TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

November 28, 2010

**TestAmerica Project Number: G0K160437**
PO/Contract: 2027.07

Ted Splitter
Tronox LLC / AIU Henderson, NV
PO Box 268859
Oklahoma City, OK 73126-8859

Dear Mr. Splitter,

This report contains the analytical results for the samples received under chain of custody by TestAmerica on November 16, 2010. These samples are associated with your Tronox Henderson Air Monitoring project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4383.

Sincerely,

DAVID R. ALLTUCKER
Project Manager

## Table of Contents

# TestAmerica West Sacramento Project Number G0K160437

# Case Narrative

# TestAmerica West Sacramento Project Number G0K160437

There are no anomalies associated with this project.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ACCREDITED IN ACCORDANCE WITH nelac

## TestAmerica Laboratories West Sacramento Certifications/Accreditations

| Certifying State | Certificate # | Certifying State | Certificate # |
|---|---|---|---|
| Alaska | UST-055 | New York* | 11666 |
| Arizona | AZ0708 | Oregon* | CA 200005 |
| Arkansas | 88-0691 | Pennsylvania | 68-1272 |
| California* | 01119CA | South Carolina | 87014 |
| Colorado | NA | Texas | T104704399-08-TX |
| Connecticut | PH-0691 | Utah* | QUAN1 |
| Florida* | E87570 | Virginia | 00178 |
| Georgia | 960 | Washington | C1281 |
| Hawaii | NA | West Virginia | 9930C, 334 |
| Illinois | 200060 | Wisconsin | 998204680 |
| Kansas* | E-10375 | NFESC | NA |
| Louisiana* | 30612 | USACE | NA |
| Michigan | 9947 | USDA Foreign Plant | 37-82605 |
| Nevada | CA44 | USDA Foreign Soil | P330-09-00055 |
| New Jersey* | CA005 | US Fish & Wildlife | LE148388-0 |
| New Mexico | NA | Guam | 09-014r |

*NELAP accredited. A more detailed parameter list is available upon request. Updated 3/25/2009

## QC Parameter Definitions

**QC Batch**: The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

**Method Blank**: An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

**Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD):** An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

**Duplicate Sample (DU):** Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

**Surrogates:** Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):** An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

**Isotope Dilution**: For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

**Control Limits:** The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

# Sample Summary

# TestAmerica West Sacramento Project Number G0K160437

| WO# | Sample # | Client Sample ID | Sampling Date | Received Date |
|---|---|---|---|---|
| L94MP | 1 | UW-11022010B | 11/2/2010 05:09 PM | 11/16/2010 09:00 AM |
| L94M4 | 2 | DW-11022010B | 11/2/2010 05:25 PM | 11/16/2010 09:00 AM |
| L94M7 | 3 | UW-11032010B | 11/3/2010 05:50 PM | 11/16/2010 09:00 AM |
| L94M9 | 4 | DW-11032010B | 11/3/2010 05:59 PM | 11/16/2010 09:00 AM |

Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

northgate
environmental management, inc.
300 Frank H. Ogawa Plaza, Ste 510
Oakland, CA 94612 (510) 839-0688

# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate.



COC # 2027 07.0016

Total # of Samples: 18 Event Complete?

| Required Ship to Lab: | | Required Project Information: | | | | Required Invoice Information: | | | |
|---|---|---|---|---|---|---|---|---|---|
| Lab Name: | Test America Laboratories Inc | Site ID #:102 | TRONOX LLC. HENDERSON | | | Send Invoice to: | Susan Crowley Tronox LLC. | | |
| Address: | 880 Riverside Parkway | Project # | 2027.07 | | | Address: | PO Box 55 | | |
| | West Sacramento, CA 95605 | Site Address | 560 W Lake Mead Pkwy | | | City/State: | Henderson, NV 89009 | Phone #: | (949) 260-9293 |
| Lab PM: | David Alltucker | City | Henderson | State, Zip | NV, 89015 | PO # | | | |
| Phone/FaH: | (916) 373-5600 | Site PM Name | Ted Splitter | | | Send EDD to | Frank.Hagar@ngem.com | | |
| Lab PM email | David.Alltucker@testamericainc.com | Phone/FaH: | (510) 435-4809 | | | CC Hardcopy report to | PDF Electronic Version Only -- FTP Upload | | |
| Applicable Lab Quote #: | | Site PM Email: | Ted.Splitter@ngem.com | | | CC Hardcopy report to | See Additional Comments Below | | |

| ITEM # | SAMPLE ID Samples IDs MUST BE UNIQUE | SAMPLE LOCATION | MATRIX CODE | G=GRAB C=COMP | SAMPLE TYPE | SAMPLE DATE | SAMPLE TIME | #OF CONTAINERS | Comments/Lab Sample I.D. Volume ($m^3$) | TO-9A/Dioxins, Furans | TO-13A/8270/CA/HCB | TSP | 6020/As/CP/MS | Regular | | | | Rush | 5 day | Mark One | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UW-11022010B | | AA | | | 11/2/2010 | 5:09 PM | 1 | 818.19 | | | X | X | | | | | | | | |
| | DW-11022010B | | AA | | | 11/2/2010 | 5:25 PM | 1 | 875.43 | | | X | X | | | | | | | | |
| | UW-11032010B | | AA | | | 11/3/2010 | 5:50 PM | 1 | 876.68 | | | X | X | | | | | | | | |
| | DW-11032010B | | AA | | | 11/3/2010 | 5:59 PM | 1 | 930.98 | | | X | X | | | | | | | | |
| | USED MEDIA | | AA | | | | | 1 | PLEASE DISCARD | | | | | | | | | | | | |

Additional Comments/Special Instructions:
3-5 DAY TURN AROUND

| | | | | | | | Sample Receipt Conditions | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ronda S. Bailey | 11/15/10 | 1032 | Cheng Vue | TA CLS | 11/16/10 | 0910 | 4 | Y/N | Y/N | Y/N |
| | | | | | | | | Y/N | Y/N | Y/N |
| | | | | | | | | Y/N | Y/N | Y/N |
| | | | | | | | Temp in 0C | Samples on Ice? | Sample intact? | Trip Blank? |

PRINT Name of SAMPLER: Ronda Bailey
SIGNATURE of SAMPLER: [signature] DATE Signed 11/12/10 Time: 1030

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# LOT RECEIPT CHECKLIST
## TestAmerica West Sacramento

CLIENT Northgate PM DA LOG # 68167

LOT# (QUANTIMS ID) 40K160437 QUOTE# 54087 LOCATION AC

Checked (✓)

DATE RECEIVED 11/16/10 TIME RECEIVED 0900 ☑

DELIVERED BY ☒ FEDEX ☐ ON TRAC ☐ CLIENT
☐ GOLDENSTATE ☐ UPS ☐ GO-GETTERS ☐ OTHER
☐ TAL COURIER ☐ TAL SF ☐ VALLEY LOGISTICS ☑

CUSTODY SEAL STATUS ☒ INTACT ☐ BROKEN ☐ N/A ☑

CUSTODY SEAL #(S) 843605, 843606

SHIPPPING CONTAINER(S) ☐ TAL ☒ CLIENT ☐ N/A ☑

COC #(S) 2027.07.0016 ☑

TEMPERATURE BLANK Observed: NA Corrected:

SAMPLE TEMPERATURE - (TEMPERATURES ARE IN °C)

Observed: 5, 3, 3 Average 4 Corrected Average 4

**LABORATORY THERMOMETER ID:**

IR UNIT: #4 ☒ #5 ☐ ☐ OTHER ☑

CV 11/16/10
Initials Date

==========

pH MEASURED ☐ YES ☐ ANOMALY ☒ N/A ☑
LABELED BY ☑
LABELS CHECKED BY ☑
PEER REVIEW ☒ NA

SHORT HOLD TEST NOTIFICATION
SAMPLE RECEIVING ☑
WETCHEM ☒ N/A ☑
VOA-ENCORES ☒ N/A ☑

☐ METALS NOTIFIED OF FILTER/PRESERVE VIA VERBAL & EMAIL ☒ N/A ☑

☒ COMPLETE SHIPMENT RECEIVED IN GOOD CONDITION WITH APPROPRIATE TEMPERATURES, CONTAINERS, PRESERVATIVES ☐ N/A ☑

☐ CLOUSEAU ☐ TEMPERATURE EXCEEDED (2 °C – 6 °C)*1 ☒ N/A
☐ WET ICE ☐ BLUE ICE ☐ GEL PACK ☐ NO COOLING AGENTS USED ☐ PM NOTIFIED

CV 11/16/10
Initials Date

Notes

*1 Acceptable temperature range for State of Wisconsin samples is ≤4°C.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Bottle Lot Inventory

Lot ID: G0K160437

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOA* | | | | | | | | | | | | | | | | | | | | |
| VOAh* | | | | | | | | | | | | | | | | | | | | |
| AGB | | | | | | | | | | | | | | | | | | | | |
| AGBs | | | | | | | | | | | | | | | | | | | | |
| 250AGB | | | | | | | | | | | | | | | | | | | | |
| 250AGBs | | | | | | | | | | | | | | | | | | | | |
| 250AGBn | | | | | | | | | | | | | | | | | | | | |
| 500AGB | | | | | | | | | | | | | | | | | | | | |
| ____AGJ | | | | | | | | | | | | | | | | | | | | |
| 500AGJ | | | | | | | | | | | | | | | | | | | | |
| 250AGJ | | | | | | | | | | | | | | | | | | | | |
| 125AGJ | | | | | | | | | | | | | | | | | | | | |
| ____CGJ | | | | | | | | | | | | | | | | | | | | |
| 500CGJ | | | | | | | | | | | | | | | | | | | | |
| 250CGJ | | | | | | | | | | | | | | | | | | | | |
| 125CGJ | | | | | | | | | | | | | | | | | | | | |
| PJ | | | | | | | | | | | | | | | | | | | | |
| PJn | | | | | | | | | | | | | | | | | | | | |
| 500PJ | | | | | | | | | | | | | | | | | | | | |
| 500PJn | | | | | | | | | | | | | | | | | | | | |
| 500PJna | | | | | | | | | | | | | | | | | | | | |
| 500PJzn/na | | | | | | | | | | | | | | | | | | | | |
| 250PJ | | | | | | | | | | | | | | | | | | | | |
| 250PJn | | | | | | | | | | | | | | | | | | | | |
| 250PJna | | | | | | | | | | | | | | | | | | | | |
| 250PJzn/na | | | | | | | | | | | | | | | | | | | | |
| Acetate Tube | | | | | | | | | | | | | | | | | | | | |
| _____"CT | | | | | | | | | | | | | | | | | | | | |
| Encore | | | | | | | | | | | | | | | | | | | | |
| Folder/filter | / | / | / | / | | | | | | | | | | | | | | | | |
| PUF | | | | | | | | | | | | | | | | | | | | |
| Petri/Filter | | | | | | | | | | | | | | | | | | | | |
| XAD Trap | | | | | | | | | | | | | | | | | | | | |
| Ziploc | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

**h** = hydrochloric acid **s** = sulfuric acid **na** = sodium hydroxide **n** = nitric acid **zn** = zinc acetate

Number of VOAs with air bubbles present / total number of VOA's

# AIR, Metals by ICPMS (As and Mn)

**Northgate Environmental Management, Inc.**

**Sample ID: UW-11022010B**

**Trace Level Compounds**

| | | | | | |
|---|---|---|---|---|---|
| **Lot - Sample #....:** | G0K160437 - 001 | **Work Order #....:** | L94MP1AC | **Matrix....:** | AA |
| **Date Sampled....:** | 11/02/10 | **Date Received....:** | 11/16/10 | **Dilution Factor....:** | 1 |
| **Prep Date....:** | 11/18/10 | **Analysis Date....:** | 11/21/10 | **Volume....:** | 818.19 |
| **Prep Batch # ....:** | 0322435 | **Instrument ID....:** | M02 | **Method....:** | SW846 6020 |
| **Initial Wgt/Vol....:** | 0.08333 L | **Analyst ID....:** | Sabine Hargrave | | |

| PARAMETER | RESULT | | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|---|---|---|---|---|---|
| **Arsenic** | **0.0016** | **B J** | **0.0029** | **0.00060** | **ug/m3** |
| **Manganese** | **2.07** | | **0.00147** | **0.000208** | **ug/m3** |

**QUALIFIERS**

B Estimated result. Result is less than RL and greater than or equal to the IDL.

J Estimated Result.

## Northgate Environmental Management, Inc.

### Sample ID: DW-11022010B

**Trace Level Compounds**

| | | | | | |
|---|---|---|---|---|---|
| **Lot - Sample #....:** | G0K160437 - 002 | **Work Order #....:** | L94M41AC | **Matrix....:** | AA |
| **Date Sampled....:** | 11/02/10 | **Date Received....:** | 11/16/10 | **Dilution Factor....:** | 1 |
| **Prep Date....:** | 11/18/10 | **Analysis Date....:** | 11/21/10 | **Volume....:** | 875.43 |
| **Prep Batch # ....:** | 0322435 | **Instrument ID....:** | M02 | **Method....:** | SW846 6020 |
| **Initial Wgt/Vol....:** | 0.08333 L | **Analyst ID....:** | Sabine Hargrave | | |

| PARAMETER | RESULT | | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|---|---|---|---|---|---|
| **Arsenic** | **0.00067** | **B J** | **0.0027** | **0.00056** | **ug/m3** |
| **Manganese** | **0.129** | | **0.00137** | **0.000194** | **ug/m3** |

**QUALIFIERS**

B Estimated result. Result is less than RL and greater than or equal to the IDL.

J Estimated Result.

## Northgate Environmental Management, Inc.

### Sample ID: UW-11032010B

**Trace Level Compounds**

| | | | | | |
|---|---|---|---|---|---|
| **Lot - Sample #....:** | G0K160437 - 003 | **Work Order #....:** | L94M71AC | **Matrix....:** | AA |
| **Date Sampled....:** | 11/03/10 | **Date Received....:** | 11/16/10 | **Dilution Factor....:** | 1 |
| **Prep Date....:** | 11/18/10 | **Analysis Date....:** | 11/21/10 | **Volume....:** | 876.68 |
| **Prep Batch # ....:** | 0322435 | **Instrument ID....:** | M02 | **Method....:** | SW846 6020 |
| **Initial Wgt/Vol....:** | 0.08333 L | **Analyst ID....:** | Sabine Hargrave | | |

| PARAMETER | RESULT | | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|---|---|---|---|---|---|
| **Arsenic** | **0.00076** | **B J** | **0.0027** | **0.00056** | **ug/m3** |
| **Manganese** | **1.92** | | **0.00137** | **0.000194** | **ug/m3** |

**QUALIFIERS**

B Estimated result. Result is less than RL and greater than or equal to the IDL.

J Estimated Result.

## Northgate Environmental Management, Inc.

### Sample ID: DW-11032010B

**Trace Level Compounds**

| | | | | | |
|---|---|---|---|---|---|
| **Lot - Sample #....:** | G0K160437 - 004 | **Work Order #....:** | L94M91AC | **Matrix....:** | AA |
| **Date Sampled....:** | 11/03/10 | **Date Received....:** | 11/16/10 | **Dilution Factor....:** | 1 |
| **Prep Date....:** | 11/18/10 | **Analysis Date....:** | 11/21/10 | **Volume....:** | 930.98 |
| **Prep Batch # ....:** | 0322435 | **Instrument ID....:** | M02 | **Method....:** | SW846 6020 |
| **Initial Wgt/Vol....:** | 0.08333 L | **Analyst ID....:** | Sabine Hargrave | | |

| PARAMETER | RESULT | | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|---|---|---|---|---|---|
| **Arsenic** | **0.00079** | **B J** | **0.0026** | **0.00053** | **ug/m3** |
| **Manganese** | **0.280** | | **0.00129** | **0.000183** | **ug/m3** |

**QUALIFIERS**

B Estimated result. Result is less than RL and greater than or equal to the IDL.

J Estimated Result.

# QC DATA ASSOCIATION SUMMARY

**G0K160437**

Sample Preparation and Analysis Control Numbers

| SAMPLE# | MATRIX | ANALYTICAL METHOD | LEACH BATCH # | PREP BATCH # | MS RUN# |
|---|---|---|---|---|---|
| 001 | AA | SW846 6020 | | 0322435 | |
| 002 | AA | SW846 6020 | | 0322435 | |
| 003 | AA | SW846 6020 | | 0322435 | |
| 004 | AA | SW846 6020 | | 0322435 | |

## Method Blank Report

### Trace Level Compounds

| | | | | | |
|---|---|---|---|---|---|
| **Lot - Sample #....:** | G0K180000 - 435B | **Work Order #....:** | L99F11AA | **Matrix....:** | AIR |
| **Date Sampled....:** | 11/02/10 | **Date Received....:** | 11/16/10 | **Dilution Factor....:** | 1 |
| **Prep Date....:** | 11/18/10 | **Analysis Date....:** | 11/21/10 | **Volume....:** | 0 |
| **Prep Batch # ....:** | 0322435 | **Instrument ID....:** | M02 | **Method....:** | SW846 6020 |
| **Initial Wgt/Vol....:** | 0.08333 L | **Analyst ID....:** | Sabine Hargrave | | |

| PARAMETER | RESULT | | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|---|---|---|---|---|---|
| **Arsenic** | **0.60** | **B** | **2.4** | **0.49** | **ug** |
| Manganese | ND | | 1.2 | 0.17 | ug |

**QUALIFIERS**

B Estimated result. Result is less than RL and greater than or equal to the IDL.

## LABORATORY CONTROL SAMPLE DATA REPORT

### Trace Level Compounds

| | | | | | |
|---|---|---|---|---|---|
| **Client Lot # ...:** | G0K160437 | **Work Order # ...:** | L99F11AD-LCS<br>L99F11AE-LCSD | **Matrix .....:** | AIR |
| **LCS Lot-Sample# :** | G0K180000 - 435 | | | | |
| **Prep Date .....:** | 11/18/10 | **Analysis Date ..:** | 11/21/10 | | |
| **Prep Batch # ...:** | 0322435 | | | | |
| **Dilution Factor :** | 1 | | | | |
| **Analyst ID.....:** | Sabine Hargrave | **Instrument ID..:** | M02 | **Method.....:** | SW846 6020 |
| **Initial Wgt/Vol:** | 0.08333 L | | | | |

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | RECOVERY LIMITS | RPD | RPD LIMITS |
|---|---|---|---|---|---|---|---|
| **Arsenic** | **240** | **214** | **ug** | **89** | **(86 - 110)** | | |
| | **240** | **218** | **ug** | **91** | **(86 - 110)** | **1.6** | **(0 - 15)** |
| **Manganese** | **240** | **222** | **ug** | **92** | **(88 - 110)** | | |
| | **240** | **226** | **ug** | **94** | **(88 - 110)** | **1.6** | **(0 - 15)** |

**Notes:**

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

# AIR, TSP-
# Total Suspended
# Particulates

**Northgate Environmental Management, Inc.**

**Sample ID: UW-11022010B**

**Trace Level Compounds**

| | | | | | |
|---|---|---|---|---|---|
| **Lot - Sample #....:** | G0K160437 - 001 | **Work Order #....:** | L94MP1AA | **Matrix....:** | AA |
| **Date Sampled....:** | 11/02/10 | **Date Received....:** | 11/16/10 | **Dilution Factor....:** | 1 |
| **Prep Date....:** | 11/17/10 | **Analysis Date....:** | 11/19/10 | **Volume....:** | 818.19 |
| **Prep Batch # ....:** | 0323369 | **Instrument ID....:** | QA-045 | **Method....:** | CFR50B APDX B |
| **Initial Wgt/Vol....:** | 0 | **Analyst ID....:** | Thep Phomsopha | | |

| PARAMETER | RESULT | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|---|---|---|---|---|
| **Total Suspended Particulates** | **0.0000660** | **0.000000611** | **--** | **g/m3** |

**QUALIFIERS**

## Northgate Environmental Management, Inc.

### Sample ID: DW-11022010B

**Trace Level Compounds**

| | | | | | |
|---|---|---|---|---|---|
| **Lot - Sample #....:** | G0K160437 - 002 | **Work Order #....:** | L94M41AA | **Matrix....:** | AA |
| **Date Sampled....:** | 11/02/10 | **Date Received....:** | 11/16/10 | **Dilution Factor....:** | 1 |
| **Prep Date....:** | 11/17/10 | **Analysis Date....:** | 11/19/10 | **Volume....:** | 875.43 |
| **Prep Batch # ....:** | 0323369 | **Instrument ID....:** | QA-045 | **Method....:** | CFR50B APDX B |
| **Initial Wgt/Vol....:** | | **Analyst ID....:** | Thep Phomsopha | | |

| PARAMETER | RESULT | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|---|---|---|---|---|
| **Total Suspended Particulates** | **0.0000427** | **0.000000571** | -- | **g/m3** |

**QUALIFIERS**

**Northgate Environmental Management, Inc.**

**Sample ID: UW-11032010B**

**Trace Level Compounds**

| | | | | | |
|---|---|---|---|---|---|
| **Lot - Sample #....:** | G0K160437 - 003 | **Work Order #....:** | L94M71AA | **Matrix.....:** | AA |
| **Date Sampled....:** | 11/03/10 | **Date Received....:** | 11/16/10 | **Dilution Factor....:** | 1 |
| **Prep Date....:** | 11/17/10 | **Analysis Date....:** | 11/19/10 | **Volume....:** | 876.68 |
| **Prep Batch # ....:** | 0323369 | **Instrument ID....:** | QA-045 | **Method....:** | CFR50B APDX B |
| **Initial Wgt/Vol....:** | | **Analyst ID....:** | Thep Phomsopha | | |

| PARAMETER | RESULT | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|---|---|---|---|---|
| **Total Suspended Particulates** | **0.0000517** | **0.000000570** | **--** | **g/m3** |

**QUALIFIERS**

**Northgate Environmental Management, Inc.**

**Sample ID: DW-11032010B**

**Trace Level Compounds**

| | | | | | |
|---|---|---|---|---|---|
| **Lot - Sample #....:** | G0K160437 - 004 | **Work Order #....:** | L94M91AA | **Matrix....:** | AA |
| **Date Sampled....:** | 11/03/10 | **Date Received....:** | 11/16/10 | **Dilution Factor....:** | 1 |
| **Prep Date....:** | 11/17/10 | **Analysis Date....:** | 11/19/10 | **Volume....:** | 930.98 |
| **Prep Batch # ....:** | 0323369 | **Instrument ID....:** | QA-045 | **Method....:** | CFR50B APDX B |
| **Initial Wgt/Vol....:** | | **Analyst ID....:** | Thep Phomsopha | | |

| PARAMETER | RESULT | REPORTING LIMIT | DETECTION LIMIT | UNITS |
|---|---|---|---|---|
| **Total Suspended Particulates** | **0.0000465** | **0.000000537** | **--** | **g/m3** |

**QUALIFIERS**

# QC DATA ASSOCIATION SUMMARY

**G0K160437**

Sample Preparation and Analysis Control Numbers

| SAMPLE# | MATRIX | ANALYTICAL METHOD | LEACH BATCH # | PREP BATCH # | MS RUN# |
|---|---|---|---|---|---|
| 001 | AA | CFR50B APDX B | | 0323369 | |
| 002 | AA | CFR50B APDX B | | 0323369 | |
| 003 | AA | CFR50B APDX B | | 0323369 | |
| 004 | AA | CFR50B APDX B | | 0323369 | |

# AIR, Metals by ICPMS (As and Mn)

# Raw Data Package

# ICPMS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# ICP-MS Data Review Checklist
## Level I and Level II

| Instrument ID (Circle one): **M01** (M02) | | Method 6020<br>SOP SAC-MT-0001 | |
|---|---|---|---|
| File Number | Batch Numbers | Date | Analyst |
| 101121A2 | 312269, 319271, 319273, 319268, 322434, 322436, 322435, 314283 | 11-21-10 | SH |

| Lot Numbers: GOK020508, GOK100450, GOK010418, GOK090544, GOK120496, GOK120572, GOK160437, GOK020536 | YES | NO | NA |
|---|---|---|---|
| 1. Copy of analysis protocol used included? | ✓ | | |
| 2. ICVs & CCVs within 10% of true value or recal and rerun? | ✓ | | |
| 3. ICB & CCBs < reporting limit or recal and rerun? | ✓ | | |
| 4. 10 samples or less analyzed between calibration checks? | ✓ | | |
| 5. All parameters within linear range? | ✓ | | |
| 6. LCS/LCSD within limits? | ✓ | | |
| 7. Prep blank value < reporting limit or all samples >20x blank? | ✓ | | |
| 8. Internal standard intensities for samples (unless followed by dilution) are > 30% and <120% of the Calibration Blank intensities? | ✓ | | |
| 9. Appropriate dilution factors applied to data? | ✓ | | |
| 10. Matrix spike and spike dup within customer defined limits? | | | ✓ |
| 11. Each batch checked for presence of internal standard in samples? | ✓ | | |
| 12. Anomalies entered using Clouseau? | | | ✓ |

COMMENTS: _____

| REVIEWED BY: MTZ | DATA ENTERED BY: SH |
|---|---|
| DATE: 11/22/10 | DATE: 11-22-10 |

# Dataset Report

Perkin Elmer M02
SOP No. SAC-MT-0001
Method: 6020,200.8

User Name: metal
Computer Name: SACP1223
Dataset File Path: E:\elandata\Dataset\101121a2\
Report Date/Time: Monday, November 22, 2010 07:14:28

