440-48-4	Cobalt	50.0	U		P
7440-50-8	Copper	1.9	J		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	32300			P
7439-96-5	Manganese	15.0	U		P
7440-02-0	Nickel	0.54	J		P
7440-09-7	Potassium	10200		E	P
7782-49-2	Selenium	35.0	U		P
7440-22-4	Silver	10.0	U		P
7440-23-5	Sodium	235000			P
7440-28-0	Thallium	25.0	U		P
7440-62-2	Vanadium	50.1			P
7440-66-6	Zinc	60.0	U		P

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.

MF5AW8

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod Ref. No.: SDG No.: MF5AW6

Matrix: WATER Lab Sample ID: L0213-03

% Solids: Date Received: 02/02/2012

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200	U		P
7440-36-0	Antimony	60.0	U		P
7440-38-2	Arsenic	6.3	J		P
7440-39-3	Barium	16.2	J		P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	185000			P
7440-47-3	Chromium	225			P
7440-48-4	Cobalt	50.0	U		P
7440-50-8	Copper	4.0	J		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	45800			P
7439-96-5	Manganese	0.53	J		P
7440-02-0	Nickel	2.3	J		P
7440-09-7	Potassium	7280		E	P
7782-49-2	Selenium	35.0	U		P
7440-22-4	Silver	10.0	U		P
7440-23-5	Sodium	378000			P
7440-28-0	Thallium	25.0	U		P
7440-62-2	Vanadium	53.6			P
7440-66-6	Zinc	60.0	U		P

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.

MF5AW9

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod Ref. No.: SDG No.: MF5AW6

Matrix: WATER Lab Sample ID: L0213-04

% Solids: Date Received: 02/02/2012

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200	U		P
7440-36-0	Antimony	60.0	U		P
7440-38-2	Arsenic	8.2	J		P
7440-39-3	Barium	15.2	J		P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	195000			P
7440-47-3	Chromium	992			P
7440-48-4	Cobalt	50.0	U		P
7440-50-8	Copper	2.2	J		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	46200			P
7439-96-5	Manganese	15.0	U		P
7440-02-0	Nickel	3.1	J		P
7440-09-7	Potassium	7330		E	P
7782-49-2	Selenium	35.0	U		P
7440-22-4	Silver	10.0	U		P
7440-23-5	Sodium	359000			P
7440-28-0	Thallium	25.0	U		P
7440-62-2	Vanadium	81.3			P
7440-66-6	Zinc	60.0	U		P

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.

MF5AX0

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod Ref. No.: SDG No.: MF5AW6

Matrix: WATER Lab Sample ID: L0213-05

% Solids: Date Received: 02/02/2012

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200	U		P
7440-36-0	Antimony	60.0	U		P
7440-38-2	Arsenic	7.2	J		P
7440-39-3	Barium	37.2	J		P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	217000			P
7440-47-3	Chromium	386			P
7440-48-4	Cobalt	50.0	U		P
7440-50-8	Copper	2.0	J		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	36600			P
7439-96-5	Manganese	2.5	J		P
7440-02-0	Nickel	1.3	J		P
7440-09-7	Potassium	9290		E	P
7782-49-2	Selenium	35.0	U		P
7440-22-4	Silver	10.0	U		P
7440-23-5	Sodium	255000			P
7440-28-0	Thallium	25.0	U		P
7440-62-2	Vanadium	34.9	J		P
7440-66-6	Zinc	60.0	U		P

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.

MF5AX1

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod Ref. No.: SDG No.: MF5AW6

Matrix: WATER Lab Sample ID: L0213-06

% Solids: Date Received: 02/02/2012

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200	U		P
7440-36-0	Antimony	60.0	U		P
7440-38-2	Arsenic	6.8	J		P
7440-39-3	Barium	22.5	J		P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	222000			P
7440-47-3	Chromium	157			P
7440-48-4	Cobalt	50.0	U		P
7440-50-8	Copper	2.2	J		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	35000			P
7439-96-5	Manganese	1.7	J		P
7440-02-0	Nickel	4.7	J		P
7440-09-7	Potassium	8910		E	P
7782-49-2	Selenium	35.0	U		P
7440-22-4	Silver	10.0	U		P
7440-23-5	Sodium	266000			P
7440-28-0	Thallium	25.0	U		P
7440-62-2	Vanadium	38.4	J		P
7440-66-6	Zinc	60.0	U		P

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.

MF5AX2

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod Ref. No.: SDG No.: MF5AW6

Matrix: WATER Lab Sample ID: L0213-07

% Solids: Date Received: 02/02/2012

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200	U		P
7440-36-0	Antimony	60.0	U		P
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	25.2	J		P
7440-41-7	Beryllium	5.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	221000			P
7440-47-3	Chromium	29.9			P
7440-48-4	Cobalt	50.0	U		P
7440-50-8	Copper	2.0	J		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	32500			P
7439-96-5	Manganese	15.0	U		P
7440-02-0	Nickel	17.8	J		P
7440-09-7	Potassium	7630		E	P
7782-49-2	Selenium	35.0	U		P
7440-22-4	Silver	10.0	U		P
7440-23-5	Sodium	280000			P
7440-28-0	Thallium	25.0	U		P
7440-62-2	Vanadium	34.1	J		P
7440-66-6	Zinc	60.0	U		P

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.

MF5AX3

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod Ref. No.: SDG No.: MF5AW6

Matrix: WATER Lab Sample ID: L0213-08

% Solids: Date Received: 02/02/2012

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	200	U		P
7440-36-0	Antimony	60.0	U		P
7440-38-2	Arsenic	10.0	U		P
7440-39-3	Barium	200	U		P
7440-41-7	Beryllium	0.14	J		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	5000	U		P
7440-47-3	Chromium	10.0	U		P
7440-48-4	Cobalt	50.0	U		P
7440-50-8	Copper	1.0	J		P
7439-89-6	Iron	100	U		P
7439-92-1	Lead	10.0	U		P
7439-95-4	Magnesium	5000	U		P
7439-96-5	Manganese	15.0	U		P
7440-02-0	Nickel	40.0	U		P
7440-09-7	Potassium	529	J	E	P
7782-49-2	Selenium	35.0	U		P
7440-22-4	Silver	10.0	U		P
7440-23-5	Sodium	703	J		P
7440-28-0	Thallium	25.0	U		P
7440-62-2	Vanadium	50.0	U		P
7440-66-6	Zinc	60.0	U		P

Color Before Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts:

Comments:

USEPA - CLP

2A-IN

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: SDG No.: MF5AW6

Initial Calibration Verification Source: ICV1-0307

Continuing Calibration Verification Source: AccuStd/HighPurity Mix

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	2520	2640	105	40000	41600	104	41100	103	P
Antimony	994	921	93	1000	983	98	955	96	P
Arsenic	999	958	96	1000	1030	103	1010	101	P
Barium	497	494	99	10000	10100	101	9890	99	P
Beryllium	495	480	97	500	510	102	503	101	P
Cadmium	496	499	101	500	510	102	497	99	P
Calcium	10000	9730	97	150000	152000	101	148000	99	P
Chromium	490	499	102	2000	2060	103	2030	102	P
Cobalt	499	504	101	2500	2550	102	2470	99	P
Copper	492	468	95	4000	4140	104	4070	102	P
Iron	5080	5230	103	20000	20900	105	20300	102	P
Lead	1000	1020	102	2000	2040	102	2020	101	P
Magnesium	6070	5890	97	150000	151000	101	149000	99	P
Manganese	499	512	103	4000	4140	104	4100	103	P
Nickel	503	507	101	2500	2540	102	2470	99	P
Potassium	10000	9720	97	200000	205000	103	200000	100	P
Selenium	1030	975	95	1000	1020	102	998	100	P
Silver	501	473	94	300	313	104	309	103	P
Sodium	10100	9980	99	200000	206000	103	199000	100	P
Thallium	1030	1050	102	1000	976	98	961	96	P
Vanadium	501	483	96	2500	2570	103	2510	100	P
Zinc	1030	1020	99	5000	5140	103	4980	100	P

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

OPTIMA3_120209A

USEPA - CLP

2A-IN

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: SDG No.: MF5AW6

Initial Calibration Verification Source: ICV1-0307

Continuing Calibration Verification Source: AccuStd/HighPurity Mix

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				40000	41100	103	40100	100	P
Antimony				1000	965	97	920	92	P
Arsenic				1000	1010	101	969	97	P
Barium				10000	9870	99	9600	96	P
Beryllium				500	501	100	485	97	P
Cadmium				500	501	100	484	97	P
Calcium				150000	149000	99	146000	97	P
Chromium				2000	2030	102	1990	100	P
Cobalt				2500	2500	100	2420	97	P
Copper				4000	4060	102	3960	99	P
Iron				20000	20500	103	19900	100	P
Lead				2000	2030	102	1950	98	P
Magnesium				150000	148000	99	143000	95	P
Manganese				4000	4100	103	3990	100	P
Nickel				2500	2490	100	2410	96	P
Potassium				200000	199000	100	189000	95	P
Selenium				1000	1000	100	964	96	P
Silver				300	310	103	302	101	P
Sodium				200000	198000	99	188000	94	P
Thallium				1000	967	97	926	93	P
Vanadium				2500	2510	100	2450	98	P
Zinc				5000	5040	101	4850	97	P

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

OPTIMA3_120209A

USEPA - CLP
3-IN
BLANKS

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: SDG No.: MF5AW6

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	200	U	200	U	200	U	200	U	200	U	P
Antimony	21.6	J	14.8	J	14.6	J	13.6	J	60.0	U	P
Arsenic	6.1	J	10.0	U	10.0	U	10.0	U	10.0	U	P
Barium	-13	J	-11	J	-11	J	-11	J	-13	J	P
Beryllium	5.0	U	0.19	J	0.26	J	0.21	J	0.13	J	P
Cadmium	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	P
Calcium	-83	J	5000	U	5000	U	-82	J	-140	J	P
Chromium	10.0	U	0.43	J	10.0	U	0.96	J	10.0	U	P
Cobalt	-1.9	J	-1.5	J	-1.3	J	-1.3	J	-2.0	J	P
Copper	0.84	J	2.1	J	2.5	J	2.2	J	0.68	J	P
Iron	100	U	23.5	J	22.4	J	100	U	100	U	P
Lead	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	P
Magnesium	-190	J	-140	J	-140	J	-150	J	-190	J	P
Manganese	-0.51	J	15.0	U	15.0	U	0.47	J	-1.1	J	P
Nickel	-1.6	J	-0.86	J	-1.0	J	-1.2	J	-1.7	J	P
Potassium	211	J	312	J	378	J	348	J	186	J	P
Selenium	35.0	U	35.0	U	35.0	U	35.0	U	35.0	U	P
Silver	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	P
Sodium	5000	U	5000	U	5000	U	5000	U	5000	U	P
Thallium	25.0	U	25.0	U	25.0	U	25.0	U	25.0	U	P
Vanadium	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	P
Zinc	-1.9	J	60.0	U	60.0	U	60.0	U	-2.0	J	P

OPTIMA3_120209A

USEPA - CLP
3-IN
BLANKS

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: SDG No.: MF5AW6

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			200	U							P
Antimony			17.7	J							P
Arsenic			10.0	U							P
Barium			-12	J							P
Beryllium			0.13	J							P
Cadmium			5.0	U							P
Calcium			5000	U							P
Chromium			10.0	U							P
Cobalt			-1.8	J							P
Copper			2.2	J							P
Iron			100	U							P
Lead			10.0	U							P
Magnesium			-170	J							P
Manganese			-0.51	J							P
Nickel			-1.2	J							P
Potassium			325	J							P
Selenium			35.0	U							P
Silver			10.0	U							P
Sodium			5000	U							P
Thallium			25.0	U							P
Vanadium			50.0	U							P
Zinc			-1.6	J							P

OPTIMA3_120209A

USEPA - CLP

4A-IN

ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No. SDG No.: MF5AW6

ICP-AES Instrument ID: OPTIMA3 ICSA Source: ICSA-1206

Concentration Units: ug/L ICSAB Source: ICSA1206+ICSB0203

Analyte	True Sol. A	True Sol. AB	Found Sol. A	%R	Found Sol. AB	%R
Aluminum	244000	241100	245000	100	245000	102
Antimony	0	589	17.4		556	94
Arsenic	0	101	2.5		91.4	91
Barium	2.0	495	-11	-571	484	98
Beryllium	0	475	0.45		489	103
Cadmium	0	940	-2.9		968	103
Calcium	235000	231100	251000	107	252000	109
Chromium	43.0	511	42.4	99	538	105
Cobalt	4.0	461	0.68	17	468	101
Copper	23.0	548	22.8	99	524	96
Iron	95600	94800	98500	103	98900	104
Lead	10.0	61	9.8	98	57.2	94
Magnesium	248000	251100	247000	100	247000	99
Manganese	19.0	502	15.6	82	519	103
Nickel	21.0	984	19.3	92	988	100
Potassium	0	0	247		227	
Selenium	0	53	-6.1		34.5	65
Silver	0	206	-1.8		204	99
Sodium	0	0	803		792	
Thallium	0	103	-4.8		94.5	92
Vanadium	0	494	-0.94		488	99
Zinc	28.0	1028	28.5	102	989	96

OPTIMA3_120209A

USEPA - CLP

5A-IN

MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MF5AW8S

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: SDG No.: MF5AW6

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	75 - 125	1940		200	U	2000	97		P
Antimony	75 - 125	108		60.0	U	100	108		P
Arsenic	75 - 125	52.0		6.3	J	40.0	114		P
Barium	75 - 125	1970		16.2	J	2000	98		P
Beryllium	75 - 125	50.1		5.0	U	50.0	100		P
Cadmium	75 - 125	52.0		5.0	U	50.0	104		P
Chromium	75 - 125	436		225		200	106		P
Cobalt	75 - 125	486		50.0	U	500	97		P
Copper	75 - 125	258		4.0	J	250	102		P
Iron	75 - 125	979		100	U	1000	98		P
Lead	75 - 125	17.1		10.0	U	20.0	86		P
Manganese	75 - 125	509		0.53	J	500	102		P
Nickel	75 - 125	495		2.3	J	500	98		P
Selenium	75 - 125	40.4		35.0	U	50.0	81		P
Silver	75 - 125	49.9		10.0	U	50.0	100		P
Thallium	75 - 125	48.6		25.0	U	50.0	97		P
Vanadium	75 - 125	553		53.6		500	100		P
Zinc	75 - 125	503		60.0	U	500	101		P

Comments:

USEPA - CLP
6-IN
DUPLICATES

EPA SAMPLE NO.
MF5AW8D

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: SDG No.: MF5AW6

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		200	U	200	U			P
Antimony		60.0	U	60.0	U			P
Arsenic	10.0	6.3	J	10.0	U	200		P
Barium		16.2	J	17.1	J	6		P
Beryllium		5.0	U	5.0	U			P
Cadmium		5.0	U	5.0	U			P
Calcium		185000		194000		4		P
Chromium		225		235		4		P
Cobalt		50.0	U	50.0	U			P
Copper		4.0	J	4.4	J	9		P
Iron		100	U	100	U			P
Lead		10.0	U	10.0	U			P
Magnesium		45800		47700		4		P
Manganese		0.53	J	0.68	J	25		P
Nickel		2.3	J	2.5	J	9		P
Potassium	5000	7280		7490		3		P
Selenium		35.0	U	35.0	U			P
Silver		10.0	U	10.0	U			P
Sodium		378000		386000		2		P
Thallium		25.0	U	25.0	U			P
Vanadium	50.0	53.6		57.0		6		P
Zinc		60.0	U	60.0	U			P

USEPA - CLP

7-IN

LABORATORY CONTROL SAMPLE

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No. SDG No.: MF5AW6

Analyte	Aqueous/Water (ug/L), Soil/Sediment (mg/kg), Wipe/Filter (ug) True	Found	%R
Aluminum	400	365	91
Antimony	120	107	89
Arsenic	20.0	18.2	91
Barium	400	379	95
Beryllium	10.0	9.9	99
Cadmium	10.0	9.6	96
Calcium	10000	9710	97
Chromium	20.0	19.5	98
Cobalt	100	97.3	97
Copper	50.0	47.5	95
Iron	200	189	94
Lead	20.0	18.8	94
Magnesium	10000	9540	95
Manganese	30.0	29.0	97
Nickel	80.0	77.5	97
Potassium	10000	9650	97
Selenium	70.0	55.8	80
Silver	20.0	19.8	99
Sodium	10000	9810	98
Thallium	50.0	48.6	97
Vanadium	100	94.8	95
Zinc	120	115	96

USEPA - CLP

8-IN

ICP_AES AND ICP-MS SERIAL DILUTIONS

EPA SAMPLE NO.

MF5AW8L

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: SDG No.: MF5AW6

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	200	U	1000	U			P
Antimony	60.0	U	300	U			P
Arsenic	6.3	J	50.0	U			P
Barium	16.2	J	1000	U			P
Beryllium	5.0	U	0.81	J			P
Cadmium	5.0	U	25.0	U			P
Calcium	185000		193000		4		P
Chromium	225		236		5		P
Cobalt	50.0	U	250	U			P
Copper	4.0	J	9.6	J	138		P
Iron	100	U	500	U			P
Lead	10.0	U	50.0	U			P
Magnesium	45800		47400		4		P
Manganese	0.53	J	75.0	U			P
Nickel	2.3	J	200	U			P
Potassium	7280		9130	J	26	E	P
Selenium	35.0	U	175	U			P
Silver	10.0	U	50.0	U			P
Sodium	378000		385000		2		P
Thallium	25.0	U	125	U			P
Vanadium	53.6		56.4	J	5		P
Zinc	60.0	U	300	U			P

USEPA - CLP

9-IN

METHOD DETECTION LIMIT (MDL) (ANNUALLY)

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: SDG No.: MF5AW6

Instrument Type: P InstrumentID: OPTIMA3 Date: 09/02/2011

Preparation Method: 200.7

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

Analyte	Wavelength /Mass	MDL
Aluminum	308.22	43.6
Antimony	206.84	4.9
Arsenic	188.98	4.4
Barium	233.53	2.2
Beryllium	313.11	0.11
Cadmium	226.50	0.29
Calcium	227.55	74.8
Chromium	267.72	0.39
Cobalt	228.62	0.53
Copper	324.75	0.66
Iron	273.96	21.1
Lead	220.35	4.2
Magnesium	279.08	44.1
Manganese	257.61	0.41
Nickel	231.60	0.31
Potassium	766.49	104
Selenium	196.03	8.4
Silver	328.07	0.75
Sodium	589.59	176
Thallium	190.80	6.7
Vanadium	292.40	0.48
Zinc	206.20	1.1

Comments:

USEPA - CLP

10A-IN

ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: SDG No.: MF5AW6

ICP-AES Instrument ID: OPTIMA3 Date: 09/16/2011

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Co	Fe	Mg
Aluminum	308.21		0.14150800	0.00000000	0.00000000	0.00000000
Antimony	206.83	0.04396810	0.00000000	0.00000000	0.02626730	0.01607680
Arsenic	188.97	-0.00918783	-0.01723830	0.00000000	-0.06065520	0.00000000
Barium	233.52	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Beryllium	313.10	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Cadmium	226.50	0.00000000	0.00323823	-0.08564160	0.15150200	0.00000000
Calcium	227.54	-0.39515300		178.58100000	0.64607400	0.47129000
Chromium	267.71	0.00000000	0.00000000	0.00000000	0.00000000	0.00606189
Cobalt	228.61	-0.00441833	0.00000000		0.05110600	0.00000000
Copper	324.75	0.00000000	0.00000000	0.00000000	-0.04838630	0.00000000
Iron	273.95	0.00000000	0.00000000	0.00000000		0.07343700
Lead	220.35	-0.08083650	-0.00706646	-0.28546200	0.02505840	0.00000000
Magnesium	279.07	0.00000000	0.00000000	0.00000000	-0.39413400	
Manganese	257.61	0.00000000	0.00000000	0.00000000	0.00000000	0.02962560
Nickel	231.60	0.00000000	0.00000000	-0.11688700	0.00000000	0.00000000
Potassium	766.49	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Selenium	196.02	-0.02532160	0.00000000	-0.35080800	-0.28721800	0.01060880
Silver	328.06	0.00724467	0.00406133	-0.10210700	0.00000000	0.00000000
Sodium	589.59	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Thallium	190.80	-0.01544970	0.00000000	4.37772000	-0.07654710	-0.02914240
Vanadium	292.40	0.00000000	0.00000000	0.00000000	-0.06422960	0.00000000
Zinc	206.20	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000

Comments:

USEPA - CLP

10B-IN

ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: SDG No.: MF5AW6

ICP-AES Instrument ID: OPTIMA3 Date: 09/16/2011

Analyte	Wave-length (nm)	Interelement Correction Factors for: Cr	Cu	Mn	Ni	Tl
Aluminum	308.21	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Antimony	206.83	19.26550000	0.12902500	0.00000000	0.00000000	0.11105200
Arsenic	188.97	-6.25311000	0.00000000	0.14303500	0.00000000	0.00000000
Barium	233.52	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Beryllium	313.10	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Cadmium	226.50	0.00000000	0.00000000	0.00000000	-0.17791000	0.00000000
Calcium	227.54	2.43664000	8.19605000	5.41032000	30.22330000	0.00000000
Chromium	267.71		0.00000000	0.22432200	0.00000000	0.00000000
Cobalt	228.61	0.30741700	0.00000000	0.00000000	0.08444110	0.00000000
Copper	324.75	0.00000000		0.00000000	0.00000000	0.00000000
Iron	273.95	-3.86005000	0.00000000	0.00000000	0.00000000	0.00000000
Lead	220.35	0.00000000	0.44670300	0.00000000	-0.18721800	0.00000000
Magnesium	279.07	2.45568000	0.00000000	-4.29653000	0.00000000	0.00000000
Manganese	257.61	0.00000000	0.00000000		0.05226270	0.00000000
Nickel	231.60	0.00000000	0.00000000	0.00000000		0.22454100
Potassium	766.49	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Selenium	196.02	0.11765100	0.25934800	0.96827400	0.08756720	0.21015000
Silver	328.06	0.00000000	0.00000000	0.00000000	0.00000000	-0.10773800
Sodium	589.59	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Thallium	190.80	0.30001700	0.00000000	0.00000000	-0.05269760	
Vanadium	292.40	-1.38569000	0.21984000	0.00000000	0.00000000	0.00000000
Zinc	206.20	-3.49467000	0.00000000	0.00000000	0.00000000	0.00000000

Comments:

USEPA - CLP

10B-IN

ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No.: _____ SDG No.: MF5AW6

ICP-AES Instrument ID: OPTIMA3 Date: 09/16/2011

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ti	V	___	___	___
Aluminum	308.21	0.00000000	15.36820000			
Antimony	206.83	-0.61103000	-1.34601000			
Arsenic	188.97	-0.44701100	0.00000000			
Barium	233.52	0.00000000	-0.55765300			
Beryllium	313.10	-2.52676000	-0.04705640			
Cadmium	226.50	0.12690600	0.00000000			
Calcium	227.54	6.76594000	35.32770000			
Chromium	267.71	0.00000000	-0.28973300			
Cobalt	228.61	3.87494000	0.00000000			
Copper	324.75	0.00000000	-0.16755100			
Iron	273.95	0.00000000	5.58475000			
Lead	220.35	-0.47459700	-0.09058960			
Magnesium	279.07	0.00000000	0.00000000			
Manganese	257.61	0.00000000	0.00000000			
Nickel	231.60	0.57209800	0.00000000			
Potassium	766.49	0.00000000	0.00000000			
Selenium	196.02	0.00000000	-0.20127500			
Silver	328.06	0.00000000	-1.12738000			
Sodium	589.59	0.00000000	0.00000000			
Thallium	190.80	0.00000000	3.12681000			
Vanadium	292.40	0.71043400				
Zinc	206.20	0.00000000	0.00000000			

Comments:

USEPA - CLP
12-IN
PREPARATION LOG

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref No.: SDG No.: MF5AW6

Preparation Method: 200.7

EPA Sample No.	Preparation Date	Initial Weight/Volume (g) or (mL)	Final Volume (mL)
LCS26	02/08/2012	50.0	50.0
MF5AW6	02/08/2012	50.0	50.0
MF5AW7	02/08/2012	50.0	50.0
MF5AW8	02/08/2012	50.0	50.0
MF5AW8D	02/08/2012	50.0	50.0
MF5AW8S	02/08/2012	50.0	50.0
MF5AW9	02/08/2012	50.0	50.0
MF5AX0	02/08/2012	50.0	50.0
MF5AX1	02/08/2012	50.0	50.0
MF5AX2	02/08/2012	50.0	50.0
MF5AX3	02/08/2012	50.0	50.0
PBW26	02/08/2012	50.0	50.0

Comments:

USEPA - CLP
13-IN
ANALYSIS RUN LOG

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No. SDG No.: MF5AW6

Instrument ID: OPTIMA3 Analysis Method: P

Start Date: 02/09/2012 End Date: 02/09/2012

EPA Sample No.	D/F	Time	Analytes																							
			AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.0	0741	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S	1.0	0744	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S	1.0	0748	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S	1.0	0752	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S	1.0	0755	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S	1.0	0759	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X	
S	1.0	0803	X										X	X		X			X			X				
ICV	1.0	0805	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICB	1.0	0809	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSA	1.0	0813	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.0	0816	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV95	1.0	0820	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB95	1.0	0824	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
PBW26	1.0	0827	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCS26	1.0	0831	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.0	0835																								
ZZZZZZ	1.0	0838																								
ZZZZZZ	1.0	0842																								
ZZZZZZ	1.0	0845																								
ZZZZZZ	1.0	0849																								
ZZZZZZ	1.0	0853																								
ZZZZZZ	5.0	0856																								
CCV96	1.0	0900	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB96	1.0	0904	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.0	0907																								
ZZZZZZ	1.0	0911																								
ZZZZZZ	1.0	0915																								
ZZZZZZ	1.0	0918																								
ZZZZZZ	1.0	0922																								
ZZZZZZ	5.0	0926																								
ZZZZZZ	1.0	0930																								
ZZZZZZ	1.0	0933																								

USEPA - CLP
13-IN
ANALYSIS RUN LOG

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No. SDG No.: MF5AW6

Instrument ID: OPTIMA3 Analysis Method: P

Start Date: 02/09/2012 End Date: 02/09/2012

EPA Sample No.	D/F	Time	Analytes																							
			AL	SB	AS	BA	BE	CD	CA	CO	CR	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.0	0937																								
CCV97	1.0	0941	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB97	1.0	0945	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.0	0948																								
MF5AW6	1.0	0952	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MF5AW7	1.0	0956	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MF5AW8	1.0	0959	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MF5AW8D	1.0	1003	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MF5AW8S	1.0	1007	X	X	X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X	
MF5AW8L	5.0	1011	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.0	1014																								
MF5AW9	1.0	1018	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MF5AX0	1.0	1022	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MF5AX1	1.0	1025	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MF5AX2	1.0	1029	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MF5AX3	1.0	1033	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV98	1.0	1037	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB98	1.0	1040	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

USEPA - CLP
16-IN
INITIAL CALIBRATION

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No. SDG No.: MF5AW6

Instrument ID: OPTIMA3 Start Date: 02/09/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	0	298		200	198	-1	1000	1040	4
Antimony	0	23.3		60.0	60.4	1	300	290	-3
Arsenic	0	-4.5		10.0	9.9	-1	50.0	52.1	4
Barium	0	-15		200	199	0	1000	1020	2
Beryllium	0	-2.8		5.0	5.0	-1	25.0	25.9	3
Cadmium	0	-0.97		5.0	5.0	-1	25.0	25.6	3
Calcium	0	227		5000	4990	0	25000	25200	1
Chromium	0	0.80		10.0	9.9	-1	50.0	53.1	6
Cobalt	0	-2.9		50.0	49.8	0	250	256	2
Copper	0	6.7		25.0	25.0	0	125	125	0
Iron	0	-37		100	99.5	-1	500	514	3
Lead	0	2.5		10.0	10	0	50.0	51.2	2
Magnesium	0	-250		5000	4980	0	25000	25600	2
Manganese	0	-1.7		15.0	14.9	-1	75.0	78.4	5
Nickel	0	-2.4		40.0	39.7	-1	200	206	3
Potassium	0	630		5000	5040	1	25000	24100	-4
Selenium	0	-18		35.0	35.0	0	175	175	0
Silver	0	-4.7		10.0	10	0	50.0	50.7	1
Sodium	0	-130		5000	5010	0	25000	24900	0
Thallium	0	-22		25.0	24.7	-1	125	133	7
Vanadium	0	-0.52		50.0	49.8	0	250	255	2
Zinc	0	-1.8		60.0	59.7	-1	300	307	2

Control Limits ±30

OPTIMA3_120209A_1

USEPA - CLP
16-IN
INITIAL CALIBRATION

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No. SDG No.: MF5AW6

Instrument ID: OPTIMA3 Start Date: 02/09/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	4000	4020	1	20000	19500	-3	100000	102000	2
Antimony	1200	1170	-2	1500	1540	3	2000	2050	2
Arsenic	200	195	-3	1000	1020	2	2000	1950	-3
Barium	4000	3960	-1	10000	9950	-1	20000	19900	0
Beryllium	100	101	1	500	494	-1	1000	975	-2
Cadmium	100	101	1	500	495	-1	1500	1480	-2
Calcium	100000	99000	-1	150000	147000	-2	300000	306000	2
Chromium	200	202	1	1000	963	-4	5000	4880	-2
Cobalt	1000	1000	0	2500	2490	0	5000	4910	-2
Copper	500	499	0	2000	1980	-1	10000	10100	1
Iron	2000	1990	-1	10000	9790	-2	50000	50500	1
Lead	200	199	-1	1000	979	-2	5000	5010	0
Magnesium	100000	98800	-1	150000	149000	-1	300000	300000	0
Manganese	300	305	2	2000	1980	-1	10000	9970	0
Nickel	800	812	2	2500	2470	-1	5000	4860	-3
Potassium	100000	97800	-2	200000	199000	0			
Selenium	700	700	0	1000	1010	1	2000	1970	-2
Silver	200	199	-1	300	298	-1	600	599	0
Sodium	100000	98700	-1	200000	200000	0			
Thallium	500	497	-1	1000	972	-3	2000	1960	-2
Vanadium	1000	994	-1	2500	2480	-1	5000	4970	-1
Zinc	1200	1210	1	5000	5010	0	10000	9680	-3

Control Limits ±30

OPTIMA3_120209A_2

USEPA - CLP

16-IN

INITIAL CALIBRATION

Lab Name: Mitkem Laboratories Contract: EP-W-09-039

Lab Code: MITKEM Case No.: 42182 Mod. Ref. No. SDG No.: MF5AW6

Instrument ID: OPTIMA3 Start Date: 02/09/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	300000	289000	-4						
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron	200000	199000	-1						
Lead	20000	20100	1						
Magnesium									
Manganese	20000	19200	-4						
Nickel									
Potassium	400000	421000	5						
Selenium									
Silver									
Sodium	400000	406000	1						
Thallium									
Vanadium									
Zinc									

Control Limits ±30

OPTIMA3_120209A_3

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Reprocessing Begun
Logged In Analyst: mitOptima3 **Technique: ICP Continuous**

Results Data Set (original): B12020901
Results Library (original): C:\pe\Administrator\Results\Results.mdb
Results Data Set (reprocessed): B12020901C
Results Library (reprocessed): C:\pe\Administrator\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 2/9/2012 7:41:09 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:34 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Y 360.073	753627.8	753627.8	98.89	%	07:42:26
1	Lu 261.542	483443.4	483443.4	98.82	%	07:42:26
1	Ag 328.068†	-484.6	-490.4	[0.00]	mg/L	07:42:28
1	Al 308.215†	5904.6	5975.0	[0.00]	mg/L	07:42:28
1	As 188.979†	-3.5	-3.6	[0.00]	mg/L	07:42:48
1	Ba 233.527†	-49.8	-50.4	[0.00]	mg/L	07:42:48
1	Be 313.107†	-4444.9	-4497.9	[0.00]	mg/L	07:42:28
1	Co 228.616†	-16.6	-16.8	[0.00]	mg/L	07:42:48
1	Cr 267.716†	30.2	30.5	[0.00]	mg/L	07:42:28
1	Cu 324.752†	1013.9	1026.0	[0.00]	mg/L	07:42:28
1	Fe 273.955†	-530.5	-536.9	[0.00]	mg/L	07:42:28
1	Mg 279.077†	-667.1	-675.1	[0.00]	mg/L	07:42:28
1	Mn 257.610†	-228.2	-230.9	[0.00]	mg/L	07:42:28
1	Ni 231.604†	-10.0	-10.1	[0.00]	mg/L	07:42:48
1	Pb 220.353†	6.3	6.4	[0.00]	mg/L	07:42:48
1	Sb 206.836†	26.4	26.7	[0.00]	mg/L	07:42:48
1	Se 196.026†	-8.2	-8.3	[0.00]	mg/L	07:42:48
1	Tl 190.801†	-16.1	-16.3	[0.00]	mg/L	07:42:48
1	V 292.402†	-23.9	-24.2	[0.00]	mg/L	07:42:28
1	Zn 206.200†	20.2	20.4	[0.00]	mg/L	07:42:48
1	Cd 226.502†	-26.1	-26.4	[0.00]	mg/L	07:42:48
1	Ti 334.940†	-9.4	-9.5	[0.00]	mg/L	07:42:28
1	Ca 227.546†	42.8	43.3	[0.00]	mg/L	07:42:48
1	Na 589.592	-212.6	-212.6	[0.00]	mg/L	07:42:18
1	K 766.490	639.8	639.8	[0.00]	mg/L	07:42:18
2	Y 360.073	756960.2	756960.2	99.33	%	07:42:51
2	Lu 261.542	486079.7	486079.7	99.36	%	07:42:51
2	Ag 328.068†	-507.2	-510.4	[0.00]	mg/L	07:42:53
2	Al 308.215†	5848.2	5885.9	[0.00]	mg/L	07:42:53
2	As 188.979†	-4.2	-4.2	[0.00]	mg/L	07:43:13
2	Ba 233.527†	-50.4	-50.7	[0.00]	mg/L	07:43:13
2	Be 313.107†	-4390.8	-4419.0	[0.00]	mg/L	07:42:53
2	Co 228.616†	-17.2	-17.4	[0.00]	mg/L	07:43:13
2	Cr 267.716†	20.8	21.0	[0.00]	mg/L	07:42:53
2	Cu 324.752†	967.3	973.6	[0.00]	mg/L	07:42:53
2	Fe 273.955†	-507.8	-511.1	[0.00]	mg/L	07:42:53
2	Mg 279.077†	-522.1	-525.4	[0.00]	mg/L	07:42:53
2	Mn 257.610†	-132.8	-133.6	[0.00]	mg/L	07:42:53
2	Ni 231.604†	-14.3	-14.4	[0.00]	mg/L	07:43:13
2	Pb 220.353†	16.8	16.9	[0.00]	mg/L	07:43:13
2	Sb 206.836†	26.4	26.6	[0.00]	mg/L	07:43:13
2	Se 196.026†	-4.1	-4.2	[0.00]	mg/L	07:43:13
2	Tl 190.801†	-17.5	-17.6	[0.00]	mg/L	07:43:13
2	V 292.402†	0.2	0.2	[0.00]	mg/L	07:42:53
2	Zn 206.200†	16.1	16.2	[0.00]	mg/L	07:43:13
2	Cd 226.502†	-26.1	-26.3	[0.00]	mg/L	07:43:13
2	Ti 334.940†	-150.7	-151.7	[0.00]	mg/L	07:42:53
2	Ca 227.546†	68.4	68.8	[0.00]	mg/L	07:43:13
2	Na 589.592	-199.3	-199.3	[0.00]	mg/L	07:42:20

2	K 766.490	539.8	539.8	[0.00]	mg/L	07:42:20
3	Y 360.073	775650.3	775650.3	101.8	%	07:43:15
3	Lu 261.542	498101.5	498101.5	101.8	%	07:43:15
3	Ag 328.068†	-460.2	-451.9	[0.00]	mg/L	07:43:18
3	Al 308.215†	5866.2	5761.4	[0.00]	mg/L	07:43:18
3	As 188.979†	-3.3	-3.2	[0.00]	mg/L	07:43:38
3	Ba 233.527†	-52.7	-51.7	[0.00]	mg/L	07:43:38
3	Be 313.107†	-4451.8	-4372.3	[0.00]	mg/L	07:43:18
3	Co 228.616†	-17.9	-17.6	[0.00]	mg/L	07:43:38
3	Cr 267.716†	27.3	26.8	[0.00]	mg/L	07:43:18
3	Cu 324.752†	1028.0	1009.6	[0.00]	mg/L	07:43:18
3	Fe 273.955†	-544.2	-534.5	[0.00]	mg/L	07:43:18
3	Mg 279.077†	-665.6	-653.7	[0.00]	mg/L	07:43:18
3	Mn 257.610†	-198.7	-195.1	[0.00]	mg/L	07:43:18
3	Ni 231.604†	-17.5	-17.1	[0.00]	mg/L	07:43:38
3	Pb 220.353†	0.7	0.7	[0.00]	mg/L	07:43:38
3	Sb 206.836†	29.2	28.7	[0.00]	mg/L	07:43:38
3	Se 196.026†	-7.1	-7.0	[0.00]	mg/L	07:43:38
3	Tl 190.801†	-19.2	-18.9	[0.00]	mg/L	07:43:38
3	V 292.402†	-23.1	-22.7	[0.00]	mg/L	07:43:18
3	Zn 206.200†	20.9	20.6	[0.00]	mg/L	07:43:38
3	Cd 226.502†	-23.6	-23.2	[0.00]	mg/L	07:43:38
3	Ti 334.940†	-91.1	-89.5	[0.00]	mg/L	07:43:18
3	Ca 227.546†	49.1	48.2	[0.00]	mg/L	07:43:38
3	Na 589.592	-197.2	-197.2	[0.00]	mg/L	07:42:22
3	K 766.490	525.8	525.8	[0.00]	mg/L	07:42:22

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	762079.4	11870.23	1.56%	100.00	%
Lu 261.542	489208.2	7813.84	1.60%	100.0	%
Ag 328.068†	-484.3	29.73	6.14%	[0.00]	mg/L
Al 308.215†	5874.1	107.29	1.83%	[0.00]	mg/L
As 188.979†	-3.7	0.52	14.01%	[0.00]	mg/L
Ba 233.527†	-50.9	0.70	1.37%	[0.00]	mg/L
Be 313.107†	-4429.8	63.50	1.43%	[0.00]	mg/L
Co 228.616†	-17.2	0.42	2.45%	[0.00]	mg/L
Cr 267.716†	26.1	4.84	18.54%	[0.00]	mg/L
Cu 324.752†	1003.1	26.83	2.67%	[0.00]	mg/L
Fe 273.955†	-527.5	14.25	2.70%	[0.00]	mg/L
Mg 279.077†	-618.1	80.94	13.10%	[0.00]	mg/L
Mn 257.610†	-186.6	49.20	26.37%	[0.00]	mg/L
Ni 231.604†	-13.9	3.55	25.54%	[0.00]	mg/L
Pb 220.353†	8.0	8.23	102.90%	[0.00]	mg/L
Sb 206.836†	27.3	1.18	4.31%	[0.00]	mg/L
Se 196.026†	-6.5	2.10	32.42%	[0.00]	mg/L
Tl 190.801†	-17.6	1.30	7.39%	[0.00]	mg/L
V 292.402†	-15.6	13.70	88.02%	[0.00]	mg/L
Zn 206.200†	19.1	2.48	13.02%	[0.00]	mg/L
Cd 226.502†	-25.3	1.81	7.16%	[0.00]	mg/L
Ti 334.940†	-83.6	71.27	85.29%	[0.00]	mg/L
Ca 227.546†	53.5	13.53	25.31%	[0.00]	mg/L
Na 589.592	-203.1	8.33	4.10%	[0.00]	mg/L
K 766.490	568.5	62.16	10.93%	[0.00]	mg/L

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Sequence No.: 2 **Autosampler Location: 9**
Sample ID: S **Date Collected: 2/9/2012 7:44:46 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:36 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Y 360.073	775824.7	775824.7	101.8	%	07:46:03
1	Lu 261.542	504563.0	504563.0	103.1	%	07:46:03

1	Ag 328.068†	527.9	996.1	[0.01]	mg/L	07:46:06
1	Al 308.215†	9723.5	3553.4	[0.2]	mg/L	07:46:06
1	As 188.979†	5.8	9.3	[0.01]	mg/L	07:46:26
1	Ba 233.527†	10199.2	9939.7	[0.2]	mg/L	07:46:06
1	Be 313.107†	3795.8	8110.1	[0.005]	mg/L	07:46:06
1	Co 228.616†	1130.9	1113.8	[0.05]	mg/L	07:46:26
1	Cr 267.716†	372.7	335.3	[0.01]	mg/L	07:46:06
1	Cu 324.752†	4912.8	3760.2	[0.025]	mg/L	07:46:06
1	Fe 273.955†	1158.0	1650.2	[0.1]	mg/L	07:46:06
1	Mg 279.077†	61725.2	60464.8	[5]	mg/L	07:46:06
1	Mn 257.610†	6315.6	6310.0	[0.015]	mg/L	07:46:06
1	Ni 231.604†	723.4	715.3	[0.04]	mg/L	07:46:26
1	Pb 220.353†	44.9	35.5	[0.01]	mg/L	07:46:26
1	Sb 206.836†	96.5	66.3	[0.06]	mg/L	07:46:26
1	Se 196.026†	19.7	25.5	[0.035]	mg/L	07:46:26
1	Tl 190.801†	14.3	31.4	[0.025]	mg/L	07:46:26
1	V 292.402†	4274.5	4160.0	[0.05]	mg/L	07:46:06
1	Zn 206.200†	1271.1	1213.3	[0.06]	mg/L	07:46:26
1	Cd 226.502†	146.3	167.2	[0.005]	mg/L	07:46:26
1	Ti 334.940†	7271.2	7133.5	[0.02]	mg/L	07:46:06
1	Ca 227.546†	816.7	738.4	[5]	mg/L	07:46:26
1	Na 589.592	16899.2	17102.2	[5]	mg/L	07:45:55
1	K 766.490	6180.1	5611.6	[5]	mg/L	07:45:55
2	Y 360.073	696341.8	696341.8	91.37	%	07:46:28
2	Lu 261.542	452569.0	452569.0	92.51	%	07:46:28
2	Ag 328.068†	555.9	1085.1	[0.01]	mg/L	07:46:30
2	Al 308.215†	9753.9	4669.4	[0.2]	mg/L	07:46:30
2	As 188.979†	5.5	9.7	[0.01]	mg/L	07:46:50
2	Ba 233.527†	10180.6	11055.7	[0.2]	mg/L	07:46:30
2	Be 313.107†	3743.9	8476.7	[0.005]	mg/L	07:46:30
2	Co 228.616†	1133.6	1242.6	[0.05]	mg/L	07:46:50
2	Cr 267.716†	389.8	395.3	[0.01]	mg/L	07:46:30
2	Cu 324.752†	4955.4	4353.6	[0.025]	mg/L	07:46:30
2	Fe 273.955†	1121.7	1740.0	[0.1]	mg/L	07:46:30
2	Mg 279.077†	61987.5	67624.0	[5]	mg/L	07:46:30
2	Mn 257.610†	6430.0	7137.1	[0.015]	mg/L	07:46:30
2	Ni 231.604†	733.3	806.6	[0.04]	mg/L	07:46:50
2	Pb 220.353†	42.0	37.4	[0.01]	mg/L	07:46:50
2	Sb 206.836†	101.9	82.8	[0.06]	mg/L	07:46:50
2	Se 196.026†	26.3	34.9	[0.035]	mg/L	07:46:50
2	Tl 190.801†	18.8	37.9	[0.025]	mg/L	07:46:50
2	V 292.402†	4207.3	4563.5	[0.05]	mg/L	07:46:30
2	Zn 206.200†	1264.7	1348.0	[0.06]	mg/L	07:46:50
2	Cd 226.502†	162.1	200.6	[0.005]	mg/L	07:46:50
2	Ti 334.940†	7383.0	8064.3	[0.02]	mg/L	07:46:30
2	Ca 227.546†	821.7	834.8	[5]	mg/L	07:46:50
2	Na 589.592	17008.1	17211.1	[5]	mg/L	07:45:57
2	K 766.490	6300.5	5732.0	[5]	mg/L	07:45:57
3	Y 360.073	755763.9	755763.9	99.17	%	07:46:53
3	Lu 261.542	491173.2	491173.2	100.4	%	07:46:53
3	Ag 328.068†	541.6	1023.7	[0.01]	mg/L	07:46:55
3	Al 308.215†	9903.7	3989.9	[0.2]	mg/L	07:46:55
3	As 188.979†	4.0	7.6	[0.01]	mg/L	07:47:15
3	Ba 233.527†	10256.8	10266.7	[0.2]	mg/L	07:46:55
3	Be 313.107†	3842.7	8257.1	[0.005]	mg/L	07:46:55
3	Co 228.616†	1122.2	1135.0	[0.05]	mg/L	07:47:15
3	Cr 267.716†	380.5	352.8	[0.01]	mg/L	07:46:55
3	Cu 324.752†	4946.3	3923.4	[0.025]	mg/L	07:46:55
3	Fe 273.955†	1190.9	1713.6	[0.1]	mg/L	07:46:55
3	Mg 279.077†	62464.4	62832.6	[5]	mg/L	07:46:55
3	Mn 257.610†	6441.3	6602.1	[0.015]	mg/L	07:46:55
3	Ni 231.604†	727.7	738.7	[0.04]	mg/L	07:47:15
3	Pb 220.353†	41.3	33.1	[0.01]	mg/L	07:47:15
3	Sb 206.836†	103.3	75.6	[0.06]	mg/L	07:47:15
3	Se 196.026†	23.8	30.2	[0.035]	mg/L	07:47:15
3	Tl 190.801†	14.1	31.6	[0.025]	mg/L	07:47:15
3	V 292.402†	4281.4	4279.9	[0.05]	mg/L	07:46:55
3	Zn 206.200†	1267.7	1243.5	[0.06]	mg/L	07:47:15
3	Cd 226.502†	154.0	178.7	[0.005]	mg/L	07:47:15
3	Ti 334.940†	7365.1	7419.2	[0.02]	mg/L	07:46:55
3	Ca 227.546†	818.8	762.1	[5]	mg/L	07:47:15

3	Na 589.592	16804.8	17007.9	[5]	mg/L	07:46:00
3	K 766.490	6180.5	5612.0	[5]	mg/L	07:46:00

Mean Data: S

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	742643.5	41333.91	5.57%	97.45	%
Lu 261.542	482768.4	26996.72	5.59%	98.68	%
Ag 328.068†	1035.0	45.56	4.40%	[0.01]	mg/L
Al 308.215†	4070.9	562.36	13.81%	[0.2]	mg/L
As 188.979†	8.9	1.09	12.29%	[0.01]	mg/L
Ba 233.527†	10420.7	573.73	5.51%	[0.2]	mg/L
Be 313.107†	8281.3	184.53	2.23%	[0.005]	mg/L
Co 228.616†	1163.8	69.08	5.94%	[0.05]	mg/L
Cr 267.716†	361.1	30.84	8.54%	[0.01]	mg/L
Cu 324.752†	4012.4	306.50	7.64%	[0.025]	mg/L
Fe 273.955†	1701.3	46.17	2.71%	[0.1]	mg/L
Mg 279.077†	63640.5	3647.29	5.73%	[5]	mg/L
Mn 257.610†	6683.1	419.44	6.28%	[0.015]	mg/L
Ni 231.604†	753.5	47.41	6.29%	[0.04]	mg/L
Pb 220.353†	35.3	2.15	6.07%	[0.01]	mg/L
Sb 206.836†	74.9	8.29	11.07%	[0.06]	mg/L
Se 196.026†	30.2	4.67	15.45%	[0.035]	mg/L
Tl 190.801†	33.6	3.68	10.94%	[0.025]	mg/L
V 292.402†	4334.5	207.21	4.78%	[0.05]	mg/L
Zn 206.200†	1268.3	70.67	5.57%	[0.06]	mg/L
Cd 226.502†	182.1	16.96	9.31%	[0.005]	mg/L
Ti 334.940†	7539.0	476.80	6.32%	[0.02]	mg/L
Ca 227.546†	778.4	50.22	6.45%	[5]	mg/L
Na 589.592	17107.1	101.72	0.59%	[5]	mg/L
K 766.490	5651.9	69.44	1.23%	[5]	mg/L

Sequence No.: 3
Sample ID: S
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 2/9/2012 7:48:25 AM
Data Type: Reprocessed on 2/10/2012 7:27:36 AM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Y 360.073	746935.1	746935.1	98.01	%	07:49:42
1	Lu 261.542	488009.8	488009.8	99.76	%	07:49:42
1	Ag 328.068†	4811.5	5307.6	[0.05]	mg/L	07:49:45
1	Al 308.215†	25214.9	19402.7	[1]	mg/L	07:49:45
1	As 188.979†	40.4	44.2	[0.05]	mg/L	07:50:05
1	Ba 233.527†	50766.8	50942.4	[1]	mg/L	07:49:45
1	Be 313.107†	38280.0	42803.8	[0.025]	mg/L	07:49:45
1	Co 228.616†	5750.6	5782.0	[0.25]	mg/L	07:50:05
1	Cr 267.716†	1995.9	1974.7	[0.05]	mg/L	07:49:45
1	Cu 324.752†	21527.0	20576.8	[0.125]	mg/L	07:49:45
1	Fe 273.955†	7987.8	8534.9	[0.5]	mg/L	07:49:45
1	Mg 279.077†	312648.2	314034.0	[25]	mg/L	07:49:42
1	Mn 257.610†	33101.8	33369.6	[0.075]	mg/L	07:49:45
1	Ni 231.604†	3751.2	3774.3	[0.2]	mg/L	07:50:05
1	Pb 220.353†	198.7	191.2	[0.05]	mg/L	07:50:05
1	Sb 206.836†	391.0	364.7	[0.3]	mg/L	07:50:05
1	Se 196.026†	117.8	124.5	[0.175]	mg/L	07:50:05
1	Tl 190.801†	131.0	148.9	[0.125]	mg/L	07:50:05
1	V 292.402†	22207.0	22277.1	[0.25]	mg/L	07:49:45
1	Zn 206.200†	6286.8	6283.1	[0.3]	mg/L	07:50:05
1	Cd 226.502†	870.8	898.2	[0.025]	mg/L	07:50:05
1	Ti 334.940†	35102.8	35272.5	[0.1]	mg/L	07:49:45
1	Ca 227.546†	3894.5	3850.6	[25]	mg/L	07:50:05
1	Na 589.592	83396.0	83599.0	[25]	mg/L	07:49:34
1	K 766.490	28069.4	27500.9	[25]	mg/L	07:49:34
2	Y 360.073	753689.2	753689.2	98.90	%	07:50:07

2	Lu 261.542	492481.1	492481.1	100.7	%	07:50:07
2	Ag 328.068†	4737.1	5189.9	[0.05]	mg/L	07:50:09
2	Al 308.215†	25168.7	19127.3	[1]	mg/L	07:50:09
2	As 188.979†	43.3	46.7	[0.05]	mg/L	07:50:30
2	Ba 233.527†	50481.2	50196.7	[1]	mg/L	07:50:09
2	Be 313.107†	37913.9	42091.7	[0.025]	mg/L	07:50:09
2	Co 228.616†	5810.3	5789.0	[0.25]	mg/L	07:50:30
2	Cr 267.716†	1975.0	1935.7	[0.05]	mg/L	07:50:09
2	Cu 324.752†	21352.2	20207.2	[0.125]	mg/L	07:50:09
2	Fe 273.955†	7864.7	8339.9	[0.5]	mg/L	07:50:09
2	Mg 279.077†	319325.7	317821.6	[25]	mg/L	07:50:07
2	Mn 257.610†	32766.0	32734.8	[0.075]	mg/L	07:50:09
2	Ni 231.604†	3794.9	3783.6	[0.2]	mg/L	07:50:30
2	Pb 220.353†	197.5	188.2	[0.05]	mg/L	07:50:30
2	Sb 206.836†	404.1	374.1	[0.3]	mg/L	07:50:30
2	Se 196.026†	122.7	128.4	[0.175]	mg/L	07:50:30
2	Tl 190.801†	136.4	153.1	[0.125]	mg/L	07:50:30
2	V 292.402†	22042.6	21911.7	[0.25]	mg/L	07:50:09
2	Zn 206.200†	6387.9	6326.4	[0.3]	mg/L	07:50:30
2	Cd 226.502†	885.4	904.8	[0.025]	mg/L	07:50:30
2	Ti 334.940†	34974.9	34826.0	[0.1]	mg/L	07:50:09
2	Ca 227.546†	3933.0	3853.4	[25]	mg/L	07:50:30
2	Na 589.592	84224.9	84428.0	[25]	mg/L	07:49:36
2	K 766.490	28262.3	27693.8	[25]	mg/L	07:49:36
3	Y 360.073	747138.9	747138.9	98.04	%	07:50:32
3	Lu 261.542	487409.2	487409.2	99.63	%	07:50:32
3	Ag 328.068†	4775.6	5277.5	[0.05]	mg/L	07:50:34
3	Al 308.215†	25226.4	19445.4	[1]	mg/L	07:50:34
3	As 188.979†	42.4	46.2	[0.05]	mg/L	07:50:54
3	Ba 233.527†	50567.0	50804.6	[1]	mg/L	07:50:34
3	Be 313.107†	37853.9	42423.3	[0.025]	mg/L	07:50:34
3	Co 228.616†	5733.8	5772.2	[0.25]	mg/L	07:50:54
3	Cr 267.716†	1980.5	1961.7	[0.05]	mg/L	07:50:34
3	Cu 324.752†	21387.5	20463.3	[0.125]	mg/L	07:50:34
3	Fe 273.955†	7992.6	8549.6	[0.5]	mg/L	07:50:34
3	Mg 279.077†	316037.8	317822.4	[25]	mg/L	07:50:32
3	Mn 257.610†	32868.2	33176.1	[0.075]	mg/L	07:50:34
3	Ni 231.604†	3756.2	3783.9	[0.2]	mg/L	07:50:54
3	Pb 220.353†	188.4	181.1	[0.05]	mg/L	07:50:54
3	Sb 206.836†	397.7	371.9	[0.3]	mg/L	07:50:54
3	Se 196.026†	122.6	129.5	[0.175]	mg/L	07:50:54
3	Tl 190.801†	134.7	152.8	[0.125]	mg/L	07:50:54
3	V 292.402†	22019.9	22116.8	[0.25]	mg/L	07:50:34
3	Zn 206.200†	6288.7	6292.9	[0.3]	mg/L	07:50:54
3	Cd 226.502†	876.6	905.1	[0.025]	mg/L	07:50:54
3	Ti 334.940†	35103.0	35316.1	[0.1]	mg/L	07:50:34
3	Ca 227.546†	3901.6	3862.6	[25]	mg/L	07:50:54
3	Na 589.592	84275.4	84478.5	[25]	mg/L	07:49:39
3	K 766.490	28333.3	27764.8	[25]	mg/L	07:49:39

Mean Data: S

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	749254.4	3842.04	0.51%	98.32	%
Lu 261.542	489300.0	2771.20	0.57%	100.0	%
Ag 328.068†	5258.3	61.16	1.16%	[0.05]	mg/L
Al 308.215†	19325.1	172.66	0.89%	[1]	mg/L
As 188.979†	45.7	1.35	2.95%	[0.05]	mg/L
Ba 233.527†	50647.9	396.79	0.78%	[1]	mg/L
Be 313.107†	42439.6	356.33	0.84%	[0.025]	mg/L
Co 228.616†	5781.1	8.41	0.15%	[0.25]	mg/L
Cr 267.716†	1957.4	19.82	1.01%	[0.05]	mg/L
Cu 324.752†	20415.8	189.33	0.93%	[0.125]	mg/L
Fe 273.955†	8474.8	117.07	1.38%	[0.5]	mg/L
Mg 279.077†	316559.4	2186.99	0.69%	[25]	mg/L
Mn 257.610†	33093.5	325.37	0.98%	[0.075]	mg/L
Ni 231.604†	3780.6	5.48	0.14%	[0.2]	mg/L
Pb 220.353†	186.8	5.19	2.78%	[0.05]	mg/L
Sb 206.836†	370.2	4.92	1.33%	[0.3]	mg/L
Se 196.026†	127.5	2.63	2.07%	[0.175]	mg/L

Tl 190.801†	151.6	2.33	1.54%	[0.125]	mg/L
V 292.402†	22101.9	183.14	0.83%	[0.25]	mg/L
Zn 206.200†	6300.8	22.69	0.36%	[0.3]	mg/L
Cd 226.502†	902.7	3.91	0.43%	[0.025]	mg/L
Ti 334.940†	35138.2	271.26	0.77%	[0.1]	mg/L
Ca 227.546†	3855.5	6.27	0.16%	[25]	mg/L
Na 589.592	84168.5	493.81	0.59%	[25]	mg/L
K 766.490	27653.2	136.58	0.49%	[25]	mg/L

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Sequence No.: 4
Sample ID: S
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 2/9/2012 7:52:04 AM
Data Type: Reprocessed on 2/10/2012 7:27:37 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Y 360.073	730334.8	730334.8	95.83	%	07:53:23
1	Lu 261.542	478776.2	478776.2	97.87	%	07:53:23
1	Ag 328.068†	19838.8	20755.4	[0.2]	mg/L	07:53:23
1	Al 308.215†	77984.4	73809.5	[4]	mg/L	07:53:23
1	As 188.979†	160.7	167.9	[0.2]	mg/L	07:53:44
1	Ba 233.527†	191076.2	195290.4	[4]	mg/L	07:53:23
1	Be 313.107†	158773.1	166662.4	[0.1]	mg/L	07:53:23
1	Co 228.616†	22174.6	22675.0	[1]	mg/L	07:53:23
1	Cr 267.716†	7382.9	7517.7	[0.2]	mg/L	07:53:23
1	Cu 324.752†	81408.9	82179.7	[0.5]	mg/L	07:53:23
1	Fe 273.955†	31348.3	32558.8	[2]	mg/L	07:53:23
1	Mg 279.077†	1196669.3	1223361.4	[100]	mg/L	07:53:23
1	Mn 257.610†	125173.4	128087.3	[0.3]	mg/L	07:53:23
1	Ni 231.604†	14556.4	14887.5	[0.8]	mg/L	07:53:23
1	Pb 220.353†	715.8	723.4	[0.2]	mg/L	07:53:44
1	Sb 206.836†	1475.7	1480.5	[1.2]	mg/L	07:53:44
1	Se 196.026†	469.0	485.7	[0.7]	mg/L	07:53:44
1	Tl 190.801†	517.1	546.0	[0.5]	mg/L	07:53:44
1	V 292.402†	84457.6	86313.4	[1]	mg/L	07:53:23
1	Zn 206.200†	24347.2	24858.7	[1.2]	mg/L	07:53:23
1	Cd 226.502†	3384.1	3483.1	[0.1]	mg/L	07:53:44
1	Ti 334.940†	170656.9	174458.9	[0.5]	mg/L	07:53:23
1	Ca 227.546†	14883.8	15154.6	[100]	mg/L	07:53:23
1	Na 589.592	335521.3	335724.4	[100]	mg/L	07:53:14
1	K 766.490	113782.9	113214.4	[100]	mg/L	07:53:14
2	Y 360.073	719279.9	719279.9	94.38	%	07:53:47
2	Lu 261.542	470130.5	470130.5	96.10	%	07:53:47
2	Ag 328.068†	19240.0	20505.0	[0.2]	mg/L	07:53:47
2	Al 308.215†	76262.6	73483.1	[4]	mg/L	07:53:47
2	As 188.979†	157.3	167.4	[0.2]	mg/L	07:54:07
2	Ba 233.527†	187220.9	194869.2	[4]	mg/L	07:53:47
2	Be 313.107†	154545.8	165246.9	[0.1]	mg/L	07:53:47
2	Co 228.616†	21596.6	22490.2	[1]	mg/L	07:53:47
2	Cr 267.716†	7192.5	7458.2	[0.2]	mg/L	07:53:47
2	Cu 324.752†	79638.6	81867.2	[0.5]	mg/L	07:53:47
2	Fe 273.955†	30860.6	32640.4	[2]	mg/L	07:53:47
2	Mg 279.077†	1167449.0	1215441.6	[100]	mg/L	07:53:47
2	Mn 257.610†	122099.5	127240.8	[0.3]	mg/L	07:53:47
2	Ni 231.604†	14229.4	14820.7	[0.8]	mg/L	07:53:47
2	Pb 220.353†	707.4	728.1	[0.2]	mg/L	07:54:07
2	Sb 206.836†	1479.0	1511.7	[1.2]	mg/L	07:54:07
2	Se 196.026†	471.0	496.5	[0.7]	mg/L	07:54:07
2	Tl 190.801†	510.0	548.2	[0.5]	mg/L	07:54:07
2	V 292.402†	82862.3	86240.4	[1]	mg/L	07:53:47
2	Zn 206.200†	23772.7	24718.3	[1.2]	mg/L	07:53:47
2	Cd 226.502†	3370.9	3533.0	[0.1]	mg/L	07:54:07
2	Ti 334.940†	168033.0	174935.3	[0.5]	mg/L	07:53:47
2	Ca 227.546†	14596.3	15135.2	[100]	mg/L	07:53:47
2	Na 589.592	332556.4	332759.5	[100]	mg/L	07:53:16
2	K 766.490	113149.6	112581.1	[100]	mg/L	07:53:16

3	Y 360.073	723048.0	723048.0	94.88	%	07:54:10
3	Lu 261.542	474131.7	474131.7	96.92	%	07:54:10
3	Ag 328.068†	19484.3	20588.1	[0.2]	mg/L	07:54:10
3	Al 308.215†	76297.3	72849.3	[4]	mg/L	07:54:10
3	As 188.979†	167.2	176.2	[0.2]	mg/L	07:54:30
3	Ba 233.527†	187246.0	193251.0	[4]	mg/L	07:54:10
3	Be 313.107†	154780.6	164132.1	[0.1]	mg/L	07:54:10
3	Co 228.616†	21690.5	22397.5	[1]	mg/L	07:54:10
3	Cr 267.716†	7216.8	7420.2	[0.2]	mg/L	07:54:10
3	Cu 324.752†	79689.3	81220.2	[0.5]	mg/L	07:54:10
3	Fe 273.955†	30912.7	32423.2	[2]	mg/L	07:54:10
3	Mg 279.077†	1168101.8	1205863.2	[100]	mg/L	07:54:10
3	Mn 257.610†	122349.2	126426.2	[0.3]	mg/L	07:54:10
3	Ni 231.604†	14269.2	14736.8	[0.8]	mg/L	07:54:10
3	Pb 220.353†	718.3	733.2	[0.2]	mg/L	07:54:30
3	Sb 206.836†	1497.7	1518.0	[1.2]	mg/L	07:54:30
3	Se 196.026†	470.2	491.6	[0.7]	mg/L	07:54:30
3	Tl 190.801†	512.6	546.4	[0.5]	mg/L	07:54:30
3	V 292.402†	82708.7	85354.3	[1]	mg/L	07:54:10
3	Zn 206.200†	23802.7	24540.5	[1.2]	mg/L	07:54:10
3	Cd 226.502†	3402.6	3536.1	[0.1]	mg/L	07:54:30
3	Ti 334.940†	167016.2	172410.6	[0.5]	mg/L	07:54:10
3	Ca 227.546†	14537.8	14946.7	[100]	mg/L	07:54:10
3	Na 589.592	331262.6	331465.7	[100]	mg/L	07:53:19
3	K 766.490	112763.7	112195.2	[100]	mg/L	07:53:19

Mean Data: S

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	724220.9	5620.00	0.78%	95.03	%
Lu 261.542	474346.2	4326.85	0.91%	96.96	%
Ag 328.068†	20616.2	127.51	0.62%	[0.2]	mg/L
Al 308.215†	73380.6	488.24	0.67%	[4]	mg/L
As 188.979†	170.5	4.96	2.91%	[0.2]	mg/L
Ba 233.527†	194470.2	1076.66	0.55%	[4]	mg/L
Be 313.107†	165347.1	1268.13	0.77%	[0.1]	mg/L
Co 228.616†	22520.9	141.26	0.63%	[1]	mg/L
Cr 267.716†	7465.4	49.13	0.66%	[0.2]	mg/L
Cu 324.752†	81755.7	489.38	0.60%	[0.5]	mg/L
Fe 273.955†	32540.8	109.72	0.34%	[2]	mg/L
Mg 279.077†	1214888.7	8762.19	0.72%	[100]	mg/L
Mn 257.610†	127251.4	830.60	0.65%	[0.3]	mg/L
Ni 231.604†	14815.0	75.51	0.51%	[0.8]	mg/L
Pb 220.353†	728.2	4.91	0.67%	[0.2]	mg/L
Sb 206.836†	1503.4	20.09	1.34%	[1.2]	mg/L
Se 196.026†	491.3	5.45	1.11%	[0.7]	mg/L
Tl 190.801†	546.9	1.19	0.22%	[0.5]	mg/L
V 292.402†	85969.3	533.93	0.62%	[1]	mg/L
Zn 206.200†	24705.8	159.47	0.65%	[1.2]	mg/L
Cd 226.502†	3517.4	29.72	0.85%	[0.1]	mg/L
Ti 334.940†	173934.9	1341.41	0.77%	[0.5]	mg/L
Ca 227.546†	15078.8	114.86	0.76%	[100]	mg/L
Na 589.592	333316.5	2183.31	0.66%	[100]	mg/L
K 766.490	112663.6	514.56	0.46%	[100]	mg/L

Sequence No.: 5
Sample ID: S
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 2/9/2012 7:55:39 AM
Data Type: Reprocessed on 2/10/2012 7:27:38 AM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Y 360.073	719185.1	719185.1	94.37	%	07:57:00
1	Lu 261.542	467896.1	467896.1	95.64	%	07:57:00
1	Ag 328.068†	29073.2	30881.7	[0.3]	mg/L	07:57:02

1	Al 308.215†	343723.9	353506.0	[20]	mg/L	07:57:02
1	As 188.979†	848.0	890.4	[1]	mg/L	07:57:22
1	Ba 233.527†	464759.0	485979.1	[10]	mg/L	07:57:00
1	Be 313.107†	766373.2	805710.3	[0.5]	mg/L	07:57:00
1	Co 228.616†	53429.5	55880.4	[2.5]	mg/L	07:57:02
1	Cr 267.716†	33942.1	35462.0	[1]	mg/L	07:57:02
1	Cu 324.752†	311531.6	324718.4	[2]	mg/L	07:57:00
1	Fe 273.955†	152355.5	159822.6	[10]	mg/L	07:57:02
1	Mg 279.077†	1745294.1	1825408.2	[150]	mg/L	07:57:00
1	Mn 257.610†	785797.1	821775.8	[2]	mg/L	07:57:00
1	Ni 231.604†	43101.3	45078.4	[2.5]	mg/L	07:57:02
1	Pb 220.353†	3415.2	3562.7	[1]	mg/L	07:57:22
1	Sb 206.836†	1896.7	1955.8	[1.5]	mg/L	07:57:22
1	Se 196.026†	678.2	715.6	[1]	mg/L	07:57:22
1	Tl 190.801†	999.9	1063.0	[1]	mg/L	07:57:22
1	V 292.402†	205371.1	214741.1	[2.5]	mg/L	07:57:02
1	Zn 206.200†	97407.9	101825.7	[5]	mg/L	07:57:02
1	Cd 226.502†	16482.3	17258.4	[0.5]	mg/L	07:57:02
1	Ti 334.940†	842895.7	881372.2	[2.5]	mg/L	07:57:00
1	Ca 227.546†	21450.3	22373.8	[150]	mg/L	07:57:02
1	Na 589.592	673673.2	673876.2	[200]	mg/L	07:56:49
1	K 766.490	229653.3	229084.9	[200]	mg/L	07:56:49
2	Y 360.073	717620.1	717620.1	94.17	%	07:57:25
2	Lu 261.542	466835.6	466835.6	95.43	%	07:57:25
2	Ag 328.068†	28642.8	30499.7	[0.3]	mg/L	07:57:28
2	Al 308.215†	338392.6	348735.6	[20]	mg/L	07:57:28
2	As 188.979†	841.8	885.8	[1]	mg/L	07:57:48
2	Ba 233.527†	464828.8	487156.2	[10]	mg/L	07:57:25
2	Be 313.107†	768100.4	809340.5	[0.5]	mg/L	07:57:25
2	Co 228.616†	52353.7	54879.9	[2.5]	mg/L	07:57:28
2	Cr 267.716†	33482.3	35060.8	[1]	mg/L	07:57:28
2	Cu 324.752†	311611.2	325541.8	[2]	mg/L	07:57:25
2	Fe 273.955†	149888.1	157598.7	[10]	mg/L	07:57:28
2	Mg 279.077†	1748508.2	1832921.6	[150]	mg/L	07:57:25
2	Mn 257.610†	786651.9	824537.9	[2]	mg/L	07:57:25
2	Ni 231.604†	42242.6	44280.9	[2.5]	mg/L	07:57:28
2	Pb 220.353†	3428.7	3585.0	[1]	mg/L	07:57:48
2	Sb 206.836†	1905.1	1969.1	[1.5]	mg/L	07:57:48
2	Se 196.026†	664.5	702.8	[1]	mg/L	07:57:48
2	Tl 190.801†	994.5	1059.8	[1]	mg/L	07:57:48
2	V 292.402†	201903.5	211595.1	[2.5]	mg/L	07:57:28
2	Zn 206.200†	95384.5	99936.6	[5]	mg/L	07:57:28
2	Cd 226.502†	16196.3	16997.8	[0.5]	mg/L	07:57:28
2	Ti 334.940†	844457.4	885010.6	[2.5]	mg/L	07:57:25
2	Ca 227.546†	21171.3	22132.5	[150]	mg/L	07:57:28
2	Na 589.592	674080.0	674283.1	[200]	mg/L	07:56:52
2	K 766.490	229937.9	229369.4	[200]	mg/L	07:56:52
3	Y 360.073	713794.3	713794.3	93.66	%	07:57:51
3	Lu 261.542	464613.3	464613.3	94.97	%	07:57:51
3	Ag 328.068†	29400.8	31441.4	[0.3]	mg/L	07:57:53
3	Al 308.215†	345346.5	357753.8	[20]	mg/L	07:57:53
3	As 188.979†	842.5	890.8	[1]	mg/L	07:58:13
3	Ba 233.527†	463301.7	487878.1	[10]	mg/L	07:57:51
3	Be 313.107†	763792.2	808654.2	[0.5]	mg/L	07:57:51
3	Co 228.616†	53815.8	56681.9	[2.5]	mg/L	07:57:53
3	Cr 267.716†	34344.9	36136.9	[1]	mg/L	07:57:53
3	Cu 324.752†	310041.2	325450.5	[2]	mg/L	07:57:51
3	Fe 273.955†	154232.3	162924.3	[10]	mg/L	07:57:53
3	Mg 279.077†	1741804.7	1834627.4	[150]	mg/L	07:57:51
3	Mn 257.610†	783228.1	824875.8	[2]	mg/L	07:57:51
3	Ni 231.604†	43526.6	45844.7	[2.5]	mg/L	07:57:53
3	Pb 220.353†	3448.6	3623.1	[1]	mg/L	07:58:13
3	Sb 206.836†	1924.4	1999.0	[1.5]	mg/L	07:58:13
3	Se 196.026†	669.0	710.9	[1]	mg/L	07:58:13
3	Tl 190.801†	995.9	1066.2	[1]	mg/L	07:58:13
3	V 292.402†	206698.5	217655.9	[2.5]	mg/L	07:57:53
3	Zn 206.200†	98555.6	103753.7	[5]	mg/L	07:57:53
3	Cd 226.502†	16708.0	17617.7	[0.5]	mg/L	07:57:53
3	Ti 334.940†	841142.1	885752.6	[2.5]	mg/L	07:57:51
3	Ca 227.546†	21577.6	22666.4	[150]	mg/L	07:57:53
3	Na 589.592	679709.5	679912.6	[200]	mg/L	07:56:54

3	K 766.490	231856.5	231288.1	[200] mg/L	07:56:54

Mean Data: S

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	716866.5	2773.29	0.39%	94.07	%
Lu 261.542	466448.3	1675.31	0.36%	95.35	%
Ag 328.068†	30941.0	473.65	1.53%	[0.3]	mg/L
Al 308.215†	353331.8	4511.62	1.28%	[20]	mg/L
As 188.979†	889.0	2.77	0.31%	[1]	mg/L
Ba 233.527†	487004.5	958.53	0.20%	[10]	mg/L
Be 313.107†	807901.7	1928.56	0.24%	[0.5]	mg/L
Co 228.616†	55814.1	902.79	1.62%	[2.5]	mg/L
Cr 267.716†	35553.2	543.83	1.53%	[1]	mg/L
Cu 324.752†	325236.9	451.35	0.14%	[2]	mg/L
Fe 273.955†	160115.2	2674.81	1.67%	[10]	mg/L
Mg 279.077†	1830985.7	4905.00	0.27%	[150]	mg/L
Mn 257.610†	823729.8	1700.63	0.21%	[2]	mg/L
Ni 231.604†	45068.0	781.91	1.73%	[2.5]	mg/L
Pb 220.353†	3590.3	30.55	0.85%	[1]	mg/L
Sb 206.836†	1974.6	22.11	1.12%	[1.5]	mg/L
Se 196.026†	709.8	6.47	0.91%	[1]	mg/L
Tl 190.801†	1063.0	3.21	0.30%	[1]	mg/L
V 292.402†	214664.0	3031.13	1.41%	[2.5]	mg/L
Zn 206.200†	101838.7	1908.57	1.87%	[5]	mg/L
Cd 226.502†	17291.3	311.26	1.80%	[0.5]	mg/L
Ti 334.940†	884045.1	2344.36	0.27%	[2.5]	mg/L
Ca 227.546†	22390.9	267.37	1.19%	[150]	mg/L
Na 589.592	676024.0	3373.78	0.50%	[200]	mg/L
K 766.490	229914.1	1198.36	0.52%	[200]	mg/L

Sequence No.: 6
Sample ID: S
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 2/9/2012 7:59:23 AM
Data Type: Reprocessed on 2/10/2012 7:27:39 AM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Y 360.073	718179.0	718179.0	94.24	%	08:00:35
1	Lu 261.542	466393.3	466393.3	95.34	%	08:00:35
1	Ag 328.068†	58019.0	61341.5	[0.6]	mg/L	08:00:38
1	Al 308.215†	1765789.0	1846293.3	[100]	mg/L	08:00:35
1	As 188.979†	1599.0	1680.9	[2]	mg/L	08:00:58
1	Ba 233.527†	926717.1	972101.0	[20]	mg/L	08:00:35
1	Be 313.107†	1511581.5	1589954.4	[1]	mg/L	08:00:35
1	Co 228.616†	102710.3	107751.9	[5]	mg/L	08:00:38
1	Cr 267.716†	168357.9	176567.5	[5]	mg/L	08:00:38
1	Cu 324.752†	1578939.1	1655174.1	[10]	mg/L	08:00:35
1	Fe 273.955†	782838.7	821660.9	[50]	mg/L	08:00:35
1	Mg 279.077†	3501372.6	3673270.0	[300]	mg/L	08:00:35
1	Mn 257.610†	3928312.8	4120663.6	[10]	mg/L	08:00:35
1	Ni 231.604†	82675.4	86733.6	[5]	mg/L	08:00:38
1	Pb 220.353†	17097.8	17926.2	[5]	mg/L	08:00:38
1	Sb 206.836†	2486.9	2581.3	[2]	mg/L	08:00:58
1	Se 196.026†	1289.8	1359.4	[2]	mg/L	08:00:58
1	Tl 190.801†	1985.9	2100.6	[2]	mg/L	08:00:58
1	V 292.402†	408619.3	428623.7	[5]	mg/L	08:00:35
1	Zn 206.200†	183083.3	192020.3	[10]	mg/L	08:00:38
1	Cd 226.502†	47889.9	50257.9	[1.5]	mg/L	08:00:38
1	Ti 334.940†	1649502.6	1730276.1	[5]	mg/L	08:00:35
1	Ca 227.546†	43680.8	45764.1	[300]	mg/L	08:00:38
2	Y 360.073	710485.5	710485.5	93.23	%	08:01:01
2	Lu 261.542	462771.2	462771.2	94.60	%	08:01:01
2	Ag 328.068†	58288.3	62102.4	[0.6]	mg/L	08:01:04
2	Al 308.215†	1764241.3	1859153.9	[100]	mg/L	08:01:01

2	As 188.979†	1611.1	1706.9	[2]	mg/L	08:01:24
2	Ba 233.527†	923223.8	976016.2	[20]	mg/L	08:01:01
2	Be 313.107†	1506089.1	1596558.0	[1]	mg/L	08:01:01
2	Co 228.616†	105405.5	111444.3	[5]	mg/L	08:01:04
2	Cr 267.716†	171922.5	181717.9	[5]	mg/L	08:01:04
2	Cu 324.752†	1570869.7	1659606.5	[10]	mg/L	08:01:01
2	Fe 273.955†	783023.3	828283.0	[50]	mg/L	08:01:01
2	Mg 279.077†	3493170.2	3693344.4	[300]	mg/L	08:01:01
2	Mn 257.610†	3924424.9	4148804.2	[10]	mg/L	08:01:01
2	Ni 231.604†	84684.6	89536.3	[5]	mg/L	08:01:04
2	Pb 220.353†	17590.7	18587.6	[5]	mg/L	08:01:04
2	Sb 206.836†	2535.2	2652.7	[2]	mg/L	08:01:24
2	Se 196.026†	1300.7	1381.5	[2]	mg/L	08:01:24
2	Tl 190.801†	2007.2	2139.4	[2]	mg/L	08:01:24
2	V 292.402†	406809.6	430065.2	[5]	mg/L	08:01:01
2	Zn 206.200†	188509.8	199259.9	[10]	mg/L	08:01:04
2	Cd 226.502†	49419.7	52268.3	[1.5]	mg/L	08:01:04
2	Ti 334.940†	1631060.8	1724322.8	[5]	mg/L	08:01:01
2	Ca 227.546†	44490.2	46978.4	[300]	mg/L	08:01:04
3	Y 360.073	708703.4	708703.4	93.00	%	08:01:27
3	Lu 261.542	461367.6	461367.6	94.31	%	08:01:27
3	Ag 328.068†	58961.7	63003.9	[0.6]	mg/L	08:01:29
3	Al 308.215†	1758972.2	1859240.8	[100]	mg/L	08:01:27
3	As 188.979†	1609.3	1710.1	[2]	mg/L	08:01:50
3	Ba 233.527†	920990.5	976617.4	[20]	mg/L	08:01:27
3	Be 313.107†	1503573.5	1598734.3	[1]	mg/L	08:01:27
3	Co 228.616†	104730.9	111068.0	[5]	mg/L	08:01:29
3	Cr 267.716†	171802.3	182143.4	[5]	mg/L	08:01:29
3	Cu 324.752†	1566029.7	1659526.6	[10]	mg/L	08:01:27
3	Fe 273.955†	780313.3	827927.7	[50]	mg/L	08:01:27
3	Mg 279.077†	3481329.9	3692024.0	[300]	mg/L	08:01:27
3	Mn 257.610†	3913109.6	4149427.4	[10]	mg/L	08:01:27
3	Ni 231.604†	83971.3	89052.3	[5]	mg/L	08:01:29
3	Pb 220.353†	17608.4	18663.0	[5]	mg/L	08:01:29
3	Sb 206.836†	2534.9	2660.6	[2]	mg/L	08:01:50
3	Se 196.026†	1287.6	1371.8	[2]	mg/L	08:01:50
3	Tl 190.801†	2018.5	2157.9	[2]	mg/L	08:01:50
3	V 292.402†	406750.3	431310.7	[5]	mg/L	08:01:27
3	Zn 206.200†	187371.3	198658.9	[10]	mg/L	08:01:29
3	Cd 226.502†	48925.3	51903.0	[1.5]	mg/L	08:01:29
3	Ti 334.940†	1629610.1	1728030.2	[5]	mg/L	08:01:27
3	Ca 227.546†	44354.8	46977.8	[300]	mg/L	08:01:29

Mean Data: S

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	712455.9	5035.76	0.71%	93.49	%
Lu 261.542	463510.7	2593.16	0.56%	94.75	%
Ag 328.068†	62149.3	832.22	1.34%	[0.6]	mg/L
Al 308.215†	1854896.0	7450.30	0.40%	[100]	mg/L
As 188.979†	1699.3	16.00	0.94%	[2]	mg/L
Ba 233.527†	974911.5	2452.48	0.25%	[20]	mg/L
Be 313.107†	1595082.2	4572.23	0.29%	[1]	mg/L
Co 228.616†	110088.1	2031.91	1.85%	[5]	mg/L
Cr 267.716†	180142.9	3103.75	1.72%	[5]	mg/L
Cu 324.752†	1658102.4	2536.26	0.15%	[10]	mg/L
Fe 273.955†	825957.2	3724.93	0.45%	[50]	mg/L
Mg 279.077†	3686212.8	11228.22	0.30%	[300]	mg/L
Mn 257.610†	4139631.7	16429.81	0.40%	[10]	mg/L
Ni 231.604†	88440.7	1498.11	1.69%	[5]	mg/L
Pb 220.353†	18392.3	405.40	2.20%	[5]	mg/L
Sb 206.836†	2631.5	43.67	1.66%	[2]	mg/L
Se 196.026†	1370.9	11.08	0.81%	[2]	mg/L
Tl 190.801†	2132.7	29.26	1.37%	[2]	mg/L
V 292.402†	429999.8	1344.70	0.31%	[5]	mg/L
Zn 206.200†	196646.4	4017.56	2.04%	[10]	mg/L
Cd 226.502†	51476.4	1070.91	2.08%	[1.5]	mg/L
Ti 334.940†	1727543.1	3006.41	0.17%	[5]	mg/L
Ca 227.546†	46573.4	700.88	1.50%	[300]	mg/L

Sequence No.: 7
Sample ID: S
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 2/9/2012 8:03:00 AM
Data Type: Reprocessed on 2/10/2012 7:27:39 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Y 360.073	701067.3	701067.3	91.99	%	08:04:24
1	Lu 261.542	469111.9	469111.9	95.89	%	08:04:22
1	Al 308.215†	5023903.5	5233248.1	[300]	mg/L	08:04:19
1	Fe 273.955†	3109396.4	3243127.1	[200]	mg/L	08:04:22
1	Mn 257.610†	7632446.3	7959598.8	[20]	mg/L	08:04:19
1	Pb 220.353†	70567.8	73582.9	[20]	mg/L	08:04:24
1	Na 589.592	1374907.2	1375110.3	[400]	mg/L	08:04:09
1	K 766.490	487769.3	487200.8	[400]	mg/L	08:04:09
2	Y 360.073	699978.6	699978.6	91.85	%	08:04:32
2	Lu 261.542	467610.0	467610.0	95.59	%	08:04:30
2	Al 308.215†	5012783.6	5238442.7	[300]	mg/L	08:04:27
2	Fe 273.955†	3095696.1	3239209.3	[200]	mg/L	08:04:30
2	Mn 257.610†	7614526.3	7966416.8	[20]	mg/L	08:04:27
2	Pb 220.353†	70364.8	73606.9	[20]	mg/L	08:04:32
2	Na 589.592	1386247.1	1386450.1	[400]	mg/L	08:04:12
2	K 766.490	491866.6	491298.1	[400]	mg/L	08:04:12
3	Y 360.073	699072.5	699072.5	91.73	%	08:04:40
3	Lu 261.542	465192.0	465192.0	95.09	%	08:04:38
3	Al 308.215†	5001758.9	5254108.0	[300]	mg/L	08:04:35
3	Fe 273.955†	3094735.6	3255033.3	[200]	mg/L	08:04:38
3	Mn 257.610†	7597227.4	7989632.1	[20]	mg/L	08:04:35
3	Pb 220.353†	70509.2	74141.4	[20]	mg/L	08:04:40
3	Na 589.592	1343272.7	1343475.8	[400]	mg/L	08:04:14
3	K 766.490	477794.3	477225.8	[400]	mg/L	08:04:14

Mean Data: S

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	700039.5	998.79	0.14%	91.86	%
Lu 261.542	467304.6	1977.74	0.42%	95.52	%
Al 308.215†	5241932.9	10859.15	0.21%	[300]	mg/L
Fe 273.955†	3245789.9	8241.25	0.25%	[200]	mg/L
Mn 257.610†	7971882.5	15745.01	0.20%	[20]	mg/L
Pb 220.353†	73777.0	315.74	0.43%	[20]	mg/L
Na 589.592	1368345.4	22271.53	1.63%	[400]	mg/L
K 766.490	485241.6	7237.84	1.49%	[400]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	5	Wt. Lin	0.7	103700	0.00000	0.999960	
Al 308.215	6	Wt. Lin	477.0	18120	0.00000	0.999526	
As 188.979	5	Wt. Lin	0.2	873.3	0.00000	0.999500	
Ba 233.527	5	Wt. Lin	679.1	48890	0.00000	0.999909	
Be 313.107	5	Wt. Lin	161.8	1635000	0.00000	0.999701	
Co 228.616	5	Wt. Lin	48.8	22400	0.00000	0.999867	
Cr 267.716	5	Wt. Lin	-3.4	36920	0.00000	0.999122	
Cu 324.752	5	Wt. Lin	-90.1	164100	0.00000	0.999972	
Fe 273.955	6	Wt. Lin	75.6	16340	0.00000	0.999839	
Mg 279.077	5	Wt. Lin	2486.4	12280	0.00000	0.999887	
Mn 257.610	6	Wt. Lin	514.4	415400	0.00000	0.999529	
Ni 231.604	5	Wt. Lin	30.0	18200	0.00000	0.999694	
Pb 220.353	6	Wt. Lin	-1.2	3670	0.00000	0.999870	
Sb 206.836	5	Wt. Lin	-2.7	1285	0.00000	0.999559	
Se 196.026	5	Wt. Lin	5.9	693.4	0.00000	0.999929	
Tl 190.801	5	Wt. Lin	6.8	1086	0.00000	0.999151	
V 292.402	5	Wt. Lin	29.1	86440	0.00000	0.999916	

Zn 206.200	5	Wt. Lin	55.8	20320	0.00000	0.999739
Cd 226.502	5	Wt. Lin	8.6	34890	0.00000	0.999849
Ti 334.940	5	Wt. Lin	571.6	347900	0.00000	0.999949
Ca 227.546	5	Wt. Lin	19.0	152.1	0.00000	0.999857
Na 589.592	5	Wt. Lin	219.1	3373	0.00000	0.999945
K 766.490	5	Wt. Lin	-158.5	1153	0.00000	0.999339

Calibration data for Ag 328.068 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00001	29.73	6.14
S	1035.0	0.01	0.00998	45.56	4.40
S	5258.3	0.05	0.05071	61.16	1.16
S	20616.2	0.2	0.19885	127.51	0.62
S	30941.0	0.3	0.29844	473.65	1.53
S	62149.3	0.6	0.59946	832.22	1.34

Correlation Coef.: 0.999960 Slope: 103700 Intercept: 0.7

Calibration data for Al 308.215 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.02633	107.29	1.83
S	4070.9	0.2	0.19837	562.36	13.81
S	19325.1	1.0	1.04035	172.66	0.89
S	73380.6	4.0	4.02404	488.24	0.67
S	353331.8	20.0	19.47642	4511.62	1.28
S	1854896.0	100.0	102.35779	7450.30	0.40
S	5241932.9	300.0	289.31101	10859.15	0.21

Correlation Coef.: 0.999526 Slope: 18120 Intercept: 477.0

Calibration data for As 188.979 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00024	0.52	14.01
S	8.9	0.01	0.00993	1.09	12.29
S	45.7	0.05	0.05208	1.35	2.95
S	170.5	0.2	0.19499	4.96	2.91
S	889.0	1.0	1.01772	2.77	0.31
S	1699.3	2.0	1.94558	16.00	0.94

Correlation Coef.: 0.999500 Slope: 873.3 Intercept: 0.2

Calibration data for Ba 233.527 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.01389	0.70	1.37
S	10420.7	0.2	0.19924	573.73	5.51
S	50647.9	1.0	1.02199	396.79	0.78
S	194470.2	4.0	3.96351	1076.66	0.55
S	487004.5	10.0	9.94657	958.53	0.20
S	974911.5	20.0	19.92549	2452.48	0.25

Correlation Coef.: 0.999909 Slope: 48890 Intercept: 679.1

Calibration data for Be 313.107 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00010	63.50	1.43
S	8281.3	0.005	0.00496	184.53	2.23
S	42439.6	0.025	0.02585	356.33	0.84
S	165347.1	0.1	0.10100	1268.13	0.77
S	807901.7	0.5	0.49389	1928.56	0.24
S	1595082.2	1.0	0.97522	4572.23	0.29

Correlation Coef.: 0.999701 Slope: 1635000 Intercept: 161.8

Calibration data for Co 228.616 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00218	0.42	2.45
S	1163.8	0.05	0.04977	69.08	5.94
S	5781.1	0.25	0.25587	8.41	0.15
S	22520.9	1.0	1.00308	141.26	0.63
S	55814.1	2.5	2.48917	902.79	1.62
S	110088.1	5.0	4.91178	2031.91	1.85

Correlation Coef.: 0.999867 Slope: 22400 Intercept: 48.8

Calibration data for Cr 267.716 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	0.00009	4.84	18.54
S	361.1	0.01	0.00987	30.84	8.54
S	1957.4	0.05	0.05311	19.82	1.01
S	7465.4	0.2	0.20230	49.13	0.66
S	35553.2	1.0	0.96307	543.83	1.53
S	180142.9	5.0	4.87933	3103.75	1.72

Correlation Coef.: 0.999122 Slope: 36920 Intercept: -3.4

Calibration data for Cu 324.752 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	0.00055	26.83	2.67
S	4012.4	0.025	0.02501	306.50	7.64
S	20415.8	0.125	0.12499	189.33	0.93
S	81755.7	0.5	0.49886	489.38	0.60
S	325236.9	2.0	1.98293	451.35	0.14
S	1658102.4	10.0	10.10698	2536.26	0.15

Correlation Coef.: 0.999972 Slope: 164100 Intercept: -90.1

Calibration data for Fe 273.955 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00463	14.25	2.70
S	1701.3	0.1	0.09949	46.17	2.71
S	8474.8	0.5	0.51404	117.07	1.38
S	32540.8	2.0	1.98691	109.72	0.34
S	160115.2	10.0	9.79463	2674.81	1.67
S	825957.2	50.0	50.54501	3724.93	0.45
S	3245789.9	200.0	198.64188	8241.25	0.25

Correlation Coef.: 0.999839 Slope: 16340 Intercept: 75.6

Calibration data for Mg 279.077 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.20252	80.94	13.10
S	63640.5	5.0	4.98104	3647.29	5.73
S	316559.4	25.0	25.58146	2186.99	0.69
S	1214888.7	100.0	98.75101	8762.19	0.72
S	1830985.7	150.0	148.93254	4905.00	0.27
S	3686212.8	300.0	300.04207	11228.22	0.30

Correlation Coef.: 0.999887 Slope: 12280 Intercept: 2486.4

Calibration data for Mn 257.610 **Equation: Weighted Linear**

Entered Calculated

ID	Mean Signal (Em)	Conc. mg/L	Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00124	49.20	26.37
S	6683.1	0.015	0.01485	419.44	6.28
S	33093.5	0.075	0.07844	325.37	0.98
S	127251.4	0.3	0.30512	830.60	0.65
S	823729.8	2.0	1.98192	1700.63	0.21
S	4139631.7	10.0	9.96505	16429.81	0.40
S	7971882.5	20.0	19.19131	15745.01	0.20

Correlation Coef.: 0.999529 Slope: 415400 Intercept: 514.4

Calibration data for Ni 231.604 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00165	3.55	25.54
S	753.5	0.04	0.03974	47.41	6.29
S	3780.6	0.2	0.20603	5.48	0.14
S	14815.0	0.8	0.81219	75.51	0.51
S	45068.0	2.5	2.47411	781.91	1.73
S	88440.7	5.0	4.85673	1498.11	1.69

Correlation Coef.: 0.999694 Slope: 18200 Intercept: 30.0

Calibration data for Pb 220.353 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	0.00033	8.23	102.90
S	35.3	0.01	0.00996	2.15	6.07
S	186.8	0.05	0.05123	5.19	2.78
S	728.2	0.2	0.19874	4.91	0.67
S	3590.3	1.0	0.97857	30.55	0.85
S	18392.3	5.0	5.01165	405.40	2.20
S	73777.0	20.0	20.10231	315.74	0.43

Correlation Coef.: 0.999870 Slope: 3670 Intercept: -1.2

Calibration data for Sb 206.836 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	0.00209	1.18	4.31
S	74.9	0.06	0.06036	8.29	11.07
S	370.2	0.3	0.29014	4.92	1.33
S	1503.4	1.2	1.17181	20.09	1.34
S	1974.6	1.5	1.53843	22.11	1.12
S	2631.5	2.0	2.04952	43.67	1.66

Correlation Coef.: 0.999559 Slope: 1285 Intercept: -2.7

Calibration data for Se 196.026 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00857	2.10	32.42
S	30.2	0.035	0.03498	4.67	15.45
S	127.5	0.175	0.17527	2.63	2.07
S	491.3	0.7	0.69988	5.45	1.11
S	709.8	1.0	1.01497	6.47	0.91
S	1370.9	2.0	1.96838	11.08	0.81

Correlation Coef.: 0.999929 Slope: 693.4 Intercept: 5.9

Calibration data for Tl 190.801 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00628	1.30	7.39
S	33.6	0.025	0.02470	3.68	10.94

S	151.6	0.125	0.13330	2.33	1.54
S	546.9	0.5	0.49727	1.19	0.22
S	1063.0	1.0	0.97245	3.21	0.30
S	2132.7	2.0	1.95734	29.26	1.37

Correlation Coef.: 0.999151 Slope: 1086 Intercept: 6.8

Calibration data for V 292.402 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00034	13.70	88.02
S	4334.5	0.05	0.04981	207.21	4.78
S	22101.9	0.25	0.25536	183.14	0.83
S	85969.3	1.0	0.99425	533.93	0.62
S	214664.0	2.5	2.48312	3031.13	1.41
S	429999.8	5.0	4.97436	1344.70	0.31

Correlation Coef.: 0.999916 Slope: 86440 Intercept: 29.1

Calibration data for Zn 206.200 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00274	2.48	13.02
S	1268.3	0.06	0.05968	70.67	5.57
S	6300.8	0.3	0.30739	22.69	0.36
S	24705.8	1.2	1.21330	159.47	0.65
S	101838.7	5.0	5.00984	1908.57	1.87
S	196646.4	10.0	9.67636	4017.56	2.04