## The Dataset

| Batch ID | Sample ID | Date and Time | Read Type | Description |
|---|---|---|---|---|
| | TUNE SHARGRAVE | 13:21:36 Sun 21-Nov-10 | Sample | |
| | AUTOLENS SHARGF | 13:24:09 Sun 21-Nov-10 | Sample | Auto Lens Calib |
| | DAILY SHARGRAVE | 13:32:26 Sun 21-Nov-10 | Sample | |
| | Rinse 2X | 13:53:56 Sun 21-Nov-10 | Sample | |
| | Blank | 13:58:17 Sun 21-Nov-10 | Blank | |
| | Standard 1 | 14:02:32 Sun 21-Nov-10 | Standard #1 | |
| | ICV | 14:06:32 Sun 21-Nov-10 | Sample | |
| | ICB | 14:10:36 Sun 21-Nov-10 | Sample | |
| | LLSTD1 | 14:16:31 Sun 21-Nov-10 | Sample | LLSTD@10X |
| | LLSTD2 | 14:20:35 Sun 21-Nov-10 | Sample | LLSTD@5X |
| | ICSA | 14:30:12 Sun 21-Nov-10 | Sample | |
| | ICSAB | 14:34:15 Sun 21-Nov-10 | Sample | |
| | Rinse | 14:41:59 Sun 21-Nov-10 | Sample | |
| | CCV 1 | 14:49:44 Sun 21-Nov-10 | Sample | |
| | CCB 1 > Recal | 14:53:49 Sun 21-Nov-10 | Sample | |
| | CCV 2 | 14:57:54 Sun 21-Nov-10 | Sample | |
| | CCB 2 | 15:01:59 Sun 21-Nov-10 | Sample | |
| 312269 | L9PGPB | 15:06:00 Sun 21-Nov-10 | Sample | G0K080000-269 BLK |
| 319271/68 | L93G4B | 15:10:03 Sun 21-Nov-10 | Sample | G0K150000-274 BLK 68 |
| 319273/71/68 | L93HEC | 15:14:14 Sun 21-Nov-10 | Sample | G0K150000-273 LCS } repeat As, Ag, Ba, Mn, Fe, Sb |
| 319268/71/73 | L93GPL | 15:18:13 Sun 21-Nov-10 | Sample | G0K150000-268 LCSD } |
| 322434 } shared QC | L99FXB | 15:22:14 Sun 21-Nov-10 | Sample | G0K180000-434 BLK |
| 322436 } shared QC | L99F3C | 15:26:16 Sun 21-Nov-10 | Sample | G0K180000-436 LCS |
| 322435 } shared QC | L99F1L | 15:30:16 Sun 21-Nov-10 | Sample | G0K180000-435 LCSD |
| | CCV 3 | 15:34:21 Sun 21-Nov-10 | Sample | |
| | CCB 3 | 15:38:25 Sun 21-Nov-10 | Sample | |
| | CCV 4 | 15:42:30 Sun 21-Nov-10 | Sample | |
| | CCB 4 > Recal | 15:46:05 Sun 21-Nov-10 | Sample | > cut down method |
| | CCV 5 | 15:49:39 Sun 21-Nov-10 | Sample | |
| | CCB 5 | 15:53:13 Sun 21-Nov-10 | Sample | |
| 312269 | L9PGPC | 15:56:43 Sun 21-Nov-10 | Sample | G0K080000-269 LCS |
| 312269 | L9PGPL | 16:00:13 Sun 21-Nov-10 | Sample | G0K080000-269 LCSD |
| 312269 | L9DNC | 16:03:42 Sun 21-Nov-10 | Sample | G0K010418-1 |
| 312269 | L9DNCP5 | 16:07:11 Sun 21-Nov-10 | Sample | G0K010418-1 5X |
| 312269 | L9DNCZ | 16:10:40 Sun 21-Nov-10 | Sample | G0K010418-1 PS |
| 312269 | L9DNK | 16:14:08 Sun 21-Nov-10 | Sample | G0K010418-2 |
| 312269 | L9DNM | 16:17:37 Sun 21-Nov-10 | Sample | G0K010418-3 |
| 312269 | L9DNN | 16:21:07 Sun 21-Nov-10 | Sample | G0K010418-4 |
| 312269 | L9DNR | 16:24:36 Sun 21-Nov-10 | Sample | G0K010418-5 |
| 312269 | L9DNT | 16:28:07 Sun 21-Nov-10 | Sample | G0K010418-6 |
| | CCV 6 | 16:31:42 Sun 21-Nov-10 | Sample | |
| | CCB 6 | 16:35:16 Sun 21-Nov-10 | Sample | |
| | CCV 7 | 16:38:51 Sun 21-Nov-10 | Sample | |
| | CCB 7 | 16:42:26 Sun 21-Nov-10 | Sample | |
| 319268 | L9RFH | 16:45:56 Sun 21-Nov-10 | Sample | G0K090544-1 |
| 319268 | L9RFHP5 | 16:49:27 Sun 21-Nov-10 | Sample | G0K090544-1 5X |
| 319268 | L9RFHZ | 16:52:56 Sun 21-Nov-10 | Sample | G0K090544-1 PS |

| | | | | |
|---|---|---|---|---|
| 319268 | L9RFJ | 16:56:24 Sun 21-Nov-10 | Sample | G0K090544-2 |
| 319268 | L9RFK | 16:59:51 Sun 21-Nov-10 | Sample | G0K090544-3 |
| 319268 | L9RFL | 17:03:19 Sun 21-Nov-10 | Sample | G0K090544-4 |
| 319268 | L9RFM | 17:06:48 Sun 21-Nov-10 | Sample | G0K090544-5 |
| 319268 | L9RFN | 17:10:16 Sun 21-Nov-10 | Sample | G0K090544-6 |
| 319268 | L9RFP | 17:13:45 Sun 21-Nov-10 | Sample | G0K090544-7 |
| | CCV 8 | 17:17:19 Sun 21-Nov-10 | Sample | |
| | CCB 8 | 17:20:54 Sun 21-Nov-10 | Sample | |
| | CCV 9 | 17:24:28 Sun 21-Nov-10 | Sample | |
| | CCB 9 | 17:28:02 Sun 21-Nov-10 | Sample | |
| 322434 | L90TF | 17:31:32 Sun 21-Nov-10 | Sample | G0K120496-1 |
| 322434 | L90TFP5 | 17:35:02 Sun 21-Nov-10 | Sample | G0K120496-1 5X |
| 322434 | L90TFZ | 17:38:31 Sun 21-Nov-10 | Sample | G0K120496-1 PS |
| 322434 | L90TJ | 17:42:01 Sun 21-Nov-10 | Sample | G0K120496-2 |
| 322434 | L90TK | 17:45:31 Sun 21-Nov-10 | Sample | G0K120496-3 |
| 322434 | L90TL | 17:49:02 Sun 21-Nov-10 | Sample | G0K120496-4 |
| 322434 | L90TM | 17:52:32 Sun 21-Nov-10 | Sample | G0K120496-5 |
| 322434 | L90TN | 17:56:03 Sun 21-Nov-10 | Sample | G0K120496-6 |
| 322434 | L90TP | 17:59:33 Sun 21-Nov-10 | Sample | G0K120496-7 |
| | CCV 10 | 18:03:06 Sun 21-Nov-10 | Sample | |
| | CCB 10 | 18:06:40 Sun 21-Nov-10 | Sample | |
| | CCV 11 | 18:10:14 Sun 21-Nov-10 | Sample | |
| | CCB 11 | 18:13:48 Sun 21-Nov-10 | Sample | |
| | ICSA | 18:17:22 Sun 21-Nov-10 | Sample | |
| | ICSAB | 18:20:54 Sun 21-Nov-10 | Sample | |
| | CCV 12 | 18:28:07 Sun 21-Nov-10 | Sample | |
| | CCB 12 | 18:31:41 Sun 21-Nov-10 | Sample | |
| | CCV 13 | 18:35:17 Sun 21-Nov-10 | Sample | |
| | CCB 13 | 18:38:53 Sun 21-Nov-10 | Sample | |
| 322436 | L97JN | 18:42:23 Sun 21-Nov-10 | Sample | G0K170572-1 |
| 322436 | L97JNP5 | 18:45:51 Sun 21-Nov-10 | Sample | G0K170572-1 5X |
| 322436 | L97JNZ | 18:49:20 Sun 21-Nov-10 | Sample | G0K170572-1 PS |
| 322436 | L97JP | 18:52:49 Sun 21-Nov-10 | Sample | G0K170572-2 |
| 322436 | L97JR | 18:56:18 Sun 21-Nov-10 | Sample | G0K170572-3 |
| 322436 | L97JT | 18:59:47 Sun 21-Nov-10 | Sample | G0K170572-4 |
| | CCV 14 | 19:03:23 Sun 21-Nov-10 | Sample | |
| | CCB 14 | 19:06:59 Sun 21-Nov-10 | Sample | |
| | CCV 15 | 19:10:36 Sun 21-Nov-10 | Sample | |
| | CCB 15 | 19:13:15 Sun 21-Nov-10 | Sample | > air down method |
| | CCV 16 | 19:15:54 Sun 21-Nov-10 | Sample | |
| | CCB 16 | 19:18:32 Sun 21-Nov-10 | Sample | |
| 322435 | L94MP | 19:21:05 Sun 21-Nov-10 | Sample | G0K160437-1 |
| 322435 | L94MPP5 | 19:23:38 Sun 21-Nov-10 | Sample | G0K160437-1 5X |
| 322435 | L94MPZ | 19:26:10 Sun 21-Nov-10 | Sample | G0K160437-1 PS |
| 322435 | L94M4 | 19:28:43 Sun 21-Nov-10 | Sample | G0K160437-2 |
| 322435 | L94M7 | 19:31:16 Sun 21-Nov-10 | Sample | G0K160437-3 |
| 322435 | L94M9 | 19:33:49 Sun 21-Nov-10 | Sample | G0K160437-4 |
| | CCV 17 | 19:36:28 Sun 21-Nov-10 | Sample | |
| | CCB 17 | 19:39:07 Sun 21-Nov-10 | Sample | |
| | CCV 18 | 19:41:46 Sun 21-Nov-10 | Sample | |
| | CCB 18 ? Recal | 19:45:30 Sun 21-Nov-10 | Sample | > change method |
| | CCV 19 | 19:49:14 Sun 21-Nov-10 | Sample | |
| | CCB 19 | 19:52:59 Sun 21-Nov-10 | Sample | |
| 314283 | L9TFKB | 19:56:39 Sun 21-Nov-10 | Sample | G0K100000-283 BLK |
| 314283 | L9TFKC | 20:00:17 Sun 21-Nov-10 | Sample | G0K100000-283 LCS |
| | CCV 20 | 20:04:01 Sun 21-Nov-10 | Sample | |
| | CCB 20 | 20:07:46 Sun 21-Nov-10 | Sample | |
| | CCV 21 | 20:11:31 Sun 21-Nov-10 | Sample | |
| | CCB 21 | 20:15:15 Sun 21-Nov-10 | Sample | |
| 314283 | L9F0G | 20:18:55 Sun 21-Nov-10 | Sample | G0K020536-1 -> don't use condit. instrct. |

| | | | | |
|---|---|---|---|---|
| 314283 | L9F0GP5 | 20:22:34 Sun 21-Nov-10 | Sample | G0K020536-1 5X } don't use condit. instru. |
| 314283 | L9F0GZ | 20:26:12 Sun 21-Nov-10 | Sample | G0K020536-1 PS } |
| | CCV 22 | 20:29:54 Sun 21-Nov-10 | Sample | |
| | CCB 22 > Recal | 20:33:38 Sun 21-Nov-10 | Sample | > out ISt elem. P |
| | CCV 23 | 20:37:23 Sun 21-Nov-10 | Sample | |
| | CCB 23 | 20:41:07 Sun 21-Nov-10 | Sample | |
| 314283 | L9F0G | 20:44:47 Sun 21-Nov-10 | Sample | G0K020536-1 } report all |
| 314283 | L9F0GP5 | 20:48:26 Sun 21-Nov-10 | Sample | G0K020536-1 5X } |
| 314283 | L9F0GZ | 20:52:04 Sun 21-Nov-10 | Sample | G0K020536-1 PS } |
| | CCV 24 | 20:55:46 Sun 21-Nov-10 | Sample | |
| | CCB 24 | 20:59:31 Sun 21-Nov-10 | Sample | |

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 11/22/10 08:01:45

**File ID:** 101121A2 **Analyst: hargraves**

| # | Sample ID | Lot No. | Batch | | DF | Analyzed Date | Comment | Q |
|---|---|---|---|---|---|---|---|---|
| 1 | Rinse 2X | | | | 2.0 | 11/21/10 13:53 | | ☐ |
| 2 | Blank | | | | 1.0 | 11/21/10 13:58 | | ☐ |
| 3 | Standard1 | | | | 1.0 | 11/21/10 14:02 | | ☐ |
| 4 | ICV | | | | 1.0 | 11/21/10 14:06 | | ☐ |
| 5 | ICB | | | | 1.0 | 11/21/10 14:10 | | ☐ |
| 6 | LLSTD1 | | | | 1.0 | 11/21/10 14:16 | | ☐ |
| 7 | LLSTD2 | | | | 1.0 | 11/21/10 14:20 | | ☐ |
| 8 | ICSA | | | | 1.0 | 11/21/10 14:30 | | ☐ |
| 9 | ICSAB | | | | 1.0 | 11/21/10 14:34 | | ☐ |
| 10 | Rinse | | | | 1.0 | 11/21/10 14:41 | | ☐ |
| 11 | CCV 1 | | | | 1.0 | 11/21/10 14:49 | | ☐ |
| 12 | CCB 1 | | | | 1.0 | 11/21/10 14:53 | | ☐ |
| 15 | CCV 2 | | | | 1.0 | 11/21/10 14:57 | | ☐ |
| 16 | CCB 2 | | | | 1.0 | 11/21/10 15:01 | | ☐ |
| 17 | L9PGPB | G0K080000 | 0312269 | 2A | 1.0 | 11/21/10 15:06 | | ☐ |
| 18 | L93G4B | G0K150000 | 0319271 | 2A | 1.0 | 11/21/10 15:10 | | ☐ |
| 19 | L93HEC | G0K150000 | 0319273 | 2A | 1.0 | 11/21/10 15:14 | | ☐ |
| 20 | L93GPL | G0K150000 | 0319268 | 2A | 1.0 | 11/21/10 15:18 | | ☐ |
| 21 | L99FXB | G0K180000 | 0322434 | 2A | 1.0 | 11/21/10 15:22 | | ☐ |
| 22 | L99F3C | G0K180000 | 0322436 | 2A | 1.0 | 11/21/10 15:26 | | ☐ |
| 23 | L99F1L | G0K180000 | 0322435 | 2A | 1.0 | 11/21/10 15:30 | | ☐ |
| 24 | CCV 3 | | | | 1.0 | 11/21/10 15:34 | | ☐ |
| 25 | CCB 3 | | | | 1.0 | 11/21/10 15:38 | | ☐ |
| 26 | CCV 4 | | | | 1.0 | 11/21/10 15:42 | | ☐ |
| 27 | CCB 4 | | | | 1.0 | 11/21/10 15:46 | | ☐ |
| 30 | CCV 5 | | | | 1.0 | 11/21/10 15:49 | | ☐ |
| 31 | CCB 5 | | | | 1.0 | 11/21/10 15:53 | | ☐ |
| 32 | L9PGPC | G0K080000 | 0312269 | 2A | 1.0 | 11/21/10 15:56 | | ☐ |
| 33 | L9PGPL | G0K080000 | 0312269 | 2A | 1.0 | 11/21/10 16:00 | | ☐ |
| 34 | L9DNC | G0K010418-1 | 0312269 | 2A | 1.0 | 11/21/10 16:03 | | ☐ |
| 35 | L9DNCP5 | G0K010418 | 0312269 | | 5.0 | 11/21/10 16:07 | | ☐ |
| 36 | L9DNCZ | G0K010418-1 | 0312269 | | 1.0 | 11/21/10 16:10 | | ☐ |
| 37 | L9DNK | G0K010418-2 | 0312269 | 2A | 1.0 | 11/21/10 16:14 | | ☐ |
| 38 | L9DNM | G0K010418-3 | 0312269 | 2A | 1.0 | 11/21/10 16:17 | | ☐ |
| 39 | L9DNN | G0K010418-4 | 0312269 | 2A | 1.0 | 11/21/10 16:21 | | ☐ |
| 40 | L9DNR | G0K010418-5 | 0312269 | 2A | 1.0 | 11/21/10 16:24 | | ☐ |
| 41 | L9DNT | G0K010418-6 | 0312269 | 2A | 1.0 | 11/21/10 16:28 | | ☐ |
| 42 | CCV 6 | | | | 1.0 | 11/21/10 16:31 | | ☐ |
| 43 | CCB 6 | | | | 1.0 | 11/21/10 16:35 | | ☐ |
| 44 | CCV 7 | | | | 1.0 | 11/21/10 16:38 | | ☐ |
| 45 | CCB 7 | | | | 1.0 | 11/21/10 16:42 | | ☐ |
| 46 | L9RFH | G0K090544-1 | 0319268 | 2A | 1.0 | 11/21/10 16:45 | | ☐ |
| 47 | L9RFHP5 | G0K090544 | 0319268 | | 5.0 | 11/21/10 16:49 | | ☐ |
| 48 | L9RFHZ | G0K090544-1 | 0319268 | | 1.0 | 11/21/10 16:52 | | ☐ |
| 49 | L9RFJ | G0K090544-2 | 0319268 | 2A | 1.0 | 11/21/10 16:56 | | ☐ |
| 50 | L9RFK | G0K090544-3 | 0319268 | 2A | 1.0 | 11/21/10 16:59 | | ☐ |

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 11/22/10 08:01:45

**File ID:** 101121A2 **Analyst:** hargraves

| # | Sample ID | Lot No. | Batch | | DF | Analyzed Date | Comment | Q |
|---|---|---|---|---|---|---|---|---|
| 51 | L9RFL | G0K090544-4 | 0319268 | 2A | 1.0 | 11/21/10 17:03 | | |
| 52 | L9RFM | G0K090544-5 | 0319268 | 2A | 1.0 | 11/21/10 17:06 | | |
| 53 | L9RFN | G0K090544-6 | 0319268 | 2A | 1.0 | 11/21/10 17:10 | | |
| 54 | L9RFP | G0K090544-7 | 0319268 | 2A | 1.0 | 11/21/10 17:13 | | |
| 55 | CCV 8 | | | | 1.0 | 11/21/10 17:17 | | |
| 56 | CCB 8 | | | | 1.0 | 11/21/10 17:20 | | |
| 57 | CCV 9 | | | | 1.0 | 11/21/10 17:24 | | |
| 58 | CCB 9 | | | | 1.0 | 11/21/10 17:28 | | |
| 59 | L90TF | G0K120496-1 | 0322434 | 2A | 1.0 | 11/21/10 17:31 | | |
| 60 | L90TFP5 | G0K120496 | 0322434 | | 5.0 | 11/21/10 17:35 | | |
| 61 | L90TFZ | G0K120496-1 | 0322434 | | 1.0 | 11/21/10 17:38 | | |
| 62 | L90TJ | G0K120496-2 | 0322434 | 2A | 1.0 | 11/21/10 17:42 | | |
| 63 | L90TK | G0K120496-3 | 0322434 | 2A | 1.0 | 11/21/10 17:45 | | |
| 64 | L90TL | G0K120496-4 | 0322434 | 2A | 1.0 | 11/21/10 17:49 | | |
| 65 | L90TM | G0K120496-5 | 0322434 | 2A | 1.0 | 11/21/10 17:52 | | |
| 66 | L90TN | G0K120496-6 | 0322434 | 2A | 1.0 | 11/21/10 17:56 | | |
| 67 | L90TP | G0K120496-7 | 0322434 | 2A | 1.0 | 11/21/10 17:59 | | |
| 68 | CCV 10 | | | | 1.0 | 11/21/10 18:03 | | |
| 69 | CCB 10 | | | | 1.0 | 11/21/10 18:06 | | |
| 70 | CCV 11 | | | | 1.0 | 11/21/10 18:10 | | |
| 71 | CCB 11 | | | | 1.0 | 11/21/10 18:13 | | |
| 72 | ICSA | | | | 1.0 | 11/21/10 18:17 | | |
| 73 | ICSAB | | | | 1.0 | 11/21/10 18:20 | | |
| 74 | CCV 12 | | | | 1.0 | 11/21/10 18:28 | | |
| 75 | CCB 12 | | | | 1.0 | 11/21/10 18:31 | | |
| 76 | CCV 13 | | | | 1.0 | 11/21/10 18:35 | | |
| 77 | CCB 13 | | | | 1.0 | 11/21/10 18:38 | | |
| 78 | L97JN | G0K170572-1 | 0322436 | 2A | 1.0 | 11/21/10 18:42 | | |
| 79 | L97JNP5 | G0K170572 | 0322436 | | 5.0 | 11/21/10 18:45 | | |
| 80 | L97JNZ | G0K170572-1 | 0322436 | | 1.0 | 11/21/10 18:49 | | |
| 81 | L97JP | G0K170572-2 | 0322436 | 2A | 1.0 | 11/21/10 18:52 | | |
| 82 | L97JR | G0K170572-3 | 0322436 | 2A | 1.0 | 11/21/10 18:56 | | |
| 83 | L97JT | G0K170572-4 | 0322436 | 2A | 1.0 | 11/21/10 18:59 | | |
| 84 | CCV 14 | | | | 1.0 | 11/21/10 19:03 | | |
| 85 | CCB 14 | | | | 1.0 | 11/21/10 19:06 | | |
| 86 | CCV 15 | | | | 1.0 | 11/21/10 19:10 | | |
| 87 | CCB 15 | | | | 1.0 | 11/21/10 19:13 | | |
| 88 | CCV 16 | | | | 1.0 | 11/21/10 19:15 | | |
| 89 | CCB 16 | | | | 1.0 | 11/21/10 19:18 | | |
| 90 | L94MP | G0K160437-1 | 0322435 | 2A | 1.0 | 11/21/10 19:21 | | |
| 91 | L94MPP5 | G0K160437 | 0322435 | | 5.0 | 11/21/10 19:23 | | |
| 92 | L94MPZ | G0K160437-1 | 0322435 | | 1.0 | 11/21/10 19:26 | | |
| 93 | L94M4 | G0K160437-2 | 0322435 | 2A | 1.0 | 11/21/10 19:28 | | |
| 94 | L94M7 | G0K160437-3 | 0322435 | 2A | 1.0 | 11/21/10 19:31 | | |
| 95 | L94M9 | G0K160437-4 | 0322435 | 2A | 1.0 | 11/21/10 19:33 | | |
| 96 | CCV 17 | | | | 1.0 | 11/21/10 19:36 | | |

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 11/22/10 08:01:45

**File ID: 101121A2** **Analyst: hargraves**

| # | Sample ID | Lot No. | Batch | | DF | Analyzed Date | Comment | Q |
|---|---|---|---|---|---|---|---|---|
| 97 | CCB 17 | | | | 1.0 | 11/21/10 19:39 | | ☐ |
| 98 | CCV 18 | | | | 1.0 | 11/21/10 19:41 | | ☐ |
| 99 | CCB 18 | | | | 1.0 | 11/21/10 19:45 | | ☐ |
| 102 | CCV 19 | | | | 1.0 | 11/21/10 19:49 | | ☐ |
| 103 | CCB 19 | | | | 1.0 | 11/21/10 19:52 | | ☐ |
| 104 | L9TFKB | G0K100000 | 0314283 | EC | 1.0 | 11/21/10 19:56 | | ☐ |
| 105 | L9TFKC | G0K100000 | 0314283 | EC | 1.0 | 11/21/10 20:00 | | ☐ |
| 106 | CCV 20 | | | | 1.0 | 11/21/10 20:04 | | ☐ |
| 107 | CCB 20 | | | | 1.0 | 11/21/10 20:07 | | ☐ |
| 108 | CCV 21 | | | | 1.0 | 11/21/10 20:11 | | ☐ |
| 109 | CCB 21 | | | | 1.0 | 11/21/10 20:15 | | ☐ |
| 110 | L9F0G | G0K020536-1 | 0314283 | EC | 1.0 | 11/21/10 20:18 | | ☐ |
| 111 | L9F0GP5 | G0K020536 | 0314283 | | 5.0 | 11/21/10 20:22 | | ☐ |
| 112 | L9F0GZ | G0K020536-1 | 0314283 | | 1.0 | 11/21/10 20:26 | | ☐ |
| 113 | CCV 22 | | | | 1.0 | 11/21/10 20:29 | | ☐ |
| 114 | CCB 22 | | | | 1.0 | 11/21/10 20:33 | | ☐ |
| 117 | CCV 23 | | | | 1.0 | 11/21/10 20:37 | | ☐ |
| 118 | CCB 23 | | | | 1.0 | 11/21/10 20:41 | | ☐ |
| 119 | L9F0G | G0K020536-1 | 0314283 | EC | 1.0 | 11/21/10 20:44 | | ☐ |
| 120 | L9F0GP5 | G0K020536 | 0314283 | | 5.0 | 11/21/10 20:48 | | ☐ |
| 121 | L9F0GZ | G0K020536-1 | 0314283 | | 1.0 | 11/21/10 20:52 | | ☐ |
| 122 | CCV 24 | | | | 1.0 | 11/21/10 20:55 | | ☐ |
| 123 | CCB 24 | | | | 1.0 | 11/21/10 20:59 | | ☐ |

TAL West Sac

# INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 11/22/10 08:01:45

**File ID:** 101121A2 **Analyst:** hargraves

| # | Sample ID | Analyzed Date | Germanium | Indium | Lithium-6 | Thulium | Q |
|---|---|---|---|---|---|---|---|
| 1 | Rinse 2X | 11/21/10 13:53 | 96.5 | 95.3 | 95.4 | 95.6 | ☐ |
| 2 | Blank | 11/21/10 13:58 | 100.0 | 100.0 | 100.0 | 100.0 | ☑ |
| 3 | Standard1 | 11/21/10 14:02 | 99.3 | 98.1 | 111.1 | 97.4 | ☑ |
| 4 | ICV | 11/21/10 14:06 | 98.9 | 98.1 | 105.7 | 97.8 | ☑ |
| 5 | ICB | 11/21/10 14:10 | 99.3 | 98.6 | 107.8 | 97.9 | ☑ |
| 6 | LLSTD1 | 11/21/10 14:16 | 99.6 | 98.9 | 108.9 | 99.2 | ☑ |
| 7 | LLSTD2 | 11/21/10 14:20 | 100.7 | 99.2 | 108.9 | 100.0 | ☑ |
| 8 | ICSA | 11/21/10 14:30 | 87.1 | 80.3 | 104.9 | 85.5 | ☑ |
| 9 | ICSAB | 11/21/10 14:34 | 90.6 | 82.7 | 109.9 | 89.4 | ☑ |
| 10 | Rinse | 11/21/10 14:41 | 109.0 | 107.6 | 127.3 | 110.3 | ☑ |
| 11 | CCV 1 | 11/21/10 14:49 | 108.5 | 104.7 | 128.5 | 108.5 | ☑ |
| 12 | CCB 1 | 11/21/10 14:53 | 109.1 | 105.5 | 130.6 | 108.1 | ☑ |
| 15 | CCV 2 | 11/21/10 14:57 | 100.1 | 98.9 | 101.3 | 98.9 | ☑ |
| 16 | CCB 2 | 11/21/10 15:01 | 101.4 | 99.7 | 103.4 | 100.2 | ☑ |
| 17 | L9PGPB | 11/21/10 15:06 | 101.7 | 103.4 | 93.6 | 104.3 | ☑ |
| 18 | L93G4B | 11/21/10 15:10 | 100.7 | 102.1 | 93.0 | 101.1 | ☑ |
| 19 | L93HEC | 11/21/10 15:14 | 97.4 | 99.8 | 96.5 | 97.2 | ☑ |
| 20 | L93GPL | 11/21/10 15:18 | 95.5 | 97.7 | 96.4 | 93.9 | ☑ |
| 21 | L99FXB | 11/21/10 15:22 | 96.0 | 98.7 | 98.5 | 94.4 | ☑ |
| 22 | L99F3C | 11/21/10 15:26 | 96.0 | 97.7 | 100.2 | 92.5 | ☑ |
| 23 | L99F1L | 11/21/10 15:30 | 95.1 | 96.6 | 101.4 | 91.3 | ☑ |
| 24 | CCV 3 | 11/21/10 15:34 | 97.3 | 95.5 | 108.6 | 89.7 | ☑ |
| 25 | CCB 3 | 11/21/10 15:38 | 100.7 | 97.7 | 108.6 | 92.4 | ☑ |
| 26 | CCV 4 | 11/21/10 15:42 | 99.0 | 97.0 | | 91.6 | ☑ |
| 27 | CCB 4 | 11/21/10 15:46 | 101.0 | 98.9 | | 93.0 | ☑ |
| 30 | CCV 5 | 11/21/10 15:49 | 98.6 | 98.1 | | 98.4 | ☑ |
| 31 | CCB 5 | 11/21/10 15:53 | 100.3 | 99.7 | | 99.1 | ☑ |
| 32 | L9PGPC | 11/21/10 15:56 | 96.1 | 98.7 | | 97.2 | ☑ |
| 33 | L9PGPL | 11/21/10 16:00 | 92.4 | 95.4 | | 91.9 | ☑ |
| 34 | L9DNC | 11/21/10 16:03 | 92.8 | 95.5 | | 91.7 | ☑ |
| 35 | L9DNCP5 | 11/21/10 16:07 | 94.3 | 94.7 | | 91.0 | ☐ |
| 36 | L9DNCZ | 11/21/10 16:10 | 91.6 | 93.7 | | 89.8 | ☑ |
| 37 | L9DNK | 11/21/10 16:14 | 91.7 | 93.6 | | 88.6 | ☑ |
| 38 | L9DNM | 11/21/10 16:17 | 93.7 | 95.0 | | 90.9 | ☑ |
| 39 | L9DNN | 11/21/10 16:21 | 94.5 | 95.5 | | 91.3 | ☑ |
| 40 | L9DNR | 11/21/10 16:24 | 94.7 | 95.9 | | 91.6 | ☑ |
| 41 | L9DNT | 11/21/10 16:28 | 96.3 | 95.7 | | 92.7 | ☑ |
| 42 | CCV 6 | 11/21/10 16:31 | 97.2 | 95.2 | | 91.3 | ☑ |
| 43 | CCB 6 | 11/21/10 16:35 | 99.0 | 97.4 | | 93.3 | ☑ |
| 44 | CCV 7 | 11/21/10 16:38 | 96.9 | 95.9 | | 91.9 | ☑ |
| 45 | CCB 7 | 11/21/10 16:42 | 98.1 | 96.1 | | 92.7 | ☑ |
| 46 | L9RFH | 11/21/10 16:45 | 98.5 | 98.5 | | 94.3 | ☑ |
| 47 | L9RFHP5 | 11/21/10 16:49 | 99.3 | 97.6 | | 93.7 | ☐ |
| 48 | L9RFHZ | 11/21/10 16:52 | 94.4 | 95.1 | | 90.4 | ☑ |
| 49 | L9RFJ | 11/21/10 16:56 | 92.5 | 94.1 | | 88.3 | ☑ |
| 50 | L9RFK | 11/21/10 16:59 | 93.9 | 94.0 | | 88.3 | ☑ |

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 11/22/10 08:01:45

**File ID:** 101121A2 **Analyst:** hargraves

| # | Sample ID | Analyzed Date | Germanium | Indium | Lithium-6 | Thulium | Q |
|---|---|---|---|---|---|---|---|
| 51 | L9RFL | 11/21/10 17:03 | 94.1 | 95.0 | | 88.9 | ☑ |
| 52 | L9RFM | 11/21/10 17:06 | 95.7 | 96.7 | | 90.6 | ☑ |
| 53 | L9RFN | 11/21/10 17:10 | 96.7 | 96.6 | | 91.3 | ☑ |
| 54 | L9RFP | 11/21/10 17:13 | 98.2 | 98.0 | | 92.9 | ☑ |
| 55 | CCV 8 | 11/21/10 17:17 | 96.9 | 95.0 | | 90.3 | ☑ |
| 56 | CCB 8 | 11/21/10 17:20 | 98.4 | 95.9 | | 90.3 | ☑ |
| 57 | CCV 9 | 11/21/10 17:24 | 97.1 | 95.8 | | 90.7 | ☑ |
| 58 | CCB 9 | 11/21/10 17:28 | 98.7 | 96.8 | | 91.7 | ☑ |
| 59 | L90TF | 11/21/10 17:31 | 99.0 | 99.3 | | 94.5 | ☑ |
| 60 | L90TFP5 | 11/21/10 17:35 | 98.0 | 97.0 | | 91.7 | ☐ |
| 61 | L90TFZ | 11/21/10 17:38 | 93.7 | 94.1 | | 87.7 | ☑ |
| 62 | L90TJ | 11/21/10 17:42 | 92.0 | 93.3 | | 85.8 | ☑ |
| 63 | L90TK | 11/21/10 17:45 | 93.2 | 93.9 | | 86.7 | ☑ |
| 64 | L90TL | 11/21/10 17:49 | 93.2 | 93.7 | | 86.6 | ☑ |
| 65 | L90TM | 11/21/10 17:52 | 94.7 | 95.7 | | 88.3 | ☑ |
| 66 | L90TN | 11/21/10 17:56 | 95.7 | 96.1 | | 89.4 | ☑ |
| 67 | L90TP | 11/21/10 17:59 | 96.4 | 97.2 | | 90.5 | ☑ |
| 68 | CCV 10 | 11/21/10 18:03 | 97.6 | 95.4 | | 89.6 | ☑ |
| 69 | CCB 10 | 11/21/10 18:06 | 98.5 | 96.2 | | 90.0 | ☑ |
| 70 | CCV 11 | 11/21/10 18:10 | 97.3 | 95.5 | | 89.4 | ☑ |
| 71 | CCB 11 | 11/21/10 18:13 | 99.1 | 96.9 | | 90.0 | ☑ |
| 72 | ICSA | 11/21/10 18:17 | 85.6 | 80.0 | | 85.3 | ☑ |
| 73 | ICSAB | 11/21/10 18:20 | 85.3 | 80.8 | | 89.1 | ☐ |
| 74 | CCV 12 | 11/21/10 18:28 | 99.8 | 98.5 | | 96.5 | ☑ |
| 75 | CCB 12 | 11/21/10 18:31 | 100.6 | 98.9 | | 95.2 | ☑ |
| 76 | CCV 13 | 11/21/10 18:35 | 100.3 | 98.0 | | 93.2 | ☑ |
| 77 | CCB 13 | 11/21/10 18:38 | 102.3 | 99.2 | | 93.7 | ☑ |
| 78 | L97JN | 11/21/10 18:42 | 101.7 | 101.0 | | 95.3 | ☑ |
| 79 | L97JNP5 | 11/21/10 18:45 | 102.4 | 98.8 | | 93.5 | ☐ |
| 80 | L97JNZ | 11/21/10 18:49 | 96.1 | 95.2 | | 87.9 | ☑ |
| 81 | L97JP | 11/21/10 18:52 | 94.0 | 93.8 | | 84.6 | ☑ |
| 82 | L97JR | 11/21/10 18:56 | 92.4 | 91.5 | | 83.4 | ☑ |
| 83 | L97JT | 11/21/10 18:59 | 95.6 | 94.9 | | 86.2 | ☑ |
| 84 | CCV 14 | 11/21/10 19:03 | 97.3 | 94.3 | | 87.1 | ☑ |
| 85 | CCB 14 | 11/21/10 19:06 | 99.4 | 95.7 | | 88.0 | ☑ |
| 86 | CCV 15 | 11/21/10 19:10 | 102.5 | | | | ☑ |
| 87 | CCB 15 | 11/21/10 19:13 | 104.5 | | | | ☑ |
| 88 | CCV 16 | 11/21/10 19:15 | 103.0 | | | | ☑ |
| 89 | CCB 16 | 11/21/10 19:18 | 106.4 | | | | ☑ |
| 90 | L94MP | 11/21/10 19:21 | 103.9 | | | | ☑ |
| 91 | L94MPP5 | 11/21/10 19:23 | 108.5 | | | | ☐ |
| 92 | L94MPZ | 11/21/10 19:26 | 104.8 | | | | ☑ |
| 93 | L94M4 | 11/21/10 19:28 | 98.1 | | | | ☑ |
| 94 | L94M7 | 11/21/10 19:31 | 103.1 | | | | ☑ |
| 95 | L94M9 | 11/21/10 19:33 | 104.5 | | | | ☑ |
| 96 | CCV 17 | 11/21/10 19:36 | 101.6 | | | | ☑ |

TAL West Sac

# INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 11/22/10 08:01:45

**File ID:** 101121A2 **Analyst:** hargraves

| # | Sample ID | Analyzed Date | Germanium | Indium | Lithium-6 | Thulium | Q |
|---|---|---|---|---|---|---|---|
| 97 | CCB 17 | 11/21/10 19:39 | 103.3 | | | | ☑ |
| 98 | CCV 18 | 11/21/10 19:41 | 97.2 | 93.5 | 103.9 | 85.4 | ☑ |
| 99 | CCB 18 | 11/21/10 19:45 | 99.2 | 94.9 | 103.9 | 87.1 | ☑ |
| 102 | CCV 19 | 11/21/10 19:49 | 97.8 | 98.7 | 99.9 | 98.2 | ☑ |
| 103 | CCB 19 | 11/21/10 19:52 | 100.5 | 101.0 | 100.9 | 100.4 | ☑ |
| 104 | L9TFKB | 11/21/10 19:56 | 100.3 | 102.0 | 102.4 | 100.9 | ☑ |
| 105 | L9TFKC | 11/21/10 20:00 | 96.3 | 99.5 | 101.6 | 99.3 | ☑ |
| 106 | CCV 20 | 11/21/10 20:04 | 95.1 | 96.6 | 101.6 | 95.5 | ☑ |
| 107 | CCB 20 | 11/21/10 20:07 | 95.6 | 97.1 | 100.1 | 95.3 | ☑ |
| 108 | CCV 21 | 11/21/10 20:11 | 96.6 | 98.5 | 101.6 | 98.2 | ☑ |
| 109 | CCB 21 | 11/21/10 20:15 | 95.5 | 97.2 | 100.1 | 95.9 | ☑ |
| 110 | L9F0G | 11/21/10 20:18 | 81.4 | 84.1 | 99.3 | 91.2 | ☑ |
| 111 | L9F0GP5 | 11/21/10 20:22 | 84.4 | 95.0 | 97.3 | 103.7 | ☐ |
| 112 | L9F0GZ | 11/21/10 20:26 | 78.3 | 86.7 | 91.7 | 99.8 | ☑ |
| 113 | CCV 22 | 11/21/10 20:29 | 86.0 | 100.7 | 82.6 | 122.6 | ☑ |
| 114 | CCB 22 | 11/21/10 20:33 | 86.5 | 101.9 | 80.7 | 123.3 | ☑ |
| 117 | CCV 23 | 11/21/10 20:37 | 99.0 | 98.5 | 100.2 | 100.0 | ☑ |
| 118 | CCB 23 | 11/21/10 20:41 | 99.5 | 99.7 | 97.7 | 100.5 | ☑ |
| 119 | L9F0G | 11/21/10 20:44 | 91.9 | 88.4 | 109.6 | 87.2 | ☑ |
| 120 | L9F0GP5 | 11/21/10 20:48 | 94.9 | 95.3 | 95.0 | 95.2 | ☐ |
| 121 | L9F0GZ | 11/21/10 20:52 | 86.7 | 84.3 | 98.8 | 84.5 | ☑ |
| 122 | CCV 24 | 11/21/10 20:55 | 94.4 | 95.4 | 82.4 | 99.5 | ☑ |
| 123 | CCB 24 | 11/21/10 20:59 | 93.4 | 95.6 | 76.9 | 99.3 | ☑ |

## Quantitative Method Report

File Name: 0322434.mth
File Path: E:\elandata\Method\0322434.mth

**Timing Parameters**

| | |
|---|---|
| Sweeps/Reading: | 50 |
| Readings/Replicate: | 1 |
| Number of Replicates: | 3 |
| Tuning File: | e:\elandata\Tuning\default.tun |
| Optimization File: | e:\elandata\Optimize\default.dac |
| QC Enabled: | Yes |
| Settling Time: | Normal |

| Analyte | Mass | Scan Mode | MCA Channels | Dwell Time | Integration Time |
|---|---|---|---|---|---|
| Sc | 44.956 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Li-1 | 6.015 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Be | 9.012 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Al | 26.982 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Ca | 43.956 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Cr | 51.941 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Mn | 54.938 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Fe | 53.940 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Fe | 56.935 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Co | 58.933 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Ni | 59.933 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Cu | 64.928 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| As | 74.922 | Peak Hopping | 1 | 20.0 ms | 1000 ms |
| Se | 81.917 | Peak Hopping | 1 | 20.0 ms | 1000 ms |
| Mo | 96.906 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Ge-1 | 71.922 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Ag | 106.905 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Cd | 110.904 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Sb | 120.904 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Ba | 134.906 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| In-1 | 114.904 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Pb | 207.977 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Tm-1 | 168.934 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Cr | 49.946 | Peak Hopping | 1 | 5.0 ms | 250 ms |
| Cr | 52.941 | Peak Hopping | 1 | 5.0 ms | 250 ms |
| Ni | 60.931 | Peak Hopping | 1 | 5.0 ms | 250 ms |
| Cu | 62.930 | Peak Hopping | 1 | 5.0 ms | 250 ms |
| Se | 75.919 | Peak Hopping | 1 | 5.0 ms | 250 ms |
| Se | 76.920 | Peak Hopping | 1 | 20.0 ms | 1000 ms |
| Se | 77.917 | Peak Hopping | 1 | 20.0 ms | 1000 ms |
| Br | 78.918 | Peak Hopping | 1 | 20.0 ms | 1000 ms |
| Ge | 71.922 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Cd | 107.904 | Peak Hopping | 1 | 5.0 ms | 250 ms |
| Cd | 113.904 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Ag | 108.905 | Peak Hopping | 1 | 5.0 ms | 250 ms |
| In | 114.904 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| 207.977 | 207.977 | Peak Hopping | 1 | 14.0 ms | 700 ms |

| | | | | | |
|---|---|---|---|---|---|
| Pb | 206.976 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Pb | 205.975 | Peak Hopping | 1 | 14.0 ms | 700 ms |
| Tm | 168.934 | Peak Hopping | 1 | 14.0 ms | 700 ms |

**Signal Processing**

| | |
|---|---|
| Detector Mode: | Dual |
| Measurement Units: | Counts |
| AutoLens: | On |
| Spectral Peak Processing: | Average |
| Signal Profile Processing: | Average |
| Blank Subtraction: | After Internal Standard |
| Baseline Readings: | 0 |
| Smoothing: | Yes, Factor 5 |

**Equations**

| Analyte | Mass | Corrections |
|---|---|---|
| Fe | 53.940 | - 0.028226 * Cr 52 |
| Fe | 56.935 | -0.074 * Ca 43 |
| Ni | 59.933 | -0.005 * Ca 43 |
| Cu | 64.928 | -0.0078 * Ti 49 |
| As | 74.922 | -3.1278 * Se 77 + 1.0177 * Se 78 |
| Se | 81.917 | - 0.00205 * Br 79 |
| Cd | 110.904 | -1.073 * Pd 108 + 0.712 * Pd 106 |
| In-1 | 114.904 | - 0.014032 * Sn 118 |
| Pb | 207.977 | + 1.0 * Pb 207 + 1.0 * Pb 206 |
| Cr | 49.946 | - 0.739726 * Ti 47 - 0.002506 * V 51 |
| Se | 75.919 | - 0.268980 * Ge 72 |
| Se | 77.917 | - 0.030435 * Kr 83 |
| Cd | 107.904 | - 1.184953 * Pd 105 |
| Cd | 113.904 | - 0.026826 * Sn 118 |
| In | 114.904 | - 0.014032 * Sn 118 |

**Calibration Information**

| Analyte | Mass | Curve Type | Sample Units | Std Units | Std 1 | Std 2 | Std 3 | Std 4 |
|---|---|---|---|---|---|---|---|---|
| Sc | 44.956 | Linear Thru Zero | ug/L | ug/L | | | | |
| Li-1 | 6.015 | Linear Thru Zero | ug/L | ug/L | | | | |
| Be | 9.012 | Linear Thru Zero | ug/L | ug/L | 100 | | | |
| Al | 26.982 | Linear Thru Zero | ug/L | ug/L | 5.1e+003 | | | |
| Ca | 43.956 | Linear Thru Zero | ug/L | ug/L | 5.1e+003 | | | |
| Cr | 51.941 | Linear Thru Zero | ug/L | ug/L | 100 | | | |
| Mn | 54.938 | Linear Thru Zero | ug/L | ug/L | 100 | | | |
| Fe | 53.940 | Linear Thru Zero | ug/L | ug/L | 5.1e+003 | | | |
| Fe | 56.935 | Linear Thru Zero | ug/L | ug/L | 5.1e+003 | | | |
| Co | 58.933 | Linear Thru Zero | ug/L | ug/L | 100 | | | |
| Ni | 59.933 | Linear Thru Zero | ug/L | ug/L | 100 | | | |
| Cu | 64.928 | Linear Thru Zero | ug/L | ug/L | 100 | | | |
| As | 74.922 | Linear Thru Zero | ug/L | ug/L | 100 | | | |
| Se | 81.917 | Linear Thru Zero | ug/L | ug/L | 100 | | | |
| Mo | 96.906 | Linear Thru Zero | ug/L | ug/L | 200 | | | |
| Ge-1 | 71.922 | Linear Thru Zero | ug/L | ug/L | | | | |
| Ag | 106.905 | Linear Thru Zero | ug/L | ug/L | 50 | | | |
| Cd | 110.904 | Linear Thru Zero | ug/L | ug/L | 100 | | | |

| | | | | | |
|---|---|---|---|---|---|
| Sb | 120.904 | Linear Thru Zero | ug/L | ug/L | 50 |
| Ba | 134.906 | Linear Thru Zero | ug/L | ug/L | 100 |
| In-1 | 114.904 | Linear Thru Zero | ug/L | ug/L | |
| Pb | 207.977 | Linear Thru Zero | ug/L | ug/L | 100 |
| Tm-1 | 168.934 | Linear Thru Zero | ug/L | ug/L | |
| Cr | 49.946 | Linear Thru Zero | ug/L | ug/L | 100 |
| Cr | 52.941 | Linear Thru Zero | ug/L | ug/L | 100 |
| Ni | 60.931 | Linear Thru Zero | ug/L | ug/L | 100 |
| Cu | 62.930 | Linear Thru Zero | ug/L | ug/L | 100 |
| Se | 75.919 | Linear Thru Zero | ug/L | ug/L | 100 |
| Se | 76.920 | Linear Thru Zero | ug/L | ug/L | 100 |
| Se | 77.917 | Linear Thru Zero | ug/L | ug/L | 100 |
| Br | 78.918 | Linear Thru Zero | ug/L | ug/L | 100 |
| Ge | 71.922 | Linear Thru Zero | ug/L | ug/L | |
| Cd | 107.904 | Linear Thru Zero | ug/L | ug/L | 100 |
| Cd | 113.904 | Linear Thru Zero | ug/L | ug/L | 100 |
| Ag | 108.905 | Linear Thru Zero | ug/L | ug/L | 50 |
| In | 114.904 | Linear Thru Zero | ug/L | ug/L | |
| 207.97 | 207.977 | Linear Thru Zero | ug/L | ug/L | 100 |
| Pb | 206.976 | Linear Thru Zero | ug/L | ug/L | 100 |
| Pb | 205.975 | Linear Thru Zero | ug/L | ug/L | 100 |
| Tm | 168.934 | Linear Thru Zero | ug/L | ug/L | |

**TAL-W. SACRMENTO – Perkin Elmer Elan 6000 ICPMS, M02 – Methods 6020, 200.8**

**AIR TOX Standards - 4 % HNO3, 0.5 % HCl**

## Standards for run:

Tuning standard: 4075-18E

Internal standard: 4075-22C

Blank, CCBs: 3185-41C

Standard 1, CCVs: 4075-21E

ICV: 4075-20D

ICSA: 4075-24A

ICSAB: 4075-24B

File Number: 101121A2

# Instrument Tuning Report

File Name: default.tun

## Sample Information

Sample Date/Time: Sunday, November 21, 2010 13:21:36
Sample ID: TUNE SHARGRAVE

| Analyte | Exact Mass | Meas. Mass | Mass DAC | Meas. Pk. Width | Res. DAC | Custom Res. |
|---|---|---|---|---|---|---|
| Li | 7.016 | 7.077 | 1575 | 0.711 | 2039 | |
| Be | 9.012 | 8.928 | 2067 | 0.702 | 2027 | |
| Mg | 23.985 | 24.028 | 5720 | 0.708 | 2007 | |
| Co | 58.933 | 58.929 | 14263 | 0.718 | 1956 | |
| In | 114.904 | 114.829 | 27905 | 0.725 | 1937 | |
| Ce | 139.905 | 139.929 | 33974 | 0.709 | 1989 | |
| Tl | 204.975 | 204.979 | 49691 | 0.703 | 2197 | |
| Pb | 207.977 | 207.979 | 50425 | 0.715 | 2210 | |
| U | 238.050 | 238.026 | 57626 | 0.719 | 2367 | |

# Elan 6000 Instrument Optomization Report

Path e:\elandata\Optimize
File Name e:\elandata\Optimize\default.dac

**Sample Information**

Sample Date/Time: Sunday, November 21, 2010 13:21:36
Sample ID: TUNE SHARGRAVE

**Parameter Settings**

| | |
|---|---|
| Nebulizer Gas Flow | 0.92 |
| Lens Voltage | 9.00 |
| ICP RF Power | 1100.00 |
| Analog Stage Voltage | -2000.00 |
| Pulse Stage Voltage | 1350.00 |
| Discriminator Threshold | 70.00 |
| AC Rod Offset | -7.00 |
| Service DAC 1 | 60.00 |
| Quadrupole Rod Offset | 0.00 |

**AutoLens Calibration**

| | |
|---|---|
| Date: | 13:24:09 Sun 21-Nov-10 |
| Sample Filename: | AUTOLENS SHARGRAVE.002 |
| Dataset Pathname: | 101121a2\ |
| Lens Voltage Start: | 5.50 |
| Lens Voltage End: | 10.00 |
| Lens Voltage Step: | 0.25 |
| Slope: | 0.02358333 |
| Intercept: | 6.81258797 |

| Analyte | Mass | Optimum Voltage | Maximum Intensity | # Points |
|---|---|---|---|---|
| Be | 9.012 | 7.0 | 4907.3 | 19 |
| Co | 58.933 | 8.3 | 136196.1 | 19 |
| In | 114.904 | 9.5 | 354853.6 | 19 |

**Dual Detector Calibration**

| | |
|---|---|
| Date: | 13:20:53 Wed 03-Nov-10 |
| Sample Filename: | DUAL BJONES.1091 |
| Dataset Pathname: | e:\elandata\Dataset\dual detector calibration\ |
| Points Acquired: | 37 |
| Lens Vol Start: | -3.00 |
| Lens Vol End: | 15.00 |
| Lens Vol Step: | 0.50 |

| Analyte | Mass | Gain | N(max) |
|---|---|---|---|
| Li | 6.016 | 10928.88 | 1145552584.620 |
| Li | 7.016 | 9978.05 | 1254714144.069 |
| Be | 9.012 | 9340.39 | 1340372612.603 |
| B | 11.008 | 9668.52 | 1294883747.870 |

| | | | |
|---|---|---|---|
| Na | 22.991 | 9855.04 | 1270376195.382 |
| Mg | 23.987 | 9231.21 | 1356225523.516 |
| Mg | 24.985 | 8823.23 | 1418937010.419 |
| Al | 26.982 | 8613.23 | 1453532645.421 |
| Si | 27.976 | 8332.42 | 1502516908.984 |
| P | 30.995 | 7826.16 | 1599713267.162 |
| K | 38.965 | 7640.17 | 1638656083.737 |
| Ca | 42.958 | 7321.08 | 1710076220.423 |
| Ca | 43.956 | 7642.29 | 1638201615.183 |
| Sc | 44.954 | 7632.75 | 1640249098.474 |
| V | 50.944 | 7461.63 | 1677863973.938 |
| Cr | 51.942 | 7201.26 | 1738531113.763 |
| Fe | 53.938 | 7047.98 | 1776340070.470 |
| Mn | 54.937 | 7071.39 | 1770458989.922 |
| Fe | 56.933 | 6759.64 | 1852112099.464 |
| Co | 58.935 | 6831.11 | 1832733384.653 |
| Ni | 59.935 | 6636.67 | 1886428605.242 |
| Cu | 62.932 | 6509.07 | 1923408754.449 |
| Cu | 64.929 | 6301.83 | 1986662884.963 |
| Zn | 67.926 | 6447.72 | 1941710015.000 |
| Ge | 71.923 | 6563.36 | 1907498254.206 |
| As | 74.924 | 6364.04 | 1967242232.774 |
| Se | 77.917 | 6647.02 | 1883490542.949 |
| Br | 78.917 | | |
| Se | 81.918 | 6360.91 | 1968210783.080 |
| Sr | 87.904 | | |
| Mo | 96.907 | 6537.35 | 1915087413.455 |
| Ag | 106.903 | 5915.05 | 2116568240.642 |
| Ag | 108.904 | 5822.25 | 2150302205.476 |
| Cd | 110.904 | 5986.51 | 2091302989.660 |
| Cd | 113.906 | 6065.88 | 2063938411.277 |
| In | 114.904 | 6105.20 | 2050646561.592 |
| Sn | 117.902 | 6067.89 | 2063255585.168 |
| Sb | 120.904 | 6082.14 | 2058421773.677 |
| Ba | 134.908 | 5857.14 | 2137493313.789 |
| Ho | 164.928 | | |
| Tm | 168.934 | 5790.80 | 2161982364.684 |
| Tl | 204.977 | 5482.39 | 2283604817.619 |
| Pb | 207.976 | 5460.99 | 2292553567.224 |
| U | 238.049 | 5445.30 | 2299157944.360 |

# Daily Performance Report

Sample ID: DAILY SHARGRAVE
Sample Date/Time: Sunday, November 21, 2010 13:32:26
Sample Description:
Sample File: e:\elandata\Sample\0319271X.sam
Method File: E:\elandata\Method\000daily.mth
Dataset File: E:\elandata\Dataset\101121a2\DAILY SHARGRAVE.003
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Number of Replicates: 5
Dual Detector Mode: Dual

## Summary

| | Analyte | Mass | Net Intens. Mean | Net Intens. RSD |
|---|---|---|---|---|
| | Mg | 24 | 46442.903 | 0.415 |
| | Rh | 103 | 245890.354 | 0.816 |
| | Pb | 208 | 196686.091 | 0.356 |
| ⌈> | Ba | 138 | 285713.789 | 0.734 |
| ⌊ | Ba++ | 69 | 0.018 | 2.040 |
| ⌈> | Ce | 140 | 371207.257 | 0.555 |
| ⌊ | CeO | 156 | 0.024 | 6.398 |
| | Bkgd | 220 | 1.714 | 91.287 |
| | Li | 7 | 13181.836 | 0.357 |
| | Be | 9 | 4338.464 | 2.070 |
| | Co | 59 | 116072.897 | 0.524 |
| | In | 115 | 339054.556 | 0.711 |
| | Tl | 205 | 280624.992 | 0.619 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: Rinse 2X**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 13:53:56
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\Rinse 2X.004
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 6
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 938077.368 | ug/L | 0.000 |
| > | 6 | Li-1 | | | 643491.192 | ug/L | 0.000 |
| | 9 | Be | | | 1.667 | ug/L | 0.000 |
| | 27 | Al | | | 236640.567 | ug/L | 0.000 |
| | 44 | Ca | | | 8160.897 | ug/L | 0.000 |
| | 52 | Cr | | | 11783.902 | ug/L | 0.000 |
| | 55 | Mn | | | 5600.892 | ug/L | 0.000 |
| | 54 | Fe | | | 71295.789 | ug/L | 0.000 |
| | 57 | Fe | | | 7901.120 | ug/L | 0.000 |
| | 59 | Co | | | 95.334 | ug/L | 0.000 |
| | 60 | Ni | | | 793.852 | ug/L | 0.000 |
| | 65 | Cu | | | 300.037 | ug/L | 0.000 |
| | 75 | As | | | 13516.166 | ug/L | 0.000 |
| | 82 | Se | | | 960.562 | ug/L | 0.000 |
| | 97 | Mo | | | 44.333 | ug/L | 0.000 |
| > | 72 | Ge-1 | | | 979476.395 | ug/L | 0.000 |
| | 107 | Ag | | | 40.000 | ug/L | 0.000 |
| | 111 | Cd | | | 68.414 | ug/L | 0.000 |
| | 121 | Sb | | | 488.686 | ug/L | 0.000 |
| | 135 | Ba | | | 84.667 | ug/L | 0.000 |
| > | 115 | In-1 | | | 1077841.018 | ug/L | 0.000 |
| | 208 | Pb | | | 737.684 | ug/L | 0.000 |
| > | 169 | Tm-1 | | | 940044.342 | ug/L | 0.000 |
| | 50 | Cr | | | -54.092 | ug/L | 0.000 |
| | 53 | Cr | | | 12518.723 | ug/L | 0.000 |
| | 61 | Ni | | | 943.529 | ug/L | 0.000 |
| | 63 | Cu | | | 206.677 | ug/L | 0.000 |
| | 76 | Se | | | -129027.038 | ug/L | 0.000 |
| | 77 | Se | | | 5338.567 | ug/L | 0.000 |
| | 78 | Se | | | 14571.197 | ug/L | 0.000 |
| | 79 | Br | | | 95209.106 | ug/L | 0.000 |
| > | 72 | Ge | | | 979476.395 | ug/L | 0.000 |
| | 108 | Cd | | | 8.989 | ug/L | 0.000 |
| | 114 | Cd | | | 171.445 | ug/L | 0.000 |
| | 109 | Ag | | | 14.333 | ug/L | 0.000 |

| | | | | |
|---|---|---|---|---|
| ⌊> | 115 In | 1077841.018 | ug/L | 0.000 |
| ⌈ | 208 207.977 | 383.679 | ug/L | 0.000 |
| \| | 207 Pb | 157.002 | ug/L | 0.000 |
| \| | 206 Pb | 197.003 | ug/L | 0.000 |
| ⌊> | 169 Tm | 940044.342 | ug/L | 0.000 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | |
| ⌊ | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| ⌊> | Ge-1 | 72 | |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| ⌊> | In-1 | 115 | |
| ⌈ | Pb | 208 | |
| ⌊> | Tm-1 | 169 | |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| ⌊> | Ge | 72 | |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| ⌊> | In | 115 | |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| ⌊> | Tm | 169 | |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: Blank**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 13:58:17
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\Blank.005
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 975119.936 | ug/L | |
| > | 6 | Li-1 | | | 674312.754 | ug/L | |
| | 9 | Be | | | 4.667 | ug/L | |
| | 27 | Al | | | 61494.391 | ug/L | |
| | 44 | Ca | | | 7827.812 | ug/L | |
| | 52 | Cr | | | 12492.923 | ug/L | |
| | 55 | Mn | | | 2515.164 | ug/L | |
| | 54 | Fe | | | 71575.950 | ug/L | |
| | 57 | Fe | | | 7885.234 | ug/L | |
| | 59 | Co | | | 134.668 | ug/L | |
| | 60 | Ni | | | 333.130 | ug/L | |
| | 65 | Cu | | | 113.236 | ug/L | |
| | 75 | As | | | 13228.025 | ug/L | |
| | 82 | Se | | | 954.303 | ug/L | |
| | 97 | Mo | | | 53.667 | ug/L | |
| > | 72 | Ge-1 | | | 1015196.027 | ug/L | |
| | 107 | Ag | | | 58.334 | ug/L | |
| | 111 | Cd | | | 53.232 | ug/L | |
| | 121 | Sb | | | 283.673 | ug/L | |
| | 135 | Ba | | | 78.667 | ug/L | |
| > | 115 | In-1 | | | 1130459.784 | ug/L | |
| | 208 | Pb | | | 586.677 | ug/L | |
| > | 169 | Tm-1 | | | 983155.379 | ug/L | |
| | 50 | Cr | | | -76.253 | ug/L | |
| | 53 | Cr | | | 14440.739 | ug/L | |
| | 61 | Ni | | | 972.876 | ug/L | |
| | 63 | Cu | | | 88.668 | ug/L | |
| | 76 | Se | | | -133614.027 | ug/L | |
| | 77 | Se | | | 5765.162 | ug/L | |
| | 78 | Se | | | 14590.878 | ug/L | |
| | 79 | Br | | | 86878.509 | ug/L | |
| > | 72 | Ge | | | 1015196.027 | ug/L | |
| | 108 | Cd | | | 9.384 | ug/L | |
| | 114 | Cd | | | 160.939 | ug/L | |
| | 109 | Ag | | | 24.667 | ug/L | |