Correlation Coef.: 0.999739 Slope: 20320 Intercept: 55.8

Calibration data for Cd 226.502 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00025	1.81	7.16
S	182.1	0.005	0.00497	16.96	9.31
S	902.7	0.025	0.02563	3.91	0.43
S	3517.4	0.1	0.10057	29.72	0.85
S	17291.3	0.5	0.49539	311.26	1.80
S	51476.4	1.5	1.47526	1070.91	2.08

Correlation Coef.: 0.999849 Slope: 34890 Intercept: 8.6

Calibration data for Ti 334.940 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.00164	71.27	85.29
S	7539.0	0.02	0.02003	476.80	6.32
S	35138.2	0.1	0.09936	271.26	0.77
S	173934.9	0.5	0.49830	1341.41	0.77
S	884045.1	2.5	2.53938	2344.36	0.27
S	1727543.1	5.0	4.96385	3006.41	0.17

Correlation Coef.: 0.999949 Slope: 347900 Intercept: 571.6

Calibration data for Ca 227.546 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.12473	13.53	25.31
S	778.4	5.0	4.99463	50.22	6.45
S	3855.5	25.0	25.23101	6.27	0.16
S	15078.8	100.0	99.04145	114.86	0.76
S	22390.9	150.0	147.12947	267.37	1.19
S	46573.4	300.0	306.16665	700.88	1.50

Correlation Coef.: 0.999857 Slope: 152.1 Intercept: 19.0

Calibration data for Na 589.592 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	-0.06496	8.33	4.10
S	17107.1	5.0	5.00654	101.72	0.59
S	84168.5	25.0	24.88734	493.81	0.59
S	333316.5	100.0	98.74889	2183.31	0.66
S	676024.0	200.0	200.34676	3373.78	0.50
S	1368345.4	400.0	405.58997	22271.53	1.63

Correlation Coef.: 0.999945 Slope: 3373 Intercept: 219.1

Calibration data for K 766.490 **Equation: Weighted Linear**

ID	Mean Signal (Em)	Entered Conc. mg/L	Calculated Conc. mg/L	Standard Deviation	%RSD
S0	0.0	0	0.13744	62.16	10.93
S	5651.9	5.0	5.03793	69.44	1.23
S	27653.2	25.0	24.11436	136.58	0.49
S	112663.6	100.0	97.82331	514.56	0.46
S	229914.1	200.0	199.48636	1198.36	0.52
S	485241.6	400.0	420.87015	7237.84	1.49

Correlation Coef.: 0.999339 Slope: 1153 Intercept: -158.5

Sequence No.: 8 **Autosampler Location: 26**
Sample ID: ICV **Date Collected: 2/9/2012 8:05:49 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:40 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	763333.4	763333.4	100.2	%			08:07:06
1	Lu 261.542	499960.5	499960.5	102.2	%			08:07:06
1	Ag 328.068†	49745.0	49159.4	0.47487	mg/L	0.47487	mg/L	08:07:09
1	Al 308.215†	55813.4	48739.0	2.6551	mg/L	2.6551	mg/L	08:07:09
1	As 188.979†	848.6	834.0	0.95830	mg/L	0.95830	mg/L	08:07:29
1	Ba 233.527†	25205.3	24714.2	0.49185	mg/L	0.49185	mg/L	08:07:09
1	Be 313.107†	799061.6	786306.5	0.48071	mg/L	0.48071	mg/L	08:07:06
1	Co 228.616†	11613.0	11380.5	0.50536	mg/L	0.50536	mg/L	08:07:09
1	Cr 267.716†	18852.0	18420.5	0.49901	mg/L	0.49901	mg/L	08:07:09
1	Cu 324.752†	78962.5	76261.3	0.46577	mg/L	0.46577	mg/L	08:07:09
1	Fe 273.955†	86990.5	85647.2	5.2359	mg/L	5.2359	mg/L	08:07:09
1	Mg 279.077†	75600.0	74592.2	5.8761	mg/L	5.8761	mg/L	08:07:09
1	Mn 257.610†	218729.9	214212.4	0.51428	mg/L	0.51428	mg/L	08:07:06
1	Ni 231.604†	9477.9	9288.0	0.50840	mg/L	0.50840	mg/L	08:07:09
1	Pb 220.353†	3838.4	3747.8	1.0219	mg/L	1.0219	mg/L	08:07:29
1	Sb 206.836†	1230.0	1176.2	0.90764	mg/L	0.90764	mg/L	08:07:29
1	Se 196.026†	694.3	685.8	0.98191	mg/L	0.98191	mg/L	08:07:29
1	Tl 190.801†	1154.9	1147.7	1.0473	mg/L	1.0473	mg/L	08:07:29
1	V 292.402†	42666.5	41764.5	0.48377	mg/L	0.48377	mg/L	08:07:09
1	Zn 206.200†	21181.8	20707.2	1.0182	mg/L	1.0182	mg/L	08:07:09
1	Cd 226.502†	17785.4	17428.2	0.49887	mg/L	0.49887	mg/L	08:07:09
1	Ti 334.940†	286.4	363.8	-0.00067	mg/L	-0.00067	mg/L	08:07:09
1	Ca 227.546†	1600.3	1512.4	9.6849	mg/L	9.6849	mg/L	08:07:29
1	Na 589.592	33585.8	33788.8	9.9520	mg/L	9.9520	mg/L	08:06:58
1	K 766.490	11585.8	11017.3	9.6901	mg/L	9.6901	mg/L	08:06:58
2	Y 360.073	757461.3	757461.3	99.39	%			08:07:31
2	Lu 261.542	495866.4	495866.4	101.4	%			08:07:31
2	Ag 328.068†	49593.6	49412.0	0.47731	mg/L	0.47731	mg/L	08:07:34
2	Al 308.215†	55549.7	48929.6	2.6655	mg/L	2.6655	mg/L	08:07:34
2	As 188.979†	843.3	835.7	0.96024	mg/L	0.96024	mg/L	08:07:54
2	Ba 233.527†	25382.6	25092.7	0.49959	mg/L	0.49959	mg/L	08:07:34
2	Be 313.107†	792359.2	786149.7	0.48061	mg/L	0.48061	mg/L	08:07:31
2	Co 228.616†	11618.9	11480.1	0.50981	mg/L	0.50981	mg/L	08:07:34

2	Cr 267.716†	18828.0	18549.1	0.50249	mg/L	0.50249	mg/L	08:07:34
2	Cu 324.752†	79663.9	77591.2	0.47388	mg/L	0.47388	mg/L	08:07:34
2	Fe 273.955†	86979.0	86338.5	5.2782	mg/L	5.2782	mg/L	08:07:34
2	Mg 279.077†	75959.5	75557.7	5.9547	mg/L	5.9547	mg/L	08:07:34
2	Mn 257.610†	215540.1	212832.5	0.51096	mg/L	0.51096	mg/L	08:07:31
2	Ni 231.604†	9426.0	9313.3	0.50979	mg/L	0.50979	mg/L	08:07:34
2	Pb 220.353†	3808.4	3749.3	1.0223	mg/L	1.0223	mg/L	08:07:54
2	Sb 206.836†	1241.5	1197.5	0.92416	mg/L	0.92416	mg/L	08:07:54
2	Se 196.026†	680.7	678.0	0.97072	mg/L	0.97072	mg/L	08:07:54
2	Tl 190.801†	1151.6	1153.8	1.0529	mg/L	1.0529	mg/L	08:07:54
2	V 292.402†	42707.3	42149.4	0.48822	mg/L	0.48822	mg/L	08:07:34
2	Zn 206.200†	21207.9	20904.0	1.0279	mg/L	1.0279	mg/L	08:07:34
2	Cd 226.502†	17830.0	17615.9	0.50424	mg/L	0.50424	mg/L	08:07:34
2	Ti 334.940†	249.9	330.1	-0.00077	mg/L	-0.00077	mg/L	08:07:34
2	Ca 227.546†	1612.7	1537.6	9.8497	mg/L	9.8497	mg/L	08:07:54
2	Na 589.592	34057.8	34260.9	10.092	mg/L	10.092	mg/L	08:07:00
2	K 766.490	11726.6	11158.1	9.8122	mg/L	9.8122	mg/L	08:07:00
3	Y 360.073	761472.4	761472.4	99.92	%			08:07:56
3	Lu 261.542	499238.9	499238.9	102.1	%			08:07:56
3	Ag 328.068†	48845.0	48347.8	0.46704	mg/L	0.46704	mg/L	08:07:58
3	Al 308.215†	54683.4	47710.6	2.5984	mg/L	2.5984	mg/L	08:07:58
3	As 188.979†	844.4	831.1	0.95499	mg/L	0.95499	mg/L	08:08:19
3	Ba 233.527†	25110.2	24656.6	0.49067	mg/L	0.49067	mg/L	08:07:58
3	Be 313.107†	795609.5	784053.9	0.47933	mg/L	0.47933	mg/L	08:07:56
3	Co 228.616†	11417.4	11205.3	0.49754	mg/L	0.49754	mg/L	08:07:58
3	Cr 267.716†	18701.8	18300.0	0.49574	mg/L	0.49574	mg/L	08:07:58
3	Cu 324.752†	78369.1	75791.4	0.46290	mg/L	0.46290	mg/L	08:07:58
3	Fe 273.955†	85868.8	84671.0	5.1762	mg/L	5.1762	mg/L	08:07:58
3	Mg 279.077†	75049.2	74159.4	5.8408	mg/L	5.8408	mg/L	08:07:58
3	Mn 257.610†	216397.5	212236.2	0.50953	mg/L	0.50953	mg/L	08:07:56
3	Ni 231.604†	9370.1	9195.8	0.50333	mg/L	0.50333	mg/L	08:07:58
3	Pb 220.353†	3817.2	3732.5	1.0177	mg/L	1.0177	mg/L	08:08:19
3	Sb 206.836†	1257.7	1205.1	0.93020	mg/L	0.93020	mg/L	08:08:19
3	Se 196.026†	686.2	678.9	0.97187	mg/L	0.97187	mg/L	08:08:19
3	Tl 190.801†	1154.0	1148.4	1.0480	mg/L	1.0480	mg/L	08:08:19
3	V 292.402†	42093.1	41263.0	0.47796	mg/L	0.47796	mg/L	08:07:58
3	Zn 206.200†	20880.9	20442.3	1.0052	mg/L	1.0052	mg/L	08:07:58
3	Cd 226.502†	17542.4	17215.3	0.49277	mg/L	0.49277	mg/L	08:07:58
3	Ti 334.940†	228.3	307.3	-0.00084	mg/L	-0.00084	mg/L	08:07:58
3	Ca 227.546†	1594.4	1508.9	9.6636	mg/L	9.6636	mg/L	08:08:19
3	Na 589.592	33359.0	33562.1	9.8847	mg/L	9.8847	mg/L	08:07:02
3	K 766.490	11544.8	10976.3	9.6545	mg/L	9.6545	mg/L	08:07:02

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	760755.7	99.83	%	0.394				0.39%
Lu 261.542	498355.3	101.9	%	0.45				0.44%
Ag 328.068†	48973.1	0.47307	mg/L	0.005369	0.47307	mg/L	0.005369	1.14%
QC value within limits for Ag 328.068 Recovery = 94.43%								
Al 308.215†	48459.7	2.6397	mg/L	0.03611	2.6397	mg/L	0.03611	1.37%
QC value within limits for Al 308.215 Recovery = 104.71%								
As 188.979†	833.6	0.95785	mg/L	0.002653	0.95785	mg/L	0.002653	0.28%
QC value within limits for As 188.979 Recovery = 95.88%								
Ba 233.527†	24821.2	0.49403	mg/L	0.004848	0.49403	mg/L	0.004848	0.98%
QC value within limits for Ba 233.527 Recovery = 99.40%								
Be 313.107†	785503.3	0.48022	mg/L	0.000769	0.48022	mg/L	0.000769	0.16%
QC value within limits for Be 313.107 Recovery = 97.01%								
Co 228.616†	11355.3	0.50424	mg/L	0.006207	0.50424	mg/L	0.006207	1.23%
QC value within limits for Co 228.616 Recovery = 101.05%								
Cr 267.716†	18423.2	0.49908	mg/L	0.003375	0.49908	mg/L	0.003375	0.68%
QC value within limits for Cr 267.716 Recovery = 101.85%								
Cu 324.752†	76547.9	0.46752	mg/L	0.005694	0.46752	mg/L	0.005694	1.22%
QC value within limits for Cu 324.752 Recovery = 95.02%								
Fe 273.955†	85552.2	5.2301	mg/L	0.05126	5.2301	mg/L	0.05126	0.98%
QC value within limits for Fe 273.955 Recovery = 102.91%								
Mg 279.077†	74769.7	5.8906	mg/L	0.05832	5.8906	mg/L	0.05832	0.99%
QC value within limits for Mg 279.077 Recovery = 96.98%								
Mn 257.610†	213093.7	0.51159	mg/L	0.002440	0.51159	mg/L	0.002440	0.48%
QC value within limits for Mn 257.610 Recovery = 102.52%								

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Ni 231.604†            9265.7     0.50717 mg/L      0.003399     0.50717 mg/L      0.003399   0.67%
   QC value within limits for Ni 231.604  Recovery = 100.83%
Pb 220.353†            3743.2      1.0206 mg/L       0.00254      1.0206 mg/L       0.00254   0.25%
   QC value within limits for Pb 220.353  Recovery = 101.86%
Sb 206.836†            1192.9     0.92067 mg/L      0.011678     0.92067 mg/L      0.011678   1.27%
   QC value within limits for Sb 206.836  Recovery = 92.62%
Se 196.026†             680.9     0.97483 mg/L      0.006152     0.97483 mg/L      0.006152   0.63%
   QC value within limits for Se 196.026  Recovery = 94.74%
Tl 190.801†            1149.9      1.0494 mg/L       0.00304      1.0494 mg/L       0.00304   0.29%
   QC value within limits for Tl 190.801  Recovery = 102.08%
V 292.402†            41725.6     0.48332 mg/L      0.005149     0.48332 mg/L      0.005149   1.07%
   QC value within limits for V 292.402  Recovery = 96.47%
Zn 206.200†           20684.5      1.0171 mg/L       0.01142      1.0171 mg/L       0.01142   1.12%
   QC value within limits for Zn 206.200  Recovery = 99.23%
Cd 226.502†           17419.8     0.49863 mg/L      0.005742     0.49863 mg/L      0.005742   1.15%
   QC value within limits for Cd 226.502  Recovery = 100.53%
Ti 334.940†             333.7    -0.00076 mg/L      0.000082    -0.00076 mg/L      0.000082  10.76%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Ca 227.546†            1519.6      9.7327 mg/L       0.10186      9.7327 mg/L       0.10186   1.05%
   QC value within limits for Ca 227.546  Recovery = 97.07%
Na 589.592            33870.6      9.9762 mg/L       0.10569      9.9762 mg/L       0.10569   1.06%
   QC value within limits for Na 589.592  Recovery = 98.80%
K 766.490             11050.6      9.7189 mg/L       0.08269      9.7189 mg/L       0.08269   0.85%
   QC value within limits for K 766.490  Recovery = 96.99%
All analyte(s) passed QC.
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Sequence No.: 9 **Autosampler Location: 4**
Sample ID: ICB **Date Collected: 2/9/2012 8:09:27 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:41 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	779284.2	779284.2	102.3	%			08:10:45
1	Lu 261.542	502342.7	502342.7	102.7	%			08:10:45
1	Ag 328.068†	-475.2	21.4	0.00020	mg/L	0.00020	mg/L	08:10:47
1	Al 308.215†	6245.2	207.8	-0.01486	mg/L	-0.01486	mg/L	08:10:47
1	As 188.979†	4.0	7.6	0.00844	mg/L	0.00844	mg/L	08:11:07
1	Ba 233.527†	-21.1	30.4	-0.01327	mg/L	-0.01327	mg/L	08:11:07
1	Be 313.107†	-4150.1	388.2	0.00014	mg/L	0.00014	mg/L	08:10:47
1	Co 228.616†	-3.4	13.9	-0.00155	mg/L	-0.00155	mg/L	08:11:07
1	Cr 267.716†	54.4	26.9	0.00082	mg/L	0.00082	mg/L	08:10:47
1	Cu 324.752†	1052.6	22.0	0.00068	mg/L	0.00068	mg/L	08:10:47
1	Fe 273.955†	-130.6	400.3	0.01989	mg/L	0.01989	mg/L	08:10:47
1	Mg 279.077†	-563.4	69.4	-0.19686	mg/L	-0.19686	mg/L	08:10:47
1	Mn 257.610†	199.5	380.8	-0.00032	mg/L	-0.00032	mg/L	08:10:47
1	Ni 231.604†	-5.6	8.5	-0.00118	mg/L	-0.00118	mg/L	08:11:07
1	Pb 220.353†	4.3	-3.8	-0.00071	mg/L	-0.00071	mg/L	08:11:07
1	Sb 206.836†	59.0	30.2	0.02558	mg/L	0.02558	mg/L	08:11:07
1	Se 196.026†	0.7	7.1	0.00168	mg/L	0.00168	mg/L	08:11:07
1	Tl 190.801†	-12.2	5.8	-0.00097	mg/L	-0.00097	mg/L	08:11:07
1	V 292.402†	-8.8	7.0	-0.00025	mg/L	-0.00025	mg/L	08:10:47
1	Zn 206.200†	41.4	21.3	-0.00169	mg/L	-0.00169	mg/L	08:11:07
1	Cd 226.502†	-18.8	7.0	-0.00005	mg/L	-0.00005	mg/L	08:11:07
1	Ti 334.940†	179.2	258.1	-0.00090	mg/L	-0.00090	mg/L	08:10:47
1	Ca 227.546†	73.6	18.2	-0.00466	mg/L	-0.00466	mg/L	08:11:07
1	Na 589.592	-33.4	169.7	-0.01466	mg/L	-0.01466	mg/L	08:10:37
1	K 766.490	657.1	88.6	0.21428	mg/L	0.21428	mg/L	08:10:37
2	Y 360.073	747049.8	747049.8	98.03	%			08:11:10
2	Lu 261.542	481581.9	481581.9	98.44	%			08:11:10
2	Ag 328.068†	-444.9	32.4	0.00030	mg/L	0.00030	mg/L	08:11:12
2	Al 308.215†	6033.9	255.4	-0.01222	mg/L	-0.01222	mg/L	08:11:12
2	As 188.979†	0.2	3.9	0.00422	mg/L	0.00422	mg/L	08:11:32
2	Ba 233.527†	-22.4	28.1	-0.01331	mg/L	-0.01331	mg/L	08:11:32
2	Be 313.107†	-4063.7	301.7	0.00008	mg/L	0.00008	mg/L	08:11:12
2	Co 228.616†	-15.5	1.5	-0.00211	mg/L	-0.00211	mg/L	08:11:32

2	Cr 267.716†	14.4	-11.4	-0.00022	mg/L	-0.00022	mg/L	08:11:12
2	Cu 324.752†	1068.7	82.6	0.00105	mg/L	0.00105	mg/L	08:11:12
2	Fe 273.955†	-191.0	333.4	0.01579	mg/L	0.01579	mg/L	08:11:12
2	Mg 279.077†	-473.8	136.8	-0.19137	mg/L	-0.19137	mg/L	08:11:12
2	Mn 257.610†	96.6	284.7	-0.00055	mg/L	-0.00055	mg/L	08:11:12
2	Ni 231.604†	-19.2	-5.6	-0.00196	mg/L	-0.00196	mg/L	08:11:32
2	Pb 220.353†	4.8	-3.1	-0.00053	mg/L	-0.00053	mg/L	08:11:32
2	Sb 206.836†	49.7	23.2	0.02017	mg/L	0.02017	mg/L	08:11:32
2	Se 196.026†	-4.0	2.4	-0.00511	mg/L	-0.00511	mg/L	08:11:32
2	Tl 190.801†	-13.1	4.3	-0.00235	mg/L	-0.00235	mg/L	08:11:32
2	V 292.402†	23.8	39.7	0.00012	mg/L	0.00012	mg/L	08:11:12
2	Zn 206.200†	37.7	19.2	-0.00180	mg/L	-0.00180	mg/L	08:11:32
2	Cd 226.502†	-18.9	6.1	-0.00008	mg/L	-0.00008	mg/L	08:11:32
2	Ti 334.940†	177.4	263.7	-0.00088	mg/L	-0.00088	mg/L	08:11:12
2	Ca 227.546†	54.0	1.4	-0.11515	mg/L	-0.11515	mg/L	08:11:32
2	Na 589.592	-106.9	96.1	-0.03646	mg/L	-0.03646	mg/L	08:10:39
2	K 766.490	647.1	78.6	0.20562	mg/L	0.20562	mg/L	08:10:39
3	Y 360.073	768074.4	768074.4	100.8	%			08:11:34
3	Lu 261.542	494025.1	494025.1	101.0	%			08:11:34
3	Ag 328.068†	-450.1	38.5	0.00036	mg/L	0.00036	mg/L	08:11:37
3	Al 308.215†	5999.3	66.7	-0.02262	mg/L	-0.02262	mg/L	08:11:37
3	As 188.979†	1.6	5.2	0.00577	mg/L	0.00577	mg/L	08:11:57
3	Ba 233.527†	-30.1	21.1	-0.01346	mg/L	-0.01346	mg/L	08:11:57
3	Be 313.107†	-4146.5	323.7	0.00010	mg/L	0.00010	mg/L	08:11:37
3	Co 228.616†	-13.0	4.4	-0.00198	mg/L	-0.00198	mg/L	08:11:57
3	Cr 267.716†	26.9	0.5	0.00011	mg/L	0.00011	mg/L	08:11:37
3	Cu 324.752†	1051.3	37.9	0.00078	mg/L	0.00078	mg/L	08:11:37
3	Fe 273.955†	-268.6	261.5	0.01139	mg/L	0.01139	mg/L	08:11:37
3	Mg 279.077†	-548.7	74.7	-0.19644	mg/L	-0.19644	mg/L	08:11:37
3	Mn 257.610†	46.1	232.2	-0.00067	mg/L	-0.00067	mg/L	08:11:37
3	Ni 231.604†	-15.8	-1.8	-0.00174	mg/L	-0.00174	mg/L	08:11:57
3	Pb 220.353†	14.0	5.8	0.00191	mg/L	0.00191	mg/L	08:11:57
3	Sb 206.836†	49.6	21.8	0.01907	mg/L	0.01907	mg/L	08:11:57
3	Se 196.026†	-6.9	-0.4	-0.00907	mg/L	-0.00907	mg/L	08:11:57
3	Tl 190.801†	-13.6	4.1	-0.00248	mg/L	-0.00248	mg/L	08:11:57
3	V 292.402†	-12.4	3.3	-0.00030	mg/L	-0.00030	mg/L	08:11:37
3	Zn 206.200†	31.4	12.1	-0.00215	mg/L	-0.00215	mg/L	08:11:57
3	Cd 226.502†	-17.6	7.9	-0.00002	mg/L	-0.00002	mg/L	08:11:57
3	Ti 334.940†	118.2	200.6	-0.00107	mg/L	-0.00107	mg/L	08:11:37
3	Ca 227.546†	53.4	-0.5	-0.12771	mg/L	-0.12771	mg/L	08:11:57
3	Na 589.592	-6.4	196.6	-0.00667	mg/L	-0.00667	mg/L	08:10:41
3	K 766.490	655.8	87.3	0.21313	mg/L	0.21313	mg/L	08:10:41

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	764802.8	100.4	%	2.15				2.14%
Lu 261.542	492649.9	100.7	%	2.14				2.12%
Ag 328.068†	30.8	0.00029	mg/L	0.000083	0.00029	mg/L	0.000083	28.83%
Al 308.215†	176.6	-0.01657	mg/L	0.005409	-0.01657	mg/L	0.005409	32.65%
As 188.979†	5.6	0.00614	mg/L	0.002138	0.00614	mg/L	0.002138	34.81%
Ba 233.527†	26.6	-0.01335	mg/L	0.000099	-0.01335	mg/L	0.000099	0.74%
Be 313.107†	337.8	0.00011	mg/L	0.000028	0.00011	mg/L	0.000028	26.15%
Co 228.616†	6.6	-0.00188	mg/L	0.000291	-0.00188	mg/L	0.000291	15.46%
Cr 267.716†	5.3	0.00024	mg/L	0.000531	0.00024	mg/L	0.000531	223.13%
Cu 324.752†	47.5	0.00084	mg/L	0.000191	0.00084	mg/L	0.000191	22.79%
Fe 273.955†	331.7	0.01569	mg/L	0.004250	0.01569	mg/L	0.004250	27.09%
Mg 279.077†	93.6	-0.19489	mg/L	0.003054	-0.19489	mg/L	0.003054	1.57%
Mn 257.610†	299.2	-0.00051	mg/L	0.000181	-0.00051	mg/L	0.000181	35.43%
Ni 231.604†	0.4	-0.00163	mg/L	0.000400	-0.00163	mg/L	0.000400	24.55%
Pb 220.353†	-0.4	0.00022	mg/L	0.001467	0.00022	mg/L	0.001467	653.24%
Sb 206.836†	25.1	0.02160	mg/L	0.003485	0.02160	mg/L	0.003485	16.13%
Se 196.026†	3.0	-0.00417	mg/L	0.005437	-0.00417	mg/L	0.005437	130.47%
Tl 190.801†	4.7	-0.00193	mg/L	0.000835	-0.00193	mg/L	0.000835	43.23%
V 292.402†	16.7	-0.00014	mg/L	0.000231	-0.00014	mg/L	0.000231	163.12%
Zn 206.200†	17.5	-0.00188	mg/L	0.000238	-0.00188	mg/L	0.000238	12.67%
Cd 226.502†	7.0	-0.00005	mg/L	0.000027	-0.00005	mg/L	0.000027	54.83%
Ti 334.940†	240.8	-0.00095	mg/L	0.000101	-0.00095	mg/L	0.000101	10.68%
Ca 227.546†	6.3	-0.08251	mg/L	0.067708	-0.08251	mg/L	0.067708	82.06%
Na 589.592	154.1	-0.01927	mg/L	0.015419	-0.01927	mg/L	0.015419	80.04%

K 766.490	84.9	0.21101 mg/L	0.004706	0.21101 mg/L	0.004706	2.23%

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Sequence No.: 10
Sample ID: ICSA
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 27
Date Collected: 2/9/2012 8:13:06 AM
Data Type: Reprocessed on 2/10/2012 7:27:42 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Y 360.073	702065.9	702065.9	92.13	%			08:14:24
1	Lu 261.542	455141.5	455141.5	93.04	%			08:14:24
1	Ag 328.068†	-649.4	-213.8	-0.00208	mg/L	-0.00208	mg/L	08:14:27
1	Al 308.215†	4142702.4	4446903.5	245.39	mg/L	245.39	mg/L	08:14:24
1	As 188.979†	-12.9	-10.1	-0.00122	mg/L	-0.00122	mg/L	08:14:47
1	Ba 233.527†	65.8	121.7	-0.01140	mg/L	-0.01140	mg/L	08:14:47
1	Be 313.107†	-3313.5	868.2	0.00042	mg/L	0.00042	mg/L	08:14:27
1	Co 228.616†	123.6	150.1	0.00056	mg/L	0.00056	mg/L	08:14:47
1	Cr 267.716†	1537.8	1626.8	0.04265	mg/L	0.04265	mg/L	08:14:47
1	Cu 324.752†	3457.8	2713.6	0.02301	mg/L	0.02301	mg/L	08:14:27
1	Fe 273.955†	1501206.5	1614097.1	98.762	mg/L	98.762	mg/L	08:14:24
1	Mg 279.077†	2827476.2	3039726.7	247.42	mg/L	247.42	mg/L	08:14:24
1	Mn 257.610†	9178.3	10051.8	0.01563	mg/L	0.01563	mg/L	08:14:27
1	Ni 231.604†	348.0	388.0	0.01967	mg/L	0.01967	mg/L	08:14:47
1	Pb 220.353†	-35.3	-45.9	0.00944	mg/L	0.00944	mg/L	08:14:47
1	Sb 206.836†	71.3	49.4	0.01920	mg/L	0.01920	mg/L	08:14:47
1	Se 196.026†	-30.3	-26.1	-0.00054	mg/L	-0.00054	mg/L	08:14:47
1	Tl 190.801†	-35.6	-20.7	-0.00498	mg/L	-0.00498	mg/L	08:14:47
1	V 292.402†	-578.5	-606.2	-0.00094	mg/L	-0.00094	mg/L	08:14:47
1	Zn 206.200†	616.0	643.0	0.02906	mg/L	0.02906	mg/L	08:14:47
1	Cd 226.502†	257.6	302.2	-0.00245	mg/L	-0.00245	mg/L	08:14:47
1	Ti 334.940†	-1248.9	-1258.8	-0.00158	mg/L	-0.00158	mg/L	08:14:27
1	Ca 227.546†	35925.2	38560.7	253.29	mg/L	253.29	mg/L	08:14:27
1	Na 589.592	2660.5	2863.6	0.78397	mg/L	0.78397	mg/L	08:14:15
1	K 766.490	732.4	163.9	0.27954	mg/L	0.27954	mg/L	08:14:15
2	Y 360.073	706150.3	706150.3	92.66	%			08:14:50
2	Lu 261.542	458180.9	458180.9	93.66	%			08:14:50
2	Ag 328.068†	-619.2	-176.9	-0.00172	mg/L	-0.00172	mg/L	08:14:52
2	Al 308.215†	4147065.0	4422024.2	244.02	mg/L	244.02	mg/L	08:14:50
2	As 188.979†	-11.1	-8.1	0.00097	mg/L	0.00097	mg/L	08:15:13
2	Ba 233.527†	64.3	119.6	-0.01145	mg/L	-0.01145	mg/L	08:15:13
2	Be 313.107†	-3313.2	892.1	0.00043	mg/L	0.00043	mg/L	08:14:52
2	Co 228.616†	127.7	153.6	0.00074	mg/L	0.00074	mg/L	08:15:13
2	Cr 267.716†	1541.2	1619.4	0.04246	mg/L	0.04246	mg/L	08:15:13
2	Cu 324.752†	3483.0	2715.8	0.02300	mg/L	0.02300	mg/L	08:14:52
2	Fe 273.955†	1503059.2	1605371.7	98.228	mg/L	98.228	mg/L	08:14:50
2	Mg 279.077†	2829542.9	3021773.5	245.96	mg/L	245.96	mg/L	08:14:50
2	Mn 257.610†	9197.6	10007.0	0.01557	mg/L	0.01557	mg/L	08:14:52
2	Ni 231.604†	343.0	380.1	0.01924	mg/L	0.01924	mg/L	08:15:13
2	Pb 220.353†	-29.5	-39.5	0.01105	mg/L	0.01105	mg/L	08:15:13
2	Sb 206.836†	65.1	42.3	0.01379	mg/L	0.01379	mg/L	08:15:13
2	Se 196.026†	-40.3	-36.5	-0.01581	mg/L	-0.01581	mg/L	08:15:13
2	Tl 190.801†	-35.5	-20.3	-0.00468	mg/L	-0.00468	mg/L	08:15:13
2	V 292.402†	-576.6	-600.0	-0.00091	mg/L	-0.00091	mg/L	08:15:13
2	Zn 206.200†	597.7	619.1	0.02788	mg/L	0.02788	mg/L	08:15:13
2	Cd 226.502†	240.1	281.7	-0.00297	mg/L	-0.00297	mg/L	08:15:13
2	Ti 334.940†	-1250.7	-1251.8	-0.00165	mg/L	-0.00165	mg/L	08:14:52
2	Ca 227.546†	35634.0	37993.6	249.56	mg/L	249.56	mg/L	08:14:52
2	Na 589.592	2777.5	2980.6	0.81865	mg/L	0.81865	mg/L	08:14:17
2	K 766.490	730.7	162.2	0.27806	mg/L	0.27806	mg/L	08:14:17
3	Y 360.073	709904.1	709904.1	93.15	%			08:15:16
3	Lu 261.542	460758.4	460758.4	94.18	%			08:15:16
3	Ag 328.068†	-623.7	-177.9	-0.00173	mg/L	-0.00173	mg/L	08:15:18
3	Al 308.215†	4176848.3	4428876.5	244.40	mg/L	244.40	mg/L	08:15:16
3	As 188.979†	-5.6	-2.3	0.00765	mg/L	0.00765	mg/L	08:15:38
3	Ba 233.527†	67.8	122.9	-0.01138	mg/L	-0.01138	mg/L	08:15:38
3	Be 313.107†	-3237.7	992.1	0.00049	mg/L	0.00049	mg/L	08:15:18

3	Co 228.616†	128.4	153.6	0.00072 mg/L	0.00072 mg/L	08:15:38
3	Cr 267.716†	1533.6	1602.2	0.04199 mg/L	0.04199 mg/L	08:15:38
3	Cu 324.752†	3426.0	2634.5	0.02252 mg/L	0.02252 mg/L	08:15:18
3	Fe 273.955†	1517269.7	1611482.1	98.602 mg/L	98.602 mg/L	08:15:16
3	Mg 279.077†	2856634.2	3033637.1	246.93 mg/L	246.93 mg/L	08:15:16
3	Mn 257.610†	9220.1	9975.9	0.01546 mg/L	0.01546 mg/L	08:15:18
3	Ni 231.604†	341.3	376.3	0.01903 mg/L	0.01903 mg/L	08:15:38
3	Pb 220.353†	-36.7	-47.0	0.00905 mg/L	0.00905 mg/L	08:15:38
3	Sb 206.836†	72.0	49.1	0.01911 mg/L	0.01911 mg/L	08:15:38
3	Se 196.026†	-31.6	-27.1	-0.00205 mg/L	-0.00205 mg/L	08:15:38
3	Tl 190.801†	-35.7	-20.3	-0.00465 mg/L	-0.00465 mg/L	08:15:38
3	V 292.402†	-586.2	-606.8	-0.00096 mg/L	-0.00096 mg/L	08:15:38
3	Zn 206.200†	613.9	632.7	0.02855 mg/L	0.02855 mg/L	08:15:38
3	Cd 226.502†	234.6	274.4	-0.00323 mg/L	-0.00323 mg/L	08:15:38
3	Ti 334.940†	-1158.8	-1146.7	-0.00139 mg/L	-0.00139 mg/L	08:15:18
3	Ca 227.546†	35732.0	37884.8	248.84 mg/L	248.84 mg/L	08:15:18
3	Na 589.592	2738.2	2941.3	0.80700 mg/L	0.80700 mg/L	08:14:19
3	K 766.490	622.8	54.4	0.18457 mg/L	0.18457 mg/L	08:14:19

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	706040.1	92.65	%	0.514				0.56%
Lu 261.542	458026.9	93.63	%	0.575				0.61%
Ag 328.068†	-189.5	-0.00185	mg/L	0.000203	-0.00185	mg/L	0.000203	11.00%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	4432601.4	244.60	mg/L	0.709	244.60	mg/L	0.709	0.29%
QC value within limits for Al 308.215 Recovery = 100.21%								
As 188.979†	-6.9	0.00247	mg/L	0.004619	0.00247	mg/L	0.004619	187.30%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	121.4	-0.01141	mg/L	0.000033	-0.01141	mg/L	0.000033	0.29%
QC value within limits for Ba 233.527 Recovery = -570.53%								
Be 313.107†	917.5	0.00045	mg/L	0.000041	0.00045	mg/L	0.000041	9.06%
QC value within limits for Be 313.107 Recovery = Not calculated								
Co 228.616†	152.4	0.00068	mg/L	0.000097	0.00068	mg/L	0.000097	14.44%
QC value within limits for Co 228.616 Recovery = 16.88%								
Cr 267.716†	1616.2	0.04236	mg/L	0.000342	0.04236	mg/L	0.000342	0.81%
QC value within limits for Cr 267.716 Recovery = 98.52%								
Cu 324.752†	2687.9	0.02284	mg/L	0.000279	0.02284	mg/L	0.000279	1.22%
QC value within limits for Cu 324.752 Recovery = 99.32%								
Fe 273.955†	1610316.9	98.531	mg/L	0.2740	98.531	mg/L	0.2740	0.28%
QC value within limits for Fe 273.955 Recovery = 103.07%								
Mg 279.077†	3031712.4	246.77	mg/L	0.744	246.77	mg/L	0.744	0.30%
QC value within limits for Mg 279.077 Recovery = 99.71%								
Mn 257.610†	10011.6	0.01555	mg/L	0.000085	0.01555	mg/L	0.000085	0.54%
QC value within limits for Mn 257.610 Recovery = 81.86%								
Ni 231.604†	381.4	0.01931	mg/L	0.000328	0.01931	mg/L	0.000328	1.70%
QC value within limits for Ni 231.604 Recovery = 91.97%								
Pb 220.353†	-44.1	0.00984	mg/L	0.001060	0.00984	mg/L	0.001060	10.77%
QC value within limits for Pb 220.353 Recovery = 98.45%								
Sb 206.836†	46.9	0.01737	mg/L	0.003094	0.01737	mg/L	0.003094	17.82%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-29.9	-0.00613	mg/L	0.008413	-0.00613	mg/L	0.008413	137.15%
QC value within limits for Se 196.026 Recovery = Not calculated								
Tl 190.801†	-20.4	-0.00477	mg/L	0.000180	-0.00477	mg/L	0.000180	3.77%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	-604.4	-0.00094	mg/L	0.000028	-0.00094	mg/L	0.000028	3.01%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	631.6	0.02850	mg/L	0.000590	0.02850	mg/L	0.000590	2.07%
QC value within limits for Zn 206.200 Recovery = 101.77%								
Cd 226.502†	286.1	-0.00288	mg/L	0.000398	-0.00288	mg/L	0.000398	13.83%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Ti 334.940†	-1219.1	-0.00154	mg/L	0.000135	-0.00154	mg/L	0.000135	8.77%
QC value within limits for Ti 334.940 Recovery = -7.70%								
Ca 227.546†	38146.4	250.56	mg/L	2.386	250.56	mg/L	2.386	0.95%
QC value within limits for Ca 227.546 Recovery = 106.67%								
Na 589.592	2928.5	0.80321	mg/L	0.017645	0.80321	mg/L	0.017645	2.20%
QC value within limits for Na 589.592 Recovery = Not calculated								
K 766.490	126.8	0.24739	mg/L	0.054411	0.24739	mg/L	0.054411	21.99%
QC value within limits for K 766.490 Recovery = Not calculated								

All analyte(s) passed QC.

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Sequence No.: 11
Sample ID: ICSAB
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 2/9/2012 8:16:47 AM
Data Type: Reprocessed on 2/10/2012 7:27:42 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	706810.0	706810.0	92.75	%			08:18:06
1	Lu 261.542	459508.6	459508.6	93.93	%			08:18:06
1	Ag 328.068†	19302.5	21034.3	0.20348	mg/L	0.20348	mg/L	08:18:08
1	Al 308.215†	4172798.7	4436626.9	244.82	mg/L	244.82	mg/L	08:18:06
1	As 188.979†	62.8	70.6	0.09418	mg/L	0.09418	mg/L	08:18:29
1	Ba 233.527†	22789.8	24313.7	0.48365	mg/L	0.48365	mg/L	08:18:08
1	Be 313.107†	743674.6	796170.6	0.48673	mg/L	0.48673	mg/L	08:18:06
1	Co 228.616†	9986.1	10648.8	0.46897	mg/L	0.46897	mg/L	08:18:29
1	Cr 267.716†	18695.4	19877.6	0.53701	mg/L	0.53701	mg/L	08:18:08
1	Cu 324.752†	80602.1	84808.6	0.52346	mg/L	0.52346	mg/L	08:18:08
1	Fe 273.955†	1511668.8	1609900.6	98.505	mg/L	98.505	mg/L	08:18:06
1	Mg 279.077†	2840319.2	3024516.9	246.19	mg/L	246.19	mg/L	08:18:06
1	Mn 257.610†	204860.0	218287.4	0.51695	mg/L	0.51695	mg/L	08:18:08
1	Ni 231.604†	16915.2	18022.4	0.98843	mg/L	0.98843	mg/L	08:18:08
1	Pb 220.353†	132.8	133.4	0.05836	mg/L	0.05836	mg/L	08:18:29
1	Sb 206.836†	722.0	741.3	0.54870	mg/L	0.54870	mg/L	08:18:29
1	Se 196.026†	-7.2	-1.2	0.03474	mg/L	0.03474	mg/L	08:18:29
1	Tl 190.801†	73.7	96.1	0.09884	mg/L	0.09884	mg/L	08:18:29
1	V 292.402†	38990.8	41526.5	0.48705	mg/L	0.48705	mg/L	08:18:08
1	Zn 206.200†	18885.0	20086.5	0.98781	mg/L	0.98781	mg/L	08:18:08
1	Cd 226.502†	32001.7	34095.4	0.96643	mg/L	0.96643	mg/L	08:18:08
1	Ti 334.940†	-1246.8	-1243.8	-0.00165	mg/L	-0.00165	mg/L	08:18:08
1	Ca 227.546†	35977.9	38249.8	251.11	mg/L	251.11	mg/L	08:18:08
1	Na 589.592	2708.6	2911.6	0.79821	mg/L	0.79821	mg/L	08:17:56
1	K 766.490	614.8	46.3	0.17761	mg/L	0.17761	mg/L	08:17:56
2	Y 360.073	716345.7	716345.7	94.00	%			08:18:32
2	Lu 261.542	464854.2	464854.2	95.02	%			08:18:32
2	Ag 328.068†	19584.7	21095.0	0.20406	mg/L	0.20406	mg/L	08:18:34
2	Al 308.215†	4220777.1	4436031.9	244.78	mg/L	244.78	mg/L	08:18:32
2	As 188.979†	61.0	67.9	0.09112	mg/L	0.09112	mg/L	08:18:55
2	Ba 233.527†	23046.1	24304.5	0.48347	mg/L	0.48347	mg/L	08:18:34
2	Be 313.107†	755169.8	799163.3	0.48856	mg/L	0.48856	mg/L	08:18:32
2	Co 228.616†	10026.9	10569.5	0.46540	mg/L	0.46540	mg/L	08:18:55
2	Cr 267.716†	19010.7	19980.6	0.53980	mg/L	0.53980	mg/L	08:18:34
2	Cu 324.752†	81428.3	84691.3	0.52278	mg/L	0.52278	mg/L	08:18:34
2	Fe 273.955†	1536453.1	1617476.2	98.968	mg/L	98.968	mg/L	08:18:32
2	Mg 279.077†	2887232.1	3039113.9	247.38	mg/L	247.38	mg/L	08:18:32
2	Mn 257.610†	208473.0	219581.6	0.52003	mg/L	0.52003	mg/L	08:18:34
2	Ni 231.604†	17082.1	17991.0	0.98670	mg/L	0.98670	mg/L	08:18:34
2	Pb 220.353†	126.2	124.8	0.05604	mg/L	0.05604	mg/L	08:18:55
2	Sb 206.836†	733.7	744.8	0.55132	mg/L	0.55132	mg/L	08:18:55
2	Se 196.026†	0.8	7.3	0.04719	mg/L	0.04719	mg/L	08:18:55
2	Tl 190.801†	69.4	90.6	0.09387	mg/L	0.09387	mg/L	08:18:55
2	V 292.402†	39529.7	41616.3	0.48812	mg/L	0.48812	mg/L	08:18:34
2	Zn 206.200†	19195.6	20182.3	0.99254	mg/L	0.99254	mg/L	08:18:34
2	Cd 226.502†	32469.5	34195.9	0.96926	mg/L	0.96926	mg/L	08:18:34
2	Ti 334.940†	-1217.1	-1197.3	-0.00151	mg/L	-0.00151	mg/L	08:18:34
2	Ca 227.546†	36510.8	38370.2	251.90	mg/L	251.90	mg/L	08:18:34
2	Na 589.592	2715.5	2918.5	0.80025	mg/L	0.80025	mg/L	08:17:58
2	K 766.490	770.0	201.5	0.31212	mg/L	0.31212	mg/L	08:17:58
3	Y 360.073	709028.0	709028.0	93.04	%			08:18:58
3	Lu 261.542	459775.4	459775.4	93.98	%			08:18:58
3	Ag 328.068†	19279.5	20997.9	0.20313	mg/L	0.20313	mg/L	08:19:00
3	Al 308.215†	4206633.9	4470050.1	246.66	mg/L	246.66	mg/L	08:18:58
3	As 188.979†	58.6	66.0	0.08899	mg/L	0.08899	mg/L	08:19:21
3	Ba 233.527†	22874.0	24389.3	0.48520	mg/L	0.48520	mg/L	08:19:00
3	Be 313.107†	750510.5	802984.7	0.49090	mg/L	0.49090	mg/L	08:18:58

3	Co 228.616†	9977.3	10633.2	0.46824 mg/L	0.46824 mg/L	08:19:21
3	Cr 267.716†	18690.6	19861.0	0.53655 mg/L	0.53655 mg/L	08:19:00
3	Cu 324.752†	80861.0	85034.3	0.52489 mg/L	0.52489 mg/L	08:19:00
3	Fe 273.955†	1525472.4	1623654.0	99.346 mg/L	99.346 mg/L	08:18:58
3	Mg 279.077†	2870538.0	3054915.4	248.66 mg/L	248.66 mg/L	08:18:58
3	Mn 257.610†	205956.0	219327.0	0.51938 mg/L	0.51938 mg/L	08:19:00
3	Ni 231.604†	16907.6	18003.8	0.98741 mg/L	0.98741 mg/L	08:19:00
3	Pb 220.353†	128.1	128.3	0.05713 mg/L	0.05713 mg/L	08:19:21
3	Sb 206.836†	746.0	766.5	0.56810 mg/L	0.56810 mg/L	08:19:21
3	Se 196.026†	-16.1	-10.6	0.02152 mg/L	0.02152 mg/L	08:19:21
3	Tl 190.801†	65.5	87.3	0.09092 mg/L	0.09092 mg/L	08:19:21
3	V 292.402†	39234.0	41761.2	0.48982 mg/L	0.48982 mg/L	08:19:00
3	Zn 206.200†	18876.1	20065.4	0.98677 mg/L	0.98677 mg/L	08:19:00
3	Cd 226.502†	32064.4	34142.3	0.96768 mg/L	0.96768 mg/L	08:19:00
3	Ti 334.940†	-1253.2	-1249.8	-0.00169 mg/L	-0.00169 mg/L	08:19:00
3	Ca 227.546†	36103.5	38361.2	251.84 mg/L	251.84 mg/L	08:19:00
3	Na 589.592	2634.4	2837.5	0.77623 mg/L	0.77623 mg/L	08:18:01
3	K 766.490	631.1	62.6	0.19174 mg/L	0.19174 mg/L	08:18:01

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	710727.9	93.26	%	0.655				0.70%
Lu 261.542	461379.4	94.31	%	0.616				0.65%
Ag 328.068†	21042.4	0.20356	mg/L	0.000472	0.20356	mg/L	0.000472	0.23%
QC value within limits for Ag 328.068 Recovery = 98.81%								
Al 308.215†	4447569.6	245.42	mg/L	1.075	245.42	mg/L	1.075	0.44%
QC value within limits for Al 308.215 Recovery = 101.79%								
As 188.979†	68.1	0.09143	mg/L	0.002610	0.09143	mg/L	0.002610	2.85%
QC value within limits for As 188.979 Recovery = 90.53%								
Ba 233.527†	24335.8	0.48411	mg/L	0.000952	0.48411	mg/L	0.000952	0.20%
QC value within limits for Ba 233.527 Recovery = 97.80%								
Be 313.107†	799439.5	0.48873	mg/L	0.002088	0.48873	mg/L	0.002088	0.43%
QC value within limits for Be 313.107 Recovery = 102.89%								
Co 228.616†	10617.2	0.46754	mg/L	0.001883	0.46754	mg/L	0.001883	0.40%
QC value within limits for Co 228.616 Recovery = 101.42%								
Cr 267.716†	19906.4	0.53779	mg/L	0.001756	0.53779	mg/L	0.001756	0.33%
QC value within limits for Cr 267.716 Recovery = 105.24%								
Cu 324.752†	84844.7	0.52371	mg/L	0.001078	0.52371	mg/L	0.001078	0.21%
QC value within limits for Cu 324.752 Recovery = 95.57%								
Fe 273.955†	1617010.3	98.940	mg/L	0.4215	98.940	mg/L	0.4215	0.43%
QC value within limits for Fe 273.955 Recovery = 104.37%								
Mg 279.077†	3039515.4	247.41	mg/L	1.238	247.41	mg/L	1.238	0.50%
QC value within limits for Mg 279.077 Recovery = 98.53%								
Mn 257.610†	219065.3	0.51879	mg/L	0.001624	0.51879	mg/L	0.001624	0.31%
QC value within limits for Mn 257.610 Recovery = 103.34%								
Ni 231.604†	18005.7	0.98751	mg/L	0.000867	0.98751	mg/L	0.000867	0.09%
QC value within limits for Ni 231.604 Recovery = 100.36%								
Pb 220.353†	128.8	0.05718	mg/L	0.001162	0.05718	mg/L	0.001162	2.03%
QC value within limits for Pb 220.353 Recovery = 93.73%								
Sb 206.836†	750.9	0.55604	mg/L	0.010530	0.55604	mg/L	0.010530	1.89%
QC value within limits for Sb 206.836 Recovery = 94.40%								
Se 196.026†	-1.5	0.03449	mg/L	0.012838	0.03449	mg/L	0.012838	37.23%
QC value within limits for Se 196.026 Recovery = 65.07%								
Tl 190.801†	91.3	0.09454	mg/L	0.004000	0.09454	mg/L	0.004000	4.23%
QC value within limits for Tl 190.801 Recovery = 91.79%								
V 292.402†	41634.6	0.48833	mg/L	0.001396	0.48833	mg/L	0.001396	0.29%
QC value within limits for V 292.402 Recovery = 98.85%								
Zn 206.200†	20111.4	0.98904	mg/L	0.003071	0.98904	mg/L	0.003071	0.31%
QC value within limits for Zn 206.200 Recovery = 96.21%								
Cd 226.502†	34144.5	0.96779	mg/L	0.001418	0.96779	mg/L	0.001418	0.15%
QC value within limits for Cd 226.502 Recovery = 102.96%								
Ti 334.940†	-1230.3	-0.00162	mg/L	0.000092	-0.00162	mg/L	0.000092	5.71%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546†	38327.1	251.61	mg/L	0.441	251.61	mg/L	0.441	0.18%
QC value within limits for Ca 227.546 Recovery = 108.88%								
Na 589.592	2889.2	0.79156	mg/L	0.013319	0.79156	mg/L	0.013319	1.68%
QC value within limits for Na 589.592 Recovery = Not calculated								
K 766.490	103.5	0.22716	mg/L	0.073918	0.22716	mg/L	0.073918	32.54%
QC value within limits for K 766.490 Recovery = Not calculated								

All analyte(s) passed QC.

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Sequence No.: 12
Sample ID: CCV95
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 2/9/2012 8:20:29 AM
Data Type: Reprocessed on 2/10/2012 7:27:43 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV95

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Y 360.073	717758.9	717758.9	94.18	%			08:21:49
1	Lu 261.542	467199.9	467199.9	95.50	%			08:21:49
1	Ag 328.068†	29882.0	31773.9	0.30969	mg/L	0.30969	mg/L	08:21:52
1	Al 308.215†	727138.3	755517.4	41.615	mg/L	41.615	mg/L	08:21:49
1	As 188.979†	848.4	892.1	1.0384	mg/L	1.0384	mg/L	08:22:12
1	Ba 233.527†	471103.0	493346.2	10.078	mg/L	10.078	mg/L	08:21:49
1	Be 313.107†	779538.5	820689.9	0.50828	mg/L	0.50828	mg/L	08:21:49
1	Co 228.616†	53982.6	56542.8	2.5101	mg/L	2.5101	mg/L	08:21:52
1	Cr 267.716†	71887.4	75247.7	2.0371	mg/L	2.0371	mg/L	08:21:52
1	Cu 324.752†	647209.8	676694.7	4.1268	mg/L	4.1268	mg/L	08:21:49
1	Fe 273.955†	321061.1	336712.7	20.585	mg/L	20.585	mg/L	08:21:52
1	Mg 279.077†	1764308.1	1848037.2	150.34	mg/L	150.34	mg/L	08:21:49
1	Mn 257.610†	1640671.3	1718144.8	4.1307	mg/L	4.1307	mg/L	08:21:49
1	Ni 231.604†	43562.3	45628.2	2.5035	mg/L	2.5035	mg/L	08:21:52
1	Pb 220.353†	7174.3	7504.2	2.0502	mg/L	2.0502	mg/L	08:22:12
1	Sb 206.836†	1272.0	1304.6	0.97590	mg/L	0.97590	mg/L	08:22:12
1	Se 196.026†	674.8	713.1	1.0247	mg/L	1.0247	mg/L	08:22:12
1	Tl 190.801†	1015.1	1080.5	0.97615	mg/L	0.97615	mg/L	08:22:12
1	V 292.402†	209319.8	219195.8	2.5370	mg/L	2.5370	mg/L	08:21:52
1	Zn 206.200†	97962.1	102557.8	5.0524	mg/L	5.0524	mg/L	08:21:52
1	Cd 226.502†	16787.3	17603.4	0.50240	mg/L	0.50240	mg/L	08:21:52
1	Ti 334.940†	847984.3	888013.8	2.5525	mg/L	2.5525	mg/L	08:21:49
1	Ca 227.546†	21993.7	22976.3	150.20	mg/L	150.20	mg/L	08:21:52
1	Na 589.592	700799.2	701002.2	207.75	mg/L	207.75	mg/L	08:21:39
1	K 766.490	239720.9	239152.4	207.50	mg/L	207.50	mg/L	08:21:39
2	Y 360.073	720988.9	720988.9	94.61	%			08:22:15
2	Lu 261.542	469869.6	469869.6	96.05	%			08:22:15
2	Ag 328.068†	30502.8	32242.5	0.31426	mg/L	0.31426	mg/L	08:22:17
2	Al 308.215†	729839.1	754003.2	41.531	mg/L	41.531	mg/L	08:22:15
2	As 188.979†	844.6	883.0	1.0283	mg/L	1.0283	mg/L	08:22:38
2	Ba 233.527†	474105.0	493668.8	10.084	mg/L	10.084	mg/L	08:22:15
2	Be 313.107†	785620.7	822384.4	0.50934	mg/L	0.50934	mg/L	08:22:15
2	Co 228.616†	55378.5	57674.9	2.5606	mg/L	2.5606	mg/L	08:22:17
2	Cr 267.716†	73292.8	76283.2	2.0652	mg/L	2.0652	mg/L	08:22:17
2	Cu 324.752†	651122.2	676917.5	4.1282	mg/L	4.1282	mg/L	08:22:15
2	Fe 273.955†	329234.0	343311.9	20.989	mg/L	20.989	mg/L	08:22:17
2	Mg 279.077†	1780304.5	1854195.0	150.84	mg/L	150.84	mg/L	08:22:15
2	Mn 257.610†	1651173.4	1719317.8	4.1335	mg/L	4.1335	mg/L	08:22:15
2	Ni 231.604†	44714.1	46568.3	2.5551	mg/L	2.5551	mg/L	08:22:17
2	Pb 220.353†	7178.7	7466.1	2.0399	mg/L	2.0399	mg/L	08:22:38
2	Sb 206.836†	1294.3	1320.3	0.98756	mg/L	0.98756	mg/L	08:22:38
2	Se 196.026†	672.7	706.8	1.0158	mg/L	1.0158	mg/L	08:22:38
2	Tl 190.801†	1013.4	1072.7	0.96863	mg/L	0.96863	mg/L	08:22:38
2	V 292.402†	213954.0	222775.3	2.5784	mg/L	2.5784	mg/L	08:22:17
2	Zn 206.200†	101075.3	105216.3	5.1833	mg/L	5.1833	mg/L	08:22:17
2	Cd 226.502†	17281.1	18017.7	0.51425	mg/L	0.51425	mg/L	08:22:17
2	Ti 334.940†	856561.2	891898.5	2.5637	mg/L	2.5637	mg/L	08:22:15
2	Ca 227.546†	22469.5	23340.8	152.59	mg/L	152.59	mg/L	08:22:17
2	Na 589.592	691376.1	691579.1	204.96	mg/L	204.96	mg/L	08:21:41
2	K 766.490	236009.0	235440.5	204.28	mg/L	204.28	mg/L	08:21:41
3	Y 360.073	720904.1	720904.1	94.60	%			08:22:41
3	Lu 261.542	469131.5	469131.5	95.90	%			08:22:41
3	Ag 328.068†	30624.1	32418.9	0.31597	mg/L	0.31597	mg/L	08:22:43
3	Al 308.215†	731488.0	756918.3	41.692	mg/L	41.692	mg/L	08:22:41
3	As 188.979†	842.0	881.7	1.0268	mg/L	1.0268	mg/L	08:23:03
3	Ba 233.527†	474900.6	495275.1	10.117	mg/L	10.117	mg/L	08:22:41
3	Be 313.107†	787614.5	825750.7	0.51140	mg/L	0.51140	mg/L	08:22:41

3	Co 228.616†	55600.7	57997.4	2.5750 mg/L	2.5750 mg/L	08:22:43
3	Cr 267.716†	73455.0	76572.4	2.0730 mg/L	2.0730 mg/L	08:22:43
3	Cu 324.752†	654089.5	681078.6	4.1535 mg/L	4.1535 mg/L	08:22:41
3	Fe 273.955†	329416.0	344041.0	21.034 mg/L	21.034 mg/L	08:22:43
3	Mg 279.077†	1781650.9	1858515.6	151.20 mg/L	151.20 mg/L	08:22:41
3	Mn 257.610†	1654956.3	1725967.6	4.1495 mg/L	4.1495 mg/L	08:22:41
3	Ni 231.604†	44855.6	46789.1	2.5673 mg/L	2.5673 mg/L	08:22:43
3	Pb 220.353†	7171.4	7470.3	2.0410 mg/L	2.0410 mg/L	08:23:03
3	Sb 206.836†	1290.4	1318.3	0.98587 mg/L	0.98587 mg/L	08:23:03
3	Se 196.026†	680.6	716.1	1.0293 mg/L	1.0293 mg/L	08:23:03
3	Tl 190.801†	1025.7	1087.2	0.98195 mg/L	0.98195 mg/L	08:23:03
3	V 292.402†	213910.0	223080.0	2.5820 mg/L	2.5820 mg/L	08:22:43
3	Zn 206.200†	101060.7	105366.6	5.1907 mg/L	5.1907 mg/L	08:22:43
3	Cd 226.502†	17184.5	17945.2	0.51217 mg/L	0.51217 mg/L	08:22:43
3	Ti 334.940†	855064.5	891741.0	2.5633 mg/L	2.5633 mg/L	08:22:41
3	Ca 227.546†	22491.4	23400.4	152.97 mg/L	152.97 mg/L	08:22:43
3	Na 589.592	691617.1	691820.1	205.03 mg/L	205.03 mg/L	08:21:44
3	K 766.490	236272.9	235704.4	204.51 mg/L	204.51 mg/L	08:21:44

Mean Data: CCV95

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	719883.9	94.46	%	0.242				0.26%
Lu 261.542	468733.7	95.81	%	0.282				0.29%
Ag 328.068†	32145.1	0.31331	mg/L	0.003246	0.31331	mg/L	0.003246	1.04%
QC value within limits for Ag 328.068 Recovery = 104.44%								
Al 308.215†	755479.6	41.613	mg/L	0.0804	41.613	mg/L	0.0804	0.19%
QC value within limits for Al 308.215 Recovery = 104.03%								
As 188.979†	885.6	1.0312	mg/L	0.00629	1.0312	mg/L	0.00629	0.61%
QC value within limits for As 188.979 Recovery = 103.12%								
Ba 233.527†	494096.7	10.093	mg/L	0.0211	10.093	mg/L	0.0211	0.21%
QC value within limits for Ba 233.527 Recovery = 100.93%								
Be 313.107†	822941.7	0.50967	mg/L	0.001588	0.50967	mg/L	0.001588	0.31%
QC value within limits for Be 313.107 Recovery = 101.93%								
Co 228.616†	57405.0	2.5485	mg/L	0.03405	2.5485	mg/L	0.03405	1.34%
QC value within limits for Co 228.616 Recovery = 101.94%								
Cr 267.716†	76034.4	2.0584	mg/L	0.01887	2.0584	mg/L	0.01887	0.92%
QC value within limits for Cr 267.716 Recovery = 102.92%								
Cu 324.752†	678230.3	4.1362	mg/L	0.01506	4.1362	mg/L	0.01506	0.36%
QC value within limits for Cu 324.752 Recovery = 103.40%								
Fe 273.955†	341355.2	20.869	mg/L	0.2470	20.869	mg/L	0.2470	1.18%
QC value within limits for Fe 273.955 Recovery = 104.35%								
Mg 279.077†	1853582.6	150.79	mg/L	0.429	150.79	mg/L	0.429	0.28%
QC value within limits for Mg 279.077 Recovery = 100.53%								
Mn 257.610†	1721143.4	4.1379	mg/L	0.01014	4.1379	mg/L	0.01014	0.25%
QC value within limits for Mn 257.610 Recovery = 103.45%								
Ni 231.604†	46328.6	2.5420	mg/L	0.03387	2.5420	mg/L	0.03387	1.33%
QC value within limits for Ni 231.604 Recovery = 101.68%								
Pb 220.353†	7480.2	2.0437	mg/L	0.00566	2.0437	mg/L	0.00566	0.28%
QC value within limits for Pb 220.353 Recovery = 102.19%								
Sb 206.836†	1314.4	0.98311	mg/L	0.006303	0.98311	mg/L	0.006303	0.64%
QC value within limits for Sb 206.836 Recovery = 98.31%								
Se 196.026†	712.0	1.0233	mg/L	0.00685	1.0233	mg/L	0.00685	0.67%
QC value within limits for Se 196.026 Recovery = 102.33%								
Tl 190.801†	1080.2	0.97558	mg/L	0.006676	0.97558	mg/L	0.006676	0.68%
QC value within limits for Tl 190.801 Recovery = 97.56%								
V 292.402†	221683.7	2.5658	mg/L	0.02502	2.5658	mg/L	0.02502	0.98%
QC value within limits for V 292.402 Recovery = 102.63%								
Zn 206.200†	104380.2	5.1421	mg/L	0.07784	5.1421	mg/L	0.07784	1.51%
QC value within limits for Zn 206.200 Recovery = 102.84%								
Cd 226.502†	17855.5	0.50961	mg/L	0.006323	0.50961	mg/L	0.006323	1.24%
QC value within limits for Cd 226.502 Recovery = 101.92%								
Ti 334.940†	890551.1	2.5598	mg/L	0.00636	2.5598	mg/L	0.00636	0.25%
QC value within limits for Ti 334.940 Recovery = 102.39%								
Ca 227.546†	23239.2	151.92	mg/L	1.501	151.92	mg/L	1.501	0.99%
QC value within limits for Ca 227.546 Recovery = 101.28%								
Na 589.592	694800.5	205.91	mg/L	1.593	205.91	mg/L	1.593	0.77%
QC value within limits for Na 589.592 Recovery = 102.96%								
K 766.490	236765.7	205.43	mg/L	1.796	205.43	mg/L	1.796	0.87%
QC value within limits for K 766.490 Recovery = 102.71%								

All analyte(s) passed QC.

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Sequence No.: 13 **Autosampler Location: 4**
Sample ID: CCB95 **Date Collected: 2/9/2012 8:24:13 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:44 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB95

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	767706.0	767706.0	100.7	%			08:25:30
1	Lu 261.542	494120.8	494120.8	101.0	%			08:25:30
1	Ag 328.068†	-406.8	81.5	0.00078	mg/L	0.00078	mg/L	08:25:33
1	Al 308.215†	6244.1	307.9	-0.00934	mg/L	-0.00934	mg/L	08:25:33
1	As 188.979†	-3.8	-0.1	-0.00034	mg/L	-0.00034	mg/L	08:25:53
1	Ba 233.527†	127.3	177.0	-0.01027	mg/L	-0.01027	mg/L	08:25:53
1	Be 313.107†	-3962.7	506.5	0.00021	mg/L	0.00021	mg/L	08:25:33
1	Co 228.616†	5.0	22.2	-0.00119	mg/L	-0.00119	mg/L	08:25:53
1	Cr 267.716†	45.0	18.5	0.00059	mg/L	0.00059	mg/L	08:25:53
1	Cu 324.752†	1334.6	318.2	0.00249	mg/L	0.00249	mg/L	08:25:33
1	Fe 273.955†	18.0	545.3	0.02875	mg/L	0.02875	mg/L	08:25:53
1	Mg 279.077†	362.3	976.8	-0.12295	mg/L	-0.12295	mg/L	08:25:33
1	Mn 257.610†	458.8	640.8	0.00031	mg/L	0.00031	mg/L	08:25:53
1	Ni 231.604†	4.7	18.6	-0.00063	mg/L	-0.00063	mg/L	08:25:53
1	Pb 220.353†	15.2	7.1	0.00225	mg/L	0.00225	mg/L	08:25:53
1	Sb 206.836†	47.5	19.7	0.01743	mg/L	0.01743	mg/L	08:25:53
1	Se 196.026†	-11.3	-4.7	-0.01538	mg/L	-0.01538	mg/L	08:25:53
1	Tl 190.801†	-9.3	8.4	0.00148	mg/L	0.00148	mg/L	08:25:53
1	V 292.402†	72.5	87.3	0.00068	mg/L	0.00068	mg/L	08:25:33
1	Zn 206.200†	69.6	49.8	-0.00029	mg/L	-0.00029	mg/L	08:25:53
1	Cd 226.502†	-18.4	7.1	-0.00005	mg/L	-0.00005	mg/L	08:25:53
1	Ti 334.940†	735.3	811.6	0.00069	mg/L	0.00069	mg/L	08:25:33
1	Ca 227.546†	69.5	15.3	-0.02387	mg/L	-0.02387	mg/L	08:25:53
1	Na 589.592	225.1	428.1	0.06197	mg/L	0.06197	mg/L	08:25:22
1	K 766.490	827.2	258.8	0.36179	mg/L	0.36179	mg/L	08:25:22
2	Y 360.073	768090.3	768090.3	100.8	%			08:25:55
2	Lu 261.542	494250.3	494250.3	101.0	%			08:25:55
2	Ag 328.068†	-464.9	24.1	0.00023	mg/L	0.00023	mg/L	08:25:57
2	Al 308.215†	6199.2	261.8	-0.01188	mg/L	-0.01188	mg/L	08:25:57
2	As 188.979†	-4.4	-0.7	-0.00106	mg/L	-0.00106	mg/L	08:26:17
2	Ba 233.527†	82.6	132.7	-0.01118	mg/L	-0.01118	mg/L	08:26:17
2	Be 313.107†	-4012.1	458.6	0.00018	mg/L	0.00018	mg/L	08:25:57
2	Co 228.616†	-2.5	14.7	-0.00152	mg/L	-0.00152	mg/L	08:26:17
2	Cr 267.716†	42.9	16.4	0.00054	mg/L	0.00054	mg/L	08:26:17
2	Cu 324.752†	1255.8	239.9	0.00201	mg/L	0.00201	mg/L	08:25:57
2	Fe 273.955†	-67.2	461.0	0.02360	mg/L	0.02360	mg/L	08:26:17
2	Mg 279.077†	101.2	718.3	-0.14401	mg/L	-0.14401	mg/L	08:25:57
2	Mn 257.610†	274.7	458.4	-0.00013	mg/L	-0.00013	mg/L	08:26:17
2	Ni 231.604†	-4.8	9.2	-0.00115	mg/L	-0.00115	mg/L	08:26:17
2	Pb 220.353†	6.2	-1.9	-0.00019	mg/L	-0.00019	mg/L	08:26:17
2	Sb 206.836†	43.5	15.8	0.01437	mg/L	0.01437	mg/L	08:26:17
2	Se 196.026†	-3.6	2.9	-0.00437	mg/L	-0.00437	mg/L	08:26:17
2	Tl 190.801†	-14.0	3.7	-0.00283	mg/L	-0.00283	mg/L	08:26:17
2	V 292.402†	-0.4	15.2	-0.00016	mg/L	-0.00016	mg/L	08:25:57
2	Zn 206.200†	63.6	43.9	-0.00058	mg/L	-0.00058	mg/L	08:26:17
2	Cd 226.502†	-20.2	5.4	-0.00010	mg/L	-0.00010	mg/L	08:26:17
2	Ti 334.940†	645.3	722.3	0.00044	mg/L	0.00044	mg/L	08:25:57
2	Ca 227.546†	80.0	25.7	0.04449	mg/L	0.04449	mg/L	08:26:17
2	Na 589.592	270.2	473.3	0.07535	mg/L	0.07535	mg/L	08:25:24
2	K 766.490	776.2	207.7	0.31755	mg/L	0.31755	mg/L	08:25:24
3	Y 360.073	774872.8	774872.8	101.7	%			08:26:20
3	Lu 261.542	497777.0	497777.0	101.8	%			08:26:20
3	Ag 328.068†	-438.3	53.5	0.00051	mg/L	0.00051	mg/L	08:26:22
3	Al 308.215†	5924.0	-52.1	-0.02921	mg/L	-0.02921	mg/L	08:26:22
3	As 188.979†	-2.0	1.7	0.00169	mg/L	0.00169	mg/L	08:26:42
3	Ba 233.527†	47.4	97.5	-0.01190	mg/L	-0.01190	mg/L	08:26:42
3	Be 313.107†	-4045.0	454.4	0.00018	mg/L	0.00018	mg/L	08:26:22

3	Co 228.616†	-6.9	10.4	-0.00171	mg/L	-0.00171	mg/L	08:26:42
3	Cr 267.716†	28.9	2.3	0.00016	mg/L	0.00016	mg/L	08:26:42
3	Cu 324.752†	1219.9	195.8	0.00174	mg/L	0.00174	mg/L	08:26:22
3	Fe 273.955†	-157.1	373.0	0.01821	mg/L	0.01821	mg/L	08:26:42
3	Mg 279.077†	-92.2	527.5	-0.15955	mg/L	-0.15955	mg/L	08:26:22
3	Mn 257.610†	156.5	340.4	-0.00041	mg/L	-0.00041	mg/L	08:26:42
3	Ni 231.604†	1.3	15.2	-0.00081	mg/L	-0.00081	mg/L	08:26:42
3	Pb 220.353†	9.9	1.7	0.00078	mg/L	0.00078	mg/L	08:26:42
3	Sb 206.836†	41.7	13.6	0.01270	mg/L	0.01270	mg/L	08:26:42
3	Se 196.026†	-3.2	3.3	-0.00381	mg/L	-0.00381	mg/L	08:26:42
3	Tl 190.801†	-14.6	3.2	-0.00330	mg/L	-0.00330	mg/L	08:26:42
3	V 292.402†	73.6	87.9	0.00068	mg/L	0.00068	mg/L	08:26:22
3	Zn 206.200†	50.3	30.4	-0.00125	mg/L	-0.00125	mg/L	08:26:42
3	Cd 226.502†	-28.2	-2.4	-0.00032	mg/L	-0.00032	mg/L	08:26:42
3	Ti 334.940†	486.8	562.0	-0.00003	mg/L	-0.00003	mg/L	08:26:22
3	Ca 227.546†	66.1	11.5	-0.04852	mg/L	-0.04852	mg/L	08:26:42
3	Na 589.592	167.5	370.5	0.04488	mg/L	0.04488	mg/L	08:25:27
3	K 766.490	704.8	136.3	0.25563	mg/L	0.25563	mg/L	08:25:27

Mean Data: CCB95

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	770223.0	101.1	%	0.53				0.52%
Lu 261.542	495382.7	101.3	%	0.42				0.42%
Ag 328.068†	53.0	0.00050	mg/L	0.000277	0.00050	mg/L	0.000277	54.92%
Al 308.215†	172.5	-0.01681	mg/L	0.010812	-0.01681	mg/L	0.010812	64.32%
As 188.979†	0.3	0.00010	mg/L	0.001430	0.00010	mg/L	0.001430	>999.9%
Ba 233.527†	135.7	-0.01111	mg/L	0.000815	-0.01111	mg/L	0.000815	7.33%
Be 313.107†	473.2	0.00019	mg/L	0.000018	0.00019	mg/L	0.000018	9.65%
Co 228.616†	15.8	-0.00147	mg/L	0.000265	-0.00147	mg/L	0.000265	18.01%
Cr 267.716†	12.4	0.00043	mg/L	0.000238	0.00043	mg/L	0.000238	55.42%
Cu 324.752†	251.3	0.00208	mg/L	0.000378	0.00208	mg/L	0.000378	18.16%
Fe 273.955†	459.8	0.02352	mg/L	0.005271	0.02352	mg/L	0.005271	22.41%
Mg 279.077†	740.8	-0.14217	mg/L	0.018369	-0.14217	mg/L	0.018369	12.92%
Mn 257.610†	479.9	-0.00008	mg/L	0.000364	-0.00008	mg/L	0.000364	461.73%
Ni 231.604†	14.3	-0.00086	mg/L	0.000262	-0.00086	mg/L	0.000262	30.37%
Pb 220.353†	2.3	0.00095	mg/L	0.001228	0.00095	mg/L	0.001228	129.29%
Sb 206.836†	16.4	0.01484	mg/L	0.002399	0.01484	mg/L	0.002399	16.17%
Se 196.026†	0.5	-0.00785	mg/L	0.006527	-0.00785	mg/L	0.006527	83.10%
Tl 190.801†	5.1	-0.00155	mg/L	0.002634	-0.00155	mg/L	0.002634	169.67%
V 292.402†	63.5	0.00040	mg/L	0.000484	0.00040	mg/L	0.000484	121.18%
Zn 206.200†	41.4	-0.00071	mg/L	0.000491	-0.00071	mg/L	0.000491	69.41%
Cd 226.502†	3.3	-0.00015	mg/L	0.000146	-0.00015	mg/L	0.000146	94.66%
Ti 334.940†	698.6	0.00037	mg/L	0.000363	0.00037	mg/L	0.000363	98.76%
Ca 227.546†	17.5	-0.00930	mg/L	0.048188	-0.00930	mg/L	0.048188	518.30%
Na 589.592	424.0	0.06073	mg/L	0.015272	0.06073	mg/L	0.015272	25.15%
K 766.490	200.9	0.31166	mg/L	0.053323	0.31166	mg/L	0.053323	17.11%

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Sequence No.: 14
Sample ID: MB-64540#PBW26~PBW
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 2/9/2012 8:27:52 AM
Data Type: Reprocessed on 2/10/2012 7:27:44 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: MB-64540#PBW26~PBW

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Y 360.073	799642.6	799642.6	104.9	%			08:29:09
1	Lu 261.542	515921.6	515921.6	105.5	%			08:29:09
1	Ag 328.068†	-504.2	6.1	0.00005	mg/L	0.00005	mg/L	08:29:11
1	Al 308.215†	5870.1	-308.0	-0.04329	mg/L	-0.04329	mg/L	08:29:11
1	As 188.979†	1.2	4.9	0.00531	mg/L	0.00531	mg/L	08:29:32
1	Ba 233.527†	-31.5	21.0	-0.01346	mg/L	-0.01346	mg/L	08:29:32
1	Be 313.107†	-4245.2	404.4	0.00015	mg/L	0.00015	mg/L	08:29:11
1	Co 228.616†	-14.9	3.1	-0.00203	mg/L	-0.00203	mg/L	08:29:32
1	Cr 267.716†	44.8	16.4	0.00054	mg/L	0.00054	mg/L	08:29:11
1	Cu 324.752†	1067.1	8.8	0.00060	mg/L	0.00060	mg/L	08:29:11

1	Fe 273.955†	-383.9	163.4	0.00539	mg/L	0.00539	mg/L	08:29:11
1	Mg 279.077†	-356.9	279.6	-0.17975	mg/L	-0.17975	mg/L	08:29:11
1	Mn 257.610†	-123.6	69.4	-0.00107	mg/L	-0.00107	mg/L	08:29:11
1	Ni 231.604†	-12.3	2.2	-0.00153	mg/L	-0.00153	mg/L	08:29:32
1	Pb 220.353†	1.3	-6.7	-0.00152	mg/L	-0.00152	mg/L	08:29:32
1	Sb 206.836†	32.2	3.3	0.00463	mg/L	0.00463	mg/L	08:29:32
1	Se 196.026†	-8.4	-1.5	-0.01072	mg/L	-0.01072	mg/L	08:29:32
1	Tl 190.801†	-7.5	10.5	0.00338	mg/L	0.00338	mg/L	08:29:32
1	V 292.402†	-14.0	2.3	-0.00031	mg/L	-0.00031	mg/L	08:29:11
1	Zn 206.200†	37.0	16.0	-0.00196	mg/L	-0.00196	mg/L	08:29:32
1	Cd 226.502†	-24.0	2.5	-0.00018	mg/L	-0.00018	mg/L	08:29:32
1	Ti 334.940†	128.5	205.4	-0.00106	mg/L	-0.00106	mg/L	08:29:11
1	Ca 227.546†	43.0	-12.7	-0.20751	mg/L	-0.20751	mg/L	08:29:32
1	Na 589.592	-48.7	154.4	-0.01920	mg/L	-0.01920	mg/L	08:29:01
1	K 766.490	622.0	53.5	0.18383	mg/L	0.18383	mg/L	08:29:01
2	Y 360.073	791010.3	791010.3	103.8	%			08:29:34
2	Lu 261.542	510580.9	510580.9	104.4	%			08:29:34
2	Ag 328.068†	-484.7	19.8	0.00018	mg/L	0.00018	mg/L	08:29:36
2	Al 308.215†	5888.2	-232.4	-0.03914	mg/L	-0.03914	mg/L	08:29:36
2	As 188.979†	-0.3	3.4	0.00368	mg/L	0.00368	mg/L	08:29:56
2	Ba 233.527†	-32.1	20.2	-0.01348	mg/L	-0.01348	mg/L	08:29:56
2	Be 313.107†	-4215.0	391.2	0.00014	mg/L	0.00014	mg/L	08:29:36
2	Co 228.616†	-9.7	7.9	-0.00182	mg/L	-0.00182	mg/L	08:29:56
2	Cr 267.716†	24.2	-2.9	0.00001	mg/L	0.00001	mg/L	08:29:36
2	Cu 324.752†	1063.9	16.3	0.00065	mg/L	0.00065	mg/L	08:29:36
2	Fe 273.955†	-429.3	116.1	0.00249	mg/L	0.00249	mg/L	08:29:36
2	Mg 279.077†	-480.9	157.3	-0.18971	mg/L	-0.18971	mg/L	08:29:36
2	Mn 257.610†	-111.0	80.2	-0.00104	mg/L	-0.00104	mg/L	08:29:36
2	Ni 231.604†	-18.8	-4.1	-0.00187	mg/L	-0.00187	mg/L	08:29:56
2	Pb 220.353†	5.8	-2.4	-0.00033	mg/L	-0.00033	mg/L	08:29:56
2	Sb 206.836†	30.8	2.2	0.00380	mg/L	0.00380	mg/L	08:29:56
2	Se 196.026†	-3.0	3.6	-0.00336	mg/L	-0.00336	mg/L	08:29:56
2	Tl 190.801†	-14.0	4.2	-0.00245	mg/L	-0.00245	mg/L	08:29:56
2	V 292.402†	-25.7	-9.1	-0.00044	mg/L	-0.00044	mg/L	08:29:36
2	Zn 206.200†	31.7	11.4	-0.00219	mg/L	-0.00219	mg/L	08:29:56
2	Cd 226.502†	-23.5	2.8	-0.00017	mg/L	-0.00017	mg/L	08:29:56
2	Ti 334.940†	85.0	165.0	-0.00117	mg/L	-0.00117	mg/L	08:29:36
2	Ca 227.546†	59.4	3.5	-0.10140	mg/L	-0.10140	mg/L	08:29:56
2	Na 589.592	-125.4	77.7	-0.04193	mg/L	-0.04193	mg/L	08:29:03
2	K 766.490	619.5	51.0	0.18166	mg/L	0.18166	mg/L	08:29:03
3	Y 360.073	781516.1	781516.1	102.6	%			08:29:59
3	Lu 261.542	504473.2	504473.2	103.1	%			08:29:59
3	Ag 328.068†	-462.9	35.4	0.00033	mg/L	0.00033	mg/L	08:30:01
3	Al 308.215†	5717.7	-329.5	-0.04449	mg/L	-0.04449	mg/L	08:30:01
3	As 188.979†	-0.6	3.1	0.00330	mg/L	0.00330	mg/L	08:30:21
3	Ba 233.527†	-31.2	20.7	-0.01347	mg/L	-0.01347	mg/L	08:30:21
3	Be 313.107†	-4217.9	339.5	0.00011	mg/L	0.00011	mg/L	08:30:01
3	Co 228.616†	-16.4	1.4	-0.00211	mg/L	-0.00211	mg/L	08:30:21
3	Cr 267.716†	39.9	12.6	0.00043	mg/L	0.00043	mg/L	08:30:01
3	Cu 324.752†	1077.1	41.4	0.00080	mg/L	0.00080	mg/L	08:30:01
3	Fe 273.955†	-427.5	112.9	0.00230	mg/L	0.00230	mg/L	08:30:01
3	Mg 279.077†	-477.7	154.8	-0.18991	mg/L	-0.18991	mg/L	08:30:01
3	Mn 257.610†	-113.6	76.4	-0.00105	mg/L	-0.00105	mg/L	08:30:01
3	Ni 231.604†	-16.8	-2.4	-0.00178	mg/L	-0.00178	mg/L	08:30:21
3	Pb 220.353†	4.7	-3.5	-0.00062	mg/L	-0.00062	mg/L	08:30:21
3	Sb 206.836†	31.0	2.8	0.00426	mg/L	0.00426	mg/L	08:30:21
3	Se 196.026†	-1.9	4.6	-0.00188	mg/L	-0.00188	mg/L	08:30:21
3	Tl 190.801†	-15.0	3.1	-0.00345	mg/L	-0.00345	mg/L	08:30:21
3	V 292.402†	-35.2	-18.6	-0.00055	mg/L	-0.00055	mg/L	08:30:01
3	Zn 206.200†	35.6	15.5	-0.00198	mg/L	-0.00198	mg/L	08:30:21
3	Cd 226.502†	-21.9	4.0	-0.00013	mg/L	-0.00013	mg/L	08:30:21
3	Ti 334.940†	68.5	150.0	-0.00121	mg/L	-0.00121	mg/L	08:30:01
3	Ca 227.546†	55.9	0.8	-0.11918	mg/L	-0.11918	mg/L	08:30:21
3	Na 589.592	-6.4	196.6	-0.00667	mg/L	-0.00667	mg/L	08:29:05
3	K 766.490	632.1	63.6	0.19259	mg/L	0.19259	mg/L	08:29:05

Mean Data: MB-64540#PBW26~PBW

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	790723.0	103.8	%	1.19				1.15%

Lu 261.542	510325.2	104.3	%	1.17				1.12%
Ag 328.068†	20.4	0.00019	mg/L	0.000141	0.00019	mg/L	0.000141	74.15%
Al 308.215†	-290.0	-0.04231	mg/L	0.002809	-0.04231	mg/L	0.002809	6.64%
As 188.979†	3.8	0.00410	mg/L	0.001068	0.00410	mg/L	0.001068	26.05%
Ba 233.527†	20.6	-0.01347	mg/L	0.000008	-0.01347	mg/L	0.000008	0.06%
Be 313.107†	378.3	0.00013	mg/L	0.000021	0.00013	mg/L	0.000021	16.33%
Co 228.616†	4.1	-0.00199	mg/L	0.000151	-0.00199	mg/L	0.000151	7.61%
Cr 267.716†	8.7	0.00033	mg/L	0.000277	0.00033	mg/L	0.000277	84.16%
Cu 324.752†	22.2	0.00068	mg/L	0.000104	0.00068	mg/L	0.000104	15.22%
Fe 273.955†	130.8	0.00339	mg/L	0.001731	0.00339	mg/L	0.001731	51.01%
Mg 279.077†	197.3	-0.18646	mg/L	0.005810	-0.18646	mg/L	0.005810	3.12%
Mn 257.610†	75.3	-0.00105	mg/L	0.000013	-0.00105	mg/L	0.000013	1.27%
Ni 231.604†	-1.4	-0.00173	mg/L	0.000178	-0.00173	mg/L	0.000178	10.31%
Pb 220.353†	-4.2	-0.00082	mg/L	0.000617	-0.00082	mg/L	0.000617	74.91%
Sb 206.836†	2.7	0.00423	mg/L	0.000413	0.00423	mg/L	0.000413	9.75%
Se 196.026†	2.3	-0.00532	mg/L	0.004735	-0.00532	mg/L	0.004735	88.96%
Tl 190.801†	5.9	-0.00084	mg/L	0.003693	-0.00084	mg/L	0.003693	439.55%
V 292.402†	-8.4	-0.00043	mg/L	0.000121	-0.00043	mg/L	0.000121	28.01%
Zn 206.200†	14.3	-0.00204	mg/L	0.000126	-0.00204	mg/L	0.000126	6.16%
Cd 226.502†	3.1	-0.00016	mg/L	0.000023	-0.00016	mg/L	0.000023	14.79%
Ti 334.940†	173.5	-0.00115	mg/L	0.000080	-0.00115	mg/L	0.000080	6.97%
Ca 227.546†	-2.8	-0.14270	mg/L	0.056832	-0.14270	mg/L	0.056832	39.83%
Na 589.592	142.9	-0.02260	mg/L	0.017871	-0.02260	mg/L	0.017871	79.08%
K 766.490	56.0	0.18603	mg/L	0.005786	0.18603	mg/L	0.005786	3.11%

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Sequence No.: 15
Sample ID: LCS-64540#LCS26~LCS
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 2/9/2012 8:31:30 AM
Data Type: Reprocessed on 2/10/2012 7:27:45 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LCS-64540#LCS26~LCS

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Y 360.073	777946.0	777946.0	102.1	%			08:32:47
1	Lu 261.542	508557.8	508557.8	104.0	%			08:32:47
1	Ag 328.068†	1628.4	2050.7	0.01989	mg/L	0.01989	mg/L	08:32:49
1	Al 308.215†	13499.0	7111.3	0.36337	mg/L	0.36337	mg/L	08:32:49
1	As 188.979†	12.4	15.6	0.01795	mg/L	0.01795	mg/L	08:33:10
1	Ba 233.527†	19880.5	19175.0	0.37834	mg/L	0.37834	mg/L	08:32:49
1	Be 313.107†	12244.7	16208.6	0.00981	mg/L	0.00981	mg/L	08:32:49
1	Co 228.616†	2290.5	2220.6	0.09693	mg/L	0.09693	mg/L	08:33:10
1	Cr 267.716†	772.9	717.4	0.01949	mg/L	0.01949	mg/L	08:33:10
1	Cu 324.752†	8992.9	7647.7	0.04719	mg/L	0.04719	mg/L	08:32:49
1	Fe 273.955†	2696.7	3121.6	0.18527	mg/L	0.18527	mg/L	08:32:49
1	Mg 279.077†	123206.2	119136.5	9.5014	mg/L	9.5014	mg/L	08:32:49
1	Mn 257.610†	12936.3	12630.7	0.02888	mg/L	0.02888	mg/L	08:32:49
1	Ni 231.604†	1473.3	1431.1	0.07697	mg/L	0.07697	mg/L	08:33:10
1	Pb 220.353†	81.8	70.7	0.01972	mg/L	0.01972	mg/L	08:33:10
1	Sb 206.836†	165.0	131.4	0.10382	mg/L	0.10382	mg/L	08:33:10
1	Se 196.026†	45.1	49.9	0.06346	mg/L	0.06346	mg/L	08:33:10
1	Tl 190.801†	41.0	57.1	0.04585	mg/L	0.04585	mg/L	08:33:10
1	V 292.402†	8458.8	8152.5	0.09401	mg/L	0.09401	mg/L	08:32:49
1	Zn 206.200†	2510.6	2396.0	0.11526	mg/L	0.11526	mg/L	08:33:10
1	Cd 226.502†	333.1	345.7	0.00966	mg/L	0.00966	mg/L	08:33:10
1	Ti 334.940†	-68.8	17.4	-0.00146	mg/L	-0.00146	mg/L	08:32:49
1	Ca 227.546†	1611.0	1496.3	9.6875	mg/L	9.6875	mg/L	08:33:10
1	Na 589.592	33074.2	33277.2	9.8003	mg/L	9.8003	mg/L	08:32:39
1	K 766.490	11547.2	10978.7	9.6566	mg/L	9.6566	mg/L	08:32:39
2	Y 360.073	777918.6	777918.6	102.1	%			08:33:12
2	Lu 261.542	508403.2	508403.2	103.9	%			08:33:12
2	Ag 328.068†	1625.3	2048.2	0.01987	mg/L	0.01987	mg/L	08:33:14
2	Al 308.215†	13461.1	7078.7	0.36156	mg/L	0.36156	mg/L	08:33:14
2	As 188.979†	12.3	15.5	0.01777	mg/L	0.01777	mg/L	08:33:34
2	Ba 233.527†	19924.6	19223.3	0.37933	mg/L	0.37933	mg/L	08:33:14
2	Be 313.107†	12412.6	16373.7	0.00991	mg/L	0.00991	mg/L	08:33:14
2	Co 228.616†	2286.0	2216.9	0.09676	mg/L	0.09676	mg/L	08:33:34
2	Cr 267.716†	764.9	709.9	0.01928	mg/L	0.01928	mg/L	08:33:34

2	Cu 324.752†	9051.7	7706.9	0.04755	mg/L	0.04755	mg/L	08:33:14
2	Fe 273.955†	2719.9	3144.6	0.18667	mg/L	0.18667	mg/L	08:33:14
2	Mg 279.077†	123917.3	119856.8	9.5600	mg/L	9.5600	mg/L	08:33:14
2	Mn 257.610†	12999.8	12695.6	0.02904	mg/L	0.02904	mg/L	08:33:14
2	Ni 231.604†	1477.9	1436.0	0.07723	mg/L	0.07723	mg/L	08:33:34
2	Pb 220.353†	72.6	61.9	0.01732	mg/L	0.01732	mg/L	08:33:34
2	Sb 206.836†	165.9	132.3	0.10451	mg/L	0.10451	mg/L	08:33:34
2	Se 196.026†	39.8	44.8	0.05613	mg/L	0.05613	mg/L	08:33:34
2	Tl 190.801†	48.9	64.7	0.05283	mg/L	0.05283	mg/L	08:33:34
2	V 292.402†	8537.0	8230.2	0.09491	mg/L	0.09491	mg/L	08:33:14
2	Zn 206.200†	2493.5	2380.3	0.11448	mg/L	0.11448	mg/L	08:33:34
2	Cd 226.502†	323.5	336.6	0.00940	mg/L	0.00940	mg/L	08:33:34
2	Ti 334.940†	-24.2	60.3	-0.00134	mg/L	-0.00134	mg/L	08:33:14
2	Ca 227.546†	1611.7	1497.4	9.6949	mg/L	9.6949	mg/L	08:33:34
2	Na 589.592	33211.1	33414.2	9.8409	mg/L	9.8409	mg/L	08:32:41
2	K 766.490	11560.3	10991.8	9.6680	mg/L	9.6680	mg/L	08:32:41
3	Y 360.073	776246.0	776246.0	101.9	%			08:33:37
3	Lu 261.542	507146.3	507146.3	103.7	%			08:33:37
3	Ag 328.068†	1590.9	2018.9	0.01959	mg/L	0.01959	mg/L	08:33:39
3	Al 308.215†	13580.4	7225.9	0.36967	mg/L	0.36967	mg/L	08:33:39
3	As 188.979†	13.3	16.5	0.01893	mg/L	0.01893	mg/L	08:33:59
3	Ba 233.527†	19879.4	19227.2	0.37941	mg/L	0.37941	mg/L	08:33:39
3	Be 313.107†	12334.1	16327.6	0.00989	mg/L	0.00989	mg/L	08:33:39
3	Co 228.616†	2314.4	2249.7	0.09823	mg/L	0.09823	mg/L	08:33:59
3	Cr 267.716†	780.6	726.8	0.01974	mg/L	0.01974	mg/L	08:33:59
3	Cu 324.752†	9057.3	7733.9	0.04772	mg/L	0.04772	mg/L	08:33:39
3	Fe 273.955†	2854.2	3280.7	0.19500	mg/L	0.19500	mg/L	08:33:39
3	Mg 279.077†	123457.1	119708.4	9.5480	mg/L	9.5480	mg/L	08:33:39
3	Mn 257.610†	12945.3	12674.0	0.02899	mg/L	0.02899	mg/L	08:33:39
3	Ni 231.604†	1492.7	1453.8	0.07822	mg/L	0.07822	mg/L	08:33:59
3	Pb 220.353†	79.7	68.9	0.01922	mg/L	0.01922	mg/L	08:33:59
3	Sb 206.836†	175.1	141.6	0.11171	mg/L	0.11171	mg/L	08:33:59
3	Se 196.026†	33.7	39.0	0.04774	mg/L	0.04774	mg/L	08:33:59
3	Tl 190.801†	42.5	58.6	0.04722	mg/L	0.04722	mg/L	08:33:59
3	V 292.402†	8554.4	8267.4	0.09534	mg/L	0.09534	mg/L	08:33:39
3	Zn 206.200†	2528.0	2419.5	0.11641	mg/L	0.11641	mg/L	08:33:59
3	Cd 226.502†	338.2	351.5	0.00983	mg/L	0.00983	mg/L	08:33:59
3	Ti 334.940†	-12.0	72.0	-0.00131	mg/L	-0.00131	mg/L	08:33:39
3	Ca 227.546†	1614.6	1504.0	9.7380	mg/L	9.7380	mg/L	08:33:59
3	Na 589.592	32999.3	33202.3	9.7781	mg/L	9.7781	mg/L	08:32:43
3	K 766.490	11527.6	10959.1	9.6396	mg/L	9.6396	mg/L	08:32:43