| | | | |
|---|---|---|---|
| ⌊> | 115 In | 1130459.784 | ug/L |
| ⌈ | 208 207.977 | 297.674 | ug/L |
| \| | 207 Pb | 124.335 | ug/L |
| \| | 206 Pb | 164.669 | ug/L |
| ⌊> | 169 Tm | 983155.379 | ug/L |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | |
| ⌊ | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| ⌊> | Ge-1 | 72 | |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| ⌊> | In-1 | 115 | |
| ⌈ | Pb | 208 | |
| ⌊> | Tm-1 | 169 | |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| ⌊> | Ge | 72 | |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| ⌊> | In | 115 | |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| ⌊> | Tm | 169 | |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: Standard 1**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:02:32
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\Standard 1.006
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 989130.456 | ug/L | 975119.936 |
| > | 6 | Li-1 | | | 748995.825 | ug/L | 674312.754 |
| | 9 | Be | 100.000000 | 1.319 | 31804.626 | ug/L | 4.667 |
| | 27 | Al | 5100.000000 | 1.138 | 22143533.450 | ug/L | 61494.391 |
| | 44 | Ca | 5100.000000 | 0.496 | 1009616.690 | ug/L | 7827.812 |
| | 52 | Cr | 100.000000 | 1.081 | 713480.844 | ug/L | 12492.923 |
| | 55 | Mn | 100.000000 | 1.415 | 1124560.798 | ug/L | 2515.164 |
| | 54 | Fe | 5100.000000 | 1.192 | 2879887.897 | ug/L | 71575.950 |
| | 57 | Fe | 5100.000000 | 0.950 | 1186654.150 | ug/L | 7885.234 |
| | 59 | Co | 100.000000 | 1.071 | 888968.353 | ug/L | 134.668 |
| | 60 | Ni | 100.000000 | 1.102 | 185927.199 | ug/L | 333.130 |
| | 65 | Cu | 100.000000 | 1.354 | 190403.982 | ug/L | 113.236 |
| | 75 | As | 100.000000 | 1.397 | 181859.650 | ug/L | 13228.025 |
| | 82 | Se | 100.000000 | 0.385 | 17518.366 | ug/L | 954.303 |
| | 97 | Mo | 200.000000 | 0.944 | 313492.969 | ug/L | 53.667 |
| > | 72 | Ge-1 | | | 1008090.984 | ug/L | 1015196.027 |
| | 107 | Ag | 50.000000 | 2.326 | 390413.102 | ug/L | 58.334 |
| | 111 | Cd | 100.000000 | 2.044 | 168899.433 | ug/L | 53.232 |
| | 121 | Sb | 50.000000 | 0.429 | 279733.130 | ug/L | 283.673 |
| | 135 | Ba | 100.000000 | 1.542 | 178535.840 | ug/L | 78.667 |
| > | 115 | In-1 | | | 1108438.225 | ug/L | 1130459.784 |
| | 208 | Pb | 100.000000 | 1.569 | 2497943.253 | ug/L | 586.677 |
| > | 169 | Tm-1 | | | 957398.403 | ug/L | 983155.379 |
| | 50 | Cr | 100.000000 | 0.921 | 17146.766 | ug/L | -76.253 |
| | 53 | Cr | 100.000000 | 2.620 | 45752.639 | ug/L | 14440.739 |
| | 61 | Ni | 100.000000 | 1.191 | 4018.550 | ug/L | 972.876 |
| | 63 | Cu | 100.000000 | 0.956 | 142853.794 | ug/L | 88.668 |
| | 76 | Se | 100.000000 | 19.912 | -129562.364 | ug/L | -133614.027 |
| | 77 | Se | 100.000000 | 3.101 | 19365.607 | ug/L | 5765.162 |
| | 78 | Se | 100.000000 | 2.102 | 56138.386 | ug/L | 14590.878 |
| | 79 | Br | 100.000000 | 974.413 | 86100.163 | ug/L | 86878.509 |
| > | 72 | Ge | | | 1008090.984 | ug/L | 1015196.027 |
| | 108 | Cd | 100.000000 | 1.331 | 11462.712 | ug/L | 9.384 |
| | 114 | Cd | 100.000000 | 1.815 | 408662.240 | ug/L | 160.939 |
| | 109 | Ag | 50.000000 | 1.648 | 135330.735 | ug/L | 24.667 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 115 | In | | | 1108438.225 | ug/L | 1130459.784 |
| 208 | 207.977 | 100.000000 | 1.463 | 1290742.413 | ug/L | 297.674 |
| 207 | Pb | 100.000000 | 1.454 | 524508.023 | ug/L | 124.335 |
| 206 | Pb | 100.000000 | 1.920 | 682692.816 | ug/L | 164.669 |
| 169 | Tm | | | 957398.403 | ug/L | 983155.379 |

## Internal Standard Recoveries

| Analyte | Mass | Int Std % Recovery |
|---|---|---|
| Sc | 45 | |
| Li-1 | 6 | |
| Be | 9 | |
| Al | 27 | |
| Ca | 44 | |
| Cr | 52 | |
| Mn | 55 | |
| Fe | 54 | |
| Fe | 57 | |
| Co | 59 | |
| Ni | 60 | |
| Cu | 65 | |
| As | 75 | |
| Se | 82 | |
| Mo | 97 | |
| Ge-1 | 72 | |
| Ag | 107 | |
| Cd | 111 | |
| Sb | 121 | |
| Ba | 135 | |
| In-1 | 115 | |
| Pb | 208 | |
| Tm-1 | 169 | |
| Cr | 50 | |
| Cr | 53 | |
| Ni | 61 | |
| Cu | 63 | |
| Se | 76 | |
| Se | 77 | |
| Se | 78 | |
| Br | 79 | |
| Ge | 72 | |
| Cd | 108 | |
| Cd | 114 | |
| Ag | 109 | |
| In | 115 | |
| 207.977 | 208 | |
| Pb | 207 | |
| Pb | 206 | |
| Tm | 169 | |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: ICV**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:06:32
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\ICV .007
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 3
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 988541.732 | ug/L | 975119.936 |
| > | 6 | Li-1 | | | 712840.786 | ug/L | 674312.754 |
| | 9 | Be | 81.442688 | 0.851 | 24653.670 | ug/L | 4.667 |
| | 27 | Al | 827.609454 | 0.939 | 3630940.696 | ug/L | 61494.391 |
| | 44 | Ca | 838.152630 | 0.704 | 171781.170 | ug/L | 7827.812 |
| | 52 | Cr | 80.642573 | 1.138 | 575657.118 | ug/L | 12492.923 |
| | 55 | Mn | 81.163158 | 1.027 | 909848.221 | ug/L | 2515.164 |
| | 54 | Fe | 825.839483 | 0.524 | 523995.750 | ug/L | 71575.950 |
| | 57 | Fe | 815.489934 | 0.573 | 195606.471 | ug/L | 7885.234 |
| | 59 | Co | 80.963798 | 0.567 | 717157.465 | ug/L | 134.668 |
| | 60 | Ni | 81.106188 | 0.588 | 150315.831 | ug/L | 333.130 |
| | 65 | Cu | 81.075916 | 0.902 | 153831.114 | ug/L | 113.236 |
| | 75 | As | 81.449382 | 0.656 | 150015.787 | ug/L | 13228.025 |
| | 82 | Se | 82.776970 | 1.503 | 14609.234 | ug/L | 954.303 |
| | 97 | Mo | 79.497026 | 0.826 | 124183.382 | ug/L | 53.667 |
| > | 72 | Ge-1 | | | 1004434.063 | ug/L | 1015196.027 |
| | 107 | Ag | 40.342612 | 0.360 | 315243.638 | ug/L | 58.334 |
| | 111 | Cd | 81.960525 | 0.730 | 138535.059 | ug/L | 53.232 |
| | 121 | Sb | 39.685434 | 2.365 | 222154.593 | ug/L | 283.673 |
| | 135 | Ba | 79.748004 | 0.347 | 142489.829 | ug/L | 78.667 |
| > | 115 | In-1 | | | 1109089.091 | ug/L | 1130459.784 |
| | 208 | Pb | 80.313609 | 0.679 | 2015963.333 | ug/L | 586.677 |
| > | 169 | Tm-1 | | | 961880.171 | ug/L | 983155.379 |
| | 50 | Cr | 69.775885 | 1.327 | 11896.723 | ug/L | -76.253 |
| | 53 | Cr | 74.657336 | 1.253 | 37661.271 | ug/L | 14440.739 |
| | 61 | Ni | 78.826595 | 5.248 | 3360.486 | ug/L | 972.876 |
| | 63 | Cu | 80.732460 | 0.162 | 114932.533 | ug/L | 88.668 |
| | 76 | Se | 85.739633 | 20.843 | -129537.478 | ug/L | -133614.027 |
| | 77 | Se | 71.518533 | 1.692 | 15427.084 | ug/L | 5765.162 |
| | 78 | Se | 81.230526 | 1.029 | 48146.572 | ug/L | 14590.878 |
| | 79 | Br | 25338.366846 | 0.450 | 45355.225 | ug/L | 86878.509 |
| > | 72 | Ge | | | 1004434.063 | ug/L | 1015196.027 |
| | 108 | Cd | 80.511497 | 1.352 | 9236.003 | ug/L | 9.384 |
| | 114 | Cd | 81.277822 | 0.803 | 332400.768 | ug/L | 160.939 |
| | 109 | Ag | 40.644685 | 0.253 | 110091.904 | ug/L | 24.667 |

| | | | | | | |
|---|---|---|---|---|---|---|
| \|> | 115 In | | | 1109089.091 | ug/L | 1130459.784 |
| ⌈ | 208 207.977 | 82.066359 | 0.971 | 1064405.822 | ug/L | 297.674 |
| \| | 207 Pb | 84.313973 | 0.135 | 444379.568 | ug/L | 124.335 |
| \| | 206 Pb | 73.926724 | 0.755 | 507177.943 | ug/L | 164.669 |
| \|> | 169 Tm | | | 961880.171 | ug/L | 983155.379 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | 105.714 |
| ⌊ | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 98.940 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| \|> | In-1 | 115 | 98.110 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 97.836 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| \|> | Ge | 72 | 98.940 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| \|> | In | 115 | 98.110 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 97.836 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: ICB**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:10:36
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\ICB.008
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 997966.113 | ug/L | 975119.936 |
| > | 6 | Li-1 | | | 727227.159 | ug/L | 674312.754 |
| | 9 | Be | -0.004416 | 112.742 | 3.667 | ug/L | 4.667 |
| | 27 | Al | 1.137973 | 17.876 | 66017.348 | ug/L | 61494.391 |
| | 44 | Ca | 4.389552 | 16.193 | 8639.195 | ug/L | 7827.812 |
| | 52 | Cr | 0.265586 | 10.200 | 14273.658 | ug/L | 12492.923 |
| | 55 | Mn | 0.003689 | 46.023 | 2540.174 | ug/L | 2515.164 |
| | 54 | Fe | 3.081213 | 31.186 | 72802.774 | ug/L | 71575.950 |
| | 57 | Fe | 0.219715 | 185.570 | 7884.134 | ug/L | 7885.234 |
| | 59 | Co | 0.005573 | 18.959 | 183.336 | ug/L | 134.668 |
| | 60 | Ni | -0.020190 | 63.984 | 293.360 | ug/L | 333.130 |
| | 65 | Cu | 0.014410 | 56.481 | 139.925 | ug/L | 113.236 |
| | 75 | As | 0.164530 | 115.982 | 13418.546 | ug/L | 13228.025 |
| | 82 | Se | 0.301099 | 60.904 | 997.843 | ug/L | 954.303 |
| | 97 | Mo | 0.124954 | 17.707 | 249.338 | ug/L | 53.667 |
| > | 72 | Ge-1 | | | 1008546.807 | ug/L | 1015196.027 |
| | 107 | Ag | 0.004305 | 54.755 | 91.334 | ug/L | 58.334 |
| | 111 | Cd | 0.004714 | 101.303 | 60.494 | ug/L | 53.232 |
| | 121 | Sb | 0.278583 | 22.074 | 1846.274 | ug/L | 283.673 |
| | 135 | Ba | 0.006754 | 84.181 | 89.667 | ug/L | 78.667 |
| > | 115 | In-1 | | | 1114587.483 | ug/L | 1130459.784 |
| | 208 | Pb | 0.004320 | 27.219 | 682.681 | ug/L | 586.677 |
| > | 169 | Tm-1 | | | 962250.097 | ug/L | 983155.379 |
| | 50 | Cr | -0.205096 | 14.712 | -111.082 | ug/L | -76.253 |
| | 53 | Cr | 3.627709 | 36.846 | 15485.599 | ug/L | 14440.739 |
| | 61 | Ni | 0.065014 | 1323.821 | 968.540 | ug/L | 972.876 |
| | 63 | Cu | 0.000857 | 649.732 | 89.335 | ug/L | 88.668 |
| | 76 | Se | -43.295498 | 35.568 | -134088.702 | ug/L | -133614.027 |
| | 77 | Se | 0.549268 | 130.481 | 5802.518 | ug/L | 5765.162 |
| | 78 | Se | -0.392742 | 97.421 | 14331.121 | ug/L | 14590.878 |
| | 79 | Br | 4757.728871 | 17.180 | 78649.109 | ug/L | 86878.509 |
| > | 72 | Ge | | | 1008546.807 | ug/L | 1015196.027 |
| | 108 | Cd | 0.022326 | 70.185 | 11.815 | ug/L | 9.384 |
| | 114 | Cd | -0.002074 | 76.255 | 150.159 | ug/L | 160.939 |
| | 109 | Ag | 0.001476 | 144.290 | 28.334 | ug/L | 24.667 |

| | | | | | | |
|---|---|---|---|---|---|---|
| \|> | 115 In | | | 1114587.483 | ug/L | 1130459.784 |
| ⌈ | 208 207.977 | 0.005168 | 35.184 | 358.343 | ug/L | 297.674 |
| \| | 207 Pb | 0.005115 | 8.480 | 148.668 | ug/L | 124.335 |
| \| | 206 Pb | 0.002105 | 54.911 | 175.669 | ug/L | 164.669 |
| \|> | 169 Tm | | | 962250.097 | ug/L | 983155.379 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | 107.847 |
| \| | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 99.345 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| \|> | In-1 | 115 | 98.596 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 97.874 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| \|> | Ge | 72 | 99.345 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| \|> | In | 115 | 98.596 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 97.874 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: LLSTD1**
Sample Description: LLSTD@10X
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:16:31
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\LLSTD1.009
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 71
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 998291.961 | ug/L | 975119.936 |
| > | 6 | Li-1 | | | 734609.107 | ug/L | 674312.754 |
| | 9 | Be | 1.065395 | 7.016 | 337.342 | ug/L | 4.667 |
| | 27 | Al | 39.623235 | 1.142 | 233373.606 | ug/L | 61494.391 |
| | 44 | Ca | 60.284435 | 2.277 | 19678.717 | ug/L | 7827.812 |
| | 52 | Cr | 1.325949 | 1.727 | 21772.519 | ug/L | 12492.923 |
| | 55 | Mn | 0.932519 | 0.874 | 13003.941 | ug/L | 2515.164 |
| | 54 | Fe | 50.389065 | 3.775 | 99149.456 | ug/L | 71575.950 |
| | 57 | Fe | 52.369656 | 1.587 | 20000.239 | ug/L | 7885.234 |
| | 59 | Co | 1.037098 | 1.125 | 9382.913 | ug/L | 134.668 |
| | 60 | Ni | 0.982215 | 1.199 | 2160.795 | ug/L | 333.130 |
| | 65 | Cu | 1.090997 | 0.781 | 2195.730 | ug/L | 113.236 |
| | 75 | As | 1.178090 | 19.927 | 15171.697 | ug/L | 13228.025 |
| | 82 | Se | 1.309316 | 3.748 | 1168.368 | ug/L | 954.303 |
| | 97 | Mo | 1.029491 | 1.559 | 1672.220 | ug/L | 53.667 |
| > | 72 | Ge-1 | | | 1011355.798 | ug/L | 1015196.027 |
| | 107 | Ag | 0.510804 | 1.806 | 4080.308 | ug/L | 58.334 |
| | 111 | Cd | 1.002728 | 1.617 | 1760.485 | ug/L | 53.232 |
| | 121 | Sb | 0.554371 | 1.707 | 3405.244 | ug/L | 283.673 |
| | 135 | Ba | 1.006518 | 1.579 | 1889.614 | ug/L | 78.667 |
| > | 115 | In-1 | | | 1117876.849 | ug/L | 1130459.784 |
| | 208 | Pb | 1.018714 | 0.697 | 26508.987 | ug/L | 586.677 |
| > | 169 | Tm-1 | | | 975558.549 | ug/L | 983155.379 |
| | 50 | Cr | 1.422151 | 42.413 | 169.753 | ug/L | -76.253 |
| | 53 | Cr | 6.644872 | 14.025 | 16480.889 | ug/L | 14440.739 |
| | 61 | Ni | 2.079123 | 157.753 | 1032.903 | ug/L | 972.876 |
| | 63 | Cu | 1.062425 | 3.770 | 1610.237 | ug/L | 88.668 |
| | 76 | Se | -15.711912 | 159.719 | -133600.217 | ug/L | -133614.027 |
| | 77 | Se | 3.918984 | 12.123 | 6279.835 | ug/L | 5765.162 |
| | 78 | Se | 0.978084 | 47.321 | 14944.007 | ug/L | 14590.878 |
| | 79 | Br | -998.263690 | 53.792 | 88162.140 | ug/L | 86878.509 |
| > | 72 | Ge | | | 1011355.798 | ug/L | 1015196.027 |
| | 108 | Cd | 1.004534 | 11.386 | 125.323 | ug/L | 9.384 |
| | 114 | Cd | 0.995493 | 2.443 | 4261.249 | ug/L | 160.939 |
| | 109 | Ag | 0.520031 | 1.656 | 1443.792 | ug/L | 24.667 |

| | | | | | | |
|---|---|---|---|---|---|---|
| ⌊> | 115 In | | | 1117876.849 | ug/L | 1130459.784 |
| ⌈ | 208 207.977 | 1.048715 | 0.903 | 14086.909 | ug/L | 297.674 |
| \| | 207 Pb | 1.076530 | 1.344 | 5876.379 | ug/L | 124.335 |
| \| | 206 Pb | 0.917580 | 1.864 | 6545.698 | ug/L | 164.669 |
| ⌊> | 169 Tm | | | 975558.549 | ug/L | 983155.379 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | 108.942 |
| ⌊ | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| ⌊> | Ge-1 | 72 | 99.622 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| ⌊> | In-1 | 115 | 98.887 |
| ⌈ | Pb | 208 | |
| ⌊> | Tm-1 | 169 | 99.227 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| ⌊> | Ge | 72 | 99.622 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| ⌊> | In | 115 | 98.887 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| ⌊> | Tm | 169 | 99.227 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: LLSTD2**
Sample Description: LLSTD@5X
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:20:35
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\LLSTD2.010
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 72
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1008024.967 | ug/L | 975119.936 |
| > | 6 | Li-1 | | | 734198.885 | ug/L | 674312.754 |
| | 9 | Be | 2.041130 | 6.069 | 641.699 | ug/L | 4.667 |
| | 27 | Al | 90.233766 | 0.276 | 458227.990 | ug/L | 61494.391 |
| | 44 | Ca | 104.539610 | 0.486 | 28714.641 | ug/L | 7827.812 |
| | 52 | Cr | 2.368742 | 2.716 | 29427.894 | ug/L | 12492.923 |
| | 55 | Mn | 1.938277 | 0.416 | 24595.105 | ug/L | 2515.164 |
| | 54 | Fe | 95.940222 | 0.764 | 125691.422 | ug/L | 71575.950 |
| | 57 | Fe | 101.312961 | 2.297 | 31697.424 | ug/L | 7885.234 |
| | 59 | Co | 2.020622 | 0.665 | 18354.098 | ug/L | 134.668 |
| | 60 | Ni | 1.904630 | 1.247 | 3921.318 | ug/L | 333.130 |
| | 65 | Cu | 2.004096 | 2.483 | 3982.301 | ug/L | 113.236 |
| | 75 | As | 2.048715 | 17.599 | 16830.964 | ug/L | 13228.025 |
| | 82 | Se | 2.410335 | 10.198 | 1366.294 | ug/L | 954.303 |
| | 97 | Mo | 1.945269 | 1.147 | 3146.444 | ug/L | 53.667 |
| > | 72 | Ge-1 | | | 1022532.973 | ug/L | 1015196.027 |
| | 107 | Ag | 1.016954 | 0.748 | 8089.472 | ug/L | 58.334 |
| | 111 | Cd | 2.072591 | 2.348 | 3592.363 | ug/L | 53.232 |
| | 121 | Sb | 1.035664 | 1.641 | 6135.958 | ug/L | 283.673 |
| | 135 | Ba | 2.001973 | 0.836 | 3691.737 | ug/L | 78.667 |
| > | 115 | In-1 | | | 1121080.094 | ug/L | 1130459.784 |
| | 208 | Pb | 1.991529 | 0.327 | 51671.722 | ug/L | 586.677 |
| > | 169 | Tm-1 | | | 983222.092 | ug/L | 983155.379 |
| | 50 | Cr | 2.880990 | 11.168 | 426.557 | ug/L | -76.253 |
| | 53 | Cr | 8.875311 | 13.189 | 17374.522 | ug/L | 14440.739 |
| | 61 | Ni | 2.999204 | 59.146 | 1072.920 | ug/L | 972.876 |
| | 63 | Cu | 2.014338 | 1.756 | 3006.321 | ug/L | 88.668 |
| | 76 | Se | -26.400503 | 33.360 | -135414.650 | ug/L | -133614.027 |
| | 77 | Se | 6.654949 | 15.523 | 6727.489 | ug/L | 5765.162 |
| | 78 | Se | 1.711748 | 12.853 | 15419.519 | ug/L | 14590.878 |
| | 79 | Br | -2427.326405 | 9.017 | 91466.174 | ug/L | 86878.509 |
| > | 72 | Ge | | | 1022532.973 | ug/L | 1015196.027 |
| | 108 | Cd | 1.905341 | 4.101 | 230.054 | ug/L | 9.384 |
| | 114 | Cd | 1.966994 | 0.784 | 8287.734 | ug/L | 160.939 |
| | 109 | Ag | 1.005820 | 2.189 | 2777.363 | ug/L | 24.667 |

| | | | | | | |
|---|---|---|---|---|---|---|
| > | 115 In | | | 1121080.094 | ug/L | 1130459.784 |
| | 208 207.977 | 2.054167 | 0.364 | 27524.734 | ug/L | 297.674 |
| | 207 Pb | 2.068678 | 1.305 | 11265.964 | ug/L | 124.335 |
| | 206 Pb | 1.813840 | 1.006 | 12881.024 | ug/L | 164.669 |
| > | 169 Tm | | | 983222.092 | ug/L | 983155.379 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| > | Li-1 | 6 | 108.881 |
| | Be | 9 | |
| | Al | 27 | |
| | Ca | 44 | |
| | Cr | 52 | |
| | Mn | 55 | |
| | Fe | 54 | |
| | Fe | 57 | |
| | Co | 59 | |
| | Ni | 60 | |
| | Cu | 65 | |
| | As | 75 | |
| | Se | 82 | |
| | Mo | 97 | |
| > | Ge-1 | 72 | 100.723 |
| | Ag | 107 | |
| | Cd | 111 | |
| | Sb | 121 | |
| | Ba | 135 | |
| > | In-1 | 115 | 99.170 |
| | Pb | 208 | |
| > | Tm-1 | 169 | 100.007 |
| | Cr | 50 | |
| | Cr | 53 | |
| | Ni | 61 | |
| | Cu | 63 | |
| | Se | 76 | |
| | Se | 77 | |
| | Se | 78 | |
| | Br | 79 | |
| > | Ge | 72 | 100.723 |
| | Cd | 108 | |
| | Cd | 114 | |
| | Ag | 109 | |
| > | In | 115 | 99.170 |
| | 207.977 | 208 | |
| | Pb | 207 | |
| | Pb | 206 | |
| > | Tm | 169 | 100.007 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: ICSA**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:30:12
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\ICSA .011
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 2
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 839501.497 | ug/L | 975119.936 |
| > | 6 | Li-1 | | | 707133.142 | ug/L | 674312.754 |
| | 9 | Be | 0.066031 | 31.929 | 24.667 | ug/L | 4.667 |
| | 27 | Al | 103254.212516 | 0.737 | 392203484.087 | ug/L | 61494.391 |
| | 44 | Ca | 95414.618519 | 0.451 | 16448249.470 | ug/L | 7827.812 |
| | 52 | Cr | 2.350470 | 0.275 | 25338.351 | ug/L | 12492.923 |
| | 55 | Mn | 6.485136 | 0.573 | 66029.180 | ug/L | 2515.164 |
| | 54 | Fe | 96669.864706 | 0.419 | 46766524.408 | ug/L | 71575.950 |
| | 57 | Fe | 95441.361271 | 0.455 | 19358513.031 | ug/L | 7885.234 |
| | 59 | Co | 1.707392 | 0.813 | 13430.158 | ug/L | 134.668 |
| | 60 | Ni | 1.809783 | 2.769 | 3236.659 | ug/L | 333.130 |
| | 65 | Cu | -0.844363 | 5.419 | -1310.609 | ug/L | 113.236 |
| | 75 | As | 0.536876 | 57.018 | 12320.502 | ug/L | 13228.025 |
| | 82 | Se | -1.820801 | 65.380 | 565.313 | ug/L | 954.303 |
| | 97 | Mo | 2037.109498 | 0.449 | 2800616.540 | ug/L | 53.667 |
| > | 72 | Ge-1 | | | 884301.530 | ug/L | 1015196.027 |
| | 107 | Ag | 0.157174 | 2.871 | 1052.087 | ug/L | 58.334 |
| | 111 | Cd | 0.917488 | 8.034 | 1311.942 | ug/L | 53.232 |
| | 121 | Sb | 0.229266 | 2.687 | 1277.462 | ug/L | 283.673 |
| | 135 | Ba | 2.979640 | 2.866 | 4419.201 | ug/L | 78.667 |
| > | 115 | In-1 | | | 907934.096 | ug/L | 1130459.784 |
| | 208 | Pb | 0.493463 | 1.202 | 11326.938 | ug/L | 586.677 |
| > | 169 | Tm-1 | | | 840850.610 | ug/L | 983155.379 |
| | 50 | Cr | 295.606084 | 1.554 | 44599.521 | ug/L | -76.253 |
| | 53 | Cr | 15.899621 | 1.836 | 16960.048 | ug/L | 14440.739 |
| | 61 | Ni | 27.615672 | 11.449 | 1586.221 | ug/L | 972.876 |
| | 63 | Cu | 3.493879 | 1.853 | 4453.026 | ug/L | 88.668 |
| | 76 | Se | -195.360669 | 8.648 | -121734.816 | ug/L | -133614.027 |
| | 77 | Se | 45.712951 | 3.814 | 10494.391 | ug/L | 5765.162 |
| | 78 | Se | 3.145882 | 16.041 | 13859.992 | ug/L | 14590.878 |
| | 79 | Br | -2602010.915907 | 3.324 | 3747525.741 | ug/L | 86878.509 |
| > | 72 | Ge | | | 884301.530 | ug/L | 1015196.027 |
| | 108 | Cd | 55.125487 | 4.534 | 5179.080 | ug/L | 9.384 |
| | 114 | Cd | 3.505795 | 2.651 | 11861.134 | ug/L | 160.939 |
| | 109 | Ag | 0.125806 | 5.817 | 298.686 | ug/L | 24.667 |

| | | | | | | |
|---|---|---|---|---|---|---|
| > | 115 In | | | 907934.096 | ug/L | 1130459.784 |
| ⌈ | 208 207.977 | 0.505068 | 1.745 | 5979.475 | ug/L | 297.674 |
| \| | 207 Pb | 0.514400 | 1.726 | 2475.815 | ug/L | 124.335 |
| \| | 206 Pb | 0.455437 | 2.495 | 2871.648 | ug/L | 164.669 |
| > | 169 Tm | | | 840850.610 | ug/L | 983155.379 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| > | Li-1 | 6 | 104.867 |
| ⌊ | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| > | Ge-1 | 72 | 87.106 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| > | In-1 | 115 | 80.315 |
| ⌈ | Pb | 208 | |
| > | Tm-1 | 169 | 85.526 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| > | Ge | 72 | 87.106 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| > | In | 115 | 80.315 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| > | Tm | 169 | 85.526 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: ICSAB**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:34:15
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\ICSAB.012
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 1
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 875092.550 | ug/L | 975119.936 |
| > | 6 | Li-1 | | | 741225.074 | ug/L | 674312.754 |
| | 9 | Be | 100.861321 | 0.848 | 31747.333 | ug/L | 4.667 |
| | 27 | Al | 100798.315151 | 0.397 | 398322247.874 | ug/L | 61494.391 |
| | 44 | Ca | 93902.340148 | 0.129 | 16839764.638 | ug/L | 7827.812 |
| | 52 | Cr | 100.842532 | 0.797 | 656518.044 | ug/L | 12492.923 |
| | 55 | Mn | 104.938643 | 0.669 | 1076868.303 | ug/L | 2515.164 |
| | 54 | Fe | 95687.156063 | 0.532 | 48158400.829 | ug/L | 71575.950 |
| | 57 | Fe | 94277.512202 | 0.638 | 19893681.492 | ug/L | 7885.234 |
| | 59 | Co | 95.996484 | 0.791 | 778808.011 | ug/L | 134.668 |
| | 60 | Ni | 93.285392 | 0.761 | 158302.202 | ug/L | 333.130 |
| | 65 | Cu | 87.605768 | 0.852 | 152241.861 | ug/L | 113.236 |
| | 75 | As | 101.149220 | 0.956 | 167737.982 | ug/L | 13228.025 |
| | 82 | Se | 103.483375 | 1.951 | 16513.998 | ug/L | 954.303 |
| | 97 | Mo | 2115.475325 | 0.728 | 3025650.547 | ug/L | 53.667 |
| > | 72 | Ge-1 | | | 919914.383 | ug/L | 1015196.027 |
| | 107 | Ag | 48.856090 | 0.290 | 321775.412 | ug/L | 58.334 |
| | 111 | Cd | 100.979317 | 0.751 | 143859.548 | ug/L | 53.232 |
| | 121 | Sb | 52.867196 | 0.398 | 249427.898 | ug/L | 283.673 |
| | 135 | Ba | 110.755104 | 0.397 | 166773.896 | ug/L | 78.667 |
| > | 115 | In-1 | | | 934776.687 | ug/L | 1130459.784 |
| | 208 | Pb | 102.541925 | 0.594 | 2352423.020 | ug/L | 586.677 |
| > | 169 | Tm-1 | | | 879102.129 | ug/L | 983155.379 |
| | 50 | Cr | 372.135081 | 1.934 | 58421.061 | ug/L | -76.253 |
| | 53 | Cr | 111.185553 | 1.141 | 44961.055 | ug/L | 14440.739 |
| | 61 | Ni | 119.415863 | 1.722 | 4207.893 | ug/L | 972.876 |
| | 63 | Cu | 91.209264 | 0.809 | 118915.283 | ug/L | 88.668 |
| | 76 | Se | -97.197458 | 42.484 | -123836.763 | ug/L | -133614.027 |
| | 77 | Se | 144.238652 | 0.696 | 23182.189 | ug/L | 5765.162 |
| | 78 | Se | 104.960504 | 1.647 | 53120.577 | ug/L | 14590.878 |
| | 79 | Br | -59251.566281 | 6.732 | 165665.775 | ug/L | 86878.509 |
| > | 72 | Ge | | | 919914.383 | ug/L | 1015196.027 |
| | 108 | Cd | 160.283259 | 0.559 | 15490.449 | ug/L | 9.384 |
| | 114 | Cd | 101.874257 | 0.658 | 351148.815 | ug/L | 160.939 |
| | 109 | Ag | 48.403391 | 0.342 | 110500.334 | ug/L | 24.667 |

| | | | | | | |
|---|---|---|---|---|---|---|
| \|> | 115 In | | | 934776.687 | ug/L | 1130459.784 |
| ⌈ | 208 207.977 | 102.587849 | 0.383 | 1216051.655 | ug/L | 297.674 |
| \| | 207 Pb | 102.862381 | 0.917 | 495495.404 | ug/L | 124.335 |
| \| | 206 Pb | 102.208918 | 0.797 | 640875.961 | ug/L | 164.669 |
| \|> | 169 Tm | | | 879102.129 | ug/L | 983155.379 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | 109.923 |
| \| | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 90.614 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| \|> | In-1 | 115 | 82.690 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 89.416 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| \|> | Ge | 72 | 90.614 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| \|> | In | 115 | 82.690 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 89.416 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: Rinse**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:41:59
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\Rinse.013
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 6
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1130580.669 | ug/L | 975119.936 |
| > | 6 | Li-1 | | | 858083.983 | ug/L | 674312.754 |
| | 9 | Be | -0.006243 | 91.427 | 3.667 | ug/L | 4.667 |
| | 27 | Al | 93.984866 | 1.966 | 513480.934 | ug/L | 61494.391 |
| | 44 | Ca | 13.059298 | 1.967 | 11343.434 | ug/L | 7827.812 |
| | 52 | Cr | 1.283743 | 2.051 | 23486.931 | ug/L | 12492.923 |
| | 55 | Mn | 0.490672 | 1.228 | 8782.056 | ug/L | 2515.164 |
| | 54 | Fe | 20.693990 | 4.948 | 90489.925 | ug/L | 71575.950 |
| | 57 | Fe | 13.576873 | 4.846 | 12034.830 | ug/L | 7885.234 |
| | 59 | Co | 0.000509 | 167.963 | 151.668 | ug/L | 134.668 |
| | 60 | Ni | 0.313796 | 4.952 | 1001.989 | ug/L | 333.130 |
| | 65 | Cu | 0.136913 | 2.204 | 409.243 | ug/L | 113.236 |
| | 75 | As | 0.491377 | 21.742 | 15322.007 | ug/L | 13228.025 |
| | 82 | Se | 0.054428 | 288.037 | 1049.568 | ug/L | 954.303 |
| | 97 | Mo | 0.415573 | 5.958 | 773.047 | ug/L | 53.667 |
| > | 72 | Ge-1 | | | 1106109.284 | ug/L | 1015196.027 |
| | 107 | Ag | 0.000651 | 220.982 | 68.334 | ug/L | 58.334 |
| | 111 | Cd | -0.000956 | 611.139 | 55.502 | ug/L | 53.232 |
| | 121 | Sb | -0.008669 | 21.711 | 252.005 | ug/L | 283.673 |
| | 135 | Ba | 0.017211 | 7.319 | 118.334 | ug/L | 78.667 |
| > | 115 | In-1 | | | 1216146.028 | ug/L | 1130459.784 |
| | 208 | Pb | 0.007246 | 26.303 | 852.356 | ug/L | 586.677 |
| > | 169 | Tm-1 | | | 1084794.868 | ug/L | 983155.379 |
| | 50 | Cr | -0.351839 | 7.292 | -149.557 | ug/L | -76.253 |
| | 53 | Cr | 29.243991 | 3.522 | 25815.141 | ug/L | 14440.739 |
| | 61 | Ni | 10.229588 | 14.822 | 1402.767 | ug/L | 972.876 |
| | 63 | Cu | 0.130066 | 6.558 | 300.353 | ug/L | 88.668 |
| | 76 | Se | 4.371849 | 706.487 | -145426.756 | ug/L | -133614.027 |
| | 77 | Se | 32.629716 | 1.351 | 11166.187 | ug/L | 5765.162 |
| | 78 | Se | 2.234456 | 12.927 | 16918.687 | ug/L | 14590.878 |
| | 79 | Br | -36064.929604 | 5.542 | 158310.124 | ug/L | 86878.509 |
| > | 72 | Ge | | | 1106109.284 | ug/L | 1015196.027 |
| | 108 | Cd | -0.042099 | 21.484 | 4.804 | ug/L | 9.384 |
| | 114 | Cd | -0.011105 | 17.354 | 123.363 | ug/L | 160.939 |
| | 109 | Ag | -0.001078 | 126.566 | 23.333 | ug/L | 24.667 |

| | | | | | | |
|---|---|---|---|---|---|---|
| L> | 115 In | | | 1216146.028 | ug/L | 1130459.784 |
| ⌈ | 208 207.977 | 0.008042 | 27.515 | 446.016 | ug/L | 297.674 |
| \| | 207 Pb | 0.009955 | 30.677 | 196.336 | ug/L | 124.335 |
| \| | 206 Pb | 0.003662 | 101.423 | 210.004 | ug/L | 164.669 |
| L> | 169 Tm | | | 1084794.868 | ug/L | 983155.379 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | 127.253 |
| L | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| L> | Ge-1 | 72 | 108.955 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| L> | In-1 | 115 | 107.580 |
| ⌈ | Pb | 208 | |
| L> | Tm-1 | 169 | 110.338 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| L> | Ge | 72 | 108.955 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| L> | In | 115 | 107.580 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| L> | Tm | 169 | 110.338 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 1**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:49:44
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 1.014
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1099250.930 | ug/L | 975119.936 |
| > | 6 | Li-1 | | | 866238.098 | ug/L | 674312.754 |
| | 9 | Be | 103.551842 | 0.870 | 38090.660 | ug/L | 4.667 |
| | 27 | Al | 5317.380846 | 0.906 | 25229126.376 | ug/L | 61494.391 |
| | 44 | Ca | 5152.790863 | 0.577 | 1114793.354 | ug/L | 7827.812 |
| | 52 | Cr | 100.395867 | 1.693 | 782812.980 | ug/L | 12492.923 |
| | 55 | Mn | 99.082648 | 1.524 | 1217842.261 | ug/L | 2515.164 |
| | 54 | Fe | 5038.575752 | 1.972 | 3110442.861 | ug/L | 71575.950 |
| | 57 | Fe | 5043.355544 | 1.533 | 1282615.848 | ug/L | 7885.234 |
| | 59 | Co | 98.377788 | 0.755 | 955888.382 | ug/L | 134.668 |
| | 60 | Ni | 98.615727 | 0.326 | 200421.603 | ug/L | 333.130 |
| | 65 | Cu | 98.510468 | 0.612 | 205016.536 | ug/L | 113.236 |
| | 75 | As | 99.437643 | 0.596 | 197740.049 | ug/L | 13228.025 |
| | 82 | Se | 97.907321 | 0.575 | 18768.475 | ug/L | 954.303 |
| | 97 | Mo | 199.063725 | 1.128 | 341026.752 | ug/L | 53.667 |
| > | 72 | Ge-1 | | | 1101846.988 | ug/L | 1015196.027 |
| | 107 | Ag | 50.373612 | 1.070 | 420217.541 | ug/L | 58.334 |
| | 111 | Cd | 100.183396 | 1.025 | 180767.792 | ug/L | 53.232 |
| | 121 | Sb | 50.917395 | 0.662 | 304291.814 | ug/L | 283.673 |
| | 135 | Ba | 101.638344 | 0.507 | 193860.111 | ug/L | 78.667 |
| > | 115 | In-1 | | | 1184083.713 | ug/L | 1130459.784 |
| | 208 | Pb | 96.386589 | 0.897 | 2682017.781 | ug/L | 586.677 |
| > | 169 | Tm-1 | | | 1066408.213 | ug/L | 983155.379 |
| | 50 | Cr | 101.139364 | 4.096 | 18949.356 | ug/L | -76.253 |
| | 53 | Cr | 112.983474 | 1.322 | 54472.556 | ug/L | 14440.739 |
| | 61 | Ni | 101.192158 | 2.457 | 4432.320 | ug/L | 972.876 |
| | 63 | Cu | 98.218300 | 0.645 | 153360.700 | ug/L | 88.668 |
| | 76 | Se | 90.460522 | 9.177 | -141931.490 | ug/L | -133614.027 |
| | 77 | Se | 114.242339 | 1.357 | 23294.147 | ug/L | 5765.162 |
| | 78 | Se | 97.259246 | 1.527 | 60111.095 | ug/L | 14590.878 |
| | 79 | Br | -3606.870210 | 7.121 | 100638.438 | ug/L | 86878.509 |
| > | 72 | Ge | | | 1101846.988 | ug/L | 1015196.027 |
| | 108 | Cd | 101.451845 | 0.469 | 12422.601 | ug/L | 9.384 |
| | 114 | Cd | 99.410144 | 1.312 | 433985.594 | ug/L | 160.939 |
| | 109 | Ag | 50.092340 | 1.134 | 144839.619 | ug/L | 24.667 |

| | | | | | | |
|---|---|---|---|---|---|---|
| > | 115 In | | | 1184083.713 | ug/L | 1130459.784 |
| | 208 207.977 | 96.131288 | 1.003 | 1382151.024 | ug/L | 297.674 |
| | 207 Pb | 96.888184 | 0.683 | 566086.061 | ug/L | 124.335 |
| | 206 Pb | 96.483902 | 0.892 | 733780.696 | ug/L | 164.669 |
| > | 169 Tm | | | 1066408.213 | ug/L | 983155.379 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| > | Li-1 | 6 | 128.462 |
| | Be | 9 | |
| | Al | 27 | |
| | Ca | 44 | |
| | Cr | 52 | |
| | Mn | 55 | |
| | Fe | 54 | |
| | Fe | 57 | |
| | Co | 59 | |
| | Ni | 60 | |
| | Cu | 65 | |
| | As | 75 | |
| | Se | 82 | |
| | Mo | 97 | |
| > | Ge-1 | 72 | 108.535 |
| | Ag | 107 | |
| | Cd | 111 | |
| | Sb | 121 | |
| | Ba | 135 | |
| > | In-1 | 115 | 104.744 |
| | Pb | 208 | |
| > | Tm-1 | 169 | 108.468 |
| | Cr | 50 | |
| | Cr | 53 | |
| | Ni | 61 | |
| | Cu | 63 | |
| | Se | 76 | |
| | Se | 77 | |
| | Se | 78 | |
| | Br | 79 | |
| > | Ge | 72 | 108.535 |
| | Cd | 108 | |
| | Cd | 114 | |
| | Ag | 109 | |
| > | In | 115 | 104.744 |
| | 207.977 | 208 | |
| | Pb | 207 | |
| | Pb | 206 | |
| > | Tm | 169 | 108.468 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 1**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:53:49
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 1.015
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1106132.928 | ug/L | 975119.936 |
| > | 6 | Li-1 | | | 880851.748 | ug/L | 674312.754 |
| | 9 | Be | -0.002910 | 184.233 | 5.000 | ug/L | 4.667 |
| | 27 | Al | 4.005349 | 13.979 | 86162.732 | ug/L | 61494.391 |
| | 44 | Ca | 6.307493 | 4.531 | 9904.704 | ug/L | 7827.812 |
| | 52 | Cr | 1.148086 | 3.747 | 22477.629 | ug/L | 12492.923 |
| | 55 | Mn | 0.015836 | 28.673 | 2940.012 | ug/L | 2515.164 |
| | 54 | Fe | 12.705354 | 13.645 | 85794.176 | ug/L | 71575.950 |
| | 57 | Fe | 7.500422 | 2.223 | 10510.726 | ug/L | 7885.234 |
| | 59 | Co | 0.008025 | 18.596 | 225.337 | ug/L | 134.668 |
| | 60 | Ni | -0.030685 | 16.416 | 301.030 | ug/L | 333.130 |
| | 65 | Cu | 0.015928 | 38.744 | 156.867 | ug/L | 113.236 |
| | 75 | As | 0.444670 | 47.800 | 15258.224 | ug/L | 13228.025 |
| | 82 | Se | 0.413823 | 64.734 | 1116.599 | ug/L | 954.303 |
| | 97 | Mo | 0.121046 | 5.770 | 267.006 | ug/L | 53.667 |
| > | 72 | Ge-1 | | | 1107889.910 | ug/L | 1015196.027 |
| | 107 | Ag | 0.005959 | 20.924 | 111.668 | ug/L | 58.334 |
| | 111 | Cd | 0.009740 | 33.057 | 73.814 | ug/L | 53.232 |
| | 121 | Sb | -0.009080 | 5.250 | 244.671 | ug/L | 283.673 |
| | 135 | Ba | 0.008833 | 38.166 | 100.001 | ug/L | 78.667 |
| > | 115 | In-1 | | | 1192611.893 | ug/L | 1130459.784 |
| | 208 | Pb | 0.006117 | 31.903 | 804.020 | ug/L | 586.677 |
| > | 169 | Tm-1 | | | 1062879.127 | ug/L | 983155.379 |
| | 50 | Cr | -0.242825 | 34.549 | -129.141 | ug/L | -76.253 |
| | 53 | Cr | 21.649884 | 5.590 | 23232.149 | ug/L | 14440.739 |
| | 61 | Ni | 4.781763 | 35.165 | 1222.329 | ug/L | 972.876 |
| | 63 | Cu | 0.015626 | 29.778 | 121.337 | ug/L | 88.668 |
| | 76 | Se | 1.217938 | 2632.725 | -145779.309 | ug/L | -133614.027 |
| | 77 | Se | 23.331459 | 3.877 | 9789.268 | ug/L | 5765.162 |
| | 78 | Se | 1.948588 | 30.866 | 16813.138 | ug/L | 14590.878 |
| | 79 | Br | 1429.633816 | 65.693 | 92273.968 | ug/L | 86878.509 |
| > | 72 | Ge | | | 1107889.910 | ug/L | 1015196.027 |
| | 108 | Cd | -0.028800 | 154.478 | 6.383 | ug/L | 9.384 |
| | 114 | Cd | -0.003129 | 39.432 | 156.006 | ug/L | 160.939 |
| | 109 | Ag | 0.003216 | 79.964 | 35.334 | ug/L | 24.667 |

| | | | | | | |
|---|---|---|---|---|---|---|
| \|> | 115 In | | | 1192611.893 | ug/L | 1130459.784 |
| ⌈ | 208 207.977 | 0.006590 | 37.234 | 416.347 | ug/L | 297.674 |
| \| | 207 Pb | 0.006800 | 19.314 | 174.002 | ug/L | 124.335 |
| \| | 206 Pb | 0.004697 | 43.718 | 213.670 | ug/L | 164.669 |
| \|> | 169 Tm | | | 1062879.127 | ug/L | 983155.379 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | 130.630 |
| ⌊ | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 109.131 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| \|> | In-1 | 115 | 105.498 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 108.109 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| \|> | Ge | 72 | 109.131 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| \|> | In | 115 | 105.498 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 108.109 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: BLK RECAL**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:53:49
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 1.015
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1106132.928 | ug/L | |
| > | 6 | Li-1 | | | 880851.748 | ug/L | |
| | 9 | Be | | | 5.000 | ug/L | |
| | 27 | Al | | | 86162.732 | ug/L | |
| | 44 | Ca | | | 9904.704 | ug/L | |
| | 52 | Cr | | | 22477.629 | ug/L | |
| | 55 | Mn | | | 2940.012 | ug/L | |
| | 54 | Fe | | | 85794.176 | ug/L | |
| | 57 | Fe | | | 10510.726 | ug/L | |
| | 59 | Co | | | 225.337 | ug/L | |
| | 60 | Ni | | | 301.030 | ug/L | |
| | 65 | Cu | | | 156.867 | ug/L | |
| | 75 | As | | | 15258.224 | ug/L | |
| | 82 | Se | | | 1116.599 | ug/L | |
| | 97 | Mo | | | 267.006 | ug/L | |
| > | 72 | Ge-1 | | | 1107889.910 | ug/L | |
| | 107 | Ag | | | 111.668 | ug/L | |
| | 111 | Cd | | | 73.814 | ug/L | |
| | 121 | Sb | | | 244.671 | ug/L | |
| | 135 | Ba | | | 100.001 | ug/L | |
| > | 115 | In-1 | | | 1192611.893 | ug/L | |
| | 208 | Pb | | | 804.020 | ug/L | |
| > | 169 | Tm-1 | | | 1062879.127 | ug/L | |
| | 50 | Cr | | | -129.141 | ug/L | |
| | 53 | Cr | | | 23232.149 | ug/L | |
| | 61 | Ni | | | 1222.329 | ug/L | |
| | 63 | Cu | | | 121.337 | ug/L | |
| | 76 | Se | | | -145779.309 | ug/L | |
| | 77 | Se | | | 9789.268 | ug/L | |
| | 78 | Se | | | 16813.138 | ug/L | |
| | 79 | Br | | | 92273.968 | ug/L | |
| > | 72 | Ge | | | 1107889.910 | ug/L | |
| | 108 | Cd | | | 6.383 | ug/L | |
| | 114 | Cd | | | 156.006 | ug/L | |
| | 109 | Ag | | | 35.334 | ug/L | |

| | | | |
|---|---|---|---|
| \|> | 115 In | 1192611.893 | ug/L |
| ⌈ | 208 207.977 | 416.347 | ug/L |
| \| | 207 Pb | 174.002 | ug/L |
| \| | 206 Pb | 213.670 | ug/L |
| \|> | 169 Tm | 1062879.127 | ug/L |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | |
| \| | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| \|> | In-1 | 115 | |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| \|> | Ge | 72 | |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| \|> | In | 115 | |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: STD1 RECAL**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:49:44
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 1.014
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1099250.930 | ug/L | 1106132.928 |
| > | 6 | Li-1 | | | 866238.098 | ug/L | 880851.748 |
| | 9 | Be | 100.000000 | 0.870 | 38090.660 | ug/L | 5.000 |
| | 27 | Al | 5100.000000 | 0.906 | 25229126.376 | ug/L | 86162.732 |
| | 44 | Ca | 5100.000000 | 0.577 | 1114793.354 | ug/L | 9904.704 |
| | 52 | Cr | 100.000000 | 1.712 | 782812.980 | ug/L | 22477.629 |
| | 55 | Mn | 100.000000 | 1.524 | 1217842.261 | ug/L | 2940.012 |
| | 54 | Fe | 5100.000000 | 1.977 | 3110442.861 | ug/L | 85794.176 |
| | 57 | Fe | 5100.000000 | 1.535 | 1282615.848 | ug/L | 10510.726 |
| | 59 | Co | 100.000000 | 0.755 | 955888.382 | ug/L | 225.337 |
| | 60 | Ni | 100.000000 | 0.326 | 200421.603 | ug/L | 301.030 |
| | 65 | Cu | 100.000000 | 0.612 | 205016.536 | ug/L | 156.867 |
| | 75 | As | 100.000000 | 0.599 | 197740.049 | ug/L | 15258.224 |
| | 82 | Se | 100.000000 | 0.577 | 18768.475 | ug/L | 1116.599 |
| | 97 | Mo | 200.000000 | 1.129 | 341026.752 | ug/L | 267.006 |
| > | 72 | Ge-1 | | | 1101846.988 | ug/L | 1107889.910 |
| | 107 | Ag | 50.000000 | 1.070 | 420217.541 | ug/L | 111.668 |
| | 111 | Cd | 100.000000 | 1.025 | 180767.792 | ug/L | 73.814 |
| | 121 | Sb | 50.000000 | 0.662 | 304291.814 | ug/L | 244.671 |
| | 135 | Ba | 100.000000 | 0.507 | 193860.111 | ug/L | 100.001 |
| > | 115 | In-1 | | | 1184083.713 | ug/L | 1192611.893 |
| | 208 | Pb | 100.000000 | 0.897 | 2682017.781 | ug/L | 804.020 |
| > | 169 | Tm-1 | | | 1066408.213 | ug/L | 1062879.127 |
| | 50 | Cr | 100.000000 | 4.086 | 18949.356 | ug/L | -129.141 |
| | 53 | Cr | 100.000000 | 1.635 | 54472.556 | ug/L | 23232.149 |
| | 61 | Ni | 100.000000 | 2.579 | 4432.320 | ug/L | 1222.329 |
| | 63 | Cu | 100.000000 | 0.645 | 153360.700 | ug/L | 121.337 |
| | 76 | Se | 100.000000 | 9.280 | -141931.490 | ug/L | -145779.309 |
| | 77 | Se | 100.000000 | 1.705 | 23294.147 | ug/L | 9789.268 |
| | 78 | Se | 100.000000 | 1.558 | 60111.095 | ug/L | 16813.138 |
| | 79 | Br | 100.000000 | 5.094 | 100638.438 | ug/L | 92273.968 |
| > | 72 | Ge | | | 1101846.988 | ug/L | 1107889.910 |
| | 108 | Cd | 100.000000 | 0.468 | 12422.601 | ug/L | 6.383 |
| | 114 | Cd | 100.000000 | 1.312 | 433985.594 | ug/L | 156.006 |
| | 109 | Ag | 50.000000 | 1.135 | 144839.619 | ug/L | 35.334 |

| | | | | | | |
|---|---|---|---|---|---|---|
| > | 115 In | | | 1184083.713 | ug/L | 1192611.893 |
| | 208 207.977 | 100.000000 | 1.003 | 1382151.024 | ug/L | 416.347 |
| | 207 Pb | 100.000000 | 0.683 | 566086.061 | ug/L | 174.002 |
| | 206 Pb | 100.000000 | 0.892 | 733780.696 | ug/L | 213.670 |
| > | 169 Tm | | | 1066408.213 | ug/L | 1062879.127 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| > | Li-1 | 6 | |
| | Be | 9 | |
| | Al | 27 | |
| | Ca | 44 | |
| | Cr | 52 | |
| | Mn | 55 | |
| | Fe | 54 | |
| | Fe | 57 | |
| | Co | 59 | |
| | Ni | 60 | |
| | Cu | 65 | |
| | As | 75 | |
| | Se | 82 | |
| | Mo | 97 | |
| > | Ge-1 | 72 | |
| | Ag | 107 | |
| | Cd | 111 | |
| | Sb | 121 | |
| | Ba | 135 | |
| > | In-1 | 115 | |
| | Pb | 208 | |
| > | Tm-1 | 169 | |
| | Cr | 50 | |
| | Cr | 53 | |
| | Ni | 61 | |
| | Cu | 63 | |
| | Se | 76 | |
| | Se | 77 | |
| | Se | 78 | |
| | Br | 79 | |
| > | Ge | 72 | |
| | Cd | 108 | |
| | Cd | 114 | |
| | Ag | 109 | |
| > | In | 115 | |
| | 207.977 | 208 | |
| | Pb | 207 | |
| | Pb | 206 | |
| > | Tm | 169 | |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 2**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 14:57:54
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 2.016
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1093200.130 | ug/L | 1106132.928 |
| > | 6 | Li-1 | | | 892390.975 | ug/L | 880851.748 |
| | 9 | Be | 97.165507 | 1.141 | 38127.884 | ug/L | 5.000 |
| | 27 | Al | 5019.506734 | 1.635 | 24995243.321 | ug/L | 86162.732 |
| | 44 | Ca | 4990.966022 | 0.446 | 1098358.964 | ug/L | 9904.704 |
| | 52 | Cr | 99.586985 | 0.235 | 784868.503 | ug/L | 22477.629 |
| | 55 | Mn | 99.405262 | 0.445 | 1218651.528 | ug/L | 2940.012 |
| | 54 | Fe | 5084.747995 | 0.397 | 3122101.338 | ug/L | 85794.176 |
| | 57 | Fe | 5029.899613 | 0.666 | 1273505.901 | ug/L | 10510.726 |
| | 59 | Co | 98.582418 | 0.755 | 948523.578 | ug/L | 225.337 |
| | 60 | Ni | 98.783048 | 0.964 | 199271.802 | ug/L | 301.030 |
| | 65 | Cu | 98.835414 | 0.328 | 203964.216 | ug/L | 156.867 |
| | 75 | As | 99.405356 | 0.224 | 197948.234 | ug/L | 15258.224 |
| | 82 | Se | 97.747010 | 0.893 | 18491.802 | ug/L | 1116.599 |
| | 97 | Mo | 197.513546 | 0.758 | 339026.193 | ug/L | 267.006 |
| > | 72 | Ge-1 | | | 1109054.025 | ug/L | 1107889.910 |
| | 107 | Ag | 49.682933 | 1.115 | 415719.131 | ug/L | 111.668 |
| | 111 | Cd | 99.639069 | 0.785 | 179339.323 | ug/L | 73.814 |
| | 121 | Sb | 49.897261 | 1.054 | 302326.008 | ug/L | 244.671 |
| | 135 | Ba | 99.499453 | 1.436 | 192031.071 | ug/L | 100.001 |
| > | 115 | In-1 | | | 1178926.819 | ug/L | 1192611.893 |
| | 208 | Pb | 99.016054 | 1.033 | 2617395.524 | ug/L | 804.020 |
| > | 169 | Tm-1 | | | 1051051.231 | ug/L | 1062879.127 |
| | 50 | Cr | 98.707913 | 2.178 | 18831.576 | ug/L | -129.141 |
| | 53 | Cr | 96.549880 | 3.085 | 53743.286 | ug/L | 23232.149 |
| | 61 | Ni | 100.424751 | 1.709 | 4474.735 | ug/L | 1222.329 |
| | 63 | Cu | 98.624926 | 0.078 | 152251.005 | ug/L | 121.337 |
| | 76 | Se | 115.708597 | 26.918 | -142385.013 | ug/L | -145779.309 |
| | 77 | Se | 95.989680 | 1.375 | 22899.477 | ug/L | 9789.268 |
| | 78 | Se | 99.764425 | 0.652 | 60409.461 | ug/L | 16813.138 |
| | 79 | Br | 62.108463 | 22.233 | 97917.990 | ug/L | 92273.968 |
| > | 72 | Ge | | | 1109054.025 | ug/L | 1107889.910 |
| | 108 | Cd | 99.795589 | 1.028 | 12342.456 | ug/L | 6.383 |
| | 114 | Cd | 99.526144 | 0.665 | 430072.049 | ug/L | 156.006 |
| | 109 | Ag | 49.887373 | 1.255 | 143879.321 | ug/L | 35.334 |