Mean Data: LCS-64540#LCS26~LCS

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	777370.2	102.0	%	0.13				0.13%
Lu 261.542	508035.8	103.8	%	0.16				0.15%
Ag 328.068†	2039.3	0.01979	mg/L	0.000170	0.01979	mg/L	0.000170	0.86%
Al 308.215†	7138.6	0.36487	mg/L	0.004258	0.36487	mg/L	0.004258	1.17%
As 188.979†	15.9	0.01822	mg/L	0.000625	0.01822	mg/L	0.000625	3.43%
Ba 233.527†	19208.5	0.37903	mg/L	0.000595	0.37903	mg/L	0.000595	0.16%
Be 313.107†	16303.3	0.00987	mg/L	0.000052	0.00987	mg/L	0.000052	0.53%
Co 228.616†	2229.1	0.09731	mg/L	0.000803	0.09731	mg/L	0.000803	0.82%
Cr 267.716†	718.0	0.01950	mg/L	0.000230	0.01950	mg/L	0.000230	1.18%
Cu 324.752†	7696.1	0.04749	mg/L	0.000269	0.04749	mg/L	0.000269	0.57%
Fe 273.955†	3182.3	0.18898	mg/L	0.005259	0.18898	mg/L	0.005259	2.78%
Mg 279.077†	119567.2	9.5365	mg/L	0.03098	9.5365	mg/L	0.03098	0.32%
Mn 257.610†	12666.8	0.02897	mg/L	0.000079	0.02897	mg/L	0.000079	0.27%
Ni 231.604†	1440.3	0.07747	mg/L	0.000656	0.07747	mg/L	0.000656	0.85%
Pb 220.353†	67.2	0.01875	mg/L	0.001266	0.01875	mg/L	0.001266	6.75%
Sb 206.836†	135.1	0.10668	mg/L	0.004368	0.10668	mg/L	0.004368	4.09%
Se 196.026†	44.6	0.05578	mg/L	0.007865	0.05578	mg/L	0.007865	14.10%
Tl 190.801†	60.1	0.04863	mg/L	0.003694	0.04863	mg/L	0.003694	7.59%
V 292.402†	8216.7	0.09475	mg/L	0.000679	0.09475	mg/L	0.000679	0.72%
Zn 206.200†	2398.6	0.11539	mg/L	0.000972	0.11539	mg/L	0.000972	0.84%
Cd 226.502†	344.6	0.00963	mg/L	0.000215	0.00963	mg/L	0.000215	2.23%
Ti 334.940†	49.9	-0.00137	mg/L	0.000082	-0.00137	mg/L	0.000082	6.01%
Ca 227.546†	1499.2	9.7068	mg/L	0.02729	9.7068	mg/L	0.02729	0.28%
Na 589.592	33297.9	9.8064	mg/L	0.03185	9.8064	mg/L	0.03185	0.32%
K 766.490	10976.5	9.6547	mg/L	0.01427	9.6547	mg/L	0.01427	0.15%

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Sequence No.: 16 **Autosampler Location: 40**
Sample ID: L0147-04A~MB9B17 **Date Collected: 2/9/2012 8:35:09 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:46 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L0147-04A~MB9B17

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	759269.0	759269.0	99.63	%			08:36:26
1	Lu 261.542	498415.4	498415.4	101.9	%			08:36:26
1	Ag 328.068†	-455.0	37.7	0.00036	mg/L	0.00036	mg/L	08:36:26
1	Al 308.215†	6130.4	143.1	-0.02379	mg/L	-0.02379	mg/L	08:36:26
1	As 188.979†	-4.2	-0.5	-0.00024	mg/L	-0.00024	mg/L	08:36:46
1	Ba 233.527†	1001.7	1034.1	0.00726	mg/L	0.00726	mg/L	08:36:46
1	Be 313.107†	-4269.3	239.3	0.00004	mg/L	0.00004	mg/L	08:36:26
1	Co 228.616†	81.5	97.2	0.00215	mg/L	0.00215	mg/L	08:36:46
1	Cr 267.716†	38.3	11.5	0.00013	mg/L	0.00013	mg/L	08:36:46
1	Cu 324.752†	1271.7	245.2	0.00207	mg/L	0.00207	mg/L	08:36:26
1	Fe 273.955†	5990.4	6407.2	0.38665	mg/L	0.38665	mg/L	08:36:26
1	Mg 279.077†	147376.8	145272.4	11.634	mg/L	11.634	mg/L	08:36:26
1	Mn 257.610†	389259.4	382255.3	0.91871	mg/L	0.91871	mg/L	08:36:26
1	Ni 231.604†	26.5	39.9	0.00054	mg/L	0.00054	mg/L	08:36:46
1	Pb 220.353†	6.2	-1.9	0.00007	mg/L	0.00007	mg/L	08:36:46
1	Sb 206.836†	34.3	6.3	0.00670	mg/L	0.00670	mg/L	08:36:46
1	Se 196.026†	-11.5	-4.8	-0.01627	mg/L	-0.01627	mg/L	08:36:46
1	Tl 190.801†	-8.0	9.8	0.00310	mg/L	0.00310	mg/L	08:36:46
1	V 292.402†	-30.0	-13.9	-0.00047	mg/L	-0.00047	mg/L	08:36:26
1	Zn 206.200†	9455.4	9261.6	0.45312	mg/L	0.45312	mg/L	08:36:26
1	Cd 226.502†	-30.0	-4.1	-0.00041	mg/L	-0.00041	mg/L	08:36:46
1	Ti 334.940†	-60.8	23.9	-0.00056	mg/L	-0.00056	mg/L	08:36:26
1	Ca 227.546†	5954.7	5791.2	37.950	mg/L	37.950	mg/L	08:36:26
1	Na 589.592	32763.5	32966.5	9.7082	mg/L	9.7082	mg/L	08:36:18
1	K 766.490	2864.2	2295.7	2.1279	mg/L	2.1279	mg/L	08:36:18
2	Y 360.073	745378.0	745378.0	97.81	%			08:36:49
2	Lu 261.542	489255.0	489255.0	100.0	%			08:36:49
2	Ag 328.068†	-483.6	0.7	0.00000	mg/L	0.00000	mg/L	08:36:49
2	Al 308.215†	6118.2	243.5	-0.01827	mg/L	-0.01827	mg/L	08:36:49
2	As 188.979†	-0.5	3.2	0.00396	mg/L	0.00396	mg/L	08:37:09
2	Ba 233.527†	996.6	1047.4	0.00753	mg/L	0.00753	mg/L	08:37:09
2	Be 313.107†	-4228.1	202.1	0.00002	mg/L	0.00002	mg/L	08:36:49
2	Co 228.616†	83.9	101.1	0.00232	mg/L	0.00232	mg/L	08:37:09
2	Cr 267.716†	34.0	7.9	0.00003	mg/L	0.00003	mg/L	08:37:09
2	Cu 324.752†	1315.3	312.1	0.00247	mg/L	0.00247	mg/L	08:36:49
2	Fe 273.955†	5916.6	6443.5	0.38887	mg/L	0.38887	mg/L	08:36:49
2	Mg 279.077†	144422.8	145027.1	11.614	mg/L	11.614	mg/L	08:36:49
2	Mn 257.610†	381903.7	382053.7	0.91822	mg/L	0.91822	mg/L	08:36:49
2	Ni 231.604†	26.2	40.1	0.00055	mg/L	0.00055	mg/L	08:37:09
2	Pb 220.353†	3.6	-4.4	-0.00060	mg/L	-0.00060	mg/L	08:37:09
2	Sb 206.836†	32.7	5.4	0.00600	mg/L	0.00600	mg/L	08:37:09
2	Se 196.026†	-7.9	-1.4	-0.01130	mg/L	-0.01130	mg/L	08:37:09
2	Tl 190.801†	-9.7	7.9	0.00136	mg/L	0.00136	mg/L	08:37:09
2	V 292.402†	-72.6	-57.1	-0.00097	mg/L	-0.00097	mg/L	08:36:49
2	Zn 206.200†	9200.0	9180.0	0.44911	mg/L	0.44911	mg/L	08:36:49
2	Cd 226.502†	-24.2	1.1	-0.00026	mg/L	-0.00026	mg/L	08:37:09
2	Ti 334.940†	-87.0	-3.4	-0.00064	mg/L	-0.00064	mg/L	08:36:49
2	Ca 227.546†	5872.8	5818.8	38.131	mg/L	38.131	mg/L	08:36:49
2	Na 589.592	32513.3	32716.4	9.6340	mg/L	9.6340	mg/L	08:36:20
2	K 766.490	2922.2	2353.7	2.1782	mg/L	2.1782	mg/L	08:36:20
3	Y 360.073	780418.1	780418.1	102.4	%			08:37:12
3	Lu 261.542	512509.2	512509.2	104.8	%			08:37:12
3	Ag 328.068†	-497.5	9.4	0.00008	mg/L	0.00008	mg/L	08:37:12
3	Al 308.215†	6180.3	25.2	-0.03011	mg/L	-0.03011	mg/L	08:37:12
3	As 188.979†	-1.2	2.6	0.00324	mg/L	0.00324	mg/L	08:37:32
3	Ba 233.527†	994.3	1000.0	0.00656	mg/L	0.00656	mg/L	08:37:32
3	Be 313.107†	-4290.9	334.0	0.00010	mg/L	0.00010	mg/L	08:37:12
3	Co 228.616†	67.4	81.6	0.00145	mg/L	0.00145	mg/L	08:37:32

3	Cr 267.716†	42.4	14.4	0.00021	mg/L	0.00021	mg/L	08:37:32
3	Cu 324.752†	1333.2	269.5	0.00221	mg/L	0.00221	mg/L	08:37:12
3	Fe 273.955†	6066.6	6318.3	0.38124	mg/L	0.38124	mg/L	08:37:12
3	Mg 279.077†	146440.2	140400.4	11.237	mg/L	11.237	mg/L	08:37:12
3	Mn 257.610†	387143.0	369728.2	0.88856	mg/L	0.88856	mg/L	08:37:12
3	Ni 231.604†	29.9	42.5	0.00068	mg/L	0.00068	mg/L	08:37:32
3	Pb 220.353†	21.0	12.1	0.00387	mg/L	0.00387	mg/L	08:37:32
3	Sb 206.836†	28.8	0.2	0.00194	mg/L	0.00194	mg/L	08:37:32
3	Se 196.026†	-8.7	-1.9	-0.01198	mg/L	-0.01198	mg/L	08:37:32
3	Tl 190.801†	-9.5	8.5	0.00195	mg/L	0.00195	mg/L	08:37:32
3	V 292.402†	-22.7	-6.1	-0.00038	mg/L	-0.00038	mg/L	08:37:12
3	Zn 206.200†	9441.6	8993.3	0.43992	mg/L	0.43992	mg/L	08:37:12
3	Cd 226.502†	-22.6	3.7	-0.00018	mg/L	-0.00018	mg/L	08:37:32
3	Ti 334.940†	-88.9	-1.2	-0.00067	mg/L	-0.00067	mg/L	08:37:12
3	Ca 227.546†	5901.9	5580.2	36.563	mg/L	36.563	mg/L	08:37:12
3	Na 589.592	33245.1	33448.1	9.8510	mg/L	9.8510	mg/L	08:36:22
3	K 766.490	3007.4	2438.9	2.2521	mg/L	2.2521	mg/L	08:36:22

Mean Data: L0147-04A~MB9B17

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	761688.4	99.95	%	2.315				2.32%
Lu 261.542	500059.9	102.2	%	2.39				2.34%
Ag 328.068†	15.9	0.00015	mg/L	0.000187	0.00015	mg/L	0.000187	127.63%
Al 308.215†	137.3	-0.02406	mg/L	0.005924	-0.02406	mg/L	0.005924	24.63%
As 188.979†	1.8	0.00232	mg/L	0.002249	0.00232	mg/L	0.002249	96.92%
Ba 233.527†	1027.2	0.00712	mg/L	0.000500	0.00712	mg/L	0.000500	7.03%
Be 313.107†	258.5	0.00005	mg/L	0.000042	0.00005	mg/L	0.000042	75.56%
Co 228.616†	93.3	0.00197	mg/L	0.000462	0.00197	mg/L	0.000462	23.39%
Cr 267.716†	11.3	0.00012	mg/L	0.000092	0.00012	mg/L	0.000092	74.09%
Cu 324.752†	275.6	0.00225	mg/L	0.000206	0.00225	mg/L	0.000206	9.17%
Fe 273.955†	6389.7	0.38559	mg/L	0.003929	0.38559	mg/L	0.003929	1.02%
Mg 279.077†	143566.6	11.495	mg/L	0.2236	11.495	mg/L	0.2236	1.95%
Mn 257.610†	378012.4	0.90850	mg/L	0.017267	0.90850	mg/L	0.017267	1.90%
Ni 231.604†	40.8	0.00059	mg/L	0.000079	0.00059	mg/L	0.000079	13.26%
Pb 220.353†	1.9	0.00111	mg/L	0.002412	0.00111	mg/L	0.002412	216.91%
Sb 206.836†	4.0	0.00488	mg/L	0.002574	0.00488	mg/L	0.002574	52.75%
Se 196.026†	-2.7	-0.01318	mg/L	0.002696	-0.01318	mg/L	0.002696	20.45%
Tl 190.801†	8.7	0.00214	mg/L	0.000880	0.00214	mg/L	0.000880	41.21%
V 292.402†	-25.7	-0.00061	mg/L	0.000317	-0.00061	mg/L	0.000317	52.24%
Zn 206.200†	9145.0	0.44738	mg/L	0.006770	0.44738	mg/L	0.006770	1.51%
Cd 226.502†	0.2	-0.00028	mg/L	0.000115	-0.00028	mg/L	0.000115	40.78%
Ti 334.940†	6.4	-0.00062	mg/L	0.000056	-0.00062	mg/L	0.000056	8.92%
Ca 227.546†	5730.0	37.548	mg/L	0.8582	37.548	mg/L	0.8582	2.29%
Na 589.592	33043.7	9.7311	mg/L	0.11026	9.7311	mg/L	0.11026	1.13%
K 766.490	2362.8	2.1861	mg/L	0.06247	2.1861	mg/L	0.06247	2.86%

Sequence No.: 17
Sample ID: L0147-05A~MB9B19
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 41
Date Collected: 2/9/2012 8:38:41 AM
Data Type: Reprocessed on 2/10/2012 7:27:47 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0147-05A~MB9B19

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Y 360.073	765855.6	765855.6	100.5	%			08:39:58
1	Lu 261.542	502383.6	502383.6	102.7	%			08:39:58
1	Ag 328.068†	-518.8	-20.9	-0.00021	mg/L	-0.00021	mg/L	08:40:00
1	Al 308.215†	6172.0	136.0	-0.02497	mg/L	-0.02497	mg/L	08:40:00
1	As 188.979†	-0.3	3.4	0.00484	mg/L	0.00484	mg/L	08:40:20
1	Ba 233.527†	1286.4	1303.6	0.01277	mg/L	0.01277	mg/L	08:40:20
1	Be 313.107†	-4044.0	491.8	0.00020	mg/L	0.00020	mg/L	08:40:00
1	Co 228.616†	3.4	20.6	-0.00167	mg/L	-0.00167	mg/L	08:40:20
1	Cr 267.716†	25.9	-0.8	-0.00011	mg/L	-0.00011	mg/L	08:40:20
1	Cu 324.752†	1069.4	38.3	0.00127	mg/L	0.00127	mg/L	08:40:00
1	Fe 273.955†	137227.3	134155.9	8.2046	mg/L	8.2046	mg/L	08:40:00

1	Mg 279.077†	225438.6	220144.3	17.733	mg/L	17.733	mg/L	08:39:58
1	Mn 257.610†	143588.6	140009.4	0.33531	mg/L	0.33531	mg/L	08:40:00
1	Ni 231.604†	25.7	38.9	0.00049	mg/L	0.00049	mg/L	08:40:20
1	Pb 220.353†	-2.5	-10.5	-0.00222	mg/L	-0.00222	mg/L	08:40:20
1	Sb 206.836†	30.8	2.7	0.00346	mg/L	0.00346	mg/L	08:40:20
1	Se 196.026†	-13.0	-6.2	-0.01458	mg/L	-0.01458	mg/L	08:40:20
1	Tl 190.801†	-8.4	9.4	0.00368	mg/L	0.00368	mg/L	08:40:20
1	V 292.402†	-98.6	-80.4	-0.00074	mg/L	-0.00074	mg/L	08:40:00
1	Zn 206.200†	42959.8	41814.1	2.0554	mg/L	2.0554	mg/L	08:40:00
1	Cd 226.502†	-4.4	21.0	-0.00055	mg/L	-0.00055	mg/L	08:40:20
1	Ti 334.940†	-243.0	-153.0	-0.00100	mg/L	-0.00100	mg/L	08:40:00
1	Ca 227.546†	6882.4	6648.4	43.584	mg/L	43.584	mg/L	08:40:00
1	Na 589.592	38786.7	38989.8	11.494	mg/L	11.494	mg/L	08:39:50
1	K 766.490	3981.1	3412.6	3.0964	mg/L	3.0964	mg/L	08:39:50
2	Y 360.073	764096.8	764096.8	100.3	%			08:40:23
2	Lu 261.542	499627.1	499627.1	102.1	%			08:40:23
2	Ag 328.068†	-457.1	36.7	0.00035	mg/L	0.00035	mg/L	08:40:25
2	Al 308.215†	6221.5	217.7	-0.02054	mg/L	-0.02054	mg/L	08:40:25
2	As 188.979†	-1.7	2.0	0.00324	mg/L	0.00324	mg/L	08:40:45
2	Ba 233.527†	1284.9	1309.1	0.01288	mg/L	0.01288	mg/L	08:40:45
2	Be 313.107†	-4173.5	343.3	0.00011	mg/L	0.00011	mg/L	08:40:25
2	Co 228.616†	8.2	25.3	-0.00147	mg/L	-0.00147	mg/L	08:40:45
2	Cr 267.716†	24.5	-2.1	-0.00015	mg/L	-0.00015	mg/L	08:40:45
2	Cu 324.752†	1064.5	39.2	0.00130	mg/L	0.00130	mg/L	08:40:25
2	Fe 273.955†	140679.0	138272.8	8.4565	mg/L	8.4565	mg/L	08:40:25
2	Mg 279.077†	223363.8	219324.0	17.666	mg/L	17.666	mg/L	08:40:23
2	Mn 257.610†	145642.5	142791.9	0.34201	mg/L	0.34201	mg/L	08:40:25
2	Ni 231.604†	29.5	42.8	0.00070	mg/L	0.00070	mg/L	08:40:45
2	Pb 220.353†	17.0	8.7	0.00299	mg/L	0.00299	mg/L	08:40:45
2	Sb 206.836†	27.9	0.0	0.00136	mg/L	0.00136	mg/L	08:40:45
2	Se 196.026†	-8.1	-1.5	-0.00768	mg/L	-0.00768	mg/L	08:40:45
2	Tl 190.801†	-9.6	8.2	0.00257	mg/L	0.00257	mg/L	08:40:45
2	V 292.402†	-25.4	-9.3	0.00010	mg/L	0.00010	mg/L	08:40:25
2	Zn 206.200†	43767.5	42835.7	2.1057	mg/L	2.1057	mg/L	08:40:25
2	Cd 226.502†	-1.1	24.2	-0.00048	mg/L	-0.00048	mg/L	08:40:45
2	Ti 334.940†	-184.1	-96.7	-0.00082	mg/L	-0.00082	mg/L	08:40:25
2	Ca 227.546†	6910.6	6713.0	44.008	mg/L	44.008	mg/L	08:40:25
2	Na 589.592	38425.6	38628.6	11.387	mg/L	11.387	mg/L	08:39:52
2	K 766.490	3991.9	3423.4	3.1057	mg/L	3.1057	mg/L	08:39:52
3	Y 360.073	748968.5	748968.5	98.28	%			08:40:47
3	Lu 261.542	489704.1	489704.1	100.1	%			08:40:47
3	Ag 328.068†	-431.0	53.7	0.00051	mg/L	0.00051	mg/L	08:40:49
3	Al 308.215†	6264.7	384.3	-0.01146	mg/L	-0.01146	mg/L	08:40:49
3	As 188.979†	-5.3	-1.6	-0.00085	mg/L	-0.00085	mg/L	08:41:10
3	Ba 233.527†	1283.3	1333.0	0.01337	mg/L	0.01337	mg/L	08:41:10
3	Be 313.107†	-4157.3	276.7	0.00007	mg/L	0.00007	mg/L	08:40:49
3	Co 228.616†	-0.2	17.0	-0.00185	mg/L	-0.00185	mg/L	08:41:10
3	Cr 267.716†	34.4	8.3	0.00013	mg/L	0.00013	mg/L	08:41:10
3	Cu 324.752†	1043.4	39.3	0.00131	mg/L	0.00131	mg/L	08:40:49
3	Fe 273.955†	140940.7	141325.5	8.6434	mg/L	8.6434	mg/L	08:40:49
3	Mg 279.077†	220192.6	220587.7	17.769	mg/L	17.769	mg/L	08:40:47
3	Mn 257.610†	145534.5	145573.7	0.34871	mg/L	0.34871	mg/L	08:40:49
3	Ni 231.604†	15.1	28.9	-0.00006	mg/L	-0.00006	mg/L	08:41:10
3	Pb 220.353†	3.0	-5.0	-0.00073	mg/L	-0.00073	mg/L	08:41:10
3	Sb 206.836†	29.2	1.9	0.00280	mg/L	0.00280	mg/L	08:41:10
3	Se 196.026†	-5.8	0.7	-0.00447	mg/L	-0.00447	mg/L	08:41:10
3	Tl 190.801†	-19.4	-1.8	-0.00658	mg/L	-0.00658	mg/L	08:41:10
3	V 292.402†	-31.4	-15.8	0.00004	mg/L	0.00004	mg/L	08:40:49
3	Zn 206.200†	43696.2	43632.9	2.1449	mg/L	2.1449	mg/L	08:40:49
3	Cd 226.502†	-4.4	20.9	-0.00060	mg/L	-0.00060	mg/L	08:41:10
3	Ti 334.940†	-216.4	-132.6	-0.00090	mg/L	-0.00090	mg/L	08:40:49
3	Ca 227.546†	6908.0	6847.6	44.893	mg/L	44.893	mg/L	08:40:49
3	Na 589.592	38074.7	38277.7	11.283	mg/L	11.283	mg/L	08:39:54
3	K 766.490	4014.0	3445.5	3.1249	mg/L	3.1249	mg/L	08:39:54

Mean Data: L0147-05A~MB9B19

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	759640.3	99.68	%	1.218				1.22%
Lu 261.542	497238.3	101.6	%	1.36				1.34%

Ag 328.068†	23.2	0.00022	mg/L	0.000377	0.00022	mg/L	0.000377	174.99%
Al 308.215†	246.0	-0.01899	mg/L	0.006886	-0.01899	mg/L	0.006886	36.26%
As 188.979†	1.2	0.00241	mg/L	0.002937	0.00241	mg/L	0.002937	121.80%
Ba 233.527†	1315.2	0.01301	mg/L	0.000319	0.01301	mg/L	0.000319	2.45%
Be 313.107†	370.6	0.00012	mg/L	0.000067	0.00012	mg/L	0.000067	54.83%
Co 228.616†	21.0	-0.00166	mg/L	0.000189	-0.00166	mg/L	0.000189	11.38%
Cr 267.716†	1.8	-0.00004	mg/L	0.000153	-0.00004	mg/L	0.000153	348.52%
Cu 324.752†	38.9	0.00129	mg/L	0.000016	0.00129	mg/L	0.000016	1.27%
Fe 273.955†	137918.1	8.4348	mg/L	0.22020	8.4348	mg/L	0.22020	2.61%
Mg 279.077†	220018.7	17.723	mg/L	0.0523	17.723	mg/L	0.0523	0.29%
Mn 257.610†	142791.7	0.34201	mg/L	0.006698	0.34201	mg/L	0.006698	1.96%
Ni 231.604†	36.9	0.00038	mg/L	0.000392	0.00038	mg/L	0.000392	103.39%
Pb 220.353†	-2.3	0.00002	mg/L	0.002683	0.00002	mg/L	0.002683	>999.9%
Sb 206.836†	1.5	0.00254	mg/L	0.001076	0.00254	mg/L	0.001076	42.39%
Se 196.026†	-2.3	-0.00891	mg/L	0.005166	-0.00891	mg/L	0.005166	57.99%
Tl 190.801†	5.3	-0.00011	mg/L	0.005631	-0.00011	mg/L	0.005631	>999.9%
V 292.402†	-35.2	-0.00020	mg/L	0.000467	-0.00020	mg/L	0.000467	233.93%
Zn 206.200†	42760.9	2.1020	mg/L	0.04488	2.1020	mg/L	0.04488	2.13%
Cd 226.502†	22.0	-0.00054	mg/L	0.000058	-0.00054	mg/L	0.000058	10.65%
Ti 334.940†	-127.5	-0.00091	mg/L	0.000089	-0.00091	mg/L	0.000089	9.79%
Ca 227.546†	6736.3	44.162	mg/L	0.6680	44.162	mg/L	0.6680	1.51%
Na 589.592	38632.0	11.388	mg/L	0.1055	11.388	mg/L	0.1055	0.93%
K 766.490	3427.2	3.1090	mg/L	0.01453	3.1090	mg/L	0.01453	0.47%

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Sequence No.: 18
Sample ID: L0147-06A~MB9B20
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 42
Date Collected: 2/9/2012 8:42:19 AM
Data Type: Reprocessed on 2/10/2012 7:27:47 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0147-06A~MB9B20

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	794817.1	794817.1	104.3	%			08:43:36
1	Lu 261.542	514532.8	514532.8	105.2	%			08:43:36
1	Ag 328.068†	-445.0	61.1	0.00058	mg/L	0.00058	mg/L	08:43:38
1	Al 308.215†	5939.7	-226.7	-0.03882	mg/L	-0.03882	mg/L	08:43:38
1	As 188.979†	-0.2	3.5	0.00376	mg/L	0.00376	mg/L	08:43:58
1	Ba 233.527†	-43.1	10.0	-0.01369	mg/L	-0.01369	mg/L	08:43:58
1	Be 313.107†	-4279.4	361.0	0.00012	mg/L	0.00012	mg/L	08:43:38
1	Co 228.616†	-11.6	6.2	-0.00190	mg/L	-0.00190	mg/L	08:43:58
1	Cr 267.716†	30.1	2.5	0.00016	mg/L	0.00016	mg/L	08:43:38
1	Cu 324.752†	1090.6	33.8	0.00076	mg/L	0.00076	mg/L	08:43:38
1	Fe 273.955†	-105.5	427.1	0.02153	mg/L	0.02153	mg/L	08:43:38
1	Mg 279.077†	-405.2	232.8	-0.18355	mg/L	-0.18355	mg/L	08:43:38
1	Mn 257.610†	-1.1	185.6	-0.00079	mg/L	-0.00079	mg/L	08:43:38
1	Ni 231.604†	-20.9	-6.0	-0.00198	mg/L	-0.00198	mg/L	08:43:58
1	Pb 220.353†	-2.7	-10.5	-0.00255	mg/L	-0.00255	mg/L	08:43:58
1	Sb 206.836†	32.5	3.6	0.00486	mg/L	0.00486	mg/L	08:43:58
1	Se 196.026†	-9.0	-2.1	-0.01159	mg/L	-0.01159	mg/L	08:43:58
1	Tl 190.801†	-10.0	8.1	0.00115	mg/L	0.00115	mg/L	08:43:58
1	V 292.402†	-14.2	2.1	-0.00031	mg/L	-0.00031	mg/L	08:43:38
1	Zn 206.200†	166.6	139.4	0.00412	mg/L	0.00412	mg/L	08:43:58
1	Cd 226.502†	-21.5	4.9	-0.00011	mg/L	-0.00011	mg/L	08:43:58
1	Ti 334.940†	29.1	111.3	-0.00132	mg/L	-0.00132	mg/L	08:43:38
1	Ca 227.546†	51.3	-4.7	-0.15528	mg/L	-0.15528	mg/L	08:43:58
1	Na 589.592	-47.1	156.0	-0.01872	mg/L	-0.01872	mg/L	08:43:28
1	K 766.490	615.9	47.4	0.17856	mg/L	0.17856	mg/L	08:43:28
2	Y 360.073	786671.5	786671.5	103.2	%			08:44:00
2	Lu 261.542	508654.5	508654.5	104.0	%			08:44:00
2	Ag 328.068†	-462.5	39.5	0.00037	mg/L	0.00037	mg/L	08:44:03
2	Al 308.215†	5968.0	-134.3	-0.03374	mg/L	-0.03374	mg/L	08:44:03
2	As 188.979†	-7.9	-3.9	-0.00472	mg/L	-0.00472	mg/L	08:44:23
2	Ba 233.527†	-43.9	8.7	-0.01371	mg/L	-0.01371	mg/L	08:44:23
2	Be 313.107†	-4192.2	397.8	0.00014	mg/L	0.00014	mg/L	08:44:03
2	Co 228.616†	-11.8	5.9	-0.00191	mg/L	-0.00191	mg/L	08:44:23
2	Cr 267.716†	11.3	-15.2	-0.00032	mg/L	-0.00032	mg/L	08:44:03
2	Cu 324.752†	1116.7	70.9	0.00098	mg/L	0.00098	mg/L	08:44:03

2	Fe 273.955†	-268.1	269.6	0.01188	mg/L	0.01188	mg/L	08:44:03
2	Mg 279.077†	-456.7	178.8	-0.18796	mg/L	-0.18796	mg/L	08:44:03
2	Mn 257.610†	-86.3	103.6	-0.00098	mg/L	-0.00098	mg/L	08:44:03
2	Ni 231.604†	-9.8	4.5	-0.00140	mg/L	-0.00140	mg/L	08:44:23
2	Pb 220.353†	7.1	-1.2	0.00000	mg/L	0.00000	mg/L	08:44:23
2	Sb 206.836†	33.6	5.0	0.00600	mg/L	0.00600	mg/L	08:44:23
2	Se 196.026†	-3.1	3.4	-0.00361	mg/L	-0.00361	mg/L	08:44:23
2	Tl 190.801†	-12.1	6.0	-0.00076	mg/L	-0.00076	mg/L	08:44:23
2	V 292.402†	53.1	66.6	0.00044	mg/L	0.00044	mg/L	08:44:03
2	Zn 206.200†	157.6	132.5	0.00378	mg/L	0.00378	mg/L	08:44:23
2	Cd 226.502†	-35.0	-8.4	-0.00049	mg/L	-0.00049	mg/L	08:44:23
2	Ti 334.940†	-1.0	82.6	-0.00140	mg/L	-0.00140	mg/L	08:44:03
2	Ca 227.546†	66.6	10.6	-0.05444	mg/L	-0.05444	mg/L	08:44:23
2	Na 589.592	5.2	208.3	-0.00321	mg/L	-0.00321	mg/L	08:43:30
2	K 766.490	679.9	111.5	0.23407	mg/L	0.23407	mg/L	08:43:30
3	Y 360.073	796644.1	796644.1	104.5	%			08:44:25
3	Lu 261.542	515940.3	515940.3	105.5	%			08:44:25
3	Ag 328.068†	-476.4	32.5	0.00031	mg/L	0.00031	mg/L	08:44:27
3	Al 308.215†	5939.1	-242.7	-0.03970	mg/L	-0.03970	mg/L	08:44:27
3	As 188.979†	-1.8	2.0	0.00206	mg/L	0.00206	mg/L	08:44:48
3	Ba 233.527†	-43.6	9.6	-0.01369	mg/L	-0.01369	mg/L	08:44:48
3	Be 313.107†	-4270.3	380.7	0.00013	mg/L	0.00013	mg/L	08:44:27
3	Co 228.616†	-13.3	4.6	-0.00196	mg/L	-0.00196	mg/L	08:44:48
3	Cr 267.716†	4.7	-21.6	-0.00049	mg/L	-0.00049	mg/L	08:44:27
3	Cu 324.752†	1062.2	4.1	0.00057	mg/L	0.00057	mg/L	08:44:27
3	Fe 273.955†	-224.4	314.7	0.01465	mg/L	0.01465	mg/L	08:44:27
3	Mg 279.077†	-494.0	149.6	-0.19033	mg/L	-0.19033	mg/L	08:44:27
3	Mn 257.610†	-55.4	134.0	-0.00091	mg/L	-0.00091	mg/L	08:44:27
3	Ni 231.604†	-15.8	-1.1	-0.00171	mg/L	-0.00171	mg/L	08:44:48
3	Pb 220.353†	10.3	1.8	0.00080	mg/L	0.00080	mg/L	08:44:48
3	Sb 206.836†	33.0	3.9	0.00518	mg/L	0.00518	mg/L	08:44:48
3	Se 196.026†	-8.9	-2.0	-0.01142	mg/L	-0.01142	mg/L	08:44:48
3	Tl 190.801†	-14.3	4.1	-0.00253	mg/L	-0.00253	mg/L	08:44:48
3	V 292.402†	-38.0	-20.5	-0.00057	mg/L	-0.00057	mg/L	08:44:27
3	Zn 206.200†	158.4	131.2	0.00371	mg/L	0.00371	mg/L	08:44:48
3	Cd 226.502†	-26.3	0.4	-0.00024	mg/L	-0.00024	mg/L	08:44:48
3	Ti 334.940†	5.5	88.8	-0.00139	mg/L	-0.00139	mg/L	08:44:27
3	Ca 227.546†	57.5	1.1	-0.11719	mg/L	-0.11719	mg/L	08:44:48
3	Na 589.592	-139.7	63.3	-0.04619	mg/L	-0.04619	mg/L	08:43:32
3	K 766.490	703.7	135.3	0.25471	mg/L	0.25471	mg/L	08:43:32

Mean Data: L0147-06A~MB9B20

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	792710.9	104.0	%	0.70				0.67%
Lu 261.542	513042.5	104.9	%	0.79				0.75%
Ag 328.068†	44.4	0.00042	mg/L	0.000144	0.00042	mg/L	0.000144	34.25%
Al 308.215†	-201.2	-0.03742	mg/L	0.003217	-0.03742	mg/L	0.003217	8.60%
As 188.979†	0.5	0.00037	mg/L	0.004489	0.00037	mg/L	0.004489	>999.9%
Ba 233.527†	9.4	-0.01370	mg/L	0.000013	-0.01370	mg/L	0.000013	0.10%
Be 313.107†	379.8	0.00013	mg/L	0.000011	0.00013	mg/L	0.000011	8.60%
Co 228.616†	5.6	-0.00192	mg/L	0.000037	-0.00192	mg/L	0.000037	1.90%
Cr 267.716†	-11.5	-0.00022	mg/L	0.000338	-0.00022	mg/L	0.000338	156.48%
Cu 324.752†	36.3	0.00077	mg/L	0.000204	0.00077	mg/L	0.000204	26.47%
Fe 273.955†	337.2	0.01602	mg/L	0.004967	0.01602	mg/L	0.004967	31.01%
Mg 279.077†	187.1	-0.18728	mg/L	0.003440	-0.18728	mg/L	0.003440	1.84%
Mn 257.610†	141.0	-0.00089	mg/L	0.000100	-0.00089	mg/L	0.000100	11.17%
Ni 231.604†	-0.9	-0.00170	mg/L	0.000288	-0.00170	mg/L	0.000288	16.99%
Pb 220.353†	-3.3	-0.00058	mg/L	0.001749	-0.00058	mg/L	0.001749	301.07%
Sb 206.836†	4.2	0.00535	mg/L	0.000585	0.00535	mg/L	0.000585	10.94%
Se 196.026†	-0.2	-0.00887	mg/L	0.004560	-0.00887	mg/L	0.004560	51.39%
Tl 190.801†	6.0	-0.00071	mg/L	0.001842	-0.00071	mg/L	0.001842	258.78%
V 292.402†	16.1	-0.00015	mg/L	0.000523	-0.00015	mg/L	0.000523	350.93%
Zn 206.200†	134.3	0.00387	mg/L	0.000218	0.00387	mg/L	0.000218	5.63%
Cd 226.502†	-1.0	-0.00028	mg/L	0.000193	-0.00028	mg/L	0.000193	69.41%
Ti 334.940†	94.2	-0.00137	mg/L	0.000041	-0.00137	mg/L	0.000041	3.02%
Ca 227.546†	2.3	-0.10897	mg/L	0.050918	-0.10897	mg/L	0.050918	46.73%
Na 589.592	142.5	-0.02271	mg/L	0.021762	-0.02271	mg/L	0.021762	95.84%
K 766.490	98.0	0.22245	mg/L	0.039381	0.22245	mg/L	0.039381	17.70%

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Sequence No.: 19 **Autosampler Location: 43**
Sample ID: L0147-07A~MB9B21 **Date Collected: 2/9/2012 8:45:57 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:48 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L0147-07A~MB9B21

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	784823.3	784823.3	103.0	%			08:47:14
1	Lu 261.542	513810.9	513810.9	105.0	%			08:47:14
1	Ag 328.068†	-489.8	17.9	0.00016	mg/L	0.00016	mg/L	08:47:16
1	Al 308.215†	6642.7	450.5	-0.00818	mg/L	-0.00818	mg/L	08:47:16
1	As 188.979†	-1.2	2.5	0.00396	mg/L	0.00396	mg/L	08:47:36
1	Ba 233.527†	1286.3	1275.7	0.01220	mg/L	0.01220	mg/L	08:47:36
1	Be 313.107†	-4091.8	533.9	0.00023	mg/L	0.00023	mg/L	08:47:16
1	Co 228.616†	-10.4	7.4	-0.00230	mg/L	-0.00230	mg/L	08:47:36
1	Cr 267.716†	50.7	22.2	0.00052	mg/L	0.00052	mg/L	08:47:36
1	Cu 324.752†	1235.8	173.5	0.00213	mg/L	0.00213	mg/L	08:47:16
1	Fe 273.955†	150285.8	143617.1	8.7836	mg/L	8.7836	mg/L	08:47:16
1	Mg 279.077†	241811.1	230850.5	18.605	mg/L	18.605	mg/L	08:47:14
1	Mn 257.610†	126875.9	120987.3	0.28949	mg/L	0.28949	mg/L	08:47:16
1	Ni 231.604†	9.0	22.5	-0.00041	mg/L	-0.00041	mg/L	08:47:36
1	Pb 220.353†	1.7	-6.3	-0.00107	mg/L	-0.00107	mg/L	08:47:36
1	Sb 206.836†	34.8	5.8	0.00582	mg/L	0.00582	mg/L	08:47:36
1	Se 196.026†	-8.2	-1.4	-0.00732	mg/L	-0.00732	mg/L	08:47:36
1	Tl 190.801†	-14.2	4.0	-0.00117	mg/L	-0.00117	mg/L	08:47:36
1	V 292.402†	-74.7	-55.6	-0.00042	mg/L	-0.00042	mg/L	08:47:16
1	Zn 206.200†	65580.5	62421.3	3.0697	mg/L	3.0697	mg/L	08:47:16
1	Cd 226.502†	-3.3	22.2	-0.00058	mg/L	-0.00058	mg/L	08:47:36
1	Ti 334.940†	743.7	791.6	0.00183	mg/L	0.00183	mg/L	08:47:16
1	Ca 227.546†	7675.7	7254.7	47.570	mg/L	47.570	mg/L	08:47:16
1	Na 589.592	39767.1	39970.1	11.784	mg/L	11.784	mg/L	08:47:06
1	K 766.490	4036.3	3467.8	3.1443	mg/L	3.1443	mg/L	08:47:06
2	Y 360.073	773406.9	773406.9	101.5	%			08:47:39
2	Lu 261.542	505409.6	505409.6	103.3	%			08:47:39
2	Ag 328.068†	-494.5	5.6	0.00005	mg/L	0.00005	mg/L	08:47:41
2	Al 308.215†	6557.1	472.8	-0.00706	mg/L	-0.00706	mg/L	08:47:41
2	As 188.979†	-5.7	-1.8	-0.00095	mg/L	-0.00095	mg/L	08:48:01
2	Ba 233.527†	1261.9	1272.4	0.01213	mg/L	0.01213	mg/L	08:48:01
2	Be 313.107†	-3991.7	566.0	0.00025	mg/L	0.00025	mg/L	08:47:41
2	Co 228.616†	-6.1	11.3	-0.00214	mg/L	-0.00214	mg/L	08:48:01
2	Cr 267.716†	51.3	23.6	0.00055	mg/L	0.00055	mg/L	08:48:01
2	Cu 324.752†	1243.7	200.7	0.00231	mg/L	0.00231	mg/L	08:47:41
2	Fe 273.955†	152005.9	147660.6	9.0310	mg/L	9.0310	mg/L	08:47:41
2	Mg 279.077†	238348.8	231326.3	18.644	mg/L	18.644	mg/L	08:47:39
2	Mn 257.610†	127262.4	123369.5	0.29523	mg/L	0.29523	mg/L	08:47:41
2	Ni 231.604†	5.6	19.3	-0.00059	mg/L	-0.00059	mg/L	08:48:01
2	Pb 220.353†	3.9	-4.2	-0.00048	mg/L	-0.00048	mg/L	08:48:01
2	Sb 206.836†	30.7	2.4	0.00316	mg/L	0.00316	mg/L	08:48:01
2	Se 196.026†	-10.0	-3.2	-0.00984	mg/L	-0.00984	mg/L	08:48:01
2	Tl 190.801†	-17.2	1.0	-0.00395	mg/L	-0.00395	mg/L	08:48:01
2	V 292.402†	-41.9	-25.0	-0.00004	mg/L	-0.00004	mg/L	08:47:41
2	Zn 206.200†	66043.1	63907.0	3.1428	mg/L	3.1428	mg/L	08:47:41
2	Cd 226.502†	1.7	27.0	-0.00047	mg/L	-0.00047	mg/L	08:48:01
2	Ti 334.940†	713.5	774.2	0.00180	mg/L	0.00180	mg/L	08:47:41
2	Ca 227.546†	7664.7	7365.6	48.299	mg/L	48.299	mg/L	08:47:41
2	Na 589.592	39280.9	39484.0	11.640	mg/L	11.640	mg/L	08:47:08
2	K 766.490	4109.0	3540.5	3.2073	mg/L	3.2073	mg/L	08:47:08
3	Y 360.073	763302.9	763302.9	100.2	%			08:48:03
3	Lu 261.542	499647.5	499647.5	102.1	%			08:48:03
3	Ag 328.068†	-500.4	-5.6	-0.00006	mg/L	-0.00006	mg/L	08:48:06
3	Al 308.215†	6519.1	508.8	-0.00513	mg/L	-0.00513	mg/L	08:48:06
3	As 188.979†	-2.9	0.9	0.00210	mg/L	0.00210	mg/L	08:48:26
3	Ba 233.527†	1277.0	1301.2	0.01272	mg/L	0.01272	mg/L	08:48:26
3	Be 313.107†	-3999.0	514.3	0.00022	mg/L	0.00022	mg/L	08:48:06
3	Co 228.616†	-3.4	13.9	-0.00202	mg/L	-0.00202	mg/L	08:48:26
3	Cr 267.716†	48.7	21.6	0.00050	mg/L	0.00050	mg/L	08:48:26

3	Cu 324.752†	1293.6	263.5	0.00270	mg/L	0.00270	mg/L	08:48:06
3	Fe 273.955†	151376.1	148740.8	9.0971	mg/L	9.0971	mg/L	08:48:06
3	Mg 279.077†	235996.0	231683.3	18.673	mg/L	18.673	mg/L	08:48:03
3	Mn 257.610†	126178.2	123728.5	0.29609	mg/L	0.29609	mg/L	08:48:06
3	Ni 231.604†	-0.7	13.2	-0.00093	mg/L	-0.00093	mg/L	08:48:26
3	Pb 220.353†	-0.3	-8.3	-0.00159	mg/L	-0.00159	mg/L	08:48:26
3	Sb 206.836†	27.3	-0.5	0.00087	mg/L	0.00087	mg/L	08:48:26
3	Se 196.026†	-15.6	-8.8	-0.01796	mg/L	-0.01796	mg/L	08:48:26
3	Tl 190.801†	-9.4	8.4	0.00287	mg/L	0.00287	mg/L	08:48:26
3	V 292.402†	-40.1	-23.7	-0.00003	mg/L	-0.00003	mg/L	08:48:06
3	Zn 206.200†	65238.9	63856.8	3.1403	mg/L	3.1403	mg/L	08:48:06
3	Cd 226.502†	-4.5	20.9	-0.00065	mg/L	-0.00065	mg/L	08:48:26
3	Ti 334.940†	764.3	831.9	0.00198	mg/L	0.00198	mg/L	08:48:06
3	Ca 227.546†	7643.7	7430.6	48.727	mg/L	48.727	mg/L	08:48:06
3	Na 589.592	38741.8	38944.8	11.480	mg/L	11.480	mg/L	08:47:10
3	K 766.490	3941.0	3372.5	3.0616	mg/L	3.0616	mg/L	08:47:10

Mean Data: L0147-07A~MB9B21

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	773844.4	101.5	%	1.41				1.39%
Lu 261.542	506289.3	103.5	%	1.46				1.41%
Ag 328.068†	6.0	0.00005	mg/L	0.000113	0.00005	mg/L	0.000113	228.55%
Al 308.215†	477.4	-0.00679	mg/L	0.001541	-0.00679	mg/L	0.001541	22.70%
As 188.979†	0.5	0.00170	mg/L	0.002476	0.00170	mg/L	0.002476	145.51%
Ba 233.527†	1283.1	0.01235	mg/L	0.000323	0.01235	mg/L	0.000323	2.61%
Be 313.107†	538.0	0.00023	mg/L	0.000016	0.00023	mg/L	0.000016	6.80%
Co 228.616†	10.9	-0.00215	mg/L	0.000138	-0.00215	mg/L	0.000138	6.42%
Cr 267.716†	22.5	0.00052	mg/L	0.000027	0.00052	mg/L	0.000027	5.16%
Cu 324.752†	212.6	0.00238	mg/L	0.000290	0.00238	mg/L	0.000290	12.15%
Fe 273.955†	146672.9	8.9706	mg/L	0.16529	8.9706	mg/L	0.16529	1.84%
Mg 279.077†	231286.7	18.641	mg/L	0.0341	18.641	mg/L	0.0341	0.18%
Mn 257.610†	122695.1	0.29360	mg/L	0.003586	0.29360	mg/L	0.003586	1.22%
Ni 231.604†	18.3	-0.00064	mg/L	0.000261	-0.00064	mg/L	0.000261	40.63%
Pb 220.353†	-6.3	-0.00105	mg/L	0.000555	-0.00105	mg/L	0.000555	53.12%
Sb 206.836†	2.6	0.00329	mg/L	0.002478	0.00329	mg/L	0.002478	75.41%
Se 196.026†	-4.5	-0.01171	mg/L	0.005561	-0.01171	mg/L	0.005561	47.50%
Tl 190.801†	4.5	-0.00075	mg/L	0.003430	-0.00075	mg/L	0.003430	456.57%
V 292.402†	-34.8	-0.00016	mg/L	0.000219	-0.00016	mg/L	0.000219	135.06%
Zn 206.200†	63395.0	3.1176	mg/L	0.04153	3.1176	mg/L	0.04153	1.33%
Cd 226.502†	23.4	-0.00056	mg/L	0.000092	-0.00056	mg/L	0.000092	16.24%
Ti 334.940†	799.3	0.00187	mg/L	0.000096	0.00187	mg/L	0.000096	5.12%
Ca 227.546†	7350.3	48.199	mg/L	0.5847	48.199	mg/L	0.5847	1.21%
Na 589.592	39466.3	11.635	mg/L	0.1520	11.635	mg/L	0.1520	1.31%
K 766.490	3460.3	3.1377	mg/L	0.07307	3.1377	mg/L	0.07307	2.33%

Sequence No.: 20
Sample ID: L0147-07ADUP~MB9B21D
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 2/9/2012 8:49:35 AM
Data Type: Reprocessed on 2/10/2012 7:27:49 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0147-07ADUP~MB9B21D

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Y 360.073	769513.9	769513.9	101.0	%			08:50:52
1	Lu 261.542	504046.8	504046.8	103.0	%			08:50:52
1	Ag 328.068†	-432.8	64.2	0.00061	mg/L	0.00061	mg/L	08:50:54
1	Al 308.215†	6455.4	391.2	-0.01170	mg/L	-0.01170	mg/L	08:50:54
1	As 188.979†	-8.3	-4.4	-0.00392	mg/L	-0.00392	mg/L	08:51:14
1	Ba 233.527†	1280.1	1293.3	0.01256	mg/L	0.01256	mg/L	08:51:14
1	Be 313.107†	-3928.2	617.2	0.00028	mg/L	0.00028	mg/L	08:50:54
1	Co 228.616†	-7.2	10.2	-0.00218	mg/L	-0.00218	mg/L	08:51:14
1	Cr 267.716†	65.2	37.2	0.00092	mg/L	0.00092	mg/L	08:51:14
1	Cu 324.752†	1327.4	285.3	0.00283	mg/L	0.00283	mg/L	08:50:54
1	Fe 273.955†	151894.4	147950.2	9.0487	mg/L	9.0487	mg/L	08:50:54
1	Mg 279.077†	239742.2	233302.5	18.805	mg/L	18.805	mg/L	08:50:52

1	Mn 257.610†	127984.1	124403.0	0.29771	mg/L	0.29771	mg/L	08:50:54
1	Ni 231.604†	5.4	19.1	-0.00060	mg/L	-0.00060	mg/L	08:51:14
1	Pb 220.353†	-3.7	-11.6	-0.00248	mg/L	-0.00248	mg/L	08:51:14
1	Sb 206.836†	29.5	1.3	0.00231	mg/L	0.00231	mg/L	08:51:14
1	Se 196.026†	-7.0	-0.4	-0.00577	mg/L	-0.00577	mg/L	08:51:14
1	Tl 190.801†	-7.7	10.1	0.00444	mg/L	0.00444	mg/L	08:51:14
1	V 292.402†	-88.1	-69.9	-0.00056	mg/L	-0.00056	mg/L	08:50:54
1	Zn 206.200†	65982.1	64020.6	3.1484	mg/L	3.1484	mg/L	08:50:54
1	Cd 226.502†	-2.6	22.8	-0.00059	mg/L	-0.00059	mg/L	08:51:14
1	Ti 334.940†	650.1	714.5	0.00166	mg/L	0.00166	mg/L	08:50:54
1	Ca 227.546†	7809.1	7525.8	49.353	mg/L	49.353	mg/L	08:50:54
1	Na 589.592	40347.2	40550.3	11.956	mg/L	11.956	mg/L	08:50:44
1	K 766.490	4120.4	3551.9	3.2172	mg/L	3.2172	mg/L	08:50:44
2	Y 360.073	757679.1	757679.1	99.42	%			08:51:16
2	Lu 261.542	495901.4	495901.4	101.4	%			08:51:16
2	Ag 328.068†	-532.5	-41.1	-0.00040	mg/L	-0.00040	mg/L	08:51:19
2	Al 308.215†	6392.0	431.6	-0.00947	mg/L	-0.00947	mg/L	08:51:19
2	As 188.979†	-7.2	-3.4	-0.00282	mg/L	-0.00282	mg/L	08:51:39
2	Ba 233.527†	1276.5	1310.2	0.01291	mg/L	0.01291	mg/L	08:51:39
2	Be 313.107†	-4005.8	478.0	0.00019	mg/L	0.00019	mg/L	08:51:19
2	Co 228.616†	-9.6	7.8	-0.00230	mg/L	-0.00230	mg/L	08:51:39
2	Cr 267.716†	49.7	23.0	0.00053	mg/L	0.00053	mg/L	08:51:39
2	Cu 324.752†	1294.9	274.3	0.00277	mg/L	0.00277	mg/L	08:51:19
2	Fe 273.955†	151709.1	150188.9	9.1858	mg/L	9.1858	mg/L	08:51:19
2	Mg 279.077†	234875.9	232323.8	18.725	mg/L	18.725	mg/L	08:51:16
2	Mn 257.610†	126876.9	125351.0	0.29999	mg/L	0.29999	mg/L	08:51:19
2	Ni 231.604†	18.4	32.0	0.00011	mg/L	0.00011	mg/L	08:51:39
2	Pb 220.353†	7.4	-0.7	0.00050	mg/L	0.00050	mg/L	08:51:39
2	Sb 206.836†	26.9	-0.8	0.00066	mg/L	0.00066	mg/L	08:51:39
2	Se 196.026†	-9.8	-3.2	-0.00987	mg/L	-0.00987	mg/L	08:51:39
2	Tl 190.801†	-17.8	0.1	-0.00480	mg/L	-0.00480	mg/L	08:51:39
2	V 292.402†	-54.1	-37.8	-0.00018	mg/L	-0.00018	mg/L	08:51:19
2	Zn 206.200†	65557.0	64653.1	3.1795	mg/L	3.1795	mg/L	08:51:19
2	Cd 226.502†	-1.0	24.3	-0.00056	mg/L	-0.00056	mg/L	08:51:39
2	Ti 334.940†	642.1	717.0	0.00167	mg/L	0.00167	mg/L	08:51:19
2	Ca 227.546†	7678.6	7521.5	49.325	mg/L	49.325	mg/L	08:51:19
2	Na 589.592	40246.9	40449.9	11.927	mg/L	11.927	mg/L	08:50:46
2	K 766.490	4091.5	3523.0	3.1921	mg/L	3.1921	mg/L	08:50:46
3	Y 360.073	767270.8	767270.8	100.7	%			08:51:41
3	Lu 261.542	501999.4	501999.4	102.6	%			08:51:41
3	Ag 328.068†	-472.4	23.9	0.00022	mg/L	0.00022	mg/L	08:51:43
3	Al 308.215†	6487.7	448.3	-0.00857	mg/L	-0.00857	mg/L	08:51:43
3	As 188.979†	-2.0	1.7	0.00308	mg/L	0.00308	mg/L	08:52:04
3	Ba 233.527†	1285.9	1304.1	0.01278	mg/L	0.01278	mg/L	08:52:04
3	Be 313.107†	-4005.9	526.0	0.00022	mg/L	0.00022	mg/L	08:51:43
3	Co 228.616†	-3.2	14.1	-0.00202	mg/L	-0.00202	mg/L	08:52:04
3	Cr 267.716†	60.3	32.7	0.00080	mg/L	0.00080	mg/L	08:52:04
3	Cu 324.752†	1272.0	236.5	0.00254	mg/L	0.00254	mg/L	08:51:43
3	Fe 273.955†	154132.2	150732.3	9.2190	mg/L	9.2190	mg/L	08:51:43
3	Mg 279.077†	239481.8	233997.7	18.862	mg/L	18.862	mg/L	08:51:41
3	Mn 257.610†	128195.5	125115.5	0.29942	mg/L	0.29942	mg/L	08:51:43
3	Ni 231.604†	13.1	26.7	-0.00018	mg/L	-0.00018	mg/L	08:52:04
3	Pb 220.353†	7.8	-0.4	0.00056	mg/L	0.00056	mg/L	08:52:04
3	Sb 206.836†	27.7	-0.3	0.00101	mg/L	0.00101	mg/L	08:52:04
3	Se 196.026†	-8.5	-1.8	-0.00782	mg/L	-0.00782	mg/L	08:52:04
3	Tl 190.801†	-12.5	5.4	0.00015	mg/L	0.00015	mg/L	08:52:04
3	V 292.402†	-108.2	-89.9	-0.00078	mg/L	-0.00078	mg/L	08:51:43
3	Zn 206.200†	66368.7	64658.6	3.1798	mg/L	3.1798	mg/L	08:51:43
3	Cd 226.502†	-4.2	21.2	-0.00065	mg/L	-0.00065	mg/L	08:52:04
3	Ti 334.940†	635.0	702.4	0.00163	mg/L	0.00163	mg/L	08:51:43
3	Ca 227.546†	7797.5	7545.3	49.481	mg/L	49.481	mg/L	08:51:43
3	Na 589.592	40291.8	40494.8	11.940	mg/L	11.940	mg/L	08:50:48
3	K 766.490	4057.6	3489.1	3.1627	mg/L	3.1627	mg/L	08:50:48

Mean Data: L0147-07ADUP~MB9B21D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	764821.3	100.4	%	0.82				0.82%
Lu 261.542	500649.2	102.3	%	0.87				0.85%
Ag 328.068†	15.7	0.00014	mg/L	0.000513	0.00014	mg/L	0.000513	358.95%

Al 308.215†	423.7	-0.00992	mg/L	0.001613	-0.00992	mg/L	0.001613	16.27%
As 188.979†	-2.0	-0.00122	mg/L	0.003767	-0.00122	mg/L	0.003767	308.96%
Ba 233.527†	1302.5	0.01275	mg/L	0.000175	0.01275	mg/L	0.000175	1.37%
Be 313.107†	540.4	0.00023	mg/L	0.000043	0.00023	mg/L	0.000043	18.58%
Co 228.616†	10.7	-0.00217	mg/L	0.000141	-0.00217	mg/L	0.000141	6.48%
Cr 267.716†	31.0	0.00075	mg/L	0.000197	0.00075	mg/L	0.000197	26.28%
Cu 324.752†	265.4	0.00272	mg/L	0.000152	0.00272	mg/L	0.000152	5.58%
Fe 273.955†	149623.8	9.1512	mg/L	0.09025	9.1512	mg/L	0.09025	0.99%
Mg 279.077†	233208.0	18.797	mg/L	0.0685	18.797	mg/L	0.0685	0.36%
Mn 257.610†	124956.5	0.29904	mg/L	0.001189	0.29904	mg/L	0.001189	0.40%
Ni 231.604†	25.9	-0.00022	mg/L	0.000357	-0.00022	mg/L	0.000357	159.07%
Pb 220.353†	-4.2	-0.00048	mg/L	0.001738	-0.00048	mg/L	0.001738	364.47%
Sb 206.836†	0.1	0.00133	mg/L	0.000871	0.00133	mg/L	0.000871	65.54%
Se 196.026†	-1.8	-0.00782	mg/L	0.002049	-0.00782	mg/L	0.002049	26.21%
Tl 190.801†	5.2	-0.00007	mg/L	0.004623	-0.00007	mg/L	0.004623	>999.9%
V 292.402†	-65.9	-0.00051	mg/L	0.000304	-0.00051	mg/L	0.000304	59.57%
Zn 206.200†	64444.1	3.1693	mg/L	0.01805	3.1693	mg/L	0.01805	0.57%
Cd 226.502†	22.8	-0.00060	mg/L	0.000048	-0.00060	mg/L	0.000048	8.01%
Ti 334.940†	711.3	0.00165	mg/L	0.000021	0.00165	mg/L	0.000021	1.28%
Ca 227.546†	7530.9	49.386	mg/L	0.0835	49.386	mg/L	0.0835	0.17%
Na 589.592	40498.3	11.941	mg/L	0.0149	11.941	mg/L	0.0149	0.12%
K 766.490	3521.3	3.1906	mg/L	0.02728	3.1906	mg/L	0.02728	0.86%

Sequence No.: 21
Sample ID: L0147-07AMS~MB9B21S
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 2/9/2012 8:53:13 AM
Data Type: Reprocessed on 2/10/2012 7:27:50 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0147-07AMS~MB9B21S

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	757163.5	757163.5	99.35	%			08:54:30
1	Lu 261.542	499599.6	499599.6	102.1	%			08:54:30
1	Ag 328.068†	4706.4	5092.8	0.04974	mg/L	0.04974	mg/L	08:54:30
1	Al 308.215†	45624.5	38801.5	2.1006	mg/L	2.1006	mg/L	08:54:30
1	As 188.979†	29.9	33.0	0.04025	mg/L	0.04025	mg/L	08:54:50
1	Ba 233.527†	104304.5	102186.0	2.0763	mg/L	2.0763	mg/L	08:54:30
1	Be 313.107†	81793.2	84521.7	0.05161	mg/L	0.05161	mg/L	08:54:30
1	Co 228.616†	11647.2	11422.1	0.50704	mg/L	0.50704	mg/L	08:54:30
1	Cr 267.716†	8014.1	7821.3	0.21178	mg/L	0.21178	mg/L	08:54:30
1	Cu 324.752†	43264.9	41362.0	0.25336	mg/L	0.25336	mg/L	08:54:30
1	Fe 273.955†	172491.0	169430.8	10.361	mg/L	10.361	mg/L	08:54:30
1	Mg 279.077†	243346.0	238902.6	19.263	mg/L	19.263	mg/L	08:54:30
1	Mn 257.610†	356106.6	348886.3	0.83812	mg/L	0.83812	mg/L	08:54:30
1	Ni 231.604†	9557.9	9373.0	0.51329	mg/L	0.51329	mg/L	08:54:30
1	Pb 220.353†	93.1	83.2	0.02369	mg/L	0.02369	mg/L	08:54:50
1	Sb 206.836†	173.1	142.2	0.10832	mg/L	0.10832	mg/L	08:54:50
1	Se 196.026†	32.1	37.9	0.04961	mg/L	0.04961	mg/L	08:54:50
1	Tl 190.801†	56.9	73.3	0.05900	mg/L	0.05900	mg/L	08:54:50
1	V 292.402†	44361.3	43454.2	0.50329	mg/L	0.50329	mg/L	08:54:30
1	Zn 206.200†	77421.2	75791.8	3.7285	mg/L	3.7285	mg/L	08:54:30
1	Cd 226.502†	1926.0	1911.3	0.05353	mg/L	0.05353	mg/L	08:54:50
1	Ti 334.940†	855.7	921.5	0.00223	mg/L	0.00223	mg/L	08:54:30
1	Ca 227.546†	7822.4	7606.3	49.751	mg/L	49.751	mg/L	08:54:30
1	Na 589.592	41543.5	41746.5	12.311	mg/L	12.311	mg/L	08:54:22
1	K 766.490	4205.1	3636.6	3.2906	mg/L	3.2906	mg/L	08:54:22
2	Y 360.073	755989.6	755989.6	99.20	%			08:54:53
2	Lu 261.542	498646.9	498646.9	101.9	%			08:54:53
2	Ag 328.068†	4784.7	5178.4	0.05057	mg/L	0.05057	mg/L	08:54:53
2	Al 308.215†	45461.5	38726.9	2.0964	mg/L	2.0964	mg/L	08:54:53
2	As 188.979†	37.3	40.3	0.04860	mg/L	0.04860	mg/L	08:55:13
2	Ba 233.527†	104202.7	102281.2	2.0783	mg/L	2.0783	mg/L	08:54:53
2	Be 313.107†	81772.9	84654.8	0.05169	mg/L	0.05169	mg/L	08:54:53
2	Co 228.616†	11614.6	11412.0	0.50658	mg/L	0.50658	mg/L	08:54:53
2	Cr 267.716†	8005.4	7827.8	0.21195	mg/L	0.21195	mg/L	08:54:53
2	Cu 324.752†	43177.0	41356.6	0.25334	mg/L	0.25334	mg/L	08:54:53
2	Fe 273.955†	173947.6	171182.4	10.469	mg/L	10.469	mg/L	08:54:53

2	Mg 279.077†	243191.5	239206.3	19.288	mg/L	19.288	mg/L	08:54:53
2	Mn 257.610†	355561.3	349017.6	0.83843	mg/L	0.83843	mg/L	08:54:53
2	Ni 231.604†	9529.3	9362.8	0.51273	mg/L	0.51273	mg/L	08:54:53
2	Pb 220.353†	83.5	73.9	0.02117	mg/L	0.02117	mg/L	08:55:13
2	Sb 206.836†	168.1	137.6	0.10475	mg/L	0.10475	mg/L	08:55:13
2	Se 196.026†	24.3	30.3	0.03868	mg/L	0.03868	mg/L	08:55:13
2	Tl 190.801†	57.7	74.2	0.05976	mg/L	0.05976	mg/L	08:55:13
2	V 292.402†	44474.2	43647.9	0.50554	mg/L	0.50554	mg/L	08:54:53
2	Zn 206.200†	77396.2	75912.1	3.7345	mg/L	3.7345	mg/L	08:54:53
2	Cd 226.502†	1902.4	1891.7	0.05296	mg/L	0.05296	mg/L	08:55:13
2	Ti 334.940†	776.0	844.9	0.00202	mg/L	0.00202	mg/L	08:54:53
2	Ca 227.546†	7874.3	7671.8	50.182	mg/L	50.182	mg/L	08:54:53
2	Na 589.592	40426.7	40629.8	11.980	mg/L	11.980	mg/L	08:54:24
2	K 766.490	4163.5	3595.0	3.2545	mg/L	3.2545	mg/L	08:54:24
3	Y 360.073	763293.1	763293.1	100.2	%			08:55:16
3	Lu 261.542	503778.2	503778.2	103.0	%			08:55:16
3	Ag 328.068†	4819.9	5164.8	0.05044	mg/L	0.05044	mg/L	08:55:16
3	Al 308.215†	45837.4	38637.6	2.0915	mg/L	2.0915	mg/L	08:55:16
3	As 188.979†	30.8	33.6	0.04090	mg/L	0.04090	mg/L	08:55:36
3	Ba 233.527†	105696.1	102690.2	2.0867	mg/L	2.0867	mg/L	08:55:16
3	Be 313.107†	82878.5	84911.3	0.05185	mg/L	0.05185	mg/L	08:55:16
3	Co 228.616†	11840.9	11515.7	0.51120	mg/L	0.51120	mg/L	08:55:16
3	Cr 267.716†	8042.6	7783.9	0.21076	mg/L	0.21076	mg/L	08:55:16
3	Cu 324.752†	43782.4	41513.1	0.25429	mg/L	0.25429	mg/L	08:55:16
3	Fe 273.955†	176471.6	171895.3	10.512	mg/L	10.512	mg/L	08:55:16
3	Mg 279.077†	246535.2	240023.1	19.355	mg/L	19.355	mg/L	08:55:16
3	Mn 257.610†	359924.0	349701.0	0.84008	mg/L	0.84008	mg/L	08:55:16
3	Ni 231.604†	9695.6	9429.1	0.51637	mg/L	0.51637	mg/L	08:55:16
3	Pb 220.353†	76.0	65.8	0.01896	mg/L	0.01896	mg/L	08:55:36
3	Sb 206.836†	173.9	141.6	0.10788	mg/L	0.10788	mg/L	08:55:36
3	Se 196.026†	27.9	33.6	0.04345	mg/L	0.04345	mg/L	08:55:36
3	Tl 190.801†	55.9	71.8	0.05761	mg/L	0.05761	mg/L	08:55:36
3	V 292.402†	44929.3	43645.4	0.50551	mg/L	0.50551	mg/L	08:55:16
3	Zn 206.200†	78747.8	76451.2	3.7610	mg/L	3.7610	mg/L	08:55:16
3	Cd 226.502†	1884.3	1855.1	0.05191	mg/L	0.05191	mg/L	08:55:36
3	Ti 334.940†	798.1	858.6	0.00205	mg/L	0.00205	mg/L	08:55:16
3	Ca 227.546†	7893.8	7612.1	49.788	mg/L	49.788	mg/L	08:55:16
3	Na 589.592	40586.2	40789.3	12.027	mg/L	12.027	mg/L	08:54:26
3	K 766.490	4131.3	3562.8	3.2266	mg/L	3.2266	mg/L	08:54:26

Mean Data: L0147-07AMS~MB9B21S

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	758815.4	99.57	%	0.515				0.52%
Lu 261.542	500674.9	102.3	%	0.56				0.55%
Ag 328.068†	5145.3	0.05025	mg/L	0.000445	0.05025	mg/L	0.000445	0.89%
Al 308.215†	38722.0	2.0962	mg/L	0.00455	2.0962	mg/L	0.00455	0.22%
As 188.979†	35.6	0.04325	mg/L	0.004646	0.04325	mg/L	0.004646	10.74%
Ba 233.527†	102385.8	2.0804	mg/L	0.00548	2.0804	mg/L	0.00548	0.26%
Be 313.107†	84695.9	0.05171	mg/L	0.000121	0.05171	mg/L	0.000121	0.23%
Co 228.616†	11449.9	0.50827	mg/L	0.002548	0.50827	mg/L	0.002548	0.50%
Cr 267.716†	7811.0	0.21150	mg/L	0.000643	0.21150	mg/L	0.000643	0.30%
Cu 324.752†	41410.6	0.25367	mg/L	0.000545	0.25367	mg/L	0.000545	0.21%
Fe 273.955†	170836.2	10.447	mg/L	0.0776	10.447	mg/L	0.0776	0.74%
Mg 279.077†	239377.3	19.302	mg/L	0.0472	19.302	mg/L	0.0472	0.24%
Mn 257.610†	349201.6	0.83888	mg/L	0.001052	0.83888	mg/L	0.001052	0.13%
Ni 231.604†	9388.3	0.51413	mg/L	0.001962	0.51413	mg/L	0.001962	0.38%
Pb 220.353†	74.3	0.02127	mg/L	0.002368	0.02127	mg/L	0.002368	11.13%
Sb 206.836†	140.4	0.10698	mg/L	0.001947	0.10698	mg/L	0.001947	1.82%
Se 196.026†	33.9	0.04391	mg/L	0.005479	0.04391	mg/L	0.005479	12.48%
Tl 190.801†	73.1	0.05879	mg/L	0.001089	0.05879	mg/L	0.001089	1.85%
V 292.402†	43582.5	0.50478	mg/L	0.001290	0.50478	mg/L	0.001290	0.26%
Zn 206.200†	76051.7	3.7413	mg/L	0.01728	3.7413	mg/L	0.01728	0.46%
Cd 226.502†	1886.0	0.05280	mg/L	0.000824	0.05280	mg/L	0.000824	1.56%
Ti 334.940†	875.0	0.00210	mg/L	0.000113	0.00210	mg/L	0.000113	5.37%
Ca 227.546†	7630.1	49.907	mg/L	0.2390	49.907	mg/L	0.2390	0.48%
Na 589.592	41055.2	12.106	mg/L	0.1791	12.106	mg/L	0.1791	1.48%
K 766.490	3598.1	3.2572	mg/L	0.03211	3.2572	mg/L	0.03211	0.99%

Sequence No.: 22
Sample ID: L0147-07ASD~MB9B21L
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 2/9/2012 8:56:45 AM
Data Type: Reprocessed on 2/10/2012 7:27:50 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0147-07ASD~MB9B21L

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	778761.7	778761.7	102.2	%			08:58:03
1	Lu 261.542	507647.6	507647.6	103.8	%			08:58:03
1	Ag 328.068†	-501.4	1.1	0.00000	mg/L	0.00000	mg/L	08:58:05
1	Al 308.215†	6049.6	-44.3	-0.03017	mg/L	-0.03017	mg/L	08:58:05
1	As 188.979†	-1.8	2.0	0.00230	mg/L	0.00230	mg/L	08:58:25
1	Ba 233.527†	272.7	313.7	-0.00747	mg/L	-0.00747	mg/L	08:58:25
1	Be 313.107†	-4146.9	433.5	0.00016	mg/L	0.00016	mg/L	08:58:05
1	Co 228.616†	-9.5	8.1	-0.00191	mg/L	-0.00191	mg/L	08:58:25
1	Cr 267.716†	32.2	4.9	0.00019	mg/L	0.00019	mg/L	08:58:25
1	Cu 324.752†	1189.3	143.1	0.00154	mg/L	0.00154	mg/L	08:58:05
1	Fe 273.955†	32116.2	31477.1	1.9215	mg/L	1.9215	mg/L	08:58:05
1	Mg 279.077†	50397.9	49185.3	3.8047	mg/L	3.8047	mg/L	08:58:05
1	Mn 257.610†	27091.2	26293.7	0.06195	mg/L	0.06195	mg/L	08:58:05
1	Ni 231.604†	-12.3	2.0	-0.00154	mg/L	-0.00154	mg/L	08:58:25
1	Pb 220.353†	1.8	-6.3	-0.00132	mg/L	-0.00132	mg/L	08:58:25
1	Sb 206.836†	31.4	3.0	0.00425	mg/L	0.00425	mg/L	08:58:25
1	Se 196.026†	-11.1	-4.3	-0.01401	mg/L	-0.01401	mg/L	08:58:25
1	Tl 190.801†	-16.6	1.6	-0.00450	mg/L	-0.00450	mg/L	08:58:25
1	V 292.402†	-59.0	-41.2	-0.00069	mg/L	-0.00069	mg/L	08:58:05
1	Zn 206.200†	13928.7	13403.7	0.65700	mg/L	0.65700	mg/L	08:58:05
1	Cd 226.502†	-25.6	0.7	-0.00044	mg/L	-0.00044	mg/L	08:58:25
1	Ti 334.940†	100.1	180.0	-0.00087	mg/L	-0.00087	mg/L	08:58:05
1	Ca 227.546†	1653.1	1539.6	9.9976	mg/L	9.9976	mg/L	08:58:25
1	Na 589.592	8093.7	8296.8	2.3947	mg/L	2.3947	mg/L	08:57:54
1	K 766.490	1336.1	767.6	0.80302	mg/L	0.80302	mg/L	08:57:54
2	Y 360.073	775813.1	775813.1	101.8	%			08:58:27
2	Lu 261.542	506133.4	506133.4	103.5	%			08:58:27
2	Ag 328.068†	-479.5	20.8	0.00019	mg/L	0.00019	mg/L	08:58:29
2	Al 308.215†	5927.9	-144.5	-0.03573	mg/L	-0.03573	mg/L	08:58:29
2	As 188.979†	-0.8	2.9	0.00337	mg/L	0.00337	mg/L	08:58:50
2	Ba 233.527†	260.0	302.3	-0.00771	mg/L	-0.00771	mg/L	08:58:50
2	Be 313.107†	-4102.9	464.0	0.00018	mg/L	0.00018	mg/L	08:58:29
2	Co 228.616†	-12.8	4.8	-0.00206	mg/L	-0.00206	mg/L	08:58:50
2	Cr 267.716†	26.7	-0.3	0.00005	mg/L	0.00005	mg/L	08:58:50
2	Cu 324.752†	1151.3	109.7	0.00133	mg/L	0.00133	mg/L	08:58:29
2	Fe 273.955†	32102.8	31556.7	1.9264	mg/L	1.9264	mg/L	08:58:29
2	Mg 279.077†	50237.5	49175.6	3.8039	mg/L	3.8039	mg/L	08:58:29
2	Mn 257.610†	26959.4	26244.4	0.06183	mg/L	0.06183	mg/L	08:58:29
2	Ni 231.604†	3.0	16.8	-0.00073	mg/L	-0.00073	mg/L	08:58:50
2	Pb 220.353†	3.9	-4.2	-0.00075	mg/L	-0.00075	mg/L	08:58:50
2	Sb 206.836†	24.7	-3.4	-0.00071	mg/L	-0.00071	mg/L	08:58:50
2	Se 196.026†	-7.5	-0.8	-0.00906	mg/L	-0.00906	mg/L	08:58:50
2	Tl 190.801†	-7.1	10.8	0.00395	mg/L	0.00395	mg/L	08:58:50
2	V 292.402†	-10.2	5.7	-0.00015	mg/L	-0.00015	mg/L	08:58:29
2	Zn 206.200†	13890.9	13407.3	0.65718	mg/L	0.65718	mg/L	08:58:29
2	Cd 226.502†	-22.8	3.3	-0.00036	mg/L	-0.00036	mg/L	08:58:50
2	Ti 334.940†	87.8	168.5	-0.00090	mg/L	-0.00090	mg/L	08:58:29
2	Ca 227.546†	1669.1	1559.9	10.131	mg/L	10.131	mg/L	08:58:50
2	Na 589.592	8303.9	8506.9	2.4570	mg/L	2.4570	mg/L	08:57:57
2	K 766.490	1306.1	737.6	0.77702	mg/L	0.77702	mg/L	08:57:57
3	Y 360.073	775740.3	775740.3	101.8	%			08:58:52
3	Lu 261.542	506702.4	506702.4	103.6	%			08:58:52
3	Ag 328.068†	-511.1	-9.2	-0.00010	mg/L	-0.00010	mg/L	08:58:54
3	Al 308.215†	5999.4	-81.9	-0.03226	mg/L	-0.03226	mg/L	08:58:54
3	As 188.979†	-4.3	-0.5	-0.00049	mg/L	-0.00049	mg/L	08:59:14
3	Ba 233.527†	250.1	292.4	-0.00791	mg/L	-0.00791	mg/L	08:59:14
3	Be 313.107†	-4143.9	429.0	0.00016	mg/L	0.00016	mg/L	08:58:54
3	Co 228.616†	-12.3	5.4	-0.00203	mg/L	-0.00203	mg/L	08:59:14
3	Cr 267.716†	35.8	8.5	0.00029	mg/L	0.00029	mg/L	08:59:14
3	Cu 324.752†	1143.5	100.9	0.00128	mg/L	0.00128	mg/L	08:58:54

3	Fe 273.955†	32524.5	31929.1	1.9492	mg/L	1.9492	mg/L	08:58:54
3	Mg 279.077†	50610.5	49481.2	3.8288	mg/L	3.8288	mg/L	08:58:54
3	Mn 257.610†	27221.9	26468.6	0.06237	mg/L	0.06237	mg/L	08:58:54
3	Ni 231.604†	-14.9	-0.5	-0.00167	mg/L	-0.00167	mg/L	08:59:14
3	Pb 220.353†	0.6	-7.4	-0.00162	mg/L	-0.00162	mg/L	08:59:14
3	Sb 206.836†	28.0	-0.2	0.00173	mg/L	0.00173	mg/L	08:59:14
3	Se 196.026†	-2.5	4.1	-0.00197	mg/L	-0.00197	mg/L	08:59:14
3	Tl 190.801†	-13.3	4.8	-0.00159	mg/L	-0.00159	mg/L	08:59:14
3	V 292.402†	-24.8	-8.3	-0.00031	mg/L	-0.00031	mg/L	08:58:54
3	Zn 206.200†	13942.1	13441.7	0.65887	mg/L	0.65887	mg/L	08:58:54
3	Cd 226.502†	-22.6	3.5	-0.00036	mg/L	-0.00036	mg/L	08:59:14
3	Ti 334.940†	107.9	187.7	-0.00085	mg/L	-0.00085	mg/L	08:58:54
3	Ca 227.546†	1661.2	1550.4	10.069	mg/L	10.069	mg/L	08:59:14
3	Na 589.592	8037.8	8240.8	2.3781	mg/L	2.3781	mg/L	08:57:59
3	K 766.490	1333.1	764.7	0.80044	mg/L	0.80044	mg/L	08:57:59

Mean Data: L0147-07ASD~MB9B21L

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	776771.7	101.9	%	0.23				0.22%
Lu 261.542	506827.8	103.6	%	0.16				0.15%
Ag 328.068†	4.2	0.00003	mg/L	0.000148	0.00003	mg/L	0.000148	447.79%
Al 308.215†	-90.2	-0.03272	mg/L	0.002807	-0.03272	mg/L	0.002807	8.58%
As 188.979†	1.5	0.00173	mg/L	0.001992	0.00173	mg/L	0.001992	115.32%
Ba 233.527†	302.8	-0.00770	mg/L	0.000217	-0.00770	mg/L	0.000217	2.83%
Be 313.107†	442.2	0.00017	mg/L	0.000012	0.00017	mg/L	0.000012	6.88%
Co 228.616†	6.1	-0.00200	mg/L	0.000078	-0.00200	mg/L	0.000078	3.88%
Cr 267.716†	4.4	0.00017	mg/L	0.000119	0.00017	mg/L	0.000119	68.45%
Cu 324.752†	117.9	0.00138	mg/L	0.000135	0.00138	mg/L	0.000135	9.74%
Fe 273.955†	31654.3	1.9324	mg/L	0.01476	1.9324	mg/L	0.01476	0.76%
Mg 279.077†	49280.7	3.8125	mg/L	0.01416	3.8125	mg/L	0.01416	0.37%
Mn 257.610†	26335.6	0.06205	mg/L	0.000283	0.06205	mg/L	0.000283	0.46%
Ni 231.604†	6.1	-0.00131	mg/L	0.000511	-0.00131	mg/L	0.000511	38.91%
Pb 220.353†	-6.0	-0.00123	mg/L	0.000441	-0.00123	mg/L	0.000441	35.89%
Sb 206.836†	-0.2	0.00176	mg/L	0.002482	0.00176	mg/L	0.002482	141.30%
Se 196.026†	-0.3	-0.00835	mg/L	0.006051	-0.00835	mg/L	0.006051	72.49%
Tl 190.801†	5.7	-0.00071	mg/L	0.004292	-0.00071	mg/L	0.004292	602.48%
V 292.402†	-14.6	-0.00038	mg/L	0.000279	-0.00038	mg/L	0.000279	73.36%
Zn 206.200†	13417.6	0.65768	mg/L	0.001033	0.65768	mg/L	0.001033	0.16%
Cd 226.502†	2.5	-0.00039	mg/L	0.000044	-0.00039	mg/L	0.000044	11.30%
Ti 334.940†	178.7	-0.00087	mg/L	0.000027	-0.00087	mg/L	0.000027	3.10%
Ca 227.546†	1550.0	10.066	mg/L	0.0666	10.066	mg/L	0.0666	0.66%
Na 589.592	8348.2	2.4099	mg/L	0.04159	2.4099	mg/L	0.04159	1.73%
K 766.490	756.6	0.79349	mg/L	0.014328	0.79349	mg/L	0.014328	1.81%

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Sequence No.: 23
Sample ID: CCV96
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 2/9/2012 9:00:24 AM
Data Type: Reprocessed on 2/10/2012 7:27:51 AM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV96

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	741543.0	741543.0	97.31	%			09:01:44
1	Lu 261.542	483541.3	483541.3	98.84	%			09:01:44
1	Ag 328.068†	30811.7	31657.1	0.30852	mg/L	0.30852	mg/L	09:01:46
1	Al 308.215†	738945.6	741731.6	40.855	mg/L	40.855	mg/L	09:01:44
1	As 188.979†	842.0	855.5	0.99635	mg/L	0.99635	mg/L	09:02:06
1	Ba 233.527†	475767.1	481393.8	9.8332	mg/L	9.8332	mg/L	09:01:44
1	Be 313.107†	794687.2	808430.4	0.50050	mg/L	0.50050	mg/L	09:01:44
1	Co 228.616†	54829.2	55489.0	2.4635	mg/L	2.4635	mg/L	09:01:46
1	Cr 267.716†	73875.1	74714.8	2.0227	mg/L	2.0227	mg/L	09:01:46
1	Cu 324.752†	655746.5	662428.5	4.0398	mg/L	4.0398	mg/L	09:01:44
1	Fe 273.955†	325482.2	329824.2	20.164	mg/L	20.164	mg/L	09:01:46
1	Mg 279.077†	1795525.0	1817185.8	147.83	mg/L	147.83	mg/L	09:01:44
1	Mn 257.610†	1676575.7	1696411.0	4.0784	mg/L	4.0784	mg/L	09:01:44

1	Ni 231.604†	44301.7	44834.8	2.4600	mg/L	2.4600	mg/L	09:01:46
1	Pb 220.353†	7267.6	7344.8	2.0067	mg/L	2.0067	mg/L	09:02:06
1	Sb 206.836†	1264.4	1252.0	0.93521	mg/L	0.93521	mg/L	09:02:06
1	Se 196.026†	675.2	689.5	0.99064	mg/L	0.99064	mg/L	09:02:06
1	Tl 190.801†	1022.9	1052.4	0.95048	mg/L	0.95048	mg/L	09:02:06
1	V 292.402†	213369.2	215885.3	2.4987	mg/L	2.4987	mg/L	09:01:46
1	Zn 206.200†	99872.0	101023.4	4.9768	mg/L	4.9768	mg/L	09:01:46
1	Cd 226.502†	17196.9	17423.7	0.49730	mg/L	0.49730	mg/L	09:01:46
1	Ti 334.940†	839790.5	849716.1	2.4424	mg/L	2.4424	mg/L	09:01:44
1	Ca 227.546†	22338.0	22546.3	147.39	mg/L	147.39	mg/L	09:01:46
1	Na 589.592	668919.4	669122.5	198.30	mg/L	198.30	mg/L	09:01:33
1	K 766.490	231218.4	230649.9	200.12	mg/L	200.12	mg/L	09:01:33
2	Y 360.073	727834.0	727834.0	95.51	%			09:02:10
2	Lu 261.542	474335.8	474335.8	96.96	%			09:02:10
2	Ag 328.068†	30476.3	31916.1	0.31104	mg/L	0.31104	mg/L	09:02:12
2	Al 308.215†	730268.4	747291.3	41.162	mg/L	41.162	mg/L	09:02:10
2	As 188.979†	838.6	868.6	1.0115	mg/L	1.0115	mg/L	09:02:32
2	Ba 233.527†	470507.9	485311.2	9.9133	mg/L	9.9133	mg/L	09:02:10
2	Be 313.107†	784950.1	813991.4	0.50399	mg/L	0.50399	mg/L	09:02:10
2	Co 228.616†	54197.1	55913.6	2.4823	mg/L	2.4823	mg/L	09:02:12
2	Cr 267.716†	73136.2	75403.2	2.0413	mg/L	2.0413	mg/L	09:02:12
2	Cu 324.752†	650698.5	670097.6	4.0866	mg/L	4.0866	mg/L	09:02:10
2	Fe 273.955†	321689.7	332303.5	20.316	mg/L	20.316	mg/L	09:02:12
2	Mg 279.077†	1770846.3	1826987.9	148.63	mg/L	148.63	mg/L	09:02:10
2	Mn 257.610†	1656157.1	1708271.1	4.1069	mg/L	4.1069	mg/L	09:02:10
2	Ni 231.604†	43629.5	45011.4	2.4696	mg/L	2.4696	mg/L	09:02:12
2	Pb 220.353†	7198.6	7416.3	2.0262	mg/L	2.0262	mg/L	09:02:32
2	Sb 206.836†	1279.6	1292.4	0.96631	mg/L	0.96631	mg/L	09:02:32
2	Se 196.026†	671.6	699.2	1.0045	mg/L	1.0045	mg/L	09:02:32
2	Tl 190.801†	1031.2	1081.1	0.97676	mg/L	0.97676	mg/L	09:02:32
2	V 292.402†	210670.7	217291.6	2.5150	mg/L	2.5150	mg/L	09:02:12
2	Zn 206.200†	98227.0	101287.8	4.9899	mg/L	4.9899	mg/L	09:02:12
2	Cd 226.502†	16950.2	17507.0	0.49967	mg/L	0.49967	mg/L	09:02:12
2	Ti 334.940†	834898.5	861159.7	2.4753	mg/L	2.4753	mg/L	09:02:10
2	Ca 227.546†	22142.1	22782.9	148.94	mg/L	148.94	mg/L	09:02:12
2	Na 589.592	673582.4	673785.5	199.68	mg/L	199.68	mg/L	09:01:36
2	K 766.490	232355.6	231787.2	201.11	mg/L	201.11	mg/L	09:01:36
3	Y 360.073	738028.1	738028.1	96.84	%			09:02:35
3	Lu 261.542	480799.4	480799.4	98.28	%			09:02:35
3	Ag 328.068†	30672.9	31693.6	0.30888	mg/L	0.30888	mg/L	09:02:38
3	Al 308.215†	740314.6	747388.1	41.167	mg/L	41.167	mg/L	09:02:35
3	As 188.979†	854.0	872.6	1.0159	mg/L	1.0159	mg/L	09:02:58
3	Ba 233.527†	478070.8	486482.8	9.9373	mg/L	9.9373	mg/L	09:02:35
3	Be 313.107†	798322.0	816713.8	0.50566	mg/L	0.50566	mg/L	09:02:35
3	Co 228.616†	54652.8	55625.8	2.4695	mg/L	2.4695	mg/L	09:02:38
3	Cr 267.716†	73576.1	74836.8	2.0260	mg/L	2.0260	mg/L	09:02:38
3	Cu 324.752†	660269.0	670813.6	4.0909	mg/L	4.0909	mg/L	09:02:35
3	Fe 273.955†	325761.7	331986.5	20.296	mg/L	20.296	mg/L	09:02:38
3	Mg 279.077†	1805620.8	1837817.9	149.51	mg/L	149.51	mg/L	09:02:35
3	Mn 257.610†	1682200.6	1711807.7	4.1154	mg/L	4.1154	mg/L	09:02:35
3	Ni 231.604†	44297.1	45085.7	2.4737	mg/L	2.4737	mg/L	09:02:38
3	Pb 220.353†	7256.4	7375.3	2.0150	mg/L	2.0150	mg/L	09:02:58
3	Sb 206.836†	1291.3	1286.5	0.96201	mg/L	0.96201	mg/L	09:02:58
3	Se 196.026†	676.9	695.2	0.99887	mg/L	0.99887	mg/L	09:02:58
3	Tl 190.801†	1022.2	1057.7	0.95535	mg/L	0.95535	mg/L	09:02:58
3	V 292.402†	212996.4	216737.1	2.5086	mg/L	2.5086	mg/L	09:02:38
3	Zn 206.200†	99443.8	101164.0	4.9837	mg/L	4.9837	mg/L	09:02:38
3	Cd 226.502†	17026.7	17349.8	0.49517	mg/L	0.49517	mg/L	09:02:38
3	Ti 334.940†	847650.2	862558.6	2.4793	mg/L	2.4793	mg/L	09:02:35
3	Ca 227.546†	22328.9	22666.0	148.17	mg/L	148.17	mg/L	09:02:38
3	Na 589.592	668548.2	668751.2	198.19	mg/L	198.19	mg/L	09:01:38
3	K 766.490	230726.0	230157.5	199.70	mg/L	199.70	mg/L	09:01:38

Mean Data: CCV96

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	735801.7	96.55	%	0.934				0.97%
Lu 261.542	479558.8	98.03	%	0.966				0.99%
Ag 328.068†	31755.6	0.30948	mg/L	0.001363	0.30948	mg/L	0.001363	0.44%

QC value within limits for Ag 328.068 Recovery = 103.16%

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Al 308.215†          745470.3      41.062 mg/L        0.1785      41.062 mg/L        0.1785   0.43%
   QC value within limits for Al 308.215  Recovery = 102.65%
As 188.979†             865.6      1.0079 mg/L       0.01027      1.0079 mg/L       0.01027   1.02%
   QC value within limits for As 188.979  Recovery = 100.79%
Ba 233.527†          484395.9      9.8946 mg/L       0.05451      9.8946 mg/L       0.05451   0.55%
   QC value within limits for Ba 233.527  Recovery = 98.95%
Be 313.107†          813045.2     0.50338 mg/L      0.002632     0.50338 mg/L      0.002632   0.52%
   QC value within limits for Be 313.107  Recovery = 100.68%
Co 228.616†           55676.2      2.4718 mg/L       0.00962      2.4718 mg/L       0.00962   0.39%
   QC value within limits for Co 228.616  Recovery = 98.87%
Cr 267.716†           74984.9      2.0300 mg/L       0.00995      2.0300 mg/L       0.00995   0.49%
   QC value within limits for Cr 267.716  Recovery = 101.50%
Cu 324.752†          667779.9      4.0724 mg/L       0.02834      4.0724 mg/L       0.02834   0.70%
   QC value within limits for Cu 324.752  Recovery = 101.81%
Fe 273.955†          331371.4      20.259 mg/L        0.0825      20.259 mg/L        0.0825   0.41%
   QC value within limits for Fe 273.955  Recovery = 101.29%
Mg 279.077†         1827330.5      148.66 mg/L         0.841      148.66 mg/L         0.841   0.57%
   QC value within limits for Mg 279.077  Recovery = 99.10%
Mn 257.610†         1705496.6      4.1003 mg/L       0.01939      4.1003 mg/L       0.01939   0.47%
   QC value within limits for Mn 257.610  Recovery = 102.51%
Ni 231.604†           44977.3      2.4678 mg/L       0.00707      2.4678 mg/L       0.00707   0.29%
   QC value within limits for Ni 231.604  Recovery = 98.71%
Pb 220.353†            7378.8      2.0160 mg/L       0.00979      2.0160 mg/L       0.00979   0.49%
   QC value within limits for Pb 220.353  Recovery = 100.80%
Sb 206.836†            1277.0     0.95451 mg/L      0.016854     0.95451 mg/L      0.016854   1.77%
   QC value within limits for Sb 206.836  Recovery = 95.45%
Se 196.026†             694.6     0.99802 mg/L      0.006990     0.99802 mg/L      0.006990   0.70%
   QC value within limits for Se 196.026  Recovery = 99.80%
Tl 190.801†            1063.8     0.96086 mg/L      0.013982     0.96086 mg/L      0.013982   1.46%
   QC value within limits for Tl 190.801  Recovery = 96.09%
V 292.402†           216638.0      2.5074 mg/L       0.00819      2.5074 mg/L       0.00819   0.33%
   QC value within limits for V 292.402  Recovery = 100.30%
Zn 206.200†          101158.4      4.9835 mg/L       0.00654      4.9835 mg/L       0.00654   0.13%
   QC value within limits for Zn 206.200  Recovery = 99.67%
Cd 226.502†           17426.9     0.49738 mg/L      0.002253     0.49738 mg/L      0.002253   0.45%
   QC value within limits for Cd 226.502  Recovery = 99.48%
Ti 334.940†          857811.5      2.4657 mg/L       0.02026      2.4657 mg/L       0.02026   0.82%
   QC value within limits for Ti 334.940  Recovery = 98.63%
Ca 227.546†           22665.1      148.17 mg/L         0.775      148.17 mg/L         0.775   0.52%
   QC value within limits for Ca 227.546  Recovery = 98.78%
Na 589.592           670553.1      198.72 mg/L         0.832      198.72 mg/L         0.832   0.42%
   QC value within limits for Na 589.592  Recovery = 99.36%
K 766.490            230864.9      200.31 mg/L         0.725      200.31 mg/L         0.725   0.36%
   QC value within limits for K 766.490  Recovery = 100.16%
All analyte(s) passed QC.
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Sequence No.: 24 **Autosampler Location: 4**
Sample ID: CCB96 **Date Collected: 2/9/2012 9:04:07 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:52 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB96

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	778770.5	778770.5	102.2	%			09:05:24
1	Lu 261.542	503645.6	503645.6	103.0	%			09:05:24
1	Ag 328.068†	-410.1	85.9	0.00082	mg/L	0.00082	mg/L	09:05:27
1	Al 308.215†	6182.7	131.3	-0.01909	mg/L	-0.01909	mg/L	09:05:27
1	As 188.979†	-3.8	-0.0	-0.00026	mg/L	-0.00026	mg/L	09:05:47
1	Ba 233.527†	147.4	194.1	-0.00992	mg/L	-0.00992	mg/L	09:05:47
1	Be 313.107†	-3818.9	720.3	0.00034	mg/L	0.00034	mg/L	09:05:27
1	Co 228.616†	5.3	22.4	-0.00118	mg/L	-0.00118	mg/L	09:05:47
1	Cr 267.716†	40.9	13.7	0.00046	mg/L	0.00046	mg/L	09:05:27
1	Cu 324.752†	1428.2	384.1	0.00289	mg/L	0.00289	mg/L	09:05:27
1	Fe 273.955†	46.5	572.7	0.03043	mg/L	0.03043	mg/L	09:05:27
1	Mg 279.077†	417.2	1023.3	-0.11916	mg/L	-0.11916	mg/L	09:05:27
1	Mn 257.610†	730.6	896.2	0.00092	mg/L	0.00092	mg/L	09:05:27