| | | | | | | |
|---|---|---|---|---|---|---|
| > | 115 In | | | 1178926.819 | ug/L | 1192611.893 |
| | 208 207.977 | 99.190342 | 1.163 | 1351222.589 | ug/L | 416.347 |
| | 207 Pb | 98.850968 | 0.974 | 551526.478 | ug/L | 174.002 |
| | 206 Pb | 98.815122 | 0.894 | 714646.458 | ug/L | 213.670 |
| > | 169 Tm | | | 1051051.231 | ug/L | 1062879.127 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| > | Li-1 | 6 | 101.310 |
| | Be | 9 | |
| | Al | 27 | |
| | Ca | 44 | |
| | Cr | 52 | |
| | Mn | 55 | |
| | Fe | 54 | |
| | Fe | 57 | |
| | Co | 59 | |
| | Ni | 60 | |
| | Cu | 65 | |
| | As | 75 | |
| | Se | 82 | |
| | Mo | 97 | |
| > | Ge-1 | 72 | 100.105 |
| | Ag | 107 | |
| | Cd | 111 | |
| | Sb | 121 | |
| | Ba | 135 | |
| > | In-1 | 115 | 98.853 |
| | Pb | 208 | |
| > | Tm-1 | 169 | 98.887 |
| | Cr | 50 | |
| | Cr | 53 | |
| | Ni | 61 | |
| | Cu | 63 | |
| | Se | 76 | |
| | Se | 77 | |
| | Se | 78 | |
| | Br | 79 | |
| > | Ge | 72 | 100.105 |
| | Cd | 108 | |
| | Cd | 114 | |
| | Ag | 109 | |
| > | In | 115 | 98.853 |
| | 207.977 | 208 | |
| | Pb | 207 | |
| | Pb | 206 | |
| > | Tm | 169 | 98.887 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 2**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 15:01:59
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 2.017
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1130227.722 | ug/L | 1106132.928 |
| ⌈> | 6 | Li-1 | | | 910407.544 | ug/L | 880851.748 |
| ⌊ | 9 | Be | 0.021222 | 26.806 | 13.667 | ug/L | 5.000 |
| ⌈ | 27 | Al | -0.892949 | 39.359 | 82898.509 | ug/L | 86162.732 |
| \| | 44 | Ca | -0.063672 | 552.534 | 10032.569 | ug/L | 9904.704 |
| \| | 52 | Cr | 0.015895 | 99.023 | 22923.214 | ug/L | 22477.629 |
| \| | 55 | Mn | -0.002389 | 219.834 | 2952.685 | ug/L | 2940.012 |
| \| | 54 | Fe | -1.981980 | 74.840 | 85821.468 | ug/L | 85794.176 |
| \| | 57 | Fe | -0.849484 | 74.061 | 10446.646 | ug/L | 10510.726 |
| \| | 59 | Co | 0.001030 | 282.723 | 238.671 | ug/L | 225.337 |
| \| | 60 | Ni | 0.006278 | 285.555 | 318.411 | ug/L | 301.030 |
| \| | 65 | Cu | 0.000283 | 811.649 | 159.743 | ug/L | 156.867 |
| \| | 75 | As | 0.023272 | 417.582 | 15519.714 | ug/L | 15258.224 |
| \| | 82 | Se | -0.241669 | 23.693 | 1089.130 | ug/L | 1116.599 |
| \| | 97 | Mo | -0.029424 | 10.583 | 219.670 | ug/L | 267.006 |
| ⌊> | 72 | Ge-1 | | | 1123806.039 | ug/L | 1107889.910 |
| ⌈ | 107 | Ag | 0.000551 | 226.668 | 116.001 | ug/L | 111.668 |
| \| | 111 | Cd | -0.006557 | 12.844 | 61.710 | ug/L | 73.814 |
| \| | 121 | Sb | 0.002018 | 68.839 | 256.339 | ug/L | 244.671 |
| \| | 135 | Ba | 0.004438 | 74.528 | 108.334 | ug/L | 100.001 |
| ⌊> | 115 | In-1 | | | 1189268.903 | ug/L | 1192611.893 |
| ⌈ | 208 | Pb | 0.003296 | 13.547 | 893.691 | ug/L | 804.020 |
| ⌊> | 169 | Tm-1 | | | 1064815.118 | ug/L | 1062879.127 |
| ⌈ | 50 | Cr | 0.027237 | 215.204 | -125.663 | ug/L | -129.141 |
| \| | 53 | Cr | -2.129289 | 35.259 | 22884.994 | ug/L | 23232.149 |
| \| | 61 | Ni | -0.224325 | 1054.975 | 1233.002 | ug/L | 1222.329 |
| \| | 63 | Cu | -0.004698 | 140.866 | 115.670 | ug/L | 121.337 |
| \| | 76 | Se | -0.779935 | 3344.825 | -147900.291 | ug/L | -145779.309 |
| \| | 77 | Se | -2.841043 | 24.414 | 9536.666 | ug/L | 9789.268 |
| \| | 78 | Se | -0.356462 | 88.846 | 16896.004 | ug/L | 16813.138 |
| \| | 79 | Br | -44.404752 | 44.109 | 89573.486 | ug/L | 92273.968 |
| ⌊> | 72 | Ge | | | 1123806.039 | ug/L | 1107889.910 |
| ⌈ | 108 | Cd | -0.003420 | 540.125 | 5.927 | ug/L | 6.383 |
| \| | 114 | Cd | 0.000902 | 451.554 | 159.410 | ug/L | 156.006 |
| \| | 109 | Ag | 0.000839 | 93.523 | 37.667 | ug/L | 35.334 |

| | | | | | | |
|---|---|---|---|---|---|---|
| > | 115 In | | | 1189268.903 | ug/L | 1192611.893 |
| ⌈ | 208 207.977 | 0.002758 | 91.731 | 455.016 | ug/L | 416.347 |
| \| | 207 Pb | 0.004650 | 54.830 | 200.670 | ug/L | 174.002 |
| \| | 206 Pb | 0.003262 | 38.548 | 238.004 | ug/L | 213.670 |
| > | 169 Tm | | | 1064815.118 | ug/L | 1062879.127 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| > | Li-1 | 6 | 103.355 |
| ⌊ | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| > | Ge-1 | 72 | 101.437 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| > | In-1 | 115 | 99.720 |
| ⌈ | Pb | 208 | |
| > | Tm-1 | 169 | 100.182 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| > | Ge | 72 | 101.437 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| > | In | 115 | 99.720 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| > | Tm | 169 | 100.182 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: L99FXB**
Sample Description: G0K180000-434 BLK
Batch ID: 322434
Sample Date/Time: Sunday, November 21, 2010 15:22:14
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\L99FXB.022
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 98
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1075848.989 | ug/L | 1106132.928 |
| > | 6 | Li-1 | | | 867959.463 | ug/L | 880851.748 |
| | 9 | Be | 0.001031 | 628.144 | 5.333 | ug/L | 5.000 |
| | 27 | Al | -15.794931 | 0.313 | 7541.469 | ug/L | 86162.732 |
| | 44 | Ca | 98.340885 | 0.707 | 30063.516 | ug/L | 9904.704 |
| | 52 | Cr | -0.994446 | 2.281 | 14272.323 | ug/L | 22477.629 |
| | 55 | Mn | -0.010226 | 42.089 | 2701.240 | ug/L | 2940.012 |
| | 54 | Fe | 33.556152 | 4.447 | 101536.869 | ug/L | 85794.176 |
| | 57 | Fe | 2.073477 | 56.278 | 10585.242 | ug/L | 10510.726 |
| | 59 | Co | -0.000025 | 8595.387 | 216.004 | ug/L | 225.337 |
| | 60 | Ni | -0.020007 | 19.322 | 250.229 | ug/L | 301.030 |
| | 65 | Cu | 0.577108 | 2.521 | 1291.364 | ug/L | 156.867 |
| | 75 | As | 0.503664 | 27.194 | 15528.583 | ug/L | 15258.224 |
| | 82 | Se | 0.005307 | 1286.128 | 1072.430 | ug/L | 1116.599 |
| | 97 | Mo | 0.132731 | 28.469 | 474.351 | ug/L | 267.006 |
| > | 72 | Ge-1 | | | 1063138.469 | ug/L | 1107889.910 |
| | 107 | Ag | -0.006175 | 13.579 | 58.667 | ug/L | 111.668 |
| | 111 | Cd | -0.002706 | 239.314 | 68.043 | ug/L | 73.814 |
| | 121 | Sb | 0.040638 | 16.314 | 487.352 | ug/L | 244.671 |
| | 135 | Ba | 0.480272 | 4.332 | 1024.082 | ug/L | 100.001 |
| > | 115 | In-1 | | | 1177447.792 | ug/L | 1192611.893 |
| | 208 | Pb | 0.032947 | 6.955 | 1590.410 | ug/L | 804.020 |
| > | 169 | Tm-1 | | | 1003363.507 | ug/L | 1062879.127 |
| | 50 | Cr | 0.580105 | 28.586 | -17.139 | ug/L | -129.141 |
| | 53 | Cr | -53.045012 | 3.114 | 6240.929 | ug/L | 23232.149 |
| | 61 | Ni | -0.301559 | 142.478 | 1163.631 | ug/L | 1222.329 |
| | 63 | Cu | 0.575118 | 2.438 | 966.872 | ug/L | 121.337 |
| | 76 | Se | -30.398839 | 85.645 | -140787.074 | ug/L | -145779.309 |
| | 77 | Se | -57.357596 | 0.546 | 1890.863 | ug/L | 9789.268 |
| | 78 | Se | -1.311741 | 45.670 | 15584.224 | ug/L | 16813.138 |
| | 79 | Br | -750.322428 | 1.074 | 24376.992 | ug/L | 92273.968 |
| > | 72 | Ge | | | 1063138.469 | ug/L | 1107889.910 |
| | 108 | Cd | -0.023333 | 55.091 | 3.420 | ug/L | 6.383 |
| | 114 | Cd | 0.002387 | 87.576 | 164.347 | ug/L | 156.006 |
| | 109 | Ag | -0.004944 | 52.116 | 20.667 | ug/L | 35.334 |

| | | | | | | |
|---|---|---|---|---|---|---|
| ⌊> | 115 In | | | 1177447.792 | ug/L | 1192611.893 |
| ⌈ | 208 207.977 | 0.032965 | 5.089 | 821.720 | ug/L | 416.347 |
| \| | 207 Pb | 0.036132 | 11.477 | 356.677 | ug/L | 174.002 |
| \| | 206 Pb | 0.030455 | 11.358 | 412.013 | ug/L | 213.670 |
| ⌊> | 169 Tm | | | 1003363.507 | ug/L | 1062879.127 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | 98.536 |
| ⌊ | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| ⌊> | Ge-1 | 72 | 95.961 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| ⌊> | In-1 | 115 | 98.728 |
| ⌈ | Pb | 208 | |
| ⌊> | Tm-1 | 169 | 94.401 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| ⌊> | Ge | 72 | 95.961 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| ⌊> | In | 115 | 98.728 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| ⌊> | Tm | 169 | 94.401 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: L99F3C**
Sample Description: G0K180000-436 LCS
Batch ID: 322436
Sample Date/Time: Sunday, November 21, 2010 15:26:16
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\L99F3C.023
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 90
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1061906.913 | ug/L | 1106132.928 |
| > | 6 | Li-1 | | | 882803.639 | ug/L | 880851.748 |
| | 9 | Be | 168.876040 | 0.783 | 65551.565 | ug/L | 5.000 |
| | 27 | Al | 919.256828 | 1.718 | 4458911.597 | ug/L | 86162.732 |
| | 44 | Ca | 1081.541409 | 1.217 | 235779.191 | ug/L | 9904.704 |
| | 52 | Cr | 184.884168 | 1.556 | 1379314.320 | ug/L | 22477.629 |
| | 55 | Mn | 184.913156 | 1.055 | 2172312.249 | ug/L | 2940.012 |
| | 54 | Fe | 993.643111 | 1.463 | 651574.688 | ug/L | 85794.176 |
| | 57 | Fe | 929.291519 | 1.019 | 233947.949 | ug/L | 10510.726 |
| | 59 | Co | 183.317908 | 1.553 | 1691853.602 | ug/L | 225.337 |
| | 60 | Ni | 181.496378 | 0.870 | 351003.509 | ug/L | 301.030 |
| | 65 | Cu | 184.560525 | 0.938 | 365255.848 | ug/L | 156.867 |
| | 75 | As | 178.474724 | 1.185 | 329285.323 | ug/L | 15258.224 |
| | 82 | Se | 173.807242 | 1.189 | 30708.193 | ug/L | 1116.599 |
| | 97 | Mo | 185.011826 | 1.509 | 304651.279 | ug/L | 267.006 |
| > | 72 | Ge-1 | | | 1064021.756 | ug/L | 1107889.910 |
| | 107 | Ag | 45.181477 | 1.080 | 373555.231 | ug/L | 111.668 |
| | 111 | Cd | 180.179305 | 1.249 | 320355.696 | ug/L | 73.814 |
| | 121 | Sb | 176.468241 | 1.062 | 1055861.009 | ug/L | 244.671 |
| | 135 | Ba | 180.534204 | 0.865 | 344205.849 | ug/L | 100.001 |
| > | 115 | In-1 | | | 1164815.530 | ug/L | 1192611.893 |
| | 208 | Pb | 181.928050 | 0.912 | 4498452.847 | ug/L | 804.020 |
| > | 169 | Tm-1 | | | 983263.131 | ug/L | 1062879.127 |
| | 50 | Cr | 157.414948 | 2.779 | 28881.753 | ug/L | -129.141 |
| | 53 | Cr | 140.334009 | 1.273 | 64821.656 | ug/L | 23232.149 |
| | 61 | Ni | 175.473234 | 0.865 | 6623.639 | ug/L | 1222.329 |
| | 63 | Cu | 182.205276 | 1.273 | 269727.500 | ug/L | 121.337 |
| | 76 | Se | 167.956161 | 26.795 | -135059.961 | ug/L | -145779.309 |
| | 77 | Se | 121.059196 | 0.552 | 25250.690 | ug/L | 9789.268 |
| | 78 | Se | 178.012733 | 1.504 | 90736.717 | ug/L | 16813.138 |
| | 79 | Br | -761.361491 | 0.736 | 23454.570 | ug/L | 92273.968 |
| > | 72 | Ge | | | 1064021.756 | ug/L | 1107889.910 |
| | 108 | Cd | 173.006718 | 0.718 | 21138.029 | ug/L | 6.383 |
| | 114 | Cd | 179.135254 | 0.602 | 764721.040 | ug/L | 156.006 |
| | 109 | Ag | 45.411323 | 0.282 | 129419.648 | ug/L | 35.334 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ⌊> | 115 | In | | | 1164815.530 | ug/L | 1192611.893 |
| ⌈ | 208 | 207.977 | 185.876136 | 0.983 | 2368534.622 | ug/L | 416.347 |
| \| | 207 | Pb | 196.781573 | 0.787 | 1026974.282 | ug/L | 174.002 |
| \| | 206 | Pb | 163.032814 | 0.883 | 1102943.942 | ug/L | 213.670 |
| ⌊> | 169 | Tm | | | 983263.131 | ug/L | 1062879.127 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | 100.222 |
| ⌊ | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| ⌊> | Ge-1 | 72 | 96.040 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| ⌊> | In-1 | 115 | 97.669 |
| ⌈ | Pb | 208 | |
| ⌊> | Tm-1 | 169 | 92.509 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| ⌊> | Ge | 72 | 96.040 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| ⌊> | In | 115 | 97.669 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| ⌊> | Tm | 169 | 92.509 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: L99F1L**
Sample Description: G0K180000-435 LCSD
Batch ID: 322435
Sample Date/Time: Sunday, November 21, 2010 15:30:16
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\L99F1L.024
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 91
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1055541.659 | ug/L | 1106132.928 |
| > | 6 | Li-1 | | | 893423.185 | ug/L | 880851.748 |
| | 9 | Be | 169.193937 | 0.937 | 66468.691 | ug/L | 5.000 |
| | 27 | Al | 934.925976 | 1.708 | 4489950.562 | ug/L | 86162.732 |
| | 44 | Ca | 1095.007744 | 1.314 | 236297.616 | ug/L | 9904.704 |
| | 52 | Cr | 187.924703 | 0.627 | 1388206.057 | ug/L | 22477.629 |
| | 55 | Mn | 187.974504 | 1.157 | 2186977.507 | ug/L | 2940.012 |
| | 54 | Fe | 1019.625539 | 1.247 | 660049.165 | ug/L | 85794.176 |
| | 57 | Fe | 939.047274 | 0.912 | 234021.734 | ug/L | 10510.726 |
| | 59 | Co | 186.234105 | 1.214 | 1702274.553 | ug/L | 225.337 |
| | 60 | Ni | 183.035787 | 0.694 | 350570.011 | ug/L | 301.030 |
| | 65 | Cu | 186.894632 | 0.587 | 366315.438 | ug/L | 156.867 |
| | 75 | As | 181.355690 | 1.053 | 331147.873 | ug/L | 15258.224 |
| | 82 | Se | 176.036960 | 0.617 | 30789.268 | ug/L | 1116.599 |
| | 97 | Mo | 187.589832 | 1.174 | 305928.879 | ug/L | 267.006 |
| > | 72 | Ge-1 | | | 1053728.461 | ug/L | 1107889.910 |
| | 107 | Ag | 45.765546 | 0.953 | 374403.374 | ug/L | 111.668 |
| | 111 | Cd | 182.186969 | 1.240 | 320522.049 | ug/L | 73.814 |
| | 121 | Sb | 179.343557 | 0.753 | 1061784.624 | ug/L | 244.671 |
| | 135 | Ba | 182.079823 | 0.772 | 343498.832 | ug/L | 100.001 |
| > | 115 | In-1 | | | 1152529.363 | ug/L | 1192611.893 |
| | 208 | Pb | 184.420284 | 0.740 | 4502201.574 | ug/L | 804.020 |
| > | 169 | Tm-1 | | | 970735.517 | ug/L | 1062879.127 |
| | 50 | Cr | 163.529064 | 1.492 | 29721.967 | ug/L | -129.141 |
| | 53 | Cr | 144.482060 | 0.600 | 65433.924 | ug/L | 23232.149 |
| | 61 | Ni | 181.769395 | 1.077 | 6753.353 | ug/L | 1222.329 |
| | 63 | Cu | 183.316676 | 0.874 | 268765.177 | ug/L | 121.337 |
| | 76 | Se | 163.385569 | 6.515 | -133886.734 | ug/L | -145779.309 |
| | 77 | Se | 123.986409 | 0.880 | 25386.734 | ug/L | 9789.268 |
| | 78 | Se | 180.910271 | 0.401 | 91069.504 | ug/L | 16813.138 |
| | 79 | Br | -769.088106 | 0.820 | 22572.339 | ug/L | 92273.968 |
| > | 72 | Ge | | | 1053728.461 | ug/L | 1107889.910 |
| | 108 | Cd | 177.479473 | 0.505 | 21455.856 | ug/L | 6.383 |
| | 114 | Cd | 182.113292 | 0.866 | 769232.116 | ug/L | 156.006 |
| | 109 | Ag | 46.002120 | 1.593 | 129715.327 | ug/L | 35.334 |

| | | | | | | |
|---|---|---|---|---|---|---|
| L> | 115 In | | | 1152529.363 | ug/L | 1192611.893 |
| ⌈ | 208 207.977 | 188.570848 | 0.823 | 2372383.788 | ug/L | 416.347 |
| \| | 207 Pb | 199.230275 | 0.620 | 1026551.913 | ug/L | 174.002 |
| \| | 206 Pb | 165.177244 | 0.911 | 1103265.874 | ug/L | 213.670 |
| L> | 169 Tm | | | 970735.517 | ug/L | 1062879.127 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | 101.427 |
| L | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| L> | Ge-1 | 72 | 95.111 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| L> | In-1 | 115 | 96.639 |
| ⌈ | Pb | 208 | |
| L> | Tm-1 | 169 | 91.331 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| L> | Ge | 72 | 95.111 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| L> | In | 115 | 96.639 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| L> | Tm | 169 | 91.331 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 3**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 15:34:21
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 3.025
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1071678.543 | ug/L | 1106132.928 |
| [> | 6 | Li-1 | | | 956510.693 | ug/L | 880851.748 |
| [ | 9 | Be | 93.540437 | 1.508 | 39333.536 | ug/L | 5.000 |
| [ | 27 | Al | 5048.064916 | 0.359 | 24430445.989 | ug/L | 86162.732 |
| \| | 44 | Ca | 5030.973508 | 0.570 | 1075899.858 | ug/L | 9904.704 |
| \| | 52 | Cr | 99.563405 | 0.696 | 762580.390 | ug/L | 22477.629 |
| \| | 55 | Mn | 98.551605 | 0.838 | 1174181.256 | ug/L | 2940.012 |
| \| | 54 | Fe | 5094.299334 | 0.751 | 3039738.992 | ug/L | 85794.176 |
| \| | 57 | Fe | 4926.707022 | 1.148 | 1212437.544 | ug/L | 10510.726 |
| \| | 59 | Co | 95.042467 | 1.353 | 888701.920 | ug/L | 225.337 |
| \| | 60 | Ni | 94.848883 | 1.461 | 185952.602 | ug/L | 301.030 |
| \| | 65 | Cu | 97.367610 | 0.652 | 195279.754 | ug/L | 156.867 |
| \| | 75 | As | 98.150167 | 1.292 | 190125.950 | ug/L | 15258.224 |
| \| | 82 | Se | 95.462318 | 1.078 | 17575.291 | ug/L | 1116.599 |
| \| | 97 | Mo | 193.053741 | 0.576 | 322044.189 | ug/L | 267.006 |
| [> | 72 | Ge-1 | | | 1077840.541 | ug/L | 1107889.910 |
| [ | 107 | Ag | 48.427433 | 1.109 | 391370.528 | ug/L | 111.668 |
| \| | 111 | Cd | 99.142745 | 1.447 | 172336.054 | ug/L | 73.814 |
| \| | 121 | Sb | 50.015338 | 0.976 | 292688.995 | ug/L | 244.671 |
| \| | 135 | Ba | 95.990151 | 1.139 | 178937.583 | ug/L | 100.001 |
| [> | 115 | In-1 | | | 1138593.043 | ug/L | 1192611.893 |
| [ | 208 | Pb | 96.640474 | 0.647 | 2318014.130 | ug/L | 804.020 |
| [> | 169 | Tm-1 | | | 953638.373 | ug/L | 1062879.127 |
| [ | 50 | Cr | 99.474821 | 4.606 | 18448.918 | ug/L | -129.141 |
| \| | 53 | Cr | 90.863462 | 0.956 | 50480.490 | ug/L | 23232.149 |
| \| | 61 | Ni | 91.560759 | 3.303 | 4069.307 | ug/L | 1222.329 |
| \| | 63 | Cu | 96.268289 | 0.690 | 144427.425 | ug/L | 121.337 |
| \| | 76 | Se | 28.624092 | 35.482 | -140969.596 | ug/L | -145779.309 |
| \| | 77 | Se | 85.752500 | 1.029 | 20896.993 | ug/L | 9789.268 |
| \| | 78 | Se | 97.378382 | 2.014 | 57691.064 | ug/L | 16813.138 |
| \| | 79 | Br | -65.683169 | 16.421 | 84072.989 | ug/L | 92273.968 |
| [> | 72 | Ge | | | 1077840.541 | ug/L | 1107889.910 |
| [ | 108 | Cd | 98.141921 | 1.382 | 11723.097 | ug/L | 6.383 |
| \| | 114 | Cd | 99.353234 | 1.295 | 414635.138 | ug/L | 156.006 |
| \| | 109 | Ag | 48.531460 | 0.923 | 135190.351 | ug/L | 35.334 |

| | | | | | | |
|---|---|---|---|---|---|---|
| L> | 115 In | | | 1138593.043 | ug/L | 1192611.893 |
| ⌈ | 208 207.977 | 96.382406 | 0.601 | 1191387.126 | ug/L | 416.347 |
| \| | 207 Pb | 96.494802 | 0.789 | 488510.435 | ug/L | 174.002 |
| \| | 206 Pb | 97.238949 | 0.682 | 638116.570 | ug/L | 213.670 |
| L> | 169 Tm | | | 953638.373 | ug/L | 1062879.127 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| ⌈> | Li-1 | 6 | 108.589 |
| L | Be | 9 | |
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Fe | 54 | |
| \| | Fe | 57 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Se | 82 | |
| \| | Mo | 97 | |
| L> | Ge-1 | 72 | 97.288 |
| ⌈ | Ag | 107 | |
| \| | Cd | 111 | |
| \| | Sb | 121 | |
| \| | Ba | 135 | |
| L> | In-1 | 115 | 95.471 |
| ⌈ | Pb | 208 | |
| L> | Tm-1 | 169 | 89.722 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \| | Se | 76 | |
| \| | Se | 77 | |
| \| | Se | 78 | |
| \| | Br | 79 | |
| L> | Ge | 72 | 97.288 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \| | Ag | 109 | |
| L> | In | 115 | 95.471 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| L> | Tm | 169 | 89.722 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 3**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 15:38:25
Method File: e:\elandata\Method\0322434.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 3.026
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 45 | Sc | | | 1098781.938 | ug/L | 1106132.928 |
| > | 6 | Li-1 | | | 956818.320 | ug/L | 880851.748 |
| | 9 | Be | 0.024133 | 59.552 | 15.667 | ug/L | 5.000 |
| | 27 | Al | -3.669818 | 10.758 | 68453.525 | ug/L | 86162.732 |
| | 44 | Ca | -0.831235 | 31.311 | 9791.193 | ug/L | 9904.704 |
| | 52 | Cr | -0.197159 | 25.303 | 21114.306 | ug/L | 22477.629 |
| | 55 | Mn | -0.034275 | 16.522 | 2539.174 | ug/L | 2940.012 |
| | 54 | Fe | -7.618010 | 6.631 | 81817.275 | ug/L | 85794.176 |
| | 57 | Fe | -4.661541 | 14.087 | 9406.793 | ug/L | 10510.726 |
| | 59 | Co | 0.013603 | 21.799 | 358.677 | ug/L | 225.337 |
| | 60 | Ni | -0.001137 | 302.240 | 300.859 | ug/L | 301.030 |
| | 65 | Cu | 0.009155 | 116.262 | 177.063 | ug/L | 156.867 |
| | 75 | As | -0.071212 | 120.844 | 15232.496 | ug/L | 15258.224 |
| | 82 | Se | -0.338959 | 6.580 | 1063.774 | ug/L | 1116.599 |
| | 97 | Mo | 0.041120 | 80.972 | 340.009 | ug/L | 267.006 |
| > | 72 | Ge-1 | | | 1115621.278 | ug/L | 1107889.910 |
| | 107 | Ag | 0.006127 | 90.451 | 160.002 | ug/L | 111.668 |
| | 111 | Cd | 0.003990 | 25.276 | 79.201 | ug/L | 73.814 |
| | 121 | Sb | 0.049245 | 17.196 | 534.023 | ug/L | 244.671 |
| | 135 | Ba | 0.006917 | 100.488 | 111.001 | ug/L | 100.001 |
| > | 115 | In-1 | | | 1165196.433 | ug/L | 1192611.893 |
| | 208 | Pb | 0.014401 | 47.813 | 1099.705 | ug/L | 804.020 |
| > | 169 | Tm-1 | | | 982620.488 | ug/L | 1062879.127 |
| | 50 | Cr | 0.044053 | 56.173 | -121.505 | ug/L | -129.141 |
| | 53 | Cr | -10.210601 | 6.635 | 20152.640 | ug/L | 23232.149 |
| | 61 | Ni | -0.977022 | 203.806 | 1199.317 | ug/L | 1222.329 |
| | 63 | Cu | 0.004751 | 311.225 | 129.670 | ug/L | 121.337 |
| | 76 | Se | -104.212588 | 13.410 | -150016.158 | ug/L | -145779.309 |
| | 77 | Se | -12.603910 | 9.415 | 8126.631 | ug/L | 9789.268 |
| | 78 | Se | -1.993141 | 30.035 | 16053.484 | ug/L | 16813.138 |
| | 79 | Br | -125.861544 | 14.107 | 81614.415 | ug/L | 92273.968 |
| > | 72 | Ge | | | 1115621.278 | ug/L | 1107889.910 |
| | 108 | Cd | 0.019395 | 271.654 | 8.655 | ug/L | 6.383 |
| | 114 | Cd | 0.015813 | 30.210 | 220.102 | ug/L | 156.006 |
| | 109 | Ag | 0.006840 | 20.062 | 54.001 | ug/L | 35.334 |

| | | | | | | |
|---|---|---|---|---|---|---|
| > | 115 In | | | 1165196.433 | ug/L | 1192611.893 |
| | 208 207.977 | 0.015401 | 53.555 | 581.360 | ug/L | 416.347 |
| | 207 Pb | 0.011966 | 52.239 | 223.337 | ug/L | 174.002 |
| | 206 Pb | 0.014396 | 40.991 | 295.007 | ug/L | 213.670 |
| > | 169 Tm | | | 982620.488 | ug/L | 1062879.127 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Sc | 45 | |
| > | Li-1 | 6 | 108.624 |
| | Be | 9 | |
| | Al | 27 | |
| | Ca | 44 | |
| | Cr | 52 | |
| | Mn | 55 | |
| | Fe | 54 | |
| | Fe | 57 | |
| | Co | 59 | |
| | Ni | 60 | |
| | Cu | 65 | |
| | As | 75 | |
| | Se | 82 | |
| | Mo | 97 | |
| > | Ge-1 | 72 | 100.698 |
| | Ag | 107 | |
| | Cd | 111 | |
| | Sb | 121 | |
| | Ba | 135 | |
| > | In-1 | 115 | 97.701 |
| | Pb | 208 | |
| > | Tm-1 | 169 | 92.449 |
| | Cr | 50 | |
| | Cr | 53 | |
| | Ni | 61 | |
| | Cu | 63 | |
| | Se | 76 | |
| | Se | 77 | |
| | Se | 78 | |
| | Br | 79 | |
| > | Ge | 72 | 100.698 |
| | Cd | 108 | |
| | Cd | 114 | |
| | Ag | 109 | |
| > | In | 115 | 97.701 |
| | 207.977 | 208 | |
| | Pb | 207 | |
| | Pb | 206 | |
| > | Tm | 169 | 92.449 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 4**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 15:42:30
Method File: e:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 4.027
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 27 | Al | 5396.195613 | 0.378 | 26568913.356 | ug/L | 86162.732 |
| \| | 44 | Ca | 4980.662236 | 0.533 | 1083987.412 | ug/L | 9904.704 |
| \| | 52 | Cr | 96.605067 | 0.263 | 753618.445 | ug/L | 22477.629 |
| \| | 55 | Mn | 96.139467 | 0.602 | 1165714.424 | ug/L | 2940.012 |
| \| | 59 | Co | 92.915527 | 0.936 | 884144.116 | ug/L | 225.337 |
| \| | 60 | Ni | 92.811718 | 1.080 | 185175.288 | ug/L | 301.030 |
| \| | 65 | Cu | 97.189806 | 0.407 | 198354.177 | ug/L | 156.867 |
| \| | 75 | As | 98.175210 | 0.865 | 193521.710 | ug/L | 15258.224 |
| \| | 97 | Mo | 194.103901 | 0.289 | 329496.198 | ug/L | 267.006 |
| ⌊> | 72 | Ge-1 | | | 1096785.123 | ug/L | 1107889.910 |
| ⌜ | 111 | Cd | 99.174408 | 0.635 | 175070.038 | ug/L | 73.814 |
| \| | 121 | Sb | 50.255745 | 1.048 | 298649.254 | ug/L | 244.671 |
| ⌊> | 115 | In-1 | | | 1156238.403 | ug/L | 1192611.893 |
| ⌜ | 208 | Pb | 96.801408 | 1.131 | 2370156.667 | ug/L | 804.020 |
| ⌊> | 169 | Tm-1 | | | 973550.024 | ug/L | 1062879.127 |
| ⌜ | 50 | Cr | 97.848154 | 1.898 | 18460.032 | ug/L | -129.141 |
| \| | 53 | Cr | 86.480842 | 1.476 | 50000.741 | ug/L | 23232.149 |
| \| | 61 | Ni | 90.731543 | 2.208 | 4114.722 | ug/L | 1222.329 |
| \| | 63 | Cu | 94.913382 | 0.672 | 144902.623 | ug/L | 121.337 |
| ⌊> | 72 | Ge | | | 1096785.123 | ug/L | 1107889.910 |
| ⌜ | 108 | Cd | 97.589365 | 0.406 | 11839.038 | ug/L | 6.383 |
| \| | 114 | Cd | 99.061663 | 0.804 | 419833.836 | ug/L | 156.006 |
| ⌊> | 115 | In | | | 1156238.403 | ug/L | 1192611.893 |
| ⌜ | 208 | 207.977 | 96.762492 | 1.224 | 1220942.608 | ug/L | 416.347 |
| \| | 207 | Pb | 96.539930 | 1.008 | 498911.218 | ug/L | 174.002 |
| \| | 206 | Pb | 97.076425 | 1.100 | 650302.841 | ug/L | 213.670 |
| ⌊> | 169 | Tm | | | 973550.024 | ug/L | 1062879.127 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 98.998 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 96.950 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 91.596 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 98.998 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 96.950 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 91.596 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 4**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 15:46:05
Method File: e:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 4.028
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | -2.396416 | 2.262 | 75057.441 | ug/L | 86162.732 |
| \| | 44 | Ca | -5.658647 | 10.339 | 8762.363 | ug/L | 9904.704 |
| \| | 52 | Cr | -0.247961 | 28.900 | 20791.583 | ug/L | 22477.629 |
| \| | 55 | Mn | -0.041535 | 5.858 | 2457.808 | ug/L | 2940.012 |
| \| | 59 | Co | 0.014762 | 20.898 | 371.011 | ug/L | 225.337 |
| \| | 60 | Ni | -0.007815 | 125.471 | 288.142 | ug/L | 301.030 |
| \| | 65 | Cu | 0.010176 | 86.916 | 179.769 | ug/L | 156.867 |
| \| | 75 | As | -0.256478 | 30.582 | 14942.004 | ug/L | 15258.224 |
| \| | 97 | Mo | -0.001348 | 694.994 | 267.339 | ug/L | 267.006 |
| ⌊> | 72 | Ge-1 | | | 1119419.469 | ug/L | 1107889.910 |
| ⌈ | 111 | Cd | 0.004845 | 54.289 | 81.753 | ug/L | 73.814 |
| \| | 121 | Sb | 0.023732 | 21.981 | 386.012 | ug/L | 244.671 |
| ⌊> | 115 | In-1 | | | 1179651.477 | ug/L | 1192611.893 |
| ⌈ | 208 | Pb | 0.014272 | 17.088 | 1103.037 | ug/L | 804.020 |
| ⌊> | 169 | Tm-1 | | | 988769.324 | ug/L | 1062879.127 |
| ⌈ | 50 | Cr | 0.135887 | 84.796 | -104.275 | ug/L | -129.141 |
| \| | 53 | Cr | -12.537601 | 3.909 | 19477.777 | ug/L | 23232.149 |
| \| | 61 | Ni | -3.085597 | 85.432 | 1133.617 | ug/L | 1222.329 |
| \| | 63 | Cu | -0.003179 | 161.107 | 117.670 | ug/L | 121.337 |
| ⌊> | 72 | Ge | | | 1119419.469 | ug/L | 1107889.910 |
| ⌈ | 108 | Cd | 0.034506 | 61.562 | 10.568 | ug/L | 6.383 |
| \| | 114 | Cd | 0.012024 | 46.797 | 206.332 | ug/L | 156.006 |
| ⌊> | 115 | In | | | 1179651.477 | ug/L | 1192611.893 |
| ⌈ | 208 | 207.977 | 0.014621 | 13.038 | 574.693 | ug/L | 416.347 |
| \| | 207 | Pb | 0.014433 | 13.360 | 237.671 | ug/L | 174.002 |
| \| | 206 | Pb | 0.013491 | 30.760 | 290.673 | ug/L | 213.670 |
| ⌊> | 169 | Tm | | | 988769.324 | ug/L | 1062879.127 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| | Cu | 65 | |
| | As | 75 | |
| | Mo | 97 | |
| > | Ge-1 | 72 | 101.041 |
| | Cd | 111 | |
| | Sb | 121 | |
| > | In-1 | 115 | 98.913 |
| | Pb | 208 | |
| > | Tm-1 | 169 | 93.027 |
| | Cr | 50 | |
| | Cr | 53 | |
| | Ni | 61 | |
| | Cu | 63 | |
| > | Ge | 72 | 101.041 |
| | Cd | 108 | |
| | Cd | 114 | |
| > | In | 115 | 98.913 |
| | 207.977 | 208 | |
| | Pb | 207 | |
| | Pb | 206 | |
| > | Tm | 169 | 93.027 |

TestAmerica West Sacramen

PRODUCTION FIGURES - WET CHEM

| TOTAL NUMBER | SAMPLE NUMBER | QC | RE-RUN MATRIX | RE-RUN OTHER | MISC NUMBER | TOTAL HOURS | EXPANDED DELIVERABLE |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

METHOD: NJ Moisture, Percent (D2216-90) - AFCEE
QC BATCH #: **0326455** INITIALS: DATA ENTRY:
PREP DATE: 11/22/10 PREP _____ INITIALS _____
COMP DATE: 11/22/10 ANAL _____ DATE _____
USER: FRANCISF

| Work Order | Lab Number | Structured Analysis | Exp. Del. | Analysis Date | Sample ID: |
|---|---|---|---|---|---|
| L9X90-1-AM | G-0K120444-002 | XX A 88 NJ 01 | B | _____ | ED-195-B06-S02 |
| L9X90-1-CX | G-0K120444-002-X | XX A 88 NJ 01 | B | _____ | ED-195-B06-S02 DUP |
| L9X92-1-AM | G-0K120444-003 | XX A 88 NJ 01 | B | _____ | ED-195-B06-S03 |
| L9X94-1-AM | G-0K120444-004 | XX A 88 NJ 01 | B | _____ | ED-195-B06-S04 |
| L9X95-1-AM | G-0K120444-005 | XX A 88 NJ 01 | B | _____ | ED-195-B06-S05 |
| L9X96-1-AM | G-0K120444-006 | XX A 88 NJ 01 | B | _____ | ED-195-B06-S06 |
| L9X98-1-AM | G-0K120444-007 | XX A 88 NJ 01 | B | _____ | ED-195-B06-S07 |
| L92CC-1-AA | G-0K130457-001 | XX A 88 NJ 01 | B | _____ | ED-195-B05-S01 |
| L92CH-1-AK | G-0K130457-002 | XX A 88 NJ 01 | B | _____ | ED-195-B05-S02 |
| L92CJ-1-AK | G-0K130457-003 | XX A 88 NJ 01 | B | _____ | ED-195-B05-S03 |
| L92CK-1-AK | G-0K130457-004 | XX A 88 NJ 01 | B | _____ | ED-195-B05-S04 |
| L92CM-1-AK | G-0K130457-005 | XX A 88 NJ 01 | B | _____ | ED-195-B05-S05 |
| L92CP-1-AK | G-0K130457-006 | XX A 88 NJ 01 | B | _____ | ED-195-B05-S06 |
| L92CQ-1-AK | G-0K130457-007 | XX A 88 NJ 01 | B | _____ | ED-195-B05-S07 |
| L92L3-1-AA | G-0K130496-001 | XX A 88 NJ 01 | M | _____ | SSAN6-08-2.0_01_BPC |
| L92L4-1-AA | G-0K130496-002 | XX A 88 NJ 01 | M | _____ | SSAN6-08-3.0_01_BPC |
| L92L5-1-AA | G-0K130496-003 | XX A 88 NJ 01 | M | _____ | SSAN6-08-4.0_01_BPC |
| L94NT-1-AA | G-0K160405-001 | XX A 88 NJ 01 | Y-D | _____ | GPEC-FED-DRUM 1 |
| L94N3-1-AA | G-0K160405-002 | XX A 88 NJ 01 | Y-D | _____ | GPEC-FED-DRUM 2 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: BLKRECAL**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 15:46:05
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 4.028
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 27 | Al | | | 75057.441 | ug/L | |
| \| | 44 | Ca | | | 8762.363 | ug/L | |
| \| | 52 | Cr | | | 20791.583 | ug/L | |
| \| | 55 | Mn | | | 2457.808 | ug/L | |
| \| | 59 | Co | | | 371.011 | ug/L | |
| \| | 60 | Ni | | | 288.142 | ug/L | |
| \| | 65 | Cu | | | 179.769 | ug/L | |
| \| | 75 | As | | | 14942.004 | ug/L | |
| \| | 97 | Mo | | | 267.339 | ug/L | |
| ⌞> | 72 | Ge-1 | | | 1119419.469 | ug/L | |
| ⌜ | 111 | Cd | | | 81.753 | ug/L | |
| \| | 121 | Sb | | | 386.012 | ug/L | |
| ⌞> | 115 | In-1 | | | 1179651.477 | ug/L | |
| ⌜ | 208 | Pb | | | 1103.037 | ug/L | |
| ⌞> | 169 | Tm-1 | | | 988769.324 | ug/L | |
| ⌜ | 50 | Cr | | | -104.275 | ug/L | |
| \| | 53 | Cr | | | 19477.777 | ug/L | |
| \| | 61 | Ni | | | 1133.617 | ug/L | |
| \| | 63 | Cu | | | 117.670 | ug/L | |
| ⌞> | 72 | Ge | | | 1119419.469 | ug/L | |
| ⌜ | 108 | Cd | | | 10.568 | ug/L | |
| \| | 114 | Cd | | | 206.332 | ug/L | |
| ⌞> | 115 | In | | | 1179651.477 | ug/L | |
| ⌜ | 208 | 207.977 | | | 574.693 | ug/L | |
| \| | 207 | Pb | | | 237.671 | ug/L | |
| \| | 206 | Pb | | | 290.673 | ug/L | |
| ⌞> | 169 | Tm | | | 988769.324 | ug/L | |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | |
|---|---|---|
| ⎢ | Cu | 65 |
| ⎢ | As | 75 |
| ⎢ | Mo | 97 |
| ⎣> | Ge-1 | 72 |
| ⎡ | Cd | 111 |
| ⎢ | Sb | 121 |
| ⎣> | In-1 | 115 |
| ⎡ | Pb | 208 |
| ⎣> | Tm-1 | 169 |
| ⎡ | Cr | 50 |
| ⎢ | Cr | 53 |
| ⎢ | Ni | 61 |
| ⎢ | Cu | 63 |
| ⎣> | Ge | 72 |
| ⎡ | Cd | 108 |
| ⎢ | Cd | 114 |
| ⎣> | In | 115 |
| ⎡ | 207.977 | 208 |
| ⎢ | Pb | 207 |
| ⎢ | Pb | 206 |
| ⎣> | Tm | 169 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: STD1RECAL**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 15:42:30
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 4.027
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 27 | Al | 5100.000000 | 0.377 | 26568913.356 | ug/L | 75057.441 |
| \| | 44 | Ca | 5100.000000 | 0.532 | 1083987.412 | ug/L | 8762.363 |
| \| | 52 | Cr | 100.000000 | 0.262 | 753618.445 | ug/L | 20791.583 |
| \| | 55 | Mn | 100.000000 | 0.601 | 1165714.424 | ug/L | 2457.808 |
| \| | 59 | Co | 100.000000 | 0.936 | 884144.116 | ug/L | 371.011 |
| \| | 60 | Ni | 100.000000 | 1.080 | 185175.288 | ug/L | 288.142 |
| \| | 65 | Cu | 100.000000 | 0.407 | 198354.177 | ug/L | 179.769 |
| \| | 75 | As | 100.000000 | 0.863 | 193521.710 | ug/L | 14942.004 |
| \| | 97 | Mo | 200.000000 | 0.289 | 329496.198 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1096785.123 | ug/L | 1119419.469 |
| ⌜ | 111 | Cd | 100.000000 | 0.635 | 175070.038 | ug/L | 81.753 |
| \| | 121 | Sb | 50.000000 | 1.048 | 298649.254 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1156238.403 | ug/L | 1179651.477 |
| ⌜ | 208 | Pb | 100.000000 | 1.131 | 2370156.667 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 973550.024 | ug/L | 988769.324 |
| ⌜ | 50 | Cr | 100.000000 | 1.901 | 18460.032 | ug/L | -104.275 |
| \| | 53 | Cr | 100.000000 | 1.289 | 50000.741 | ug/L | 19477.777 |
| \| | 61 | Ni | 100.000000 | 2.135 | 4114.722 | ug/L | 1133.617 |
| \| | 63 | Cu | 100.000000 | 0.672 | 144902.623 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1096785.123 | ug/L | 1119419.469 |
| ⌜ | 108 | Cd | 100.000000 | 0.406 | 11839.038 | ug/L | 10.568 |
| \| | 114 | Cd | 100.000000 | 0.804 | 419833.836 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1156238.403 | ug/L | 1179651.477 |
| ⌜ | 208 | 207.977 | 100.000000 | 1.224 | 1220942.608 | ug/L | 574.693 |
| \| | 207 | Pb | 100.000000 | 1.008 | 498911.218 | ug/L | 237.671 |
| \| | 206 | Pb | 100.000000 | 1.100 | 650302.841 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 973550.024 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | |
|---|---|---|
| ⎢ | Cu | 65 |
| ⎢ | As | 75 |
| ⎢ | Mo | 97 |
| ⎣> | Ge-1 | 72 |
| ⎡ | Cd | 111 |
| ⎢ | Sb | 121 |
| ⎣> | In-1 | 115 |
| ⎡ | Pb | 208 |
| ⎣> | Tm-1 | 169 |
| ⎡ | Cr | 50 |
| ⎢ | Cr | 53 |
| ⎢ | Ni | 61 |
| ⎢ | Cu | 63 |
| ⎣> | Ge | 72 |
| ⎡ | Cd | 108 |
| ⎢ | Cd | 114 |
| ⎣> | In | 115 |
| ⎡ | 207.977 | 208 |
| ⎢ | Pb | 207 |
| ⎢ | Pb | 206 |
| ⎣> | Tm | 169 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 5**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 15:49:39
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 5.029
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 27 | Al | 5036.144860 | 1.312 | 26397281.502 | ug/L | 75057.441 |
| \| | 44 | Ca | 5083.401917 | 0.895 | 1087139.459 | ug/L | 8762.363 |
| \| | 52 | Cr | 98.659671 | 0.739 | 748360.307 | ug/L | 20791.583 |
| \| | 55 | Mn | 98.438409 | 0.545 | 1154607.134 | ug/L | 2457.808 |
| \| | 59 | Co | 98.717153 | 0.403 | 878229.468 | ug/L | 371.011 |
| \| | 60 | Ni | 98.795698 | 1.237 | 184072.321 | ug/L | 288.142 |
| \| | 65 | Cu | 99.115590 | 1.273 | 197806.491 | ug/L | 179.769 |
| \| | 75 | As | 99.324203 | 0.888 | 193497.396 | ug/L | 14942.004 |
| \| | 97 | Mo | 199.484871 | 1.407 | 330648.623 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1103585.738 | ug/L | 1119419.469 |
| ⌜ | 111 | Cd | 99.614622 | 0.624 | 174519.143 | ug/L | 81.753 |
| \| | 121 | Sb | 49.672389 | 0.783 | 296910.411 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1157043.486 | ug/L | 1179651.477 |
| ⌜ | 208 | Pb | 99.586240 | 0.886 | 2359473.501 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 973148.023 | ug/L | 988769.324 |
| ⌜ | 50 | Cr | 98.278935 | 2.143 | 18255.211 | ug/L | -104.275 |
| \| | 53 | Cr | 99.484008 | 1.029 | 50150.010 | ug/L | 19477.777 |
| \| | 61 | Ni | 98.233320 | 1.245 | 4086.671 | ug/L | 1133.617 |
| \| | 63 | Cu | 99.332545 | 0.751 | 144822.068 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1103585.738 | ug/L | 1119419.469 |
| ⌜ | 108 | Cd | 100.778138 | 1.717 | 11938.044 | ug/L | 10.568 |
| \| | 114 | Cd | 99.689158 | 0.475 | 418833.969 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1157043.486 | ug/L | 1179651.477 |
| ⌜ | 208 | 207.977 | 99.528932 | 0.886 | 1214764.701 | ug/L | 574.693 |
| \| | 207 | Pb | 99.861085 | 1.020 | 498019.440 | ug/L | 237.671 |
| \| | 206 | Pb | 99.482983 | 0.987 | 646689.360 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 973148.023 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 98.586 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 98.084 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 98.420 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 98.586 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 98.084 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 98.420 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 5**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 15:53:13
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 5.030
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | -0.398518 | 58.565 | 73170.265 | ug/L | 75057.441 |
| \| | 44 | Ca | 0.972724 | 27.488 | 9001.363 | ug/L | 8762.363 |
| \| | 52 | Cr | 0.165430 | 25.055 | 22099.645 | ug/L | 20791.583 |
| \| | 55 | Mn | 0.000223 | 1521.623 | 2468.479 | ug/L | 2457.808 |
| \| | 59 | Co | -0.008484 | 13.756 | 295.340 | ug/L | 371.011 |
| \| | 60 | Ni | 0.002339 | 491.237 | 293.365 | ug/L | 288.142 |
| \| | 65 | Cu | -0.000657 | 1442.196 | 179.081 | ug/L | 179.769 |
| \| | 75 | As | -0.074247 | 91.256 | 14854.704 | ug/L | 14942.004 |
| \| | 97 | Mo | -0.021576 | 59.825 | 231.671 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1123061.870 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | -0.007707 | 94.838 | 67.907 | ug/L | 81.753 |
| \| | 121 | Sb | -0.013916 | 40.326 | 300.007 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1175954.285 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | -0.006717 | 32.797 | 933.360 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 980051.929 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | -0.110441 | 118.895 | -125.407 | ug/L | -104.275 |
| \| | 53 | Cr | 3.581914 | 19.613 | 20673.269 | ug/L | 19477.777 |
| \| | 61 | Ni | -0.588120 | 227.587 | 1119.276 | ug/L | 1133.617 |
| \| | 63 | Cu | -0.002041 | 82.949 | 115.003 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1123061.870 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | -0.031860 | 63.650 | 6.717 | ug/L | 10.568 |
| \| | 114 | Cd | -0.006627 | 61.660 | 177.582 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1175954.285 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | -0.006816 | 44.358 | 486.019 | ug/L | 574.693 |
| \| | 207 | Pb | -0.006031 | 41.447 | 205.337 | ug/L | 237.671 |
| \| | 206 | Pb | -0.007056 | 38.027 | 242.005 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 980051.929 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| | Cu | 65 | |
| | As | 75 | |
| | Mo | 97 | |
| > | Ge-1 | 72 | 100.325 |
| | Cd | 111 | |
| | Sb | 121 | |
| > | In-1 | 115 | 99.687 |
| | Pb | 208 | |
| > | Tm-1 | 169 | 99.118 |
| | Cr | 50 | |
| | Cr | 53 | |
| | Ni | 61 | |
| | Cu | 63 | |
| > | Ge | 72 | 100.325 |
| | Cd | 108 | |
| | Cd | 114 | |
| > | In | 115 | 99.687 |
| | 207.977 | 208 | |
| | Pb | 207 | |
| | Pb | 206 | |
| > | Tm | 169 | 99.118 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 6**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 16:31:42
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 6.041
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | 4969.029534 | 1.765 | 25678746.386 | ug/L | 75057.441 |
| \| | 44 | Ca | 5046.378676 | 1.672 | 1064081.153 | ug/L | 8762.363 |
| \| | 52 | Cr | 100.032102 | 0.573 | 747808.235 | ug/L | 20791.583 |
| \| | 55 | Mn | 99.037085 | 0.764 | 1145225.919 | ug/L | 2457.808 |
| \| | 59 | Co | 98.142152 | 0.824 | 860752.753 | ug/L | 371.011 |
| \| | 60 | Ni | 98.459339 | 0.416 | 180869.030 | ug/L | 288.142 |
| \| | 65 | Cu | 99.900836 | 1.129 | 196558.465 | ug/L | 179.769 |
| \| | 75 | As | 99.900733 | 1.645 | 191779.600 | ug/L | 14942.004 |
| \| | 97 | Mo | 198.184910 | 1.248 | 323867.223 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1088034.093 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | 100.559314 | 0.478 | 170949.688 | ug/L | 81.753 |
| \| | 121 | Sb | 50.134767 | 1.362 | 290772.542 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1122737.648 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | 99.535165 | 1.027 | 2188804.578 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 903223.338 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | 101.753710 | 3.921 | 18638.644 | ug/L | -104.275 |
| \| | 53 | Cr | 102.283073 | 3.172 | 50309.099 | ug/L | 19477.777 |
| \| | 61 | Ni | 101.178467 | 3.303 | 4117.395 | ug/L | 1133.617 |
| \| | 63 | Cu | 99.644302 | 1.501 | 143221.007 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1088034.093 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | 101.674264 | 0.989 | 11687.825 | ug/L | 10.568 |
| \| | 114 | Cd | 101.141430 | 0.631 | 412326.828 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1122737.648 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | 99.319989 | 0.944 | 1125102.709 | ug/L | 574.693 |
| \| | 207 | Pb | 100.016259 | 1.105 | 462962.337 | ug/L | 237.671 |
| \| | 206 | Pb | 99.570075 | 1.297 | 600739.531 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 903223.338 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 97.196 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 95.175 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 91.348 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 97.196 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 95.175 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 91.348 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 6**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 16:35:16
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 6.042
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | -0.953649 | 12.821 | 69322.210 | ug/L | 75057.441 |
| \| | 44 | Ca | 1.422850 | 23.748 | 8981.000 | ug/L | 8762.363 |
| \| | 52 | Cr | 0.159199 | 16.975 | 21770.848 | ug/L | 20791.583 |
| \| | 55 | Mn | 0.001834 | 395.586 | 2455.808 | ug/L | 2457.808 |
| \| | 59 | Co | -0.011983 | 13.787 | 260.339 | ug/L | 371.011 |
| \| | 60 | Ni | -0.010695 | 62.099 | 265.384 | ug/L | 288.142 |
| \| | 65 | Cu | -0.002724 | 43.544 | 172.570 | ug/L | 179.769 |
| \| | 75 | As | 0.157178 | 88.889 | 15081.991 | ug/L | 14942.004 |
| \| | 97 | Mo | -0.047551 | 18.543 | 185.669 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1108592.060 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | -0.009066 | 103.177 | 63.908 | ug/L | 81.753 |
| \| | 121 | Sb | -0.021121 | 3.902 | 250.672 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1148654.965 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | -0.008065 | 3.742 | 848.022 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 922471.115 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | -0.119435 | 57.715 | -125.649 | ug/L | -104.275 |
| \| | 53 | Cr | 2.168034 | 40.132 | 19967.345 | ug/L | 19477.777 |
| \| | 61 | Ni | -0.739513 | 232.655 | 1100.267 | ug/L | 1133.617 |
| \| | 63 | Cu | -0.002860 | 137.994 | 112.336 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1108592.060 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | -0.051730 | 59.127 | 4.199 | ug/L | 10.568 |
| \| | 114 | Cd | -0.011600 | 30.139 | 152.576 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1148654.965 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | -0.007564 | 7.367 | 448.682 | ug/L | 574.693 |
| \| | 207 | Pb | -0.010955 | 20.530 | 170.002 | ug/L | 237.671 |
| \| | 206 | Pb | -0.006790 | 13.726 | 229.337 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 922471.115 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 99.033 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 97.372 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 93.295 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 99.033 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 97.372 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 93.295 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 7**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 16:38:51
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 7.043
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | 4920.278656 | 1.539 | 25343799.641 | ug/L | 75057.441 |
| \| | 44 | Ca | 5051.258898 | 1.668 | 1061493.293 | ug/L | 8762.363 |
| \| | 52 | Cr | 98.904766 | 1.512 | 737116.925 | ug/L | 20791.583 |
| \| | 55 | Mn | 97.609254 | 0.970 | 1125029.433 | ug/L | 2457.808 |
| \| | 59 | Co | 96.982934 | 2.241 | 847682.121 | ug/L | 371.011 |
| \| | 60 | Ni | 97.535345 | 1.386 | 178573.454 | ug/L | 288.142 |
| \| | 65 | Cu | 98.773118 | 0.911 | 193712.358 | ug/L | 179.769 |
| \| | 75 | As | 99.186750 | 1.979 | 189879.815 | ug/L | 14942.004 |
| \| | 97 | Mo | 198.710700 | 1.687 | 323644.955 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1084503.357 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | 99.797785 | 1.947 | 170904.049 | ug/L | 81.753 |
| \| | 121 | Sb | 49.776995 | 1.055 | 290862.420 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1131166.951 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | 98.870324 | 1.300 | 2188229.429 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 909091.651 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | 97.253662 | 5.552 | 17740.039 | ug/L | -104.275 |
| \| | 53 | Cr | 102.000578 | 0.500 | 50050.874 | ug/L | 19477.777 |
| \| | 61 | Ni | 94.556226 | 2.146 | 3906.354 | ug/L | 1133.617 |
| \| | 63 | Cu | 98.554904 | 1.595 | 141187.707 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1084503.357 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | 100.282125 | 0.809 | 11614.112 | ug/L | 10.568 |
| \| | 114 | Cd | 100.144821 | 1.131 | 411304.286 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1131166.951 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | 98.601868 | 1.271 | 1124178.985 | ug/L | 574.693 |
| \| | 207 | Pb | 99.282040 | 1.375 | 462526.163 | ug/L | 237.671 |
| \| | 206 | Pb | 99.058488 | 1.330 | 601524.282 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 909091.651 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 96.881 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 95.890 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 91.942 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 96.881 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 95.890 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 91.942 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 7**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 16:42:26
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 7.044
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | -0.683021 | 15.186 | 70096.967 | ug/L | 75057.441 |
| \| | 44 | Ca | 0.950082 | 115.041 | 8798.414 | ug/L | 8762.363 |
| \| | 52 | Cr | 0.194747 | 13.247 | 21832.055 | ug/L | 20791.583 |
| \| | 55 | Mn | 0.002036 | 36.978 | 2435.466 | ug/L | 2457.808 |
| \| | 59 | Co | -0.008777 | 26.722 | 286.340 | ug/L | 371.011 |
| \| | 60 | Ni | -0.004137 | 130.113 | 275.094 | ug/L | 288.142 |
| \| | 65 | Cu | -0.000035 | 5671.227 | 176.331 | ug/L | 179.769 |
| \| | 75 | As | 0.174184 | 131.434 | 14973.545 | ug/L | 14942.004 |
| \| | 97 | Mo | -0.033962 | 6.475 | 206.337 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1098443.586 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | -0.010648 | 23.340 | 60.309 | ug/L | 81.753 |
| \| | 121 | Sb | -0.020953 | 9.505 | 248.338 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1133443.420 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | -0.006879 | 22.560 | 869.023 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 916864.133 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | -0.131309 | 46.527 | -126.715 | ug/L | -104.275 |
| \| | 53 | Cr | 3.827165 | 42.928 | 20296.926 | ug/L | 19477.777 |
| \| | 61 | Ni | -1.966564 | 74.865 | 1053.244 | ug/L | 1133.617 |
| \| | 63 | Cu | 0.002667 | 122.677 | 119.336 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1098443.586 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | -0.024212 | 151.854 | 7.322 | ug/L | 10.568 |
| \| | 114 | Cd | -0.008049 | 26.584 | 165.076 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1133443.420 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | -0.007432 | 20.312 | 447.349 | ug/L | 574.693 |
| \| | 207 | Pb | -0.006866 | 48.382 | 188.003 | ug/L | 237.671 |
| \| | 206 | Pb | -0.005852 | 15.232 | 233.671 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 916864.133 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| | Cu | 65 | |
| | As | 75 | |
| | Mo | 97 | |
| > | Ge-1 | 72 | 98.126 |
| | Cd | 111 | |
| | Sb | 121 | |
| > | In-1 | 115 | 96.083 |
| | Pb | 208 | |
| > | Tm-1 | 169 | 92.728 |
| | Cr | 50 | |
| | Cr | 53 | |
| | Ni | 61 | |
| | Cu | 63 | |
| > | Ge | 72 | 98.126 |
| | Cd | 108 | |
| | Cd | 114 | |
| > | In | 115 | 96.083 |
| | 207.977 | 208 | |
| | Pb | 207 | |
| | Pb | 206 | |
| > | Tm | 169 | 92.728 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 8**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 17:17:19
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 8.054
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | 4939.959710 | 0.375 | 25450660.002 | ug/L | 75057.441 |
| \| | 44 | Ca | 5050.125478 | 0.925 | 1061487.191 | ug/L | 8762.363 |
| \| | 52 | Cr | 100.584201 | 0.962 | 749451.668 | ug/L | 20791.583 |
| \| | 55 | Mn | 98.790263 | 0.847 | 1138797.382 | ug/L | 2457.808 |
| \| | 59 | Co | 98.447694 | 1.218 | 860709.793 | ug/L | 371.011 |
| \| | 60 | Ni | 98.893344 | 1.727 | 181086.054 | ug/L | 288.142 |
| \| | 65 | Cu | 99.390477 | 0.697 | 194947.912 | ug/L | 179.769 |
| \| | 75 | As | 99.786083 | 0.604 | 190991.013 | ug/L | 14942.004 |
| \| | 97 | Mo | 198.854874 | 0.572 | 323957.030 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1084569.913 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | 100.596247 | 1.033 | 170647.444 | ug/L | 81.753 |
| \| | 121 | Sb | 50.310001 | 0.905 | 291184.161 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1120388.356 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | 99.881355 | 1.546 | 2170951.998 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 892789.909 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | 96.693469 | 1.946 | 17648.981 | ug/L | -104.275 |
| \| | 53 | Cr | 105.312188 | 3.271 | 51065.796 | ug/L | 19477.777 |
| \| | 61 | Ni | 98.987039 | 3.015 | 4038.586 | ug/L | 1133.617 |
| \| | 63 | Cu | 99.710331 | 1.181 | 142877.040 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1084569.913 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | 101.599663 | 0.898 | 11654.308 | ug/L | 10.568 |
| \| | 114 | Cd | 101.069203 | 1.176 | 411155.386 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1120388.356 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | 99.579521 | 1.392 | 1114968.527 | ug/L | 574.693 |
| \| | 207 | Pb | 100.236015 | 1.774 | 458589.473 | ug/L | 237.671 |
| \| | 206 | Pb | 100.175958 | 1.679 | 597393.998 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 892789.909 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 96.887 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 94.976 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 90.293 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 96.887 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 94.976 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 90.293 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 8**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 17:20:54
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 8 .055
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | -0.744310 | 14.501 | 69955.803 | ug/L | 75057.441 |
| \| | 44 | Ca | 0.544908 | 78.255 | 8735.326 | ug/L | 8762.363 |
| \| | 52 | Cr | 0.167076 | 17.751 | 21683.216 | ug/L | 20791.583 |
| \| | 55 | Mn | -0.007293 | 91.570 | 2332.761 | ug/L | 2457.808 |
| \| | 59 | Co | -0.007280 | 10.544 | 300.340 | ug/L | 371.011 |
| \| | 60 | Ni | -0.005582 | 101.088 | 273.084 | ug/L | 288.142 |
| \| | 65 | Cu | -0.003442 | 249.492 | 170.083 | ug/L | 179.769 |
| \| | 75 | As | 0.061667 | 54.272 | 14809.257 | ug/L | 14942.004 |
| \| | 97 | Mo | -0.040101 | 15.221 | 196.670 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1101200.032 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | -0.005592 | 137.227 | 68.902 | ug/L | 81.753 |
| \| | 121 | Sb | -0.010816 | 29.046 | 307.007 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1131455.042 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | -0.005248 | 20.062 | 882.024 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 892804.306 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | -0.172562 | 42.209 | -134.670 | ug/L | -104.275 |
| \| | 53 | Cr | 2.121176 | 56.587 | 19821.098 | ug/L | 19477.777 |
| \| | 61 | Ni | -2.409186 | 108.817 | 1042.573 | ug/L | 1133.617 |
| \| | 63 | Cu | -0.004894 | 162.299 | 108.669 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1101200.032 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | -0.032888 | 53.707 | 6.322 | ug/L | 10.568 |
| \| | 114 | Cd | -0.006937 | 31.609 | 169.392 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1131455.042 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | -0.004551 | 30.714 | 468.017 | ug/L | 574.693 |
| \| | 207 | Pb | -0.005455 | 23.005 | 189.669 | ug/L | 237.671 |
| \| | 206 | Pb | -0.006397 | 10.136 | 224.337 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 892804.306 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \> | Ge-1 | 72 | 98.372 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \> | In-1 | 115 | 95.914 |
| ⌈ | Pb | 208 | |
| \> | Tm-1 | 169 | 90.294 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \> | Ge | 72 | 98.372 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \> | In | 115 | 95.914 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \> | Tm | 169 | 90.294 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 9**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 17:24:28
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 9.056
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | 4863.929332 | 2.223 | 25112940.936 | ug/L | 75057.441 |
| \| | 44 | Ca | 5004.872088 | 0.909 | 1054399.895 | ug/L | 8762.363 |
| \| | 52 | Cr | 98.510463 | 1.061 | 736047.462 | ug/L | 20791.583 |
| \| | 55 | Mn | 96.892493 | 0.706 | 1119462.758 | ug/L | 2457.808 |
| \| | 59 | Co | 96.700612 | 0.665 | 847355.285 | ug/L | 371.011 |
| \| | 60 | Ni | 96.988865 | 0.889 | 178001.966 | ug/L | 288.142 |
| \| | 65 | Cu | 98.401097 | 1.172 | 193433.400 | ug/L | 179.769 |
| \| | 75 | As | 98.266284 | 1.000 | 188716.142 | ug/L | 14942.004 |
| \| | 97 | Mo | 197.200892 | 0.843 | 321977.589 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1087030.424 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | 98.896956 | 1.089 | 169294.297 | ug/L | 81.753 |
| \| | 121 | Sb | 49.465739 | 1.240 | 288903.108 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1130612.203 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | 98.675261 | 1.567 | 2154489.926 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 896854.129 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | 99.779770 | 0.790 | 18256.942 | ug/L | -104.275 |
| \| | 53 | Cr | 102.523727 | 1.634 | 50327.873 | ug/L | 19477.777 |
| \| | 61 | Ni | 95.549229 | 6.194 | 3945.760 | ug/L | 1133.617 |
| \| | 63 | Cu | 98.098293 | 1.085 | 140875.563 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1087030.424 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | 100.010147 | 0.760 | 11576.775 | ug/L | 10.568 |
| \| | 114 | Cd | 99.332755 | 1.184 | 407772.626 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1130612.203 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | 98.508266 | 1.492 | 1107983.980 | ug/L | 574.693 |
| \| | 207 | Pb | 98.644367 | 1.551 | 453368.596 | ug/L | 237.671 |
| \| | 206 | Pb | 99.012491 | 1.730 | 593137.351 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 896854.129 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 97.107 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 95.843 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 90.704 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 97.107 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 95.843 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 90.704 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 9**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 17:28:02
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 9.057
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 27 | Al | -0.757259 | 24.018 | 70106.407 | ug/L | 75057.441 |
| | 44 | Ca | -0.094556 | 766.432 | 8627.179 | ug/L | 8762.363 |
| | 52 | Cr | 0.195366 | 1.157 | 21961.833 | ug/L | 20791.583 |
| | 55 | Mn | -0.008548 | 77.845 | 2325.092 | ug/L | 2457.808 |
| | 59 | Co | -0.003802 | 47.974 | 332.342 | ug/L | 371.011 |
| | 60 | Ni | -0.004714 | 331.939 | 275.694 | ug/L | 288.142 |
| | 65 | Cu | -0.007404 | 43.014 | 162.608 | ug/L | 179.769 |
| | 75 | As | 0.217209 | 62.028 | 15137.048 | ug/L | 14942.004 |
| | 97 | Mo | -0.034041 | 16.674 | 207.337 | ug/L | 267.339 |
| > | 72 | Ge-1 | | | 1104744.589 | ug/L | 1119419.469 |
| | 111 | Cd | -0.001110 | 1177.066 | 77.166 | ug/L | 81.753 |
| | 121 | Sb | -0.015630 | 14.902 | 281.673 | ug/L | 386.012 |
| > | 115 | In-1 | | | 1142060.420 | ug/L | 1179651.477 |
| | 208 | Pb | -0.005172 | 11.688 | 897.025 | ug/L | 1103.037 |
| > | 169 | Tm-1 | | | 906340.041 | ug/L | 988769.324 |
| | 50 | Cr | -0.089484 | 111.990 | -119.531 | ug/L | -104.275 |
| | 53 | Cr | 2.746638 | 18.728 | 20078.314 | ug/L | 19477.777 |
| | 61 | Ni | -2.127096 | 50.305 | 1054.578 | ug/L | 1133.617 |
| | 63 | Cu | -0.009201 | 92.764 | 102.669 | ug/L | 117.670 |
| > | 72 | Ge | | | 1104744.589 | ug/L | 1119419.469 |
| | 108 | Cd | -0.013609 | 148.971 | 8.630 | ug/L | 10.568 |
| | 114 | Cd | -0.002256 | 112.571 | 190.522 | ug/L | 206.332 |
| > | 115 | In | | | 1142060.420 | ug/L | 1179651.477 |
| | 208 | 207.977 | -0.004850 | 31.129 | 471.684 | ug/L | 574.693 |
| | 207 | Pb | -0.005441 | 50.244 | 192.670 | ug/L | 237.671 |
| | 206 | Pb | -0.005568 | 29.880 | 232.671 | ug/L | 290.673 |
| > | 169 | Tm | | | 906340.041 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Al | 27 | |
| | Ca | 44 | |
| | Cr | 52 | |
| | Mn | 55 | |
| | Co | 59 | |
| | Ni | 60 | |