1	Ni 231.604†	0.3	14.2	-0.00087	mg/L	-0.00087	mg/L	09:05:47
1	Pb 220.353†	9.6	1.4	0.00070	mg/L	0.00070	mg/L	09:05:47
1	Sb 206.836†	43.3	14.7	0.01355	mg/L	0.01355	mg/L	09:05:47
1	Se 196.026†	-5.9	0.7	-0.00751	mg/L	-0.00751	mg/L	09:05:47
1	Tl 190.801†	-7.9	10.0	0.00289	mg/L	0.00289	mg/L	09:05:47
1	V 292.402†	16.0	31.1	0.00002	mg/L	0.00002	mg/L	09:05:27
1	Zn 206.200†	79.7	58.3	0.00013	mg/L	0.00013	mg/L	09:05:47
1	Cd 226.502†	-16.7	9.1	0.00001	mg/L	0.00001	mg/L	09:05:47
1	Ti 334.940†	807.5	867.9	0.00085	mg/L	0.00085	mg/L	09:05:27
1	Ca 227.546†	81.8	26.0	0.04643	mg/L	0.04643	mg/L	09:05:47
1	Na 589.592	427.3	630.4	0.12192	mg/L	0.12192	mg/L	09:05:16
1	K 766.490	870.1	301.6	0.39892	mg/L	0.39892	mg/L	09:05:16
2	Y 360.073	778344.6	778344.6	102.1	%			09:05:49
2	Lu 261.542	503881.5	503881.5	103.0	%			09:05:49
2	Ag 328.068†	-463.6	34.1	0.00032	mg/L	0.00032	mg/L	09:05:51
2	Al 308.215†	5985.5	-62.9	-0.02979	mg/L	-0.02979	mg/L	09:05:51
2	As 188.979†	-6.2	-2.4	-0.00293	mg/L	-0.00293	mg/L	09:06:11
2	Ba 233.527†	98.8	146.9	-0.01088	mg/L	-0.01088	mg/L	09:06:11
2	Be 313.107†	-3883.0	659.8	0.00031	mg/L	0.00031	mg/L	09:05:51
2	Co 228.616†	6.3	23.3	-0.00114	mg/L	-0.00114	mg/L	09:06:11
2	Cr 267.716†	28.8	1.9	0.00014	mg/L	0.00014	mg/L	09:05:51
2	Cu 324.752†	1388.5	345.0	0.00265	mg/L	0.00265	mg/L	09:05:51
2	Fe 273.955†	-144.4	387.3	0.01908	mg/L	0.01908	mg/L	09:05:51
2	Mg 279.077†	89.8	705.3	-0.14507	mg/L	-0.14507	mg/L	09:05:51
2	Mn 257.610†	431.8	605.7	0.00022	mg/L	0.00022	mg/L	09:05:51
2	Ni 231.604†	-10.6	3.6	-0.00145	mg/L	-0.00145	mg/L	09:06:11
2	Pb 220.353†	14.2	5.8	0.00191	mg/L	0.00191	mg/L	09:06:11
2	Sb 206.836†	47.1	18.5	0.01646	mg/L	0.01646	mg/L	09:06:11
2	Se 196.026†	-2.6	4.0	-0.00285	mg/L	-0.00285	mg/L	09:06:11
2	Tl 190.801†	-12.5	5.5	-0.00125	mg/L	-0.00125	mg/L	09:06:11
2	V 292.402†	54.5	68.5	0.00046	mg/L	0.00046	mg/L	09:05:51
2	Zn 206.200†	63.4	42.5	-0.00065	mg/L	-0.00065	mg/L	09:06:11
2	Cd 226.502†	-22.8	3.2	-0.00016	mg/L	-0.00016	mg/L	09:06:11
2	Ti 334.940†	571.4	638.3	0.00019	mg/L	0.00019	mg/L	09:05:51
2	Ca 227.546†	57.8	2.6	-0.10706	mg/L	-0.10706	mg/L	09:06:11
2	Na 589.592	440.7	643.8	0.12589	mg/L	0.12589	mg/L	09:05:18
2	K 766.490	858.1	289.6	0.38853	mg/L	0.38853	mg/L	09:05:18
3	Y 360.073	764972.8	764972.8	100.4	%			09:06:14
3	Lu 261.542	494292.1	494292.1	101.0	%			09:06:14
3	Ag 328.068†	-400.3	88.0	0.00084	mg/L	0.00084	mg/L	09:06:16
3	Al 308.215†	6040.4	104.1	-0.02058	mg/L	-0.02058	mg/L	09:06:16
3	As 188.979†	-1.1	2.6	0.00271	mg/L	0.00271	mg/L	09:06:36
3	Ba 233.527†	57.1	107.4	-0.01169	mg/L	-0.01169	mg/L	09:06:36
3	Be 313.107†	-4117.4	354.7	0.00012	mg/L	0.00012	mg/L	09:06:16
3	Co 228.616†	-1.0	16.3	-0.00145	mg/L	-0.00145	mg/L	09:06:36
3	Cr 267.716†	30.5	4.1	0.00021	mg/L	0.00021	mg/L	09:06:16
3	Cu 324.752†	1269.3	253.2	0.00209	mg/L	0.00209	mg/L	09:06:16
3	Fe 273.955†	-162.8	366.3	0.01780	mg/L	0.01780	mg/L	09:06:16
3	Mg 279.077†	-40.4	578.0	-0.15543	mg/L	-0.15543	mg/L	09:06:16
3	Mn 257.610†	201.2	385.7	-0.00031	mg/L	-0.00031	mg/L	09:06:16
3	Ni 231.604†	1.6	15.4	-0.00080	mg/L	-0.00080	mg/L	09:06:36
3	Pb 220.353†	5.5	-2.6	-0.00039	mg/L	-0.00039	mg/L	09:06:36
3	Sb 206.836†	42.9	15.2	0.01389	mg/L	0.01389	mg/L	09:06:36
3	Se 196.026†	6.2	12.6	0.00956	mg/L	0.00956	mg/L	09:06:36
3	Tl 190.801†	-11.5	6.2	-0.00054	mg/L	-0.00054	mg/L	09:06:36
3	V 292.402†	56.5	71.5	0.00049	mg/L	0.00049	mg/L	09:06:16
3	Zn 206.200†	56.1	36.4	-0.00095	mg/L	-0.00095	mg/L	09:06:36
3	Cd 226.502†	-29.8	-4.2	-0.00037	mg/L	-0.00037	mg/L	09:06:36
3	Ti 334.940†	395.0	474.5	-0.00028	mg/L	-0.00028	mg/L	09:06:16
3	Ca 227.546†	63.7	9.6	-0.06129	mg/L	-0.06129	mg/L	09:06:36
3	Na 589.592	242.2	445.3	0.06705	mg/L	0.06705	mg/L	09:05:21
3	K 766.490	808.7	240.2	0.34574	mg/L	0.34574	mg/L	09:05:21

Mean Data: CCB96

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	774029.3	101.6	%	1.03				1.01%
Lu 261.542	500606.4	102.3	%	1.12				1.09%
Ag 328.068†	69.4	0.00066	mg/L	0.000294	0.00066	mg/L	0.000294	44.46%
Al 308.215†	57.5	-0.02315	mg/L	0.005798	-0.02315	mg/L	0.005798	25.04%

As 188.979†	0.1	-0.00016	mg/L	0.002824	-0.00016	mg/L	0.002824 >999.9%
Ba 233.527†	149.5	-0.01083	mg/L	0.000887	-0.01083	mg/L	0.000887 8.19%
Be 313.107†	578.3	0.00026	mg/L	0.000121	0.00026	mg/L	0.000121 47.43%
Co 228.616†	20.7	-0.00126	mg/L	0.000170	-0.00126	mg/L	0.000170 13.54%
Cr 267.716†	6.6	0.00027	mg/L	0.000169	0.00027	mg/L	0.000169 62.48%
Cu 324.752†	327.4	0.00255	mg/L	0.000410	0.00255	mg/L	0.000410 16.11%
Fe 273.955†	442.1	0.02244	mg/L	0.006952	0.02244	mg/L	0.006952 30.98%
Mg 279.077†	768.9	-0.13989	mg/L	0.018685	-0.13989	mg/L	0.018685 13.36%
Mn 257.610†	629.2	0.00028	mg/L	0.000616	0.00028	mg/L	0.000616 219.39%
Ni 231.604†	11.1	-0.00104	mg/L	0.000358	-0.00104	mg/L	0.000358 34.40%
Pb 220.353†	1.5	0.00074	mg/L	0.001146	0.00074	mg/L	0.001146 155.12%
Sb 206.836†	16.1	0.01463	mg/L	0.001587	0.01463	mg/L	0.001587 10.84%
Se 196.026†	5.8	-0.00027	mg/L	0.008825	-0.00027	mg/L	0.008825 >999.9%
Tl 190.801†	7.2	0.00036	mg/L	0.002215	0.00036	mg/L	0.002215 607.70%
V 292.402†	57.0	0.00032	mg/L	0.000260	0.00032	mg/L	0.000260 80.23%
Zn 206.200†	45.7	-0.00049	mg/L	0.000557	-0.00049	mg/L	0.000557 113.32%
Cd 226.502†	2.7	-0.00017	mg/L	0.000190	-0.00017	mg/L	0.000190 110.03%
Ti 334.940†	660.3	0.00026	mg/L	0.000569	0.00026	mg/L	0.000569 222.27%
Ca 227.546†	12.7	-0.04064	mg/L	0.078798	-0.04064	mg/L	0.078798 193.89%
Na 589.592	573.1	0.10495	mg/L	0.032886	0.10495	mg/L	0.032886 31.33%
K 766.490	277.1	0.37773	mg/L	0.028182	0.37773	mg/L	0.028182 7.46%

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Sequence No.: 25
Sample ID: L0147-07APDS~MB9B21A
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 2/9/2012 9:07:46 AM
Data Type: Reprocessed on 2/10/2012 7:27:53 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0147-07APDS~MB9B21A

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	743813.8	743813.8	97.60	%			09:09:04
1	Lu 261.542	488180.9	488180.9	99.79	%			09:09:04
1	Ag 328.068†	1594.1	2081.7	0.02020	mg/L	0.02020	mg/L	09:09:06
1	Al 308.215†	13952.0	8107.2	0.41132	mg/L	0.41132	mg/L	09:09:06
1	As 188.979†	12.8	16.5	0.02027	mg/L	0.02027	mg/L	09:09:26
1	Ba 233.527†	20687.5	20782.0	0.41121	mg/L	0.41121	mg/L	09:09:06
1	Be 313.107†	12684.1	17140.5	0.01039	mg/L	0.01039	mg/L	09:09:06
1	Co 228.616†	2205.2	2227.1	0.09675	mg/L	0.09675	mg/L	09:09:26
1	Cr 267.716†	795.5	771.1	0.02076	mg/L	0.02076	mg/L	09:09:26
1	Cu 324.752†	9277.7	8294.1	0.05167	mg/L	0.05167	mg/L	09:09:06
1	Fe 273.955†	148562.9	149403.0	9.1365	mg/L	9.1365	mg/L	09:09:04
1	Mg 279.077†	347452.8	348802.0	28.213	mg/L	28.213	mg/L	09:09:04
1	Mn 257.610†	137121.6	137596.7	0.32919	mg/L	0.32919	mg/L	09:09:06
1	Ni 231.604†	1442.1	1459.0	0.07850	mg/L	0.07850	mg/L	09:09:26
1	Pb 220.353†	71.8	63.9	0.01822	mg/L	0.01822	mg/L	09:09:26
1	Sb 206.836†	162.0	135.0	0.10580	mg/L	0.10580	mg/L	09:09:26
1	Se 196.026†	30.2	36.8	0.04781	mg/L	0.04781	mg/L	09:09:26
1	Tl 190.801†	42.0	59.7	0.04963	mg/L	0.04963	mg/L	09:09:26
1	V 292.402†	8362.8	8396.0	0.09740	mg/L	0.09740	mg/L	09:09:06
1	Zn 206.200†	67233.7	67356.1	3.3127	mg/L	3.3127	mg/L	09:09:06
1	Cd 226.502†	343.7	369.7	0.00937	mg/L	0.00937	mg/L	09:09:26
1	Ti 334.940†	791.9	877.1	0.00226	mg/L	0.00226	mg/L	09:09:06
1	Ca 227.546†	9037.2	9002.8	59.037	mg/L	59.037	mg/L	09:09:06
1	Na 589.592	71464.5	71667.6	21.181	mg/L	21.181	mg/L	09:08:56
1	K 766.490	14682.8	14114.3	12.375	mg/L	12.375	mg/L	09:08:56
2	Y 360.073	768698.3	768698.3	100.9	%			09:09:29
2	Lu 261.542	505492.3	505492.3	103.3	%			09:09:29
2	Ag 328.068†	1585.9	2019.1	0.01959	mg/L	0.01959	mg/L	09:09:31
2	Al 308.215†	13773.1	7455.3	0.37568	mg/L	0.37568	mg/L	09:09:31
2	As 188.979†	11.8	15.1	0.01865	mg/L	0.01865	mg/L	09:09:51
2	Ba 233.527†	20510.2	19900.4	0.39318	mg/L	0.39318	mg/L	09:09:31
2	Be 313.107†	12545.9	16571.5	0.01004	mg/L	0.01004	mg/L	09:09:31
2	Co 228.616†	2190.3	2137.0	0.09273	mg/L	0.09273	mg/L	09:09:51
2	Cr 267.716†	795.3	743.6	0.02002	mg/L	0.02002	mg/L	09:09:51
2	Cu 324.752†	9145.8	7848.1	0.04894	mg/L	0.04894	mg/L	09:09:31
2	Fe 273.955†	152085.7	147713.8	9.0332	mg/L	9.0332	mg/L	09:09:29
2	Mg 279.077†	352942.4	342190.7	27.674	mg/L	27.674	mg/L	09:09:29

2	Mn 257.610†	135881.6	131690.9	0.31499	mg/L	0.31499	mg/L	09:09:31
2	Ni 231.604†	1424.3	1392.3	0.07484	mg/L	0.07484	mg/L	09:09:51
2	Pb 220.353†	72.5	62.1	0.01772	mg/L	0.01772	mg/L	09:09:51
2	Sb 206.836†	167.1	134.5	0.10540	mg/L	0.10540	mg/L	09:09:51
2	Se 196.026†	39.7	44.9	0.05947	mg/L	0.05947	mg/L	09:09:51
2	Tl 190.801†	36.4	52.8	0.04329	mg/L	0.04329	mg/L	09:09:51
2	V 292.402†	8369.8	8115.8	0.09415	mg/L	0.09415	mg/L	09:09:31
2	Zn 206.200†	66650.8	64484.6	3.1713	mg/L	3.1713	mg/L	09:09:31
2	Cd 226.502†	343.0	357.2	0.00902	mg/L	0.00902	mg/L	09:09:51
2	Ti 334.940†	800.6	858.4	0.00215	mg/L	0.00215	mg/L	09:09:31
2	Ca 227.546†	9023.8	8679.7	56.914	mg/L	56.914	mg/L	09:09:31
2	Na 589.592	74049.3	74252.3	21.948	mg/L	21.948	mg/L	09:08:58
2	K 766.490	15214.4	14645.9	12.836	mg/L	12.836	mg/L	09:08:58
3	Y 360.073	764519.9	764519.9	100.3	%			09:09:53
3	Lu 261.542	502114.5	502114.5	102.6	%			09:09:53
3	Ag 328.068†	1543.3	1987.9	0.01928	mg/L	0.01928	mg/L	09:09:56
3	Al 308.215†	13543.1	7320.9	0.36845	mg/L	0.36845	mg/L	09:09:56
3	As 188.979†	12.3	15.6	0.01926	mg/L	0.01926	mg/L	09:10:16
3	Ba 233.527†	20107.5	19641.6	0.38788	mg/L	0.38788	mg/L	09:09:56
3	Be 313.107†	12081.1	16200.3	0.00981	mg/L	0.00981	mg/L	09:09:56
3	Co 228.616†	2215.4	2175.7	0.09446	mg/L	0.09446	mg/L	09:10:16
3	Cr 267.716†	788.2	741.9	0.01998	mg/L	0.01998	mg/L	09:10:16
3	Cu 324.752†	8934.2	7701.5	0.04805	mg/L	0.04805	mg/L	09:09:56
3	Fe 273.955†	152114.9	148732.4	9.0955	mg/L	9.0955	mg/L	09:09:53
3	Mg 279.077†	350922.4	342520.4	27.701	mg/L	27.701	mg/L	09:09:53
3	Mn 257.610†	132759.1	129533.2	0.30979	mg/L	0.30979	mg/L	09:09:56
3	Ni 231.604†	1430.1	1407.3	0.07566	mg/L	0.07566	mg/L	09:10:16
3	Pb 220.353†	72.0	62.1	0.01770	mg/L	0.01770	mg/L	09:10:16
3	Sb 206.836†	175.3	143.5	0.11246	mg/L	0.11246	mg/L	09:10:16
3	Se 196.026†	36.7	42.3	0.05575	mg/L	0.05575	mg/L	09:10:16
3	Tl 190.801†	37.4	54.0	0.04442	mg/L	0.04442	mg/L	09:10:16
3	V 292.402†	8135.9	7942.3	0.09215	mg/L	0.09215	mg/L	09:09:56
3	Zn 206.200†	64567.4	62888.7	3.0928	mg/L	3.0928	mg/L	09:09:56
3	Cd 226.502†	343.7	360.2	0.00910	mg/L	0.00910	mg/L	09:10:16
3	Ti 334.940†	745.2	809.6	0.00197	mg/L	0.00197	mg/L	09:09:56
3	Ca 227.546†	8794.6	8515.0	55.831	mg/L	55.831	mg/L	09:09:56
3	Na 589.592	73646.7	73849.8	21.828	mg/L	21.828	mg/L	09:09:00
3	K 766.490	15081.3	14512.9	12.721	mg/L	12.721	mg/L	09:09:00

Mean Data: L0147-07APDS~MB9B21A

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	759010.7	99.60	%	1.749				1.76%
Lu 261.542	498595.9	101.9	%	1.88				1.84%
Ag 328.068†	2029.6	0.01969	mg/L	0.000464	0.01969	mg/L	0.000464	2.36%
Al 308.215†	7627.8	0.38515	mg/L	0.022949	0.38515	mg/L	0.022949	5.96%
As 188.979†	15.7	0.01939	mg/L	0.000821	0.01939	mg/L	0.000821	4.23%
Ba 233.527†	20108.0	0.39742	mg/L	0.012229	0.39742	mg/L	0.012229	3.08%
Be 313.107†	16637.4	0.01008	mg/L	0.000290	0.01008	mg/L	0.000290	2.88%
Co 228.616†	2179.9	0.09465	mg/L	0.002015	0.09465	mg/L	0.002015	2.13%
Cr 267.716†	752.2	0.02025	mg/L	0.000440	0.02025	mg/L	0.000440	2.17%
Cu 324.752†	7947.9	0.04955	mg/L	0.001884	0.04955	mg/L	0.001884	3.80%
Fe 273.955†	148616.4	9.0884	mg/L	0.05203	9.0884	mg/L	0.05203	0.57%
Mg 279.077†	344504.3	27.862	mg/L	0.3035	27.862	mg/L	0.3035	1.09%
Mn 257.610†	132940.3	0.31799	mg/L	0.010041	0.31799	mg/L	0.010041	3.16%
Ni 231.604†	1419.5	0.07633	mg/L	0.001922	0.07633	mg/L	0.001922	2.52%
Pb 220.353†	62.7	0.01788	mg/L	0.000294	0.01788	mg/L	0.000294	1.64%
Sb 206.836†	137.7	0.10789	mg/L	0.003963	0.10789	mg/L	0.003963	3.67%
Se 196.026†	41.3	0.05434	mg/L	0.005958	0.05434	mg/L	0.005958	10.96%
Tl 190.801†	55.5	0.04578	mg/L	0.003379	0.04578	mg/L	0.003379	7.38%
V 292.402†	8151.4	0.09457	mg/L	0.002650	0.09457	mg/L	0.002650	2.80%
Zn 206.200†	64909.8	3.1922	mg/L	0.11143	3.1922	mg/L	0.11143	3.49%
Cd 226.502†	362.4	0.00916	mg/L	0.000182	0.00916	mg/L	0.000182	1.99%
Ti 334.940†	848.4	0.00212	mg/L	0.000145	0.00212	mg/L	0.000145	6.81%
Ca 227.546†	8732.5	57.261	mg/L	1.6310	57.261	mg/L	1.6310	2.85%
Na 589.592	73256.6	21.652	mg/L	0.4123	21.652	mg/L	0.4123	1.90%
K 766.490	14424.4	12.644	mg/L	0.2399	12.644	mg/L	0.2399	1.90%

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Sequence No.: 26 **Autosampler Location: 48**

Sample ID: L0147-08A~MB9B23 **Date Collected: 2/9/2012 9:11:25 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:53 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L0147-08A~MB9B23

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	772990.3	772990.3	101.4	%			09:12:43
1	Lu 261.542	507297.7	507297.7	103.7	%			09:12:43
1	Ag 328.068†	-442.1	57.9	0.00055	mg/L	0.00055	mg/L	09:12:45
1	Al 308.215†	6276.6	178.6	-0.02233	mg/L	-0.02233	mg/L	09:12:45
1	As 188.979†	-11.3	-7.2	-0.00666	mg/L	-0.00666	mg/L	09:13:06
1	Ba 233.527†	1102.3	1113.9	0.00889	mg/L	0.00889	mg/L	09:13:06
1	Be 313.107†	-3872.3	695.5	0.00032	mg/L	0.00032	mg/L	09:12:45
1	Co 228.616†	28.7	44.9	-0.00120	mg/L	-0.00120	mg/L	09:13:06
1	Cr 267.716†	56.8	28.6	0.00054	mg/L	0.00054	mg/L	09:13:06
1	Cu 324.752†	1003.4	-35.5	0.00155	mg/L	0.00155	mg/L	09:12:45
1	Fe 273.955†	343932.7	332196.0	20.324	mg/L	20.324	mg/L	09:12:43
1	Mg 279.077†	393049.2	379651.7	30.731	mg/L	30.731	mg/L	09:12:43
1	Mn 257.610†	270079.6	260635.5	0.62534	mg/L	0.62534	mg/L	09:12:43
1	Ni 231.604†	39.4	51.9	0.00120	mg/L	0.00120	mg/L	09:13:06
1	Pb 220.353†	2.1	-6.0	-0.00102	mg/L	-0.00102	mg/L	09:13:06
1	Sb 206.836†	35.3	6.7	0.00580	mg/L	0.00580	mg/L	09:13:06
1	Se 196.026†	-12.9	-5.9	-0.00960	mg/L	-0.00960	mg/L	09:13:06
1	Tl 190.801†	-15.6	2.6	-0.00107	mg/L	-0.00107	mg/L	09:13:06
1	V 292.402†	-130.6	-110.4	-0.00031	mg/L	-0.00031	mg/L	09:12:45
1	Zn 206.200†	36562.0	35239.2	1.7318	mg/L	1.7318	mg/L	09:12:45
1	Cd 226.502†	23.4	47.9	-0.00111	mg/L	-0.00111	mg/L	09:13:06
1	Ti 334.940†	42.5	124.5	-0.00050	mg/L	-0.00050	mg/L	09:12:45
1	Ca 227.546†	6632.1	6342.1	41.554	mg/L	41.554	mg/L	09:12:45
1	Na 589.592	53243.7	53446.7	15.780	mg/L	15.780	mg/L	09:12:35
1	K 766.490	5603.3	5034.8	4.5029	mg/L	4.5029	mg/L	09:12:35
2	Y 360.073	772644.0	772644.0	101.4	%			09:13:08
2	Lu 261.542	507436.6	507436.6	103.7	%			09:13:08
2	Ag 328.068†	-439.2	60.8	0.00058	mg/L	0.00058	mg/L	09:13:10
2	Al 308.215†	6141.1	46.4	-0.02949	mg/L	-0.02949	mg/L	09:13:10
2	As 188.979†	0.6	4.3	0.00651	mg/L	0.00651	mg/L	09:13:31
2	Ba 233.527†	1106.0	1117.2	0.00896	mg/L	0.00896	mg/L	09:13:31
2	Be 313.107†	-3750.8	813.7	0.00040	mg/L	0.00040	mg/L	09:13:10
2	Co 228.616†	30.5	46.7	-0.00113	mg/L	-0.00113	mg/L	09:13:31
2	Cr 267.716†	37.4	10.0	0.00004	mg/L	0.00004	mg/L	09:13:31
2	Cu 324.752†	1041.0	0.5	0.00178	mg/L	0.00178	mg/L	09:13:10
2	Fe 273.955†	345375.3	333496.1	20.404	mg/L	20.404	mg/L	09:13:08
2	Mg 279.077†	392596.7	379111.8	30.687	mg/L	30.687	mg/L	09:13:08
2	Mn 257.610†	269878.1	260370.0	0.62470	mg/L	0.62470	mg/L	09:13:08
2	Ni 231.604†	30.7	43.5	0.00074	mg/L	0.00074	mg/L	09:13:31
2	Pb 220.353†	2.1	-6.0	-0.00102	mg/L	-0.00102	mg/L	09:13:31
2	Sb 206.836†	40.8	12.0	0.00993	mg/L	0.00993	mg/L	09:13:31
2	Se 196.026†	-13.0	-6.0	-0.00971	mg/L	-0.00971	mg/L	09:13:31
2	Tl 190.801†	-14.7	3.4	-0.00027	mg/L	-0.00027	mg/L	09:13:31
2	V 292.402†	-133.8	-113.5	-0.00034	mg/L	-0.00034	mg/L	09:13:10
2	Zn 206.200†	35532.2	34236.7	1.6824	mg/L	1.6824	mg/L	09:13:10
2	Cd 226.502†	39.5	63.4	-0.00067	mg/L	-0.00067	mg/L	09:13:31
2	Ti 334.940†	105.4	185.2	-0.00036	mg/L	-0.00036	mg/L	09:13:10
2	Ca 227.546†	6481.6	6195.3	40.588	mg/L	40.588	mg/L	09:13:10
2	Na 589.592	52580.3	52783.4	15.583	mg/L	15.583	mg/L	09:12:37
2	K 766.490	5535.0	4966.6	4.4437	mg/L	4.4437	mg/L	09:12:37
3	Y 360.073	765702.2	765702.2	100.5	%			09:13:33
3	Lu 261.542	502609.0	502609.0	102.7	%			09:13:33
3	Ag 328.068†	-486.8	10.4	0.00009	mg/L	0.00009	mg/L	09:13:35
3	Al 308.215†	6227.5	187.3	-0.02184	mg/L	-0.02184	mg/L	09:13:35
3	As 188.979†	-8.0	-4.1	-0.00311	mg/L	-0.00311	mg/L	09:13:55
3	Ba 233.527†	1105.7	1127.2	0.00916	mg/L	0.00916	mg/L	09:13:55
3	Be 313.107†	-3834.9	697.1	0.00032	mg/L	0.00032	mg/L	09:13:35
3	Co 228.616†	18.2	34.9	-0.00166	mg/L	-0.00166	mg/L	09:13:55
3	Cr 267.716†	42.1	14.9	0.00017	mg/L	0.00017	mg/L	09:13:55
3	Cu 324.752†	1037.1	6.3	0.00182	mg/L	0.00182	mg/L	09:13:35
3	Fe 273.955†	343978.7	335334.8	20.516	mg/L	20.516	mg/L	09:13:33

3	Mg 279.077†	390290.6	380502.5	30.800	mg/L	30.800	mg/L	09:13:33
3	Mn 257.610†	268372.9	261404.0	0.62719	mg/L	0.62719	mg/L	09:13:33
3	Ni 231.604†	33.9	46.9	0.00093	mg/L	0.00093	mg/L	09:13:55
3	Pb 220.353†	12.9	4.5	0.00185	mg/L	0.00185	mg/L	09:13:55
3	Sb 206.836†	30.2	2.1	0.00222	mg/L	0.00222	mg/L	09:13:55
3	Se 196.026†	-10.9	-4.2	-0.00697	mg/L	-0.00697	mg/L	09:13:55
3	Tl 190.801†	-19.4	-1.2	-0.00457	mg/L	-0.00457	mg/L	09:13:55
3	V 292.402†	-111.2	-92.6	-0.00009	mg/L	-0.00009	mg/L	09:13:35
3	Zn 206.200†	36022.1	35042.6	1.7221	mg/L	1.7221	mg/L	09:13:35
3	Cd 226.502†	38.4	62.7	-0.00071	mg/L	-0.00071	mg/L	09:13:55
3	Ti 334.940†	81.4	162.8	-0.00039	mg/L	-0.00039	mg/L	09:13:35
3	Ca 227.546†	6558.8	6330.5	41.477	mg/L	41.477	mg/L	09:13:35
3	Na 589.592	52704.5	52907.6	15.620	mg/L	15.620	mg/L	09:12:39
3	K 766.490	5533.0	4964.5	4.4420	mg/L	4.4420	mg/L	09:12:39

Mean Data: L0147-08A~MB9B23

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	770445.5	101.1	%	0.54				0.53%
Lu 261.542	505781.1	103.4	%	0.56				0.54%
Ag 328.068†	43.1	0.00041	mg/L	0.000273	0.00041	mg/L	0.000273	67.26%
Al 308.215†	137.5	-0.02455	mg/L	0.004282	-0.02455	mg/L	0.004282	17.44%
As 188.979†	-2.4	-0.00109	mg/L	0.006814	-0.00109	mg/L	0.006814	626.26%
Ba 233.527†	1119.4	0.00901	mg/L	0.000141	0.00901	mg/L	0.000141	1.57%
Be 313.107†	735.4	0.00035	mg/L	0.000042	0.00035	mg/L	0.000042	11.97%
Co 228.616†	42.2	-0.00133	mg/L	0.000287	-0.00133	mg/L	0.000287	21.52%
Cr 267.716†	17.8	0.00025	mg/L	0.000262	0.00025	mg/L	0.000262	105.79%
Cu 324.752†	-9.6	0.00172	mg/L	0.000143	0.00172	mg/L	0.000143	8.34%
Fe 273.955†	333675.6	20.415	mg/L	0.0965	20.415	mg/L	0.0965	0.47%
Mg 279.077†	379755.3	30.740	mg/L	0.0571	30.740	mg/L	0.0571	0.19%
Mn 257.610†	260803.1	0.62574	mg/L	0.001291	0.62574	mg/L	0.001291	0.21%
Ni 231.604†	47.4	0.00096	mg/L	0.000233	0.00096	mg/L	0.000233	24.27%
Pb 220.353†	-2.5	-0.00007	mg/L	0.001657	-0.00007	mg/L	0.001657	>999.9%
Sb 206.836†	6.9	0.00598	mg/L	0.003859	0.00598	mg/L	0.003859	64.50%
Se 196.026†	-5.4	-0.00876	mg/L	0.001553	-0.00876	mg/L	0.001553	17.72%
Tl 190.801†	1.6	-0.00197	mg/L	0.002283	-0.00197	mg/L	0.002283	115.87%
V 292.402†	-105.5	-0.00024	mg/L	0.000135	-0.00024	mg/L	0.000135	55.45%
Zn 206.200†	34839.5	1.7121	mg/L	0.02615	1.7121	mg/L	0.02615	1.53%
Cd 226.502†	58.0	-0.00083	mg/L	0.000242	-0.00083	mg/L	0.000242	29.23%
Ti 334.940†	157.5	-0.00042	mg/L	0.000075	-0.00042	mg/L	0.000075	17.90%
Ca 227.546†	6289.3	41.206	mg/L	0.5368	41.206	mg/L	0.5368	1.30%
Na 589.592	53045.9	15.661	mg/L	0.1045	15.661	mg/L	0.1045	0.67%
K 766.490	4988.6	4.4629	mg/L	0.03467	4.4629	mg/L	0.03467	0.78%

Sequence No.: 27
Sample ID: L0195-01A~MC09P4
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 2/9/2012 9:15:05 AM
Data Type: Reprocessed on 2/10/2012 7:27:54 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0195-01A~MC09P4

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	817327.1	817327.1	107.2	%			09:16:30
1	Lu 261.542	503106.4	503106.4	102.8	%			09:16:30
1	Ag 328.068†	-492.1	5.8	0.00006	mg/L	0.00006	mg/L	09:16:33
1	Al 308.215†	74294.7	66368.2	3.6327	mg/L	3.6327	mg/L	09:16:33
1	As 188.979†	2.2	5.8	0.00620	mg/L	0.00620	mg/L	09:16:53
1	Ba 233.527†	9038.4	8839.7	0.16690	mg/L	0.16690	mg/L	09:16:33
1	Be 313.107†	2581.2	6939.7	0.00414	mg/L	0.00414	mg/L	09:16:33
1	Co 228.616†	1560.6	1534.7	0.06635	mg/L	0.06635	mg/L	09:16:53
1	Cr 267.716†	104.3	75.3	0.00089	mg/L	0.00089	mg/L	09:16:53
1	Cu 324.752†	1406.7	364.8	0.00277	mg/L	0.00277	mg/L	09:16:33
1	Fe 273.955†	148.1	671.5	0.03553	mg/L	0.03553	mg/L	09:16:53
1	Mg 279.077†	165684.0	161725.1	12.992	mg/L	12.992	mg/L	09:16:30
1	Mn 257.610†	2217304.4	2156238.2	5.1896	mg/L	5.1896	mg/L	09:16:30
1	Ni 231.604†	580.1	578.0	0.03011	mg/L	0.03011	mg/L	09:16:53

1	Pb 220.353†	5.3	-2.9	0.00007	mg/L	0.00007	mg/L	09:16:53
1	Sb 206.836†	28.2	0.1	0.00163	mg/L	0.00163	mg/L	09:16:53
1	Se 196.026†	5.8	12.1	0.00404	mg/L	0.00404	mg/L	09:16:53
1	Tl 190.801†	-7.3	10.5	0.00354	mg/L	0.00354	mg/L	09:16:53
1	V 292.402†	-36.8	-20.2	-0.00056	mg/L	-0.00056	mg/L	09:16:33
1	Zn 206.200†	2170.9	2091.9	0.10023	mg/L	0.10023	mg/L	09:16:53
1	Cd 226.502†	18.4	43.2	0.00100	mg/L	0.00100	mg/L	09:16:53
1	Ti 334.940†	-216.8	-127.3	-0.00127	mg/L	-0.00127	mg/L	09:16:33
1	Ca 227.546†	4830.9	4644.0	30.370	mg/L	30.370	mg/L	09:16:53
1	Na 589.592	305474.4	305677.5	90.555	mg/L	90.555	mg/L	09:16:15
1	K 766.490	4128.0	3559.5	3.2237	mg/L	3.2237	mg/L	09:16:18
2	Y 360.073	832146.9	832146.9	109.2	%			09:16:56
2	Lu 261.542	513429.8	513429.8	105.0	%			09:16:56
2	Ag 328.068†	-456.0	49.8	0.00048	mg/L	0.00048	mg/L	09:16:58
2	Al 308.215†	75980.6	66522.0	3.6413	mg/L	3.6413	mg/L	09:16:58
2	As 188.979†	-1.8	1.9	0.00176	mg/L	0.00176	mg/L	09:17:18
2	Ba 233.527†	9240.4	8855.4	0.16722	mg/L	0.16722	mg/L	09:16:58
2	Be 313.107†	2647.9	6952.7	0.00415	mg/L	0.00415	mg/L	09:16:58
2	Co 228.616†	1542.9	1487.4	0.06423	mg/L	0.06423	mg/L	09:17:18
2	Cr 267.716†	104.5	73.5	0.00084	mg/L	0.00084	mg/L	09:17:18
2	Cu 324.752†	1357.1	290.0	0.00232	mg/L	0.00232	mg/L	09:16:58
2	Fe 273.955†	41.7	567.2	0.02914	mg/L	0.02914	mg/L	09:17:18
2	Mg 279.077†	169541.7	162161.5	13.028	mg/L	13.028	mg/L	09:16:56
2	Mn 257.610†	2265868.5	2159160.4	5.1966	mg/L	5.1966	mg/L	09:16:56
2	Ni 231.604†	569.7	556.7	0.02894	mg/L	0.02894	mg/L	09:17:18
2	Pb 220.353†	15.1	6.4	0.00259	mg/L	0.00259	mg/L	09:17:18
2	Sb 206.836†	30.4	1.7	0.00285	mg/L	0.00285	mg/L	09:17:18
2	Se 196.026†	0.1	6.5	-0.00404	mg/L	-0.00404	mg/L	09:17:18
2	Tl 190.801†	-8.8	9.2	0.00237	mg/L	0.00237	mg/L	09:17:18
2	V 292.402†	-28.2	-11.3	-0.00046	mg/L	-0.00046	mg/L	09:16:58
2	Zn 206.200†	2165.5	2044.3	0.09788	mg/L	0.09788	mg/L	09:17:18
2	Cd 226.502†	14.5	39.1	0.00088	mg/L	0.00088	mg/L	09:17:18
2	Ti 334.940†	-182.3	-90.2	-0.00118	mg/L	-0.00118	mg/L	09:16:58
2	Ca 227.546†	4830.8	4549.5	29.748	mg/L	29.748	mg/L	09:17:18
2	Na 589.592	305277.6	305480.7	90.497	mg/L	90.497	mg/L	09:16:20
2	K 766.490	4260.4	3691.9	3.3385	mg/L	3.3385	mg/L	09:16:22
3	Y 360.073	820395.6	820395.6	107.7	%			09:17:21
3	Lu 261.542	506545.2	506545.2	103.5	%			09:17:21
3	Ag 328.068†	-444.2	55.3	0.00053	mg/L	0.00053	mg/L	09:17:23
3	Al 308.215†	75893.3	67421.7	3.6909	mg/L	3.6909	mg/L	09:17:23
3	As 188.979†	-0.1	3.6	0.00371	mg/L	0.00371	mg/L	09:17:43
3	Ba 233.527†	9234.8	8969.7	0.16956	mg/L	0.16956	mg/L	09:17:23
3	Be 313.107†	2671.4	7009.7	0.00418	mg/L	0.00418	mg/L	09:17:23
3	Co 228.616†	1562.4	1526.2	0.06596	mg/L	0.06596	mg/L	09:17:43
3	Cr 267.716†	102.2	72.6	0.00083	mg/L	0.00083	mg/L	09:17:43
3	Cu 324.752†	1442.6	390.1	0.00293	mg/L	0.00293	mg/L	09:17:23
3	Fe 273.955†	-23.0	505.3	0.02537	mg/L	0.02537	mg/L	09:17:43
3	Mg 279.077†	165003.8	159974.5	12.850	mg/L	12.850	mg/L	09:17:21
3	Mn 257.610†	2210750.3	2135272.0	5.1391	mg/L	5.1391	mg/L	09:17:21
3	Ni 231.604†	562.8	557.5	0.02898	mg/L	0.02898	mg/L	09:17:43
3	Pb 220.353†	5.3	-2.9	0.00007	mg/L	0.00007	mg/L	09:17:43
3	Sb 206.836†	28.5	0.2	0.00173	mg/L	0.00173	mg/L	09:17:43
3	Se 196.026†	1.5	8.0	-0.00195	mg/L	-0.00195	mg/L	09:17:43
3	Tl 190.801†	-9.3	8.6	0.00180	mg/L	0.00180	mg/L	09:17:43
3	V 292.402†	-141.9	-121.5	-0.00174	mg/L	-0.00174	mg/L	09:17:23
3	Zn 206.200†	2172.2	2078.8	0.09958	mg/L	0.09958	mg/L	09:17:43
3	Cd 226.502†	8.2	33.2	0.00071	mg/L	0.00071	mg/L	09:17:43
3	Ti 334.940†	-131.4	-43.4	-0.00103	mg/L	-0.00103	mg/L	09:17:23
3	Ca 227.546†	4836.1	4617.1	30.193	mg/L	30.193	mg/L	09:17:43
3	Na 589.592	303897.8	304100.8	90.088	mg/L	90.088	mg/L	09:16:24
3	K 766.490	4070.5	3502.0	3.1739	mg/L	3.1739	mg/L	09:16:26

Mean Data: L0195-01A~MC09P4

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	823289.9	108.0	%	1.03				0.95%
Lu 261.542	507693.8	103.8	%	1.07				1.04%
Ag 328.068†	37.0	0.00036	mg/L	0.000261	0.00036	mg/L	0.000261	73.44%
Al 308.215†	66770.6	3.6549	mg/L	0.03142	3.6549	mg/L	0.03142	0.86%
As 188.979†	3.8	0.00389	mg/L	0.002223	0.00389	mg/L	0.002223	57.14%

Ba 233.527†	8888.3	0.16790 mg/L	0.001451	0.16790 mg/L	0.001451	0.86%
Be 313.107†	6967.4	0.00416 mg/L	0.000023	0.00416 mg/L	0.000023	0.55%
Co 228.616†	1516.1	0.06552 mg/L	0.001127	0.06552 mg/L	0.001127	1.72%
Cr 267.716†	73.8	0.00085 mg/L	0.000033	0.00085 mg/L	0.000033	3.84%
Cu 324.752†	348.3	0.00267 mg/L	0.000317	0.00267 mg/L	0.000317	11.87%
Fe 273.955†	581.3	0.03001 mg/L	0.005134	0.03001 mg/L	0.005134	17.11%
Mg 279.077†	161287.0	12.957 mg/L	0.0944	12.957 mg/L	0.0944	0.73%
Mn 257.610†	2150223.5	5.1751 mg/L	0.03137	5.1751 mg/L	0.03137	0.61%
Ni 231.604†	564.1	0.02935 mg/L	0.000663	0.02935 mg/L	0.000663	2.26%
Pb 220.353†	0.2	0.00091 mg/L	0.001457	0.00091 mg/L	0.001457	159.95%
Sb 206.836†	0.6	0.00207 mg/L	0.000679	0.00207 mg/L	0.000679	32.83%
Se 196.026†	8.9	-0.00065 mg/L	0.004192	-0.00065 mg/L	0.004192	646.56%
Tl 190.801†	9.4	0.00257 mg/L	0.000886	0.00257 mg/L	0.000886	34.45%
V 292.402†	-51.0	-0.00092 mg/L	0.000708	-0.00092 mg/L	0.000708	76.93%
Zn 206.200†	2071.6	0.09923 mg/L	0.001211	0.09923 mg/L	0.001211	1.22%
Cd 226.502†	38.5	0.00087 mg/L	0.000143	0.00087 mg/L	0.000143	16.56%
Ti 334.940†	-86.9	-0.00116 mg/L	0.000121	-0.00116 mg/L	0.000121	10.43%
Ca 227.546†	4603.5	30.104 mg/L	0.3203	30.104 mg/L	0.3203	1.06%
Na 589.592	305086.3	90.380 mg/L	0.2547	90.380 mg/L	0.2547	0.28%
K 766.490	3584.5	3.2454 mg/L	0.08441	3.2454 mg/L	0.08441	2.60%

Sequence No.: 28
Sample ID: L0195-01ADUP~MC09P4D
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 50
Date Collected: 2/9/2012 9:18:53 AM
Data Type: Reprocessed on 2/10/2012 7:27:55 AM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0195-01ADUP~MC09P4D

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	816236.9	816236.9	107.1	%			09:20:18
1	Lu 261.542	503346.8	503346.8	102.9	%			09:20:18
1	Ag 328.068†	-457.8	39.3	0.00038	mg/L	0.00038	mg/L	09:20:20
1	Al 308.215†	76234.9	68219.4	3.7348	mg/L	3.7348	mg/L	09:20:20
1	As 188.979†	-1.8	1.9	0.00177	mg/L	0.00177	mg/L	09:20:40
1	Ba 233.527†	9264.5	9055.2	0.17131	mg/L	0.17131	mg/L	09:20:20
1	Be 313.107†	2638.2	6993.9	0.00417	mg/L	0.00417	mg/L	09:20:20
1	Co 228.616†	1570.4	1543.6	0.06674	mg/L	0.06674	mg/L	09:20:40
1	Cr 267.716†	105.5	76.4	0.00091	mg/L	0.00091	mg/L	09:20:40
1	Cu 324.752†	1406.1	363.6	0.00277	mg/L	0.00277	mg/L	09:20:20
1	Fe 273.955†	-214.6	318.9	0.01394	mg/L	0.01394	mg/L	09:20:40
1	Mg 279.077†	166942.3	162871.1	13.086	mg/L	13.086	mg/L	09:20:18
1	Mn 257.610†	2229894.8	2167445.5	5.2166	mg/L	5.2166	mg/L	09:20:18
1	Ni 231.604†	579.1	576.7	0.03004	mg/L	0.03004	mg/L	09:20:40
1	Pb 220.353†	-4.4	-12.3	-0.00248	mg/L	-0.00248	mg/L	09:20:40
1	Sb 206.836†	30.6	2.5	0.00348	mg/L	0.00348	mg/L	09:20:40
1	Se 196.026†	-2.3	4.2	-0.00740	mg/L	-0.00740	mg/L	09:20:40
1	Tl 190.801†	-8.0	9.8	0.00289	mg/L	0.00289	mg/L	09:20:40
1	V 292.402†	-55.2	-38.1	-0.00077	mg/L	-0.00077	mg/L	09:20:20
1	Zn 206.200†	2205.6	2124.5	0.10184	mg/L	0.10184	mg/L	09:20:40
1	Cd 226.502†	20.6	45.4	0.00106	mg/L	0.00106	mg/L	09:20:40
1	Ti 334.940†	-188.2	-99.3	-0.00117	mg/L	-0.00117	mg/L	09:20:20
1	Ca 227.546†	4906.1	4714.8	30.835	mg/L	30.835	mg/L	09:20:40
1	Na 589.592	308668.5	308871.6	91.502	mg/L	91.502	mg/L	09:20:03
1	K 766.490	4177.6	3609.1	3.2667	mg/L	3.2667	mg/L	09:20:05
2	Y 360.073	819935.6	819935.6	107.6	%			09:20:43
2	Lu 261.542	505301.4	505301.4	103.3	%			09:20:43
2	Ag 328.068†	-479.5	20.0	0.00019	mg/L	0.00019	mg/L	09:20:45
2	Al 308.215†	76534.0	68222.3	3.7350	mg/L	3.7350	mg/L	09:20:45
2	As 188.979†	-3.0	0.8	0.00045	mg/L	0.00045	mg/L	09:21:05
2	Ba 233.527†	9249.6	9006.0	0.17030	mg/L	0.17030	mg/L	09:20:45
2	Be 313.107†	2660.1	7005.2	0.00418	mg/L	0.00418	mg/L	09:20:45
2	Co 228.616†	1575.0	1542.1	0.06668	mg/L	0.06668	mg/L	09:21:05
2	Cr 267.716†	111.9	82.2	0.00107	mg/L	0.00107	mg/L	09:21:05
2	Cu 324.752†	1448.8	399.6	0.00299	mg/L	0.00299	mg/L	09:20:45
2	Fe 273.955†	-220.0	314.5	0.01367	mg/L	0.01367	mg/L	09:21:05
2	Mg 279.077†	167645.3	162924.0	13.090	mg/L	13.090	mg/L	09:20:43
2	Mn 257.610†	2240648.6	2169473.5	5.2214	mg/L	5.2214	mg/L	09:20:43

2	Ni 231.604†	577.8	573.3	0.02985	mg/L	0.02985	mg/L	09:21:05
2	Pb 220.353†	7.9	-0.3	0.00078	mg/L	0.00078	mg/L	09:21:05
2	Sb 206.836†	26.6	-1.6	0.00033	mg/L	0.00033	mg/L	09:21:05
2	Se 196.026†	-0.9	5.6	-0.00539	mg/L	-0.00539	mg/L	09:21:05
2	Tl 190.801†	-7.7	10.1	0.00318	mg/L	0.00318	mg/L	09:21:05
2	V 292.402†	-28.9	-12.4	-0.00047	mg/L	-0.00047	mg/L	09:20:45
2	Zn 206.200†	2211.7	2122.2	0.10172	mg/L	0.10172	mg/L	09:21:05
2	Cd 226.502†	14.5	39.3	0.00089	mg/L	0.00089	mg/L	09:21:05
2	Ti 334.940†	-172.6	-83.5	-0.00113	mg/L	-0.00113	mg/L	09:20:45
2	Ca 227.546†	4923.7	4713.4	30.826	mg/L	30.826	mg/L	09:21:05
2	Na 589.592	306963.7	307166.8	90.997	mg/L	90.997	mg/L	09:20:07
2	K 766.490	4105.2	3536.7	3.2039	mg/L	3.2039	mg/L	09:20:09
3	Y 360.073	815252.6	815252.6	107.0	%			09:21:08
3	Lu 261.542	503044.3	503044.3	102.8	%			09:21:08
3	Ag 328.068†	-513.4	-15.0	-0.00015	mg/L	-0.00015	mg/L	09:21:10
3	Al 308.215†	75594.2	67640.8	3.7029	mg/L	3.7029	mg/L	09:21:10
3	As 188.979†	-2.7	1.0	0.00076	mg/L	0.00076	mg/L	09:21:31
3	Ba 233.527†	9120.9	8920.9	0.16857	mg/L	0.16857	mg/L	09:21:10
3	Be 313.107†	2647.1	7004.1	0.00418	mg/L	0.00418	mg/L	09:21:10
3	Co 228.616†	1573.3	1547.3	0.06691	mg/L	0.06691	mg/L	09:21:31
3	Cr 267.716†	96.6	67.8	0.00068	mg/L	0.00068	mg/L	09:21:31
3	Cu 324.752†	1413.7	371.7	0.00282	mg/L	0.00282	mg/L	09:21:10
3	Fe 273.955†	-219.7	313.8	0.01363	mg/L	0.01363	mg/L	09:21:31
3	Mg 279.077†	166723.8	162756.2	13.077	mg/L	13.077	mg/L	09:21:08
3	Mn 257.610†	2229798.3	2168654.8	5.2195	mg/L	5.2195	mg/L	09:21:08
3	Ni 231.604†	585.5	583.3	0.03040	mg/L	0.03040	mg/L	09:21:31
3	Pb 220.353†	1.8	-6.2	-0.00082	mg/L	-0.00082	mg/L	09:21:31
3	Sb 206.836†	32.4	4.2	0.00482	mg/L	0.00482	mg/L	09:21:31
3	Se 196.026†	0.1	6.6	-0.00401	mg/L	-0.00401	mg/L	09:21:31
3	Tl 190.801†	-4.5	13.2	0.00606	mg/L	0.00606	mg/L	09:21:31
3	V 292.402†	-65.1	-47.7	-0.00088	mg/L	-0.00088	mg/L	09:21:10
3	Zn 206.200†	2207.1	2127.4	0.10197	mg/L	0.10197	mg/L	09:21:31
3	Cd 226.502†	18.0	42.8	0.00099	mg/L	0.00099	mg/L	09:21:31
3	Ti 334.940†	-117.0	-30.2	-0.00097	mg/L	-0.00097	mg/L	09:21:10
3	Ca 227.546†	4900.6	4712.3	30.819	mg/L	30.819	mg/L	09:21:31
3	Na 589.592	309107.5	309310.6	91.632	mg/L	91.632	mg/L	09:20:11
3	K 766.490	4211.9	3643.4	3.2965	mg/L	3.2965	mg/L	09:20:14

Mean Data: L0195-01ADUP~MC09P4D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	817141.7	107.2	%	0.32				0.30%
Lu 261.542	503897.5	103.0	%	0.25				0.24%
Ag 328.068†	14.8	0.00014	mg/L	0.000265	0.00014	mg/L	0.000265	186.92%
Al 308.215†	68027.5	3.7242	mg/L	0.01848	3.7242	mg/L	0.01848	0.50%
As 188.979†	1.3	0.00099	mg/L	0.000690	0.00099	mg/L	0.000690	69.72%
Ba 233.527†	8994.0	0.17006	mg/L	0.001389	0.17006	mg/L	0.001389	0.82%
Be 313.107†	7001.0	0.00418	mg/L	0.000004	0.00418	mg/L	0.000004	0.10%
Co 228.616†	1544.3	0.06678	mg/L	0.000120	0.06678	mg/L	0.000120	0.18%
Cr 267.716†	75.5	0.00089	mg/L	0.000196	0.00089	mg/L	0.000196	22.13%
Cu 324.752†	378.3	0.00286	mg/L	0.000115	0.00286	mg/L	0.000115	4.03%
Fe 273.955†	315.7	0.01375	mg/L	0.000170	0.01375	mg/L	0.000170	1.23%
Mg 279.077†	162850.4	13.084	mg/L	0.0070	13.084	mg/L	0.0070	0.05%
Mn 257.610†	2168524.6	5.2192	mg/L	0.00246	5.2192	mg/L	0.00246	0.05%
Ni 231.604†	577.7	0.03010	mg/L	0.000279	0.03010	mg/L	0.000279	0.93%
Pb 220.353†	-6.3	-0.00084	mg/L	0.001628	-0.00084	mg/L	0.001628	193.72%
Sb 206.836†	1.7	0.00288	mg/L	0.002302	0.00288	mg/L	0.002302	79.99%
Se 196.026†	5.5	-0.00560	mg/L	0.001702	-0.00560	mg/L	0.001702	30.40%
Tl 190.801†	11.1	0.00404	mg/L	0.001756	0.00404	mg/L	0.001756	43.40%
V 292.402†	-32.7	-0.00071	mg/L	0.000212	-0.00071	mg/L	0.000212	29.80%
Zn 206.200†	2124.7	0.10184	mg/L	0.000127	0.10184	mg/L	0.000127	0.13%
Cd 226.502†	42.5	0.00098	mg/L	0.000087	0.00098	mg/L	0.000087	8.82%
Ti 334.940†	-71.0	-0.00109	mg/L	0.000104	-0.00109	mg/L	0.000104	9.49%
Ca 227.546†	4713.5	30.827	mg/L	0.0081	30.827	mg/L	0.0081	0.03%
Na 589.592	308449.6	91.377	mg/L	0.3357	91.377	mg/L	0.3357	0.37%
K 766.490	3596.4	3.2557	mg/L	0.04726	3.2557	mg/L	0.04726	1.45%

Sequence No.: 29 **Autosampler Location: 51**
Sample ID: L0195-01AMS~MC09P4S **Date Collected: 2/9/2012 9:22:40 AM**

Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Data Type: Reprocessed on 2/10/2012 7:27:56 AM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0195-01AMS~MC09P4S

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	814926.0	814926.0	106.9	%			09:24:04
1	Lu 261.542	504978.0	504978.0	103.2	%			09:24:04
1	Ag 328.068†	4510.2	4853.6	0.04742	mg/L	0.04742	mg/L	09:24:07
1	Al 308.215†	112754.3	103359.0	5.6670	mg/L	5.6670	mg/L	09:24:07
1	As 188.979†	34.1	36.7	0.04285	mg/L	0.04285	mg/L	09:24:27
1	Ba 233.527†	106951.2	103662.2	2.1065	mg/L	2.1065	mg/L	09:24:04
1	Be 313.107†	85098.0	86870.3	0.05304	mg/L	0.05304	mg/L	09:24:04
1	Co 228.616†	13076.3	12685.2	0.56392	mg/L	0.56392	mg/L	09:24:07
1	Cr 267.716†	7674.1	7408.4	0.19954	mg/L	0.19954	mg/L	09:24:07
1	Cu 324.752†	41406.2	39110.0	0.23907	mg/L	0.23907	mg/L	09:24:07
1	Fe 273.955†	16218.8	16239.8	0.98639	mg/L	0.98639	mg/L	09:24:07
1	Mg 279.077†	165946.9	161382.7	12.966	mg/L	12.966	mg/L	09:24:04
1	Mn 257.610†	2429686.4	2353996.8	5.6657	mg/L	5.6657	mg/L	09:24:04
1	Ni 231.604†	9946.3	9649.6	0.52849	mg/L	0.52849	mg/L	09:24:07
1	Pb 220.353†	83.9	73.2	0.02115	mg/L	0.02115	mg/L	09:24:27
1	Sb 206.836†	163.2	130.8	0.09997	mg/L	0.09997	mg/L	09:24:27
1	Se 196.026†	37.9	43.2	0.04898	mg/L	0.04898	mg/L	09:24:27
1	Tl 190.801†	60.8	76.5	0.06073	mg/L	0.06073	mg/L	09:24:27
1	V 292.402†	43125.8	41794.6	0.48348	mg/L	0.48348	mg/L	09:24:07
1	Zn 206.200†	12769.1	12351.3	0.60590	mg/L	0.60590	mg/L	09:24:07
1	Cd 226.502†	1863.0	1830.1	0.05225	mg/L	0.05225	mg/L	09:24:27
1	Ti 334.940†	-203.3	-113.4	-0.00126	mg/L	-0.00126	mg/L	09:24:07
1	Ca 227.546†	4850.5	4645.6	30.253	mg/L	30.253	mg/L	09:24:27
1	Na 589.592	309250.8	309453.9	91.675	mg/L	91.675	mg/L	09:23:49
1	K 766.490	4160.0	3591.5	3.2515	mg/L	3.2515	mg/L	09:23:51
2	Y 360.073	815114.7	815114.7	107.0	%			09:24:30
2	Lu 261.542	504583.3	504583.3	103.1	%			09:24:30
2	Ag 328.068†	4433.1	4782.3	0.04672	mg/L	0.04672	mg/L	09:24:32
2	Al 308.215†	111934.0	102649.2	5.6279	mg/L	5.6279	mg/L	09:24:32
2	As 188.979†	35.3	37.9	0.04420	mg/L	0.04420	mg/L	09:24:52
2	Ba 233.527†	106814.4	103610.6	2.1055	mg/L	2.1055	mg/L	09:24:30
2	Be 313.107†	84946.0	86787.4	0.05299	mg/L	0.05299	mg/L	09:24:30
2	Co 228.616†	12885.8	12510.4	0.55612	mg/L	0.55612	mg/L	09:24:32
2	Cr 267.716†	7599.3	7341.7	0.19773	mg/L	0.19773	mg/L	09:24:32
2	Cu 324.752†	41028.1	38774.9	0.23703	mg/L	0.23703	mg/L	09:24:32
2	Fe 273.955†	16144.6	16180.2	0.98276	mg/L	0.98276	mg/L	09:24:32
2	Mg 279.077†	165877.1	161440.7	12.971	mg/L	12.971	mg/L	09:24:30
2	Mn 257.610†	2428621.4	2354805.8	5.6676	mg/L	5.6676	mg/L	09:24:30
2	Ni 231.604†	9859.0	9572.5	0.52425	mg/L	0.52425	mg/L	09:24:32
2	Pb 220.353†	70.5	60.3	0.01763	mg/L	0.01763	mg/L	09:24:52
2	Sb 206.836†	157.6	125.5	0.09589	mg/L	0.09589	mg/L	09:24:52
2	Se 196.026†	23.7	29.4	0.02903	mg/L	0.02903	mg/L	09:24:52
2	Tl 190.801†	55.4	71.3	0.05597	mg/L	0.05597	mg/L	09:24:52
2	V 292.402†	42758.4	41471.1	0.47973	mg/L	0.47973	mg/L	09:24:32
2	Zn 206.200†	12633.3	12229.3	0.59989	mg/L	0.59989	mg/L	09:24:32
2	Cd 226.502†	1868.8	1837.1	0.05244	mg/L	0.05244	mg/L	09:24:52
2	Ti 334.940†	-142.1	-54.2	-0.00109	mg/L	-0.00109	mg/L	09:24:32
2	Ca 227.546†	4849.6	4648.4	30.274	mg/L	30.274	mg/L	09:24:52
2	Na 589.592	307921.0	308124.1	91.280	mg/L	91.280	mg/L	09:23:53
2	K 766.490	4136.9	3568.4	3.2315	mg/L	3.2315	mg/L	09:23:55
3	Y 360.073	808659.3	808659.3	106.1	%			09:24:55
3	Lu 261.542	500688.1	500688.1	102.3	%			09:24:55
3	Ag 328.068†	4422.7	4805.6	0.04695	mg/L	0.04695	mg/L	09:24:57
3	Al 308.215†	110953.4	102535.4	5.6216	mg/L	5.6216	mg/L	09:24:57
3	As 188.979†	33.9	36.8	0.04293	mg/L	0.04293	mg/L	09:25:17
3	Ba 233.527†	106029.1	103648.9	2.1063	mg/L	2.1063	mg/L	09:24:55
3	Be 313.107†	84610.3	87100.1	0.05318	mg/L	0.05318	mg/L	09:24:55
3	Co 228.616†	12720.4	12446.0	0.55325	mg/L	0.55325	mg/L	09:24:57
3	Cr 267.716†	7608.1	7407.5	0.19952	mg/L	0.19952	mg/L	09:24:57
3	Cu 324.752†	40513.8	38581.8	0.23585	mg/L	0.23585	mg/L	09:24:57
3	Fe 273.955†	16085.1	16243.8	0.98667	mg/L	0.98667	mg/L	09:24:57
3	Mg 279.077†	164828.3	161667.2	12.990	mg/L	12.990	mg/L	09:24:55

3	Mn 257.610†	2412702.9	2357570.6	5.6743	mg/L	5.6743	mg/L	09:24:55
3	Ni 231.604†	9696.2	9487.7	0.51960	mg/L	0.51960	mg/L	09:24:57
3	Pb 220.353†	79.8	70.0	0.02025	mg/L	0.02025	mg/L	09:25:17
3	Sb 206.836†	166.6	135.5	0.10365	mg/L	0.10365	mg/L	09:25:17
3	Se 196.026†	36.2	41.9	0.04700	mg/L	0.04700	mg/L	09:25:17
3	Tl 190.801†	53.5	69.9	0.05465	mg/L	0.05465	mg/L	09:25:17
3	V 292.402†	42275.3	41321.5	0.47801	mg/L	0.47801	mg/L	09:24:57
3	Zn 206.200†	12477.5	12172.4	0.59709	mg/L	0.59709	mg/L	09:24:57
3	Cd 226.502†	1869.1	1851.5	0.05286	mg/L	0.05286	mg/L	09:25:17
3	Ti 334.940†	-185.0	-97.2	-0.00120	mg/L	-0.00120	mg/L	09:24:57
3	Ca 227.546†	4846.0	4681.5	30.492	mg/L	30.492	mg/L	09:25:17
3	Na 589.592	308499.3	308702.4	91.452	mg/L	91.452	mg/L	09:23:58
3	K 766.490	4194.0	3625.5	3.2809	mg/L	3.2809	mg/L	09:24:00

Mean Data: L0195-01AMS~MC09P4S

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	812900.0	106.7	%	0.48				0.45%
Lu 261.542	503416.5	102.9	%	0.48				0.47%
Ag 328.068†	4813.8	0.04703	mg/L	0.000354	0.04703	mg/L	0.000354	0.75%
Al 308.215†	102847.9	5.6388	mg/L	0.02461	5.6388	mg/L	0.02461	0.44%
As 188.979†	37.2	0.04332	mg/L	0.000758	0.04332	mg/L	0.000758	1.75%
Ba 233.527†	103640.6	2.1061	mg/L	0.00055	2.1061	mg/L	0.00055	0.03%
Be 313.107†	86919.3	0.05307	mg/L	0.000099	0.05307	mg/L	0.000099	0.19%
Co 228.616†	12547.2	0.55776	mg/L	0.005524	0.55776	mg/L	0.005524	0.99%
Cr 267.716†	7385.9	0.19893	mg/L	0.001036	0.19893	mg/L	0.001036	0.52%
Cu 324.752†	38822.2	0.23732	mg/L	0.001630	0.23732	mg/L	0.001630	0.69%
Fe 273.955†	16221.2	0.98527	mg/L	0.002182	0.98527	mg/L	0.002182	0.22%
Mg 279.077†	161496.9	12.976	mg/L	0.0123	12.976	mg/L	0.0123	0.09%
Mn 257.610†	2355457.7	5.6692	mg/L	0.00451	5.6692	mg/L	0.00451	0.08%
Ni 231.604†	9569.9	0.52412	mg/L	0.004447	0.52412	mg/L	0.004447	0.85%
Pb 220.353†	67.8	0.01968	mg/L	0.001829	0.01968	mg/L	0.001829	9.29%
Sb 206.836†	130.6	0.09984	mg/L	0.003881	0.09984	mg/L	0.003881	3.89%
Se 196.026†	38.2	0.04167	mg/L	0.010992	0.04167	mg/L	0.010992	26.38%
Tl 190.801†	72.6	0.05712	mg/L	0.003197	0.05712	mg/L	0.003197	5.60%
V 292.402†	41529.1	0.48041	mg/L	0.002797	0.48041	mg/L	0.002797	0.58%
Zn 206.200†	12251.0	0.60096	mg/L	0.004501	0.60096	mg/L	0.004501	0.75%
Cd 226.502†	1839.6	0.05252	mg/L	0.000311	0.05252	mg/L	0.000311	0.59%
Ti 334.940†	-88.3	-0.00118	mg/L	0.000088	-0.00118	mg/L	0.000088	7.43%
Ca 227.546†	4658.5	30.340	mg/L	0.1322	30.340	mg/L	0.1322	0.44%
Na 589.592	308760.1	91.469	mg/L	0.1977	91.469	mg/L	0.1977	0.22%
K 766.490	3595.1	3.2546	mg/L	0.02489	3.2546	mg/L	0.02489	0.76%

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Sequence No.: 30
Sample ID: L0195-01ASD~MC09P4L
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 52
Date Collected: 2/9/2012 9:26:27 AM
Data Type: Reprocessed on 2/10/2012 7:27:56 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0195-01ASD~MC09P4L

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	764421.6	764421.6	100.3	%			09:27:45
1	Lu 261.542	496054.3	496054.3	101.4	%			09:27:45
1	Ag 328.068†	-455.0	35.5	0.00034	mg/L	0.00034	mg/L	09:27:47
1	Al 308.215†	20888.8	14726.4	0.78560	mg/L	0.78560	mg/L	09:27:47
1	As 188.979†	-3.3	0.4	0.00016	mg/L	0.00016	mg/L	09:28:07
1	Ba 233.527†	1938.5	1962.7	0.02625	mg/L	0.02625	mg/L	09:28:07
1	Be 313.107†	-2730.9	1736.5	0.00096	mg/L	0.00096	mg/L	09:27:47
1	Co 228.616†	322.8	335.6	0.01281	mg/L	0.01281	mg/L	09:28:07
1	Cr 267.716†	40.9	14.2	0.00021	mg/L	0.00021	mg/L	09:28:07
1	Cu 324.752†	1205.5	185.8	0.00168	mg/L	0.00168	mg/L	09:27:47
1	Fe 273.955†	-335.5	196.6	0.00721	mg/L	0.00721	mg/L	09:28:07
1	Mg 279.077†	34944.8	35080.5	2.6596	mg/L	2.6596	mg/L	09:27:47
1	Mn 257.610†	473369.2	467022.8	1.1231	mg/L	1.1231	mg/L	09:27:45
1	Ni 231.604†	109.8	122.1	0.00506	mg/L	0.00506	mg/L	09:28:07
1	Pb 220.353†	4.7	-3.4	-0.00048	mg/L	-0.00048	mg/L	09:28:07

1	Sb 206.836†	25.9	-1.7	0.00064	mg/L	0.00064	mg/L	09:28:07
1	Se 196.026†	-8.1	-1.5	-0.01182	mg/L	-0.01182	mg/L	09:28:07
1	Tl 190.801†	-10.2	7.6	0.00072	mg/L	0.00072	mg/L	09:28:07
1	V 292.402†	-25.7	-9.8	-0.00045	mg/L	-0.00045	mg/L	09:27:47
1	Zn 206.200†	482.0	456.3	0.01971	mg/L	0.01971	mg/L	09:28:07
1	Cd 226.502†	-9.7	15.7	0.00020	mg/L	0.00020	mg/L	09:28:07
1	Ti 334.940†	-95.6	-10.7	-0.00151	mg/L	-0.00151	mg/L	09:27:47
1	Ca 227.546†	1086.4	1018.0	6.5602	mg/L	6.5602	mg/L	09:28:07
1	Na 589.592	61699.2	61902.2	18.286	mg/L	18.286	mg/L	09:27:36
1	K 766.490	1432.8	864.3	0.88686	mg/L	0.88686	mg/L	09:27:36
2	Y 360.073	792780.9	792780.9	104.0	%			09:28:10
2	Lu 261.542	514786.4	514786.4	105.2	%			09:28:10
2	Ag 328.068†	-435.6	70.3	0.00067	mg/L	0.00067	mg/L	09:28:12
2	Al 308.215†	21178.9	14252.5	0.75946	mg/L	0.75946	mg/L	09:28:12
2	As 188.979†	-1.1	2.7	0.00276	mg/L	0.00276	mg/L	09:28:32
2	Ba 233.527†	1927.6	1882.7	0.02462	mg/L	0.02462	mg/L	09:28:32
2	Be 313.107†	-2751.4	1815.1	0.00101	mg/L	0.00101	mg/L	09:28:12
2	Co 228.616†	321.5	322.8	0.01224	mg/L	0.01224	mg/L	09:28:32
2	Cr 267.716†	35.6	7.7	0.00004	mg/L	0.00004	mg/L	09:28:32
2	Cu 324.752†	1245.4	180.5	0.00165	mg/L	0.00165	mg/L	09:28:12
2	Fe 273.955†	-347.8	196.9	0.00723	mg/L	0.00723	mg/L	09:28:32
2	Mg 279.077†	35667.6	34513.5	2.6134	mg/L	2.6134	mg/L	09:28:12
2	Mn 257.610†	484418.8	460536.0	1.1074	mg/L	1.1074	mg/L	09:28:10
2	Ni 231.604†	114.1	122.4	0.00508	mg/L	0.00508	mg/L	09:28:32
2	Pb 220.353†	6.4	-1.9	-0.00008	mg/L	-0.00008	mg/L	09:28:32
2	Sb 206.836†	26.1	-2.6	0.00000	mg/L	0.00000	mg/L	09:28:32
2	Se 196.026†	-7.2	-0.4	-0.01021	mg/L	-0.01021	mg/L	09:28:32
2	Tl 190.801†	-10.2	7.9	0.00105	mg/L	0.00105	mg/L	09:28:32
2	V 292.402†	26.6	40.9	0.00014	mg/L	0.00014	mg/L	09:28:12
2	Zn 206.200†	494.8	451.1	0.01946	mg/L	0.01946	mg/L	09:28:32
2	Cd 226.502†	-18.4	7.8	-0.00002	mg/L	-0.00002	mg/L	09:28:32
2	Ti 334.940†	-37.3	48.1	-0.00135	mg/L	-0.00135	mg/L	09:28:12
2	Ca 227.546†	1092.5	984.7	6.3418	mg/L	6.3418	mg/L	09:28:32
2	Na 589.592	62636.2	62839.3	18.564	mg/L	18.564	mg/L	09:27:39
2	K 766.490	1375.6	807.1	0.83725	mg/L	0.83725	mg/L	09:27:39
3	Y 360.073	779346.0	779346.0	102.3	%			09:28:34
3	Lu 261.542	506812.1	506812.1	103.6	%			09:28:34
3	Ag 328.068†	-515.2	-13.0	-0.00013	mg/L	-0.00013	mg/L	09:28:36
3	Al 308.215†	21400.7	14783.2	0.78876	mg/L	0.78876	mg/L	09:28:36
3	As 188.979†	-1.5	2.3	0.00230	mg/L	0.00230	mg/L	09:28:57
3	Ba 233.527†	1910.4	1895.0	0.02487	mg/L	0.02487	mg/L	09:28:57
3	Be 313.107†	-2777.3	1748.9	0.00097	mg/L	0.00097	mg/L	09:28:36
3	Co 228.616†	322.4	328.4	0.01249	mg/L	0.01249	mg/L	09:28:57
3	Cr 267.716†	33.0	5.8	-0.00001	mg/L	-0.00001	mg/L	09:28:57
3	Cu 324.752†	1215.9	170.6	0.00159	mg/L	0.00159	mg/L	09:28:36
3	Fe 273.955†	-337.5	201.7	0.00752	mg/L	0.00752	mg/L	09:28:57
3	Mg 279.077†	35837.7	35210.9	2.6702	mg/L	2.6702	mg/L	09:28:36
3	Mn 257.610†	473650.5	457385.0	1.0999	mg/L	1.0999	mg/L	09:28:34
3	Ni 231.604†	114.1	124.0	0.00517	mg/L	0.00517	mg/L	09:28:57
3	Pb 220.353†	10.8	2.5	0.00111	mg/L	0.00111	mg/L	09:28:57
3	Sb 206.836†	32.0	3.6	0.00475	mg/L	0.00475	mg/L	09:28:57
3	Se 196.026†	-4.5	2.2	-0.00648	mg/L	-0.00648	mg/L	09:28:57
3	Tl 190.801†	-15.6	2.5	-0.00393	mg/L	-0.00393	mg/L	09:28:57
3	V 292.402†	-28.8	-12.3	-0.00048	mg/L	-0.00048	mg/L	09:28:36
3	Zn 206.200†	481.2	445.4	0.01918	mg/L	0.01918	mg/L	09:28:57
3	Cd 226.502†	-11.2	14.5	0.00017	mg/L	0.00017	mg/L	09:28:57
3	Ti 334.940†	-78.5	7.8	-0.00146	mg/L	-0.00146	mg/L	09:28:36
3	Ca 227.546†	1079.4	988.5	6.3664	mg/L	6.3664	mg/L	09:28:57
3	Na 589.592	62549.9	62753.0	18.539	mg/L	18.539	mg/L	09:27:41
3	K 766.490	1431.5	863.1	0.88576	mg/L	0.88576	mg/L	09:27:41

Mean Data: L0195-01ASD~MC09P4L

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	778849.5	102.2	%	1.86				1.82%
Lu 261.542	505884.3	103.4	%	1.92				1.86%
Ag 328.068†	30.9	0.00029	mg/L	0.000404	0.00029	mg/L	0.000404	138.30%
Al 308.215†	14587.4	0.77794	mg/L	0.016080	0.77794	mg/L	0.016080	2.07%
As 188.979†	1.8	0.00174	mg/L	0.001388	0.00174	mg/L	0.001388	79.83%
Ba 233.527†	1913.5	0.02525	mg/L	0.000880	0.02525	mg/L	0.000880	3.49%

Be 313.107†	1766.9	0.00098	mg/L	0.000026	0.00098	mg/L	0.000026	2.67%
Co 228.616†	329.0	0.01252	mg/L	0.000288	0.01252	mg/L	0.000288	2.30%
Cr 267.716†	9.2	0.00008	mg/L	0.000117	0.00008	mg/L	0.000117	149.41%
Cu 324.752†	179.0	0.00164	mg/L	0.000047	0.00164	mg/L	0.000047	2.87%
Fe 273.955†	198.4	0.00732	mg/L	0.000174	0.00732	mg/L	0.000174	2.37%
Mg 279.077†	34935.0	2.6477	mg/L	0.03020	2.6477	mg/L	0.03020	1.14%
Mn 257.610†	461647.9	1.1101	mg/L	0.01183	1.1101	mg/L	0.01183	1.07%
Ni 231.604†	122.8	0.00510	mg/L	0.000057	0.00510	mg/L	0.000057	1.13%
Pb 220.353†	-0.9	0.00018	mg/L	0.000828	0.00018	mg/L	0.000828	449.09%
Sb 206.836†	-0.2	0.00180	mg/L	0.002579	0.00180	mg/L	0.002579	143.43%
Se 196.026†	0.1	-0.00950	mg/L	0.002736	-0.00950	mg/L	0.002736	28.79%
Tl 190.801†	6.0	-0.00072	mg/L	0.002786	-0.00072	mg/L	0.002786	387.90%
V 292.402†	6.3	-0.00026	mg/L	0.000347	-0.00026	mg/L	0.000347	132.29%
Zn 206.200†	450.9	0.01945	mg/L	0.000267	0.01945	mg/L	0.000267	1.37%
Cd 226.502†	12.7	0.00012	mg/L	0.000121	0.00012	mg/L	0.000121	103.15%
Ti 334.940†	15.1	-0.00144	mg/L	0.000084	-0.00144	mg/L	0.000084	5.81%
Ca 227.546†	997.1	6.4228	mg/L	0.11960	6.4228	mg/L	0.11960	1.86%
Na 589.592	62498.2	18.463	mg/L	0.1535	18.463	mg/L	0.1535	0.83%
K 766.490	844.8	0.86996	mg/L	0.028332	0.86996	mg/L	0.028332	3.26%

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Sequence No.: 31
Sample ID: L0195-01APDS~MC09P4A
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 2/9/2012 9:30:06 AM
Data Type: Reprocessed on 2/10/2012 7:27:57 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0195-01APDS~MC09P4A

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	797340.0	797340.0	104.6	%			09:31:30
1	Lu 261.542	492934.4	492934.4	100.8	%			09:31:30
1	Ag 328.068†	1482.2	1955.2	0.01898	mg/L	0.01898	mg/L	09:31:32
1	Al 308.215†	81317.8	74829.0	4.0968	mg/L	4.0968	mg/L	09:31:32
1	As 188.979†	12.0	15.6	0.01766	mg/L	0.01766	mg/L	09:31:53
1	Ba 233.527†	27889.8	27729.9	0.55331	mg/L	0.55331	mg/L	09:31:32
1	Be 313.107†	18635.5	22924.4	0.01392	mg/L	0.01392	mg/L	09:31:32
1	Co 228.616†	3733.8	3722.8	0.16400	mg/L	0.16400	mg/L	09:31:53
1	Cr 267.716†	826.9	794.6	0.02033	mg/L	0.02033	mg/L	09:31:53
1	Cu 324.752†	9167.3	8095.0	0.04992	mg/L	0.04992	mg/L	09:31:32
1	Fe 273.955†	2770.8	3277.4	0.19383	mg/L	0.19383	mg/L	09:31:32
1	Mg 279.077†	283241.2	281718.2	22.766	mg/L	22.766	mg/L	09:31:30
1	Mn 257.610†	2188311.8	2171956.5	5.2271	mg/L	5.2271	mg/L	09:31:30
1	Ni 231.604†	1997.9	1996.7	0.10805	mg/L	0.10805	mg/L	09:31:53
1	Pb 220.353†	79.6	71.0	0.02035	mg/L	0.02035	mg/L	09:31:53
1	Sb 206.836†	158.8	130.3	0.10244	mg/L	0.10244	mg/L	09:31:53
1	Se 196.026†	47.6	53.7	0.06403	mg/L	0.06403	mg/L	09:31:53
1	Tl 190.801†	43.9	61.2	0.04980	mg/L	0.04980	mg/L	09:31:53
1	V 292.402†	8271.6	8224.6	0.09485	mg/L	0.09485	mg/L	09:31:32
1	Zn 206.200†	4538.7	4485.3	0.21810	mg/L	0.21810	mg/L	09:31:53
1	Cd 226.502†	373.0	395.5	0.01110	mg/L	0.01110	mg/L	09:31:53
1	Ti 334.940†	-224.2	-139.0	-0.00116	mg/L	-0.00116	mg/L	09:31:32
1	Ca 227.546†	6292.8	6191.8	40.520	mg/L	40.520	mg/L	09:31:32
1	Na 589.592	334533.1	334736.2	99.170	mg/L	99.170	mg/L	09:31:15
1	K 766.490	14982.6	14414.1	12.635	mg/L	12.635	mg/L	09:31:17
2	Y 360.073	799164.2	799164.2	104.9	%			09:31:55
2	Lu 261.542	494205.0	494205.0	101.0	%			09:31:55
2	Ag 328.068†	1496.1	1965.3	0.01908	mg/L	0.01908	mg/L	09:31:58
2	Al 308.215†	81324.1	74627.7	4.0857	mg/L	4.0857	mg/L	09:31:58
2	As 188.979†	11.6	15.1	0.01718	mg/L	0.01718	mg/L	09:32:18
2	Ba 233.527†	27954.5	27722.8	0.55316	mg/L	0.55316	mg/L	09:31:58
2	Be 313.107†	18805.9	23045.5	0.01399	mg/L	0.01399	mg/L	09:31:58
2	Co 228.616†	3714.2	3693.9	0.16271	mg/L	0.16271	mg/L	09:32:18
2	Cr 267.716†	834.6	800.1	0.02048	mg/L	0.02048	mg/L	09:32:18
2	Cu 324.752†	9151.1	8055.5	0.04968	mg/L	0.04968	mg/L	09:31:58
2	Fe 273.955†	2945.2	3442.9	0.20396	mg/L	0.20396	mg/L	09:31:58
2	Mg 279.077†	284010.0	281756.5	22.769	mg/L	22.769	mg/L	09:31:55
2	Mn 257.610†	2196435.5	2174414.3	5.2331	mg/L	5.2331	mg/L	09:31:55
2	Ni 231.604†	1979.7	1973.5	0.10677	mg/L	0.10677	mg/L	09:32:18

2	Pb 220.353†	78.0	69.2	0.01985	mg/L	0.01985	mg/L	09:32:18
2	Sb 206.836†	164.5	135.5	0.10645	mg/L	0.10645	mg/L	09:32:18
2	Se 196.026†	52.3	58.2	0.07051	mg/L	0.07051	mg/L	09:32:18
2	Tl 190.801†	51.8	68.8	0.05684	mg/L	0.05684	mg/L	09:32:18
2	V 292.402†	8340.3	8271.6	0.09539	mg/L	0.09539	mg/L	09:31:58
2	Zn 206.200†	4487.1	4422.7	0.21502	mg/L	0.21502	mg/L	09:32:18
2	Cd 226.502†	371.1	392.7	0.01102	mg/L	0.01102	mg/L	09:32:18
2	Ti 334.940†	-254.5	-168.3	-0.00126	mg/L	-0.00126	mg/L	09:31:58
2	Ca 227.546†	6232.6	6116.1	40.023	mg/L	40.023	mg/L	09:31:58
2	Na 589.592	331837.6	332040.7	98.371	mg/L	98.371	mg/L	09:31:19
2	K 766.490	15016.6	14448.1	12.665	mg/L	12.665	mg/L	09:31:22
3	Y 360.073	780031.5	780031.5	102.4	%			09:32:20
3	Lu 261.542	480691.7	480691.7	98.26	%			09:32:20
3	Ag 328.068†	1578.8	2091.0	0.02029	mg/L	0.02029	mg/L	09:32:23
3	Al 308.215†	82108.4	77689.0	4.2544	mg/L	4.2544	mg/L	09:32:23
3	As 188.979†	17.6	21.6	0.02464	mg/L	0.02464	mg/L	09:32:43
3	Ba 233.527†	28197.4	28747.9	0.57413	mg/L	0.57413	mg/L	09:32:23
3	Be 313.107†	18980.8	23746.9	0.01442	mg/L	0.01442	mg/L	09:32:23
3	Co 228.616†	3727.0	3810.3	0.16790	mg/L	0.16790	mg/L	09:32:43
3	Cr 267.716†	835.7	824.4	0.02111	mg/L	0.02111	mg/L	09:32:43
3	Cu 324.752†	9368.5	8531.4	0.05258	mg/L	0.05258	mg/L	09:32:23
3	Fe 273.955†	2936.4	3515.9	0.20838	mg/L	0.20838	mg/L	09:32:23
3	Mg 279.077†	281964.7	287578.4	23.244	mg/L	23.244	mg/L	09:32:20
3	Mn 257.610†	2184491.5	2223381.0	5.3509	mg/L	5.3509	mg/L	09:32:20
3	Ni 231.604†	1994.4	2043.7	0.11063	mg/L	0.11063	mg/L	09:32:43
3	Pb 220.353†	77.7	71.1	0.02039	mg/L	0.02039	mg/L	09:32:43
3	Sb 206.836†	169.1	144.8	0.11369	mg/L	0.11369	mg/L	09:32:43
3	Se 196.026†	48.2	55.5	0.06648	mg/L	0.06648	mg/L	09:32:43
3	Tl 190.801†	41.9	60.2	0.04889	mg/L	0.04889	mg/L	09:32:43
3	V 292.402†	8325.1	8488.2	0.09790	mg/L	0.09790	mg/L	09:32:23
3	Zn 206.200†	4525.0	4586.1	0.22306	mg/L	0.22306	mg/L	09:32:43
3	Cd 226.502†	367.0	398.9	0.01120	mg/L	0.01120	mg/L	09:32:43
3	Ti 334.940†	-219.7	-140.0	-0.00114	mg/L	-0.00114	mg/L	09:32:23
3	Ca 227.546†	6303.1	6361.3	41.633	mg/L	41.633	mg/L	09:32:23
3	Na 589.592	337696.7	337899.7	100.11	mg/L	100.11	mg/L	09:31:24
3	K 766.490	15075.7	14507.2	12.716	mg/L	12.716	mg/L	09:31:26

Mean Data: L0195-01APDS~MC09P4A

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	792178.6	103.9	%	1.39				1.33%
Lu 261.542	489277.0	100.0	%	1.53				1.53%
Ag 328.068†	2003.8	0.01945	mg/L	0.000732	0.01945	mg/L	0.000732	3.76%
Al 308.215†	75715.2	4.1457	mg/L	0.09437	4.1457	mg/L	0.09437	2.28%
As 188.979†	17.4	0.01983	mg/L	0.004174	0.01983	mg/L	0.004174	21.05%
Ba 233.527†	28066.9	0.56020	mg/L	0.012064	0.56020	mg/L	0.012064	2.15%
Be 313.107†	23238.9	0.01411	mg/L	0.000272	0.01411	mg/L	0.000272	1.93%
Co 228.616†	3742.3	0.16487	mg/L	0.002705	0.16487	mg/L	0.002705	1.64%
Cr 267.716†	806.3	0.02064	mg/L	0.000413	0.02064	mg/L	0.000413	2.00%
Cu 324.752†	8227.3	0.05072	mg/L	0.001610	0.05072	mg/L	0.001610	3.17%
Fe 273.955†	3412.0	0.20206	mg/L	0.007459	0.20206	mg/L	0.007459	3.69%
Mg 279.077†	283684.3	22.926	mg/L	0.2750	22.926	mg/L	0.2750	1.20%
Mn 257.610†	2189917.3	5.2704	mg/L	0.06983	5.2704	mg/L	0.06983	1.32%
Ni 231.604†	2004.6	0.10848	mg/L	0.001964	0.10848	mg/L	0.001964	1.81%
Pb 220.353†	70.5	0.02020	mg/L	0.000300	0.02020	mg/L	0.000300	1.48%
Sb 206.836†	136.9	0.10753	mg/L	0.005698	0.10753	mg/L	0.005698	5.30%
Se 196.026†	55.8	0.06701	mg/L	0.003271	0.06701	mg/L	0.003271	4.88%
Tl 190.801†	63.4	0.05184	mg/L	0.004351	0.05184	mg/L	0.004351	8.39%
V 292.402†	8328.1	0.09605	mg/L	0.001627	0.09605	mg/L	0.001627	1.69%
Zn 206.200†	4498.0	0.21873	mg/L	0.004059	0.21873	mg/L	0.004059	1.86%
Cd 226.502†	395.7	0.01111	mg/L	0.000089	0.01111	mg/L	0.000089	0.80%
Ti 334.940†	-149.1	-0.00119	mg/L	0.000067	-0.00119	mg/L	0.000067	5.65%
Ca 227.546†	6223.1	40.726	mg/L	0.8246	40.726	mg/L	0.8246	2.02%
Na 589.592	334892.2	99.216	mg/L	0.8694	99.216	mg/L	0.8694	0.88%
K 766.490	14456.5	12.672	mg/L	0.0408	12.672	mg/L	0.0408	0.32%

Sequence No.: 32 **Autosampler Location: 54**
Sample ID: L0195-02A~MC09P5 **Date Collected: 2/9/2012 9:33:52 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:58 AM**

Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L0195-02A~MC09P5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	806370.1	806370.1	105.8	%			09:35:16
1	Lu 261.542	498810.6	498810.6	102.0	%			09:35:16
1	Ag 328.068†	-542.4	-47.7	-0.00046	mg/L	-0.00046	mg/L	09:35:18
1	Al 308.215†	75859.8	68525.4	3.7518	mg/L	3.7518	mg/L	09:35:18
1	As 188.979†	-6.6	-2.7	-0.00361	mg/L	-0.00361	mg/L	09:35:39
1	Ba 233.527†	9065.8	8942.2	0.16900	mg/L	0.16900	mg/L	09:35:18
1	Be 313.107†	2791.8	7167.8	0.00428	mg/L	0.00428	mg/L	09:35:18
1	Co 228.616†	1563.2	1550.3	0.06705	mg/L	0.06705	mg/L	09:35:39
1	Cr 267.716†	90.1	62.3	0.00051	mg/L	0.00051	mg/L	09:35:39
1	Cu 324.752†	1376.1	346.5	0.00266	mg/L	0.00266	mg/L	09:35:18
1	Fe 273.955†	-307.0	226.4	0.00828	mg/L	0.00828	mg/L	09:35:39
1	Mg 279.077†	164859.5	162303.9	13.040	mg/L	13.040	mg/L	09:35:16
1	Mn 257.610†	2240953.5	2198000.3	5.2901	mg/L	5.2901	mg/L	09:35:16
1	Ni 231.604†	566.8	569.7	0.02966	mg/L	0.02966	mg/L	09:35:39
1	Pb 220.353†	9.9	1.7	0.00132	mg/L	0.00132	mg/L	09:35:39
1	Sb 206.836†	33.8	5.9	0.00613	mg/L	0.00613	mg/L	09:35:39
1	Se 196.026†	2.6	9.0	-0.00053	mg/L	-0.00053	mg/L	09:35:39
1	Tl 190.801†	-12.9	5.0	-0.00157	mg/L	-0.00157	mg/L	09:35:39
1	V 292.402†	-70.0	-53.1	-0.00095	mg/L	-0.00095	mg/L	09:35:18
1	Zn 206.200†	2194.5	2133.2	0.10226	mg/L	0.10226	mg/L	09:35:39
1	Cd 226.502†	15.9	40.9	0.00094	mg/L	0.00094	mg/L	09:35:39
1	Ti 334.940†	-240.6	-152.4	-0.00134	mg/L	-0.00134	mg/L	09:35:18
1	Ca 227.546†	4790.8	4645.1	30.377	mg/L	30.377	mg/L	09:35:39
1	Na 589.592	282498.3	282701.3	83.744	mg/L	83.744	mg/L	09:35:01
1	K 766.490	4174.6	3606.1	3.2642	mg/L	3.2642	mg/L	09:35:03
2	Y 360.073	802064.6	802064.6	105.2	%			09:35:41
2	Lu 261.542	494542.4	494542.4	101.1	%			09:35:41
2	Ag 328.068†	-465.7	23.6	0.00023	mg/L	0.00023	mg/L	09:35:43
2	Al 308.215†	74723.0	68042.9	3.7250	mg/L	3.7250	mg/L	09:35:43
2	As 188.979†	-3.8	-0.1	-0.00055	mg/L	-0.00055	mg/L	09:36:04
2	Ba 233.527†	8858.7	8814.1	0.16638	mg/L	0.16638	mg/L	09:35:43
2	Be 313.107†	2650.0	7051.2	0.00421	mg/L	0.00421	mg/L	09:35:43
2	Co 228.616†	1571.9	1572.2	0.06802	mg/L	0.06802	mg/L	09:36:04
2	Cr 267.716†	97.5	70.4	0.00073	mg/L	0.00073	mg/L	09:36:04
2	Cu 324.752†	1374.5	356.6	0.00272	mg/L	0.00272	mg/L	09:35:43
2	Fe 273.955†	-320.2	210.7	0.00732	mg/L	0.00732	mg/L	09:36:04
2	Mg 279.077†	163230.4	162087.8	13.022	mg/L	13.022	mg/L	09:35:41
2	Mn 257.610†	2220940.7	2197171.8	5.2881	mg/L	5.2881	mg/L	09:35:41
2	Ni 231.604†	571.0	578.8	0.03015	mg/L	0.03015	mg/L	09:36:04
2	Pb 220.353†	1.1	-7.0	-0.00102	mg/L	-0.00102	mg/L	09:36:04
2	Sb 206.836†	29.4	1.8	0.00295	mg/L	0.00295	mg/L	09:36:04
2	Se 196.026†	-6.0	0.5	-0.01285	mg/L	-0.01285	mg/L	09:36:04
2	Tl 190.801†	-7.4	10.2	0.00329	mg/L	0.00329	mg/L	09:36:04
2	V 292.402†	-51.1	-35.0	-0.00074	mg/L	-0.00074	mg/L	09:35:43
2	Zn 206.200†	2216.1	2173.1	0.10422	mg/L	0.10422	mg/L	09:36:04
2	Cd 226.502†	21.7	46.8	0.00111	mg/L	0.00111	mg/L	09:36:04
2	Ti 334.940†	-208.7	-122.9	-0.00123	mg/L	-0.00123	mg/L	09:35:43
2	Ca 227.546†	4841.1	4735.4	30.970	mg/L	30.970	mg/L	09:36:04
2	Na 589.592	286689.3	286892.4	84.986	mg/L	84.986	mg/L	09:35:05
2	K 766.490	4105.9	3537.4	3.2046	mg/L	3.2046	mg/L	09:35:08
3	Y 360.073	797072.0	797072.0	104.6	%			09:36:06
3	Lu 261.542	493955.0	493955.0	101.0	%			09:36:06
3	Ag 328.068†	-518.9	-29.7	-0.00029	mg/L	-0.00029	mg/L	09:36:09
3	Al 308.215†	76059.3	69454.3	3.8030	mg/L	3.8030	mg/L	09:36:09
3	As 188.979†	-3.5	0.2	-0.00024	mg/L	-0.00024	mg/L	09:36:29
3	Ba 233.527†	9073.0	9036.8	0.17093	mg/L	0.17093	mg/L	09:36:09
3	Be 313.107†	2698.6	7102.5	0.00424	mg/L	0.00424	mg/L	09:36:09
3	Co 228.616†	1561.0	1563.2	0.06762	mg/L	0.06762	mg/L	09:36:29
3	Cr 267.716†	93.8	66.8	0.00063	mg/L	0.00063	mg/L	09:36:29
3	Cu 324.752†	1349.1	333.1	0.00258	mg/L	0.00258	mg/L	09:36:09
3	Fe 273.955†	-278.3	251.9	0.00984	mg/L	0.00984	mg/L	09:36:29
3	Mg 279.077†	164002.1	163044.1	13.100	mg/L	13.100	mg/L	09:36:06
3	Mn 257.610†	2232146.1	2210882.2	5.3211	mg/L	5.3211	mg/L	09:36:06

3	Ni 231.604†	569.5	577.9	0.03011	mg/L	0.03011	mg/L	09:36:29
3	Pb 220.353†	9.2	1.1	0.00119	mg/L	0.00119	mg/L	09:36:29
3	Sb 206.836†	36.1	8.5	0.00814	mg/L	0.00814	mg/L	09:36:29
3	Se 196.026†	-1.3	5.1	-0.00619	mg/L	-0.00619	mg/L	09:36:29
3	Tl 190.801†	-7.1	10.6	0.00363	mg/L	0.00363	mg/L	09:36:29
3	V 292.402†	-74.9	-58.6	-0.00101	mg/L	-0.00101	mg/L	09:36:09
3	Zn 206.200†	2196.6	2156.5	0.10340	mg/L	0.10340	mg/L	09:36:29
3	Cd 226.502†	18.0	43.1	0.00100	mg/L	0.00100	mg/L	09:36:29
3	Ti 334.940†	-225.6	-139.8	-0.00129	mg/L	-0.00129	mg/L	09:36:09
3	Ca 227.546†	4813.5	4713.7	30.827	mg/L	30.827	mg/L	09:36:29
3	Na 589.592	288154.9	288358.0	85.421	mg/L	85.421	mg/L	09:35:10
3	K 766.490	4052.9	3484.5	3.1587	mg/L	3.1587	mg/L	09:35:12

Mean Data: L0195-02A~MC09P5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	801835.6	105.2	%	0.61				0.58%
Lu 261.542	495769.3	101.3	%	0.54				0.53%
Ag 328.068†	-17.9	-0.00017	mg/L	0.000358	-0.00017	mg/L	0.000358	205.96%
Al 308.215†	68674.2	3.7599	mg/L	0.03960	3.7599	mg/L	0.03960	1.05%
As 188.979†	-0.9	-0.00147	mg/L	0.001860	-0.00147	mg/L	0.001860	126.97%
Ba 233.527†	8931.0	0.16877	mg/L	0.002285	0.16877	mg/L	0.002285	1.35%
Be 313.107†	7107.2	0.00424	mg/L	0.000036	0.00424	mg/L	0.000036	0.84%
Co 228.616†	1561.9	0.06756	mg/L	0.000491	0.06756	mg/L	0.000491	0.73%
Cr 267.716†	66.5	0.00063	mg/L	0.000110	0.00063	mg/L	0.000110	17.53%
Cu 324.752†	345.4	0.00265	mg/L	0.000072	0.00265	mg/L	0.000072	2.71%
Fe 273.955†	229.7	0.00848	mg/L	0.001269	0.00848	mg/L	0.001269	14.96%
Mg 279.077†	162478.6	13.054	mg/L	0.0409	13.054	mg/L	0.0409	0.31%
Mn 257.610†	2202018.1	5.2998	mg/L	0.01851	5.2998	mg/L	0.01851	0.35%
Ni 231.604†	575.5	0.02997	mg/L	0.000273	0.02997	mg/L	0.000273	0.91%
Pb 220.353†	-1.4	0.00049	mg/L	0.001318	0.00049	mg/L	0.001318	266.41%
Sb 206.836†	5.4	0.00574	mg/L	0.002615	0.00574	mg/L	0.002615	45.57%
Se 196.026†	4.9	-0.00652	mg/L	0.006170	-0.00652	mg/L	0.006170	94.62%
Tl 190.801†	8.6	0.00178	mg/L	0.002905	0.00178	mg/L	0.002905	162.88%
V 292.402†	-48.9	-0.00090	mg/L	0.000143	-0.00090	mg/L	0.000143	15.92%
Zn 206.200†	2154.3	0.10330	mg/L	0.000987	0.10330	mg/L	0.000987	0.96%
Cd 226.502†	43.6	0.00101	mg/L	0.000086	0.00101	mg/L	0.000086	8.45%
Ti 334.940†	-138.4	-0.00129	mg/L	0.000052	-0.00129	mg/L	0.000052	4.01%
Ca 227.546†	4698.1	30.725	mg/L	0.3098	30.725	mg/L	0.3098	1.01%
Na 589.592	285983.9	84.717	mg/L	0.8703	84.717	mg/L	0.8703	1.03%
K 766.490	3542.7	3.2091	mg/L	0.05289	3.2091	mg/L	0.05289	1.65%

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Sequence No.: 33 **Autosampler Location: 55**
Sample ID: L0195-03A~MC09P6 **Date Collected: 2/9/2012 9:37:38 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:59 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L0195-03A~MC09P6

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	796780.8	796780.8	104.6	%			09:39:02
1	Lu 261.542	503236.1	503236.1	102.9	%			09:39:02
1	Ag 328.068†	-481.2	16.5	0.00016	mg/L	0.00016	mg/L	09:39:04
1	Al 308.215†	31175.4	24432.2	1.3179	mg/L	1.3179	mg/L	09:39:04
1	As 188.979†	-5.8	-2.0	-0.00266	mg/L	-0.00266	mg/L	09:39:25
1	Ba 233.527†	9032.0	8831.2	0.16673	mg/L	0.16673	mg/L	09:39:04
1	Be 313.107†	-1018.6	3439.5	0.00200	mg/L	0.00200	mg/L	09:39:04
1	Co 228.616†	1359.9	1339.2	0.05761	mg/L	0.05761	mg/L	09:39:25
1	Cr 267.716†	53.6	26.0	-0.00033	mg/L	-0.00033	mg/L	09:39:25
1	Cu 324.752†	5795.2	4630.5	0.02877	mg/L	0.02877	mg/L	09:39:04
1	Fe 273.955†	-343.5	193.5	0.00623	mg/L	0.00623	mg/L	09:39:25
1	Mg 279.077†	172323.0	168137.5	13.512	mg/L	13.512	mg/L	09:39:02
1	Mn 257.610†	1992661.5	1937301.7	4.6625	mg/L	4.6625	mg/L	09:39:02
1	Ni 231.604†	580.0	577.8	0.03010	mg/L	0.03010	mg/L	09:39:25
1	Pb 220.353†	20.0	11.4	0.00378	mg/L	0.00378	mg/L	09:39:25
1	Sb 206.836†	35.3	7.0	0.00711	mg/L	0.00711	mg/L	09:39:25

1	Se 196.026†	-3.6	3.0	-0.00878	mg/L	-0.00878	mg/L	09:39:25
1	Tl 190.801†	-7.4	10.4	0.00342	mg/L	0.00342	mg/L	09:39:25
1	V 292.402†	-41.2	-24.5	-0.00062	mg/L	-0.00062	mg/L	09:39:04
1	Zn 206.200†	2615.6	2523.6	0.12147	mg/L	0.12147	mg/L	09:39:25
1	Cd 226.502†	28.3	52.9	0.00128	mg/L	0.00128	mg/L	09:39:25
1	Ti 334.940†	-274.1	-182.9	-0.00142	mg/L	-0.00142	mg/L	09:39:04
1	Ca 227.546†	4920.0	4729.4	30.935	mg/L	30.935	mg/L	09:39:25
1	Na 589.592	365007.5	365210.6	108.20	mg/L	108.20	mg/L	09:38:47
1	K 766.490	4367.8	3799.3	3.4316	mg/L	3.4316	mg/L	09:38:49
2	Y 360.073	792403.3	792403.3	104.0	%			09:39:27
2	Lu 261.542	499010.0	499010.0	102.0	%			09:39:27
2	Ag 328.068†	-448.3	44.7	0.00043	mg/L	0.00043	mg/L	09:39:29
2	Al 308.215†	30447.8	23975.6	1.2926	mg/L	1.2926	mg/L	09:39:29
2	As 188.979†	-2.2	1.5	0.00133	mg/L	0.00133	mg/L	09:39:50
2	Ba 233.527†	8749.4	8628.5	0.16258	mg/L	0.16258	mg/L	09:39:29
2	Be 313.107†	-1099.3	3352.1	0.00195	mg/L	0.00195	mg/L	09:39:29
2	Co 228.616†	1349.6	1340.4	0.05766	mg/L	0.05766	mg/L	09:39:50
2	Cr 267.716†	44.0	17.1	-0.00058	mg/L	-0.00058	mg/L	09:39:50
2	Cu 324.752†	5644.7	4530.7	0.02817	mg/L	0.02817	mg/L	09:39:29
2	Fe 273.955†	-321.0	212.8	0.00741	mg/L	0.00741	mg/L	09:39:50
2	Mg 279.077†	171309.8	168563.0	13.547	mg/L	13.547	mg/L	09:39:27
2	Mn 257.610†	1983379.3	1944607.5	4.6801	mg/L	4.6801	mg/L	09:39:27
2	Ni 231.604†	572.0	574.7	0.02993	mg/L	0.02993	mg/L	09:39:50
2	Pb 220.353†	17.2	8.9	0.00308	mg/L	0.00308	mg/L	09:39:50
2	Sb 206.836†	26.5	-1.3	0.00063	mg/L	0.00063	mg/L	09:39:50
2	Se 196.026†	-3.7	2.8	-0.00898	mg/L	-0.00898	mg/L	09:39:50
2	Tl 190.801†	-6.2	11.5	0.00445	mg/L	0.00445	mg/L	09:39:50
2	V 292.402†	-45.7	-29.3	-0.00068	mg/L	-0.00068	mg/L	09:39:29
2	Zn 206.200†	2594.8	2524.8	0.12153	mg/L	0.12153	mg/L	09:39:50
2	Cd 226.502†	15.8	40.8	0.00093	mg/L	0.00093	mg/L	09:39:50
2	Ti 334.940†	-214.8	-127.1	-0.00125	mg/L	-0.00125	mg/L	09:39:29
2	Ca 227.546†	4905.2	4755.4	31.106	mg/L	31.106	mg/L	09:39:50
2	Na 589.592	357173.6	357376.7	105.88	mg/L	105.88	mg/L	09:38:51
2	K 766.490	4492.3	3923.8	3.5396	mg/L	3.5396	mg/L	09:38:53
3	Y 360.073	795562.7	795562.7	104.4	%			09:39:52
3	Lu 261.542	501750.6	501750.6	102.6	%			09:39:52
3	Ag 328.068†	-451.4	44.1	0.00042	mg/L	0.00042	mg/L	09:39:54
3	Al 308.215†	30408.2	23774.0	1.2815	mg/L	1.2815	mg/L	09:39:54
3	As 188.979†	-1.0	2.7	0.00268	mg/L	0.00268	mg/L	09:40:15
3	Ba 233.527†	8815.8	8646.4	0.16295	mg/L	0.16295	mg/L	09:39:54
3	Be 313.107†	-1211.4	3248.6	0.00188	mg/L	0.00188	mg/L	09:39:54
3	Co 228.616†	1364.5	1347.7	0.05799	mg/L	0.05799	mg/L	09:40:15
3	Cr 267.716†	48.9	21.6	-0.00046	mg/L	-0.00046	mg/L	09:40:15
3	Cu 324.752†	5632.8	4489.0	0.02791	mg/L	0.02791	mg/L	09:39:54
3	Fe 273.955†	-311.3	224.0	0.00809	mg/L	0.00809	mg/L	09:40:15
3	Mg 279.077†	172702.5	169003.4	13.583	mg/L	13.583	mg/L	09:39:52
3	Mn 257.610†	1995835.2	1946131.3	4.6837	mg/L	4.6837	mg/L	09:39:52
3	Ni 231.604†	575.0	574.5	0.02992	mg/L	0.02992	mg/L	09:40:15
3	Pb 220.353†	15.2	6.9	0.00253	mg/L	0.00253	mg/L	09:40:15
3	Sb 206.836†	31.9	3.8	0.00461	mg/L	0.00461	mg/L	09:40:15
3	Se 196.026†	-0.6	5.9	-0.00451	mg/L	-0.00451	mg/L	09:40:15
3	Tl 190.801†	-12.5	5.4	-0.00114	mg/L	-0.00114	mg/L	09:40:15
3	V 292.402†	-89.7	-71.9	-0.00117	mg/L	-0.00117	mg/L	09:39:54
3	Zn 206.200†	2608.8	2524.5	0.12152	mg/L	0.12152	mg/L	09:40:15
3	Cd 226.502†	16.1	41.0	0.00094	mg/L	0.00094	mg/L	09:40:15
3	Ti 334.940†	-266.4	-176.2	-0.00139	mg/L	-0.00139	mg/L	09:39:54
3	Ca 227.546†	4936.8	4759.9	31.136	mg/L	31.136	mg/L	09:40:15
3	Na 589.592	360517.9	360721.0	106.87	mg/L	106.87	mg/L	09:38:56
3	K 766.490	4498.4	3929.9	3.5449	mg/L	3.5449	mg/L	09:38:58

Mean Data: L0195-03A~MC09P6

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	794915.6	104.3	%	0.30				0.28%
Lu 261.542	501332.2	102.5	%	0.44				0.43%
Ag 328.068†	35.1	0.00034	mg/L	0.000156	0.00034	mg/L	0.000156	46.16%
Al 308.215†	24060.6	1.2973	mg/L	0.01863	1.2973	mg/L	0.01863	1.44%
As 188.979†	0.7	0.00045	mg/L	0.002779	0.00045	mg/L	0.002779	619.21%
Ba 233.527†	8702.0	0.16409	mg/L	0.002295	0.16409	mg/L	0.002295	1.40%
Be 313.107†	3346.7	0.00194	mg/L	0.000058	0.00194	mg/L	0.000058	3.01%

Co 228.616†	1342.4	0.05776	mg/L	0.000204	0.05776	mg/L	0.000204	0.35%
Cr 267.716†	21.5	-0.00045	mg/L	0.000123	-0.00045	mg/L	0.000123	26.99%
Cu 324.752†	4550.1	0.02828	mg/L	0.000443	0.02828	mg/L	0.000443	1.57%
Fe 273.955†	210.1	0.00724	mg/L	0.000942	0.00724	mg/L	0.000942	13.01%
Mg 279.077†	168568.0	13.548	mg/L	0.0353	13.548	mg/L	0.0353	0.26%
Mn 257.610†	1942680.2	4.6754	mg/L	0.01136	4.6754	mg/L	0.01136	0.24%
Ni 231.604†	575.7	0.02998	mg/L	0.000100	0.02998	mg/L	0.000100	0.33%
Pb 220.353†	9.1	0.00313	mg/L	0.000628	0.00313	mg/L	0.000628	20.06%
Sb 206.836†	3.1	0.00412	mg/L	0.003265	0.00412	mg/L	0.003265	79.33%
Se 196.026†	3.9	-0.00742	mg/L	0.002521	-0.00742	mg/L	0.002521	33.96%
Tl 190.801†	9.1	0.00224	mg/L	0.002978	0.00224	mg/L	0.002978	132.68%
V 292.402†	-41.9	-0.00082	mg/L	0.000302	-0.00082	mg/L	0.000302	36.60%
Zn 206.200†	2524.3	0.12151	mg/L	0.000030	0.12151	mg/L	0.000030	0.02%
Cd 226.502†	44.9	0.00105	mg/L	0.000198	0.00105	mg/L	0.000198	18.84%
Ti 334.940†	-162.0	-0.00135	mg/L	0.000089	-0.00135	mg/L	0.000089	6.57%
Ca 227.546†	4748.2	31.059	mg/L	0.1084	31.059	mg/L	0.1084	0.35%
Na 589.592	361102.7	106.99	mg/L	1.165	106.99	mg/L	1.165	1.09%
K 766.490	3884.3	3.5054	mg/L	0.06392	3.5054	mg/L	0.06392	1.82%

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Sequence No.: 34 **Autosampler Location: 3**
Sample ID: CCV97 **Date Collected: 2/9/2012 9:41:24 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:27:59 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV97

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	718010.7	718010.7	94.22	%			09:42:44
1	Lu 261.542	470727.3	470727.3	96.22	%			09:42:44
1	Ag 328.068†	30524.4	32207.0	0.31386	mg/L	0.31386	mg/L	09:42:46
1	Al 308.215†	720568.4	742984.0	40.924	mg/L	40.924	mg/L	09:42:44
1	As 188.979†	828.8	865.0	1.0074	mg/L	1.0074	mg/L	09:43:06
1	Ba 233.527†	462762.0	480981.1	9.8248	mg/L	9.8248	mg/L	09:42:44
1	Be 313.107†	772406.8	807161.5	0.49970	mg/L	0.49970	mg/L	09:42:44
1	Co 228.616†	54745.0	56911.6	2.5270	mg/L	2.5270	mg/L	09:42:46
1	Cr 267.716†	72937.2	75774.7	2.0514	mg/L	2.0514	mg/L	09:42:46
1	Cu 324.752†	637759.0	661794.6	4.0360	mg/L	4.0360	mg/L	09:42:44
1	Fe 273.955†	324308.9	337568.8	20.638	mg/L	20.638	mg/L	09:42:46
1	Mg 279.077†	1743172.7	1812228.3	147.43	mg/L	147.43	mg/L	09:42:44
1	Mn 257.610†	1634563.7	1698923.8	4.0845	mg/L	4.0845	mg/L	09:42:44
1	Ni 231.604†	44097.7	45842.9	2.5154	mg/L	2.5154	mg/L	09:42:46
1	Pb 220.353†	7106.1	7377.1	2.0155	mg/L	2.0155	mg/L	09:43:06
1	Sb 206.836†	1246.4	1268.0	0.94719	mg/L	0.94719	mg/L	09:43:06
1	Se 196.026†	657.2	689.5	0.99074	mg/L	0.99074	mg/L	09:43:06
1	Tl 190.801†	1011.8	1069.1	0.96551	mg/L	0.96551	mg/L	09:43:06
1	V 292.402†	210047.0	218309.1	2.5269	mg/L	2.5269	mg/L	09:42:46
1	Zn 206.200†	99581.1	103471.7	5.0974	mg/L	5.0974	mg/L	09:42:46
1	Cd 226.502†	17078.4	17774.2	0.50731	mg/L	0.50731	mg/L	09:42:46
1	Ti 334.940†	814046.3	846089.6	2.4321	mg/L	2.4321	mg/L	09:42:44
1	Ca 227.546†	22213.0	23031.6	150.57	mg/L	150.57	mg/L	09:42:46
1	Na 589.592	662463.0	662666.1	196.39	mg/L	196.39	mg/L	09:42:33
1	K 766.490	227780.0	227211.5	197.14	mg/L	197.14	mg/L	09:42:33
2	Y 360.073	715021.7	715021.7	93.83	%			09:43:09
2	Lu 261.542	467574.5	467574.5	95.58	%			09:43:09
2	Ag 328.068†	29711.3	31570.3	0.30767	mg/L	0.30767	mg/L	09:43:12
2	Al 308.215†	719314.6	746721.7	41.131	mg/L	41.131	mg/L	09:43:09
2	As 188.979†	823.6	865.3	1.0075	mg/L	1.0075	mg/L	09:43:32
2	Ba 233.527†	463807.2	485317.6	9.9135	mg/L	9.9135	mg/L	09:43:09
2	Be 313.107†	770095.4	810156.0	0.50161	mg/L	0.50161	mg/L	09:43:09
2	Co 228.616†	53205.8	55684.7	2.4722	mg/L	2.4722	mg/L	09:43:12
2	Cr 267.716†	70973.8	74231.5	2.0096	mg/L	2.0096	mg/L	09:43:12
2	Cu 324.752†	639095.7	667662.2	4.0717	mg/L	4.0717	mg/L	09:43:09
2	Fe 273.955†	317090.0	332288.6	20.315	mg/L	20.315	mg/L	09:43:12
2	Mg 279.077†	1744525.5	1825859.2	148.54	mg/L	148.54	mg/L	09:43:09
2	Mn 257.610†	1634357.7	1710162.7	4.1115	mg/L	4.1115	mg/L	09:43:09
2	Ni 231.604†	42879.7	44877.5	2.4623	mg/L	2.4623	mg/L	09:43:12
2	Pb 220.353†	7100.4	7420.9	2.0274	mg/L	2.0274	mg/L	09:43:32

2	Sb 206.836†	1266.3	1297.5	0.97088	mg/L	0.97088	mg/L	09:43:32
2	Se 196.026†	659.4	696.4	1.0006	mg/L	1.0006	mg/L	09:43:32
2	Tl 190.801†	999.8	1063.6	0.96080	mg/L	0.96080	mg/L	09:43:32
2	V 292.402†	205498.0	215021.5	2.4887	mg/L	2.4887	mg/L	09:43:12
2	Zn 206.200†	96797.4	101257.0	4.9882	mg/L	4.9882	mg/L	09:43:12
2	Cd 226.502†	16555.5	17346.8	0.49508	mg/L	0.49508	mg/L	09:43:12
2	Ti 334.940†	819625.7	857631.7	2.4651	mg/L	2.4651	mg/L	09:43:09
2	Ca 227.546†	21684.9	22634.8	147.97	mg/L	147.97	mg/L	09:43:12
2	Na 589.592	672976.8	673179.9	199.50	mg/L	199.50	mg/L	09:42:36
2	K 766.490	231891.7	231323.2	200.71	mg/L	200.71	mg/L	09:42:36
3	Y 360.073	712651.6	712651.6	93.51	%			09:43:35
3	Lu 261.542	466504.8	466504.8	95.36	%			09:43:35
3	Ag 328.068†	29809.9	31745.0	0.30938	mg/L	0.30938	mg/L	09:43:37
3	Al 308.215†	717622.2	746672.6	41.128	mg/L	41.128	mg/L	09:43:35
3	As 188.979†	831.8	875.9	1.0198	mg/L	1.0198	mg/L	09:43:58
3	Ba 233.527†	461390.2	483895.6	9.8844	mg/L	9.8844	mg/L	09:43:35
3	Be 313.107†	770293.5	812211.2	0.50285	mg/L	0.50285	mg/L	09:43:35
3	Co 228.616†	53669.3	56298.5	2.4996	mg/L	2.4996	mg/L	09:43:37
3	Cr 267.716†	71629.3	75089.2	2.0328	mg/L	2.0328	mg/L	09:43:37
3	Cu 324.752†	636830.5	666820.1	4.0666	mg/L	4.0666	mg/L	09:43:35
3	Fe 273.955†	319492.2	335568.4	20.516	mg/L	20.516	mg/L	09:43:37
3	Mg 279.077†	1737064.2	1822219.9	148.24	mg/L	148.24	mg/L	09:43:35
3	Mn 257.610†	1630505.6	1710044.0	4.1112	mg/L	4.1112	mg/L	09:43:35
3	Ni 231.604†	43082.5	45193.1	2.4796	mg/L	2.4796	mg/L	09:43:37
3	Pb 220.353†	7107.1	7445.0	2.0340	mg/L	2.0340	mg/L	09:43:58
3	Sb 206.836†	1272.3	1306.9	0.97776	mg/L	0.97776	mg/L	09:43:58
3	Se 196.026†	663.5	702.3	1.0091	mg/L	1.0091	mg/L	09:43:58
3	Tl 190.801†	1011.7	1078.5	0.97438	mg/L	0.97438	mg/L	09:43:58
3	V 292.402†	206329.7	216386.7	2.5046	mg/L	2.5046	mg/L	09:43:37
3	Zn 206.200†	97384.7	102105.0	5.0301	mg/L	5.0301	mg/L	09:43:37
3	Cd 226.502†	16656.1	17492.0	0.49922	mg/L	0.49922	mg/L	09:43:37
3	Ti 334.940†	814932.6	854676.5	2.4567	mg/L	2.4567	mg/L	09:43:35
3	Ca 227.546†	21862.2	22872.8	149.53	mg/L	149.53	mg/L	09:43:37
3	Na 589.592	664821.3	665024.3	197.09	mg/L	197.09	mg/L	09:42:38
3	K 766.490	228851.7	228283.2	198.07	mg/L	198.07	mg/L	09:42:38

Mean Data: CCV97

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	715228.0	93.85	%	0.352				0.38%
Lu 261.542	468268.9	95.72	%	0.449				0.47%
Ag 328.068†	31840.8	0.31030	mg/L	0.003198	0.31030	mg/L	0.003198	1.03%
QC value within limits for Ag 328.068 Recovery = 103.43%								
Al 308.215†	745459.4	41.061	mg/L	0.1188	41.061	mg/L	0.1188	0.29%
QC value within limits for Al 308.215 Recovery = 102.65%								
As 188.979†	868.7	1.0116	mg/L	0.00713	1.0116	mg/L	0.00713	0.70%
QC value within limits for As 188.979 Recovery = 101.16%								
Ba 233.527†	483398.1	9.8742	mg/L	0.04520	9.8742	mg/L	0.04520	0.46%
QC value within limits for Ba 233.527 Recovery = 98.74%								
Be 313.107†	809842.9	0.50139	mg/L	0.001587	0.50139	mg/L	0.001587	0.32%
QC value within limits for Be 313.107 Recovery = 100.28%								
Co 228.616†	56298.3	2.4996	mg/L	0.02743	2.4996	mg/L	0.02743	1.10%
QC value within limits for Co 228.616 Recovery = 99.98%								
Cr 267.716†	75031.8	2.0313	mg/L	0.02095	2.0313	mg/L	0.02095	1.03%
QC value within limits for Cr 267.716 Recovery = 101.56%								
Cu 324.752†	665425.6	4.0581	mg/L	0.01933	4.0581	mg/L	0.01933	0.48%
QC value within limits for Cu 324.752 Recovery = 101.45%								
Fe 273.955†	335141.9	20.489	mg/L	0.1632	20.489	mg/L	0.1632	0.80%
QC value within limits for Fe 273.955 Recovery = 102.45%								
Mg 279.077†	1820102.5	148.07	mg/L	0.575	148.07	mg/L	0.575	0.39%
QC value within limits for Mg 279.077 Recovery = 98.71%								
Mn 257.610†	1706376.8	4.1024	mg/L	0.01552	4.1024	mg/L	0.01552	0.38%
QC value within limits for Mn 257.610 Recovery = 102.56%								
Ni 231.604†	45304.5	2.4858	mg/L	0.02705	2.4858	mg/L	0.02705	1.09%
QC value within limits for Ni 231.604 Recovery = 99.43%								
Pb 220.353†	7414.3	2.0257	mg/L	0.00938	2.0257	mg/L	0.00938	0.46%
QC value within limits for Pb 220.353 Recovery = 101.28%								
Sb 206.836†	1290.8	0.96527	mg/L	0.016035	0.96527	mg/L	0.016035	1.66%
QC value within limits for Sb 206.836 Recovery = 96.53%								
Se 196.026†	696.1	1.0001	mg/L	0.00919	1.0001	mg/L	0.00919	0.92%

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   QC value within limits for Se 196.026  Recovery = 100.01%
Tl 190.801†            1070.4     0.96690 mg/L      0.006899     0.96690 mg/L      0.006899   0.71%
   QC value within limits for Tl 190.801  Recovery = 96.69%
V 292.402†           216572.4      2.5067 mg/L       0.01916      2.5067 mg/L       0.01916   0.76%
   QC value within limits for V 292.402  Recovery = 100.27%
Zn 206.200†          102277.9      5.0386 mg/L       0.05507      5.0386 mg/L       0.05507   1.09%
   QC value within limits for Zn 206.200  Recovery = 100.77%
Cd 226.502†           17537.7     0.50054 mg/L      0.006222     0.50054 mg/L      0.006222   1.24%
   QC value within limits for Cd 226.502  Recovery = 100.11%
Ti 334.940†          852799.2      2.4513 mg/L       0.01719      2.4513 mg/L       0.01719   0.70%
   QC value within limits for Ti 334.940  Recovery = 98.05%
Ca 227.546†           22846.4      149.35 mg/L         1.308      149.35 mg/L         1.308   0.88%
   QC value within limits for Ca 227.546  Recovery = 99.57%
Na 589.592           666956.8      197.66 mg/L         1.636      197.66 mg/L         1.636   0.83%
   QC value within limits for Na 589.592  Recovery = 98.83%
K 766.490            228939.3      198.64 mg/L         1.849      198.64 mg/L         1.849   0.93%
   QC value within limits for K 766.490  Recovery = 99.32%
All analyte(s) passed QC.
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Sequence No.: 35 **Autosampler Location: 4**
Sample ID: CCB97 **Date Collected: 2/9/2012 9:45:07 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:28:00 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB97

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	748824.3	748824.3	98.26	%			09:46:24
1	Lu 261.542	484065.4	484065.4	98.95	%			09:46:24
1	Ag 328.068†	-400.0	80.0	0.00077	mg/L	0.00077	mg/L	09:46:27
1	Al 308.215†	6166.7	358.1	-0.00657	mg/L	-0.00657	mg/L	09:46:27
1	As 188.979†	-0.5	3.1	0.00337	mg/L	0.00337	mg/L	09:46:47
1	Ba 233.527†	136.8	189.2	-0.01002	mg/L	-0.01002	mg/L	09:46:47
1	Be 313.107†	-3860.9	527.9	0.00023	mg/L	0.00023	mg/L	09:46:27
1	Co 228.616†	14.6	32.0	-0.00075	mg/L	-0.00075	mg/L	09:46:47
1	Cr 267.716†	70.6	45.2	0.00132	mg/L	0.00132	mg/L	09:46:27
1	Cu 324.752†	1289.7	300.4	0.00238	mg/L	0.00238	mg/L	09:46:27
1	Fe 273.955†	2.0	529.5	0.02779	mg/L	0.02779	mg/L	09:46:27
1	Mg 279.077†	285.9	907.0	-0.12863	mg/L	-0.12863	mg/L	09:46:27
1	Mn 257.610†	775.4	970.2	0.00110	mg/L	0.00110	mg/L	09:46:27
1	Ni 231.604†	2.3	16.2	-0.00076	mg/L	-0.00076	mg/L	09:46:47
1	Pb 220.353†	-0.3	-8.3	-0.00192	mg/L	-0.00192	mg/L	09:46:47
1	Sb 206.836†	47.3	20.5	0.01803	mg/L	0.01803	mg/L	09:46:47
1	Se 196.026†	-2.0	4.4	-0.00217	mg/L	-0.00217	mg/L	09:46:47
1	Tl 190.801†	-11.0	6.5	-0.00032	mg/L	-0.00032	mg/L	09:46:47
1	V 292.402†	84.4	100.9	0.00083	mg/L	0.00083	mg/L	09:46:27
1	Zn 206.200†	73.3	55.0	-0.00003	mg/L	-0.00003	mg/L	09:46:47
1	Cd 226.502†	-22.2	2.9	-0.00017	mg/L	-0.00017	mg/L	09:46:47
1	Ti 334.940†	694.9	785.9	0.00062	mg/L	0.00062	mg/L	09:46:27
1	Ca 227.546†	66.7	14.0	-0.03263	mg/L	-0.03263	mg/L	09:46:47
1	Na 589.592	418.8	621.9	0.11939	mg/L	0.11939	mg/L	09:46:16
1	K 766.490	823.9	255.4	0.35885	mg/L	0.35885	mg/L	09:46:16
2	Y 360.073	748158.2	748158.2	98.17	%			09:46:49
2	Lu 261.542	483784.3	483784.3	98.89	%			09:46:49
2	Ag 328.068†	-417.1	62.5	0.00059	mg/L	0.00059	mg/L	09:46:51
2	Al 308.215†	6036.6	230.2	-0.01361	mg/L	-0.01361	mg/L	09:46:51
2	As 188.979†	-1.6	2.1	0.00212	mg/L	0.00212	mg/L	09:47:11
2	Ba 233.527†	84.5	136.4	-0.01110	mg/L	-0.01110	mg/L	09:47:11
2	Be 313.107†	-3973.8	411.4	0.00015	mg/L	0.00015	mg/L	09:46:51
2	Co 228.616†	3.3	20.6	-0.00126	mg/L	-0.00126	mg/L	09:47:11
2	Cr 267.716†	63.0	37.6	0.00111	mg/L	0.00111	mg/L	09:46:51
2	Cu 324.752†	1261.9	273.0	0.00221	mg/L	0.00221	mg/L	09:46:51
2	Fe 273.955†	-195.2	330.1	0.01559	mg/L	0.01559	mg/L	09:46:51
2	Mg 279.077†	21.2	639.5	-0.15043	mg/L	-0.15043	mg/L	09:46:51
2	Mn 257.610†	492.3	684.4	0.00041	mg/L	0.00041	mg/L	09:46:51
2	Ni 231.604†	0.9	14.8	-0.00084	mg/L	-0.00084	mg/L	09:47:11
2	Pb 220.353†	7.2	-0.7	0.00013	mg/L	0.00013	mg/L	09:47:11

2	Sb 206.836†	42.0	15.1	0.01386	mg/L	0.01386	mg/L	09:47:11
2	Se 196.026†	-6.9	-0.5	-0.00930	mg/L	-0.00930	mg/L	09:47:11
2	Tl 190.801†	-19.0	-1.7	-0.00781	mg/L	-0.00781	mg/L	09:47:11
2	V 292.402†	7.9	23.6	-0.00006	mg/L	-0.00006	mg/L	09:46:51
2	Zn 206.200†	63.1	44.7	-0.00054	mg/L	-0.00054	mg/L	09:47:11
2	Cd 226.502†	-19.1	6.0	-0.00008	mg/L	-0.00008	mg/L	09:47:11
2	Ti 334.940†	608.1	698.4	0.00037	mg/L	0.00037	mg/L	09:46:51
2	Ca 227.546†	55.0	2.2	-0.11008	mg/L	-0.11008	mg/L	09:47:11
2	Na 589.592	432.3	635.4	0.12340	mg/L	0.12340	mg/L	09:46:18
2	K 766.490	844.1	275.6	0.37642	mg/L	0.37642	mg/L	09:46:18
3	Y 360.073	778373.4	778373.4	102.1	%			09:47:14
3	Lu 261.542	504370.5	504370.5	103.1	%			09:47:14
3	Ag 328.068†	-462.4	35.8	0.00034	mg/L	0.00034	mg/L	09:47:16
3	Al 308.215†	6018.9	-36.2	-0.02831	mg/L	-0.02831	mg/L	09:47:16
3	As 188.979†	-4.4	-0.6	-0.00096	mg/L	-0.00096	mg/L	09:47:36
3	Ba 233.527†	44.6	94.2	-0.01196	mg/L	-0.01196	mg/L	09:47:36
3	Be 313.107†	-3975.7	573.6	0.00025	mg/L	0.00025	mg/L	09:47:16
3	Co 228.616†	-7.7	9.8	-0.00174	mg/L	-0.00174	mg/L	09:47:36
3	Cr 267.716†	40.9	13.5	0.00046	mg/L	0.00046	mg/L	09:47:16
3	Cu 324.752†	1267.6	226.4	0.00193	mg/L	0.00193	mg/L	09:47:16
3	Fe 273.955†	-237.2	297.4	0.01358	mg/L	0.01358	mg/L	09:47:16
3	Mg 279.077†	-57.1	562.7	-0.15669	mg/L	-0.15669	mg/L	09:47:16
3	Mn 257.610†	286.8	464.8	-0.00011	mg/L	-0.00011	mg/L	09:47:16
3	Ni 231.604†	-21.1	-6.6	-0.00201	mg/L	-0.00201	mg/L	09:47:36
3	Pb 220.353†	2.3	-5.8	-0.00126	mg/L	-0.00126	mg/L	09:47:36
3	Sb 206.836†	37.1	8.7	0.00883	mg/L	0.00883	mg/L	09:47:36
3	Se 196.026†	-6.4	0.3	-0.00813	mg/L	-0.00813	mg/L	09:47:36
3	Tl 190.801†	-17.9	0.2	-0.00606	mg/L	-0.00606	mg/L	09:47:36
3	V 292.402†	16.9	31.9	0.00003	mg/L	0.00003	mg/L	09:47:16
3	Zn 206.200†	47.0	26.6	-0.00144	mg/L	-0.00144	mg/L	09:47:36
3	Cd 226.502†	-27.2	-1.1	-0.00028	mg/L	-0.00028	mg/L	09:47:36
3	Ti 334.940†	507.7	576.0	0.00001	mg/L	0.00001	mg/L	09:47:16
3	Ca 227.546†	58.3	3.1	-0.10416	mg/L	-0.10416	mg/L	09:47:36
3	Na 589.592	413.3	616.4	0.11776	mg/L	0.11776	mg/L	09:46:21
3	K 766.490	766.7	198.2	0.30929	mg/L	0.30929	mg/L	09:46:21

Mean Data: CCB97

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	758452.0	99.52	%	2.264				2.28%
Lu 261.542	490740.1	100.3	%	2.41				2.41%
Ag 328.068†	59.4	0.00057	mg/L	0.000215	0.00057	mg/L	0.000215	38.05%
Al 308.215†	184.0	-0.01616	mg/L	0.011094	-0.01616	mg/L	0.011094	68.64%
As 188.979†	1.5	0.00151	mg/L	0.002225	0.00151	mg/L	0.002225	147.30%
Ba 233.527†	139.9	-0.01103	mg/L	0.000974	-0.01103	mg/L	0.000974	8.83%
Be 313.107†	504.3	0.00021	mg/L	0.000051	0.00021	mg/L	0.000051	24.19%
Co 228.616†	20.8	-0.00125	mg/L	0.000494	-0.00125	mg/L	0.000494	39.50%
Cr 267.716†	32.1	0.00096	mg/L	0.000448	0.00096	mg/L	0.000448	46.49%
Cu 324.752†	266.6	0.00218	mg/L	0.000228	0.00218	mg/L	0.000228	10.50%
Fe 273.955†	385.7	0.01899	mg/L	0.007687	0.01899	mg/L	0.007687	40.49%
Mg 279.077†	703.0	-0.14525	mg/L	0.014727	-0.14525	mg/L	0.014727	10.14%
Mn 257.610†	706.5	0.00047	mg/L	0.000610	0.00047	mg/L	0.000610	130.61%
Ni 231.604†	8.1	-0.00120	mg/L	0.000701	-0.00120	mg/L	0.000701	58.40%
Pb 220.353†	-4.9	-0.00102	mg/L	0.001046	-0.00102	mg/L	0.001046	102.68%
Sb 206.836†	14.8	0.01357	mg/L	0.004606	0.01357	mg/L	0.004606	33.93%
Se 196.026†	1.4	-0.00653	mg/L	0.003824	-0.00653	mg/L	0.003824	58.55%
Tl 190.801†	1.7	-0.00473	mg/L	0.003918	-0.00473	mg/L	0.003918	82.83%
V 292.402†	52.1	0.00027	mg/L	0.000492	0.00027	mg/L	0.000492	182.96%
Zn 206.200†	42.1	-0.00067	mg/L	0.000710	-0.00067	mg/L	0.000710	106.19%
Cd 226.502†	2.6	-0.00018	mg/L	0.000102	-0.00018	mg/L	0.000102	57.99%
Ti 334.940†	686.8	0.00033	mg/L	0.000303	0.00033	mg/L	0.000303	91.32%
Ca 227.546†	6.4	-0.08229	mg/L	0.043105	-0.08229	mg/L	0.043105	52.38%
Na 589.592	624.5	0.12018	mg/L	0.002901	0.12018	mg/L	0.002901	2.41%
K 766.490	243.1	0.34819	mg/L	0.034814	0.34819	mg/L	0.034814	10.00%

Sequence No.: 36 **Autosampler Location: 56**
Sample ID: L0204-01A~MA4B09 **Date Collected: 2/9/2012 9:48:46 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:28:01 AM**
Logged In Analyst (Original) : mitOptima3

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

Replicate Data: L0204-01A~MA4B09

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	731079.2	731079.2	95.93	%			09:50:04
1	Lu 261.542	477541.7	477541.7	97.62	%			09:50:04
1	Ag 328.068†	-454.2	19.0	0.00018	mg/L	0.00018	mg/L	09:50:06
1	Al 308.215†	16956.3	11496.5	0.58939	mg/L	0.58939	mg/L	09:50:06
1	As 188.979†	233.2	242.6	0.28081	mg/L	0.28081	mg/L	09:50:26
1	Ba 233.527†	17747.5	18232.0	0.35900	mg/L	0.35900	mg/L	09:50:06
1	Be 313.107†	-3233.7	1117.1	0.00062	mg/L	0.00062	mg/L	09:50:06
1	Co 228.616†	127.1	147.5	0.00324	mg/L	0.00324	mg/L	09:50:26
1	Cr 267.716†	1252.4	1256.9	0.03316	mg/L	0.03316	mg/L	09:50:26
1	Cu 324.752†	49688.1	49898.9	0.30598	mg/L	0.30598	mg/L	09:50:06
1	Fe 273.955†	341787.9	350665.3	21.455	mg/L	21.455	mg/L	09:50:04
1	Mg 279.077†	347612.3	356722.6	28.876	mg/L	28.876	mg/L	09:50:04
1	Mn 257.610†	1442260.1	1477681.4	3.5555	mg/L	3.5555	mg/L	09:50:04
1	Ni 231.604†	427.2	451.5	0.02315	mg/L	0.02315	mg/L	09:50:26
1	Pb 220.353†	13.9	6.3	0.00290	mg/L	0.00290	mg/L	09:50:26
1	Sb 206.836†	38.4	12.0	0.00927	mg/L	0.00927	mg/L	09:50:26
1	Se 196.026†	-5.4	1.0	-0.00210	mg/L	-0.00210	mg/L	09:50:26
1	Tl 190.801†	-8.3	9.1	0.00496	mg/L	0.00496	mg/L	09:50:26
1	V 292.402†	131.7	150.5	0.00275	mg/L	0.00275	mg/L	09:50:06
1	Zn 206.200†	2888.4	2939.9	0.14208	mg/L	0.14208	mg/L	09:50:26
1	Cd 226.502†	129.4	157.8	0.00192	mg/L	0.00192	mg/L	09:50:26
1	Ti 334.940†	5760.9	5985.3	0.01932	mg/L	0.01932	mg/L	09:50:06
1	Ca 227.546†	19818.7	20249.4	133.00	mg/L	133.00	mg/L	09:50:06
1	Na 589.592	397753.8	397956.9	117.91	mg/L	117.91	mg/L	09:49:55
1	K 766.490	37498.5	36930.1	32.158	mg/L	32.158	mg/L	09:49:55
2	Y 360.073	718071.8	718071.8	94.23	%			09:50:29
2	Lu 261.542	467957.1	467957.1	95.66	%			09:50:29
2	Ag 328.068†	-490.0	-27.9	-0.00028	mg/L	-0.00028	mg/L	09:50:31
2	Al 308.215†	17130.8	12034.6	0.61850	mg/L	0.61850	mg/L	09:50:31
2	As 188.979†	230.8	245.0	0.28365	mg/L	0.28365	mg/L	09:50:51
2	Ba 233.527†	18054.2	18925.1	0.37318	mg/L	0.37318	mg/L	09:50:31
2	Be 313.107†	-3412.4	862.4	0.00047	mg/L	0.00047	mg/L	09:50:31
2	Co 228.616†	130.2	153.3	0.00350	mg/L	0.00350	mg/L	09:50:51
2	Cr 267.716†	1237.3	1267.4	0.03345	mg/L	0.03345	mg/L	09:50:51
2	Cu 324.752†	50284.8	51565.3	0.31614	mg/L	0.31614	mg/L	09:50:31
2	Fe 273.955†	335048.4	350791.2	21.462	mg/L	21.462	mg/L	09:50:29
2	Mg 279.077†	339540.5	355577.9	28.783	mg/L	28.783	mg/L	09:50:29
2	Mn 257.610†	1409608.6	1473808.9	3.5461	mg/L	3.5461	mg/L	09:50:29
2	Ni 231.604†	429.7	463.1	0.02379	mg/L	0.02379	mg/L	09:50:51
2	Pb 220.353†	11.8	4.3	0.00240	mg/L	0.00240	mg/L	09:50:51
2	Sb 206.836†	31.3	5.4	0.00411	mg/L	0.00411	mg/L	09:50:51
2	Se 196.026†	-7.5	-1.4	-0.00545	mg/L	-0.00545	mg/L	09:50:51
2	Tl 190.801†	-14.8	2.1	-0.00152	mg/L	-0.00152	mg/L	09:50:51
2	V 292.402†	110.6	131.2	0.00253	mg/L	0.00253	mg/L	09:50:31
2	Zn 206.200†	2831.6	2941.2	0.14214	mg/L	0.14214	mg/L	09:50:51
2	Cd 226.502†	120.1	150.9	0.00172	mg/L	0.00172	mg/L	09:50:51
2	Ti 334.940†	5551.4	5887.1	0.01917	mg/L	0.01917	mg/L	09:50:31
2	Ca 227.546†	20036.0	20892.4	137.22	mg/L	137.22	mg/L	09:50:31
2	Na 589.592	396511.4	396714.4	117.54	mg/L	117.54	mg/L	09:49:58
2	K 766.490	37380.0	36811.5	32.055	mg/L	32.055	mg/L	09:49:58
3	Y 360.073	719972.2	719972.2	94.47	%			09:50:54
3	Lu 261.542	470530.4	470530.4	96.18	%			09:50:54
3	Ag 328.068†	-465.8	-0.0	0.00000	mg/L	0.00000	mg/L	09:50:56
3	Al 308.215†	17054.9	11857.8	0.60898	mg/L	0.60898	mg/L	09:50:56
3	As 188.979†	233.9	246.8	0.28574	mg/L	0.28574	mg/L	09:51:16
3	Ba 233.527†	17847.9	18607.3	0.36668	mg/L	0.36668	mg/L	09:50:56
3	Be 313.107†	-3411.7	882.6	0.00048	mg/L	0.00048	mg/L	09:50:56
3	Co 228.616†	132.9	155.4	0.00359	mg/L	0.00359	mg/L	09:51:16
3	Cr 267.716†	1247.6	1271.0	0.03355	mg/L	0.03355	mg/L	09:51:16
3	Cu 324.752†	49741.3	50712.7	0.31094	mg/L	0.31094	mg/L	09:50:56
3	Fe 273.955†	337753.6	351688.3	21.517	mg/L	21.517	mg/L	09:50:54
3	Mg 279.077†	341780.8	355965.9	28.815	mg/L	28.815	mg/L	09:50:54
3	Mn 257.610†	1419966.6	1476519.1	3.5527	mg/L	3.5527	mg/L	09:50:54
3	Ni 231.604†	425.1	455.8	0.02338	mg/L	0.02338	mg/L	09:51:16

3	Pb 220.353†	2.2	-5.7	-0.00035	mg/L	-0.00035	mg/L	09:51:16
3	Sb 206.836†	35.9	10.0	0.00771	mg/L	0.00771	mg/L	09:51:16
3	Se 196.026†	-9.4	-3.3	-0.00818	mg/L	-0.00818	mg/L	09:51:16
3	Tl 190.801†	-8.1	9.2	0.00506	mg/L	0.00506	mg/L	09:51:16
3	V 292.402†	141.9	163.1	0.00290	mg/L	0.00290	mg/L	09:50:56
3	Zn 206.200†	2886.5	2982.0	0.14415	mg/L	0.14415	mg/L	09:51:16
3	Cd 226.502†	117.8	147.8	0.00162	mg/L	0.00162	mg/L	09:51:16
3	Ti 334.940†	5515.6	5818.1	0.01892	mg/L	0.01892	mg/L	09:50:56
3	Ca 227.546†	19887.3	20623.3	135.45	mg/L	135.45	mg/L	09:50:56
3	Na 589.592	390497.8	390700.8	115.76	mg/L	115.76	mg/L	09:50:00
3	K 766.490	36953.7	36385.3	31.686	mg/L	31.686	mg/L	09:50:00

Mean Data: L0204-01A~MA4B09

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	723041.1	94.88	%	0.922				0.97%
Lu 261.542	472009.7	96.48	%	1.014				1.05%
Ag 328.068†	-3.0	-0.00003	mg/L	0.000228	-0.00003	mg/L	0.000228	674.84%
Al 308.215†	11796.3	0.60562	mg/L	0.014842	0.60562	mg/L	0.014842	2.45%
As 188.979†	244.8	0.28340	mg/L	0.002474	0.28340	mg/L	0.002474	0.87%
Ba 233.527†	18588.1	0.36628	mg/L	0.007096	0.36628	mg/L	0.007096	1.94%
Be 313.107†	954.0	0.00052	mg/L	0.000087	0.00052	mg/L	0.000087	16.65%
Co 228.616†	152.1	0.00344	mg/L	0.000184	0.00344	mg/L	0.000184	5.34%
Cr 267.716†	1265.1	0.03339	mg/L	0.000200	0.03339	mg/L	0.000200	0.60%
Cu 324.752†	50725.6	0.31102	mg/L	0.005079	0.31102	mg/L	0.005079	1.63%
Fe 273.955†	351048.3	21.478	mg/L	0.0341	21.478	mg/L	0.0341	0.16%
Mg 279.077†	356088.8	28.825	mg/L	0.0474	28.825	mg/L	0.0474	0.16%
Mn 257.610†	1476003.2	3.5514	mg/L	0.00478	3.5514	mg/L	0.00478	0.13%
Ni 231.604†	456.8	0.02344	mg/L	0.000323	0.02344	mg/L	0.000323	1.38%
Pb 220.353†	1.6	0.00165	mg/L	0.001753	0.00165	mg/L	0.001753	106.28%
Sb 206.836†	9.2	0.00703	mg/L	0.002649	0.00703	mg/L	0.002649	37.69%
Se 196.026†	-1.2	-0.00524	mg/L	0.003045	-0.00524	mg/L	0.003045	58.07%
Tl 190.801†	6.8	0.00284	mg/L	0.003769	0.00284	mg/L	0.003769	132.89%
V 292.402†	148.3	0.00273	mg/L	0.000188	0.00273	mg/L	0.000188	6.91%
Zn 206.200†	2954.4	0.14279	mg/L	0.001180	0.14279	mg/L	0.001180	0.83%
Cd 226.502†	152.2	0.00175	mg/L	0.000151	0.00175	mg/L	0.000151	8.59%
Ti 334.940†	5896.8	0.01913	mg/L	0.000203	0.01913	mg/L	0.000203	1.06%
Ca 227.546†	20588.4	135.22	mg/L	2.124	135.22	mg/L	2.124	1.57%
Na 589.592	395124.0	117.07	mg/L	1.150	117.07	mg/L	1.150	0.98%
K 766.490	36708.9	31.966	mg/L	0.2484	31.966	mg/L	0.2484	0.78%

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Sequence No.: 37 **Autosampler Location: 57**
Sample ID: L0213-01A~MF5AW6 **Date Collected: 2/9/2012 9:52:25 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:28:02 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: L0213-01A~MF5AW6

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	727798.5	727798.5	95.50	%			09:53:49
1	Lu 261.542	476894.2	476894.2	97.48	%			09:53:49
1	Ag 328.068†	-483.3	-11.5	-0.00006	mg/L	-0.00006	mg/L	09:53:51
1	Al 308.215†	6020.7	302.1	-0.03421	mg/L	-0.03421	mg/L	09:53:51
1	As 188.979†	-0.7	3.0	0.00934	mg/L	0.00934	mg/L	09:54:11
1	Ba 233.527†	1812.6	1910.3	0.02521	mg/L	0.02521	mg/L	09:54:11
1	Be 313.107†	-4117.3	206.1	0.00002	mg/L	0.00002	mg/L	09:53:51
1	Co 228.616†	-14.1	2.8	-0.00220	mg/L	-0.00220	mg/L	09:54:11
1	Cr 267.716†	18868.2	19329.3	0.52345	mg/L	0.52345	mg/L	09:53:51
1	Cu 324.752†	1289.5	319.8	0.00251	mg/L	0.00251	mg/L	09:53:51
1	Fe 273.955†	-85.4	439.8	0.02162	mg/L	0.02162	mg/L	09:54:11
1	Mg 279.077†	394628.3	405436.2	32.819	mg/L	32.819	mg/L	09:53:49
1	Mn 257.610†	690.2	894.6	-0.00006	mg/L	-0.00006	mg/L	09:54:11
1	Ni 231.604†	18.5	32.9	0.00016	mg/L	0.00016	mg/L	09:54:11
1	Pb 220.353†	-3.1	-11.1	-0.00152	mg/L	-0.00152	mg/L	09:54:11
1	Sb 206.836†	44.1	17.9	0.00521	mg/L	0.00521	mg/L	09:54:11
1	Se 196.026†	-6.7	-0.4	-0.00914	mg/L	-0.00914	mg/L	09:54:11

1	Tl 190.801†	-13.1	4.2	-0.00176	mg/L	-0.00176	mg/L	09:54:11
1	V 292.402†	4271.0	4396.9	0.05126	mg/L	0.05126	mg/L	09:53:51
1	Zn 206.200†	95.9	79.3	0.00299	mg/L	0.00299	mg/L	09:54:11
1	Cd 226.502†	-33.7	-9.2	-0.00051	mg/L	-0.00051	mg/L	09:54:11
1	Ti 334.940†	-968.0	-909.5	0.00050	mg/L	0.00050	mg/L	09:53:51
1	Ca 227.546†	24978.5	25570.0	168.02	mg/L	168.02	mg/L	09:53:51
1	Na 589.592	806266.2	806469.3	239.02	mg/L	239.02	mg/L	09:53:34
1	K 766.490	12256.0	11687.5	10.271	mg/L	10.271	mg/L	09:53:36
2	Y 360.073	733004.1	733004.1	96.18	%			09:54:14
2	Lu 261.542	479589.7	479589.7	98.03	%			09:54:14
2	Ag 328.068†	-511.1	-37.1	-0.00031	mg/L	-0.00031	mg/L	09:54:16
2	Al 308.215†	6080.7	328.5	-0.03266	mg/L	-0.03266	mg/L	09:54:16
2	As 188.979†	-2.2	1.4	0.00753	mg/L	0.00753	mg/L	09:54:36
2	Ba 233.527†	1811.2	1898.4	0.02497	mg/L	0.02497	mg/L	09:54:36
2	Be 313.107†	-4083.7	264.1	0.00005	mg/L	0.00005	mg/L	09:54:16
2	Co 228.616†	-9.4	7.7	-0.00198	mg/L	-0.00198	mg/L	09:54:36
2	Cr 267.716†	19055.9	19412.0	0.52569	mg/L	0.52569	mg/L	09:54:16
2	Cu 324.752†	1191.8	212.6	0.00185	mg/L	0.00185	mg/L	09:54:16
2	Fe 273.955†	-186.9	336.8	0.01532	mg/L	0.01532	mg/L	09:54:36
2	Mg 279.077†	396882.0	405459.8	32.821	mg/L	32.821	mg/L	09:54:14
2	Mn 257.610†	475.3	671.4	-0.00059	mg/L	-0.00059	mg/L	09:54:36
2	Ni 231.604†	18.9	33.2	0.00018	mg/L	0.00018	mg/L	09:54:36
2	Pb 220.353†	-5.5	-13.6	-0.00219	mg/L	-0.00219	mg/L	09:54:36
2	Sb 206.836†	39.9	13.4	0.00162	mg/L	0.00162	mg/L	09:54:36
2	Se 196.026†	-13.5	-7.3	-0.01914	mg/L	-0.01914	mg/L	09:54:36
2	Tl 190.801†	-16.4	0.8	-0.00486	mg/L	-0.00486	mg/L	09:54:36
2	V 292.402†	4330.1	4432.5	0.05168	mg/L	0.05168	mg/L	09:54:16
2	Zn 206.200†	91.8	74.6	0.00277	mg/L	0.00277	mg/L	09:54:36
2	Cd 226.502†	-22.6	2.3	-0.00018	mg/L	-0.00018	mg/L	09:54:36
2	Ti 334.940†	-1011.7	-948.5	0.00037	mg/L	0.00037	mg/L	09:54:16
2	Ca 227.546†	25017.6	25465.9	167.33	mg/L	167.33	mg/L	09:54:16
2	Na 589.592	808356.8	808559.9	239.64	mg/L	239.64	mg/L	09:53:38
2	K 766.490	12231.1	11662.7	10.250	mg/L	10.250	mg/L	09:53:41
3	Y 360.073	736167.2	736167.2	96.60	%			09:54:38
3	Lu 261.542	482065.3	482065.3	98.54	%			09:54:38
3	Ag 328.068†	-523.8	-47.3	-0.00041	mg/L	-0.00041	mg/L	09:54:41
3	Al 308.215†	5943.3	157.2	-0.04191	mg/L	-0.04191	mg/L	09:54:41
3	As 188.979†	-3.0	0.7	0.00657	mg/L	0.00657	mg/L	09:55:01
3	Ba 233.527†	1797.9	1875.4	0.02450	mg/L	0.02450	mg/L	09:55:01
3	Be 313.107†	-4307.7	58.2	-0.00007	mg/L	-0.00007	mg/L	09:54:41
3	Co 228.616†	-10.6	6.5	-0.00203	mg/L	-0.00203	mg/L	09:55:01
3	Cr 267.716†	18563.7	18812.7	0.50946	mg/L	0.50946	mg/L	09:54:41
3	Cu 324.752†	1241.5	256.8	0.00212	mg/L	0.00212	mg/L	09:54:41
3	Fe 273.955†	-262.6	261.0	0.01062	mg/L	0.01062	mg/L	09:55:01
3	Mg 279.077†	399393.3	405929.3	32.859	mg/L	32.859	mg/L	09:54:38
3	Mn 257.610†	324.4	515.7	-0.00097	mg/L	-0.00097	mg/L	09:55:01
3	Ni 231.604†	33.2	47.6	0.00097	mg/L	0.00097	mg/L	09:55:01
3	Pb 220.353†	1.9	-6.0	-0.00015	mg/L	-0.00015	mg/L	09:55:01
3	Sb 206.836†	40.3	13.6	0.00210	mg/L	0.00210	mg/L	09:55:01
3	Se 196.026†	-3.7	2.7	-0.00473	mg/L	-0.00473	mg/L	09:55:01
3	Tl 190.801†	-3.0	14.5	0.00778	mg/L	0.00778	mg/L	09:55:01
3	V 292.402†	4212.0	4290.0	0.05000	mg/L	0.05000	mg/L	09:54:41
3	Zn 206.200†	100.3	82.7	0.00311	mg/L	0.00311	mg/L	09:55:01
3	Cd 226.502†	-32.2	-7.4	-0.00046	mg/L	-0.00046	mg/L	09:55:01
3	Ti 334.940†	-998.8	-930.1	0.00038	mg/L	0.00038	mg/L	09:54:41
3	Ca 227.546†	24960.7	25277.1	166.09	mg/L	166.09	mg/L	09:54:41
3	Na 589.592	790180.6	790383.6	234.25	mg/L	234.25	mg/L	09:53:43
3	K 766.490	12186.0	11617.5	10.211	mg/L	10.211	mg/L	09:53:45

Mean Data: L0213-01A~MF5AW6

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	732323.3	96.10	%	0.554				0.58%
Lu 261.542	479516.4	98.02	%	0.529				0.54%
Ag 328.068†	-32.0	-0.00026	mg/L	0.000178	-0.00026	mg/L	0.000178	68.88%
Al 308.215†	262.6	-0.03626	mg/L	0.004957	-0.03626	mg/L	0.004957	13.67%
As 188.979†	1.7	0.00781	mg/L	0.001405	0.00781	mg/L	0.001405	17.98%
Ba 233.527†	1894.7	0.02489	mg/L	0.000363	0.02489	mg/L	0.000363	1.46%
Be 313.107†	176.2	0.00000	mg/L	0.000065	0.00000	mg/L	0.000065	>999.9%
Co 228.616†	5.7	-0.00207	mg/L	0.000114	-0.00207	mg/L	0.000114	5.53%

Cr 267.716†	19184.7	0.51953 mg/L	0.008797	0.51953 mg/L	0.008797	1.69%
Cu 324.752†	263.1	0.00216 mg/L	0.000329	0.00216 mg/L	0.000329	15.20%
Fe 273.955†	345.9	0.01585 mg/L	0.005518	0.01585 mg/L	0.005518	34.81%
Mg 279.077†	405608.4	32.833 mg/L	0.0227	32.833 mg/L	0.0227	0.07%
Mn 257.610†	693.9	-0.00054 mg/L	0.000459	-0.00054 mg/L	0.000459	84.94%
Ni 231.604†	37.9	0.00044 mg/L	0.000460	0.00044 mg/L	0.000460	105.56%
Pb 220.353†	-10.3	-0.00129 mg/L	0.001041	-0.00129 mg/L	0.001041	80.98%
Sb 206.836†	15.0	0.00298 mg/L	0.001944	0.00298 mg/L	0.001944	65.27%
Se 196.026†	-1.7	-0.01101 mg/L	0.007383	-0.01101 mg/L	0.007383	67.08%
Tl 190.801†	6.5	0.00039 mg/L	0.006585	0.00039 mg/L	0.006585	>999.9%
V 292.402†	4373.1	0.05098 mg/L	0.000871	0.05098 mg/L	0.000871	1.71%
Zn 206.200†	78.9	0.00295 mg/L	0.000173	0.00295 mg/L	0.000173	5.86%
Cd 226.502†	-4.8	-0.00039 mg/L	0.000177	-0.00039 mg/L	0.000177	46.08%
Ti 334.940†	-929.3	0.00042 mg/L	0.000074	0.00042 mg/L	0.000074	17.72%
Ca 227.546†	25437.7	167.15 mg/L	0.977	167.15 mg/L	0.977	0.58%
Na 589.592	801804.3	237.64 mg/L	2.948	237.64 mg/L	2.948	1.24%
K 766.490	11655.9	10.244 mg/L	0.0308	10.244 mg/L	0.0308	0.30%

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Sequence No.: 38
Sample ID: L0213-02A~MF5AW7
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 2/9/2012 9:56:10 AM
Data Type: Reprocessed on 2/10/2012 7:28:02 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0213-02A~MF5AW7

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	741673.1	741673.1	97.32	%			09:57:34
1	Lu 261.542	484664.3	484664.3	99.07	%			09:57:34
1	Ag 328.068†	-452.1	27.9	0.00032	mg/L	0.00032	mg/L	09:57:36
1	Al 308.215†	6065.2	248.0	-0.03686	mg/L	-0.03686	mg/L	09:57:36
1	As 188.979†	-1.0	2.7	0.00887	mg/L	0.00887	mg/L	09:57:57
1	Ba 233.527†	1795.7	1863.5	0.02425	mg/L	0.02425	mg/L	09:57:57
1	Be 313.107†	-4004.7	387.5	0.00013	mg/L	0.00013	mg/L	09:57:36
1	Co 228.616†	-15.9	1.2	-0.00227	mg/L	-0.00227	mg/L	09:57:57
1	Cr 267.716†	18850.4	19001.0	0.51456	mg/L	0.51456	mg/L	09:57:36
1	Cu 324.752†	1245.1	253.7	0.00210	mg/L	0.00210	mg/L	09:57:36
1	Fe 273.955†	-326.1	198.3	0.00685	mg/L	0.00685	mg/L	09:57:57
1	Mg 279.077†	392654.0	396953.3	32.128	mg/L	32.128	mg/L	09:57:34
1	Mn 257.610†	55.1	242.2	-0.00161	mg/L	-0.00161	mg/L	09:57:57
1	Ni 231.604†	26.0	40.2	0.00056	mg/L	0.00056	mg/L	09:57:57
1	Pb 220.353†	-2.5	-10.5	-0.00136	mg/L	-0.00136	mg/L	09:57:57
1	Sb 206.836†	38.0	11.0	0.00000	mg/L	0.00000	mg/L	09:57:57
1	Se 196.026†	-4.6	1.9	-0.00592	mg/L	-0.00592	mg/L	09:57:57
1	Tl 190.801†	-10.3	7.2	0.00094	mg/L	0.00094	mg/L	09:57:57
1	V 292.402†	4287.0	4342.7	0.05062	mg/L	0.05062	mg/L	09:57:36
1	Zn 206.200†	9.8	-9.2	-0.00140	mg/L	-0.00140	mg/L	09:57:57
1	Cd 226.502†	-27.2	-2.1	-0.00031	mg/L	-0.00031	mg/L	09:57:57
1	Ti 334.940†	-907.9	-832.8	0.00066	mg/L	0.00066	mg/L	09:57:36
1	Ca 227.546†	25036.8	25218.0	165.70	mg/L	165.70	mg/L	09:57:36
1	Na 589.592	793416.1	793619.1	235.21	mg/L	235.21	mg/L	09:57:19
1	K 766.490	12195.7	11627.2	10.219	mg/L	10.219	mg/L	09:57:22
2	Y 360.073	748859.4	748859.4	98.27	%			09:57:59
2	Lu 261.542	490672.7	490672.7	100.3	%			09:57:59
2	Ag 328.068†	-464.0	21.7	0.00026	mg/L	0.00026	mg/L	09:58:01
2	Al 308.215†	6062.6	170.4	-0.04062	mg/L	-0.04062	mg/L	09:58:01
2	As 188.979†	6.6	10.3	0.01746	mg/L	0.01746	mg/L	09:58:21
2	Ba 233.527†	1795.5	1841.1	0.02379	mg/L	0.02379	mg/L	09:58:21
2	Be 313.107†	-4098.7	343.3	0.00010	mg/L	0.00010	mg/L	09:58:01
2	Co 228.616†	-3.7	13.5	-0.00171	mg/L	-0.00171	mg/L	09:58:21
2	Cr 267.716†	18699.4	18617.5	0.50417	mg/L	0.50417	mg/L	09:58:01
2	Cu 324.752†	1201.6	194.9	0.00175	mg/L	0.00175	mg/L	09:58:01
2	Fe 273.955†	-321.8	206.7	0.00731	mg/L	0.00731	mg/L	09:58:21
2	Mg 279.077†	401270.8	400691.2	32.433	mg/L	32.433	mg/L	09:57:59
2	Mn 257.610†	43.2	229.6	-0.00165	mg/L	-0.00165	mg/L	09:58:21
2	Ni 231.604†	27.2	41.0	0.00061	mg/L	0.00061	mg/L	09:58:21
2	Pb 220.353†	6.1	-1.9	0.00094	mg/L	0.00094	mg/L	09:58:21
2	Sb 206.836†	44.6	17.1	0.00497	mg/L	0.00497	mg/L	09:58:21

2	Se 196.026†	1.0	7.4	0.00209	mg/L	0.00209	mg/L	09:58:21
2	Tl 190.801†	-17.7	-0.1	-0.00569	mg/L	-0.00569	mg/L	09:58:21
2	V 292.402†	4219.8	4222.7	0.04922	mg/L	0.04922	mg/L	09:58:01
2	Zn 206.200†	8.8	-10.3	-0.00149	mg/L	-0.00149	mg/L	09:58:21
2	Cd 226.502†	-38.5	-13.0	-0.00062	mg/L	-0.00062	mg/L	09:58:21
2	Ti 334.940†	-974.5	-888.0	0.00039	mg/L	0.00039	mg/L	09:58:01
2	Ca 227.546†	24809.0	24681.5	162.18	mg/L	162.18	mg/L	09:58:01
2	Na 589.592	793760.1	793963.2	235.31	mg/L	235.31	mg/L	09:57:24
2	K 766.490	12237.8	11669.3	10.255	mg/L	10.255	mg/L	09:57:26
3	Y 360.073	737541.7	737541.7	96.78	%			09:58:24
3	Lu 261.542	482676.6	482676.6	98.66	%			09:58:24
3	Ag 328.068†	-497.7	-20.2	-0.00015	mg/L	-0.00015	mg/L	09:58:26
3	Al 308.215†	6010.3	217.5	-0.03849	mg/L	-0.03849	mg/L	09:58:26
3	As 188.979†	-1.0	2.7	0.00888	mg/L	0.00888	mg/L	09:58:46
3	Ba 233.527†	1775.9	1850.8	0.02399	mg/L	0.02399	mg/L	09:58:46
3	Be 313.107†	-4070.2	304.5	0.00008	mg/L	0.00008	mg/L	09:58:26
3	Co 228.616†	-3.3	13.9	-0.00170	mg/L	-0.00170	mg/L	09:58:46
3	Cr 267.716†	18695.2	18922.1	0.51242	mg/L	0.51242	mg/L	09:58:26
3	Cu 324.752†	1179.3	192.2	0.00173	mg/L	0.00173	mg/L	09:58:26
3	Fe 273.955†	-341.2	181.6	0.00581	mg/L	0.00581	mg/L	09:58:46
3	Mg 279.077†	393810.7	399757.8	32.357	mg/L	32.357	mg/L	09:58:24
3	Mn 257.610†	41.1	228.2	-0.00165	mg/L	-0.00165	mg/L	09:58:46
3	Ni 231.604†	24.1	38.3	0.00046	mg/L	0.00046	mg/L	09:58:46
3	Pb 220.353†	-7.9	-16.0	-0.00288	mg/L	-0.00288	mg/L	09:58:46
3	Sb 206.836†	32.8	5.9	-0.00393	mg/L	-0.00393	mg/L	09:58:46
3	Se 196.026†	-0.5	6.0	0.00003	mg/L	0.00003	mg/L	09:58:46
3	Tl 190.801†	-10.0	7.5	0.00125	mg/L	0.00125	mg/L	09:58:46
3	V 292.402†	4256.3	4329.5	0.05046	mg/L	0.05046	mg/L	09:58:26
3	Zn 206.200†	11.7	-7.2	-0.00131	mg/L	-0.00131	mg/L	09:58:46
3	Cd 226.502†	-32.2	-7.3	-0.00046	mg/L	-0.00046	mg/L	09:58:46
3	Ti 334.940†	-916.9	-845.7	0.00061	mg/L	0.00061	mg/L	09:58:26
3	Ca 227.546†	24882.7	25166.0	165.36	mg/L	165.36	mg/L	09:58:26
3	Na 589.592	794274.7	794477.7	235.46	mg/L	235.46	mg/L	09:57:28
3	K 766.490	12087.4	11518.9	10.125	mg/L	10.125	mg/L	09:57:30

Mean Data: L0213-02A~MF5AW7

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	742691.4	97.46	%	0.752				0.77%
Lu 261.542	486004.5	99.35	%	0.851				0.86%
Ag 328.068†	9.8	0.00014	mg/L	0.000252	0.00014	mg/L	0.000252	176.38%
Al 308.215†	212.0	-0.03866	mg/L	0.001887	-0.03866	mg/L	0.001887	4.88%
As 188.979†	5.2	0.01174	mg/L	0.004956	0.01174	mg/L	0.004956	42.23%
Ba 233.527†	1851.8	0.02401	mg/L	0.000230	0.02401	mg/L	0.000230	0.96%
Be 313.107†	345.1	0.00010	mg/L	0.000025	0.00010	mg/L	0.000025	24.47%
Co 228.616†	9.5	-0.00189	mg/L	0.000324	-0.00189	mg/L	0.000324	17.10%
Cr 267.716†	18846.9	0.51039	mg/L	0.005486	0.51039	mg/L	0.005486	1.07%
Cu 324.752†	213.6	0.00186	mg/L	0.000212	0.00186	mg/L	0.000212	11.39%
Fe 273.955†	195.5	0.00666	mg/L	0.000769	0.00666	mg/L	0.000769	11.55%
Mg 279.077†	399134.1	32.306	mg/L	0.1585	32.306	mg/L	0.1585	0.49%
Mn 257.610†	233.3	-0.00163	mg/L	0.000023	-0.00163	mg/L	0.000023	1.41%
Ni 231.604†	39.8	0.00054	mg/L	0.000077	0.00054	mg/L	0.000077	14.29%
Pb 220.353†	-9.5	-0.00110	mg/L	0.001923	-0.00110	mg/L	0.001923	175.08%
Sb 206.836†	11.3	0.00034	mg/L	0.004462	0.00034	mg/L	0.004462	>999.9%
Se 196.026†	5.1	-0.00127	mg/L	0.004160	-0.00127	mg/L	0.004160	328.14%
Tl 190.801†	4.9	-0.00117	mg/L	0.003922	-0.00117	mg/L	0.003922	335.62%
V 292.402†	4298.3	0.05010	mg/L	0.000768	0.05010	mg/L	0.000768	1.53%
Zn 206.200†	-8.9	-0.00140	mg/L	0.000092	-0.00140	mg/L	0.000092	6.57%
Cd 226.502†	-7.5	-0.00046	mg/L	0.000156	-0.00046	mg/L	0.000156	33.81%
Ti 334.940†	-855.5	0.00055	mg/L	0.000146	0.00055	mg/L	0.000146	26.40%
Ca 227.546†	25021.8	164.41	mg/L	1.946	164.41	mg/L	1.946	1.18%
Na 589.592	794020.0	235.33	mg/L	0.128	235.33	mg/L	0.128	0.05%
K 766.490	11605.2	10.200	mg/L	0.0673	10.200	mg/L	0.0673	0.66%

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Sequence No.: 39
Sample ID: L0213-03A~MF5AW8
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:

Autosampler Location: 59
Date Collected: 2/9/2012 9:59:55 AM
Data Type: Reprocessed on 2/10/2012 7:28:03 AM

Initial Sample Vol:

Dilution: Sample Prep Vol:

Replicate Data: L0213-03A~MF5AW8

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	730858.1	730858.1	95.90	%			10:01:21
1	Lu 261.542	479200.0	479200.0	97.95	%			10:01:21
1	Ag 328.068†	-466.3	8.2	0.00013	mg/L	0.00013	mg/L	10:01:21
1	Al 308.215†	5966.3	216.8	-0.04138	mg/L	-0.04138	mg/L	10:01:21
1	As 188.979†	-2.9	0.7	0.00518	mg/L	0.00518	mg/L	10:01:41
1	Ba 233.527†	1402.8	1483.0	0.01647	mg/L	0.01647	mg/L	10:01:41
1	Be 313.107†	-4105.3	238.7	0.00004	mg/L	0.00004	mg/L	10:01:21
1	Co 228.616†	-14.3	2.6	-0.00211	mg/L	-0.00211	mg/L	10:01:41
1	Cr 267.716†	8147.0	8291.1	0.22440	mg/L	0.22440	mg/L	10:01:21
1	Cu 324.752†	1573.6	603.4	0.00424	mg/L	0.00424	mg/L	10:01:21
1	Fe 273.955†	-357.1	162.9	0.00255	mg/L	0.00255	mg/L	10:01:41
1	Mg 279.077†	550621.5	562739.4	45.632	mg/L	45.632	mg/L	10:01:21
1	Mn 257.610†	1094.7	1304.1	0.00055	mg/L	0.00055	mg/L	10:01:41
1	Ni 231.604†	51.8	66.8	0.00202	mg/L	0.00202	mg/L	10:01:41
1	Pb 220.353†	-4.5	-12.6	-0.00181	mg/L	-0.00181	mg/L	10:01:41
1	Sb 206.836†	24.4	-2.4	-0.00518	mg/L	-0.00518	mg/L	10:01:41
1	Se 196.026†	-0.8	5.7	-0.00044	mg/L	-0.00044	mg/L	10:01:41
1	Tl 190.801†	-9.7	7.7	0.00195	mg/L	0.00195	mg/L	10:01:41
1	V 292.402†	4557.3	4668.0	0.05398	mg/L	0.05398	mg/L	10:01:41
1	Zn 206.200†	29.2	10.7	-0.00143	mg/L	-0.00143	mg/L	10:01:41
1	Cd 226.502†	-27.7	-3.0	-0.00033	mg/L	-0.00033	mg/L	10:01:41
1	Ti 334.940†	-1089.5	-1028.7	0.00051	mg/L	0.00051	mg/L	10:01:21
1	Ca 227.546†	27640.9	28164.8	185.08	mg/L	185.08	mg/L	10:01:21
1	Na 589.592	1272442.8	1272645.8	377.22	mg/L	377.22	mg/L	10:01:05
1	K 766.490	8659.5	8091.0	7.1528	mg/L	7.1528	mg/L	10:01:07
2	Y 360.073	732209.2	732209.2	96.08	%			10:01:44
2	Lu 261.542	480476.8	480476.8	98.22	%			10:01:44
2	Ag 328.068†	-478.8	-3.3	0.00002	mg/L	0.00002	mg/L	10:01:44
2	Al 308.215†	5852.6	84.8	-0.04872	mg/L	-0.04872	mg/L	10:01:44
2	As 188.979†	-2.3	1.4	0.00595	mg/L	0.00595	mg/L	10:02:04
2	Ba 233.527†	1388.9	1465.1	0.01610	mg/L	0.01610	mg/L	10:02:04
2	Be 313.107†	-4128.4	226.3	0.00003	mg/L	0.00003	mg/L	10:01:44
2	Co 228.616†	-7.2	9.9	-0.00179	mg/L	-0.00179	mg/L	10:02:04
2	Cr 267.716†	8208.7	8331.8	0.22550	mg/L	0.22550	mg/L	10:01:44
2	Cu 324.752†	1520.4	545.0	0.00388	mg/L	0.00388	mg/L	10:01:44
2	Fe 273.955†	-336.6	184.8	0.00389	mg/L	0.00389	mg/L	10:02:04
2	Mg 279.077†	553789.0	564470.7	45.773	mg/L	45.773	mg/L	10:01:44
2	Mn 257.610†	1096.7	1303.2	0.00054	mg/L	0.00054	mg/L	10:02:04
2	Ni 231.604†	51.9	66.7	0.00202	mg/L	0.00202	mg/L	10:02:04
2	Pb 220.353†	2.5	-5.5	0.00015	mg/L	0.00015	mg/L	10:02:04
2	Sb 206.836†	24.6	-2.3	-0.00509	mg/L	-0.00509	mg/L	10:02:04
2	Se 196.026†	-9.4	-3.1	-0.01302	mg/L	-0.01302	mg/L	10:02:04
2	Tl 190.801†	-13.7	3.6	-0.00182	mg/L	-0.00182	mg/L	10:02:04
2	V 292.402†	4544.6	4642.8	0.05369	mg/L	0.05369	mg/L	10:02:04
2	Zn 206.200†	39.2	20.9	-0.00093	mg/L	-0.00093	mg/L	10:02:04
2	Cd 226.502†	-26.6	-1.8	-0.00030	mg/L	-0.00030	mg/L	10:02:04
2	Ti 334.940†	-1111.2	-1047.8	0.00046	mg/L	0.00046	mg/L	10:01:44
2	Ca 227.546†	27772.5	28223.8	185.47	mg/L	185.47	mg/L	10:01:44
2	Na 589.592	1286837.8	1287040.9	381.49	mg/L	381.49	mg/L	10:01:10
2	K 766.490	8962.2	8393.7	7.4153	mg/L	7.4153	mg/L	10:01:12
3	Y 360.073	732425.6	732425.6	96.11	%			10:02:07
3	Lu 261.542	481007.9	481007.9	98.32	%			10:02:07
3	Ag 328.068†	-505.4	-29.8	-0.00023	mg/L	-0.00023	mg/L	10:02:07
3	Al 308.215†	6023.3	251.9	-0.03944	mg/L	-0.03944	mg/L	10:02:07
3	As 188.979†	-0.6	3.1	0.00786	mg/L	0.00786	mg/L	10:02:27
3	Ba 233.527†	1381.7	1456.2	0.01592	mg/L	0.01592	mg/L	10:02:27
3	Be 313.107†	-4153.6	205.3	0.00002	mg/L	0.00002	mg/L	10:02:07
3	Co 228.616†	-10.7	6.4	-0.00194	mg/L	-0.00194	mg/L	10:02:27
3	Cr 267.716†	8192.2	8305.8	0.22480	mg/L	0.22480	mg/L	10:02:07
3	Cu 324.752†	1538.9	562.1	0.00398	mg/L	0.00398	mg/L	10:02:07
3	Fe 273.955†	-361.8	159.5	0.00234	mg/L	0.00234	mg/L	10:02:27
3	Mg 279.077†	555338.2	565423.7	45.851	mg/L	45.851	mg/L	10:02:07
3	Mn 257.610†	1075.5	1280.4	0.00049	mg/L	0.00049	mg/L	10:02:27
3	Ni 231.604†	65.6	80.6	0.00278	mg/L	0.00278	mg/L	10:02:27
3	Pb 220.353†	-8.8	-16.9	-0.00298	mg/L	-0.00298	mg/L	10:02:27

3	Sb 206.836†	32.2	5.4	0.00091	mg/L	0.00091	mg/L	10:02:27
3	Se 196.026†	-1.6	4.9	-0.00156	mg/L	-0.00156	mg/L	10:02:27
3	Tl 190.801†	-9.4	8.1	0.00225	mg/L	0.00225	mg/L	10:02:27
3	V 292.402†	4503.8	4596.1	0.05315	mg/L	0.05315	mg/L	10:02:27
3	Zn 206.200†	38.8	20.4	-0.00095	mg/L	-0.00095	mg/L	10:02:27
3	Cd 226.502†	-28.4	-3.5	-0.00035	mg/L	-0.00035	mg/L	10:02:27
3	Ti 334.940†	-1194.2	-1131.0	0.00021	mg/L	0.00021	mg/L	10:02:07
3	Ca 227.546†	27750.1	28169.8	185.11	mg/L	185.11	mg/L	10:02:07
3	Na 589.592	1264212.1	1264415.2	374.78	mg/L	374.78	mg/L	10:01:14
3	K 766.490	8781.4	8212.9	7.2585	mg/L	7.2585	mg/L	10:01:16

Mean Data: L0213-03A~MF5AW8

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	731831.0	96.03	%	0.111				0.12%
Lu 261.542	480228.2	98.16	%	0.190				0.19%
Ag 328.068†	-8.3	-0.00003	mg/L	0.000188	-0.00003	mg/L	0.000188	696.89%
Al 308.215†	184.5	-0.04318	mg/L	0.004893	-0.04318	mg/L	0.004893	11.33%
As 188.979†	1.7	0.00633	mg/L	0.001384	0.00633	mg/L	0.001384	21.86%
Ba 233.527†	1468.1	0.01617	mg/L	0.000280	0.01617	mg/L	0.000280	1.73%
Be 313.107†	223.4	0.00003	mg/L	0.000011	0.00003	mg/L	0.000011	37.90%
Co 228.616†	6.3	-0.00195	mg/L	0.000163	-0.00195	mg/L	0.000163	8.39%
Cr 267.716†	8309.6	0.22490	mg/L	0.000558	0.22490	mg/L	0.000558	0.25%
Cu 324.752†	570.2	0.00403	mg/L	0.000183	0.00403	mg/L	0.000183	4.54%
Fe 273.955†	169.0	0.00293	mg/L	0.000840	0.00293	mg/L	0.000840	28.70%
Mg 279.077†	564211.2	45.752	mg/L	0.1108	45.752	mg/L	0.1108	0.24%
Mn 257.610†	1295.9	0.00053	mg/L	0.000035	0.00053	mg/L	0.000035	6.66%
Ni 231.604†	71.4	0.00227	mg/L	0.000440	0.00227	mg/L	0.000440	19.35%
Pb 220.353†	-11.7	-0.00155	mg/L	0.001581	-0.00155	mg/L	0.001581	102.20%
Sb 206.836†	0.3	-0.00312	mg/L	0.003490	-0.00312	mg/L	0.003490	111.82%
Se 196.026†	2.5	-0.00501	mg/L	0.006965	-0.00501	mg/L	0.006965	139.11%
Tl 190.801†	6.5	0.00079	mg/L	0.002266	0.00079	mg/L	0.002266	285.63%
V 292.402†	4635.6	0.05361	mg/L	0.000422	0.05361	mg/L	0.000422	0.79%
Zn 206.200†	17.4	-0.00110	mg/L	0.000284	-0.00110	mg/L	0.000284	25.72%
Cd 226.502†	-2.8	-0.00033	mg/L	0.000025	-0.00033	mg/L	0.000025	7.78%
Ti 334.940†	-1069.2	0.00039	mg/L	0.000160	0.00039	mg/L	0.000160	40.59%
Ca 227.546†	28186.1	185.22	mg/L	0.215	185.22	mg/L	0.215	0.12%
Na 589.592	1274700.6	377.83	mg/L	3.395	377.83	mg/L	3.395	0.90%
K 766.490	8232.5	7.2755	mg/L	0.13208	7.2755	mg/L	0.13208	1.82%

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Sequence No.: 40
Sample ID: L0213-03ADUP~MF5AW8D
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 60
Date Collected: 2/9/2012 10:03:37 AM
Data Type: Reprocessed on 2/10/2012 7:28:04 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0213-03ADUP~MF5AW8D

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	714046.6	714046.6	93.70	%			10:05:02
1	Lu 261.542	467774.0	467774.0	95.62	%			10:05:02
1	Ag 328.068†	-507.1	-46.1	-0.00039	mg/L	-0.00039	mg/L	10:05:04
1	Al 308.215†	5997.9	398.7	-0.03265	mg/L	-0.03265	mg/L	10:05:04
1	As 188.979†	-5.4	-2.0	0.00229	mg/L	0.00229	mg/L	10:05:25
1	Ba 233.527†	1397.7	1512.7	0.01708	mg/L	0.01708	mg/L	10:05:25
1	Be 313.107†	-4020.3	225.3	0.00003	mg/L	0.00003	mg/L	10:05:04
1	Co 228.616†	-16.1	0.4	-0.00221	mg/L	-0.00221	mg/L	10:05:25
1	Cr 267.716†	8352.6	8709.2	0.23572	mg/L	0.23572	mg/L	10:05:04
1	Cu 324.752†	1609.9	680.6	0.00471	mg/L	0.00471	mg/L	10:05:04
1	Fe 273.955†	-443.7	63.4	-0.00363	mg/L	-0.00363	mg/L	10:05:25
1	Mg 279.077†	557042.4	583185.1	47.298	mg/L	47.298	mg/L	10:05:02
1	Mn 257.610†	1156.8	1396.4	0.00072	mg/L	0.00072	mg/L	10:05:25
1	Ni 231.604†	55.4	71.8	0.00230	mg/L	0.00230	mg/L	10:05:25
1	Pb 220.353†	-1.6	-9.7	-0.00095	mg/L	-0.00095	mg/L	10:05:25
1	Sb 206.836†	29.7	3.7	-0.00065	mg/L	-0.00065	mg/L	10:05:25
1	Se 196.026†	-11.8	-5.9	-0.01708	mg/L	-0.01708	mg/L	10:05:25
1	Tl 190.801†	-13.4	3.6	-0.00183	mg/L	-0.00183	mg/L	10:05:25

1	V 292.402†	4727.0	4959.2	0.05737	mg/L	0.05737	mg/L	10:05:04
1	Zn 206.200†	48.4	31.5	-0.00037	mg/L	-0.00037	mg/L	10:05:25
1	Cd 226.502†	-33.3	-9.5	-0.00052	mg/L	-0.00052	mg/L	10:05:25
1	Ti 334.940†	-1167.3	-1137.3	0.00045	mg/L	0.00045	mg/L	10:05:04
1	Ca 227.546†	28274.0	29516.1	193.96	mg/L	193.96	mg/L	10:05:04
1	Na 589.592	1300322.9	1300526.0	385.48	mg/L	385.48	mg/L	10:04:47
1	K 766.490	9089.0	8520.5	7.5252	mg/L	7.5252	mg/L	10:04:49
2	Y 360.073	709113.2	709113.2	93.05	%			10:05:27
2	Lu 261.542	465112.4	465112.4	95.07	%			10:05:27
2	Ag 328.068†	-476.2	-16.6	-0.00010	mg/L	-0.00010	mg/L	10:05:29
2	Al 308.215†	5905.9	337.7	-0.03575	mg/L	-0.03575	mg/L	10:05:29
2	As 188.979†	-4.0	-0.6	0.00386	mg/L	0.00386	mg/L	10:05:49
2	Ba 233.527†	1394.0	1517.1	0.01717	mg/L	0.01717	mg/L	10:05:49
2	Be 313.107†	-4113.1	103.6	-0.00005	mg/L	-0.00005	mg/L	10:05:29
2	Co 228.616†	-11.6	5.0	-0.00200	mg/L	-0.00200	mg/L	10:05:49
2	Cr 267.716†	8118.2	8512.6	0.23039	mg/L	0.23039	mg/L	10:05:29
2	Cu 324.752†	1502.8	577.6	0.00408	mg/L	0.00408	mg/L	10:05:29
2	Fe 273.955†	-455.6	48.3	-0.00461	mg/L	-0.00461	mg/L	10:05:49
2	Mg 279.077†	560765.5	590434.9	47.888	mg/L	47.888	mg/L	10:05:27
2	Mn 257.610†	1129.9	1375.0	0.00065	mg/L	0.00065	mg/L	10:05:49
2	Ni 231.604†	66.5	83.8	0.00296	mg/L	0.00296	mg/L	10:05:49
2	Pb 220.353†	-5.8	-14.1	-0.00216	mg/L	-0.00216	mg/L	10:05:49
2	Sb 206.836†	28.5	2.7	-0.00136	mg/L	-0.00136	mg/L	10:05:49
2	Se 196.026†	-7.8	-1.8	-0.01115	mg/L	-0.01115	mg/L	10:05:49
2	Tl 190.801†	-19.6	-3.0	-0.00787	mg/L	-0.00787	mg/L	10:05:49
2	V 292.402†	4620.6	4875.6	0.05639	mg/L	0.05639	mg/L	10:05:29
2	Zn 206.200†	45.6	28.9	-0.00052	mg/L	-0.00052	mg/L	10:05:49
2	Cd 226.502†	-27.3	-3.4	-0.00034	mg/L	-0.00034	mg/L	10:05:49
2	Ti 334.940†	-1135.5	-1110.7	0.00046	mg/L	0.00046	mg/L	10:05:29
2	Ca 227.546†	27859.2	29249.1	192.21	mg/L	192.21	mg/L	10:05:29
2	Na 589.592	1295171.4	1295374.5	383.96	mg/L	383.96	mg/L	10:04:52
2	K 766.490	8954.4	8386.0	7.4085	mg/L	7.4085	mg/L	10:04:54
3	Y 360.073	708373.8	708373.8	92.95	%			10:05:52
3	Lu 261.542	464436.2	464436.2	94.94	%			10:05:52
3	Ag 328.068†	-501.4	-43.9	-0.00037	mg/L	-0.00037	mg/L	10:05:54
3	Al 308.215†	6010.8	457.3	-0.02950	mg/L	-0.02950	mg/L	10:05:54
3	As 188.979†	-7.5	-4.3	-0.00027	mg/L	-0.00027	mg/L	10:06:14
3	Ba 233.527†	1389.2	1514.3	0.01711	mg/L	0.01711	mg/L	10:06:14
3	Be 313.107†	-4127.1	82.5	-0.00006	mg/L	-0.00006	mg/L	10:05:54
3	Co 228.616†	-6.2	10.7	-0.00175	mg/L	-0.00175	mg/L	10:06:14
3	Cr 267.716†	8355.8	8775.3	0.23750	mg/L	0.23750	mg/L	10:05:54
3	Cu 324.752†	1554.0	633.8	0.00442	mg/L	0.00442	mg/L	10:05:54
3	Fe 273.955†	-464.6	38.1	-0.00522	mg/L	-0.00522	mg/L	10:06:14
3	Mg 279.077†	560237.8	590737.6	47.913	mg/L	47.913	mg/L	10:05:52
3	Mn 257.610†	1128.4	1375.2	0.00065	mg/L	0.00065	mg/L	10:06:14
3	Ni 231.604†	53.7	70.5	0.00223	mg/L	0.00223	mg/L	10:06:14
3	Pb 220.353†	-0.8	-8.9	-0.00071	mg/L	-0.00071	mg/L	10:06:14
3	Sb 206.836†	42.0	17.0	0.00958	mg/L	0.00958	mg/L	10:06:14
3	Se 196.026†	-1.7	4.7	-0.00187	mg/L	-0.00187	mg/L	10:06:14
3	Tl 190.801†	-14.7	2.1	-0.00322	mg/L	-0.00322	mg/L	10:06:14
3	V 292.402†	4684.6	4950.0	0.05726	mg/L	0.05726	mg/L	10:05:54
3	Zn 206.200†	44.2	27.5	-0.00056	mg/L	-0.00056	mg/L	10:06:14
3	Cd 226.502†	-29.6	-5.9	-0.00041	mg/L	-0.00041	mg/L	10:06:14
3	Ti 334.940†	-1206.8	-1187.6	0.00032	mg/L	0.00032	mg/L	10:05:54
3	Ca 227.546†	28161.3	29609.9	194.58	mg/L	194.58	mg/L	10:05:54
3	Na 589.592	1306961.0	1307164.0	387.45	mg/L	387.45	mg/L	10:04:56
3	K 766.490	9105.1	8536.6	7.5392	mg/L	7.5392	mg/L	10:04:58

Mean Data: L0213-03ADUP~MF5AW8D

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	710511.2	93.23	%	0.405				0.43%
Lu 261.542	465774.2	95.21	%	0.361				0.38%
Ag 328.068†	-35.5	-0.00029	mg/L	0.000158	-0.00029	mg/L	0.000158	55.05%
Al 308.215†	397.9	-0.03263	mg/L	0.003124	-0.03263	mg/L	0.003124	9.57%
As 188.979†	-2.3	0.00196	mg/L	0.002088	0.00196	mg/L	0.002088	106.46%
Ba 233.527†	1514.7	0.01712	mg/L	0.000045	0.01712	mg/L	0.000045	0.27%
Be 313.107†	137.1	-0.00002	mg/L	0.000047	-0.00002	mg/L	0.000047	189.93%
Co 228.616†	5.4	-0.00199	mg/L	0.000231	-0.00199	mg/L	0.000231	11.60%
Cr 267.716†	8665.7	0.23453	mg/L	0.003702	0.23453	mg/L	0.003702	1.58%

Cu 324.752†	630.7	0.00440	mg/L	0.000315	0.00440	mg/L	0.000315	7.15%
Fe 273.955†	49.9	-0.00449	mg/L	0.000800	-0.00449	mg/L	0.000800	17.83%
Mg 279.077†	588119.2	47.700	mg/L	0.3483	47.700	mg/L	0.3483	0.73%
Mn 257.610†	1382.2	0.00068	mg/L	0.000040	0.00068	mg/L	0.000040	5.90%
Ni 231.604†	75.4	0.00250	mg/L	0.000403	0.00250	mg/L	0.000403	16.14%
Pb 220.353†	-10.9	-0.00128	mg/L	0.000779	-0.00128	mg/L	0.000779	61.09%
Sb 206.836†	7.8	0.00252	mg/L	0.006125	0.00252	mg/L	0.006125	242.91%
Se 196.026†	-1.0	-0.01004	mg/L	0.007668	-0.01004	mg/L	0.007668	76.41%
Tl 190.801†	0.9	-0.00431	mg/L	0.003161	-0.00431	mg/L	0.003161	73.37%
V 292.402†	4928.3	0.05701	mg/L	0.000535	0.05701	mg/L	0.000535	0.94%
Zn 206.200†	29.3	-0.00048	mg/L	0.000100	-0.00048	mg/L	0.000100	20.72%
Cd 226.502†	-6.2	-0.00042	mg/L	0.000087	-0.00042	mg/L	0.000087	20.55%
Ti 334.940†	-1145.2	0.00041	mg/L	0.000082	0.00041	mg/L	0.000082	19.92%
Ca 227.546†	29458.3	193.58	mg/L	1.231	193.58	mg/L	1.231	0.64%
Na 589.592	1301021.5	385.63	mg/L	1.752	385.63	mg/L	1.752	0.45%
K 766.490	8481.0	7.4910	mg/L	0.07173	7.4910	mg/L	0.07173	0.96%

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Sequence No.: 41
Sample ID: L0213-03AMS~MF5AW8S
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 2/9/2012 10:07:24 AM
Data Type: Reprocessed on 2/10/2012 7:28:05 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0213-03AMS~MF5AW8S

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	715303.2	715303.2	93.86	%			10:08:50
1	Lu 261.542	471869.3	471869.3	96.46	%			10:08:50
1	Ag 328.068†	4412.4	5058.8	0.04946	mg/L	0.04946	mg/L	10:08:50
1	Al 308.215†	40542.7	36158.3	1.9340	mg/L	1.9340	mg/L	10:08:50
1	As 188.979†	40.5	45.7	0.05805	mg/L	0.05805	mg/L	10:09:10
1	Ba 233.527†	93429.1	96913.1	1.9685	mg/L	1.9685	mg/L	10:08:50
1	Be 313.107†	74819.0	81998.0	0.05005	mg/L	0.05005	mg/L	10:08:50
1	Co 228.616†	10496.1	10899.0	0.48412	mg/L	0.48412	mg/L	10:09:10
1	Cr 267.716†	15546.6	16091.7	0.43570	mg/L	0.43570	mg/L	10:08:50
1	Cu 324.752†	41604.0	42129.7	0.25749	mg/L	0.25749	mg/L	10:08:50
1	Fe 273.955†	14873.6	15947.6	0.96656	mg/L	0.96656	mg/L	10:08:50
1	Mg 279.077†	556543.4	577611.7	46.846	mg/L	46.846	mg/L	10:08:50
1	Mn 257.610†	204311.0	212005.0	0.50776	mg/L	0.50776	mg/L	10:08:50
1	Ni 231.604†	8667.0	8999.4	0.49277	mg/L	0.49277	mg/L	10:09:10
1	Pb 220.353†	57.7	51.8	0.01612	mg/L	0.01612	mg/L	10:09:10
1	Sb 206.836†	167.0	145.8	0.10655	mg/L	0.10655	mg/L	10:09:10
1	Se 196.026†	24.0	31.3	0.03667	mg/L	0.03667	mg/L	10:09:10
1	Tl 190.801†	44.3	63.5	0.04974	mg/L	0.04974	mg/L	10:09:10
1	V 292.402†	45845.6	47545.7	0.55034	mg/L	0.55034	mg/L	10:08:50
1	Zn 206.200†	9837.7	10180.1	0.49985	mg/L	0.49985	mg/L	10:09:10
1	Cd 226.502†	1730.0	1818.9	0.05191	mg/L	0.05191	mg/L	10:09:10
1	Ti 334.940†	-1135.2	-1093.4	0.00046	mg/L	0.00046	mg/L	10:08:50
1	Ca 227.546†	28088.4	29067.1	190.89	mg/L	190.89	mg/L	10:08:50
1	Na 589.592	1315996.9	1316199.9	390.13	mg/L	390.13	mg/L	10:08:35
1	K 766.490	9150.0	8581.5	7.5781	mg/L	7.5781	mg/L	10:08:37
2	Y 360.073	706914.2	706914.2	92.76	%			10:09:13
2	Lu 261.542	465465.7	465465.7	95.15	%			10:09:13
2	Ag 328.068†	4425.6	5135.6	0.05021	mg/L	0.05021	mg/L	10:09:13
2	Al 308.215†	40060.6	36229.9	1.9379	mg/L	1.9379	mg/L	10:09:13
2	As 188.979†	33.8	39.2	0.05066	mg/L	0.05066	mg/L	10:09:33
2	Ba 233.527†	92436.4	97202.4	1.9745	mg/L	1.9745	mg/L	10:09:13
2	Be 313.107†	73584.2	81767.4	0.04991	mg/L	0.04991	mg/L	10:09:13
2	Co 228.616†	10530.3	11084.7	0.49241	mg/L	0.49241	mg/L	10:09:33
2	Cr 267.716†	15320.0	16075.3	0.43526	mg/L	0.43526	mg/L	10:09:13
2	Cu 324.752†	41158.5	42254.9	0.25825	mg/L	0.25825	mg/L	10:09:13
2	Fe 273.955†	14895.1	16182.3	0.98089	mg/L	0.98089	mg/L	10:09:13
2	Mg 279.077†	550227.6	578911.7	46.952	mg/L	46.952	mg/L	10:09:13
2	Mn 257.610†	201869.1	212352.6	0.50859	mg/L	0.50859	mg/L	10:09:13
2	Ni 231.604†	8665.2	9121.0	0.49945	mg/L	0.49945	mg/L	10:09:33
2	Pb 220.353†	62.0	57.2	0.01758	mg/L	0.01758	mg/L	10:09:33
2	Sb 206.836†	164.4	145.4	0.10627	mg/L	0.10627	mg/L	10:09:33
2	Se 196.026†	30.7	38.7	0.04727	mg/L	0.04727	mg/L	10:09:33

2	Tl 190.801†	40.4	60.1	0.04653	mg/L	0.04653	mg/L	10:09:33
2	V 292.402†	45504.4	47841.1	0.55375	mg/L	0.55375	mg/L	10:09:13
2	Zn 206.200†	9865.0	10349.1	0.50817	mg/L	0.50817	mg/L	10:09:33
2	Cd 226.502†	1731.6	1845.2	0.05267	mg/L	0.05267	mg/L	10:09:33
2	Ti 334.940†	-1059.0	-1029.4	0.00065	mg/L	0.00065	mg/L	10:09:13
2	Ca 227.546†	27744.5	29106.2	191.14	mg/L	191.14	mg/L	10:09:13
2	Na 589.592	1302232.4	1302435.5	386.05	mg/L	386.05	mg/L	10:08:39
2	K 766.490	9179.6	8611.1	7.6038	mg/L	7.6038	mg/L	10:08:41
3	Y 360.073	710824.4	710824.4	93.27	%			10:09:35
3	Lu 261.542	469875.5	469875.5	96.05	%			10:09:35
3	Ag 328.068†	4444.8	5111.9	0.04998	mg/L	0.04998	mg/L	10:09:35
3	Al 308.215†	40613.5	36410.4	1.9478	mg/L	1.9478	mg/L	10:09:35
3	As 188.979†	31.2	36.1	0.04715	mg/L	0.04715	mg/L	10:09:55
3	Ba 233.527†	93466.7	97363.3	1.9777	mg/L	1.9777	mg/L	10:09:35
3	Be 313.107†	74740.9	82245.9	0.05020	mg/L	0.05020	mg/L	10:09:35
3	Co 228.616†	10424.5	10870.7	0.48285	mg/L	0.48285	mg/L	10:09:55
3	Cr 267.716†	15552.9	16166.7	0.43773	mg/L	0.43773	mg/L	10:09:35
3	Cu 324.752†	41494.4	42198.6	0.25791	mg/L	0.25791	mg/L	10:09:35
3	Fe 273.955†	15192.3	16344.8	0.99082	mg/L	0.99082	mg/L	10:09:35
3	Mg 279.077†	558701.1	582306.5	47.228	mg/L	47.228	mg/L	10:09:35
3	Mn 257.610†	204828.6	213442.7	0.51121	mg/L	0.51121	mg/L	10:09:35
3	Ni 231.604†	8608.3	8976.4	0.49150	mg/L	0.49150	mg/L	10:09:55
3	Pb 220.353†	62.8	57.4	0.01765	mg/L	0.01765	mg/L	10:09:55
3	Sb 206.836†	171.2	151.0	0.11053	mg/L	0.11053	mg/L	10:09:55
3	Se 196.026†	24.3	31.8	0.03730	mg/L	0.03730	mg/L	10:09:55
3	Tl 190.801†	43.9	63.3	0.04958	mg/L	0.04958	mg/L	10:09:55
3	V 292.402†	46072.1	47983.2	0.55540	mg/L	0.55540	mg/L	10:09:35
3	Zn 206.200†	9791.6	10175.4	0.49963	mg/L	0.49963	mg/L	10:09:55
3	Cd 226.502†	1711.4	1807.1	0.05157	mg/L	0.05157	mg/L	10:09:55
3	Ti 334.940†	-1160.9	-1125.1	0.00038	mg/L	0.00038	mg/L	10:09:35
3	Ca 227.546†	28065.3	29166.5	191.54	mg/L	191.54	mg/L	10:09:35
3	Na 589.592	1300528.4	1300731.5	385.55	mg/L	385.55	mg/L	10:08:43
3	K 766.490	9196.1	8627.6	7.6181	mg/L	7.6181	mg/L	10:08:46

Mean Data: L0213-03AMS~MF5AW8S

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	711013.9	93.30	%	0.551				0.59%
Lu 261.542	469070.2	95.88	%	0.670				0.70%
Ag 328.068†	5102.1	0.04988	mg/L	0.000382	0.04988	mg/L	0.000382	0.77%
Al 308.215†	36266.2	1.9399	mg/L	0.00709	1.9399	mg/L	0.00709	0.37%
As 188.979†	40.3	0.05196	mg/L	0.005564	0.05196	mg/L	0.005564	10.71%
Ba 233.527†	97159.6	1.9736	mg/L	0.00467	1.9736	mg/L	0.00467	0.24%
Be 313.107†	82003.7	0.05006	mg/L	0.000146	0.05006	mg/L	0.000146	0.29%
Co 228.616†	10951.5	0.48646	mg/L	0.005187	0.48646	mg/L	0.005187	1.07%
Cr 267.716†	16111.3	0.43623	mg/L	0.001319	0.43623	mg/L	0.001319	0.30%
Cu 324.752†	42194.4	0.25788	mg/L	0.000383	0.25788	mg/L	0.000383	0.15%
Fe 273.955†	16158.2	0.97942	mg/L	0.012197	0.97942	mg/L	0.012197	1.25%
Mg 279.077†	579610.0	47.009	mg/L	0.1974	47.009	mg/L	0.1974	0.42%
Mn 257.610†	212600.1	0.50918	mg/L	0.001800	0.50918	mg/L	0.001800	0.35%
Ni 231.604†	9032.3	0.49458	mg/L	0.004272	0.49458	mg/L	0.004272	0.86%
Pb 220.353†	55.5	0.01712	mg/L	0.000861	0.01712	mg/L	0.000861	5.03%
Sb 206.836†	147.4	0.10778	mg/L	0.002386	0.10778	mg/L	0.002386	2.21%
Se 196.026†	33.9	0.04042	mg/L	0.005947	0.04042	mg/L	0.005947	14.72%
Tl 190.801†	62.3	0.04862	mg/L	0.001812	0.04862	mg/L	0.001812	3.73%
V 292.402†	47790.0	0.55316	mg/L	0.002584	0.55316	mg/L	0.002584	0.47%
Zn 206.200†	10234.9	0.50255	mg/L	0.004868	0.50255	mg/L	0.004868	0.97%
Cd 226.502†	1823.7	0.05205	mg/L	0.000561	0.05205	mg/L	0.000561	1.08%
Ti 334.940†	-1082.6	0.00050	mg/L	0.000138	0.00050	mg/L	0.000138	27.79%
Ca 227.546†	29113.3	191.19	mg/L	0.330	191.19	mg/L	0.330	0.17%
Na 589.592	1306455.6	387.24	mg/L	2.514	387.24	mg/L	2.514	0.65%
K 766.490	8606.8	7.6000	mg/L	0.02026	7.6000	mg/L	0.02026	0.27%

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Sequence No.: 42
Sample ID: L0213-03ASD~MF5AW8L
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 2/9/2012 10:11:06 AM
Data Type: Reprocessed on 2/10/2012 7:28:05 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0213-03ASD~MF5AW8L

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Y 360.073	759495.2	759495.2	99.66	%			10:12:30
1	Lu 261.542	498480.2	498480.2	101.9	%			10:12:30
1	Ag 328.068†	-429.6	62.6	0.00061	mg/L	0.00061	mg/L	10:12:32
1	Al 308.215†	5971.9	-13.3	-0.03275	mg/L	-0.03275	mg/L	10:12:32
1	As 188.979†	-1.7	2.0	0.00299	mg/L	0.00299	mg/L	10:12:52
1	Ba 233.527†	288.7	334.2	-0.00705	mg/L	-0.00705	mg/L	10:12:52
1	Be 313.107†	-4033.2	471.6	0.00018	mg/L	0.00018	mg/L	10:12:32
1	Co 228.616†	-7.6	9.8	-0.00175	mg/L	-0.00175	mg/L	10:12:52
1	Cr 267.716†	1823.4	1763.4	0.04780	mg/L	0.04780	mg/L	10:12:32
1	Cu 324.752†	1252.5	226.2	0.00193	mg/L	0.00193	mg/L	10:12:32
1	Fe 273.955†	-343.1	190.8	0.00647	mg/L	0.00647	mg/L	10:12:52
1	Mg 279.077†	120481.2	118858.2	9.4784	mg/L	9.4784	mg/L	10:12:32
1	Mn 257.610†	187.6	370.6	-0.00063	mg/L	-0.00063	mg/L	10:12:52
1	Ni 231.604†	2.0	15.8	-0.00078	mg/L	-0.00078	mg/L	10:12:52
1	Pb 220.353†	-3.5	-11.5	-0.00253	mg/L	-0.00253	mg/L	10:12:52
1	Sb 206.836†	28.5	0.7	0.00146	mg/L	0.00146	mg/L	10:12:52
1	Se 196.026†	-9.7	-3.0	-0.01292	mg/L	-0.01292	mg/L	10:12:52
1	Tl 190.801†	-9.0	8.7	0.00201	mg/L	0.00201	mg/L	10:12:52
1	V 292.402†	1028.8	1025.2	0.01159	mg/L	0.01159	mg/L	10:12:32
1	Zn 206.200†	40.1	20.3	-0.00158	mg/L	-0.00158	mg/L	10:12:52
1	Cd 226.502†	-27.1	-1.3	-0.00029	mg/L	-0.00029	mg/L	10:12:52
1	Ti 334.940†	-324.8	-235.2	-0.00124	mg/L	-0.00124	mg/L	10:12:32
1	Ca 227.546†	6111.3	5944.1	38.962	mg/L	38.962	mg/L	10:12:32
1	Na 589.592	258648.3	258851.4	76.673	mg/L	76.673	mg/L	10:12:15
1	K 766.490	2509.1	1940.6	1.8200	mg/L	1.8200	mg/L	10:12:17
2	Y 360.073	763951.1	763951.1	100.2	%			10:12:55
2	Lu 261.542	500677.4	500677.4	102.3	%			10:12:55
2	Ag 328.068†	-478.0	17.2	0.00017	mg/L	0.00017	mg/L	10:12:57
2	Al 308.215†	5853.0	-155.2	-0.04052	mg/L	-0.04052	mg/L	10:12:57
2	As 188.979†	1.6	5.2	0.00670	mg/L	0.00670	mg/L	10:13:17
2	Ba 233.527†	285.9	330.2	-0.00713	mg/L	-0.00713	mg/L	10:13:17
2	Be 313.107†	-4094.5	429.0	0.00016	mg/L	0.00016	mg/L	10:12:57
2	Co 228.616†	-22.1	-4.3	-0.00238	mg/L	-0.00238	mg/L	10:13:17
2	Cr 267.716†	1810.7	1743.1	0.04725	mg/L	0.04725	mg/L	10:12:57
2	Cu 324.752†	1288.1	255.6	0.00211	mg/L	0.00211	mg/L	10:12:57
2	Fe 273.955†	-383.5	152.8	0.00414	mg/L	0.00414	mg/L	10:13:17
2	Mg 279.077†	121055.2	118900.2	9.4819	mg/L	9.4819	mg/L	10:12:57
2	Mn 257.610†	180.6	363.1	-0.00065	mg/L	-0.00065	mg/L	10:13:17
2	Ni 231.604†	7.0	20.7	-0.00051	mg/L	-0.00051	mg/L	10:13:17
2	Pb 220.353†	-1.7	-9.7	-0.00204	mg/L	-0.00204	mg/L	10:13:17
2	Sb 206.836†	28.2	0.3	0.00117	mg/L	0.00117	mg/L	10:13:17
2	Se 196.026†	-3.1	3.4	-0.00368	mg/L	-0.00368	mg/L	10:13:17
2	Tl 190.801†	-19.0	-1.0	-0.00695	mg/L	-0.00695	mg/L	10:13:17
2	V 292.402†	1006.1	998.6	0.01128	mg/L	0.01128	mg/L	10:12:57
2	Zn 206.200†	38.3	18.4	-0.00167	mg/L	-0.00167	mg/L	10:13:17
2	Cd 226.502†	-31.4	-5.4	-0.00040	mg/L	-0.00040	mg/L	10:13:17
2	Ti 334.940†	-303.1	-212.5	-0.00119	mg/L	-0.00119	mg/L	10:12:57
2	Ca 227.546†	6067.8	5875.4	38.510	mg/L	38.510	mg/L	10:12:57
2	Na 589.592	260367.6	260570.6	77.183	mg/L	77.183	mg/L	10:12:20
2	K 766.490	2512.9	1944.4	1.8234	mg/L	1.8234	mg/L	10:12:22
3	Y 360.073	767836.9	767836.9	100.8	%			10:13:19
3	Lu 261.542	503509.1	503509.1	102.9	%			10:13:19
3	Ag 328.068†	-498.2	0.2	0.00001	mg/L	0.00001	mg/L	10:13:21
3	Al 308.215†	5821.8	-217.6	-0.04396	mg/L	-0.04396	mg/L	10:13:21
3	As 188.979†	-3.8	0.0	0.00076	mg/L	0.00076	mg/L	10:13:42
3	Ba 233.527†	276.0	319.1	-0.00736	mg/L	-0.00736	mg/L	10:13:42
3	Be 313.107†	-4144.0	403.5	0.00014	mg/L	0.00014	mg/L	10:13:21
3	Co 228.616†	-12.8	4.8	-0.00197	mg/L	-0.00197	mg/L	10:13:42
3	Cr 267.716†	1800.9	1723.6	0.04672	mg/L	0.04672	mg/L	10:13:21
3	Cu 324.752†	1230.5	192.5	0.00172	mg/L	0.00172	mg/L	10:13:21
3	Fe 273.955†	-387.7	150.7	0.00402	mg/L	0.00402	mg/L	10:13:42
3	Mg 279.077†	121743.7	118904.0	9.4822	mg/L	9.4822	mg/L	10:13:21
3	Mn 257.610†	150.5	332.8	-0.00072	mg/L	-0.00072	mg/L	10:13:42
3	Ni 231.604†	3.1	16.9	-0.00072	mg/L	-0.00072	mg/L	10:13:42
3	Pb 220.353†	7.5	-0.7	0.00040	mg/L	0.00040	mg/L	10:13:42
3	Sb 206.836†	28.4	0.3	0.00119	mg/L	0.00119	mg/L	10:13:42

3	Se 196.026†	-0.9	5.6	-0.00048	mg/L	-0.00048	mg/L	10:13:42
3	Tl 190.801†	-10.3	7.6	0.00094	mg/L	0.00094	mg/L	10:13:42
3	V 292.402†	985.4	973.0	0.01099	mg/L	0.01099	mg/L	10:13:21
3	Zn 206.200†	35.4	15.3	-0.00183	mg/L	-0.00183	mg/L	10:13:42
3	Cd 226.502†	-30.6	-4.4	-0.00038	mg/L	-0.00038	mg/L	10:13:42
3	Ti 334.940†	-130.7	-43.5	-0.00070	mg/L	-0.00070	mg/L	10:13:21
3	Ca 227.546†	6104.0	5877.2	38.522	mg/L	38.522	mg/L	10:13:21
3	Na 589.592	260977.2	261180.2	77.364	mg/L	77.364	mg/L	10:12:24
3	K 766.490	2527.1	1958.6	1.8357	mg/L	1.8357	mg/L	10:12:26

Mean Data: L0213-03ASD~MF5AW8L

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	763761.1	100.2	%	0.55				0.55%
Lu 261.542	500888.9	102.4	%	0.52				0.50%
Ag 328.068†	26.7	0.00026	mg/L	0.000312	0.00026	mg/L	0.000312	118.53%
Al 308.215†	-128.7	-0.03908	mg/L	0.005740	-0.03908	mg/L	0.005740	14.69%
As 188.979†	2.4	0.00348	mg/L	0.003001	0.00348	mg/L	0.003001	86.16%
Ba 233.527†	327.8	-0.00718	mg/L	0.000161	-0.00718	mg/L	0.000161	2.24%
Be 313.107†	434.7	0.00016	mg/L	0.000020	0.00016	mg/L	0.000020	12.60%
Co 228.616†	3.4	-0.00203	mg/L	0.000319	-0.00203	mg/L	0.000319	15.73%
Cr 267.716†	1743.4	0.04726	mg/L	0.000539	0.04726	mg/L	0.000539	1.14%
Cu 324.752†	224.7	0.00192	mg/L	0.000192	0.00192	mg/L	0.000192	10.01%
Fe 273.955†	164.8	0.00488	mg/L	0.001381	0.00488	mg/L	0.001381	28.31%
Mg 279.077†	118887.5	9.4808	mg/L	0.00207	9.4808	mg/L	0.00207	0.02%
Mn 257.610†	355.5	-0.00066	mg/L	0.000048	-0.00066	mg/L	0.000048	7.27%
Ni 231.604†	17.8	-0.00067	mg/L	0.000142	-0.00067	mg/L	0.000142	21.23%
Pb 220.353†	-7.3	-0.00139	mg/L	0.001569	-0.00139	mg/L	0.001569	112.92%
Sb 206.836†	0.4	0.00127	mg/L	0.000163	0.00127	mg/L	0.000163	12.80%
Se 196.026†	2.0	-0.00569	mg/L	0.006458	-0.00569	mg/L	0.006458	113.43%
Tl 190.801†	5.1	-0.00134	mg/L	0.004894	-0.00134	mg/L	0.004894	366.53%
V 292.402†	998.9	0.01129	mg/L	0.000303	0.01129	mg/L	0.000303	2.69%
Zn 206.200†	18.0	-0.00169	mg/L	0.000126	-0.00169	mg/L	0.000126	7.47%
Cd 226.502†	-3.7	-0.00035	mg/L	0.000061	-0.00035	mg/L	0.000061	17.16%
Ti 334.940†	-163.7	-0.00105	mg/L	0.000296	-0.00105	mg/L	0.000296	28.34%
Ca 227.546†	5898.9	38.665	mg/L	0.2577	38.665	mg/L	0.2577	0.67%
Na 589.592	260200.7	77.073	mg/L	0.3580	77.073	mg/L	0.3580	0.46%
K 766.490	1947.9	1.8264	mg/L	0.00823	1.8264	mg/L	0.00823	0.45%

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Sequence No.: 43
Sample ID: L0213-03APDS~MF5AW8A
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 2/9/2012 10:14:51 AM
Data Type: Reprocessed on 2/10/2012 7:28:06 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0213-03APDS~MF5AW8A

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	721411.2	721411.2	94.66	%			10:16:16
1	Lu 261.542	473862.4	473862.4	96.86	%			10:16:16
1	Ag 328.068†	1540.7	2074.9	0.02019	mg/L	0.02019	mg/L	10:16:16
1	Al 308.215†	12564.3	7097.1	0.33584	mg/L	0.33584	mg/L	10:16:16
1	As 188.979†	16.7	20.9	0.02858	mg/L	0.02858	mg/L	10:16:36
1	Ba 233.527†	18993.5	19659.6	0.38828	mg/L	0.38828	mg/L	10:16:16
1	Be 313.107†	11331.6	16128.3	0.00976	mg/L	0.00976	mg/L	10:16:16
1	Co 228.616†	2080.4	2165.0	0.09439	mg/L	0.09439	mg/L	10:16:36
1	Cr 267.716†	8803.7	9062.7	0.24526	mg/L	0.24526	mg/L	10:16:16
1	Cu 324.752†	9193.4	8488.0	0.05232	mg/L	0.05232	mg/L	10:16:16
1	Fe 273.955†	2566.9	3177.5	0.18596	mg/L	0.18596	mg/L	10:16:36
1	Mg 279.077†	649111.6	670750.9	54.430	mg/L	54.430	mg/L	10:16:16
1	Mn 257.610†	12828.7	13430.7	0.02948	mg/L	0.02948	mg/L	10:16:16
1	Ni 231.604†	1420.6	1480.5	0.07969	mg/L	0.07969	mg/L	10:16:36
1	Pb 220.353†	64.6	58.6	0.01773	mg/L	0.01773	mg/L	10:16:36
1	Sb 206.836†	183.9	162.5	0.12262	mg/L	0.12262	mg/L	10:16:36
1	Se 196.026†	32.6	40.1	0.04937	mg/L	0.04937	mg/L	10:16:36
1	Tl 190.801†	41.3	60.2	0.04985	mg/L	0.04985	mg/L	10:16:36
1	V 292.402†	12447.7	12866.4	0.14886	mg/L	0.14886	mg/L	10:16:16

1	Zn 206.200†	2327.7	2384.0	0.11546	mg/L	0.11546	mg/L	10:16:36
1	Cd 226.502†	301.3	336.3	0.00940	mg/L	0.00940	mg/L	10:16:36
1	Ti 334.940†	-1224.4	-1180.5	0.00015	mg/L	0.00015	mg/L	10:16:16
1	Ca 227.546†	28467.6	29336.1	192.75	mg/L	192.75	mg/L	10:16:16
1	Na 589.592	1293053.4	1293256.5	383.33	mg/L	383.33	mg/L	10:16:01
1	K 766.490	19744.3	19175.8	16.764	mg/L	16.764	mg/L	10:16:03
2	Y 360.073	728722.7	728722.7	95.62	%			10:16:39
2	Lu 261.542	478153.3	478153.3	97.74	%			10:16:39
2	Ag 328.068†	1513.4	2032.6	0.01978	mg/L	0.01978	mg/L	10:16:39
2	Al 308.215†	12701.9	7121.5	0.33693	mg/L	0.33693	mg/L	10:16:39
2	As 188.979†	17.1	21.2	0.02889	mg/L	0.02889	mg/L	10:16:59
2	Ba 233.527†	19458.3	19959.1	0.39441	mg/L	0.39441	mg/L	10:16:39
2	Be 313.107†	11643.3	16342.2	0.00989	mg/L	0.00989	mg/L	10:16:39
2	Co 228.616†	2078.7	2144.0	0.09345	mg/L	0.09345	mg/L	10:16:59
2	Cr 267.716†	8823.8	9001.7	0.24361	mg/L	0.24361	mg/L	10:16:39
2	Cu 324.752†	9304.8	8516.8	0.05250	mg/L	0.05250	mg/L	10:16:39
2	Fe 273.955†	2582.0	3169.2	0.18539	mg/L	0.18539	mg/L	10:16:59
2	Mg 279.077†	662202.8	678131.0	55.031	mg/L	55.031	mg/L	10:16:39
2	Mn 257.610†	13136.0	13626.3	0.02993	mg/L	0.02993	mg/L	10:16:39
2	Ni 231.604†	1424.7	1471.5	0.07919	mg/L	0.07919	mg/L	10:16:59
2	Pb 220.353†	64.3	57.8	0.01750	mg/L	0.01750	mg/L	10:16:59
2	Sb 206.836†	170.6	147.2	0.11074	mg/L	0.11074	mg/L	10:16:59
2	Se 196.026†	42.0	49.5	0.06283	mg/L	0.06283	mg/L	10:16:59
2	Tl 190.801†	37.0	55.5	0.04550	mg/L	0.04550	mg/L	10:16:59
2	V 292.402†	12719.0	13028.7	0.15074	mg/L	0.15074	mg/L	10:16:39
2	Zn 206.200†	2350.8	2386.1	0.11555	mg/L	0.11555	mg/L	10:16:59
2	Cd 226.502†	300.4	332.7	0.00929	mg/L	0.00929	mg/L	10:16:59
2	Ti 334.940†	-1150.0	-1093.0	0.00044	mg/L	0.00044	mg/L	10:16:39
2	Ca 227.546†	28970.4	29586.8	194.40	mg/L	194.40	mg/L	10:16:39
2	Na 589.592	1284809.5	1285012.6	380.89	mg/L	380.89	mg/L	10:16:05
2	K 766.490	19961.8	19393.3	16.953	mg/L	16.953	mg/L	10:16:07
3	Y 360.073	724384.7	724384.7	95.05	%			10:17:02
3	Lu 261.542	475475.4	475475.4	97.19	%			10:17:02
3	Ag 328.068†	1577.7	2107.5	0.02050	mg/L	0.02050	mg/L	10:17:02
3	Al 308.215†	12717.8	7211.0	0.34223	mg/L	0.34223	mg/L	10:17:02
3	As 188.979†	14.3	18.4	0.02560	mg/L	0.02560	mg/L	10:17:22
3	Ba 233.527†	19063.0	19664.6	0.38838	mg/L	0.38838	mg/L	10:17:02
3	Be 313.107†	11378.2	16136.6	0.00976	mg/L	0.00976	mg/L	10:17:02
3	Co 228.616†	2064.3	2141.1	0.09333	mg/L	0.09333	mg/L	10:17:22
3	Cr 267.716†	8663.1	8887.2	0.24051	mg/L	0.24051	mg/L	10:17:02
3	Cu 324.752†	9204.4	8467.1	0.05219	mg/L	0.05219	mg/L	10:17:02
3	Fe 273.955†	2594.2	3196.6	0.18712	mg/L	0.18712	mg/L	10:17:22
3	Mg 279.077†	650025.5	669417.7	54.322	mg/L	54.322	mg/L	10:17:02
3	Mn 257.610†	12851.5	13409.3	0.02943	mg/L	0.02943	mg/L	10:17:02
3	Ni 231.604†	1414.9	1469.6	0.07909	mg/L	0.07909	mg/L	10:17:22
3	Pb 220.353†	64.9	58.8	0.01775	mg/L	0.01775	mg/L	10:17:22
3	Sb 206.836†	179.0	156.9	0.11831	mg/L	0.11831	mg/L	10:17:22
3	Se 196.026†	43.8	51.5	0.06578	mg/L	0.06578	mg/L	10:17:22
3	Tl 190.801†	32.3	50.8	0.04117	mg/L	0.04117	mg/L	10:17:22
3	V 292.402†	12540.7	12918.4	0.14946	mg/L	0.14946	mg/L	10:17:02
3	Zn 206.200†	2319.8	2367.7	0.11464	mg/L	0.11464	mg/L	10:17:22
3	Cd 226.502†	294.3	328.1	0.00916	mg/L	0.00916	mg/L	10:17:22
3	Ti 334.940†	-1177.1	-1127.5	0.00028	mg/L	0.00028	mg/L	10:17:02
3	Ca 227.546†	28452.2	29220.5	191.99	mg/L	191.99	mg/L	10:17:02
3	Na 589.592	1285453.4	1285656.5	381.08	mg/L	381.08	mg/L	10:16:09
3	K 766.490	19696.8	19128.3	16.723	mg/L	16.723	mg/L	10:16:12

Mean Data: L0213-03APDS~MF5AW8A

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	724839.5	95.11	%	0.482				0.51%
Lu 261.542	475830.4	97.27	%	0.443				0.46%
Ag 328.068†	2071.7	0.02016	mg/L	0.000361	0.02016	mg/L	0.000361	1.79%
Al 308.215†	7143.2	0.33833	mg/L	0.003418	0.33833	mg/L	0.003418	1.01%
As 188.979†	20.2	0.02769	mg/L	0.001818	0.02769	mg/L	0.001818	6.57%
Ba 233.527†	19761.1	0.39036	mg/L	0.003508	0.39036	mg/L	0.003508	0.90%
Be 313.107†	16202.4	0.00980	mg/L	0.000074	0.00980	mg/L	0.000074	0.76%
Co 228.616†	2150.1	0.09372	mg/L	0.000582	0.09372	mg/L	0.000582	0.62%
Cr 267.716†	8983.9	0.24313	mg/L	0.002412	0.24313	mg/L	0.002412	0.99%
Cu 324.752†	8490.7	0.05234	mg/L	0.000152	0.05234	mg/L	0.000152	0.29%

Fe 273.955†	3181.1	0.18616 mg/L	0.000880	0.18616 mg/L	0.000880	0.47%
Mg 279.077†	672766.5	54.594 mg/L	0.3823	54.594 mg/L	0.3823	0.70%
Mn 257.610†	13488.8	0.02961 mg/L	0.000277	0.02961 mg/L	0.000277	0.93%
Ni 231.604†	1473.9	0.07932 mg/L	0.000320	0.07932 mg/L	0.000320	0.40%
Pb 220.353†	58.4	0.01766 mg/L	0.000138	0.01766 mg/L	0.000138	0.78%
Sb 206.836†	155.5	0.11722 mg/L	0.006014	0.11722 mg/L	0.006014	5.13%
Se 196.026†	47.0	0.05933 mg/L	0.008752	0.05933 mg/L	0.008752	14.75%
Tl 190.801†	55.5	0.04551 mg/L	0.004341	0.04551 mg/L	0.004341	9.54%
V 292.402†	12937.8	0.14968 mg/L	0.000958	0.14968 mg/L	0.000958	0.64%
Zn 206.200†	2379.3	0.11522 mg/L	0.000502	0.11522 mg/L	0.000502	0.44%
Cd 226.502†	332.4	0.00928 mg/L	0.000118	0.00928 mg/L	0.000118	1.28%
Ti 334.940†	-1133.7	0.00029 mg/L	0.000148	0.00029 mg/L	0.000148	50.88%
Ca 227.546†	29381.1	193.05 mg/L	1.231	193.05 mg/L	1.231	0.64%
Na 589.592	1287975.2	381.76 mg/L	1.359	381.76 mg/L	1.359	0.36%
K 766.490	19232.5	16.813 mg/L	0.1225	16.813 mg/L	0.1225	0.73%

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Sequence No.: 44
Sample ID: L0213-04A~MF5AW9
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 2/9/2012 10:18:32 AM
Data Type: Reprocessed on 2/10/2012 7:28:07 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0213-04A~MF5AW9

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	721316.8	721316.8	94.65	%			10:19:57
1	Lu 261.542	475797.5	475797.5	97.26	%			10:19:57
1	Ag 328.068†	-523.7	-54.2	-0.00044	mg/L	-0.00044	mg/L	10:19:57
1	Al 308.215†	5901.7	193.9	-0.04438	mg/L	-0.04438	mg/L	10:19:57
1	As 188.979†	-5.0	-1.5	0.00762	mg/L	0.00762	mg/L	10:20:17
1	Ba 233.527†	1339.5	1428.1	0.01536	mg/L	0.01536	mg/L	10:20:17
1	Be 313.107†	-4087.1	227.5	0.00003	mg/L	0.00003	mg/L	10:19:57
1	Co 228.616†	-11.3	5.6	-0.00221	mg/L	-0.00221	mg/L	10:20:17
1	Cr 267.716†	35651.9	36630.7	0.99199	mg/L	0.99199	mg/L	10:19:57
1	Cu 324.752†	1237.1	268.9	0.00220	mg/L	0.00220	mg/L	10:19:57
1	Fe 273.955†	-544.3	-32.2	-0.00660	mg/L	-0.00660	mg/L	10:20:17
1	Mg 279.077†	551579.3	567744.1	46.038	mg/L	46.038	mg/L	10:19:57
1	Mn 257.610†	-14.3	171.9	-0.00219	mg/L	-0.00219	mg/L	10:20:17
1	Ni 231.604†	69.4	85.3	0.00304	mg/L	0.00304	mg/L	10:20:17
1	Pb 220.353†	-2.7	-10.8	-0.00123	mg/L	-0.00123	mg/L	10:20:17
1	Sb 206.836†	48.7	22.8	-0.00036	mg/L	-0.00036	mg/L	10:20:17
1	Se 196.026†	3.6	10.1	0.00595	mg/L	0.00595	mg/L	10:20:17
1	Tl 190.801†	-14.1	3.2	-0.00258	mg/L	-0.00258	mg/L	10:20:17
1	V 292.402†	6722.2	6927.2	0.08118	mg/L	0.08118	mg/L	10:19:57
1	Zn 206.200†	-10.6	-30.0	-0.00075	mg/L	-0.00075	mg/L	10:20:17
1	Cd 226.502†	-28.3	-3.8	-0.00035	mg/L	-0.00035	mg/L	10:20:17
1	Ti 334.940†	-1207.9	-1158.4	0.00035	mg/L	0.00035	mg/L	10:19:57
1	Ca 227.546†	28837.5	29596.8	194.49	mg/L	194.49	mg/L	10:19:57
1	Na 589.592	1203894.2	1204097.2	356.90	mg/L	356.90	mg/L	10:19:42
1	K 766.490	8817.4	8248.9	7.2897	mg/L	7.2897	mg/L	10:19:44
2	Y 360.073	727078.1	727078.1	95.41	%			10:20:19
2	Lu 261.542	478934.8	478934.8	97.90	%			10:20:19
2	Ag 328.068†	-422.5	52.7	0.00059	mg/L	0.00059	mg/L	10:20:19
2	Al 308.215†	6008.9	263.7	-0.04072	mg/L	-0.04072	mg/L	10:20:19
2	As 188.979†	-0.2	3.5	0.01330	mg/L	0.01330	mg/L	10:20:40
2	Ba 233.527†	1333.8	1413.4	0.01506	mg/L	0.01506	mg/L	10:20:40
2	Be 313.107†	-4176.0	164.2	-0.00001	mg/L	-0.00001	mg/L	10:20:19
2	Co 228.616†	-10.6	6.4	-0.00218	mg/L	-0.00218	mg/L	10:20:40
2	Cr 267.716†	35932.8	36677.4	0.99326	mg/L	0.99326	mg/L	10:20:19
2	Cu 324.752†	1229.4	252.7	0.00210	mg/L	0.00210	mg/L	10:20:19
2	Fe 273.955†	-562.3	-46.9	-0.00751	mg/L	-0.00751	mg/L	10:20:40
2	Mg 279.077†	558071.5	570660.5	46.276	mg/L	46.276	mg/L	10:20:19
2	Mn 257.610†	-30.0	155.9	-0.00223	mg/L	-0.00223	mg/L	10:20:40
2	Ni 231.604†	69.1	84.4	0.00299	mg/L	0.00299	mg/L	10:20:40
2	Pb 220.353†	-10.9	-19.1	-0.00349	mg/L	-0.00349	mg/L	10:20:40
2	Sb 206.836†	44.5	18.2	-0.00397	mg/L	-0.00397	mg/L	10:20:40
2	Se 196.026†	-1.4	5.1	-0.00135	mg/L	-0.00135	mg/L	10:20:40
2	Tl 190.801†	-16.5	0.7	-0.00481	mg/L	-0.00481	mg/L	10:20:40

2	V 292.402†	6828.6	6990.6	0.08192	mg/L	0.08192	mg/L	10:20:19
2	Zn 206.200†	-17.6	-37.0	-0.00110	mg/L	-0.00110	mg/L	10:20:40
2	Cd 226.502†	-21.2	3.6	-0.00014	mg/L	-0.00014	mg/L	10:20:40
2	Ti 334.940†	-1235.0	-1177.9	0.00034	mg/L	0.00034	mg/L	10:20:19
2	Ca 227.546†	29222.6	29796.0	195.80	mg/L	195.80	mg/L	10:20:19
2	Na 589.592	1212825.1	1213028.2	359.55	mg/L	359.55	mg/L	10:19:46
2	K 766.490	9028.5	8460.0	7.4728	mg/L	7.4728	mg/L	10:19:48
3	Y 360.073	728813.1	728813.1	95.63	%			10:20:42
3	Lu 261.542	481170.5	481170.5	98.36	%			10:20:42
3	Ag 328.068†	-447.1	29.7	0.00037	mg/L	0.00037	mg/L	10:20:42
3	Al 308.215†	6053.6	280.6	-0.03968	mg/L	-0.03968	mg/L	10:20:42
3	As 188.979†	-8.5	-4.9	0.00369	mg/L	0.00369	mg/L	10:21:02
3	Ba 233.527†	1342.2	1415.6	0.01511	mg/L	0.01511	mg/L	10:21:02
3	Be 313.107†	-4170.4	189.7	0.00001	mg/L	0.00001	mg/L	10:20:42
3	Co 228.616†	-6.9	10.2	-0.00200	mg/L	-0.00200	mg/L	10:21:02
3	Cr 267.716†	36056.5	36632.7	0.99205	mg/L	0.99205	mg/L	10:20:42
3	Cu 324.752†	1246.2	263.9	0.00217	mg/L	0.00217	mg/L	10:20:42
3	Fe 273.955†	-578.5	-60.7	-0.00835	mg/L	-0.00835	mg/L	10:21:02
3	Mg 279.077†	560403.4	570382.7	46.253	mg/L	46.253	mg/L	10:20:42
3	Mn 257.610†	-32.3	153.7	-0.00224	mg/L	-0.00224	mg/L	10:21:02
3	Ni 231.604†	73.7	88.8	0.00323	mg/L	0.00323	mg/L	10:21:02
3	Pb 220.353†	-7.1	-15.3	-0.00245	mg/L	-0.00245	mg/L	10:21:02
3	Sb 206.836†	51.9	25.5	0.00175	mg/L	0.00175	mg/L	10:21:02
3	Se 196.026†	1.5	8.0	0.00286	mg/L	0.00286	mg/L	10:21:02
3	Tl 190.801†	-17.1	0.2	-0.00528	mg/L	-0.00528	mg/L	10:21:02
3	V 292.402†	6766.4	6895.0	0.08081	mg/L	0.08081	mg/L	10:20:42
3	Zn 206.200†	-11.6	-30.8	-0.00080	mg/L	-0.00080	mg/L	10:21:02
3	Cd 226.502†	-21.7	3.3	-0.00015	mg/L	-0.00015	mg/L	10:21:02
3	Ti 334.940†	-1215.1	-1151.8	0.00039	mg/L	0.00039	mg/L	10:20:42
3	Ca 227.546†	29265.5	29700.9	195.18	mg/L	195.18	mg/L	10:20:42
3	Na 589.592	1211529.2	1211732.2	359.16	mg/L	359.16	mg/L	10:19:50
3	K 766.490	8738.6	8170.1	7.2214	mg/L	7.2214	mg/L	10:19:53

Mean Data: L0213-04A~MF5AW9

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	725736.0	95.23	%	0.515				0.54%
Lu 261.542	478634.2	97.84	%	0.552				0.56%
Ag 328.068†	9.4	0.00017	mg/L	0.000543	0.00017	mg/L	0.000543	313.35%
Al 308.215†	246.0	-0.04160	mg/L	0.002465	-0.04160	mg/L	0.002465	5.93%
As 188.979†	-1.0	0.00820	mg/L	0.004828	0.00820	mg/L	0.004828	58.86%
Ba 233.527†	1419.0	0.01518	mg/L	0.000163	0.01518	mg/L	0.000163	1.07%
Be 313.107†	193.8	0.00001	mg/L	0.000020	0.00001	mg/L	0.000020	181.64%
Co 228.616†	7.4	-0.00213	mg/L	0.000111	-0.00213	mg/L	0.000111	5.19%
Cr 267.716†	36646.9	0.99243	mg/L	0.000715	0.99243	mg/L	0.000715	0.07%
Cu 324.752†	261.8	0.00216	mg/L	0.000051	0.00216	mg/L	0.000051	2.35%
Fe 273.955†	-46.6	-0.00749	mg/L	0.000878	-0.00749	mg/L	0.000878	11.72%
Mg 279.077†	569595.8	46.189	mg/L	0.1311	46.189	mg/L	0.1311	0.28%
Mn 257.610†	160.5	-0.00222	mg/L	0.000028	-0.00222	mg/L	0.000028	1.25%
Ni 231.604†	86.2	0.00309	mg/L	0.000127	0.00309	mg/L	0.000127	4.12%
Pb 220.353†	-15.0	-0.00239	mg/L	0.001130	-0.00239	mg/L	0.001130	47.33%
Sb 206.836†	22.1	-0.00086	mg/L	0.002891	-0.00086	mg/L	0.002891	335.34%
Se 196.026†	7.7	0.00249	mg/L	0.003664	0.00249	mg/L	0.003664	147.30%
Tl 190.801†	1.4	-0.00422	mg/L	0.001445	-0.00422	mg/L	0.001445	34.20%
V 292.402†	6937.6	0.08130	mg/L	0.000564	0.08130	mg/L	0.000564	0.69%
Zn 206.200†	-32.6	-0.00088	mg/L	0.000187	-0.00088	mg/L	0.000187	21.18%
Cd 226.502†	1.0	-0.00022	mg/L	0.000120	-0.00022	mg/L	0.000120	55.73%
Ti 334.940†	-1162.7	0.00036	mg/L	0.000028	0.00036	mg/L	0.000028	7.86%
Ca 227.546†	29697.9	195.16	mg/L	0.655	195.16	mg/L	0.655	0.34%
Na 589.592	1209619.2	358.53	mg/L	1.431	358.53	mg/L	1.431	0.40%
K 766.490	8293.0	7.3280	mg/L	0.12996	7.3280	mg/L	0.12996	1.77%

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Sequence No.: 45
Sample ID: L0213-05A~MF5AX0
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 65
Date Collected: 2/9/2012 10:22:12 AM
Data Type: Reprocessed on 2/10/2012 7:28:08 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0213-05A~MF5AX0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Y 360.073	737646.5	737646.5	96.79	%			10:23:37
1	Lu 261.542	483486.9	483486.9	98.83	%			10:23:37
1	Ag 328.068†	-457.8	21.0	0.00023	mg/L	0.00023	mg/L	10:23:39
1	Al 308.215†	5990.1	186.9	-0.04684	mg/L	-0.04684	mg/L	10:23:39
1	As 188.979†	-2.8	0.8	0.00678	mg/L	0.00678	mg/L	10:23:59
1	Ba 233.527†	2385.0	2464.2	0.03653	mg/L	0.03653	mg/L	10:23:59
1	Be 313.107†	-4203.3	176.8	0.00000	mg/L	0.00000	mg/L	10:23:39
1	Co 228.616†	-0.9	16.4	-0.00154	mg/L	-0.00154	mg/L	10:23:59
1	Cr 267.716†	13938.0	14076.8	0.38116	mg/L	0.38116	mg/L	10:23:39
1	Cu 324.752†	1187.9	198.8	0.00177	mg/L	0.00177	mg/L	10:23:39
1	Fe 273.955†	-470.0	51.9	-0.00285	mg/L	-0.00285	mg/L	10:23:59
1	Mg 279.077†	444786.5	450667.9	36.504	mg/L	36.504	mg/L	10:23:37
1	Mn 257.610†	1768.8	1976.3	0.00244	mg/L	0.00244	mg/L	10:23:59
1	Ni 231.604†	34.2	48.5	0.00102	mg/L	0.00102	mg/L	10:23:59
1	Pb 220.353†	-10.0	-18.1	-0.00309	mg/L	-0.00309	mg/L	10:23:59
1	Sb 206.836†	33.5	6.6	-0.00099	mg/L	-0.00099	mg/L	10:23:59
1	Se 196.026†	1.7	8.2	0.00317	mg/L	0.00317	mg/L	10:23:59
1	Tl 190.801†	-13.7	3.8	-0.00196	mg/L	-0.00196	mg/L	10:23:59
1	V 292.402†	2905.7	2955.7	0.03439	mg/L	0.03439	mg/L	10:23:39
1	Zn 206.200†	20.5	1.7	-0.00133	mg/L	-0.00133	mg/L	10:23:59
1	Cd 226.502†	-36.2	-11.4	-0.00057	mg/L	-0.00057	mg/L	10:23:59
1	Ti 334.940†	-1390.5	-1323.4	0.00075	mg/L	0.00075	mg/L	10:23:39
1	Ca 227.546†	32259.5	32587.7	214.17	mg/L	214.17	mg/L	10:23:39
1	Na 589.592	862911.4	863114.4	255.81	mg/L	255.81	mg/L	10:23:22
1	K 766.490	11008.4	10439.9	9.1895	mg/L	9.1895	mg/L	10:23:24
2	Y 360.073	720823.2	720823.2	94.59	%			10:24:01
2	Lu 261.542	473550.3	473550.3	96.80	%			10:24:01
2	Ag 328.068†	-431.0	39.0	0.00041	mg/L	0.00041	mg/L	10:24:03
2	Al 308.215†	6060.6	386.8	-0.03639	mg/L	-0.03639	mg/L	10:24:03
2	As 188.979†	-3.1	0.5	0.00655	mg/L	0.00655	mg/L	10:24:24
2	Ba 233.527†	2395.9	2526.0	0.03779	mg/L	0.03779	mg/L	10:24:24
2	Be 313.107†	-4087.8	206.8	0.00002	mg/L	0.00002	mg/L	10:24:03
2	Co 228.616†	-9.0	8.0	-0.00192	mg/L	-0.00192	mg/L	10:24:24
2	Cr 267.716†	13896.8	14330.2	0.38802	mg/L	0.38802	mg/L	10:24:03
2	Cu 324.752†	1218.0	255.2	0.00211	mg/L	0.00211	mg/L	10:24:03
2	Fe 273.955†	-464.7	47.4	-0.00311	mg/L	-0.00311	mg/L	10:24:24
2	Mg 279.077†	436081.8	451118.8	36.540	mg/L	36.540	mg/L	10:24:01
2	Mn 257.610†	1757.4	2002.1	0.00250	mg/L	0.00250	mg/L	10:24:24
2	Ni 231.604†	48.9	64.5	0.00190	mg/L	0.00190	mg/L	10:24:24
2	Pb 220.353†	-9.8	-18.1	-0.00307	mg/L	-0.00307	mg/L	10:24:24
2	Sb 206.836†	29.3	2.9	-0.00398	mg/L	-0.00398	mg/L	10:24:24
2	Se 196.026†	3.4	10.0	0.00585	mg/L	0.00585	mg/L	10:24:24
2	Tl 190.801†	-14.1	3.0	-0.00264	mg/L	-0.00264	mg/L	10:24:24
2	V 292.402†	2925.2	3037.4	0.03535	mg/L	0.03535	mg/L	10:24:03
2	Zn 206.200†	19.2	0.8	-0.00135	mg/L	-0.00135	mg/L	10:24:24
2	Cd 226.502†	-27.0	-2.6	-0.00032	mg/L	-0.00032	mg/L	10:24:24
2	Ti 334.940†	-1330.5	-1290.9	0.00097	mg/L	0.00097	mg/L	10:24:03
2	Ca 227.546†	32187.9	33198.7	218.19	mg/L	218.19	mg/L	10:24:03
2	Na 589.592	860849.9	861052.9	255.20	mg/L	255.20	mg/L	10:23:26
2	K 766.490	11199.1	10630.6	9.3548	mg/L	9.3548	mg/L	10:23:28
3	Y 360.073	724182.7	724182.7	95.03	%			10:24:26
3	Lu 261.542	475071.8	475071.8	97.11	%			10:24:26
3	Ag 328.068†	-514.5	-45.6	-0.00041	mg/L	-0.00041	mg/L	10:24:28
3	Al 308.215†	5998.2	302.6	-0.04127	mg/L	-0.04127	mg/L	10:24:28
3	As 188.979†	-1.7	1.9	0.00820	mg/L	0.00820	mg/L	10:24:48
3	Ba 233.527†	2372.2	2493.7	0.03713	mg/L	0.03713	mg/L	10:24:48
3	Be 313.107†	-4179.0	126.4	-0.00003	mg/L	-0.00003	mg/L	10:24:28
3	Co 228.616†	-9.8	7.2	-0.00196	mg/L	-0.00196	mg/L	10:24:48
3	Cr 267.716†	13978.0	14367.8	0.38904	mg/L	0.38904	mg/L	10:24:28
3	Cu 324.752†	1203.4	236.1	0.00199	mg/L	0.00199	mg/L	10:24:28
3	Fe 273.955†	-460.9	52.9	-0.00278	mg/L	-0.00278	mg/L	10:24:48
3	Mg 279.077†	439512.9	453209.2	36.711	mg/L	36.711	mg/L	10:24:26
3	Mn 257.610†	1745.2	1983.6	0.00245	mg/L	0.00245	mg/L	10:24:48
3	Ni 231.604†	34.0	48.9	0.00104	mg/L	0.00104	mg/L	10:24:48
3	Pb 220.353†	-5.4	-13.5	-0.00181	mg/L	-0.00181	mg/L	10:24:48
3	Sb 206.836†	36.6	10.3	0.00177	mg/L	0.00177	mg/L	10:24:48
3	Se 196.026†	6.9	13.6	0.01095	mg/L	0.01095	mg/L	10:24:48

3	Tl 190.801†	-16.9	0.1	-0.00529	mg/L	-0.00529	mg/L	10:24:48
3	V 292.402†	2911.1	3013.2	0.03507	mg/L	0.03507	mg/L	10:24:28
3	Zn 206.200†	13.6	-5.0	-0.00163	mg/L	-0.00163	mg/L	10:24:48
3	Cd 226.502†	-27.9	-3.4	-0.00034	mg/L	-0.00034	mg/L	10:24:48
3	Ti 334.940†	-1325.2	-1281.1	0.00105	mg/L	0.00105	mg/L	10:24:28
3	Ca 227.546†	32540.5	33455.3	219.88	mg/L	219.88	mg/L	10:24:28
3	Na 589.592	861314.3	861517.4	255.34	mg/L	255.34	mg/L	10:23:30
3	K 766.490	11174.0	10605.5	9.3330	mg/L	9.3330	mg/L	10:23:33

Mean Data: L0213-05A~MF5AX0

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	727550.8	95.47	%	1.168				1.22%
Lu 261.542	477369.7	97.58	%	1.094				1.12%
Ag 328.068†	4.8	0.00008	mg/L	0.000430	0.00008	mg/L	0.000430	551.42%
Al 308.215†	292.1	-0.04150	mg/L	0.005231	-0.04150	mg/L	0.005231	12.60%
As 188.979†	1.1	0.00718	mg/L	0.000899	0.00718	mg/L	0.000899	12.52%
Ba 233.527†	2494.6	0.03715	mg/L	0.000633	0.03715	mg/L	0.000633	1.70%
Be 313.107†	170.0	-0.00001	mg/L	0.000025	-0.00001	mg/L	0.000025	357.25%
Co 228.616†	10.5	-0.00181	mg/L	0.000229	-0.00181	mg/L	0.000229	12.68%
Cr 267.716†	14258.3	0.38607	mg/L	0.004287	0.38607	mg/L	0.004287	1.11%
Cu 324.752†	230.1	0.00196	mg/L	0.000175	0.00196	mg/L	0.000175	8.94%
Fe 273.955†	50.7	-0.00291	mg/L	0.000171	-0.00291	mg/L	0.000171	5.89%
Mg 279.077†	451665.3	36.585	mg/L	0.1104	36.585	mg/L	0.1104	0.30%
Mn 257.610†	1987.4	0.00246	mg/L	0.000032	0.00246	mg/L	0.000032	1.32%
Ni 231.604†	53.9	0.00132	mg/L	0.000500	0.00132	mg/L	0.000500	37.93%
Pb 220.353†	-16.6	-0.00266	mg/L	0.000736	-0.00266	mg/L	0.000736	27.71%
Sb 206.836†	6.6	-0.00107	mg/L	0.002879	-0.00107	mg/L	0.002879	270.16%
Se 196.026†	10.6	0.00666	mg/L	0.003956	0.00666	mg/L	0.003956	59.42%
Tl 190.801†	2.3	-0.00330	mg/L	0.001760	-0.00330	mg/L	0.001760	53.36%
V 292.402†	3002.1	0.03493	mg/L	0.000491	0.03493	mg/L	0.000491	1.41%
Zn 206.200†	-0.9	-0.00144	mg/L	0.000169	-0.00144	mg/L	0.000169	11.77%
Cd 226.502†	-5.8	-0.00041	mg/L	0.000139	-0.00041	mg/L	0.000139	33.70%
Ti 334.940†	-1298.5	0.00092	mg/L	0.000156	0.00092	mg/L	0.000156	16.93%
Ca 227.546†	33080.6	217.41	mg/L	2.931	217.41	mg/L	2.931	1.35%
Na 589.592	861894.9	255.45	mg/L	0.321	255.45	mg/L	0.321	0.13%
K 766.490	10558.7	9.2924	mg/L	0.08982	9.2924	mg/L	0.08982	0.97%

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Sequence No.: 46
Sample ID: L0213-06A~MF5AX1
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 2/9/2012 10:25:58 AM
Data Type: Reprocessed on 2/10/2012 7:28:08 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0213-06A~MF5AX1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Y 360.073	718390.1	718390.1	94.27	%			10:27:25
1	Lu 261.542	474188.8	474188.8	96.93	%			10:27:25
1	Ag 328.068†	-520.0	-52.2	-0.00047	mg/L	-0.00047	mg/L	10:27:25
1	Al 308.215†	5932.3	246.1	-0.04452	mg/L	-0.04452	mg/L	10:27:25
1	As 188.979†	-4.8	-1.2	0.00312	mg/L	0.00312	mg/L	10:27:45
1	Ba 233.527†	1673.9	1777.9	0.02249	mg/L	0.02249	mg/L	10:27:45
1	Be 313.107†	-4106.4	193.3	0.00001	mg/L	0.00001	mg/L	10:27:25
1	Co 228.616†	3.0	20.3	-0.00130	mg/L	-0.00130	mg/L	10:27:45
1	Cr 267.716†	5670.3	5823.8	0.15763	mg/L	0.15763	mg/L	10:27:45
1	Cu 324.752†	1217.4	252.9	0.00210	mg/L	0.00210	mg/L	10:27:25
1	Fe 273.955†	-482.7	29.5	-0.00499	mg/L	-0.00499	mg/L	10:27:45
1	Mg 279.077†	416270.7	430073.7	34.827	mg/L	34.827	mg/L	10:27:25
1	Mn 257.610†	1416.7	1648.1	0.00170	mg/L	0.00170	mg/L	10:27:45
1	Ni 231.604†	95.1	112.0	0.00450	mg/L	0.00450	mg/L	10:27:45
1	Pb 220.353†	-5.6	-13.7	-0.00186	mg/L	-0.00186	mg/L	10:27:45
1	Sb 206.836†	30.2	3.8	0.00120	mg/L	0.00120	mg/L	10:27:45
1	Se 196.026†	-1.2	5.3	-0.00101	mg/L	-0.00101	mg/L	10:27:45
1	Tl 190.801†	-7.5	9.8	0.00363	mg/L	0.00363	mg/L	10:27:45
1	V 292.402†	3233.9	3351.9	0.03866	mg/L	0.03866	mg/L	10:27:45
1	Zn 206.200†	38.1	20.3	-0.00120	mg/L	-0.00120	mg/L	10:27:45

1	Cd 226.502†	-31.5	-7.1	-0.00045	mg/L	-0.00045	mg/L	10:27:45
1	Ti 334.940†	-1341.2	-1300.1	0.00107	mg/L	0.00107	mg/L	10:27:25
1	Ca 227.546†	32555.6	33533.3	220.39	mg/L	220.39	mg/L	10:27:25
1	Na 589.592	892242.1	892445.2	264.51	mg/L	264.51	mg/L	10:27:10
1	K 766.490	10586.3	10017.8	8.8234	mg/L	8.8234	mg/L	10:27:12
2	Y 360.073	720297.2	720297.2	94.52	%			10:27:48
2	Lu 261.542	476276.5	476276.5	97.36	%			10:27:48
2	Ag 328.068†	-525.1	-55.1	-0.00050	mg/L	-0.00050	mg/L	10:27:48
2	Al 308.215†	6029.4	319.0	-0.04081	mg/L	-0.04081	mg/L	10:27:48
2	As 188.979†	3.7	7.4	0.01309	mg/L	0.01309	mg/L	10:28:08
2	Ba 233.527†	1674.1	1770.5	0.02234	mg/L	0.02234	mg/L	10:28:08
2	Be 313.107†	-4224.5	90.6	-0.00006	mg/L	-0.00006	mg/L	10:27:48
2	Co 228.616†	-16.5	0.3	-0.00219	mg/L	-0.00219	mg/L	10:28:08
2	Cr 267.716†	5670.1	5798.0	0.15693	mg/L	0.15693	mg/L	10:28:08
2	Cu 324.752†	1256.9	287.9	0.00231	mg/L	0.00231	mg/L	10:27:48
2	Fe 273.955†	-448.2	67.1	-0.00270	mg/L	-0.00270	mg/L	10:28:08
2	Mg 279.077†	419853.9	431871.7	34.973	mg/L	34.973	mg/L	10:27:48
2	Mn 257.610†	1420.8	1646.0	0.00169	mg/L	0.00169	mg/L	10:28:08
2	Ni 231.604†	103.3	120.0	0.00495	mg/L	0.00495	mg/L	10:28:08
2	Pb 220.353†	-7.1	-15.3	-0.00226	mg/L	-0.00226	mg/L	10:28:08
2	Sb 206.836†	30.7	4.3	0.00156	mg/L	0.00156	mg/L	10:28:08
2	Se 196.026†	1.4	7.9	0.00275	mg/L	0.00275	mg/L	10:28:08
2	Tl 190.801†	-15.1	2.0	-0.00354	mg/L	-0.00354	mg/L	10:28:08
2	V 292.402†	3198.7	3301.2	0.03808	mg/L	0.03808	mg/L	10:28:08
2	Zn 206.200†	46.8	29.0	-0.00077	mg/L	-0.00077	mg/L	10:28:08
2	Cd 226.502†	-34.2	-9.9	-0.00053	mg/L	-0.00053	mg/L	10:28:08
2	Ti 334.940†	-1427.0	-1382.2	0.00090	mg/L	0.00090	mg/L	10:27:48
2	Ca 227.546†	33026.6	33869.9	222.60	mg/L	222.60	mg/L	10:27:48
2	Na 589.592	899623.2	899826.3	266.69	mg/L	266.69	mg/L	10:27:15
2	K 766.490	10747.6	10179.1	8.9633	mg/L	8.9633	mg/L	10:27:17
3	Y 360.073	718349.1	718349.1	94.26	%			10:28:11
3	Lu 261.542	474737.5	474737.5	97.04	%			10:28:11
3	Ag 328.068†	-446.5	24.2	0.00027	mg/L	0.00027	mg/L	10:28:11
3	Al 308.215†	5975.4	283.4	-0.04273	mg/L	-0.04273	mg/L	10:28:11
3	As 188.979†	-4.0	-0.4	0.00409	mg/L	0.00409	mg/L	10:28:31
3	Ba 233.527†	1684.6	1786.9	0.02268	mg/L	0.02268	mg/L	10:28:31
3	Be 313.107†	-4305.1	-6.6	-0.00011	mg/L	-0.00011	mg/L	10:28:11
3	Co 228.616†	-0.4	16.8	-0.00145	mg/L	-0.00145	mg/L	10:28:31
3	Cr 267.716†	5671.4	5818.2	0.15748	mg/L	0.15748	mg/L	10:28:31
3	Cu 324.752†	1257.1	292.3	0.00234	mg/L	0.00234	mg/L	10:28:11
3	Fe 273.955†	-467.8	45.4	-0.00404	mg/L	-0.00404	mg/L	10:28:31
3	Mg 279.077†	419969.9	433389.3	35.097	mg/L	35.097	mg/L	10:28:11
3	Mn 257.610†	1417.3	1647.0	0.00169	mg/L	0.00169	mg/L	10:28:31
3	Ni 231.604†	97.4	114.3	0.00463	mg/L	0.00463	mg/L	10:28:31
3	Pb 220.353†	-6.6	-14.8	-0.00213	mg/L	-0.00213	mg/L	10:28:31
3	Sb 206.836†	28.9	2.4	0.00013	mg/L	0.00013	mg/L	10:28:31
3	Se 196.026†	2.0	8.5	0.00365	mg/L	0.00365	mg/L	10:28:31
3	Tl 190.801†	-14.5	2.6	-0.00300	mg/L	-0.00300	mg/L	10:28:31
3	V 292.402†	3215.7	3329.3	0.03840	mg/L	0.03840	mg/L	10:28:31
3	Zn 206.200†	46.5	28.9	-0.00077	mg/L	-0.00077	mg/L	10:28:31
3	Cd 226.502†	-34.4	-10.1	-0.00053	mg/L	-0.00053	mg/L	10:28:31
3	Ti 334.940†	-1373.5	-1331.8	0.00103	mg/L	0.00103	mg/L	10:28:11
3	Ca 227.546†	32877.9	33826.6	222.32	mg/L	222.32	mg/L	10:28:11
3	Na 589.592	901031.1	901234.2	267.11	mg/L	267.11	mg/L	10:27:19
3	K 766.490	10723.4	10154.9	8.9424	mg/L	8.9424	mg/L	10:27:21

Mean Data: L0213-06A~MF5AX1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	719012.2	94.35	%	0.146				0.15%
Lu 261.542	475067.6	97.11	%	0.221				0.23%
Ag 328.068†	-27.7	-0.00023	mg/L	0.000433	-0.00023	mg/L	0.000433	187.21%
Al 308.215†	282.8	-0.04269	mg/L	0.001860	-0.04269	mg/L	0.001860	4.36%
As 188.979†	1.9	0.00677	mg/L	0.005500	0.00677	mg/L	0.005500	81.26%
Ba 233.527†	1778.4	0.02250	mg/L	0.000168	0.02250	mg/L	0.000168	0.75%
Be 313.107†	92.4	-0.00005	mg/L	0.000061	-0.00005	mg/L	0.000061	112.44%
Co 228.616†	12.5	-0.00165	mg/L	0.000477	-0.00165	mg/L	0.000477	28.99%
Cr 267.716†	5813.3	0.15735	mg/L	0.000367	0.15735	mg/L	0.000367	0.23%
Cu 324.752†	277.7	0.00225	mg/L	0.000132	0.00225	mg/L	0.000132	5.86%
Fe 273.955†	47.3	-0.00391	mg/L	0.001151	-0.00391	mg/L	0.001151	29.45%

Mg 279.077†	431778.2	34.966	mg/L	0.1352	34.966	mg/L	0.1352	0.39%
Mn 257.610†	1647.0	0.00169	mg/L	0.000006	0.00169	mg/L	0.000006	0.35%
Ni 231.604†	115.4	0.00470	mg/L	0.000229	0.00470	mg/L	0.000229	4.88%
Pb 220.353†	-14.6	-0.00208	mg/L	0.000202	-0.00208	mg/L	0.000202	9.72%
Sb 206.836†	3.5	0.00096	mg/L	0.000742	0.00096	mg/L	0.000742	76.91%
Se 196.026†	7.2	0.00179	mg/L	0.002472	0.00179	mg/L	0.002472	137.72%
Tl 190.801†	4.8	-0.00097	mg/L	0.003991	-0.00097	mg/L	0.003991	410.36%
V 292.402†	3327.4	0.03838	mg/L	0.000294	0.03838	mg/L	0.000294	0.77%
Zn 206.200†	26.0	-0.00091	mg/L	0.000246	-0.00091	mg/L	0.000246	26.91%
Cd 226.502†	-9.0	-0.00050	mg/L	0.000047	-0.00050	mg/L	0.000047	9.36%
Ti 334.940†	-1338.0	0.00100	mg/L	0.000088	0.00100	mg/L	0.000088	8.78%
Ca 227.546†	33743.2	221.77	mg/L	1.204	221.77	mg/L	1.204	0.54%
Na 589.592	897835.2	266.10	mg/L	1.399	266.10	mg/L	1.399	0.53%
K 766.490	10117.3	8.9097	mg/L	0.07545	8.9097	mg/L	0.07545	0.85%

Sequence No.: 47
Sample ID: L0213-07A~MF5AX2
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 67
Date Collected: 2/9/2012 10:29:40 AM
Data Type: Reprocessed on 2/10/2012 7:28:09 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0213-07A~MF5AX2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	732068.9	732068.9	96.06	%			10:31:06
1	Lu 261.542	481879.1	481879.1	98.50	%			10:31:06
1	Ag 328.068†	-473.0	4.0	0.00007	mg/L	0.00007	mg/L	10:31:08
1	Al 308.215†	5924.1	140.1	-0.05045	mg/L	-0.05045	mg/L	10:31:08
1	As 188.979†	-3.1	0.5	0.00438	mg/L	0.00438	mg/L	10:31:29
1	Ba 233.527†	1831.9	1910.7	0.02521	mg/L	0.02521	mg/L	10:31:29
1	Be 313.107†	-4153.8	212.7	0.00002	mg/L	0.00002	mg/L	10:31:08
1	Co 228.616†	24.7	42.4	-0.00028	mg/L	-0.00028	mg/L	10:31:29
1	Cr 267.716†	1127.2	1118.3	0.03019	mg/L	0.03019	mg/L	10:31:29
1	Cu 324.752†	1206.3	221.6	0.00191	mg/L	0.00191	mg/L	10:31:08
1	Fe 273.955†	-452.3	68.3	-0.00292	mg/L	-0.00292	mg/L	10:31:29
1	Mg 279.077†	395233.6	401862.9	32.529	mg/L	32.529	mg/L	10:31:06
1	Mn 257.610†	381.3	573.7	-0.00082	mg/L	-0.00082	mg/L	10:31:29
1	Ni 231.604†	337.1	356.1	0.01791	mg/L	0.01791	mg/L	10:31:29
1	Pb 220.353†	3.7	-4.3	0.00073	mg/L	0.00073	mg/L	10:31:29
1	Sb 206.836†	26.0	-0.9	0.00004	mg/L	0.00004	mg/L	10:31:29
1	Se 196.026†	-4.8	1.6	-0.00626	mg/L	-0.00626	mg/L	10:31:29
1	Tl 190.801†	-9.3	8.1	0.00203	mg/L	0.00203	mg/L	10:31:29
1	V 292.402†	2935.2	2995.4	0.03436	mg/L	0.03436	mg/L	10:31:08
1	Zn 206.200†	54.0	35.8	-0.00088	mg/L	-0.00088	mg/L	10:31:29
1	Cd 226.502†	-24.1	0.9	-0.00022	mg/L	-0.00022	mg/L	10:31:29
1	Ti 334.940†	-1426.7	-1364.8	0.00097	mg/L	0.00097	mg/L	10:31:08
1	Ca 227.546†	33223.6	33675.5	221.33	mg/L	221.33	mg/L	10:31:08
1	Na 589.592	932458.7	932661.7	276.43	mg/L	276.43	mg/L	10:30:51
1	K 766.490	9187.0	8618.5	7.6102	mg/L	7.6102	mg/L	10:30:53
2	Y 360.073	739239.7	739239.7	97.00	%			10:31:31
2	Lu 261.542	486314.4	486314.4	99.41	%			10:31:31
2	Ag 328.068†	-443.0	38.6	0.00040	mg/L	0.00040	mg/L	10:31:33
2	Al 308.215†	6047.0	208.9	-0.04641	mg/L	-0.04641	mg/L	10:31:33
2	As 188.979†	-6.9	-3.3	0.00001	mg/L	0.00001	mg/L	10:31:53
2	Ba 233.527†	1845.9	1907.8	0.02515	mg/L	0.02515	mg/L	10:31:53
2	Be 313.107†	-4146.2	258.9	0.00005	mg/L	0.00005	mg/L	10:31:33
2	Co 228.616†	13.3	30.6	-0.00080	mg/L	-0.00080	mg/L	10:31:53
2	Cr 267.716†	1120.7	1101.3	0.02973	mg/L	0.02973	mg/L	10:31:53
2	Cu 324.752†	1245.3	249.7	0.00208	mg/L	0.00208	mg/L	10:31:33
2	Fe 273.955†	-440.0	84.8	-0.00191	mg/L	-0.00191	mg/L	10:31:53
2	Mg 279.077†	399863.8	402861.2	32.611	mg/L	32.611	mg/L	10:31:31
2	Mn 257.610†	406.5	595.5	-0.00077	mg/L	-0.00077	mg/L	10:31:53
2	Ni 231.604†	334.7	350.6	0.01762	mg/L	0.01762	mg/L	10:31:53
2	Pb 220.353†	-5.3	-13.4	-0.00176	mg/L	-0.00176	mg/L	10:31:53
2	Sb 206.836†	34.1	7.0	0.00622	mg/L	0.00622	mg/L	10:31:53
2	Se 196.026†	-5.7	0.7	-0.00751	mg/L	-0.00751	mg/L	10:31:53
2	Tl 190.801†	-21.6	-4.1	-0.00920	mg/L	-0.00920	mg/L	10:31:53
2	V 292.402†	2902.0	2934.9	0.03366	mg/L	0.03366	mg/L	10:31:33

2	Zn 206.200†	59.2	40.5	-0.00065 mg/L	-0.00065 mg/L	10:31:53
2	Cd 226.502†	-25.1	0.1	-0.00024 mg/L	-0.00024 mg/L	10:31:53
2	Ti 334.940†	-1397.0	-1321.8	0.00104 mg/L	0.00104 mg/L	10:31:33
2	Ca 227.546†	33293.7	33438.3	219.77 mg/L	219.77 mg/L	10:31:33
2	Na 589.592	946232.3	946435.4	280.51 mg/L	280.51 mg/L	10:30:56
2	K 766.490	9238.6	8670.1	7.6549 mg/L	7.6549 mg/L	10:30:58
3	Y 360.073	741796.5	741796.5	97.34 %		10:31:56
3	Lu 261.542	488551.7	488551.7	99.87 %		10:31:56
3	Ag 328.068†	-463.9	19.8	0.00022 mg/L	0.00022 mg/L	10:31:58
3	Al 308.215†	6092.0	226.0	-0.04593 mg/L	-0.04593 mg/L	10:31:58
3	As 188.979†	-7.7	-4.1	-0.00088 mg/L	-0.00088 mg/L	10:32:18
3	Ba 233.527†	1855.9	1909.4	0.02518 mg/L	0.02518 mg/L	10:32:18
3	Be 313.107†	-4264.7	159.3	-0.00001 mg/L	-0.00001 mg/L	10:31:58
3	Co 228.616†	18.2	35.5	-0.00058 mg/L	-0.00058 mg/L	10:32:18
3	Cr 267.716†	1126.4	1101.8	0.02975 mg/L	0.02975 mg/L	10:32:18
3	Cu 324.752†	1258.6	257.2	0.00212 mg/L	0.00212 mg/L	10:31:58
3	Fe 273.955†	-407.2	119.7	0.00024 mg/L	0.00024 mg/L	10:32:18
3	Mg 279.077†	398765.9	399919.8	32.371 mg/L	32.371 mg/L	10:31:56
3	Mn 257.610†	386.4	573.5	-0.00082 mg/L	-0.00082 mg/L	10:32:18
3	Ni 231.604†	339.8	354.2	0.01781 mg/L	0.01781 mg/L	10:32:18
3	Pb 220.353†	-9.3	-17.3	-0.00281 mg/L	-0.00281 mg/L	10:32:18
3	Sb 206.836†	21.8	-5.5	-0.00354 mg/L	-0.00354 mg/L	10:32:18
3	Se 196.026†	-5.7	0.8	-0.00742 mg/L	-0.00742 mg/L	10:32:18
3	Tl 190.801†	-18.1	-0.5	-0.00590 mg/L	-0.00590 mg/L	10:32:18
3	V 292.402†	2970.5	2990.1	0.03430 mg/L	0.03430 mg/L	10:31:58
3	Zn 206.200†	49.9	30.9	-0.00112 mg/L	-0.00112 mg/L	10:32:18
3	Cd 226.502†	-30.4	-5.1	-0.00039 mg/L	-0.00039 mg/L	10:32:18
3	Ti 334.940†	-1407.5	-1325.8	0.00113 mg/L	0.00113 mg/L	10:31:58
3	Ca 227.546†	33933.4	33925.6	222.97 mg/L	222.97 mg/L	10:31:58
3	Na 589.592	954323.3	954526.4	282.91 mg/L	282.91 mg/L	10:31:00
3	K 766.490	9197.9	8629.4	7.6196 mg/L	7.6196 mg/L	10:31:02

Mean Data: L0213-07A~MF5AX2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	737701.7	96.80	%	0.662				0.68%
Lu 261.542	485581.7	99.26	%	0.694				0.70%
Ag 328.068†	20.8	0.00023	mg/L	0.000166	0.00023	mg/L	0.000166	71.58%
Al 308.215†	191.7	-0.04760	mg/L	0.002478	-0.04760	mg/L	0.002478	5.21%
As 188.979†	-2.3	0.00117	mg/L	0.002817	0.00117	mg/L	0.002817	240.77%
Ba 233.527†	1909.3	0.02518	mg/L	0.000030	0.02518	mg/L	0.000030	0.12%
Be 313.107†	210.3	0.00002	mg/L	0.000030	0.00002	mg/L	0.000030	174.77%
Co 228.616†	36.1	-0.00055	mg/L	0.000264	-0.00055	mg/L	0.000264	47.81%
Cr 267.716†	1107.1	0.02989	mg/L	0.000261	0.02989	mg/L	0.000261	0.87%
Cu 324.752†	242.8	0.00203	mg/L	0.000114	0.00203	mg/L	0.000114	5.62%
Fe 273.955†	90.9	-0.00153	mg/L	0.001612	-0.00153	mg/L	0.001612	105.60%
Mg 279.077†	401548.0	32.504	mg/L	0.1218	32.504	mg/L	0.1218	0.37%
Mn 257.610†	580.9	-0.00080	mg/L	0.000028	-0.00080	mg/L	0.000028	3.47%
Ni 231.604†	353.6	0.01778	mg/L	0.000152	0.01778	mg/L	0.000152	0.86%
Pb 220.353†	-11.7	-0.00128	mg/L	0.001818	-0.00128	mg/L	0.001818	141.70%
Sb 206.836†	0.2	0.00091	mg/L	0.004938	0.00091	mg/L	0.004938	543.79%
Se 196.026†	1.0	-0.00707	mg/L	0.000695	-0.00707	mg/L	0.000695	9.84%
Tl 190.801†	1.2	-0.00436	mg/L	0.005772	-0.00436	mg/L	0.005772	132.41%
V 292.402†	2973.5	0.03411	mg/L	0.000388	0.03411	mg/L	0.000388	1.14%
Zn 206.200†	35.7	-0.00088	mg/L	0.000235	-0.00088	mg/L	0.000235	26.60%
Cd 226.502†	-1.4	-0.00028	mg/L	0.000093	-0.00028	mg/L	0.000093	33.04%
Ti 334.940†	-1337.5	0.00105	mg/L	0.000085	0.00105	mg/L	0.000085	8.13%
Ca 227.546†	33679.8	221.35	mg/L	1.602	221.35	mg/L	1.602	0.72%
Na 589.592	944541.2	279.95	mg/L	3.277	279.95	mg/L	3.277	1.17%
K 766.490	8639.3	7.6282	mg/L	0.02360	7.6282	mg/L	0.02360	0.31%

Sequence No.: 48
Sample ID: L0213-08A~MF5AX3
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 68
Date Collected: 2/9/2012 10:33:30 AM
Data Type: Reprocessed on 2/10/2012 7:28:10 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L0213-08A~MF5AX3

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	783943.3	783943.3	102.9	%			10:34:50
1	Lu 261.542	508938.6	508938.6	104.0	%			10:34:50
1	Ag 328.068†	-479.6	23.3	0.00022	mg/L	0.00022	mg/L	10:34:52
1	Al 308.215†	5760.8	-336.6	-0.04489	mg/L	-0.04489	mg/L	10:34:52
1	As 188.979†	1.2	4.9	0.00532	mg/L	0.00532	mg/L	10:35:12
1	Ba 233.527†	-38.2	14.2	-0.01360	mg/L	-0.01360	mg/L	10:35:12
1	Be 313.107†	-4117.2	472.2	0.00019	mg/L	0.00019	mg/L	10:34:52
1	Co 228.616†	-11.2	6.5	-0.00188	mg/L	-0.00188	mg/L	10:35:12
1	Cr 267.716†	16.1	-10.6	-0.00019	mg/L	-0.00019	mg/L	10:34:52
1	Cu 324.752†	1136.9	89.8	0.00110	mg/L	0.00110	mg/L	10:34:52
1	Fe 273.955†	-395.7	147.1	0.00439	mg/L	0.00439	mg/L	10:34:52
1	Mg 279.077†	-316.9	313.4	-0.17699	mg/L	-0.17699	mg/L	10:34:52
1	Mn 257.610†	-107.6	83.2	-0.00103	mg/L	-0.00103	mg/L	10:34:52
1	Ni 231.604†	-10.7	3.6	-0.00145	mg/L	-0.00145	mg/L	10:35:12
1	Pb 220.353†	2.3	-5.8	-0.00126	mg/L	-0.00126	mg/L	10:35:12
1	Sb 206.836†	30.7	2.2	0.00383	mg/L	0.00383	mg/L	10:35:12
1	Se 196.026†	-6.4	0.3	-0.00812	mg/L	-0.00812	mg/L	10:35:12
1	Tl 190.801†	-18.8	-0.5	-0.00673	mg/L	-0.00673	mg/L	10:35:12
1	V 292.402†	-42.7	-25.5	-0.00063	mg/L	-0.00063	mg/L	10:34:52
1	Zn 206.200†	34.6	14.2	-0.00205	mg/L	-0.00205	mg/L	10:35:12
1	Cd 226.502†	-21.8	4.3	-0.00012	mg/L	-0.00012	mg/L	10:35:12
1	Ti 334.940†	-74.5	11.9	-0.00161	mg/L	-0.00161	mg/L	10:34:52
1	Ca 227.546†	61.0	5.2	-0.08999	mg/L	-0.08999	mg/L	10:35:12
1	Na 589.592	2432.3	2635.4	0.71631	mg/L	0.71631	mg/L	10:34:42
1	K 766.490	1045.1	476.6	0.55067	mg/L	0.55067	mg/L	10:34:42
2	Y 360.073	788360.1	788360.1	103.4	%			10:35:14
2	Lu 261.542	512337.0	512337.0	104.7	%			10:35:14
2	Ag 328.068†	-459.2	45.8	0.00043	mg/L	0.00043	mg/L	10:35:17
2	Al 308.215†	5748.6	-385.0	-0.04757	mg/L	-0.04757	mg/L	10:35:17
2	As 188.979†	1.0	4.6	0.00502	mg/L	0.00502	mg/L	10:35:37
2	Ba 233.527†	-34.9	17.6	-0.01353	mg/L	-0.01353	mg/L	10:35:37
2	Be 313.107†	-4191.7	427.3	0.00016	mg/L	0.00016	mg/L	10:35:17
2	Co 228.616†	-13.0	4.8	-0.00196	mg/L	-0.00196	mg/L	10:35:37
2	Cr 267.716†	20.1	-6.9	-0.00009	mg/L	-0.00009	mg/L	10:35:17
2	Cu 324.752†	1107.3	54.2	0.00088	mg/L	0.00088	mg/L	10:35:17
2	Fe 273.955†	-378.8	165.8	0.00553	mg/L	0.00553	mg/L	10:35:17
2	Mg 279.077†	-448.7	189.6	-0.18708	mg/L	-0.18708	mg/L	10:35:17
2	Mn 257.610†	-113.9	77.8	-0.00105	mg/L	-0.00105	mg/L	10:35:17
2	Ni 231.604†	-24.2	-9.2	-0.00215	mg/L	-0.00215	mg/L	10:35:37
2	Pb 220.353†	3.4	-4.8	-0.00098	mg/L	-0.00098	mg/L	10:35:37
2	Sb 206.836†	25.2	-3.2	-0.00042	mg/L	-0.00042	mg/L	10:35:37
2	Se 196.026†	-2.6	4.0	-0.00280	mg/L	-0.00280	mg/L	10:35:37
2	Tl 190.801†	-18.6	-0.2	-0.00642	mg/L	-0.00642	mg/L	10:35:37
2	V 292.402†	-14.6	1.6	-0.00032	mg/L	-0.00032	mg/L	10:35:17
2	Zn 206.200†	29.5	9.1	-0.00230	mg/L	-0.00230	mg/L	10:35:37
2	Cd 226.502†	-33.6	-6.8	-0.00044	mg/L	-0.00044	mg/L	10:35:37
2	Ti 334.940†	-84.8	2.6	-0.00163	mg/L	-0.00163	mg/L	10:35:17
2	Ca 227.546†	69.4	12.8	-0.04025	mg/L	-0.04025	mg/L	10:35:37
2	Na 589.592	2378.7	2581.7	0.70041	mg/L	0.70041	mg/L	10:34:44
2	K 766.490	1025.0	456.5	0.53323	mg/L	0.53323	mg/L	10:34:44
3	Y 360.073	768237.9	768237.9	100.8	%			10:35:39
3	Lu 261.542	497233.0	497233.0	101.6	%			10:35:39
3	Ag 328.068†	-445.5	46.0	0.00044	mg/L	0.00044	mg/L	10:35:42
3	Al 308.215†	5775.7	-191.7	-0.03690	mg/L	-0.03690	mg/L	10:35:42
3	As 188.979†	-5.4	-1.6	-0.00206	mg/L	-0.00206	mg/L	10:36:02
3	Ba 233.527†	-40.7	10.9	-0.01367	mg/L	-0.01367	mg/L	10:36:02
3	Be 313.107†	-4184.9	312.4	0.00009	mg/L	0.00009	mg/L	10:35:42
3	Co 228.616†	-8.1	9.3	-0.00176	mg/L	-0.00176	mg/L	10:36:02
3	Cr 267.716†	17.7	-8.7	-0.00014	mg/L	-0.00014	mg/L	10:35:42
3	Cu 324.752†	1106.1	85.2	0.00107	mg/L	0.00107	mg/L	10:35:42
3	Fe 273.955†	-393.8	140.0	0.00395	mg/L	0.00395	mg/L	10:35:42
3	Mg 279.077†	-381.8	242.4	-0.18278	mg/L	-0.18278	mg/L	10:35:42
3	Mn 257.610†	-97.8	90.3	-0.00102	mg/L	-0.00102	mg/L	10:35:42
3	Ni 231.604†	-17.7	-3.5	-0.00184	mg/L	-0.00184	mg/L	10:36:02
3	Pb 220.353†	10.7	2.6	0.00102	mg/L	0.00102	mg/L	10:36:02
3	Sb 206.836†	25.9	-1.8	0.00067	mg/L	0.00067	mg/L	10:36:02
3	Se 196.026†	-1.1	5.3	-0.00087	mg/L	-0.00087	mg/L	10:36:02
3	Tl 190.801†	-12.8	5.0	-0.00164	mg/L	-0.00164	mg/L	10:36:02

3	V 292.402†	0.6	16.1	-0.00015	mg/L	-0.00015	mg/L	10:35:42
3	Zn 206.200†	29.1	9.6	-0.00227	mg/L	-0.00227	mg/L	10:36:02
3	Cd 226.502†	-24.4	1.3	-0.00021	mg/L	-0.00021	mg/L	10:36:02
3	Ti 334.940†	-43.3	41.0	-0.00152	mg/L	-0.00152	mg/L	10:35:42
3	Ca 227.546†	69.4	14.9	-0.02658	mg/L	-0.02658	mg/L	10:36:02
3	Na 589.592	2355.3	2558.3	0.69347	mg/L	0.69347	mg/L	10:34:46
3	K 766.490	988.6	420.1	0.50169	mg/L	0.50169	mg/L	10:34:46

Mean Data: L0213-08A~MF5AX3

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	780180.4	102.4	%	1.39				1.36%
Lu 261.542	506169.5	103.5	%	1.62				1.57%
Ag 328.068†	38.4	0.00036	mg/L	0.000126	0.00036	mg/L	0.000126	34.92%
Al 308.215†	-304.4	-0.04312	mg/L	0.005548	-0.04312	mg/L	0.005548	12.87%
As 188.979†	2.6	0.00276	mg/L	0.004178	0.00276	mg/L	0.004178	151.38%
Ba 233.527†	14.2	-0.01360	mg/L	0.000069	-0.01360	mg/L	0.000069	0.51%
Be 313.107†	404.0	0.00014	mg/L	0.000050	0.00014	mg/L	0.000050	34.88%
Co 228.616†	6.8	-0.00186	mg/L	0.000100	-0.00186	mg/L	0.000100	5.37%
Cr 267.716†	-8.7	-0.00014	mg/L	0.000050	-0.00014	mg/L	0.000050	35.18%
Cu 324.752†	76.4	0.00101	mg/L	0.000118	0.00101	mg/L	0.000118	11.60%
Fe 273.955†	151.0	0.00462	mg/L	0.000817	0.00462	mg/L	0.000817	17.66%
Mg 279.077†	248.5	-0.18228	mg/L	0.005060	-0.18228	mg/L	0.005060	2.78%
Mn 257.610†	83.8	-0.00103	mg/L	0.000015	-0.00103	mg/L	0.000015	1.46%
Ni 231.604†	-3.0	-0.00181	mg/L	0.000354	-0.00181	mg/L	0.000354	19.50%
Pb 220.353†	-2.7	-0.00041	mg/L	0.001244	-0.00041	mg/L	0.001244	307.01%
Sb 206.836†	-1.0	0.00136	mg/L	0.002211	0.00136	mg/L	0.002211	162.67%
Se 196.026†	3.2	-0.00393	mg/L	0.003753	-0.00393	mg/L	0.003753	95.56%
Tl 190.801†	1.5	-0.00493	mg/L	0.002853	-0.00493	mg/L	0.002853	57.89%
V 292.402†	-2.6	-0.00037	mg/L	0.000244	-0.00037	mg/L	0.000244	66.82%
Zn 206.200†	11.0	-0.00220	mg/L	0.000138	-0.00220	mg/L	0.000138	6.27%
Cd 226.502†	-0.4	-0.00026	mg/L	0.000164	-0.00026	mg/L	0.000164	63.45%
Ti 334.940†	18.5	-0.00159	mg/L	0.000057	-0.00159	mg/L	0.000057	3.62%
Ca 227.546†	10.9	-0.05228	mg/L	0.033369	-0.05228	mg/L	0.033369	63.83%
Na 589.592	2591.8	0.70339	mg/L	0.011711	0.70339	mg/L	0.011711	1.66%
K 766.490	451.1	0.52853	mg/L	0.024825	0.52853	mg/L	0.024825	4.70%

Sequence No.: 49
Sample ID: CCV98
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 2/9/2012 10:37:11 AM
Data Type: Reprocessed on 2/10/2012 7:28:10 AM
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV98

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Y 360.073	708905.5	708905.5	93.02	%			10:38:31
1	Lu 261.542	462624.5	462624.5	94.57	%			10:38:31
1	Ag 328.068†	28424.2	30541.8	0.29765	mg/L	0.29765	mg/L	10:38:33
1	Al 308.215†	694241.0	728259.9	40.114	mg/L	40.114	mg/L	10:38:31
1	As 188.979†	771.9	819.9	0.95512	mg/L	0.95512	mg/L	10:38:53
1	Ba 233.527†	444497.1	470090.1	9.6020	mg/L	9.6020	mg/L	10:38:31
1	Be 313.107†	735642.4	782344.3	0.48440	mg/L	0.48440	mg/L	10:38:31
1	Co 228.616†	50816.6	53754.0	2.3864	mg/L	2.3864	mg/L	10:38:33
1	Cr 267.716†	68532.0	72444.0	1.9612	mg/L	1.9612	mg/L	10:38:33
1	Cu 324.752†	614816.1	649142.2	3.9588	mg/L	3.9588	mg/L	10:38:31
1	Fe 273.955†	303152.3	321099.7	19.631	mg/L	19.631	mg/L	10:38:33
1	Mg 279.077†	1659326.2	1755293.9	142.79	mg/L	142.79	mg/L	10:38:31
1	Mn 257.610†	1567543.3	1657805.5	3.9856	mg/L	3.9856	mg/L	10:38:31
1	Ni 231.604†	40874.7	43237.3	2.3722	mg/L	2.3722	mg/L	10:38:33
1	Pb 220.353†	6703.2	7080.4	1.9345	mg/L	1.9345	mg/L	10:38:53
1	Sb 206.836†	1159.8	1199.2	0.89537	mg/L	0.89537	mg/L	10:38:53
1	Se 196.026†	624.1	666.4	0.95710	mg/L	0.95710	mg/L	10:38:53
1	Tl 190.801†	947.1	1019.1	0.92024	mg/L	0.92024	mg/L	10:38:53
1	V 292.402†	197098.4	208439.8	2.4125	mg/L	2.4125	mg/L	10:38:33
1	Zn 206.200†	91526.3	96766.6	4.7670	mg/L	4.7670	mg/L	10:38:33
1	Cd 226.502†	15711.6	16639.7	0.47487	mg/L	0.47487	mg/L	10:38:33

1	Ti 334.940†	784522.6	829687.1	2.3848	mg/L	2.3848	mg/L	10:38:31
1	Ca 227.546†	20938.5	22088.2	144.40	mg/L	144.40	mg/L	10:38:33
1	Na 589.592	628240.4	628443.4	186.24	mg/L	186.24	mg/L	10:38:20
1	K 766.490	216896.2	216327.7	187.71	mg/L	187.71	mg/L	10:38:20
2	Y 360.073	700351.7	700351.7	91.90	%			10:38:57
2	Lu 261.542	457310.5	457310.5	93.48	%			10:38:57
2	Ag 328.068†	29177.6	31697.1	0.30890	mg/L	0.30890	mg/L	10:38:59
2	Al 308.215†	685330.0	727258.1	40.056	mg/L	40.056	mg/L	10:38:57
2	As 188.979†	779.1	837.1	0.97533	mg/L	0.97533	mg/L	10:39:19
2	Ba 233.527†	438408.3	469038.5	9.5805	mg/L	9.5805	mg/L	10:38:57
2	Be 313.107†	725607.2	780648.5	0.48335	mg/L	0.48335	mg/L	10:38:57
2	Co 228.616†	52220.0	55879.7	2.4812	mg/L	2.4812	mg/L	10:38:59
2	Cr 267.716†	70143.1	75009.6	2.0307	mg/L	2.0307	mg/L	10:38:59
2	Cu 324.752†	605432.0	646658.2	3.9437	mg/L	3.9437	mg/L	10:38:57
2	Fe 273.955†	312132.6	334431.5	20.446	mg/L	20.446	mg/L	10:38:59
2	Mg 279.077†	1636490.1	1751254.4	142.46	mg/L	142.46	mg/L	10:38:57
2	Mn 257.610†	1547404.7	1655523.7	3.9801	mg/L	3.9801	mg/L	10:38:57
2	Ni 231.604†	42085.5	45034.9	2.4710	mg/L	2.4710	mg/L	10:38:59
2	Pb 220.353†	6704.0	7163.6	1.9573	mg/L	1.9573	mg/L	10:39:19
2	Sb 206.836†	1188.8	1244.4	0.92934	mg/L	0.92934	mg/L	10:39:19
2	Se 196.026†	620.5	670.3	0.96306	mg/L	0.96306	mg/L	10:39:19
2	Tl 190.801†	940.5	1023.7	0.92382	mg/L	0.92382	mg/L	10:39:19
2	V 292.402†	202136.1	216250.8	2.5031	mg/L	2.5031	mg/L	10:38:59
2	Zn 206.200†	94518.9	101092.6	4.9802	mg/L	4.9802	mg/L	10:38:59
2	Cd 226.502†	16290.7	17452.3	0.49810	mg/L	0.49810	mg/L	10:38:59
2	Ti 334.940†	773161.8	827173.9	2.3777	mg/L	2.3777	mg/L	10:38:57
2	Ca 227.546†	21365.5	22802.3	149.07	mg/L	149.07	mg/L	10:38:59
2	Na 589.592	628923.3	629126.3	186.44	mg/L	186.44	mg/L	10:38:23
2	K 766.490	216905.7	216337.2	187.71	mg/L	187.71	mg/L	10:38:23
3	Y 360.073	705436.5	705436.5	92.57	%			10:39:22
3	Lu 261.542	460171.5	460171.5	94.06	%			10:39:22
3	Ag 328.068†	28397.6	30673.7	0.29894	mg/L	0.29894	mg/L	10:39:25
3	Al 308.215†	692177.3	729979.3	40.208	mg/L	40.208	mg/L	10:39:22
3	As 188.979†	785.2	838.4	0.97632	mg/L	0.97632	mg/L	10:39:45
3	Ba 233.527†	442865.2	470860.8	9.6177	mg/L	9.6177	mg/L	10:39:22
3	Be 313.107†	736120.2	786998.9	0.48731	mg/L	0.48731	mg/L	10:39:22
3	Co 228.616†	50806.8	54029.9	2.3986	mg/L	2.3986	mg/L	10:39:25
3	Cr 267.716†	68596.5	72898.9	1.9735	mg/L	1.9735	mg/L	10:39:25
3	Cu 324.752†	616327.8	654214.8	3.9897	mg/L	3.9897	mg/L	10:39:22
3	Fe 273.955†	303670.7	323359.7	19.769	mg/L	19.769	mg/L	10:39:25
3	Mg 279.077†	1657768.3	1762991.0	143.41	mg/L	143.41	mg/L	10:39:22
3	Mn 257.610†	1563900.4	1662768.6	3.9976	mg/L	3.9976	mg/L	10:39:22
3	Ni 231.604†	40897.2	43491.7	2.3862	mg/L	2.3862	mg/L	10:39:25
3	Pb 220.353†	6791.3	7211.8	1.9703	mg/L	1.9703	mg/L	10:39:45
3	Sb 206.836†	1202.0	1250.5	0.93508	mg/L	0.93508	mg/L	10:39:45
3	Se 196.026†	630.5	676.8	0.97212	mg/L	0.97212	mg/L	10:39:45
3	Tl 190.801†	957.3	1035.4	0.93510	mg/L	0.93510	mg/L	10:39:45
3	V 292.402†	196993.3	209439.1	2.4241	mg/L	2.4241	mg/L	10:39:25
3	Zn 206.200†	91625.1	97387.6	4.7977	mg/L	4.7977	mg/L	10:39:25
3	Cd 226.502†	15802.2	16824.7	0.48016	mg/L	0.48016	mg/L	10:39:25
3	Ti 334.940†	787795.5	837588.7	2.4075	mg/L	2.4075	mg/L	10:39:22
3	Ca 227.546†	20810.8	22070.5	144.28	mg/L	144.28	mg/L	10:39:25
3	Na 589.592	642798.7	643001.8	190.56	mg/L	190.56	mg/L	10:38:25
3	K 766.490	221546.3	220977.8	191.74	mg/L	191.74	mg/L	10:38:25

Mean Data: CCV98

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	704897.9	92.50	%	0.565				0.61%
Lu 261.542	460035.5	94.04	%	0.544				0.58%
Ag 328.068†	30970.9	0.30183	mg/L	0.006160	0.30183	mg/L	0.006160	2.04%
QC value within limits for Ag 328.068 Recovery = 100.61%								
Al 308.215†	728499.1	40.126	mg/L	0.0768	40.126	mg/L	0.0768	0.19%
QC value within limits for Al 308.215 Recovery = 100.32%								
As 188.979†	831.8	0.96892	mg/L	0.011968	0.96892	mg/L	0.011968	1.24%
QC value within limits for As 188.979 Recovery = 96.89%								
Ba 233.527†	469996.5	9.6001	mg/L	0.01869	9.6001	mg/L	0.01869	0.19%
QC value within limits for Ba 233.527 Recovery = 96.00%								
Be 313.107†	783330.6	0.48502	mg/L	0.002049	0.48502	mg/L	0.002049	0.42%
QC value within limits for Be 313.107 Recovery = 97.00%								

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Co 228.616†            54554.5      2.4220 mg/L       0.05159      2.4220 mg/L       0.05159   2.13%
   QC value within limits for Co 228.616  Recovery = 96.88%
Cr 267.716†            73450.8      1.9885 mg/L       0.03710      1.9885 mg/L       0.03710   1.87%
   QC value within limits for Cr 267.716  Recovery = 99.42%
Cu 324.752†           650005.1      3.9641 mg/L       0.02345      3.9641 mg/L       0.02345   0.59%
   QC value within limits for Cu 324.752  Recovery = 99.10%
Fe 273.955†           326297.0      19.949 mg/L        0.4365      19.949 mg/L        0.4365   2.19%
   QC value within limits for Fe 273.955  Recovery = 99.74%
Mg 279.077†          1756513.1      142.89 mg/L         0.486      142.89 mg/L         0.486   0.34%
   QC value within limits for Mg 279.077  Recovery = 95.26%
Mn 257.610†          1658699.3      3.9878 mg/L       0.00891      3.9878 mg/L       0.00891   0.22%
   QC value within limits for Mn 257.610  Recovery = 99.69%
Ni 231.604†            43921.3      2.4098 mg/L       0.05345      2.4098 mg/L       0.05345   2.22%
   QC value within limits for Ni 231.604  Recovery = 96.39%
Pb 220.353†             7151.9      1.9540 mg/L       0.01813      1.9540 mg/L       0.01813   0.93%
   QC value within limits for Pb 220.353  Recovery = 97.70%
Sb 206.836†             1231.4     0.91993 mg/L      0.021464     0.91993 mg/L      0.021464   2.33%
   QC value within limits for Sb 206.836  Recovery = 91.99%
Se 196.026†              671.1     0.96409 mg/L      0.007560     0.96409 mg/L      0.007560   0.78%
   QC value within limits for Se 196.026  Recovery = 96.41%
Tl 190.801†             1026.1     0.92639 mg/L      0.007758     0.92639 mg/L      0.007758   0.84%
   QC value within limits for Tl 190.801  Recovery = 92.64%
V 292.402†            211376.6      2.4466 mg/L       0.04927      2.4466 mg/L       0.04927   2.01%
   QC value within limits for V 292.402  Recovery = 97.86%
Zn 206.200†            98415.6      4.8483 mg/L       0.11526      4.8483 mg/L       0.11526   2.38%
   QC value within limits for Zn 206.200  Recovery = 96.97%
Cd 226.502†            16972.2     0.48438 mg/L      0.012175     0.48438 mg/L      0.012175   2.51%
   QC value within limits for Cd 226.502  Recovery = 96.88%
Ti 334.940†           831483.2      2.3900 mg/L       0.01555      2.3900 mg/L       0.01555   0.65%
   QC value within limits for Ti 334.940  Recovery = 95.60%
Ca 227.546†            22320.4      145.92 mg/L         2.733      145.92 mg/L         2.733   1.87%
   QC value within limits for Ca 227.546  Recovery = 97.28%
Na 589.592            633523.9      187.75 mg/L         2.435      187.75 mg/L         2.435   1.30%
   QC value within limits for Na 589.592  Recovery = 93.87%
K 766.490             217880.9      189.05 mg/L         2.325      189.05 mg/L         2.325   1.23%
   QC value within limits for K 766.490  Recovery = 94.53%
All analyte(s) passed QC.
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Sequence No.: 50 **Autosampler Location: 4**
Sample ID: CCB98 **Date Collected: 2/9/2012 10:40:54 AM**
Analyst: **Data Type: Reprocessed on 2/10/2012 7:28:11 AM**
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCB98

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	758468.3	758468.3	99.53	%			10:42:11
1	Lu 261.542	489941.5	489941.5	100.1	%			10:42:11
1	Ag 328.068†	-468.6	16.4	0.00015	mg/L	0.00015	mg/L	10:42:14
1	Al 308.215†	6026.6	143.4	-0.01842	mg/L	-0.01842	mg/L	10:42:14
1	As 188.979†	-2.4	1.3	0.00122	mg/L	0.00122	mg/L	10:42:34
1	Ba 233.527†	57.3	108.2	-0.01168	mg/L	-0.01168	mg/L	10:42:34
1	Be 313.107†	-4004.8	431.0	0.00017	mg/L	0.00017	mg/L	10:42:14
1	Co 228.616†	-5.8	11.5	-0.00167	mg/L	-0.00167	mg/L	10:42:34
1	Cr 267.716†	31.7	5.5	0.00024	mg/L	0.00024	mg/L	10:42:34
1	Cu 324.752†	1317.5	312.5	0.00245	mg/L	0.00245	mg/L	10:42:14
1	Fe 273.955†	-100.2	427.5	0.02154	mg/L	0.02154	mg/L	10:42:34
1	Mg 279.077†	-153.8	464.4	-0.16469	mg/L	-0.16469	mg/L	10:42:14
1	Mn 257.610†	190.4	376.7	-0.00033	mg/L	-0.00033	mg/L	10:42:34
1	Ni 231.604†	-2.8	11.0	-0.00104	mg/L	-0.00104	mg/L	10:42:34
1	Pb 220.353†	7.0	-1.0	0.00005	mg/L	0.00005	mg/L	10:42:34
1	Sb 206.836†	46.2	18.8	0.01671	mg/L	0.01671	mg/L	10:42:34
1	Se 196.026†	-4.8	1.7	-0.00613	mg/L	-0.00613	mg/L	10:42:34
1	Tl 190.801†	-12.7	4.9	-0.00174	mg/L	-0.00174	mg/L	10:42:34
1	V 292.402†	66.6	82.1	0.00061	mg/L	0.00061	mg/L	10:42:14
1	Zn 206.200†	51.1	32.0	-0.00117	mg/L	-0.00117	mg/L	10:42:34
1	Cd 226.502†	-21.2	4.1	-0.00013	mg/L	-0.00013	mg/L	10:42:34

1	Ti 334.940†	573.7	656.4	0.00025	mg/L	0.00025	mg/L	10:42:14
1	Ca 227.546†	71.1	17.5	-0.00917	mg/L	-0.00917	mg/L	10:42:34
1	Na 589.592	353.0	556.0	0.09987	mg/L	0.09987	mg/L	10:42:03
1	K 766.490	776.6	208.1	0.31786	mg/L	0.31786	mg/L	10:42:03
2	Y 360.073	753788.0	753788.0	98.91	%			10:42:36
2	Lu 261.542	487508.6	487508.6	99.65	%			10:42:36
2	Ag 328.068†	-481.0	1.5	0.00001	mg/L	0.00001	mg/L	10:42:38
2	Al 308.215†	6028.9	175.8	-0.01663	mg/L	-0.01663	mg/L	10:42:38
2	As 188.979†	1.5	5.2	0.00572	mg/L	0.00572	mg/L	10:42:58
2	Ba 233.527†	34.1	85.2	-0.01215	mg/L	-0.01215	mg/L	10:42:58
2	Be 313.107†	-4001.4	414.4	0.00015	mg/L	0.00015	mg/L	10:42:38
2	Co 228.616†	-5.9	11.4	-0.00167	mg/L	-0.00167	mg/L	10:42:58
2	Cr 267.716†	31.2	5.2	0.00024	mg/L	0.00024	mg/L	10:42:58
2	Cu 324.752†	1259.3	260.6	0.00214	mg/L	0.00214	mg/L	10:42:38
2	Fe 273.955†	-190.0	336.8	0.01600	mg/L	0.01600	mg/L	10:42:58
2	Mg 279.077†	-221.8	395.5	-0.17031	mg/L	-0.17031	mg/L	10:42:38
2	Mn 257.610†	102.8	289.7	-0.00054	mg/L	-0.00054	mg/L	10:42:58
2	Ni 231.604†	-1.0	12.9	-0.00094	mg/L	-0.00094	mg/L	10:42:58
2	Pb 220.353†	12.7	4.8	0.00162	mg/L	0.00162	mg/L	10:42:58
2	Sb 206.836†	50.3	23.2	0.02016	mg/L	0.02016	mg/L	10:42:58
2	Se 196.026†	-4.0	2.5	-0.00501	mg/L	-0.00501	mg/L	10:42:58
2	Tl 190.801†	-12.3	5.3	-0.00143	mg/L	-0.00143	mg/L	10:42:58
2	V 292.402†	49.9	65.6	0.00042	mg/L	0.00042	mg/L	10:42:38
2	Zn 206.200†	40.1	21.2	-0.00170	mg/L	-0.00170	mg/L	10:42:58
2	Cd 226.502†	-27.4	-2.2	-0.00031	mg/L	-0.00031	mg/L	10:42:58
2	Ti 334.940†	458.1	543.3	-0.00008	mg/L	-0.00008	mg/L	10:42:38
2	Ca 227.546†	72.4	19.2	0.00179	mg/L	0.00179	mg/L	10:42:58
2	Na 589.592	329.7	532.7	0.09298	mg/L	0.09298	mg/L	10:42:05
2	K 766.490	773.8	205.3	0.31544	mg/L	0.31544	mg/L	10:42:05
3	Y 360.073	744733.7	744733.7	97.72	%			10:43:01
3	Lu 261.542	480813.5	480813.5	98.28	%			10:43:01
3	Ag 328.068†	-421.6	55.3	0.00053	mg/L	0.00053	mg/L	10:43:03
3	Al 308.215†	5950.2	180.0	-0.01639	mg/L	-0.01639	mg/L	10:43:03
3	As 188.979†	-3.7	-0.1	-0.00037	mg/L	-0.00037	mg/L	10:43:23
3	Ba 233.527†	19.4	70.7	-0.01244	mg/L	-0.01244	mg/L	10:43:23
3	Be 313.107†	-4064.8	294.0	0.00008	mg/L	0.00008	mg/L	10:43:03
3	Co 228.616†	-12.8	4.2	-0.00199	mg/L	-0.00199	mg/L	10:43:23
3	Cr 267.716†	26.6	0.9	0.00012	mg/L	0.00012	mg/L	10:43:23
3	Cu 324.752†	1235.8	254.3	0.00210	mg/L	0.00210	mg/L	10:43:03
3	Fe 273.955†	-262.3	260.6	0.01133	mg/L	0.01133	mg/L	10:43:23
3	Mg 279.077†	-342.9	269.1	-0.18060	mg/L	-0.18060	mg/L	10:43:03
3	Mn 257.610†	47.1	234.4	-0.00067	mg/L	-0.00067	mg/L	10:43:23
3	Ni 231.604†	-10.6	3.1	-0.00148	mg/L	-0.00148	mg/L	10:43:23
3	Pb 220.353†	8.4	0.5	0.00046	mg/L	0.00046	mg/L	10:43:23
3	Sb 206.836†	44.8	18.3	0.01630	mg/L	0.01630	mg/L	10:43:23
3	Se 196.026†	-1.7	4.8	-0.00171	mg/L	-0.00171	mg/L	10:43:23
3	Tl 190.801†	-12.8	4.6	-0.00202	mg/L	-0.00202	mg/L	10:43:23
3	V 292.402†	-22.1	-6.9	-0.00042	mg/L	-0.00042	mg/L	10:43:03
3	Zn 206.200†	34.2	15.7	-0.00197	mg/L	-0.00197	mg/L	10:43:23
3	Cd 226.502†	-25.4	-0.5	-0.00026	mg/L	-0.00026	mg/L	10:43:23
3	Ti 334.940†	358.6	448.4	-0.00035	mg/L	-0.00035	mg/L	10:43:03
3	Ca 227.546†	73.5	21.4	0.01622	mg/L	0.01622	mg/L	10:43:23
3	Na 589.592	288.4	491.4	0.08073	mg/L	0.08073	mg/L	10:42:08
3	K 766.490	802.6	234.1	0.34043	mg/L	0.34043	mg/L	10:42:08

Mean Data: CCB98

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	752330.0	98.72	%	0.916				0.93%
Lu 261.542	486087.9	99.36	%	0.966				0.97%
Ag 328.068†	24.4	0.00023	mg/L	0.000267	0.00023	mg/L	0.000267	116.97%
Al 308.215†	166.4	-0.01715	mg/L	0.001110	-0.01715	mg/L	0.001110	6.47%
As 188.979†	2.1	0.00219	mg/L	0.003163	0.00219	mg/L	0.003163	144.45%
Ba 233.527†	88.0	-0.01209	mg/L	0.000387	-0.01209	mg/L	0.000387	3.20%
Be 313.107†	379.8	0.00013	mg/L	0.000046	0.00013	mg/L	0.000046	34.86%
Co 228.616†	9.0	-0.00177	mg/L	0.000184	-0.00177	mg/L	0.000184	10.38%
Cr 267.716†	3.9	0.00020	mg/L	0.000070	0.00020	mg/L	0.000070	35.09%
Cu 324.752†	275.8	0.00223	mg/L	0.000195	0.00223	mg/L	0.000195	8.74%
Fe 273.955†	341.6	0.01629	mg/L	0.005110	0.01629	mg/L	0.005110	31.37%
Mg 279.077†	376.4	-0.17186	mg/L	0.008070	-0.17186	mg/L	0.008070	4.70%

Mn 257.610†	300.3	-0.00051 mg/L	0.000172	-0.00051 mg/L	0.000172	33.78%
Ni 231.604†	9.0	-0.00115 mg/L	0.000286	-0.00115 mg/L	0.000286	24.74%
Pb 220.353†	1.4	0.00071 mg/L	0.000814	0.00071 mg/L	0.000814	114.63%
Sb 206.836†	20.1	0.01772 mg/L	0.002118	0.01772 mg/L	0.002118	11.95%
Se 196.026†	3.0	-0.00428 mg/L	0.002298	-0.00428 mg/L	0.002298	53.66%
Tl 190.801†	4.9	-0.00173 mg/L	0.000293	-0.00173 mg/L	0.000293	16.93%
V 292.402†	47.0	0.00021 mg/L	0.000548	0.00021 mg/L	0.000548	263.76%
Zn 206.200†	23.0	-0.00161 mg/L	0.000408	-0.00161 mg/L	0.000408	25.28%
Cd 226.502†	0.5	-0.00024 mg/L	0.000093	-0.00024 mg/L	0.000093	39.51%
Ti 334.940†	549.4	-0.00006 mg/L	0.000299	-0.00006 mg/L	0.000299	496.07%
Ca 227.546†	19.4	0.00295 mg/L	0.012733	0.00295 mg/L	0.012733	432.08%
Na 589.592	526.7	0.09119 mg/L	0.009696	0.09119 mg/L	0.009696	10.63%
K 766.490	215.8	0.32458 mg/L	0.013780	0.32458 mg/L	0.013780	4.25%

Sequence No.: 51
Sample ID: MB-64511#PBS17~PBS
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 69
Date Collected: 2/9/2012 10:44:33 AM
Data Type: Reprocessed on 2/10/2012 7:28:12 AM

Initial Sample Vol:
Sample Prep Vol:

Replicate Data: MB-64511#PBS17~PBS

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Y 360.073	810362.7	810362.7	106.3	%			10:45:51
1	Lu 261.542	527758.1	527758.1	107.9	%			10:45:51
1	Ag 328.068†	-460.0	57.9	0.00055	mg/L	0.00055	mg/L	10:45:54
1	Al 308.215†	5972.5	-337.8	-0.04495	mg/L	-0.04495	mg/L	10:45:54
1	As 188.979†	-5.0	-0.9	-0.00131	mg/L	-0.00131	mg/L	10:46:14
1	Ba 233.527†	-38.8	15.0	-0.01358	mg/L	-0.01358	mg/L	10:46:14
1	Be 313.107†	-4043.8	681.3	0.00032	mg/L	0.00032	mg/L	10:45:54
1	Co 228.616†	-15.1	3.2	-0.00203	mg/L	-0.00203	mg/L	10:46:14
1	Cr 267.716†	54.6	24.5	0.00076	mg/L	0.00076	mg/L	10:45:54
1	Cu 324.752†	1110.4	26.2	0.00071	mg/L	0.00071	mg/L	10:45:54
1	Fe 273.955†	-292.7	256.1	0.01107	mg/L	0.01107	mg/L	10:45:54
1	Mg 279.077†	-479.8	173.3	-0.18841	mg/L	-0.18841	mg/L	10:45:54
1	Mn 257.610†	-130.7	65.5	-0.00108	mg/L	-0.00108	mg/L	10:45:54
1	Ni 231.604†	-25.4	-9.7	-0.00218	mg/L	-0.00218	mg/L	10:46:14
1	Pb 220.353†	3.0	-5.2	-0.00110	mg/L	-0.00110	mg/L	10:46:14
1	Sb 206.836†	55.6	24.2	0.02095	mg/L	0.02095	mg/L	10:46:14
1	Se 196.026†	-7.1	-0.1	-0.00873	mg/L	-0.00873	mg/L	10:46:14
1	Tl 190.801†	-18.5	0.4	-0.00588	mg/L	-0.00588	mg/L	10:46:14
1	V 292.402†	-55.5	-35.9	-0.00075	mg/L	-0.00075	mg/L	10:45:54
1	Zn 206.200†	28.9	7.7	-0.00236	mg/L	-0.00236	mg/L	10:46:14
1	Cd 226.502†	-29.1	-1.6	-0.00030	mg/L	-0.00030	mg/L	10:46:14
1	Ti 334.940†	480.7	529.1	-0.00012	mg/L	-0.00012	mg/L	10:45:54
1	Ca 227.546†	63.9	5.8	-0.08615	mg/L	-0.08615	mg/L	10:46:14
1	Na 589.592	139.4	342.4	0.03656	mg/L	0.03656	mg/L	10:45:43
1	K 766.490	698.0	129.5	0.24974	mg/L	0.24974	mg/L	10:45:43
2	Y 360.073	772192.0	772192.0	101.3	%			10:46:16
2	Lu 261.542	503850.8	503850.8	103.0	%			10:46:16
2	Ag 328.068†	-404.1	91.9	0.00088	mg/L	0.00088	mg/L	10:46:18
2	Al 308.215†	5940.9	-105.8	-0.03214	mg/L	-0.03214	mg/L	10:46:18
2	As 188.979†	-0.2	3.5	0.00375	mg/L	0.00375	mg/L	10:46:39
2	Ba 233.527†	-30.5	21.3	-0.01345	mg/L	-0.01345	mg/L	10:46:39
2	Be 313.107†	-4067.9	480.1	0.00019	mg/L	0.00019	mg/L	10:46:18
2	Co 228.616†	-21.9	-4.0	-0.00236	mg/L	-0.00236	mg/L	10:46:39
2	Cr 267.716†	43.8	16.5	0.00054	mg/L	0.00054	mg/L	10:46:18
2	Cu 324.752†	1086.6	52.0	0.00087	mg/L	0.00087	mg/L	10:46:18
2	Fe 273.955†	-389.8	149.0	0.00451	mg/L	0.00451	mg/L	10:46:18
2	Mg 279.077†	-544.1	89.7	-0.19522	mg/L	-0.19522	mg/L	10:46:18
2	Mn 257.610†	-99.7	89.8	-0.00102	mg/L	-0.00102	mg/L	10:46:18
2	Ni 231.604†	-18.8	-4.4	-0.00189	mg/L	-0.00189	mg/L	10:46:39
2	Pb 220.353†	11.5	3.1	0.00118	mg/L	0.00118	mg/L	10:46:39
2	Sb 206.836†	50.1	21.3	0.01867	mg/L	0.01867	mg/L	10:46:39
2	Se 196.026†	-0.7	5.8	-0.00026	mg/L	-0.00026	mg/L	10:46:39
2	Tl 190.801†	-13.6	4.4	-0.00219	mg/L	-0.00219	mg/L	10:46:39
2	V 292.402†	-85.8	-67.8	-0.00112	mg/L	-0.00112	mg/L	10:46:18
2	Zn 206.200†	32.9	12.9	-0.00211	mg/L	-0.00211	mg/L	10:46:39

MITKEM LABORATORIES OPTIMA3 RUN LOG: ICAP/4300DV

Date: 2/9/12 Analyst: TR

	Run ID:	OPTIMA3_120209A		FD	34	CCV	CCV97	2/9/2012 9:41:24 AM	1	70	L0186-12A	MY8766	2/9/2012 11:55:32 AM	1
	Method:	EPA CLP ISM 1.3 ICP			35	CCB	CCB97	2/9/2012 9:45:07 AM	1	71	L0186-13A	MY87H2	2/9/2012 11:59:16 AM	1
Seq	Lab ID	Client Sample ID	Analytical Runtime		36	L0204-01A	MA4B09	2/9/2012 9:48:46 AM	1	72	L0186-14A	MY87H3	2/9/2012 12:03:01 PM	1
1	S0	S0	2/9/2012 7:41:09 AM	1	37	L0213-01A	MF5AW6	2/9/2012 9:52:25 AM	1	73	L0186-15A	MY87H4	2/9/2012 12:06:46 PM	1
2	S	S	2/9/2012 7:44:46 AM	1	38	L0213-02A	MF5AW7	2/9/2012 9:56:10 AM	1	74	L0186-16A	MY87H5	2/9/2012 12:10:31 PM	1
3	S	S	2/9/2012 7:48:25 AM	1	39	L0213-03A	MF5AW8	2/9/2012 9:59:55 AM	1	75	L0186-17A	MY87F8	2/9/2012 12:14:16 PM	1
4	S	S	2/9/2012 7:52:04 AM	1	40	L0213-03ADUP	MF5AW8D	2/9/2012 10:03:37 AM	1	76	L0186-18A	MY87F9	2/9/2012 12:18:09 PM	1
5	S	S	2/9/2012 7:55:39 AM	1	41	L0213-03AMS	MF5AW8S	2/9/2012 10:07:24 AM	1	77	L0186-19A	MY87G5	2/9/2012 12:21:54 PM	1
6	S	S	2/9/2012 7:59:23 AM	1	42	L0213-03ASD	MF5AW8L	2/9/2012 10:11:06 AM	5	78	L0186-20A	MY87G6	2/9/2012 12:25:39 PM	1
7	S	S	2/9/2012 8:03:00 AM	1	43	BL0213-03APDS	BL0213-03APDS	2/9/2012 10:14:51 AM	1	79	CCV	CCV01	2/9/2012 12:29:41 PM	1
8	ICV	ICV	2/9/2012 8:05:49 AM	1	44	L0213-04A	MF5AW9	2/9/2012 10:18:32 AM	1	80	CCB	CCB01	2/9/2012 12:33:24 PM	1
9	ICB	ICB	2/9/2012 8:09:27 AM	1	45	L0213-05A	MF5AX0	2/9/2012 10:22:12 AM	1	81	L0186-08APDS	MY8746A	2/9/2012 12:37:21 PM	1
10	ICSA	ICSA	2/9/2012 8:13:06 AM	1	46	L0213-06A	MF5AX1	2/9/2012 10:25:58 AM	1	82	L0186-01A	MY8753	2/9/2012 12:41:10 PM	2
11	ICSAB	ICSAB	2/9/2012 8:16:47 AM	1	47	L0213-07A	MF5AX2	2/9/2012 10:29:40 AM	1	83	L0186-02A	MY8754	2/9/2012 12:44:57 PM	2
12	CCV	CCV95	2/9/2012 8:20:29 AM	1	48	L0213-08A	MF5AX3	2/9/2012 10:33:30 AM	1	84	L0186-03A	MY8755	2/9/2012 12:48:40 PM	2
13	CCB	CCB95	2/9/2012 8:24:13 AM	1	49	CCV	CCV98	2/9/2012 10:37:11 AM	1	85	L0186-04A	MY8756	2/9/2012 12:52:23 PM	2
14	MB-64540	PBW26	2/9/2012 8:27:52 AM	1	50	CCB	CCB98	2/9/2012 10:40:54 AM	1	86	L0186-05A	MY8757	2/9/2012 12:56:06 PM	2
15	LCS-64540	LCS26	2/9/2012 8:31:30 AM	1	51	MB-64511	PBS17	2/9/2012 10:44:33 AM	1	87	L0186-06A	MY8758	2/9/2012 12:59:50 PM	3
16	L0147-04A	MB9B17	2/9/2012 8:35:09 AM	1	52	LCS-64511	LCS17	2/9/2012 10:48:13 AM	1	88	L0186-07A	MY8767	2/9/2012 1:03:33 PM	3
17	L0147-05A	MB9B19	2/9/2012 8:38:41 AM	1	53	L0186-01A	MY8753	2/9/2012 10:51:52 AM	1	89	L0186-08A	MY8746	2/9/2012 1:07:16 PM	3
18	L0147-06A	MB9B20	2/9/2012 8:42:19 AM	1	54	L0186-02A	MY8754	2/9/2012 10:55:37 AM	1	90	L0186-08ADUP	MY8746D	2/9/2012 1:10:59 PM	3
19	L0147-07A	MB9B21	2/9/2012 8:45:57 AM	1	55	L0186-03A	MY8755	2/9/2012 10:59:22 AM	1	91	L0186-08ASD	MY8746L	2/9/2012 1:14:42 PM	15
20	L0147-07ADUP	MB9B21D	2/9/2012 8:49:35 AM	1	56	L0186-04A	MY8756	2/9/2012 11:03:08 AM	1	92	CCV	CCV02	2/9/2012 1:18:23 PM	1
21	L0147-07AMS	MB9B21S	2/9/2012 8:53:13 AM	1	57	L0186-05A	MY8757	2/9/2012 11:06:52 AM	1	93	CCB	CCB02	2/9/2012 1:22:06 PM	1
22	L0147-07ASD	MB9B21L	2/9/2012 8:56:45 AM	5	58	L0186-06A	MY8758	2/9/2012 11:10:37 AM	1	94	L0186-09A	MY8747	2/9/2012 1:25:45 PM	2
23	CCV	CCV96	2/9/2012 9:00:24 AM	1	59	L0186-07A	MY8767	2/9/2012 11:14:29 AM	1	95	L0186-10A	MY8750	2/9/2012 1:29:29 PM	2
24	CCB	CCB96	2/9/2012 9:04:07 AM	1	60	L0186-08A	MY8746	2/9/2012 11:18:14 AM	1	96	L0186-11A	MY8751	2/9/2012 1:33:12 PM	2
25	BL0147-07APDS	BL0147-07APDS	2/9/2012 9:07:46 AM	1	61	L0186-08ADUP	MY8746D	2/9/2012 11:21:59 AM	1	97	L0186-12A	MY8766	2/9/2012 1:36:55 PM	2
26	L0147-08A	MB9B23	2/9/2012 9:11:25 AM	1	62	L0186-08AMS	MY8746S	2/9/2012 11:25:44 AM	1	98	L0186-13A	MY87H2	2/9/2012 1:40:39 PM	3
27	L0195-01A	MC09P4	2/9/2012 9:15:05 AM	1	63	L0186-08ASD	MY8746L	2/9/2012 11:29:29 AM	5	99	L0186-14A	MY87H3	2/9/2012 1:44:23 PM	2
28	L0195-01ADUP	MC09P4D	2/9/2012 9:18:53 AM	1	64	CCV	CCV99	2/9/2012 11:33:09 AM	1	100	L0186-15A	MY87H4	2/9/2012 1:48:08 PM	3
29	L0195-01AMS	MC09P4S	2/9/2012 9:22:40 AM	1	65	CCB	CCB99	2/9/2012 11:36:52 AM	1	101	L0186-16A	MY87H5	2/9/2012 1:51:55 PM	3
30	L0195-01ASD	MC09P4L	2/9/2012 9:26:27 AM	5	66	L0186-08APDS	MY8746A	2/9/2012 11:40:31 AM	1	102	L0186-17A	MY87F8	2/9/2012 1:55:39 PM	2
31	BL0195-01APDS	BL0195-01APDS	2/9/2012 9:30:06 AM	1	67	L0186-09A	MY8747	2/9/2012 11:44:16 AM	1	103	L0186-18A	MY87F9	2/9/2012 1:59:33 PM	2
32	L0195-02A	MC09P5	2/9/2012 9:33:52 AM	1	68	L0186-10A	MY8750	2/9/2012 11:48:01 AM	1	104	L0186-19A	MY87G5	2/9/2012 2:03:17 PM	3
33	L0195-03A	MC09P6	2/9/2012 9:37:38 AM	1	69	L0186-11A	MY8751	2/9/2012 11:51:46 AM	1	105	L0186-20A	MY87G6	2/9/2012 2:07:04 PM	3

K0195 need hardness HZA 2/13/12

HNO3: 1111091
HCL: 4111080
Mixed Acid: IR12020907
Logbook ID: 100.0129-01/12

STANDARD: IW120209 A/E/F/G/H/I/J All OK
ICV/CCV: IW120209 B/K

ICSA/ICSAB: IW120209 C/D
TUBING CHANGED? N
Reviewed By: HZA 2/13/12

MITKEM LABORATORIES OPTIMA3 RUN LOG: ICAP/4300DV

Date: 2/9/12 Analyst:

106	CCV	CCV03	2/9/2012 2:11:05 PM	1
107	CCB	CCB03	2/9/2012 2:14:54 PM	1
108	MB-64512	PBS18	2/9/2012 2:18:38 PM	1
109	LCS-64512	LCS18	2/9/2012 2:22:27 PM	1
110	L0187-01A	MY87G7	2/9/2012 2:26:09 PM	1
111	L0187-02A	MY87G8	2/9/2012 2:29:54 PM	1
112	L0187-03A	MY87G9	2/9/2012 2:33:40 PM	1
113	L0187-04A	MY87H0	2/9/2012 2:37:26 PM	1
114	L0187-05A	MY87H1	2/9/2012 2:41:12 PM	1
115	L0187-06A	MY87H7	2/9/2012 2:44:58 PM	1
116	L0187-07A	MY86E2	2/9/2012 2:48:44 PM	1
117	L0187-08A	MY87F6	2/9/2012 2:52:48 PM	1
118	L0187-08ADUP	MY87F6D	2/9/2012 2:56:34 PM	1
119	L0187-08AMS	MY87F6S	2/9/2012 3:00:19 PM	1
120	L0187-08ASD	MY87F6L	2/9/2012 3:04:05 PM	5
121	CCV	CCV04	2/9/2012 3:07:46 PM	1
122	CCB	CCB04	2/9/2012 3:11:29 PM	1
123	L0187-08APDS	MY87F6A	2/9/2012 3:15:08 PM	1
124	L0187-09A	MY87F7	2/9/2012 3:18:54 PM	1
125	L0187-10A	MY87G0	2/9/2012 3:22:37 PM	1
126	L0187-11A	MY87G1	2/9/2012 3:26:23 PM	1
127	L0187-12A	MY87G2	2/9/2012 3:30:09 PM	1
128	L0187-13A	MY87G3	2/9/2012 3:33:55 PM	1
129	L0187-14A	MY87G4	2/9/2012 3:37:41 PM	1
130	L0187-15A	MY87H6	2/9/2012 3:41:27 PM	1
131	L0187-16A	MY8734	2/9/2012 3:45:13 PM	1
132	L0187-17A	MY8735	2/9/2012 3:48:59 PM	1
133	L0187-18A	MY8736	2/9/2012 3:52:45 PM	1
134	L0187-19A	MY8737	2/9/2012 3:56:31 PM	1
135	L0187-20A	MY8738	2/9/2012 4:00:16 PM	1
136	CCV	CCV05	2/9/2012 4:04:09 PM	1
137	CCB	CCB05	2/9/2012 4:07:52 PM	1
138	L0187-01A	MY87G7	2/9/2012 4:11:30 PM	3
139	L0187-02A	MY87G8	2/9/2012 4:15:23 PM	3
140	L0187-03A	MY87G9	2/9/2012 4:19:13 PM	2
141	L0187-04A	MY87H0	2/9/2012 4:22:57 PM	3
142	L0187-05A	MY87H1	2/9/2012 4:26:41 PM	2
143	L0187-06A	MY87H7	2/9/2012 4:30:25 PM	3
144	L0187-07A	MY86E2	2/9/2012 4:34:09 PM	5
145	L0187-08A	MY87F6	2/9/2012 4:37:53 PM	3
146	L0187-08ADUP	MY87F6D	2/9/2012 4:41:31 PM	3
147	L0187-08ASD	MY87F6L	2/9/2012 4:45:19 PM	15
148	L0187-07A	MY86E2	2/9/2012 4:49:04 PM	10
149	CCV	CCV06	2/9/2012 4:52:45 PM	1
150	CCB	CCB06	2/9/2012 4:56:28 PM	1
151	L0187-09A	MY87F7	2/9/2012 5:00:09 PM	2
152	L0187-10A	MY87G0	2/9/2012 5:03:53 PM	3
153	L0187-11A	MY87G1	2/9/2012 5:07:37 PM	3
154	L0187-12A	MY87G2	2/9/2012 5:11:21 PM	3
155	L0187-13A	MY87G3	2/9/2012 5:15:05 PM	3
156	L0187-14A	MY87G4	2/9/2012 5:18:48 PM	3
157	L0187-15A	MY87H6	2/9/2012 5:22:29 PM	3
158	L0187-16A	MY8734	2/9/2012 5:26:09 PM	2
159	L0187-17A	MY8735	2/9/2012 5:29:50 PM	2
160	L0187-18A	MY8736	2/9/2012 5:33:32 PM	3
161	L0187-19A	MY8737	2/9/2012 5:37:12 PM	2
162	L0187-20A	MY8738	2/9/2012 5:40:56 PM	3
163	CCV	CCV07	2/9/2012 5:44:40 PM	1
164	CCB	CCB07	2/9/2012 5:48:25 PM	1

2/10/12

15MRGS AQ + SOILS

All OK

HNO3: 1111091
HCL: 4111080
Mixed Acid: IR12020907
Logbook ID: 100.0129-01/12

STANDARD: IW120209 A/E/F/G/H/I/J
ICV/CCV: IW120209 B/K

ICSA/ICSAB: IW120209 C/D
TUBING CHANGED? N
Reviewed By: HZA 2/13/12

Start time:

Spectrum Analytical, Inc. RI Division: Aqueous Metals Preparation Logbook

Prep Start Date: **2/8/2012 10:30:00**
Prep End Date: **2/8/2012 2:30:00 P**
Prep Batch ID: **64540**

Prep Code: **ISM01.3_ICP_AES_W_PR**
Technician: **David T Camara**

Prep Type: **200.7/200.7**

Prep Factor Units: **mL / mL**

QC Matrix: N/A
QC Matrix Lot: N/A

1:1 HNO3 **1110107**
1:1 HNO3 (mL): **1.0**

Reagent 3 Lot: N/A
Reagent 3 (mL): N/A

Reagent 5 Lot: N/A
Reagent 5 (mL): N/A

Filter?: N/A
Filter Lot: N/A

1:1 HCl **4110110**
1:1 HCl (mL): **0.5**

Reagent 4 Lot: N/A
Reagent 4 (mL): N/A

Reagent 6 Lot: N/A
Reagent 6 (mL): N/A

Digestion Start Time 1: **02/08/2012 10:30**
Digestion End Time 1: **02/08/2012 14:30**

Digestion Start Time 2: N/A
Digestion End Time 2: N/A

Block Temp (C): **94**

Therm ID1: **MT-102**
Corr Fac **0**

Mitkem Sample ID	Client Samp ID		tial L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity			Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	HOT BLOCK
MB-64540	PBW		50	50	--	--	Colorless	Clear					02/08/12	DTC	ICPLab	2	☐	☐	HB-B
PBW26																			
LCS-64540	LCS		50	50	--	--	Colorless	Clear					02/08/12	DTC	ICPLab	2	☐	☐	HB-B
1 mL IP110518A, LCS26																			
L0147-04A	MB9B17	A	50	50	Colorless	Clear	Colorless	Clear			02/20/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0147-05A	MB9B19	A	50	50	Colorless	Clear	Colorless	Clear			02/20/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0147-06A	MB9B20	A	50	50	Colorless	Clear	Colorless	Clear			02/20/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0147-07A	MB9B21	A	50	50	Colorless	Clear	Colorless	Clear			02/20/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0147-07ADUP	MB9B21D	A	50	50	Colorless	Clear	Colorless	Clear			02/20/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0147-07AMS	MB9B21S	A	50	50	Colorless	Clear	Colorless	Clear			02/20/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
50 uL II110509C, 50 uL IP110607B, 50 uL IP110607C																			
L0147-08A	MB9B23	A	50	50	Colorless	Clear	Colorless	Clear			02/20/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0195-01A	MC09P4	A	50	50	Colorless	Clear	Colorless	Clear			02/17/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
1999.2 Sol. 1625																			
L0195-01ADUP	MC09P4D	A	50	50	Colorless	Clear	Colorless	Clear			02/17/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0195-01AMS	MC09P4S	A	50	50	Colorless	Clear	Colorless	Clear			02/17/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
50 uL II110509C, 50 uL IP110607B, 50 uL IP110607C																			
L0195-02A	MC09P5	A	50	50	Colorless	Clear	Colorless	Clear			02/17/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
1999.2 Sol. 1625																			
L0195-03A	MC09P6	A	50	50	Colorless	Clear	Colorless	Clear			02/17/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
1999.2 Sol. 1625																			
L0204-01A	MA4B09	A	50	50	Yellow	Clear	Colorless	Clear			02/13/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0213-01A	MF5AW6	A	50	50	Colorless	Clear	Colorless	Clear			02/21/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0213-02A	MF5AW7	A	50	50	Colorless	Clear	Colorless	Clear			02/21/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0213-03A	MF5AW8	A	50	50	--	--	Colorless	Clear			02/21/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0213-03ADUP	MF5AW8D	A	50	50	--	--	Colorless	Clear			02/21/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0213-03AMS	MF5AW8S	A	50	50	--	--	Colorless	Clear			02/21/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
50 uL II110509C, 50 uL IP110607B, 50 uL IP110607C																			
L0213-04A	MF5AW9	A	50	50	Colorless	Clear	Colorless	Clear			02/21/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0213-05A	MF5AX0	A	50	50	Colorless	Clear	Colorless	Clear			02/21/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0213-06A	MF5AX1	A	50	50	Colorless	Clear	Colorless	Clear			02/21/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B
L0213-07A	MF5AX2	A	50	50	Colorless	Clear	Colorless	Clear			02/21/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B

12/28/12

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Start time: **Spectrum Analytical, Inc. RI Division: Aqueous Metals Preparation Logbook**

Date	Sample ID	Sample Vol (ml)	Sample pH	Sample Color Before	Sample Clarity Before	1:1 HNO_3 (ml)	1:1 HCl (ml)	Sample Color After	Sample Clarity After	Final Volume (ml)	Comments

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: **2/8/2012 10:30:00**

Prep End Date: **2/8/2012 2:30:00 P** Prep Code: **ISM01.3_ICP_AES_W_PR** Prep Type: **200.7/200.7** Prep Factor Units: **mL / mL**

Prep Batch ID: **64540** Technician: **David T Camara**

QC Matrix: N/A 1:1 HNO3 **1110107** Reagent 3 Lot: N/A Reagent 5 Lot: N/A

QC Matrix Lot: N/A 1:1 HNO3 (mL): **1.0** Reagent 3 (mL): N/A Reagent 5 (mL): N/A

Filter?: N/A 1:1 HCl **4110110** Reagent 4 Lot: N/A Reagent 6 Lot: N/A

Filter Lot: N/A 1:1 HCl (mL): **0.5** Reagent 4 (mL): N/A Reagent 6 (mL): N/A

Digestion Start Time 1: **02/08/2012 10:30** Digestion Start Time 2: N/A Block Temp (C): **94** Therm ID1: **MT-102**

Digestion End Time 1: **02/08/2012 14:30** Digestion End Time 2: N/A Corr Fac **0**

Mitkem Sample ID	Client Samp ID		tial L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity			Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	HOT BLOCK
L0213-08A	MF5AX3	A	50	50	Colorless	Clear	Colorless	Clear			02/21/12	01	02/08/12	DTC	ICPLab	2	☐	☐	HB-B

David T Camara 02/08/2012 NZA 2/8/12

Analyst Reviewed Date Manager Reviewed Date

Comments:

JRC 2/8/12

From: (214) 578-8182
Jason Stroup
EA Engineering, Science, & Tec
405 S. Hwy 121 Bypass
Suite C-100
Lewisville, TX 75067

Origin ID: JMDA

FedEx Express

J12101112190225

Ship Date: 01FEB12
ActWgt: 45.0 LB
CAD: 1247365/INET3250

Delivery Address Bar Code

SHIP TO: (401) 732-3400 BILL SENDER

Dawn Smart
MITKEM
175 METRO CENTER BLVD

WARWICK, RI 02886

Agnes R Huntley 2/2/12

Ref # 1434265 B 3
Invoice #
PO #
Dept #

Case 42182
SDG MF 5AW6

THU - 02 FEB A1
PRIORITY OVERNIGHT

TRK# 7979 9744 6610
0201

XH NCOA

02886
RI-US
PVD

512G1/9F59/A278

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Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Designate: Grab
		1/31/12	1454		

Tag Number 6- 449119

Station Location

Samplers (Signatures)

Concentration: ☐L ☐M ☐H

Lab Sample No.

Remarks:

Case No: 42182
Sample No: MF5AW6
Station Location: WMW-27A
Sample Type: Grab
Preservative: Ice to 4 C, HNO3 pH < 2
Analysis: Total Metals ISM01.3/ICP-AES
Concentration: Low
Tag No: 6-449119

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Designate: Grab
		1/31/12	1454		

Tag Number 6- 449123

Station Location

Samplers (Signatures)

Concentration: ☐L ☐M ☐H

Lab Sample No.

Remarks:

Case No: 42182
Sample No: MF5AW7
Station Location: WMW-27A DUP
Sample Type: Grab
Preservative: Ice to 4 C, HNO3 pH < 2
Analysis: Total Metals ISM01.3/ICP-AES
Concentration: Low
Tag No: 6-449123

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Designate: Grab
		1/31/12	1141		

Tag Number 6- 449127

Station Location

Samplers (Signatures)

Concentration: ☐L ☐M ☐H

Lab Sample No.

Remarks:

Case No: 42182
Sample No: MF5AW8
Station Location: WMW-29A
Sample Type: Grab
Preservative: Ice to 4 C, HNO3 pH < 2
Analysis: Total Metals ISM01.3/ICP-AES
Concentration: Low
Tag No: 6-449127

GPO U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Designate: Grab
		1/31/12	1141		

Tag Number: 6- 449128

Station Location:

Samplers (Signatures):

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Remarks:

Case No: 42182
Sample No: MF5AW8
Station Location: WMW-29A
Sample Type: Grab
Preservative: Ice to 4 C, HNO3 pH < 2
Analysis: Total Metals ISM01.3/ICP-AES
Concentration: Low
Tag No: 6-449128

GPO: U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Designate: Grab
		1/31/12	1600		

Tag Number: 6- 449132

Station Location:

Samplers (Signatures):

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Remarks:

Case No: 42182
Sample No: MF5AW9
Station Location: WMW-31A
Sample Type: Grab
Preservative: Ice to 4 C, HNO3 pH < 2
Analysis: Total Metals ISM01.3/ICP-AES
Concentration: Low
Tag No: 6-449132

GPO: U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Designate: Grab
		1/31/12	1402		

Tag Number: 6- 449136

Station Location:

Samplers (Signatures):

Concentration: ☐ L ☐ M ☐ H

Lab Sample No.

Remarks:

Case No: 42182
Sample No: MF5AX0
Station Location: WMW-32A
Sample Type: Grab
Preservative: Ice to 4 C, HNO3 pH < 2
Analysis: Total Metals ISM01.3/ICP-AES
Concentration: Low
Tag No: 6-449136

GPO: U.S. GOVERNMENT PRINTING OFFICE: 2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Designate: Grab
		1/31/12	1029		

Tag Number 6- 449140

Station Location

Samplers (Signatures)

Concentration: ☐L ☐M ☐H

Lab Sample No.

Remarks:

Case No: 42182
Sample No: MF5AX1
Station Location: WMW-33A
Sample Type: Grab
Preservative: Ice to 4 C, HNO3 pH < 2
Analysis: Total Metals ISM01.3/ICP-AES
Concentration: Low/Medium
Tag No: 6-449140

GPO: U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Designate: Grab
		1/31/12	933		

Tag Number 6- 449144

Station Location

Samplers (Signatures)

Concentration: ☐L ☐M ☐H

Lab Sample No.

Remarks:

Case No: 42182
Sample No: MF5AX2
Station Location: WMW-34A
Sample Type: Grab
Preservative: Ice to 4 C, HNO3 pH < 2
Analysis: Total Metals ISM01.3/ICP-AES
Concentration: Low/Medium
Tag No: 6-449144

GPO: U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

Project Code CLP Case No.	Station No.	Month/Day/Year	Time	Designate: Comp.	Designate: Grab
		1/31/12	1050		

Tag Number 6- 449148

Station Location

Samplers (Signatures)

Concentration: ☐L ☐M ☐H

Lab Sample No.

Remarks:

Case No: 42182
Sample No: MF5AX3
Station Location: ER # 1
Sample Type: Grab
Preservative: Ice to 4 C, HNO3 pH < 2
Analysis: Total Metals ISM01.3/ICP-AES
Concentration: Low
Tag No: 6-449148

GPO: U.S. GOVERNMENT PRINTING OFFICE:2009-546-765

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L0213

Client ID: EPAINV
Project: ISM Region VI 21 day TAT
WO Name: ISM Region VI 21 day TAT
Location: ISM_VI_21,
Comments: N/A

Case: 42182
SDG: MF5AW6
PO: EP-W-09-039

HC Due: 02/21/12
Fax Due:
Fax Report: ☐

Report Level: CLP_REPORT
Special Program:
EDD: ISM_SEDD2B

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L0213-01A	MF5AW6	01/31/2012 14:54	02/02/2012	Aqueous	ISM01.3_ICP_AES_W	/					O3
L0213-02A	MF5AW7	01/31/2012 14:54	02/02/2012	Aqueous	ISM01.3_ICP_AES_W	/					O3
L0213-03A	MF5AW8	01/31/2012 11:41	02/02/2012	Aqueous	ISM01.3_ICP_AES_W	/			Y		O3
L0213-04A	MF5AW9	01/31/2012 16:00	02/02/2012	Aqueous	ISM01.3_ICP_AES_W	/					O3
L0213-05A	MF5AX0	01/31/2012 14:02	02/02/2012	Aqueous	ISM01.3_ICP_AES_W	/					O3
L0213-06A	MF5AX1	01/31/2012 10:29	02/02/2012	Aqueous	ISM01.3_ICP_AES_W	/					O3
L0213-07A	MF5AX2	01/31/2012 09:33	02/02/2012	Aqueous	ISM01.3_ICP_AES_W	/					O3
L0213-08A	MF5AX3	01/31/2012 10:50	02/02/2012	Aqueous	ISM01.3_ICP_AES_W	/					O3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Client: EPAINV

Work Order: L0213 **Profile Name:** ISM_VI_21

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
01A	001	ISM01.3_ICP_AES_W	In	LOGIN: kpierce	2/2/2012 10:20:00 AM
01A	001	ISM01.3_ICP_AES_W	Out	David T Camara	2/8/2012 10:05:34 AM
01A	001	ISM01.3_ICP_AES_W	In	David T Camara	2/8/2012 10:49:20 AM
02A	001	ISM01.3_ICP_AES_W	In	LOGIN: kpierce	2/2/2012 10:20:00 AM
02A	001	ISM01.3_ICP_AES_W	Out	David T Camara	2/8/2012 10:05:34 AM
02A	001	ISM01.3_ICP_AES_W	In	David T Camara	2/8/2012 10:49:20 AM
03A	001	ISM01.3_ICP_AES_W	In	LOGIN: kpierce	2/2/2012 10:20:00 AM
03A	001	ISM01.3_ICP_AES_W	Out	David T Camara	2/8/2012 10:05:34 AM
03A	001	ISM01.3_ICP_AES_W	In	David T Camara	2/8/2012 10:49:20 AM
03A	002	ISM01.3_ICP_AES_W	In	LOGIN: kpierce	2/2/2012 10:20:00 AM
04A	001	ISM01.3_ICP_AES_W	In	LOGIN: kpierce	2/2/2012 10:20:00 AM
04A	001	ISM01.3_ICP_AES_W	Out	David T Camara	2/8/2012 10:05:34 AM
04A	001	ISM01.3_ICP_AES_W	In	David T Camara	2/8/2012 10:49:20 AM
05A	001	ISM01.3_ICP_AES_W	In	LOGIN: kpierce	2/2/2012 10:20:00 AM
05A	001	ISM01.3_ICP_AES_W	Out	David T Camara	2/8/2012 10:05:34 AM
05A	001	ISM01.3_ICP_AES_W	In	David T Camara	2/8/2012 10:49:20 AM
06A	001	ISM01.3_ICP_AES_W	In	LOGIN: kpierce	2/2/2012 10:20:00 AM
06A	001	ISM01.3_ICP_AES_W	Out	David T Camara	2/8/2012 10:05:34 AM
06A	001	ISM01.3_ICP_AES_W	In	David T Camara	2/8/2012 10:49:20 AM
07A	001	ISM01.3_ICP_AES_W	In	LOGIN: kpierce	2/2/2012 10:20:00 AM
07A	001	ISM01.3_ICP_AES_W	Out	David T Camara	2/8/2012 10:05:34 AM
07A	001	ISM01.3_ICP_AES_W	In	David T Camara	2/8/2012 10:49:20 AM
08A	001	ISM01.3_ICP_AES_W	In	LOGIN: kpierce	2/2/2012 10:20:00 AM
08A	001	ISM01.3_ICP_AES_W	Out	David T Camara	2/8/2012 10:05:34 AM
08A	001	ISM01.3_ICP_AES_W	In	David T Camara	2/8/2012 10:49:20 AM

MITKEM CORPORATION

METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
5/21/08	V	High Purity	100065-1	0811315	V	JRW	11/19/09	11/11/09 TS	I080521AE
5/21/08	Cd	High Purity	10008-1	0731229	Cd	JRW	11/19/09	11/11/09 TS	I080521AF
5/27/08	Sulfur	High Purity	100054-5	0728437	S	JRW	7/7/09	1/26/09 TS	8A30006
5/27/08	Sulfur	Accu Standard	N/A	B6085031	S	JRW	8/2011	1/26/09 TS	I080527A
5/29/08	CLP-CV-2	High Purity	CLP-CV2	0814102	Sb	JRW	5/23/09	1/26/09 TS	I080529A
5/29/08	SM-150-036	High Purity	SM150-036	0814106	TAL NaKBno SnSi SrLiP	JRW	5/23/09	5/23/09 TS	I080529B
6/18/08	Sn	Accu Standard	ICP-63N-1	B0755032	Sn	JRW	5/12 2012		I080618A
	Y		ICP-69N-1	B6075067	Y		6/2011		I080618B
	Sb		ICP-02N-1	B8045030	Sb		4/2013		I080618C
	B		ICP-07W-1	B7055023	B		5/2012		I080618D
6/18/08	Mo	Accu Standard	ICP-35W-1	B8015120	Mo	JRW	2/2013		I080618E
6/25/08	Custom	Accu Standard	IS-17463	B8065099	Mix	JRW	12/2009	4/23/09	I080625A
6/25/08	Custom CCV	AccuStd	IS-17464	B8065102	Mix	JRW	12/2009	3/24/09 TS	I080625B
6/25/08	Custom	Acu Std	IS-17465	B8065100	SbAsCdSeTl Pb	JRW	12/2009	12/31/09 TS	I080625C
7/3/08	Ti	AccuSTD	ICP-61W-1	B7035001	Ti	TS	3/2012		I080703A
7/22/08	INFCS-5	High Purity	INFS-5	0729706	Na K	JRW	7/19/2009	5/28/09 TS	I080722A
9/23/08	Hg Ref. std	Fisher Scientific	SM-114-100	081818	Hg	JRW	4/2010		I080923A

MITKEM CORPORATION

METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
10/1/08	CRDL	High Purity	CRDL	0803012	Mix/Multiple	JRW	9/26/09	9/24/09 TS	I081001A
10/1/08	CLP-CV-3	High Purity	CLP-CV-3	0805606	AS Cd Pb & Tl	JRW	9/26/09	9/24/09 TS	I081001B
10/1/08	CLP-CAL3	High Purity	CLPCAL-3	0806404	AS Cd Pb & Tl	JRW	9/26/09	9/24/09 TS	I081001C
10/8/08	CLP--INF-1	High Purity	CLPINF1	0814916	Al Ca Fe Mg	TS	10/6/09	1/13/09 JRW	I081008A
	ANALCS-R		ANALCS-R	0723327	mix		10/6/09	5/23/09 TS	I081008B
	CLP-CV-1		CLP-CV-1	0809110	mix		10/6/09	12/18/08 JRW	I081008C
	CLP-CAL-1A		CLP-CAL-1A	0808111	mix		10/6/09	10/6/09 TS	I081008D
	CLP-CAL-1B		CLP-CAL-1B	0733326	Ag		10/6/09	10/6/09 TS	I081008E
11/7/08	Tuning Soln #1	Perkin Elmer	N9303813	39-108AS	Mix 10ppm	TS	3/15/10		I081107A
	CLP-CV-2	High Purity	CLP-CV-2	0806405	Sb 500ppm		11/4/09	9/30/09 TS	I081107B
	CLP-CV-1		CLP-CV-1	0809110	mix			1/26/08 TS	I081107C
	CLP-CV-1		CLP-CV-1	0809110	mix			3/25/09 JW	I081107D
11/18/08	OPTIMA H_2O	Fisher	W011515	9207110	H_2O ultrapure	TS	12/1/2010		I081118A
	OPTIMA HNO_3	Fisher	N227508	1207121	HNO_3 ultrapure	TS	1/1/2011		I081118B
11/25/08	ICP-MS-ISmix1	ACCUSTD	ICPMS-ISmix1	B7105037 1A	INT. STDS mix	TS	10/1/2010		I081125A
	ICP-MS-INTA1		ICPMSINTA1	B8115064	mix	TS	11/1/2010	8/10/09 TS	I081125B
12/18/08	ICP-MS INT 6020	ACCU STD	ICPMS INT 1-1 6020	B8065096	mix	TS	6/1/2010	1/15/10 TS	I081218A

QAT00138 Log ID: FIO-20 Reviewed By: DES 3/29/09 Page: 055

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MITKEM CORPORATION

METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
12/23/08	Lithium 6	High Purity	100029-6L	0812718	Li 6	TS	6/1/2010	6/1/2010 TS	IP081223A
↓	CLP INF 1	↓	CLP-INF-1	0814916	Mix	↓	12/17/09	(3) 5/14/09	IP081223B
1/9/09	IRON	High Purity	100026-1	0823503	1000ppm Fe	TS	7/7/10	TS 7/15/09	IP090109A
1/13/09	Scandium	ACCUSTD.	ICP SCN-1	B3065144	Scandium	TS	6/1/2013		IP090113A
	Custom CCV 100x		IS 17464	B7015012	Custom mix		7/1/2010	TS 3/23/10	B
	Na		ICP 51N 10X	B7085122	Na		8/1/2012		C
	K		ICP 43N 10x 20ml	B7125011	K		12/1/2012		D
	Al		ICP 01N 10x 20ml	B8065134	Al		7/1/2013	TS 4/8/09	E
	Fe		ICP 27N 10x 20ml	B8035098	Fe		4/1/2013	TS 11/11/09	F
	Ca		ICP-09N 10x 20ml	B7095036	Ca		9/1/2012		G
	Mg		ICP-32N 10x 20ml	B7105137	Mg		10/1/2012		H
	Ba		ICP-04N 10x 20ml	B8015037	Ba		1/1/2013		I
1/19/09	S	Accustd	ICP-S6W 100mL	B0806 5026	S	JRW	6/2013		IP090119A
1/22/09	Sulfur	High Purity-1	100051-5	0813606	S	TS	7/19/10	TS 7/19/10	IP090122A
	CLP SPK STD A		CLP-SP-1A	0815712	Mix		7/10 01/14/10	TS 1/14/10	B
	CLP SPK STD B		CLPSP-1B	0817804	Ag		1/19/10	TS 1/14/10	C
	QC STD 19		QCS-19	0805125	Mix		1/19/10	TS 1/8/10	D
	RA	ACCUSTD	ICP-46H-1	B8069025	1000		4/30/2013		F
	LU		ICP-51N-1	(3) B8045147	1000		6/30/2013		E

Log ID: FIO-20

Reviewed By: DES 3/25/08

Page: 056

TS 1/14

MITKEM CORPORATION

METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
2/3/09	ICPMS CAL STD 200.8	ACCUSTD	ICP-MS-200.8 CAL1-1	B8075015	Mix 10PPM	TS	7/1/10		IP090203A
	Silver		ICP-53N-1	B8115019	Ag 1000		11/1/13		B
	Barium		ICP-04N-1	B7095062	Ba 1000		9/1/12		C
2/4/09	Calcium	High Purity	10M9-1	0802214	Ca 10K	TS	7/30/10	5/21/09 TS	IP090204A
	Magnesium		10M31-1	0830522	Mg 10K		7/30/10	5/21/09 TS	B
	Potassium		10M41-1	0816917	K 10K		7/30/10		C
	Sodium		10M52-1	0819004	Na 10K		7/30/10		D
2/17/09	Potassium	High Purity	100041-1	0834401	K 1K	TS	9/12/10		IP090217A
	CLPCV-1 mix		CLP-CV-1	0831915	Mix		2/12/10	5/21/09	IP090217B
3/19/09	6020 ICSAB Mix	ACCUSTD	ICP-MS-INTB1	B8105070	Mix	TS	10/1/10		IP090319A
3/26/09	CRI 514 mix	ACCUSTD	FS 17463	B9035120	Mix	TS	9/1/10		IP090326A
3/31/09	ICV-5(0508) Hg	EPA	0508			TS			IP090331A
3/27/09	ICV-1(0307)	EPA	TS 3/31/09 ~~1206~~ 0307		Mix	TS	3/27/10		IP090327A
	ICP-AES PART A		~~0203~~ 1206		Mix		3/27/10		B
	ICPAES PART B		0203						C
	ICS-MS PART A		0803						D
	ICSMS PART B		0803						E

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MITKEM CORPORATION

METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
4/5/09	IP090405 A	VITRA Scient.	ICM 213	F000833A	12 mix	TS	1/31/11		IP090405A
	B		ICM215	G002238A	5 mix	TS	7/31/12		B
	C		ICP-051	J01034	Sb	TS	1/31/15		C
	D		ICM 211	G00742A	3mix	TS	12/31/10		D
	E		ICM 212	G00357A	4 mix	TS	7/31/12		E
4/6/09	IP090406 A Ca	ACCUSTD	ICP09N 10x 20ml	B7095036	Ca 10K	TS	9/1/12		IP090406 A
	B Fe		ICP27N 10x 20ml	B8035098	Fe 10K		4/1/13		B
	C Mg		ICP32N 10x 20ml	B9105137	Mg 10K		11/1/12		C
	D K		ICP43N 10x 20ml	B7115041	K 10K		11/1/12		D
	E Na		ICP54N 10x 20ml	B6051117-1A	Na 10K		3/1/13		E
4/7/09	Aluminum	ACCUSTD	ICP-01N-1	B8035061	Al 1K	TS	3/1/13		IP090407B
	CLP GFAA SPIK		CLP SPI AA	B110512 2B	Mix		1/1/11	11/12/09 TS	IP090407A
4/8/09	Aluminum	High Purity	1000/-1	0835319	Al 1000	TS	10/3/10		IP090408A
	CAL STD 1 PART A		CLP-CAL-1	0808111	Mix		4/3/10		B
	CAL STD 1 PART B		CLP-CAL-1	0909206	Ag 250		4/3/10		C

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METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
5/5/09	IP090505 A INT.	Ultra Sci	ICM-441	J00734	Al Ca Fe Mg	TS	9/30/12	9/8/09 drw	IP090505A
	B Fe		IAA-226	J00851	Fe		10/31/15		B
	C ANA LCS		ICM-443	G00792A	16 ANALYTES		12/31/12		C
	D ICM SPK		ICM451	F00693A	12 ANALYTES		1/31/11		D
5/8/09	Mg	High Purity	10M31-1	0909104	Mg	TS	11/4/10		IP090508 A
	Ca		10M9-1	0835136	Ca		11/4/10		B
	CV-1		CLP-CV-1	0831915	mix		5/4/10	8/25/09 drw	C
	INFCS-5		INFCS-5	0836615	NaK		5/4/10		D
5/18/09	Au	Ultra Scientific	IAA-279	K00314	Au	JRW	5/31/2016		IP090518A
5/18/09	Si	Ultra Scientific	IAA214	J00242	Si	JRW	4/30/2016		IP090518B
6/19/09	Au	High Purity	100021-2	0910707	Au	TS	11/15/2010		IP090519A
	Si		100050-4	0904231	Si & Na		11/15/2010		IP090519B
6/16/09	ICP-MS 6020 ECSA	ACCUSTD	ICP-MS-INTA-1	B8115064	mix	TS	11/30/2010	TS 11/19/09	IP090616A
7/9/09	CLP-CV-1	High Purity	CLP-CV1	0831915	Mix	drw	7/2/2010	8/25/09 drw	IP090709A
7/9/09	CLP-CV-2	High Purity	CLP-CV2	0814102	Sb	JRW	7/2/2010	11/13/09 TS	IP090709B
7/9/09	CLP-CV-3	High Purity	CLP-CV3	0916084	As Cd Pb Se Tl	JRW	7/2/2010	11/13/09 TS	IP090709C
8/6/09	Hg	ACCUSTD	ICP-34N-1	B8065130	Hg	drw	6/2013		IP090806A

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METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
8/11/09	Al IP090811A	High Purity	10MI-1	09098114	Al 10K	TS	2/5/11		IP090811A
↓	Hg IP090811B	VWR	82025-992	C2-HG 02005	Hg 1K	TS	9/1/10		IP090811B
8/11/09	CLP SPK STD 1A	High Purity	CLP-SP-1	0815712	Mix	TS	8/7/10		IP090811C
↓	CLP SPK STD 1B	↓	CLP-SP-1	0817804	Ag (50 ppm)	TS	8/7/10		IP090811D
9/8/09	CLP Interference Check	Ultra Scientific	ICM-441	J00734	Ca Al Fe Mg	JRW	9/30/12	TS 1/6/10	IP090908A
9/10/09	CLP-CV-1	High Purity	CLP-CV-1	0831915	Mix	TS	9/03/10	10/27/09 TS	IP090910A
~~9/24/09~~	~~CLP-CV-3~~ TS	~~High Purity~~	~~CLP-CV-3~~	~~0916004~~	~~As Cd Pb Se Tl~~	~~TS~~	~~7/24/09~~ 7/21/10		~~IP090924A~~
9/24/09	CLP-CAL-3	High Purity	CLP-CAL-3	0916805	As Cd Pb Se Tl	TS	9/21/10		IP090924A
10/7/09	TRACE METALS	ERA	500	9171-500	Mix	TS	6/14/10		IP091007A
11/11/09	As	ACCUSTD	ICP03N1	B8055113	As 1000	TS	5/30/13		IP091111A
	Be		ICP05N1	B9025001	Be 1000		2/28/14		B
	Cd		ICP08N1	B9015081	Cd 1000		2/28/14		C
	Cr		ICP13N1	B9015012	Cr 1000		1/30/14		D
	Co		ICP14N1	B9035124	Co 1000		3/30/14		E
	Cu		ICP15N1	B8055080	Cu 1000		5/30/13		F
	ICP-MS INT Check Soln A		ICP-MS-INTA-1	B8115064	Mix		11/30/10		G
↓	Pb	↓	ICP-29N1	209095131	Pb 1000	↓	9/30/14		H

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METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
11/11/09	Mn	ACCUSTD	ICP38N1	B8045178	Mn 1000	TS	4/30/13		IP091111I
	Ni		ICP37N1	B8045143	Ni 1000		4/30/13		J
	Zn		ICP70N1	B9015044	Zn 1000		1/30/14		K
	Se		ICP51N1	B9035001	Se 1000		3/30/14		L
	Tl		ICP60N1	B8025014	Tl 1000		2/28/13		M
	V		ICP67N1	B9025039	V 1000		2/28/14		N
11/13/09	CV1	High Purity	CLP-CV-1	0831915	Mix	TS	11/11/10	1/6/10 TS	IP091113A
	CV2		CLP-CV-2	0931409	Sb		11/11/10		B
	CV3		CLP-CV-3	0916004	AsCdPbSeTl		11/11/10		C
	Sb		10002-3	0921603	Sb		5/11/11		D
	Mo		100034-3	0908515	Mo		5/11/11		E
	Sn		100061-3	0927820	Sn		5/11/11		F
	Ti		100062-3	0914701	Ti		5/11/11		G
	CAL1A		CLP-CAL1A	0916901	Mix		11/11/10		H
	CAL1B		CLP-CAL1B	0931408	Ag		11/11/10		I
12/9/09	Boron	High Purity	10007-4	0928109	B 1000	TS	6/7/11		IP091209A
12/21/09	CLP ICP Check	Ultra Scientific	ICM-441	J00734	AlCaFeMg	JRW	9/30/12		IP091221A

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METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
12/22/09	CV-1	High Purity	CLP-CV-1	0931915	mix	TS	12/18/10		IP091222A
12/24/09	QCS-19	High Purity	QCS-19	0933532	100ppm mix	TS	12/21/10		IP091224A
1/12/10	CCV 100x Conc	ACCUSTD	ES174164	210015026	mix	TS	7/30/11		IP100112A
1/25/10	Fsm EPA ICSA AES	EPA	ICSA1206	—	mix	TS	1/25/11		IP100125A
	Fsm EPA ICSB AES		ICSB0203	—					B
	Fsm EPA ICSA MS		ICSA0803	—					C
	Fsm EPA ICSB MS		ICSB0803	—					D
	ICPAES & MS ICV1-0307		ICV1-0307	—					E
	ICV 5-0508 Hg		ICV5 0508	—	Hg				F
					HZA 2/1/10				

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METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
2/2/10	CLP-CV-1	High Purity	CLP-CV-1	0831915	Mix	TS	1/29/11	TS 04/12/10	IP100202A
2/10/10	Tuning Solution	Perkin Elmer	N9308043	15-152513	10ppm Mix	TS	7/30/11		IP100210A
	Mg 10,000	High Purity	10M31-1	0909104	Mg		8/8/11		B
	Ca 10,000		10M9-1	0927502	Ca		8/8/11		C
	K 10,000		10M41-1	0917022	K		8/8/11		D
	Na 10,000		10M52-1	0911811	Na		8/8/11		E
2/12/10	Custom ICP Std	Accu Standard	IS-17463	210025025	Mix	JMW	8/2011	TS 10/21/10	IP100212A
2/12/10	ICP-MS Int. Std Mix	AccuStd	ICP-MS-IS-MIX 1-1	B9035092 -1A	Bi, Ho, In, Li6 Sc, Tb, Y	JMW	2/2012		IP100212B
3/4/10	K 10K	High Purity	10M41-1	1003001	K	TS	9/2/2011		IP100304A
	Na 10K		10M52-1	0911811	Na				B
	Mg 10K		10M31-1	0929517	Mg				C
	Ca 10K		10M9-1	0927502	Ca				D
3/22/10	Yttrium	High Purity	10M67-1	0931001	Y	TS	9/17/11		IP100322A
4/6/10	CLP primary interference std	Accu Standard	CLP-PIN-01-5	210035045	Al Ca Fe Mg	HZA	3/31/2012	6/11/10 TS	IP100406A
4/12/10	CLP-Cal-1A	High Purity	CLP-Cal-1A	0916901	IS Mix	HZA	4/6/2011		IP100412A
↓	CLP-Cal-1B (Ag)	↓	CLP-Cal-1B	0931408	Ag	↓	4/6/2011		IP100412B
4/12/10	CLP-CV-1 (CCV)	High purity	CLP-CV-1	0831915	16 Mix	HZA	4/6/2011	TS 5/14/10	IP100412C

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METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
4/12/10	CLP-SP-1A	High Purity	CLP-SP-1A	0926419	11 Mix	HZA	4/06/2011		IP100412D
↓	CLP-SP-1B	↓	CLP-SP-1B	0926417	Ag	↓	4/06/2011		↓ E
4/12/10	10M1-1 (Al)	High Purity	10M1-1	1008321	Al	HZA	10/6/2011		IP100412F
6/4/10	PRIMARY INTERFERENTS ICSA	ACCUSTD	CLP-PIN-01 5	210035043	Al Cafe Mg	TS	3/31/12	9/8/10 TR	IP100604A
6/7/10	NaK INFCS-5	HIGPURITY	INFCS-5	1011615	NaK 5000	TS	6/3/11		IP100607A
↓	ANA-LCS-R	↓	ANALCS-R	0927928	Mix ICSAB/B	↓	↓		↓ B
↓	CV-1	↓	CLP-CV-1	0831915	Mix	↓	↓	7/15/10 TS	↓ C
↓	CV-1	↓	CLP-CV-1	0831915	Mix	↓	↓	9/21/10 TS	↓ D
6/22/10	CV-2	High Purity	CLP-CV-2	0931409	Sb	TS	6/17/11		IP100622A
↓	Li 6	↓	100029-6I	1003306	Li 6	↓	12/17/11		↓ B
↓	CV-3	↓	CLP-CV-3	0928720	Mix	↓	6/17/11		↓ C
7/7/10	CRI 5.4 mix	Accu STD	IS 17463	B9035120	Mix	TR	12/1/10		IP100707A
7/8/10	CLP ~~Cal~~ SP 1A	High purity	CLP-SP-1	0926419	11 Mix	TR	7/6/2011		IP100708A
↓	CLP ~~Cal~~ SP 1B (Ag)	High purity	CLP-SP-1	0926417	Ag	↓	7/6/2011		IP100708B
↓	Barium	Accu std	ICP-04N1	210015088	Ba 1000	↓	1/1/2015		IP100708C
↓	IRON	Accu std	ICP27N 10x - 20ml	B8035098	Fe 10K	↓	4/1/2015		IP100708D
7/23/10	ISM OES 54/55 B	ACCUSTD	IS 20994	210075117	14 ANAlite Mix	TS	1/31/12		IP100723A

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MITKEM CORPORATION **METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB**

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
7/23/10	ISM OES S6 CAL STD 10X	ACCUSTD	IS20993	210075115	Al Fe Mn Pb 4 ANALYTES	TS	1/31/12		IP100723B
↓	ISM OES S4/S5 CAL STD A	↓	IS20995	210075116	Al Cr Fe Mn Pb Cu 6 ANALYTES	TS	1/3/12		IP100723C
8/6/10	ICP-MS Soln A	ACCUSTD	ICP-MS-INTA-1	138115064-1A	ICSA 6020	TS	~~03/31/12~~	TS 12/31/11	IP100806A
↓	CIP PRIMARY INTERF.	ACCUSTD	CIP-PIN 01-5	210035013	Al Ca Fe Mg	TS	03/31/12		IP100806B
8/10/10	ICSA-0803 MS	EPA	—	—	Mix	TS	8/10/11		IP100810A
	ICSB-0803 MS	EPA	—	—	Mix	TS	8/10/11		B
	ICSA-1206 AES	EPA	—	—	Mix	TS	8/10/11		C
	ICSB-0203 AES	EPA	—	—	Mix	TS	8/10/11		D
	ICV1-0307	EPA	—	—	Mix	TS	8/10/11		E
↓	ICV5-0508	EPA	—	—	Hg	TS	8/10/11		F
	Partial Reviewed			HZA	8/10/10				
8/23/10	Silver CAL Soln B	HighPurity	CLP-CAL-1	0931408	Ag	TS	8/18/11		IP100823A
	Aluminum		10001-1	1013305	Al	TS	2/18/12		B
	Sulfur		100054-5	1016909	S		2/18/12		C
	CV-1		1016907	CLP-CV-1	Mix		8/18/11		D
↓	CAL-3	↓	1008112	CIP-CAL3	Mix	↓	8/18/11		E
8/23/10	Hg STD	BDH	82025499	C2Hg02070	Hg	GA	9/1/11		IP100823F

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Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
9/17/10	UV WAVECAL Sol'n	Perkin Elmer	N0681470	H1-4AS	11 ANALYTES	TS	9/30/11		IP100917A
↓	Vis WAVECAL Sol'n	↓	N9302946	42-23AS	8 ANALYTES	TS	2/28/12		IP100917B
10/6/10	ICP-MS INTERFERENCE CHECK SOL. B	ACCUSTANDARD	ICP-MS INTB	B 8105040-1A	11 ANALYTES	TR	3/30/12		IP1010064
10/6/10	Fe 10,000ppm	High Purity	10M26-1	1009502	Fe@10,000	TR	~~4/30/12~~ 4/4/12		IP101006B
↓	Fe 1000ppm	↓	100026-1	1022807	Fe@1,000ppm	TR	4/4/12		IP101006C
	Yttrium		10M67-1	093/001	Y @ 10,000	TR	4/4/12		IP101006D
	Clpcheck std 1		CLP-CV-1	1016907	16 Analytes	TR	10/4/11		IP101006E
↓	CLP Cal std 1 Sol A		CLP-CAL-1	1009210	15 Analytes	TR	10/4/11		IP101006F
10/6/10	Clpcal1 Sol B	↓	CLP-Cal-1	1018201	Ag	TR	10/4/11		IP101006G
			HZA 10/7/10		Partial Reviewed				
10/21/10	ICP-AES ICSA	EPA	ICSA 1206	—	mix	TS	10/21/11		IP101021A
↓	ICP AES ICSA	↓	ICSA 1206	—	↓	↓	↓		B
	ICP AES ICSB		ICSB 0303	—					C
	ICP MS ICSA		ICSA 0303	—					D
	ICV 1		ICV1 0307	—					E
↓	ICV 1	↓	ICV1 0307	—	↓	↓	↓		F
			HZA 10/25/10						

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Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
11/23/10	CLP SPK MIX A	High Purity	CLP-SP-1A	0926419	Mix	TS	11/18/11		IP101123A
↓	CLP SPK Ag B	↓	CLP-SP-1B	0926417	Ag	TS	11/18/11		↓ B
12/2/10	ICSA 10x	ACCUSTD	CLP-PEN-01	210035043	Mix	TS	3/31/12		IP101202A
↓	CRI 100x	↓	IS174163	B9035120 1A	mix	TS	1/31/12		IP101202B
12/23/10	QCS-19 Mix	High Purity	QCS-19	1026518	Mix	TS	12/21/11		IP101223A
↓	CV-1 mix	High Purity	CLP-CV-1	1016907	Mix	TS	12/21/11		↓ B
1/6/11	Mn	ACCUSTD	ICP-33N-1	210055015		TS	6/6/2015		IP110106A
↓	6020ICSA	↓	ICP-MS-INTA-1	B3115064 2B		TS	11/6/2012		↓ B
↓ 1/6/11	B	↓	ICP-07421	B3075144-1A		TS	8/6/2015		↓ C
1/8/11	Ba	High Purity	10004-1	1016518	Ba@1000ppm	TR	7/5/2012		IP110108A
—	— Partial Reviewed NZA 2/16/11 —								
1/22/11	CRI 100x Mix	Accustandard	IS-17164	211025047	MIX	TR	08/30/2012		IP110222A
↓	ISM 54/55 A OES	↓	IS-20995	211025049	MIX-6	TR	8/30/2012		IP110222B
↓	ISM 54/55 B OES	↓	IS-20994	211029064	MIX-14	TR	8/30/2012		IP110222C
2/25/11	Fe 10K	ACCUSTD	ICP-27N-10X-20ml	B8035048-1A	Fe	TS	4/30/15		IP110225A
↓	CCV 100x Conc	ACCUSTD	IS174164	21102	Mix	TS	8/31/12		IP110225B
						TS 3/7/11			

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MITKEM CORPORATION **METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB**

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
3/7/11	ICV 5-0508 Hg	EPA	—	—	Hg	TS	3/7/12 TS		IP110307A
	ICSA-0803 ICP MS				mix				B
	ICSB-0803 ICP MS				mix				C
	ICSA-1206 ICP AES								D
	ICSA-1206 ICP AES								E
	ICSB-0203 ICP AES								F
	ICV1-0307								G
	ICV1-0307								H
	Partial	Reviewed	NZA	3/9/11					
TS 3/21/11	CLP-CAL-1B	High Purity	CLP-CAL-1	1018201	Ag @ 250	TS	3/17/12 TS		IP110321A
3/23/11	CV-1	High Purity	CLP-CV-1	1016907	mix of 16	TS	3/21/12		IP110323A
	CV-2		CLP-CV-2	0931409	Sb @ 500		3/21/12		B
	CV-3		CLP-CV-3	1030124	mix of 5		3/21/12		C
TS 4/11/11	ICP-MS ISM LCS	High Purity	SM-1305-004	1109522	mix of 19	TS	4/7/12		IP110411A
4/11/11	ICP-MS-ISM-CAL		SM-1305-003	1109521	mix of 18	TS	4/7/12		B
		NZA 4/12/11							

MITKEM CORPORATION **METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB**

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
4/15/11	~~A~~ HZA 5/2/11 Antimony	High purity	10002-3	1030709	Sb @1,000 ppm	TK	10/5/2012		~~IP~~ IP110415A TK 4/7/11
↓	Titanium	High Purity	100062-3	1025703	Ti @1,000 ppm	TR	10/5/2012		~~IP~~ IP110415B
	ICP-MS CAL	High PURITY	ICP-AM-15-5M	1021626	Ca Mg Na K @ 5,000 ppm	TR	4/5/2012		IP110415C
4/22/11	Na	High PURITY	10M-52-1	1103310	Na 10K ppm	TS	10/19/2012		IP110422A
	K		10M-41-1	1031408	K 10K				B
	Ca		10M9-1	1110406	Ca 10K				C
	Mg		10M31-1	1031611	Mg 10K				D
	Lu		10M30-1	1108705	Lu 10K				E
	In		10M24-1	1036319	In 10K				F
	Partial	Reviewed	HZA	5/2/11					
5/9/11	0020 ICSA 10x	ACCU STD	ICP-MS-INTA-1	211035192	mix	TS	4/30/13		IP110509A
	B	High PURITY	10007-4	1036225	1000 ppm		11/4/12		B
	Sn		100061-3	1033410					C
	Mo		100031-3	1029512					D
5/18/11	CRI 5.4 100x	ACCU STD	IS-17463	21 0115085	MIX	TR	06/1/2012		IP110518A
5/18/11	Sb	ACCU STD	ICP-02N-1	210075109	Sb @ 1000 ppm	TK	6/1/2015		IP110518B
5/27/11	ICP-MS Tune Soln	Perkin elmer	N9303343	42-15AS	10ppm Mix	TS	11/30/2012		IP110527A

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MITKEM CORPORATION **METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB**

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
6/6/11	CAL STD 1A	High Purity	CLP-CAL-1	1009210	Mix (15)	TS	6/2/12		IP110606A
↓	CAL STD 1B	↓	CLP-CAL-1	1018201	Ag @ 250	↓	6/2/12		↓ B
6/7/11	INFCS-5 (KNa)	High Purity	INFCS-5		KNa	TS	6/3/2012		IP110607A
	CLP SPK STD B (Ag)		CLP-SP-1		Ag				B
	CLP SPK STD A		CLP-SP-1		Mix				C
	CV-1		CLP-CV-1		Mix			8/25/11 TS	D
	CV-1		CLP-CV1		Mix			7/5/11 TK	E
↓	ANALCS-R	↓	ANALCS-R		Mix	↓	↓		↓ F
6/16/11	Ti	ACCU STD.	ICP-64W1	211015121	Ti @ 1,000	TK	1/31/2016		IP110616A
↓	ICP-MS INT STD MIX	ACCU STD.	ICP-MS-IS MIX1-1	210075074	MIX	TK	07/31/2012		IP110616B
↓	CCV 100x Conc	ACCU STD	IS-17464	211065052	MIX	TK	12/31/2012		IP110616C
	Partial	Reviewed	HZA	8/5/11					
8/9/11	ICP-MS CAL	High Purity	STMB85 003	1121504	Mix	TS	8/4/2012		IP110809A
8/22/11	INTERFERENTS ICSA/AB STK.	ACCU STD	CLP-PIN-01-5	210035043 .01	AlFeCaMg	TS	2/23/13		IP110822A
	CV-1	High Purity	CLP-CV-1	1107611	Mix	TS	8/15/12		B
	CV-2		CLP-CV-2	1120125	Sb				C
↓	CV-3	↓	CLP-CV-3	1030124	AsCdPbSeTl	↓	↓		↓ D

MITKEM CORPORATION **METALS PRIMARY STD RECEIPT LOGBOOK: INSTRUMENT LAB**

Date Received	Primary STD ID	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Disposal or Consumption Date	Mitkem ID
8/29/11	Hg @ 1000 ppm	High-purity	100033-1	1119425	Hg @ 1000 ppm	TR	02/25/13		IP110829A
		Partial Reviewed	HZA 9/2/11						
TS 9/9/11	ISM 54/55 B	ACCUSTD	IS 20994	211095006	14 mix	TS	3/31/13		IP110909A
9/20/11	ICP-MS ICSA	EPA	ICSA 0803	—	mix	TS	9/20/12		IP110920A
	ICP-MS ICSA		ICSA 0803	—					B
	ICP-MS ICSB		ICSB 0803	—					C
	AES ICSA		ICSA 1206	—					D
	AES ICSA		ICSA 1206	—					E
	AES ICSB		ICSB 0803	—					F
	ICV ISM		ICVI-0307	—					G
	ICV ISM		ICVI-0307	—					H
9/22/11	Na	High Purity	10M52-1	1115410	Na	TS	3/19/2013		IP110922A
	K		10M41-1	1113723	K		3/19/2013		B
	Al		10M1-1	1113110	Al		3/19/2013		C
	S		100054-5	1106026	S		3/19/2013		D
	CLP CAL 3		CLP-CAL-3	1008112	As Cd Pb Se Tl		9/19/2012		E
10/7/11	CLP CAL 1	High Purity	CLP-CAL-1	1009210	mix		10/5/2012		IP111007A

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
10/9/10	CV2	IP091113B	500	1	11	4.55	2x HNO3	II101009AB 10/10/10	TR	11/11/10
10/9/10	CV-3	IP091113C	Mix	1	11	Mix	2x HNO3	II101009A	TR	11/11/10
				HZA 10/10/10						
		Partial Reviewed HZA 10/12/10								
10/14/10	Hg Cal Std	IP090806A	1000	0.05	100	500 ppb	3% HCL	II101014A	AED	11/11/10
10/14/10	Hg CCV	IP100823F	1000	0.05	100	500 ppb	3% HCL	II101014B	AED	11/11/10
10/21/10	Hg Cal Std	IP090806A	1000	0.0500	100	500 ppb	3% HCL	II101021A	AED	11/18/10
10/21/10	Hg CCV	IP100823F	1000	0.0500	100	500 ppb	3% HCL	II101021B	AED	11/18/10
10/21/10	Hg LCS	IP100823F	1000	0.0455	100	455 ppb	3% HCL	II101021C	AED	11/18/10
10/26/10	Be	IP091111B	1000	0.5	5	100ppm	1% HNO3	II101026A	TS	10/27/10
↓	Co	IP091111E	↓	↓	↓	↓	↓	↓ B	↓	↓
↓	Sb	IO080618C	↓	↓	↓	↓	↓	↓ C	↓	↓
↓	Tl	IP091111M	↓	↓	↓	↓	↓	↓ D	↓	↓
10/26/10	Be	IP091111B	1000	0.01	50ml	0.2 ppm	1% HNO3	~1000X conc.	TS	10/26/11
↓	B	IO080618D	1000	0.50	↓	10	↓	ICP-MS 6020	↓	↓
↓	Na	IP100210E	10,000	0.50	↓	100	↓	LOD SPK	↓	↓
↓	Mg	IP100210B	10,000	0.120	↓	24	↓	II101026E	↓	↓

Logbook ID: 100.0041 -09/10

Reviewed By: HZA 11/2/10

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
11/19/10	Hg LCS	IP100823F	1000	AED 11/19/10 ~~0.050~~ 0.0455	100 ml	455 ppb	3% HCL	II 101119C	AED	12/12/10
11/23/10	Hg Cal Std.	IP090806A	1000	0.050	100ml	500ppb	3% HCL	II 101123 A	AED	12/16/10
11/23/10	Hg CCV	IP100823F	1000	0.050	100ml	500ppb	3% HCL	II 101123 B	AED	12/16/10
		Partial	Reviewed		HZA	11/29/10				
11/24/10	Hg Cal Std	IP090806A	1000	0.025	50 ml	500ppb	3% HCL	II 101124A	AED	12/17/10
11/24/10	Hg CCV	IP100823F	1000	0.025	50 ml	500 ppb	3% HCL	II 101124B	AED	12/17/10
12/1/10	Na	IP100210E	10,000	2.5ml	50ml	500ppm	1% HNO3		TS	8/8/11
↓	K	IP100210D	↓	↓	↓	↓	↓	Icp-ms LCS/MS spike II 101201A	↓	↓
↓	Ca	IP100210C	↓	↓	↓	↓	↓		↓	↓
↓	Mg	IP100210B	↓	↓	↓	↓	↓		↓	↓
12/3/10	Hg Cal Std.	IP090806A	1000	0.025	50ml	500 ppb	3% HCL	II 101203A	AED	12/31/10
12/3/10	Hg CCV	IP100823F	1000	0.025	50ml	500ppb	3% HCL	II 101203 B	AED	12/31/10
		Partial	Reviewed	DES	12/8/10					
12/9/10	Tune Mix	IP100210A	10ppm	0.250	250ml	10ppb	1% HNO3	II 101209A	TS	6/9/11
12/9/10	Rh	IP090122F	1000	1.0 ml	50	20 ppm	1% HNO3	II 101209B	TS	6/9/11
↓	Lu	IP090122E	1000	0.5ml	↓	10 ppm	↓		↓	↓

Logbook ID: 100.0041 -09/10

Reviewed By: DES 12/15/10

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
12/28/10	Hg CCV	IP100823F	1000	0.025	50	500ppb	3% HCL	II101228B	AED	1/20/11
			partial review DES 12/29/10							
1/3/11	Hg Cal Std.	IP090806A	1000	0.025	50	500ppb	3% HCL	II110103A	AED	1/31/11
1/3/11	Hg CCV	IP100823F	1000	0.025	50	500ppb	3% HCL	II110103B	AED	1/31/11
			partial review DES 1/5/11							
1/10/11	TUNE STD	IP100210A	10ppm	0.25ml	250ml	10ppb	1% HNO3	II110110A	TS	7/30/11
1/11/11	B	IP091209A	1000	0.5	50ml	10ppm	1% HNO3	II110111A LLQC SPK	TS	5/11/11
	Mo	IP091113E		1.0 1/11/11		20ppm				
	Sn	IP091113F		0.1		2ppm				
1/14/11	B	IP110106C	1000	0.1	10ml	10ppm	1% HNO3	II110114A LLICV 100x STOCK	TS	5/30/11
	Mo	I000618E		0.02		2 ppm				
	Sn	I000618A		0.2		20ppm				
1/18/11	CV1	IP101006E	Mix	10	11 mL	Mix	2% HNO3	II110118B	TK	10/6/11
1/18/11	CV2	IP100622A	500	1	11	455		II110118A		6/13/11
1/18/11	CV3	IP100622C	Mix	1	11	Mix		II110118A		6/17/11
1/18/11	Hg Cal Std.	IP090806A	1000	0.050	100	500ppb	3% HCL	II110118C	AED	2/15/11

Logbook ID: 100.0041 -09/10

Reviewed By: DES 1/25/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
1/18/11	Hg CCV	IP100823F	1000	0.050	100	500 ppb	3% HCL	II110118D	AED	2/15/11
1/18/11	Hg LCS	IP100823F	1000	0.0455	100	455 ppb	3% HCL	II110118E	AED	2/15/11
1/19/11	Hg Cal Std.	IP090806A	1000	0.025	50	500 ppb	3% HCL	II110119A	AED	2/16/11
1/19/11	Hg CCV	IP100823F	1000	0.025	50	500 ppb	3% HCL	II110119B	AED	2/16/11
1/24/11	Hg Cal Std	IP090806A	1000	0.025	50	500 ppb	3% HCL	II110124A	AED	2/21/11
1/24/11	Hg CCV	IP100823F ~~IP090806A~~ AED 1/24/11	1000	0.025	50	500 ppb	3% HCL	II110124B	AED	2/21/11
1/25/11	Hg Cal Std.	IP090806A	1000	0.025	50	500 ppb	3% HCL	II110125A	AED	2/22/11
1/25/11	Hg CCV	IP100823F	1000	0.025	50	500 ppb	3% HCL	II110125B	AED	2/22/11
				partial	review	DES 1/25/11				
1/26/11	Hg Cal Std.	IP090806A	1000	0.025	50	500 ppb	3% HCL	II110126A	AED	2/23/11
1/26/11	Hg CCV	IP100823F	1000	0.025	50	500 ppb	3% HCL	II110126B	AED	2/23/11
1/28/11	Hg Cal Std.	IP090806A	1000	0.025	50	500 ppb	3% HCL	II110128A	AED	2/25/11
1/28/11	Hg CCV	IP100823F	1000	0.025	50	500 ppb	3% HCL	II110128A	AED	2/25/11
1/28/11	Na	IP100304B	10,000	2.5 ml	250 ml	100 ppm	2% HNO_3	II110128C 100X ISM LCS	TS	2/25/11
↓	K	IP100304A	↓	↓		↓	↓		↓	↓
↓	Ca	IP100304D	↓	↓		↓	↓		↓	↓

Logbook ID: 100.0041 -09/10

Reviewed By: DES 2/3/11

MITKEM LABORATORIES METALS INTERMEDIATE STANDARD LOGBOOK

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
1/20/11	Mg	IP100304C	10,000	2.5ml	250ml	100ppm	2% HNO3		TS	7/20/11
	Fe	IP101006B	10,000	1.0		40				
	Al	IP090407B	1,000	1.0		4				
	Ba	IP100708C		0.5		2		100x ISM LCS		
	V	IP091111N		0.25		1				
	Se	IP091111L		0.25		1		#110128C		
	Sb	1080618C		0.10		0.4				
	Cr	IP091111D		0.10		0.4				
	Cu	IP091111F		0.10		0.4				
	Zn	IP091111K		0.10		0.4				
	As	IP091111A		0.05		0.2				
	Be	IP091111B		0.05						
	Cd	IP091111C		0.05						
	Co	IP091111E		0.05						
	Pb	IP091111H		0.05						
	Mn	IP091111I		0.05						

Logbook ID: 100.0041 -09/10

Reviewed By: NZA 2/4/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
1/28/11	Ni	IP091111J	1000	0.05	250ml	0.2ppm	2% HNO_3	100X ISM LCS	TS	7/28/11
	Ag	IP090203B		0.05				II110128C		
	Tl	IP091111M		0.05						
1/31/11	Hg Cal Std	IP090806A	1000	0.025	50 ml	500 ppb	3% HCL	II110131A	AED	2/28/11
1/31/11	Hg CCV	IP100823F	1000	0.025	50ml	500ppb	3% HCL	II110131B	AED	2/28/11
2/1/11	Ti	I080703A	1000	5	50ml	100ppm	2% HNO_3	II110201A	TS	8/1/11
2/3/11	Hg CalStd	IP090806A	1000	0.025	50ml	500 ppb	3% HCl	II110203A	CJA	3/3/11
2/3/11	Hg CCV	IP100823F	1000	0.025	50ml	500 ppb	3% HCl	II110203B ~~II110203A~~ 3/3/11	CJA	3/3/11
		Partial	Reviewed	HZA 2/4/11						
2/4/11	Hg CALSTD	IP090806A	1000	0.025	50ml	500 ppb	3% HCl	II110204A	CJA	3/5/4
2/4/11	Hg CCV	IP100823F	1000	0.025	50ml	500 ppb	3% HCl	II110204A	CJA	3/5/4
2/7/11	Na	IP100304B	10,000ppm	0.625	250ml	25ppm	2% HNO3	ISM MDL SPIKE II110207A	TS	8/7/11
	K	IP100304A								
	Ca	IP100304D								
	Mg	IP100304C								
	Fe	IP101006B		0.500		20ppm				

Logbook ID: 100.0041 -09/10

Reviewed By: HZA 2/8/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
2/7/11	Al	IP100823B	1000ppm	0.25	250ml	1	2% HNO3		TS	8/7/11
	B	IP091209A		0.25		1				
	Ba	IP110108A		0.125		0.5				
	V	IP091111N		0.05		0.2				
	Zn	K						FSM MDL STK		
	Se	L						IP110207A		
	Sb	IP000618C								
	Ag	IP090203B								
	Cd	IP091111C		0.025		0.1				
	Tl	M								
	Pb	H								
	Be	B								
	Cr	D								
	Mn	IP110106A								
	Co	IP091111E								
	Ni	J								

Logbook ID: 100.0041 -09/10

Reviewed By: HZA 2/8/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
2/9/11	Cu	IP091111F	1000	0.025	250	0.1 ppm	2% HNO3		TS	8/9/11
	As	A						II110207A		
	Mo	I080618E								
2/8/11	Hg CALSTD	IP090806A	1000	0.025	50ml	500ppb	3% HCl	II 110208A	CJ	3/8/11
2/8/11	Hg CCV	IP100823F	1000	0.025	50ml	500ppb	3% HCl	II110208B	CJ	3/8/11
2/9/11	Ca Mg Na K	IP090405E	mix	2.5	50ml	mix	2% HNO2		TS	8/9/11
	Sb	IP090405C	1000	0.050		1.0				
	As Se Pb Se Tl	IP090405B	mix	0.250		mix				
	B	IP110106C	1000	0.250		5		II110209A ICV 10X CONC.		
	Mo	I080618E	1000	0.125		2.5				
	Al	IP090407B		1.0		20				
	Ba	IP100708C		1.0		20				
	Be	IP091111B		0.0250		0.5				
	Cr	IP091111D		0.10		2				
	Co	IP091111E		0.250		5				
	Cu	IP091111F		0.125		2.5				

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Reviewed By: HZA 2/14/11

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MITKEM LABORATORIES METALS INTERMEDIATE STANDARD LOGBOOK

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
2/9/11	Fe	IP100708D	10,000	0.050	50ml	10	2% HNO_3		TS	8/9/11
	Mn	IP110106A	1000	0.25		5				
	Ni	IP091111J		0.25		5		II110209A ICV 10X CONC		
	Ag	IP090203B		0.025		0.5				
	V	IP091111N		0.25		5				
	Zn	IP091111K		0.25		5				
2/10/11	Hg Cal Std	IP090806A	1000	0.025	50ml	500 ppb	3% HCL	II110210ØA AED 2/10/11	AED	3/10/11
2/10/11	Hg CCV	IP100823F	1000	0.025	50ml	500 ppb	3% HCL	II110210B	AED	3/10/11
2/11/11	TUNE MIX	IP100210A	10ppm	0.25	250ml	10ppb	2% HNO_3	II110211A	TS	7/30/11
2/14/11	Hg Cal Std.	IP090806A	1000	0.025	50 ml	500 ppb	3% HCL	II110214A	AED	3/14/11
2/14/11	Hg CCV	IP100823F	1000	0.025	50ml	500 ppb	3% HCL	II110214B	AED	3/14/11
		Partial Reviewed HZA 2/14/11								
2/16/11	TUNE MIX	IP100210A	10ppm	0.25	250	10ppb	1% HNO_3	II110216A	TS	7/30/11
	Hg Cal Std.	IP090806A	1000	0.050	100	500 ppb	3% HCL	II110216B	AED	3/16/11
	Hg CCV	IP100823F	1000	0.050	100	500 ppb	3% HCL	II110216C	AED	3/16/11
2/16/11	Hg LCS	IP100823F	1000	0.050	100	455 ppb	3% HCL	II110216D	AED	3/16/11

Logbook ID: 100.0041 -09/10

Reviewed By: HZA 2/28/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
2/24/11	Hg Cal Std	IP090806A	1000	0.050	100	500 ppb	3% HCl	II 110224A	GP	2/25/11
2/24/11	Hg CCV	IP100823F	1000	0.050	100	500 ppb	3% HCl	II 110224B	GP	2/25/11
2/28/11	Hg Cal Std.	IP090806A	1000	0.025	50	500 ppb	3% HCL	II 110228A	AED	3/28/11
2/28/11	Hg CCV	IP100823F	1000	0.025	50	500 ppb	3% HCL	II 110228B	AED	3/28/11
		HZA	2/28/11							
3/2/11	Hg Cal Std.	IP090806A	1000	0.025	50	500 ppb	3% HCL	II 110302A	AED	3/30/11
3/2/11	Hg CCV	IP100823F	1000	0.025	50	500 ppb	3% HCL	II 110302B	AED	3/30/11
		Partial Reviewed HZA 3/2/11								
3/7/11	Hg Cal Std.	IP090806A	1000	0.025	50	500 ppb	3% HCL	II 110307A	AED	4/4/11
3/7/11	Hg CCV	IP100823F	1000	0.025	50	500 ppb	3% HCL	II 110307B	AED	4/4/11
3/7/11	Tune Mix	IP100210A	10ppm	0.25	250	10ppb	1% HNO_3	II 110307C	TS	7/30/11
		Partial Reviewed HZA 3/8/11								
3/9/11	Hg Cal Std.	IP090806A	1000	0.025	50	500 ppb	3% HCL	II 110309A	AED	4/6/11
3/9/11	Hg CCV	IP100823F	1000	0.025	50	500 ppb	3% HCL	II 110309B	AED	4/6/11
3/10/11	Pb	IP091111H	1000	2.25	50	45 ppm	1% HNO_3	II 110310A	TS	9/10/11
3/10/11	Se	IP091111L	1000	2.25	50	45 ppm	1% HNO_3	II 110310B	TS	9/10/11

Logbook ID: 100.0041 -09/10

Reviewed By: HZA 3/15/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
3/18/11	Ni	IP091111J	1000	0.25	50	5	2% HNO_3	6020 ICV 10X CONC. II110318A	TS	9/18/11
	Ag	IP090203B		0.025		0.5				
	V	IP091111N		0.25		5				
	Zn	IP091111K		0.25		5				
3/21/11	Hg CAL STD	IP090806A	1000ppm	0.025	50	500ppb	3% HCl	II110321A	CM	3/22/11
3/24/11	Hg Cal Std	IP090806A	1000	.025	50	500ppb	3% HCl	II110324A	AEB	4/21/11
3/24/11	Hg CCV	IP100823F	1000	.025	50	500ppb	3% HCl	II110324B	AEB	4/21/11
		Partial Reviewed HZA 3/25/11								
3/29/11	Ca	IP100304D	10,000	2.5	50	500	1% HNO_3	ICP-MS LCS/MS SPIKE II110329A	TS	9/2/11
	Mg	C								
	Na	B								
	K	A								
4/6/11	Hg Cal Std.	IP090806A	1000	.025	50	500ppb	3% HCl	II110406A	AEB	5/4/11
4/6/11	Hg CCV	IP100823F	1000	.025	50	500ppb	3% HCl	II110406B	AEB	5/4/11
4/11/11	Hg Cal Std.	IP090806A	1000	.025	50	500ppb	3% HCl	II110411A	AEB	5/9/11
		HZA 4/11/11								

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Reviewed By: HZA 4/11/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
4/14/11	Hg Cal Std.	IP090806A	1000	.025	50	500ppb	3% HCL	II 110414A	AED	5/12/11
4/15/11	Hg Cal Std.	IP090806A	1000	.050	100	500ppb	3% HCL	II 110415A	AED	5/13/11
4/15/11	Hg CCV	IP100823F	1000	.050	100	500ppb	3% HCL	II 110415B	AED	5/13/11
4/15/11	Hg LCS	IP100823F	1000	.0455	100	455 ppb	3% HCL	II 110415C	AED	5/13/11
4/18/11	Hg Cal Std.	IP090806A	1000	0.050	100	500ppb	3% HCL	II 110418A	AED	5/16/11
4/19/11	Tune mix	IP100210A	10 PPM	0.25	250	10 ppb	1% HNO_3	II 110419A	TS	7/30/11
4/21/11	Hg Cal Std.	IP090806A	1000	.025	50	500ppb	3% HCL	II 110421A	AED	5/19/11
		HZA	4/22/11	Partial	Reviewed					
4/23/11	Hg Cal Std.	IP100823F	1000	.025	50	500ppb	3% HCL	II 110425A	AED	5/23/11
		HZA.	4/26/11	Partial	Reviewed					
4/26/11 ~~4/27/11~~	Hg Cal Std	IP100823F	1000	.025	50	500 ppb	3% HCl	II 110426A ~~27A~~	Gn	5/27/11
4/26/11 ~~4/27/11~~	Hg CCV	IP100823F	1000	.050	100	500 ppb	3% HCl	II 110426B ~~27B~~	Gn	5/27/11
		HZA	4/27/11	Partial	Reviewed					
4/28/11 ~~4/27/11~~	Hg Cal. Std.	IP090806A	1000	.025	50	500 ppb	3% HCL	II 110428A	AED	5/25/11
4/30/11	Hg Cal Std.	IP090806A	1000	.025	50	500 ppb	3% HCL	II 110430A	AED	5/28/11
5/2/11	Hg Cal Std.	IP090806A	1000	.025	50	500 ppb	3% HCL	II 110502A	AED	5/30/11

4/26/11 CA

4/28/11 AED

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Reviewed By: HZA 5/2/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
5/3/11	Hg Cal STD	IP090806A	1000	.025	50	500 ppb 6/2/11 ca	3% HCl	II 110503A	CJA	5/4/11
5/4/11	Hg Cal STD	IP090806A	1000	.025	50	500 ppb 6/2/11 ca	3% HCl	II ~~110503A~~ 110504A 5/4/11 ca	CJA	5/5/11
5/5/11	Hg Cal STD	IP090806A	1000	.025	50	500 ppb 6/2/11 ca	3% HCl	II 110505A	CJA	5/6/11
5/6/11	Hg Cal Std	IP090806A	1000	.025	50	500 ppb 6/2/11	3% HCl	II 110506A	CJA	5/7/11
	Partial Reviewed HZA 5/6/11									
5/9/11	B	IP110509B	1000	0.5	50	10	1% HNO_3	II 110509A SPK HR 6010 LLQC	TS	11/9/11
	Sn	IP110509C	1000	1		20 TS 5/9/11				
	Mo	IP110509D	1000	0.1		~~0.~~ 2.0				
5/9/11	Sb	I080618C	1000	5	50	100 ppm	2% HNO_3	II 110509B ISM ICP-MS SPKE	TS	5/9/12
	Cd	IP091111C		2.5		50				
	Se	IP091111L		0.5		10				
	As	IP091111A		2.0		40				
	Pb	IP091111H		1.0		20				
	Tl	IP091111M		2.5		50				
5/9/11	Sb	IP110415A	1000	5	50	100	2% HNO_3	II 110508C ISM 5.4 ISM MATRIX SPK	TS	5/9/12
	Cd	IP091111C		2.5		50				

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Reviewed By: HZA 5/19/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
5/9/11	Se	IP091111L	1000	2.5	50	50	2% HNO3	II110509L ILMG4 MARIX 7216 ICP-M	TS	5/9/12
	As	IP091111A		2.0		40				
	Pb	IP091111H		1.0		20				
	Tl	IP091111M		2.5		50				
5/11/11	ICP-MS TUNE	IP100210A	10ppm(mix)	0.25	250ml	10ppb mix	1% HNO3	II110511A TUNE 470	TS	7/30/11
5/16/11	Hg Cal Std	IP090806A	1000	.025	50	500	3% HCl	II110516A	GA	~~5/17/11~~ 6/12/11
5/16/11	Hg CCV	IP100823F	1000	.050	100	500ppb	3% HCl	II110516B	AED	6/13/11 5/16/11
5/16/11	Hg LCS	IP100823F	1000	.0455	100	455 ppb	3% HCL	II110516C	AED	6/13/11
5/17/11	Hg Cal Std	IP090806A	1000	.025	50	500 ppb 6/2/11 GA	3% HCl	II110517A	GA	5/18/11
5/18/11	Hg Cal Std	IP090806A	1000	.025	50	500 ppb 6/2/11 GA	3% HCl	II110518A	GA	5/19/11
5/19/11	Se	IP091111L	1000	5	50	100	1% HNO3	II110519A	TS	5/19/12
5/19/11	Hg Cal Std	IP090806A	1000	.025	50	500 ppb 6/2/11 GA	3% HCl	II110519B	GA	5/20/11
	Partial Reviewed		HZA	5/19/11						
5/20/11	Hg Cal Std	IP090806A	1000	.025	50	500 ppb 6/2/11 GA	3% HCl	II110520A ~~II110519~~ 5/20/11 GA	GA	5/21/11
5/23/11	B	IP110509B	1000	12.5	50	250ppm	2% HNO3	6010 BMOSM LCS	TS	5/23/12
	MO	IP110509D	1000	5		100ppm		II110523A		

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Reviewed By: TK 5/26/11

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MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
5/23/11	Sn	IP110509C	1000	5	50	100ppm	2% HNO3	II110523A	TB	5/23/12
5/25/11	Hg Cal Std.	IP090806A	1000	.025	50	500ppb	3% HCL	II110525A	AED	6/22/11
5/26/11	Rh	IP090122F	1000	1	50	20ppm	1% HNO3	II110526A	TB	5/26/12
↓	Lu	IP090122E	1000	0.5	↓	10ppm	↓		↓	↓
		Partial Reviewed	TR	5/26/11						
5/26/11	Hg Cal Std.	IP090806A	1000	0.025	50	500ppb	3% HCL	II110526B	AED	6/23/11
5/27/11	Hg Cal Std.	IP090806A	1000	0.025	50	500ppb	3% HCl	II110527A	CJA	6/24/11
6/1/11	Hg Cal Std.	IP090806A	1000	0.025	50	500ppb	3% HCl	II110601A	AED	6/29/11
6/2/11	Hg Cal Std.	IP090806A	1000	0.025	50	500ppb	3% HCl	II110602A	AED	6/30/11
		Partial Reviewed	HZA	6/3/11						
6/4/11	CV1	IP110323A	MIX	10	11ml	Mix	2% HNO3	II110604B	TR	3/21/12
	CV2	IP100622A	500	1	11	455	↓	II110604A HZA 6/13/11		6/13/11
↓	CV3	IP100622C	MIX	1	11	MIX			↓	6/17/11
6/10/11	Hg Cal Std.	IP090806A	1000	.025	50	500ppb	3% HCL	II110610A	AED	7/8/11
				HZA 6/13/11						

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Reviewed By: HZA 6/13/11

MITKEM LABORATORIES METALS INTERMEDIATE STANDARD LOGBOOK

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
6/13/11	Cd	IP091111C	1000	0.010	50	0.2ppm	2% HNO3	II110613E	TS	12/13/11
6/14/11	tune mix	IP100210A	10ppm	0.25	250	10ppb	1% HNO3	II110614A	TS	7/30/11
6/22/11	Sb	IP110518B	1,000	0.05	250	200ppb	2% HNO3		TR	1/22/12
	Tl	IP110616A		0.05		200				
	Ag	IP090203B		0.075		300				
	Al	IP100823B		0.5		2000				
	As	IP091111A		0.05		200				
	Ba	IP100708C		0.5		2000				
	Be	IP091111B		0.0125		500				
	Cd	IP091111C		0.0125		500				
	Co	IP091111E		0.125		500				
	Cr	IP091111D		0.05		200				
	Cu	IP091111F	1,000	0.075		300				
	Mg	IP110422D	10,000	0.125		5000				
	Ca	IP110422C		0.200		8000				
6/22/11	Na	IP110422A	10,000	0.250	250	10,000	2% HNO3		TR	1/22/12

6010 10x LLICV II110622A

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Reviewed By: DZA 6/23/11

MITKEM LABORATORIES METALS INTERMEDIATE STANDARD LOGBOOK

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
6/28/11	Zn	IP091111K	1000	0.1	50	2	1% HNO3		TS	6/28/12
	V	IP091111N		0.1		2				
	Tl	IP091111M		0.1		2				
	Se	IP091111L		0.1		2				
	As	IP091111A		0.1		2		100X CONC. 200.9 MDL SPIKE		
	Mn	IP110106A		0.1		2				
	Sb	IP110518B		0.1		2				
	Ag	IP090203B		0.05		1		II110628A		
	Cr	IP091111D		0.05		1				
	Cu	IP091111F		0.05		1				
	Ni	IP091111J		0.05		1				
	Pb	IP091111H		0.05		1				
	Co	IP091111E		0.025		0.5				
	Cd	IP091111C		0.010		0.2				
	Be	IP091111B		0.010		0.2				
6/29/11	Hg CAL std	IP090806A	1000	0.05	100	500ppb	3% HCl	II110629A	GA	7/27/11

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MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
6/29/11	MS-TUNE	IP110527A	10ppm	0.25	250ml	10ppb	1% HNO3	II110629B	TS	12/29/11
		HZA 7/5/11								
7/5/11	Hg CAL STD	IP090806A	1000	0.05	100	500ppb	3% HCl	II110705A	CJA	8/3/11
7/6/11	Ca	IP110622C	10,000	2.5	50	500	12% HNO3	II110706A	TK	1/6/12
↓	Mg	IP110622D	↓	↓	↓	↓	↓	)	↓	↓
↓	Na	IP110622A	↓	↓	↓	↓	↓	)	↓	↓
↓	K	IP110622B	↓	↓	↓	↓	↓	)	↓	↓
7/6/11	Hg CAL STD	IP090806A	1000	0.05	100	500ppb	3% HCl	II110706B	CJA	8/4/11
		Partial Reviewed HZA 7/6/11								
7/7/11	Hg CAL STD	IP090806A 7/7/11	1000	0.05	100	500PPB	3% HCl	II110707A	GMD	8/5/11
						TS 7/11/11				
7/11/11	Ti	IP110616A	1000	0.05	10	5 ppm	1% HNO3	) II110711A	TS	7/11/12
↓	Mo	IP080615E	1000	0.1	↓	10	↓	)	↓	↓
↓	Ti/Mo	II110711A	5/10	0.50	50	0.05/0.1	↓	) 200.7 MDL SPK	↓	↓
↓	B	IP110100C	1000	0.050	↓	1.0	↓	) II110711B	↓	↓
↓	Sn	IP080615A	1000	0.025	↓	0.5	↓	)	↓	↓

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Reviewed By: HZA 7/12/11

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METALS INTERMEDIATE STANDARD LOGBOOK

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
7/11/11	Ti	IP110616A	1000 ppm	2.27	50	45.5	1% HNO3	II110711C	TS	7/11/12
7/11/11	Hg CAL STD	IP090806A	1000	0.05	100	500 ppb	3% HCl	II 110711D	Cjs	8/9/11
	Partial Reviewed		HZA 7/12/11							
7/13/11	TUNE MIX	IP110527A	10 ppm	0.250	250	10 ppb	1% HNO3	II110713A	TS	1/13/12
7/13/11	Hg CaL STD	IP090806A	1000	0.05	100	500 ppb	3% HCl	II110713B	RS	8/11/11
7/13/11	Hg LCS	IP100823F	1000	0.0455	100	455 ppb	3% HCl	II110713C	RS	8/11/11
7/13/11	Hg CCV	IP100823F	1000	0.05	100	500 ppb	3% HCl	II110713D	RS	8/11/11
7/15/11	Hg CaL STD	IP090806A	1000	0.05	100	500 ppb	3% HCl	II110715A	RS	8/13/11
	Partial Reviewed		HZA	7/19/11						
7/28/11	B	IP110509B	1000	12.5	50	250 ppm	2% HNO3	6010 BMoSn SPK	TS	7/28/12
↓	Mo	IP110509D	↓	5	↓	100	↓	II110728A		↓
↓	Sn	IP110509C	↓	5	↓	100	↓	100x CONC.		↓
7/28/11	Hg CaL STD	IP090806A	1000	0.05	100	500 ppb	3% HCl	II110728B	RS	8/25/11
7/29/11	Hg CaL STD	IP090806A	1000	0.05	100	500 ppb	3% HCl	II110729A	RS	8/26/11
8/1/11	TITANIUM	IP110616A	1000	5	50	100 ppm	2% HNO3	II110801A	TS	2/1/12
8/3/11	Hg CaL STD	IP090806A	1000	0.05	100	50 ppb	3% HCl	II110802A	RS	8/28/11

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MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
8/10/11	HgCal STD	IP090806A	1000	0.05	100	50 ppb	3% HCl	II110810A	RS	9/17/11
8/10/11	Hg LCS	IP100823F	1000	0.0455	100	45.5 ppb	3% HCl	II110810B	RS	9/17/11
8/10/11	Hg CCV	IP100823F	1000	0.05	100	50 ppb	3% HCl	II110810C	RS	9/17/11
8/30/11	Ag	IP090203B	1000	0.25	250ml	1 ppm	2% HNO_3		TS	2/29/12
	Al	IP100823B	1000	2.5		10		MEG ISM MDL SPIKE		
	As	IP091111A	1000	0.25		1				
	Ba	IP110108A	1000	2.5		10		II110830A 100x conc.	TS	2/29/12
	Be	IP091111B	1000	0.05		0.2				
	Co	IP091111E	1000	0.25		1				
	Cr	IP091111D	1000	0.25		1				
	Cu	IP091111F	1000	0.25		1				
	Fe	IP101006C	1000	2.5		10				
	Mg	IP110422D	10,000	2.5		100				
	Mn	IP110106A	1000	0.25		1				
	Ni	IP091111J	1000	0.25		1				
	Pb	IP091111H	1000	0.25		1				

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MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
8/30/11	Sb	IP110513B	1000	0.5	250ml	2	2% HNO3		TS	2/28/11
	Se	IP091111L	1000	0.5		2				
	Tl	IP091111M	1000	0.5		2				
	V	IP091111N	1000	0.5		2		II 110830A 1ppm mix		
	Zn	IP091111K	1000	0.5		2				
	Cd	IP091111C	1000	0.05		0.2				
	Ca	IP110422C	10,000	2.5		100				
	Na	IP110422A	10,000	3.75		150				
	K	IP110422B	10,000	3.75		150				
					TS 8/30/11					
8/30/11	1ppm Hg Cal std	IP090806A	1000	0.05	100	50 ppb	3% HCl	II 110830B	RS	9/27/11
8/31/11	B	IP110106C	1000	0.5	50ml	10 ppm	2% HNO3	II 110831A 1ppm mix	TS	2/28/12
	Mo	IP080613E	1000	0.05		1 ppm				
8/31/11	B	IP110106C	1000	1	50	20 ppm	2% HNO3	II 110831B LCS 1ppm	TS	2/28/12
	Mo	IP080613E	1000	0.2		4				
9/6/11	Hg CCV	IP110829A	1000	~~0.050~~ 0.05 RS 9/6/11	100ml	50 ppb	3% HCl	II 110906A	RS	10/4/11

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Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
9/6/11	Hg LCS	IP110829A	1000	0.045	100 ml	45 ppb	3% Hcl	II110906B	BS	10/9/11
9/14/11	Na	IP110422A	10,000	2.5	50	500ppm	2% HNO3	II110914A 100x conc ICP-MS LCS spk	TS	4/14/12
	K	IP110422B								
	Ca	IP110422C								
	Mg	IP110422D		TS 9/14/11						
9/14/11	Na	IP090113C	0.625ml	10,000 ppm	250ml	25ppm	2% HNO3	ICP-MS ISM MDL spike I110914B	TS	3/14/12
	K	IP090113D								
	Ca	IP090113G								
	Fe	IP110225A	0.5ml			20ppm				
	Mg	IP090113H	0.25ml			10ppm				
	Al	IP090407B	0.25ml	1000ppm		1ppm				
	B	IP110106C	0.25ml			1ppm				
	Ba	IP100703C	0.125ml			0.5ppm				
	V	IP091111N	0.05ml			0.2ppm				
	Zn	IP091111K								
	Se	IP091111L								

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Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
9/14/11	Sb	IP110518B	1000	0.05ml	250ml	0.2ppm	2% HNO_3		TS	3/14/12
	Ti	IP110616A								
	Be	IP091111B		0.025ml		0.1ppm		ICP-MS ISM-MDL spike		
	Cr	IP091111D								
	Mn	IP110106A						#110914B		
	Co	IP091111E								
	Ni	IP091111J								
	Cu	IP091111F								
	As	IP091111A								
	Mo	I080618E								
	Cd	IP091111C								
	Tl	IP091111M								
	Pb	IP091111H								
	Ag	IP090203B								
						TS 9/15/11				
9/15/11	S	IP090119A	1000	0.5	50	10ppm	1% HNO_3	#110915A	TS	3/15/12

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Reviewed By: HZA 9/20/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
9/16/11	Al	IP100412F	10,000	0.5	10ml	500	1.0% HNO3 1.5% HCl	II110916A	TS	9/17/11
	Ca	IP110422C		0.5		500		B		
	Fe	IP101006B		0.2		200		C		
	Mg	IP110422D		0.5		500		D OPT3 IEC TABLE STDS		
	Cr	IP091111D	1000	0.25		25		E		
	Mn	IP110106A		0.2		20		F		
	Ni	IP091111F		0.5		50		G		
	Ti	~~IP091111J~~ IP110616A TS 9/16/11		0.1		10		H		
	Tl	IP091111M		0.2		20		I		
	V	IP091111N		0.5		50		J		
	Cu	IP091111J		0.25		25		K		
	Co	IP091111E		0.25		25		L		
9/17/11	CV1	IP110822B	MIX	10	11ml	Mix	2% HNO3	II110917B	TC	8/15/12
	CV2	IP110323B	500	1	11	455		II110917A		3/12/12
	CV3	IP110323C	MIX	1	11	Mix				3/21/12
9/19/11	Hg Cal STD	IP090806A	1000	0.05	100	50 ppb	3% HCl	II110919A	RS	~~9~~ 10/19/11 RS 9/19/11

Logbook ID: 100.0041 -09/10

Reviewed By: HZA 9/20/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
9/21/11	B	IP110106C	1000	12.5	50	250 ppm	2% HNO3	6010 B Mo Sn spike 4	TS	5/31/12
	Mo	I000618E		5		100		II110921A		
	Sn	I000618A		5		100				
4/27/11	Tune mix	IP110527A	10 ppm	0.25	250	10 ppb	1% HNO3	II110927A	TS	3/27/12
9/30/11	Ca Mg Na K	IP090405E	Mix	2.5 ml	50 ml	Mix	2% HNO3		TS	7/31/12
	Sb	IP090405C	1000	0.05 ml		1.0				
	As Cd Pb & Tl	IP090405B	Mix	0.25		Mix				
	B	IP110106C	1000	0.25		5		II110930A 6020 ICV 10X conc.		
	Mo	I080618E		0.125		2.5				
	Al	IP090407B		1.0		20				
	Ba	IP100708C		1.0		20				
	Be	IP091111B		0.025		0.5				
	Cr	IP091111D		0.1		2				
	Co	IP091111E		0.25		5				
	Cu	IP091111F		0.125		2.5				
	Fe	IP110225A	10,000	0.05		10				

Logbook ID: 100.0041 -09/10

Reviewed By: NZA 11/3/11

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MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
9/30/11	Mn	IP110106A	1000	0.25	50ml	5	2% HNO_3		TS	7/31/12
	Ni	IP091111J		0.25		5		II110930A 10x ICV conc 6020		
	Ag	IP090203B		0.025		0.5				
	V	IP091111N		0.25		5				
	Zn	IP091111K		0.25		5				
10/4/11	Hg CCV	IP110829A	1000	0.05	100ml	50 ppb	3% HCl	II111004~~06~~A	DC	11/1/11
10/4/11	Hg LCS	IP110829A	1000	0.045	100ml	45 ppb	3% HCl	II111004~~07~~B	DC	11/1/11
10/6/11	Mn	IP110106A	1000	0.1	50	2 ppm	1% HNO_3	II111006A	TS	10/26/11
	Sb	IP110518B	1000	0.020 ~~0.040~~	TS 10/6	0.4 ppm ~~0.8 ppm~~				
10/17/11	B	IP110509B	1000	0.5 ml	10ml	50 ppm	1.5% HCl 1.0% HNO_3	II111017A	TK	4/17/12
	Mo	IP110509D	1000	0.1 ml		10 ppm				
	Sn	IP110509C	1000	1 ml		100 ppm				
10/17/11	Hg Cal STD	IP090806A	1000	0.05	100	50 ppb	3% HCL	II111017A	DC	11/16/11
10/26/11	B	IP110106C	1000	12.5	50	250 ppm	1% HNO_3	II111026A	TS	5/26/12
	Mo	I080618E	1000	5		100				
	Sn	I080618A	1000	5		100				

Logbook ID: 100.0041 -09/10

Reviewed By: HZA 11/3/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
10/26/11	Sb	IP1105188	1000	5	50	100 ppm	1% HNO3		TS	10/26/12
	Se	IP091111L		5		100				
	Cd	IP091111C		2.5		50		II111026B 1gm ICP-MS spike		
	Tl	IP091111M		2.5		50				
	As	IP091111A		2.0		40				
	Pb	IP091111H		1.0		20				
10/31/11	HgCal STD	IP090806A	1000	0.05	100 ml	500 ppb	3% HCl	II111031A	DC	11/30/11
11/1/11	HgCal STD	IP090806A	1000	0.05	100 ml	500 ppb	3% HCl	II111101A	DC	11/29/11
~~11/1/11~~ 11/1/11	HgCCV	IP110829A	1000	0.05	100 ml	500 ppb	3% HCl	II111101A	DC	11/29/11
11/1/11	Hg LCS	IP110829A	1000	0.045	100 ml	450 ppb	3% HCl	II111101B	DC	11/29/11
		Partial Reviewed	HZA	11/3/11						
11/3/11	Al	IP110922C	10,000	0.5	10	500	1% HNO3 1.5% HCl	II111103A	TS	11/4/11
	Ca	IP110422C	10,000	0.5		500		B		
	Fe	IP101006B	10,000	0.2		200		C		
	Mg	IP110422D	10,000	0.5		500		D		
	Cr	IP091111D	1000	0.25		25		E		

Logbook ID: 100.0041 -09/10

Reviewed By: HZA 11/16/11

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
11/3/11	Mn	IP110106A	1000	0.2	10	20	1.0% HNO_3 1.5% HCl	II111103F	TS	11/4/11
	Ni	IP091111J		0.5		50		G		
	Ti	IP110616A		0.1		10		H		
	Tl	IP091111M		0.2		20		I		
	V	IP091111N		0.5		50		J		
	Co	IP091111F		0.25		25		K		
	Co	IP091111E		0.25		25		L		
11/3/11	TUNE MIX	~~IP~~ IP110527A	10 ppm	0.25	250	10 ppb	1% HNO_3	II111103M	TR	5/3/12
11/9/11	Se	IP091111L	1000	2.25	50	45	1% HNO_3 1.5% HCl	II111109A	TS	5/9/12
11/9/11	Pb	IP091111H	1000	2.25	50	45		II111109B	TS	5/9/12
11/10/11	NaKCaMg	IP110415C	5000	5	50	500	1% HNO_3	II111110A	TS	4/5/12
11/10/11	Hg Cal Std.	IP090806A	1000	0.05	100ml	50 ppb	3% HCl	II111110B	DC	12/8/11
11/15/11	Hg Cal Std	IP090806A	1000	0.05	100ml	50 ppb	3% HCl	II111115A	DC	12/13/11
11/16/11	B	IP110509B	1000	0.1	10	~~100~~ 10	1% HNO_3		TS	11/17/11
	Mo	IP110509D		0.02		2		II111116A		
	Sn	IP110509C		0.2		20				

Logbook ID: 100.0041 -09/10

Reviewed By: NZA 11/16/11

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MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
11/29/11	Hg CCV	IP110829A	1000	0.05	100ml	50ppb	3% HCl	II111129A	DC	12/27/11
11/29/11	Hg LCS	IP110829A	1000	0.045	100ml	45ppb	3% HCl	II111129B	DC	12/27/11
12/1/11	Hg Cal Std	~~IP11~~ DC 12/1/11 IP090806A	1000	0.05	100ml	50ppb	3% HCl	II111201A	DC	12/29/11
		Partial Reviewed		HZA	12/02/11					
12/5/11	Hg Cal Std	IP090806A	1000	0.05	100ml	50 ppb	3% HCl	II111205A	RS	~~12~~ 01/5/12
12/7/11	Hg Cal Std	IP090806A	1000	0.05	100ml	50 ppb	3% HCl	II111207A	RS	1/5/12
12/8/11	Hg Cal Std	IP090806A	1000	0.05	100ml	50ppb	3% HCl	II111208A	DC	1/6/12
		Partial Reviewed		HZA	12/09/11					
12/12/11	Tune STD	IP110527A	10ppm	0.250	250ml	1% HNO_3	10ppb	II111212A	TS	11/30/12
12/12/11	Hg Cal STD	IP090806A	1000	0.05	100ml	50 ppb	3% HCl	II111212B	RS	1/10/12
		Partial Reviewed		HZA	12/13/11					

Logbook ID: 100.0041 -09/10

Reviewed By: _____

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
12/30/11	Hg Cal Std.	IP090806A	1000	0.05	100mL	50ppb	3% HCl	II 111236 A	DC	~~1/27/12~~ 1/27/12 12/30/11 DC
1/5/12	Hg Cal Std.	IP090806A	1000	0.05	100mL	50ppb	3% HCl	II 120105A	DC	2/2/12
1/6/12	ICPMS TUNE	IP110527A	10ppm	0.25	250ml	10ppb	1% HNO3	II 120106A	TS	11/30/12
1/11/12	Hg Cal Std.	IP090806A	1000	0.05	100mL	50ppb	3% HCl	II 120111A	DC	2/8/12
1/17/12	Hg Cal Std.	IP090806A	1000	0.05	100mL	50ppb	3% HCL	II 120117 A	DC	2/14/12
1/19/12	CaMgNaK	IP110415C	5000	5	50	500ppm	1% HNO3	II 120119A	TS	4/5/12
1/19/12	Hg Cal Std.	IP090806A	1000	0.05	100mL	50ppb	3% HCL	II 120119B	DC	2/16/12
1/20/12	Hg CCV	IP110829A	1000	0.05	100mL	50ppb	3% HCL	II 120120A	DC	2/17/12
1/20/12	Hg LCS	IP110829A	1000	0.045	100mL	45ppb	3% HCL	II 120120B	DC	2/17/12
		Partial Reviewed		HZA	1/24/12					
1/25/12	Hg Cal Std	IP090806A	1000	0.05	100mL	50ppb	3% HCL	II 120125A	DC	2/22/12
1/25/12	Hg CCV	IP110829A	1000	0.05	100mL	50ppb	3% HCL	II 120125B	DC	2/22/12
1/26/12	Hg Cal Std	IP090806A	1000	0.05	100mL	50ppb	3% HCL	II 120126A	DC	2/23/12
1/27/12	Hg Cal Std	IP090806A	1000	0.05	100ml	50ppb	3% HCl	II 120127A	CJA	2/24/12
			HZA	1/27/12						

Logbook ID: 100.0041 -09/10

Reviewed By: HZA 1/27/12

MITKEM LABORATORIES **METALS INTERMEDIATE STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Intermediate STD ID	Analyst	Exp. Date
1/31/12	Hg CAL STD	IP090806A	1000	0.05	100ml	50 ppb	3% HCl	II120131A	CJA	2/28/12
2/1/12	TITANIUM	IP110616A	1000	5	50	100 ppm	2% HNO_3	II120201A	TR	8/1/12
2/1/12	Hg CAL STD	IP090806A	1000	0.05	100	50ppb	3% HCl	II120201B 2/1/12	CJA	3/1/12
	Partial Reviewed		HZA 2/2/12							
2/2/12	Hg Cal Std	IP090806A	1000	0.05	100	50ppb	3% HCl	II120202A	CJA	3/2/12
2/4/12	TUNE STD	IP110527A	10ppm	250 ul	250ml	10 ppb	1% HNO_3	II120204A	TS	8/4/12
	Partial Reviewed		HZA 2/6/12							
2/6/12	Hg Cal STD	IP090806A	1000	0.05	100	50 ppb	3% HCl	II120206A	CJA	3/6/12
2/7/12	Hg Cal Std	IP090806A	1000	0.05	100	50ppb	3% HCl	II120207A	CJA	3/7/12
2/8/12	Hg Cal Std	IP090806A	1000	0.05	100	50 ppb	3% HCl	II120208A	CJA	3/8/12
	Partial Reviewed		HZA 2/9/12							

Logbook ID: 100.0041 -09/10

Reviewed By: _____

MITKEM LABORATORIES **METALS WORKING STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Working STD ID	Analyst	Exp. Date
2/9/2012	Lu	IP110422E	10,000	0.5	1L	5	1.0% HNO3, 1.5%HCL	Int Std IW120209A	TR	2/10/2012
	Y	IP101006C	10,000	0.5		5				
	ICV1-0307	IP110920G	MIX	1	10	MIX	1.0% HNO3, 1.5%HCL	ICV IW120209B		
	ICSA-1206	IP110307D	MIX	1	10	MIX	1.0% HNO3, 1.5%HCL	ICSA IW120209C		
	ICSA-1206	IP110307D	MIX	1	10	MIX	1.0% HNO3, 1.5%HCL	ICSAB IW120209D		
	ICSB-0203	IP110307F	MIX	1		MIX				
	ISM S6 10x conc	IP111114A	MIX	5	50	MIX	1.0% HNO3, 1.5%HCL	S6 Cal IW120209E		
	Na	IP110922A	10,000	2		400				
	K	IP110922B	10,000	2		400				
	Cd	IP091111C	1000	0.025	50	0.5	1.0% HNO3, 1.5%HCL	S5 Cal IW120209F		
	Sb	IP110518B	1000	0.1		2				
	ISM S4/5 Part A	IP110222B	MIX	5		MIX				
	ISM S4/5 Part B	IP110909A	MIX	5		MIX				
	Sb	IP110518B	1000	0.075	50	1.5	1.0% HNO3, 1.5%HCL	S4 Cal IW120209G		
	ISM S4/5 Part A	IP110222B	MIX	1		MIX				
	ISM S4/5 Part B	IP110909A	MIX	2.5		MIX				
	Na	IP110922A	10,000	1		200				
	K	IP110922B	10,000	1		200				
	Ti	II120201A	1000	0.25	50	0.5	1.0% HNO3, 1.5%HCL	S3 Cal IW120209H		
	CRI 5.4	IP110518A	MIX	10		MIX				
	Ti	II120201A	100	0.05	50	0.1	1.0% HNO3, 1.5%HCL	S2 Cal IW120209I		
	CRI 5.4	IP110518A	MIX	2.5		MIX				
	Ti	II120201A	100	0.01	50	0.02	1.0% HNO3, 1.5%HCL	S1 Cal IW120209J		
2/9/2012	CRI 5.4	IP110518A	MIX	0.5		MIX			TR	2/10/2012

Logbook ID: 100.0036 -01/12

TR 2/10/12

Reviewed By: HZA 2/13/12

MITKEM LABORATORIES **METALS WORKING STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Working STD ID	Analyst	Exp. Date
2/10/2012	Lu	IP110422E	10,000	0.5	1L	5	1.0% HNO3, 1.5%HCL	Int Std IW120210A	TR	2/11/2012
	Y	IP101006C	10,000	0.5		5				
	ICV1-0307	IP110920G	MIX	1	10	MIX	1.0% HNO3, 1.5%HCL	ICV IW120210B		
	ICSA-1206	IP110307D	MIX	1	10	MIX	1.0% HNO3, 1.5%HCL	ICSA IW120210C		
	ICSA-1206	IP110307D	MIX	1	10	MIX	1.0% HNO3, 1.5%HCL	ICSAB IW120210D		
	ICSB-0203	IP110307F	MIX	1		MIX				
	ISM S6 10x conc	IP111114A	MIX	5	50	MIX	1.0% HNO3, 1.5%HCL	S6 Cal IW120210E		
	Na	IP110922A	10,000	2		400				
	K	IP110922B	10,000	2		400				
	Cd	IP091111C	1000	0.025	50	0.5	1.0% HNO3, 1.5%HCL	S5 Cal IW120210F		
	Sb	IP110518B	1000	0.1		2				
	ISM S4/5 Part A	IP110222B	MIX	5		MIX				
	ISM S4/5 Part B	IP110909A	MIX	5		MIX				
	Sb	IP110518B	1000	0.075	50	1.5	1.0% HNO3, 1.5%HCL	S4 Cal IW120210G		
	ISM S4/5 Part A	IP110222B	MIX	1		MIX				
	ISM S4/5 Part B	IP110909A	MIX	2.5		MIX				
	Na	IP110922A	10,000	1		200				
	K	IP110922B	10,000	1		200				
	Ti	II120201A	1000	0.25	50	0.5	1.0% HNO3, 1.5%HCL	S3 Cal IW120210H		
	CRI 5.4	IP110518A	MIX	10		MIX				
	Ti	II120201A	100	0.05	50	0.1	1.0% HNO3, 1.5%HCL	S2 Cal IW120210I		
	CRI 5.4	IP110518A	MIX	2.5		MIX				
	Ti	II120201A	100	0.01	50	0.02	1.0% HNO3, 1.5%HCL	S1 Cal IW120210J		
2/10/2012	CRI 5.4	IP110518A	MIX	0.5		MIX			TR	2/11/2012

Logbook ID: 100.0036 -01/12

TR 2/10/12

Reviewed By: HZA 2/13/12

MITKEM LABORATORIES **METALS WORKING STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.(mg/L)	Amt. Added (ml)	Final Volume (ml)	Final Conc.(mg/L)	Diluent Used	Working STD ID	Analyst	Exp. Date
2/9/2012	Sb	IP110518B	1000	0.05	50	1	1.5%HCl 1%HNO3	IW120209K/ CCV	TR	2/10/2012
	ISM S4/5 Part A	IP110222B	MIX	2		MIX				
	ISM S4/5 Part B	IP110909A	MIX	2.5		MIX				
	Na	IP110922A	10,000	1		200				
2/9/2012	K	IP110922B	10,000	1		200			TR	2/10/2012
2/10/2012	Sb	IP110518B	1000	0.05	50	1	1.5%HCl 1%HNO3	IW120210K/ CCV	TR	2/11/2012
	ISM S4/5 Part A	IP110222B	MIX	2		MIX				
	ISM S4/5 Part B	IP110909A	MIX	2.5		MIX				
	Na	IP110922A	10,000	1		200				
2/10/2012	K	IP110922B	10,000	1		200			TR	2/11/2012

Logbook ID: 100.0036 -01/12

Reviewed By: HZA 2/13/12

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ULTRA SCIENTIFIC
Analytical Solutions

Certificate of Analysis

EPA Method 200.7 Spiking Standard #5

Catalog Number: ICM-215
Lot Number: G00228A
Job Number: J00005587
Lot Issue Date: 06/02/2008
Expiration Date: 07/31/2012

This Certified Reference Material (CRM) was manufactured and verified in accordance with ULTRA's ISO 9001:2000 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory.
The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below

Analyte	True Value				Analytical Method	NIST SRM
arsenic	800.4	±	4.0	µg/mL	ICP / ICP-MS	3103a
cadmium	100.0	±	0.5	µg/mL	ICP / ICP-MS	3108
lead	1001	±	5	µg/mL	ICP / ICP-MS	3128
selenium	1001	±	5	µg/mL	ICP / ICP-MS	3149
thallium	1000	±	5	µg/mL	ICP / ICP-MS	3158

Matrix: 5% nitric acid in low TOC water (< 50 ppb)

ULTRA uses purified acids, 18 megohm double deionized water, calibrated Class A glassware & meticulously cleaned bottles in the manufacturing of ULTRAgrade standards. Balances used in the manufacturing of this standard are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001

I090405B

ACCREDITED

ISO 17025:2005
Accredited
A2LA
Cert. No. 0851.01

ISO 9001:2000
Registered
TUV USA, Inc.
Cert. No. 06-1004

250 Smith Street, North Kingstown, RI 02852 USA
401-294-9400 Fax: 401-295-2330
www.ultrasci.com

See Reverse For Additional Information

William J. Leary
Quality Assurance Manager

ULTRA SCIENTIFIC
Analytical Solutions

Certificate of Analysis

EPA Method 200.7 Spiking Standard #2

Catalog Number: ICM-212
Lot Number: G00357A
Job Number: J00005749
Lot Issue Date: 06/19/2008
Expiration Date: 07/31/2012

This Certified Reference Material (CRM) was manufactured and verified in accordance with ULTRA's ISO 9001:2000 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory.
The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below

Analyte	True Value				Analytical Method	NIST SRM
calcium	999.9	±	5.0	µg/mL	ICP / ICP-MS	3109a
magnesium	2000	±	10	µg/mL	ICP / ICP-MS	3131a
potassium	10000	±	50	µg/mL	ICP / ICP-MS	3141a
sodium	3000	±	15	µg/mL	ICP / ICP-MS	3152a

Matrix: 5% nitric acid in low TOC water (< 50 ppb)

ULTRA uses purified acids, 18 megohm double deionized water, calibrated Class A glassware & meticulously cleaned bottles in the manufacturing of ULTRAgrade standards. Balances used in the manufacturing of this standard are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001

I090105E

ACCREDITED

ISO 17025:2005
Accredited
A2LA
Cert. No. 0851.01

ISO 9001:2000
Registered
TUV USA, Inc.
Cert. No. 06-1004

250 Smith Street, North Kingstown, RI 02852 USA
401-294-9400 Fax: 401-295-2330
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See Reverse For Additional Information

William J. Leary
Quality Assurance Manager

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USA

AccuStandard®, Inc.

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Website AccuStandard.com

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: IS-17463

Mix Name: Custom ICP Standard
Matrix: 5% HNO3

Lot Number: 210025025
Expiration Date: Aug / 2011

IP100212A

Elements in µg/mL

		SRM#			SRM#			SRM#
Al	20	3101a	Fe	10	3126a	V	5	3165
As	1	3103a	Pb	1	3128	Zn	6	3168a
Sb	6	3102a	Mg	501	3131a			
Ba	20	3104a	Mn	1.5	3132			
Be	0.5	3105a	Ni	4	3136			
Ca	500	3109a	K	500	3141a			
Cd	0.5	3108	Se	3.5	3149			
Co	5	3113	Ag	1	3151			
Cr	1	3112a	Na	500	3152a			
Cu	2.5	3114	Tl	2.5	3158			

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

AccuStandard is accredited to ISO/IEC 17025:2005 and certified to ISO 9001:2000

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CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: ICP-MS-IS-MIX1-1

Mix Name: ICP-MS Internal Standard Mixed
Matrix: 2-5% Nitric acid
Lot Number: B9035092-1A
Expiration Date: Feb / 2012

Elements in µg/mL

		SRM#
Bi	10	3106
Ho	10	3123
In	10	3124a
Li-6	10	3129a
Sc	10	3148a
Tb	10	3157a
Y	10	3167

1P100212B

The total maximum uncertainty on the certified value(s) is ±2%. See reverse side of certificate for details.

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

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Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

TS 1/25/10

QATS INORGANIC REFERENCE MATERIAL
INTERFERENCE CHECK SAMPLE SET
ICSA WITH ICSB FOR ICP-AES

The "Certified Value" concentrations of the elements are listed in Table 1. The values are certified in that all results used in calculating the certified values were derived from statistically pooled results from the following sources: ILM05.4 Pre-award analysis, Quarterly Blind analysis, CLP laboratory referee analysis, and QATS Laboratory analysis.

Preparation and analysis must be performed according to the following instructions:
ICSA-1206, Interferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSA solution by ICP-AES.
ICSB-0203, Analytes, mixed with ICSA-1206, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this ICSAB solution by ICP-AES. Class 'A' glassware should be used to prepare these solutions.

NOTE: THIS ICS INSTRUCTION SHEET IS FOR USE WITH ISM01.x AND REVISIONS ONLY, NOT ILM05.x.

IP100125A&B

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES ICSA-1206, AND ICSA-1206 MIXED WITH ICSB-0203

Element	CRQL	Part A (µg/L)	Low Limit (ug/L)	High Limit (ug/L)	Part A +Part B (µg/L)	Low Limit (ug/L)	High Limit (ug/L)
Al	200	244100	195280	292920	241100	192880	289320
Sb	60	(0)	-60.0	60.0	589	471.2	706.8
As	10	(0)	-10.0	10.0	101	80.8	121.2
Ba	200	(2)	-198	202	(495)	295	695
Be	5	(0)	-5.0	5.0	475	380	570
Cd	5	(0)	-5.0	5.0	940	752	1128
Ca	5000	234900	187920	281880	231100	184880	277320
Cr	10	(43.0)	33.0	53.0	511	408.8	613.2
Co	50	(4)	-46.0	54.0	461	368.8	553.2
Cu	25	(23)	-2.0	48.0	548	438.4	657.6
Fe	100	95600	76480	114720	94800	75840	113760
Pb	10	(10.0)	0	20.0	61.0	48.8	73.2
Mg	5000	247500	198000	297000	251100	200880	301320
Mn	15	(19.0)	4.0	34.0	502	401.6	602.4
Ni	40	(21)	-19.0	61.0	984	787.2	1180.8
Se	35	(0)	-35.0	35.0	(53.0)	18.0	88.0
Ag	10	(0)	-10.0	10.0	206	164.8	247.2
Tl	25	(0)	-25.0	25.0	(103)	78.0	128.0
V	50	(0)	-50.0	50.0	494	395.2	592.8
Zn	60	(28)	-32.0	88.0	1028	822.4	1233.6

( ) Indicates analyte certified values and the acceptance range is calculated based on +/- 1 times the CRQL.

TS 1/25/10

statistically pooled results from the following sources: ILM05.2 Pre-award analysis, Quarterly Blind analysis, CLP laboratory referee analysis, and QATS Laboratory analysis.

Preparation and analysis must be performed according to the following instructions:
ICSA-0803, Inferferents: Pipet 10 mL of the ICSA solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this solution by ICP-MS.
ICSB-0803, Analytes, mixed with ICSA-0803, Interferents: Pipet 10 mL of the ICSA solution and 10 mL of the ICSB solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this ICSAB solution by ICP-MS. Class 'A' glassware should be use to prepare these solutions.

MS

IP 100125C&D

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS ICSA-0803, AND ICSA-0803 MIXED WITH ICSB-0803

Element	CRQL	Part A (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)	Part A +Part B (µg/L)	Lower Limit (µg/L)	Upper Limit (µg/L)
Al	20	[100000]			[100000]		
Sb	2	(1.5)	-2.5	5.5	22.0	17.6	26.4
As	1	(0.1)	-1.9	2.1	19.0	15.2	22.8
Ba	10	(1.2)	-18.8	21.2	(22.0)	2.0	42.0
Be	1	(0)	-2.0	2.0	19.0	15.2	22.8
Cd	1	(0.7)	-1.3	2.7	20.0	16.0	24.0
Ca	500	[100000]			[100000]		
C		[200000]			[200000]		
Cl		[1000000]			[1000000]		
Cr	2	21.0	16.8	25.2	40.0	32.0	48.0
Co	1	(1.0)	-1.0	3.0	20.0	16.0	24.0
Cu	2	(8.0)	4.0	12.0	25.0	20.0	30.0
Fe	200	[100000]			[100000]		
Pb	1	(4.0)	2.0	6.0	25.0	20.0	30.0
Mg	500	[100000]			[100000]		
Mn	1	(7.0)	5.0	9.0	27.0	21.6	32.4
Mo		[2000]			[2000]		
Ni	1	(6.0)	4.0	8.0	24.0	19.2	28.8
P		[100000]			[100000]		
K	500	[100000]			[100000]		
Se	5	(0.3)	-9.7	10.3	(19.0)	9.0	29.0
Ag	1	(0)	-2.0	2.0	18.0	14.4	21.6
Na	500	[100000]			[100000]		
S		[100000]			[100000]		
Tl	1	(0)	-2.0	2.0	21.0	16.8	25.2
Ti		[2000]			[2000]		
V	5	(0.5)	-9.5	10.5	(19.0)	9.0	29.0
Zn	2	(11.0)	7.0	15.0	29.0	23.2	34.8

[ ] Indicates analytes that do not require ICP-MS determination in the ICS.
( ) Indicates analyte certified values and the acceptance range is calculated based on +/- 2 times the CRQL.

TS 1/25/10

QATS INORGANIC REFERENCE MATERIAL
INITIAL CALIBRATION VERIFICATION SOLUTIONS
(ICVs)

IP1001251

ICV1-0307		
Element	Concentration (µg/L) (after 10 fold dilution)	Concentration (µg/L) (after 50 fold dilution)
Al	2521	504
Sb	994	199
As	999	200
Ba	497	99
Be	495	99
Cd	496	99
Ca	10026	2005
Cr	490	98
Co	499	100
Cu	492	98
Fe	5082	1016
Pb	1002	200
Mg	6074	1215
Mn	499	100
Ni	503	101
K	10021	2004
Se	1029	206
Ag	501	100
Na	10097	2019
Tl	1028	206
V	501	100
Zn	1025	205

ICV2-0601	
Element	Concentration (µg/L) (after 20 fold dilution)
As	52.6
Se	50.8

ICV3-0500	
Element	Concentration (µg/L) (after 10 fold dilution)
Sb	999

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CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: IS-17463

Mix Name: Custom ICP Standard
Storage Condition: Ambient
Hazards: IRRITANT
Matrix: 5% HNO3

Lot: B9035120-1A
Date Certified: 7/2/2010
Expiration: Jan / 2012
Sample Size: 500 mL

Elements in µg/mL

Al	20	3101a	**Fe**	10	3126a	**V**	5	3165
As	1	3103a	**Pb**	1	3128	**Zn**	6	3168a
Sb	6	3102a	**Mg**	499	3131a			
Ba	20	3104a	**Mn**	1.5	3132			
Be	0.5	3105a	**Ni**	4	3136			
Ca	498	3109a	**K**	500	3141a			
Cd	0.5	3108	**Se**	3.5	3149			
Co	5	3113	**Ag**	1	3151			
Cr	1	3112a	**Na**	500	3152a			
Cu	2.5	3114	**Tl**	2.5	3158			

The total maximum uncertainty on the certified value(s) is ±1%. See reverse side of certificate for details.

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

For use in routine laboratory analysis.

AccuStandard is accredited to ISO/IEC 17025:2005 and certified to ISO 9001:2000

OR-ORG/INO-001
Rev. 9/08

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CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: IS-20994

Mix Name: Custom ICP Standard
Storage Condition: Ambient
Hazards: IRRITANT
Matrix: 5% HNO3

Lot: 210075117
Date Certified: 7/21/2010
Expiration: Jan / 2012
Sample Size: 500 mL

Elements in µg/mL

As	20	3103a	**Zn**	100	3168a
Ba	200	3104a	**Cd**	10	3108
Be	10	3105a	**Ti**	50	3162a
Co	50	3113	**Ca**	3000	3109a
Ag	6	3151			
Mg	2991	3131a			
Ni	50	3136			
Se	20	3149			
Tl	20	3158			
V	50	3165			

IP100723A

The total maximum uncertainty on the certified value(s) is ±1%. See reverse side of certificate for details.

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

For use in routine laboratory analysis.

AccuStandard is accredited to ISO/IEC 17025:2005 and certified to ISO 9001:2000

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Rev. 9/08

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CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: IS-20993

Mix Name: Custom ICP Standard
Storage Condition: Ambient
Hazards: IRRITANT
Matrix: 5% HNO3

Lot: 210075115
Date Certified: 7/21/2010
Expiration: Jan / 2012
Sample Size: 500 mL

Elements in µg/mL

Al	3000	3101a
Fe	2000	3126a
Mn	200	3132
Pb	200	3128

IP100723B

The total maximum uncertainty on the certified value(s) is ±1%. See reverse side of certificate for details.

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

For use in routine laboratory analysis.

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Rev. 9/08

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CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: IS-20995

Mix Name: Custom ICP Standard
Storage Condition: Ambient
Hazards: IRRITANT
Matrix: 5% HNO3

Lot: 210075116
Date Certified: 7/21/2010
Expiration: Jan / 2012
Sample Size: 500 mL

Elements in µg/mL

Al	1000	3101a
Cr	50	3112a
Fe	500	3126a
Mn	100	3132
Pb	50	3128
Cu	100	3114

IP100723C

The total maximum uncertainty on the certified value(s) is ±1%. See reverse side of certificate for details.

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

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L. Snyder
Lydia Snyder
Inorganic QC Supervisor

For use in routine laboratory analysis.

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Rev. 9/08

QATS INORGANIC REFERENCE MATERIAL
INTERFERENCE CHECK SAMPLE FOR ICP-MS
PART A (0803) WITH PART B (0803)

Preparation and analysis must be performed according to the following instructions:

Part A (0803), Inferferents: Pipet 10 mL of the Part A solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this solution, Soln. A, by ICP-MS.

Part B (0803), Analytes, mixed with Part A (0803), Interferents: Pipet 10 mL of the Part A solution and 10 mL of the Part B solution into a 100 mL volumetric flask and dilute to volume with 1% v/v HNO_3. Analyze this solution, Soln. AB, by ICP-MS.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS PART A (0803), AND PART A (0803) MIXED WITH PART B (0803)		
Element	Concentration (µg/L) Part A	Concentration (µg/L) Part A + Part B
Al	[100000]	[100000]
Sb	(1.5)	22
As	(0.1)	19
Ba	(1.2)	22
Be	(0)	19
Cd	(0.7)	20
Ca	[100000]	[100000]
C	[200000]	[200000]
Cl	[1000000]	[1000000]
Cr	21	40
Co	1	20
Cu	8	25
Fe	[100000]	[100000]
Pb	4	25
Mg	[100000]	[100000]
Mn	7	27
Mo	[2000]	[2000]
Ni	6	24
P	[100000]	[100000]
K	[100000]	[100000]
Se	(0.3)	19
Ag	(0)	18
Na	[100000]	[100000]
S	[100000]	[100000]
Tl	(0)	21
Ti	[2000]	[2000]
V	(0.5)	19
Zn	11	29

[ ] Indicates analytes that do not require ICP-MS determination in the ICS.

( ) Indicates analyte values that are less than the CRQL and the value is to be used as a set point for the ± 3 times CRQL acceptance criteria calculations.

IP100810 A & B

QATS INORGANIC REFERENCE MATERIAL
INTERFERENCE CHECK SAMPLE SET
PART A (1206) WITH PART B (0203) FOR ICP-AES

TY 8/10/10

The "Certified Value" concentrations of the elements are listed in Table 1. The values are certified in that all results used in calculating the certified values were derived from statistically pooled results from the following sources: ILM05.4 Pre-award analysis, Quarterly Blind analysis, CLP laboratory referee analysis, and QATS Laboratory analysis. Preparation and analysis must be performed according to the following instructions:

Part A (1206), Interferents: Pipet 10 mL of the Part A solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this solution, Soln. A, by ICP-AES.

Part B (0203), Analytes, mixed with Part A (1206), Interferents: Pipet 10 mL of the Part A solution and 10 mL of the Part B solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this solution, Soln. AB, by ICP-AES.

NOTE: THIS ICS SET IS FOR USE WITH ILM05.4 AND REVISIONS ONLY, NOT ILM04.x.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES PART A (1206), AND PART A (1206) MIXED WITH PART B (0203)

Element	Concentration (µg/L) Part A	Concentration (µg/L) Part A + Part B
Al	244100	241100
Sb	(0)	589
As	(0)	101
Ba	(2)	495
Be	(0)	475
Cd	(0)	940
Ca	234900	231100
Cr	43	511
Co	(4)	461
Cu	(23)	548
Fe	95600	94800
Pb	10	61
Mg	247500	251100
Mn	19	502
Ni	(21)	984
Se	(0)	53
Ag	(0)	206
Tl	(0)	103
V	(0)	494
Zn	(28)	1028

( ) Indicates analyte values that are less than the CRQL, and the value is to be used as a set point for the +/- 2 times CRQL acceptance criteria calculations.

IP100810 C&D

IWD1012023

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CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: IS-17463

Mix Name: Custom ICP Standard
Storage Condition: Ambient
Hazards: IRRITANT
Matrix: 5% HNO3

Lot: B9035120-1A
Date Certified: 7/2/2010
Expiration: Jan / 2012
Sample Size: 500 mL

Elements in µg/mL

Al	20	3101a	**Fe**	10	3126a	**V**	5	3165
As	1	3103a	**Pb**	1	3128	**Zn**	6	3168a
Sb	6	3102a	**Mg**	499	3131a			
Ba	20	3104a	**Mn**	1.5	3132			
Be	0.5	3105a	**Ni**	4	3136			
Ca	498	3109a	**K**	500	3141a			
Cd	0.5	3108	**Se**	3.5	3149			
Co	5	3113	**Ag**	1	3151			
Cr	1	3112a	**Na**	500	3152a			
Cu	2.5	3114	**Tl**	2.5	3158			

FP1012023

The total maximum uncertainty on the certified value(s) is ±1%. See reverse side of certificate for details.

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

For use in routine laboratory analysis.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

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Rev. 7/10

125 Market Street
New Haven, CT 06513
USA

AccuStandard®, Inc.

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Fax (203)786-5287
Website AccuStandard.com

CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: IS-17463

HP10222A

Mix Name: Custom ICP Standard
Storage Condition: Ambient
Hazards: IRRITANT
Matrix: 5% HNO3

Lot: 211025047
Date Certified: 2/14/2011
Expiration: Aug / 2012
Sample Size: 500 mL

Elements in µg/mL

Al	20	3101a	**Fe**	10	3126a	**V**	5	3165
As	1	3103a	**Pb**	1	3128	**Zn**	6	3168a
Sb	6	3102a	**Mg**	500	3131a			
Ba	20	3104a	**Mn**	1.5	3132			
Be	0.5	3105a	**Ni**	4	3136			
Ca	500	3109a	**K**	500	3141a			
Cd	0.5	3108	**Se**	3.5	3149			
Co	5	3113	**Ag**	1	3151			
Cr	1	3112a	**Na**	500	3152a			
Cu	2.5	3114	**Tl**	2.5	3158			

The total maximum uncertainty on the certified value(s) is ±1%. See reverse side of certificate for details.

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

We use the highest purity raw materials available, including high purity acids, ASTM type I 18 megohm deionized water, and typically 99.999%+ starting materials to minimize impurity levels in the final solution. All bottles are acid leached and then triple rinsed with deionized water prior to use.

Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: IS-20995

Mix Name: Custom ICP Standard
Storage Condition: Ambient
Hazards: IRRITANT
Matrix: 5% HNO3

Lot: 211025045
Date Certified: 2/14/2011
Expiration: Aug / 2012
Sample Size: 500 mL

Elements in µg/mL

Al	1004	3101a
Cr	50	3112a
Fe	500	3126a
Mn	100	3132
Pb	50	3128
Cu	100	3114

The total maximum uncertainty on the certified value(s) is ±1%. See reverse side of certificate for details.

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

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L. Snyder
Lydia Snyder
Inorganic QC Supervisor

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CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: IS-20994

Mix Name: Custom ICP Standard
Storage Condition: Ambient
Hazards: IRRITANT
Matrix: 5% HNO3

Lot: 211025064
Date Certified: 2/17/2011
Expiration: Aug / 2012
Sample Size: 500 mL

Elements in µg/mL

As	20	3103a	**Zn**	100	3168a
Ba	200	3104a	**Cd**	10	3108
Be	10	3105a	**Ti**	50	3162a
Co	50	3113	**Ca**	3000	3109a
Ag	6	3151			
Mg	3000	3131a			
Ni	50	3136			
Se	20	3149			
Tl	20	3158			
V	50	3165			

The total maximum uncertainty on the certified value(s) is ±1%. See reverse side of certificate for details.

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L. Snyder
Lydia Snyder
Inorganic QC Supervisor

For use in routine laboratory analysis.

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Phone: (843) 767-7800
Fax: (843) 767-7900

Certificate of Analysis

IP110411A

SM-1385-004
(ICP-MS ISM LCS)

Lot # 1109522

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts and Oxides	99.96+%	HNO_3, 2% + Tr HF	mg/L ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C Rains

Theodore C. Rains, Ph.D.
President

Exp Date: APR 07 2012
MSDS ATTACHED

1P110411A

SM-1385-004
(ICP-MS ISM LCS)
Element List
(mg/L)

Aluminum	4
Antimony	0.4
Arsenic	0.2
Barium	2
Beryllium	0.2
Cadmium	0.2
Chromium	0.4
Cobalt	0.2
Copper	0.4
Iron	40
Lead	0.2
Manganese	0.2
Molybdenum	0.2
Nickel	0.2
Selenium	1
Silver	0.2
Thallium	0.2
Vanadium	1
Zinc	0.4

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Certificate of Analysis

IP110411B

SM-1385-003

Lot # 1109521

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts and Oxides	99.96+%	HNO_3, 2% + Tr HF	mg/L ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains

Theodore C. Rains, Ph.D.
President

Exp Date: APR 07 2012

MSDS ATTACHED

SM-1385-003

Element List

(mg/L)

Aluminum	200
Antimony	10
Arsenic	10
Barium	100
Beryllium	10
Cadmium	10
Chromium	10
Cobalt	10
Copper	10
Iron	1000
Lead	10
Manganese	10
Molybdenum	10
Nickel	10
Thallium	10
Titanium	10
Vanadium	10
Zinc	10

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Certificate of Analysis

Product Description:

Name:	ICP Analytical Mixture 15 (5000µg/mL)
Part Number:	**ICP-AM-15-5M**
Lot Number:	**1021626**
Matrix:	5% HNO_3
Purity:	99.98% - 99.9995%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Ca	5000 ± 25	3109a	050825	K	5000 ± 25	3141a	051220
Mg	5000 ± 25	3131a	050302	Na	5000 ± 25	3152a	010728

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval.

Preparation Information:

The highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. This standard was prepared using methods developed at NIST for the preparation of SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties.

a. **Analytical Balance Calibration**: All balances are calibrated weekly by an in-house method using NBS weights Inventory No 20231A. The balances are calibrated yearly and the calibration weights are checked biennially by a qualified metrology company with weights traceable to the primary standards developed by NIST.

b. **Volumetric Device Calibration**: The calibration of all volumetric vessels is checked using the NBS 602 method where all vessels are weighed to five significant figures.

c. **Calibration Standards:** The Calibration Standards are directly traceable to SRM 3100 Series Spectrometric Standard Solutions.

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions. The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Expiration Information:

Preparation Date: August 13, 2010

Shipped Date: April 5, 2011

Expiration Date: April 5, 2012

Vanny T. Yib, Inorganic Laboratory Manager

Connie Hayes, Quality Manager

Theodore Rains, PhD, President

August 16, 2010

Certificate Issue Date

PJLA Testing

Accreditation # 49337

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

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CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: IS-17463

Mix Name: Custom ICP Standard
Storage Condition: Ambient
Hazards: IRRITANT
Matrix: 5% HNO3

Lot: 210115085
Date Certified: 12/2/2010
Expiration: Jun / 2012
Sample Size: 500 mL

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Elements in μg/mL

Al	20	3101a	**Fe**	10	3126a	**V**	5	3165
As	1	3103a	**Pb**	1	3128	**Zn**	6	3168a
Sb	6	3102a	**Mg**	500	3131a			
Ba	20	3104a	**Mn**	1.5	3132			
Be	0.5	3105a	**Ni**	4	3136			
Ca	500	3109a	**K**	500	3141a			
Cd	0.5	3108	**Se**	3.5	3149			
Co	5	3113	**Ag**	1	3151			
Cr	1	3112a	**Na**	500	3152a			
Cu	2.5	3114	**Tl**	2.5	3158			

The gravimetric uncertainty for this product is ±0.24%. The CRM uncertainty is ±5%. See reverse side for

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

RESULTS: This solution standard was certified for accuracy of major elemental constituency via methodology traceable to primary or well characterized secondary standards. All trace level elements and impurities were determined via plasma emission spectroscopy on the concentrate.

This standard was prepared gravimetrically to contain the elemental concentrations shown above. Balances, used in the preparation, are calibrated regularly using NIST-traceable weights. All glassware used in preparation is Class A.

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Use good laboratory procedure when diluting this product. Shake bottle prior to use and do not pipette directly out of the bottle. Use only cleaned Class A volumetric glassware.

We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

For use in routine laboratory analysis.

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Rev. 7/10

T3115184

PerkinElmer Pure Plus

Atomic Spectroscopy Standard

ISO 9001 CERTIFIED

Certificate of Analysis

IP110527A

PerkinElmer Number: N9303843

Description: Tuning Solution 1

Matrix: 5% HCl / 2% HNO_3

Lot Number: 42-15AS

Certification Date: MAY – – 2011

Expiration Date: NOV 30 2012

*** Instrumental Analysis using OPTIMA 3300 DV ICP Spectrometer:**

Analyte	Labeled	Measured	SRM	Analyte	Labeled	Measured	SRM
Ba	10.0 mg/L	9.94 mg/L	3104a*	Mg	10.0 mg/L	10.1 mg/L	3131a*
Be	10.0 mg/L	9.90 mg/L	3105a*	Pb	10.0 mg/L	9.94 mg/L	3128*
Ce	10.0 mg/L	9.97 mg/L	3110*	Rh	10.0 mg/L	9.82 mg/L	3144*
Co	10.0 mg/L	9.92 mg/L	3113*	Tl	10.0 mg/L	10.1 mg/L	3158*
In	10.0 mg/L	9.97 mg/L	3124a*	U	10.0 mg/L	9.94 mg/L	3164*
Li	10.0 mg/L	10.0 mg/L	3129a*	Y	10.0 mg/L	9.95 mg/L	3167a*

* - indicates NIST SRM † - indicates CRM (when NIST SRM is not available)

Reference Multi: Lot# 13-165VY, 36-176AS

Refer to side 2 for details of certification.

Trace Metallic Impurities in the Actual Solution via ICP/ICP-MS Analysis:

Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L	Element	µg/L
Ag	<0.6	Er	<0.01	La	0.6	Pt	<0.9	Ta	<0.06
Al	10	Eu	<0.1	Lu	<0.01	Rb	<0.4	Tb	2
As	<2	Fe	20	Mn	6	Re	<0.1	Te	<2
Au	10	Ga	<50	Mo	<0.5	Ru	<0.01	Th	<0.2
B	<6	Gd	<50	Na	<4	Sb	<0.4	Ti	<4
Bi	0.4	Ge	<5	Nb	<0.3	Sc	1	Tm	0.01
Ca	10	Hf	<0.08	Nd	<0.09	Se	<9	V	0.7
Cd	0.5	Hg	7	Ni	<3	Si	<500	W	<1
Cr	<4	Ho	0.02	P	<100	Sm	<0.4	Yb	<0.01
Cs	<0.06	Ir	0.6	Pd	0.7	Sn	<0.8	Zn	5
Cu	2	K	<4	Pr	<0.1	Sr	0.2	Zr	<0.3
Dy	<0.06								

Balances are calibrated with weight sets traceable to NIST.

We guarantee that our PerkinElmer Pure Plus Atomic Spectroscopy Standards are stable and accurate to ±0.5% of certified concentration until the expiration date, provided the standards are kept tightly capped and stored under normal laboratory conditions. This value is the sum of cumulative errors associated with the analytical determinations, pipetting, and diluting to final volume. For these solutions we use high purity acids, ASTM Type I water (18 megohm double deionized), and leached, triple-rinsed bottles. All glassware used is class A.

Certifying Officer: Laura Ensei

PerkinElmer®

PerkinElmer, Inc.

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Charleston, SC [illegible]
Phone [illegible]
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Certificate of Analysis

IP110607B

Product Description:

Name:	CLP Spike Standard 1 Solution B
Part Number:	**CLP-SP-1 B**
Lot Number:	**1031616**
Matrix:	4% HNO_3
Purity:	99.999+%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#
Ag	50.00 ± 0.25	3151	992212

The Certified values are based on gravimetric and volumetric preparation, and verified against SRM 3100 series developed by National Institute of Standards and Technology (NIST) via inductively coupled plasma optical emission spectrometry (ICP-OES) using an internal laboratory developed method. The uncertainty in the certified value is calculated for a 95% confidence interval.

Preparation Information:

The highest purity source materials were purchased from qualified vendors per ISO 9001:2008 guidelines and assayed by ICP-OES for conformity prior to use. This standard was prepared using methods developed at NIST for the preparation of SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties.

a. **Analytical Balance Calibration:** All balances are calibrated weekly by an in-house method using NBS weights Inventory No 20231A. The balances are calibrated yearly and the calibration weights are checked biennially by a qualified metrology company with weights traceable to the primary standards developed by NIST.

b. **Volumetric Device Calibration:** The calibration of all volumetric vessels is checked using the NBS 602 method where all vessels are weighed to five significant figures.

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Certificate of Analysis

IP110809A

SM-1385-003

Lot # 1121504

Source	Source Purity	Matrix	Standard Concentration
High Purity Metals, Salts and Oxides	99.96+%	HNO_3, 2% + Tr HF	mg/L ± 0.5% See element list on reverse

This spectrometric standard solution has been prepared from high-purity reference materials. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water. The reference materials have been assayed by inductively coupled plasma optical emission spectrometry (ICP-OES).

The standard has been prepared gravimetrically by weighing the reference material to 5 significant figures. Volumetric glassware has been calibrated gravimetrically to 5 significant figures. The standard concentration has been verified by ICP-OES against an independent source which is directly traceable to National Institute of Standards and Technology, Standard Reference Material No. 3100 series.

This standard is valid for one year from the shipping date provided the solution is kept tightly capped and stored under normal laboratory conditions.

Theodore C. Rains

Theodore C. Rains, Ph.D.
President

Exp Date: AUG 0 4 2012

MSDS ATTACHED

1P 110809A

SM-1385-003

Element List

(mg/L)

Aluminum	200
Antimony	10
Arsenic	10
Barium	100
Beryllium	10
Cadmium	10
Chromium	10
Cobalt	10
Copper	10
Iron	1000
Lead	10
Manganese	10
Molybdenum	10
Nickel	10
Thallium	10
Titanium	10
Vanadium	10
Zinc	10

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CERTIFICATE OF ANALYSIS

AccuTrace™ Reference Standard

Item Number: IS-20994

Mix Name: Custom ICP Standard
Storage Condition: Ambient
Hazards: IRRITANT
Matrix: 5% HNO3, tr. HF

Lot: 211095006
Date Certified: 9/7/2011
Expiration: Mar / 2013
Sample Size: 500 mL

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

IP110909A

Elements in µg/mL

As	20	3103a	**Zn**	100	3168a
Ba	200	3104a	**Cd**	10	3108
Be	10	3105a	**Ti**	50	3162a
Co	50	3113	**Ca**	3000	3109a
Ag	6	3151			
Mg	3000	3131a			
Ni	50	3136			
Se	20	3149			
Tl	20	3158			
V	50	3165			

The gravimetric uncertainty for this product is ±0.24%. The CRM uncertainty is ±5%. See reverse side for

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

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We certify the accuracy of this standard to be ± 0.5% of the stated value until the expiration date listed above, provided it is kept tightly capped and stored under normal laboratory conditions.

L. Snyder
Lydia Snyder
Inorganic QC Supervisor

For use in routine laboratory analysis.

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CERTIFICATE OF ANALYSIS

1P111114A

AccuTrace™ Reference Standard

Item Number: IS-20993

Mix Name: Custom ICP Standard
Storage Condition: Ambient
Hazards: IRRITANT
Matrix: 5% HNO3

Lot: 211115043
Date Certified: 11/9/2011
Expiration: May / 2013
Sample Size: 500 mL

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Elements in µg/mL

Al	3001	3101a
Fe	2000	3126a
Mn	200	3132
Pb	200	3128

The gravimetric uncertainty for this product is ±0.24%. The CRM uncertainty is ±5%. See reverse side for

In order to verify the concentrations, the final solution was checked against material traceable to the listed NIST SRMs by plasma emission spectroscopy (ICP)

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L. Snyder
Lydia Snyder
Inorganic QC Supervisor

For use in routine laboratory analysis.

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CERTIFICATION REPORT

1. **Quality Documentation:** This certificate is designed in accordance with ISO Guide 31 (Reference Materials - Contents of Certificates and Labels) and ISO Guide 35 (Reference Materials – General and Statistical Principles for Certification).

2. **Quality Standards:**

   ISO Guide 34 - General Requirements for the Competence of Reference Material Producers ACLASS Certificate Number AR-1463

   AR-1463

   ISO/IEC 17025:2005 - General Requirements for the Competence of Testing and Calibration Laboratories ACLASS Certificate Number AT-1339

   AT-1339

   ISO 9001:2008 Quality Management System - Requirements Eagle Registrations Certificate Number 3774

3. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 11. If dilution is required, use only Class A glassware and diluent compatible with all certified analytes in this preparation. All solutions should be thoroughly mixed prior to use.

4. **Raw Materials:** Reference standards are prepared from the highest quality starting materials with defined purities. All analytes and solvents are obtained from pre-qualified vendors and then analyzed or evaluated prior to use.

5. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this CRM.

6. **Homogeneity Assessment:** Homogeneity of the finished product is assessed by analyzing sample batches or by other methods consistent with the intended use of the product and by procedures that comply with the appropriate Quality System requirements, and ISO Guide 35.

7. **Stability Assessment:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label. To ensure a uniform solution, mix the contents of the sealed container thoroughly prior to use. Care should be taken not to contaminate the contents of the original container.

8. **Analytical Quality Control:** Products are tested by validated analytical methods specified in the manufacturer's quality system.

9. **Uncertainty Statistics and Confidence Limits:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide (Quantifying Uncertainty in Analytical Measurement). We have evaluated both Type A (based on a series of observations) and Type B (manufacturers specifications and calibration data) factors and report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_m = \sqrt{(u(P))^2 + (u(m))^2 + (u(V))^2}$. The expanded uncertainty, U, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level. Laboratories accredited to ISO/IEC 17025 and ISO Guide 34 are required to estimate uncertainty budgets associated with the measurements they make. However, for analysis, the certified value should be used as the actual value.

10. **Warranties:** The manufacturer warrants that its products shall conform to the description of such products as provided in its catalog or on the specific product label. This warranty is exclusive, and the manufacturer makes no other warranty, express or implied, including any implied warranty of merchantability or fitness for any particular purpose.

11. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. Due to the hazardous nature, only trained personnel should handle this product. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

MITKEM LABORATORIES

WET CHEM PRIMARY STD RECEIPT LOGBOOK

Date Rec	STANDARD	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Mitkem Primary STD ID
5/5/10	Chloride	Arculon	IC-Cl-10X-1	210035066	Cl^-	GJA	3/2012	IWP100505A
5/6/10	Solids	ERA	P179-499	P179-499	TDS, TSS, TS	GJA	12/2012	IWP100506A
5/6/10	Solids	ERA	P179-499	P179-499	TDS, TSS, TS	GJA	12/2012	IWP100506B
5/13/10	Cyanide + Phenol	ERA	502	P179-502	Phenol	GJA	6/2012	IWP100513A
5/19/10	Anion Std	Spex	AS-BR9-2Y	2-50BR-2	IC	GJA	5/30/11	IWP100519A
5/20/10	Ammonia Std	Ricco	615-16	2001212	NH_3/TKN	GJA	7/2011	IWP100520A
6/3/10	Sulfide 1	Hach	1816-32	A0121	S^-	↓	12/2013	IWP100603A
6/	Sulfide 1	↓	"	"	S^-	↓	"	IWP100603B
↓	Sulfide 2	↓	1817-32	A0097	S^-	↓	4/2015	IWP100603C
↓	Sulfide 2	↓	"	"	S^-	↓	"	IWP100603R
6/3/10	PO_4 Std Ampule	Hach	171-10	A0145	PO_4	GJA	05/2015	IWP100603E
6/22/10	Nitrate as N	ACCU STD	IC-SO_4-S	B7055095-23	IC	↓	6/2011	IWP100622A
6/22/10	Sulfate as Sulfur	ACCU STD	IC-NO_3-N	209095122	IC	↓	9/2011	IWP100622B
6/22/10	Bromide	ACCU STD	IC-Br	210045070	IC	GJA	4/2012	IWP100622C
7/13/10	S^- STD	Aqua Sol	8975-1L	0062531	S^-	BMA	8/30/10	IWP100713A
8/10/10	CN ISM ICV	EPA	ICV6-0400	89-000	CN	HZA	8/10/11	IWP100810A
			HZA	8/10/10				

Logbook ID: 100.0039-11/08

Reviewed By: HZA 8/10/10

MITKEM LABORATORIES **WET CHEM PRIMARY STD RECEIPT LOGBOOK**

Date Rec	STANDARD	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Mitkem Primary STD ID
1/6/11	Minerals	ERA	506	P185-506	Alk, Cond, TDS, TS	Cpa	10/2013	IWP110106A
↓	Minerals	ERA	506	P185-506	Alk, cond, TDS, TS	↓	10/2013	IWP110106B
1/6/11	Cyanide std	Ricca	2543-4	2012503	Cn-	Cpa	06/2011	IWP110106C
	Sulfide Standard	Aqua solutions	1313-84-4	10103C2	Sulfide	Cma	3/9/11	IWP110113A
2/17/11	Nitrite as N	Acculon	IC-NO2-N 10X-1	211025005	NO2	Cpa	8/2012	IWP110217A
2/17/11	Phosphate as P	Acculon	IC-PO4-P 10X-1	210055130	PO4	Cpa	6/2012	IWP110217B
2/25/11	COD STD	AquaSol	2167-500	1021849	COD	Cpa	4/26/11	IWP110225A
2/25/11	Demand	ERA	516	P188-516	COD / TOC	Cpa	1/2014	IWP110225B
3/7/11	EPA KV solution	EPA	KV6-0400CN	KV0400	CN - cyanide	Cma	3/7/12	IWP110307C
								Cma 3/7/11
				3/7/11 Cpa				

Logbook ID: 100.0039-11/08

Reviewed By: HZA 3/21/11

MITKEM LABORATORIES **WET CHEM PRIMARY STD RECEIPT LOGBOOK**

Date Rec	STANDARD	Vendor	Catalog #	Lot #	Analytes	Received By	Exp. Date	Mitkem Primary STD ID
8/12/10	Cyanide Standard	RICCA	2543-21	2005519	Cyanide	CMA	11/2010	1WP100812A
8/20/10	Nitrite N Standard	Ultra Science	ICC-007A	L00504	Nitrite as N	CMA	12/31/10	1WP100820A
~~8/22/10~~	~~Mercury STD~~ 8/23/10 CA	~~BDH~~	~~82025992~~	~~C2-Hg02070~~	~~Hg~~	~~CJA~~	~~9/1/11~~	~~1WP100822A~~ CMA 8/20/10
8/24/10	Sulfide STD	Aqua Sol	8975-1L	80902	S	CJA	10/15/10	1WP100824A
8/26/10	Sulfate STD	Ricca	810032	2008542	SO_4	CJA	2/2012	1WP100826A
8/26/10	Phosphate STD	Ricca	5838-16	2006666	P, PO_4	CJA	6/2011	1WP100826B
9/3/10	Conductivity Standard	Ricca	5895-32	2002392	Potassium Chloride	CMA	8/2011	1WP100903A
9/10/10	Free Cyanide	ERA	997	160610	CN^-	CJA	6/2012	1WP100910A
10/14/10	Demand	ERA	578	P182516	TOC, COD	CJA	7/20/13	1WP101014A
				HEA 10/14/10	Partial Reviewed			

Logbook ID: 100.0039-11/08

Reviewed By: _____

MITKEM LABORATORIES: WET CHEM INTERMEDIATE STANDARD LOGBOOK

Prep Date	Analyte(s)	Primary STD ID	Initial Conc.	Amt. Added	Final Volume	Final Conc.	Diluent Used	Intermediate STD ID	Prep By	Exp. Date
1/20/12	Cn-Curve	IWP100910A	1000 mg/L	1.0 ml	100 ml	10 mg/L	.25N NaOH	IWI12012001	RS	2/17/12
1/24/12	Cn-Curve	IWP100910A	1000 mg/L	1.0 ml	100 ml	10 mg/L	.25N NaOH	IWI12012401	RS	2/21/12
1/25/12	Cn-Curve	IWP100910A	1000 mg/L	1.0 ml	100 ml	10 mg/L	.25N NaOH	IWI12012501	RS	2/22/12
1/26/12	Cn-Curve	IWP100910A	1000 mg/L	1.0 ml	100 ml	10 mg/L	.25N NaOH	IWI12012601	RS	2/23/12
1/27/12	Cn-Curve	IWP100910A	1000 mg/L	1.0 ml	100 ml	10 mg/L	.25N NaOH	IWI12012701	RS	2/24/12
1/28/12	Cn-Curve	IWP100910 ~~12~~ A RS 1/28/12	1000 mg/L	1.0 ml	100 ml	10 mg/L	.250 NaOH	IWI12012801	GA	2/25/12
1/28/12	NH3 Std @100	IWP110804B	1000 mg/L	10 ml	100 ml	100 mg/L	DI	IWI12012802	GA	2/25/12
1/28/12	Alk LCS ~~Cn Cur~~	IC100903A	Neat	1.416g	250 ml	0.1069N	DI	IWI12012803	GA	2/25/12
1/30/12	5+ STD	IWP120127A ~~IWP100910A~~ 1/30/12	1000 mg/L	.650 ml ~~1.0 ml~~ 1/30/12	50 ml ~~100 ml~~	5 mg/L ~~10 mg/L~~	0.25N NaOH	IWI12013001	GA	1/31/12
1/30/12	Cn-Curve	IWP100910A	1000 mg/L	1.0 ml	100 ml	10 mg/L	.25N NaOH	IWI12013802 RS 1/30/12	RS	2/27/12
1/31/12	Cn-Curve	IWP100910A	1000 mg/L	1.0 ml	100 ml	10 mg/L	.25N NaOH	IWI12013101	RS	2/22/12
	Partial	Reviewed	HZA	1/31/12						
2/1/12	Cn-Curve	IWP100910A	1000 mg/L	1.0 ml	100 ml	10 mg/L	.25N NaOH	IWI12020101	RS	2/29/12
2/2/12	Cn-Curve	IWP100910A	1000 mg/L	1.0 ml	100 ml	10 mg/L	.25N NaOH	IWI12020201	RS	~~2/30/12~~ 3/1/12 RS 2/2/12
	Partial	Reviewed	HZA	2/31/12 HZA 2/3/12						
2/3/12	COD Std @150	IWP110016A	1000 mg/L	15 mL	100 mL	150 mg/L	DI	IWI12020301	JLC	3/2/12
2/3/12	Cn-Curve	IWP100910A	1000 mg/L	10 ml	100 ml	10 mg/L	.25N NaOH	IWI12020302	RS	~~2/31/12~~ 3/2/12 RS 2/2/12
2/6/12	Cn-Curve	IWP100910A	1000 mg/L	10 ml	100 ml	10 mg/L	.25N NaOH	IWI12020601	RS	3/4/12
2/7/12	Cn-Curve	IWP100910A	1000 mg/L	10 ml	100 ml	10 mg/L	.25N NaOH	IWI12020701	RS	3/5/12

Reviewed By: HZA 2/9/12

MITKEM LABORATORIES: WET CHEM INTERMEDIATE STANDARD LOGBOOK

Prep Date	Analyte(s)	Primary STD ID	Initial Conc.	Amt. Added	Final Volume	Final Conc.	Diluent Used	Intermediate STD ID	Prep By	Exp. Date
2/7/12	Cn-ICV	IWP112064	1000 mg/L	1.0 ml	100 ml	10 mg/L	25% NaOH	IWI120207 02	RJ	3/5/12
2/8/12	Cn-CVME	IWP100910A	1000 mg/L	1.0ml	100 ml	10 mg/L	25% NaOH	IWI120208 01	RJ	3/6/12
2/9/12	Cn-CVME	IWP100910A	1000 mg/L	1ml	100ml	10 mg/L	25% NaOH	IWI120209 01	RJ	3/7/12
	Partial	Reviewed HZA	2/13/12							

Logbook ID:100.0166-02/08

Reviewed By: _____

MITKEM LABORATORIES **WET CHEM WORKING STANDARD LOGBOOK**

Prep Date	Analyte(s)	Primary/Intermediate STD ID	Initial Conc.	Amt. Added	Final Volume	Final Conc.	Diluent Used	IWW120207 Working STD ID	Prep By	Exp. Date
2/7/12	Cn-ICV ISM	IWP11030701	9.99 ppm ~~10mg/L~~	0.5	50 ml	0.0999	.25N NaOH	~~IWW120207 08~~ IWW120 08	RJ	2/9/12
	Cn-Curve	IWI12020701	10mg/L	0.05		0.01		09		
				0.125		0.025		10		
				0.250 ~~0.25~~ ~~0.5~~		0.05		11		
				0.50 ~~0.5~~ 1.0		0.10		12		
				1.0 ~~2.0~~		0.20		13		
	Cn-Curve			~~1~~ 2.0		0.40		14		
	Cn-CCV	IWI12020701		1.0		0.2		15		
2/7/12	Cn-ICV	IWI12020702	10mg/L	1.25	50 ml	0.25	.25N NaOH	IWW120207 16	RJ	2/9/12
2/8/12	Cn-Curve ISM	IWI12020801	10mg/L	0.05	50 ml	0.01	.25N NaOH	IWW120208 01	RJ	2/10/12
				0.125		0.025		02		
				0.250		0.05		03		
				0.50		0.10		04		
				1.0		0.20		05		
	Cn-Curve ISM			2.0		0.40		06		
	Cn-CCV ISM	IWI12020801	10 mg/L	1.0		0.20		07		
2/8/12	Cn-ICV ISM	IWP11030701	9.99 ppm	0.5	50 ml	0.0999	.25N NaOH	IWW120208 08	RJ	2/10/12

Logbook ID: 100.0136-04/11

Reviewed By: HZA 2/13/12

CASE	SDG	EPASAMP	LABID	MATRIX	QCCODE	ANDATE	ANTIME	CASNUM	ANALYTE	CONC	VALDQAL	UNITS	ADJCRQL	SMPDATE	PRPDATE	LRDATE	LEVEL	PERSOLD	SMPW	FINVOL	METHOI	STATLOC
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440393	Barium	24.9	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440702	Calcium	167000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440473	Chromium	520		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7439954	Magnesium	32800		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440020	Nickel	0.44	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440097	Potassium	10200	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440235	Sodium	238000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440622	Vanadium	51.0		ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW6	L0213-01A	W	Field_Sample	02/09/2012	09:52:25	7440666	Zinc	3.0	LJ	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440382	Arsenic	11.7	UC	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440393	Barium	24.0	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440702	Calcium	164000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440473	Chromium	510		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7439954	Magnesium	32300		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440020	Nickel	0.54	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440097	Potassium	10200	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440235	Sodium	235000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440622	Vanadium	50.1		ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW7	L0213-02A	W	Field_Sample	02/09/2012	09:56:10	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-27A DUP
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440393	Barium	16.2	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440702	Calcium	185000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440473	Chromium	225		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7439954	Magnesium	45800		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440020	Nickel	2.3	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440097	Potassium	7280	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440235	Sodium	378000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440622	Vanadium	53.6		ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW8	L0213-03A	W	Field_Sample	02/09/2012	09:59:55	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-29A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A

42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440393	Barium	15.2	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440702	Calcium	195000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440473	Chromium	992		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7439954	Magnesium	46200		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440020	Nickel	3.1	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440097	Potassium	7330	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440235	Sodium	359000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440622	Vanadium	81.3		ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AW9	L0213-04A	W	Field_Sample	02/09/2012	10:18:32	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-31A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440393	Barium	37.2	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440702	Calcium	217000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440473	Chromium	386		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7439954	Magnesium	36600		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440020	Nickel	1.3	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440097	Potassium	9290	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440235	Sodium	255000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440622	Vanadium	34.9	LJ	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX0	L0213-05A	W	Field_Sample	02/09/2012	10:22:12	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-32A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440393	Barium	22.5	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440702	Calcium	222000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440473	Chromium	157		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7439954	Magnesium	35000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440020	Nickel	4.7	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440097	Potassium	8910	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440235	Sodium	266000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440622	Vanadium	38.4	LJ	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX1	L0213-06A	W	Field_Sample	02/09/2012	10:25:58	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-33A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A

42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440393	Barium	25.2	LJ	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440702	Calcium	221000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440473	Chromium	29.9		ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7439954	Magnesium	32500		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440020	Nickel	17.8	LJ	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440097	Potassium	7630	J	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440235	Sodium	280000		ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440622	Vanadium	34.1	LJ	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX2	L0213-07A	W	Field_Sample	02/09/2012	10:29:40	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	WMW-34A
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7429905	Aluminum	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440360	Antimony	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440382	Arsenic	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440393	Barium	200	U	ug/L	200	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440417	Beryllium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440439	Cadmium	5.0	U	ug/L	5.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440702	Calcium	5000	U	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440473	Chromium	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440484	Cobalt	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440508	Copper	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7439896	Iron	100	U	ug/L	100	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7439921	Lead	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7439954	Magnesium	5000	U	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7439965	Manganese	15.0	U	ug/L	15.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440020	Nickel	40.0	U	ug/L	40.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440097	Potassium	5000	U	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7782492	Selenium	35.0	U	ug/L	35.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440224	Silver	10.0	U	ug/L	10.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440235	Sodium	703	LJ	ug/L	5000	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440280	Thallium	25.0	U	ug/L	25.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440622	Vanadium	50.0	U	ug/L	50.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1
42182	MF5AW6	MF5AX3	L0213-08A	W	Field_Sample	02/09/2012	10:33:30	7440666	Zinc	60.0	U	ug/L	60.0	01/31/2012	02/08/2012	02/02/2012	Low	0.0	50	50	P	ER # 1

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INITIALS
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SHIP DATE: 24JAN12
ACTWGT: 3.4 LB
CAD: 0697760/CAFE2509

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281-983-2100 2133
USEPA ENVIRONMENTAL SVCS DIV
10625 FALLSTONE RD
HOUSTON TX 77099

7 LBS

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SHIP TO:
V. MALOTT, 6SF-RA
281-983-2100 2133
US EPA REGION 6
SUITE 1200
1445 ROSS AVENUE
DALLAS TX 75202-2750

TX 752 9-33

UPS GROUND

TRACKING #: 1Z A42 00W 03 9542 7260

BILLING: P/P

Reference # 1: CSA_9173

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Spectrum Analytical, Inc. Featuring Hanibal Technology

Rhode Island Division

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