| | | | |
|---|---|---|---|
| | Cu | 65 | |
| | As | 75 | |
| | Mo | 97 | |
| > | Ge-1 | 72 | 98.689 |
| | Cd | 111 | |
| | Sb | 121 | |
| > | In-1 | 115 | 96.813 |
| | Pb | 208 | |
| > | Tm-1 | 169 | 91.663 |
| | Cr | 50 | |
| | Cr | 53 | |
| | Ni | 61 | |
| | Cu | 63 | |
| > | Ge | 72 | 98.689 |
| | Cd | 108 | |
| | Cd | 114 | |
| > | In | 115 | 96.813 |
| | 207.977 | 208 | |
| | Pb | 207 | |
| | Pb | 206 | |
| > | Tm | 169 | 91.663 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 10**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 18:03:06
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 10.067
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | 4787.134712 | 1.619 | 24848058.296 | ug/L | 75057.441 |
| \| | 44 | Ca | 4915.436799 | 0.176 | 1041192.246 | ug/L | 8762.363 |
| \| | 52 | Cr | 97.086424 | 1.299 | 729478.470 | ug/L | 20791.583 |
| \| | 55 | Mn | 95.771399 | 0.331 | 1112394.846 | ug/L | 2457.808 |
| \| | 59 | Co | 95.163168 | 0.052 | 838293.611 | ug/L | 371.011 |
| \| | 60 | Ni | 95.870129 | 1.138 | 176878.525 | ug/L | 288.142 |
| \| | 65 | Cu | 97.698881 | 0.399 | 193072.644 | ug/L | 179.769 |
| \| | 75 | As | 97.442780 | 1.112 | 188235.890 | ug/L | 14942.004 |
| \| | 97 | Mo | 194.292987 | 1.053 | 318888.987 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1092722.928 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | 98.449330 | 0.929 | 167813.308 | ug/L | 81.753 |
| \| | 121 | Sb | 48.944594 | 1.346 | 284646.332 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1125769.841 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | 97.627175 | 0.609 | 2106057.387 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 886020.129 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | 95.579172 | 3.493 | 17574.023 | ug/L | -104.275 |
| \| | 53 | Cr | 99.085709 | 1.082 | 49534.059 | ug/L | 19477.777 |
| \| | 61 | Ni | 94.757365 | 1.514 | 3942.751 | ug/L | 1133.617 |
| \| | 63 | Cu | 97.280095 | 0.337 | 140447.056 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1092722.928 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | 98.627075 | 0.828 | 11368.079 | ug/L | 10.568 |
| \| | 114 | Cd | 98.767500 | 0.799 | 403736.557 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1125769.841 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | 97.491960 | 0.790 | 1083397.812 | ug/L | 574.693 |
| \| | 207 | Pb | 97.646089 | 0.822 | 443393.669 | ug/L | 237.671 |
| \| | 206 | Pb | 97.866528 | 0.274 | 579265.907 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 886020.129 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 97.615 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 95.432 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 89.608 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 97.615 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 95.432 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 89.608 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 10**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 18:06:40
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 10.068
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 27 | Al | -0.836858 | 10.039 | 69543.600 | ug/L | 75057.441 |
| | 44 | Ca | -1.035334 | 70.405 | 8409.889 | ug/L | 8762.363 |
| | 52 | Cr | 0.223065 | 25.217 | 22120.058 | ug/L | 20791.583 |
| | 55 | Mn | -0.013258 | 9.121 | 2265.403 | ug/L | 2457.808 |
| | 59 | Co | -0.004811 | 39.968 | 322.675 | ug/L | 371.011 |
| | 60 | Ni | -0.002566 | 699.375 | 279.066 | ug/L | 288.142 |
| | 65 | Cu | -0.004477 | 47.056 | 168.108 | ug/L | 179.769 |
| | 75 | As | 0.083254 | 142.461 | 14864.051 | ug/L | 14942.004 |
| | 97 | Mo | -0.019499 | 50.902 | 231.004 | ug/L | 267.339 |
| > | 72 | Ge-1 | | | 1102372.569 | ug/L | 1119419.469 |
| | 111 | Cd | -0.006213 | 53.111 | 68.014 | ug/L | 81.753 |
| | 121 | Sb | -0.016631 | 11.373 | 274.006 | ug/L | 386.012 |
| > | 115 | In-1 | | | 1135126.252 | ug/L | 1179651.477 |
| | 208 | Pb | -0.004742 | 20.546 | 890.356 | ug/L | 1103.037 |
| > | 169 | Tm-1 | | | 890209.164 | ug/L | 988769.324 |
| | 50 | Cr | -0.138858 | 59.218 | -128.626 | ug/L | -104.275 |
| | 53 | Cr | 1.655370 | 141.890 | 19697.077 | ug/L | 19477.777 |
| | 61 | Ni | -0.997286 | 50.691 | 1086.260 | ug/L | 1133.617 |
| | 63 | Cu | 0.001917 | 40.061 | 118.670 | ug/L | 117.670 |
| > | 72 | Ge | | | 1102372.569 | ug/L | 1119419.469 |
| | 108 | Cd | -0.023059 | 214.795 | 7.470 | ug/L | 10.568 |
| | 114 | Cd | -0.005426 | 56.789 | 176.249 | ug/L | 206.332 |
| > | 115 | In | | | 1135126.252 | ug/L | 1179651.477 |
| | 208 | 207.977 | -0.007711 | 6.654 | 431.348 | ug/L | 574.693 |
| | 207 | Pb | -0.004451 | 81.353 | 193.670 | ug/L | 237.671 |
| | 206 | Pb | 0.000608 | 408.355 | 265.339 | ug/L | 290.673 |
| > | 169 | Tm | | | 890209.164 | ug/L | 988769.324 |

## Internal Standard Recoveries

| Analyte | Mass | Int Std % Recovery |
|---|---|---|
| Al | 27 | |
| Ca | 44 | |
| Cr | 52 | |
| Mn | 55 | |
| Co | 59 | |
| Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 98.477 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 96.226 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 90.032 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 98.477 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 96.226 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 90.032 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 11**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 18:10:14
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 11.069
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 27 | Al | 4810.039512 | 2.784 | 24873765.270 | ug/L | 75057.441 |
| \| | 44 | Ca | 4936.328544 | 1.775 | 1041650.205 | ug/L | 8762.363 |
| \| | 52 | Cr | 97.296291 | 1.557 | 728337.133 | ug/L | 20791.583 |
| \| | 55 | Mn | 96.344516 | 1.630 | 1114821.017 | ug/L | 2457.808 |
| \| | 59 | Co | 95.932253 | 1.572 | 841900.660 | ug/L | 371.011 |
| \| | 60 | Ni | 95.685638 | 1.505 | 175886.202 | ug/L | 288.142 |
| \| | 65 | Cu | 96.849408 | 1.376 | 190688.296 | ug/L | 179.769 |
| \| | 75 | As | 97.321468 | 1.030 | 187341.720 | ug/L | 14942.004 |
| \| | 97 | Mo | 195.055272 | 2.283 | 318939.300 | ug/L | 267.339 |
| ⌞> | 72 | Ge-1 | | | 1088813.712 | ug/L | 1119419.469 |
| ⌜ | 111 | Cd | 98.710237 | 1.314 | 168417.815 | ug/L | 81.753 |
| \| | 121 | Sb | 49.202766 | 2.029 | 286402.134 | ug/L | 386.012 |
| ⌞> | 115 | In-1 | | | 1126959.595 | ug/L | 1179651.477 |
| ⌜ | 208 | Pb | 98.012264 | 1.361 | 2109256.013 | ug/L | 1103.037 |
| ⌞> | 169 | Tm-1 | | | 883965.154 | ug/L | 988769.324 |
| ⌜ | 50 | Cr | 100.416164 | 1.249 | 18403.401 | ug/L | -104.275 |
| \| | 53 | Cr | 100.455561 | 1.813 | 49771.799 | ug/L | 19477.777 |
| \| | 61 | Ni | 95.332698 | 4.654 | 3945.090 | ug/L | 1133.617 |
| \| | 63 | Cu | 96.805739 | 1.228 | 139242.475 | ug/L | 117.670 |
| ⌞> | 72 | Ge | | | 1088813.712 | ug/L | 1119419.469 |
| ⌜ | 108 | Cd | 98.655235 | 1.629 | 11381.726 | ug/L | 10.568 |
| \| | 114 | Cd | 99.060896 | 1.951 | 405288.917 | ug/L | 206.332 |
| ⌞> | 115 | In | | | 1126959.595 | ug/L | 1179651.477 |
| ⌜ | 208 | 207.977 | 97.852841 | 1.259 | 1084801.093 | ug/L | 574.693 |
| \| | 207 | Pb | 97.855501 | 1.224 | 443282.647 | ug/L | 237.671 |
| \| | 206 | Pb | 98.431842 | 1.707 | 581172.273 | ug/L | 290.673 |
| ⌞> | 169 | Tm | | | 883965.154 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 97.266 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 95.533 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 89.401 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 97.266 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 95.533 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 89.401 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 11**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 18:13:48
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 11.070
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 27 | Al | -0.865044 | 16.192 | 69828.702 | ug/L | 75057.441 |
| | 44 | Ca | -1.713321 | 51.497 | 8316.097 | ug/L | 8762.363 |
| | 52 | Cr | 0.191370 | 31.076 | 22021.043 | ug/L | 20791.583 |
| | 55 | Mn | -0.002952 | 50.774 | 2400.786 | ug/L | 2457.808 |
| | 59 | Co | -0.003499 | 86.792 | 336.676 | ug/L | 371.011 |
| | 60 | Ni | -0.005712 | 111.038 | 274.959 | ug/L | 288.142 |
| | 65 | Cu | -0.004142 | 99.672 | 169.766 | ug/L | 179.769 |
| | 75 | As | 0.092892 | 126.226 | 14973.372 | ug/L | 14942.004 |
| | 97 | Mo | -0.004665 | 290.439 | 257.005 | ug/L | 267.339 |
| > | 72 | Ge-1 | | | 1109345.333 | ug/L | 1119419.469 |
| | 111 | Cd | -0.005067 | 21.940 | 70.435 | ug/L | 81.753 |
| | 121 | Sb | -0.019430 | 16.133 | 259.339 | ug/L | 386.012 |
| > | 115 | In-1 | | | 1142898.134 | ug/L | 1179651.477 |
| | 208 | Pb | 0.000243 | 592.901 | 998.031 | ug/L | 1103.037 |
| > | 169 | Tm-1 | | | 889945.911 | ug/L | 988769.324 |
| | 50 | Cr | -0.046640 | 334.522 | -111.858 | ug/L | -104.275 |
| | 53 | Cr | 2.742046 | 16.342 | 20161.056 | ug/L | 19477.777 |
| | 61 | Ni | -2.969569 | 72.628 | 1033.235 | ug/L | 1133.617 |
| | 63 | Cu | -0.007936 | 30.067 | 105.002 | ug/L | 117.670 |
| > | 72 | Ge | | | 1109345.333 | ug/L | 1119419.469 |
| | 108 | Cd | -0.011428 | 392.260 | 8.927 | ug/L | 10.568 |
| | 114 | Cd | -0.003340 | 156.542 | 186.126 | ug/L | 206.332 |
| > | 115 | In | | | 1142898.134 | ug/L | 1179651.477 |
| | 208 | 207.977 | 0.001116 | 255.362 | 529.689 | ug/L | 574.693 |
| | 207 | Pb | -0.003344 | 85.448 | 198.670 | ug/L | 237.671 |
| | 206 | Pb | 0.001354 | 161.548 | 269.672 | ug/L | 290.673 |
| > | 169 | Tm | | | 889945.911 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Al | 27 | |
| | Ca | 44 | |
| | Cr | 52 | |
| | Mn | 55 | |
| | Co | 59 | |
| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \> | Ge-1 | 72 | 99.100 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \> | In-1 | 115 | 96.884 |
| ⌈ | Pb | 208 | |
| \> | Tm-1 | 169 | 90.005 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \> | Ge | 72 | 99.100 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \> | In | 115 | 96.884 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \> | Tm | 169 | 90.005 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: ICSA**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 18:17:22
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\ICSA .071
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 2
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 27 | Al | 89396.543430 | 0.762 | 405953438.611 | ug/L | 75057.441 |
| \| | 44 | Ca | 92355.876176 | 0.316 | 17027600.291 | ug/L | 8762.363 |
| \| | 52 | Cr | 2.343622 | 2.166 | 32821.424 | ug/L | 20791.583 |
| \| | 55 | Mn | 6.350161 | 0.514 | 66665.042 | ug/L | 2457.808 |
| \| | 59 | Co | 1.664643 | 0.211 | 13175.626 | ug/L | 371.011 |
| \| | 60 | Ni | 1.579996 | 7.355 | 2800.584 | ug/L | 288.142 |
| \| | 65 | Cu | -0.750551 | 4.352 | -1145.978 | ug/L | 179.769 |
| \| | 75 | As | 0.841847 | 31.545 | 14109.491 | ug/L | 14942.004 |
| \| | 97 | Mo | 1970.270994 | 0.790 | 2834780.729 | ug/L | 267.339 |
| ⌞> | 72 | Ge-1 | | | 958557.244 | ug/L | 1119419.469 |
| ⌜ | 111 | Cd | 0.978958 | 13.718 | 1463.695 | ug/L | 81.753 |
| \| | 121 | Sb | 0.188352 | 6.856 | 1226.452 | ug/L | 386.012 |
| ⌞> | 115 | In-1 | | | 944102.172 | ug/L | 1179651.477 |
| ⌜ | 208 | Pb | 0.485700 | 2.099 | 10906.596 | ug/L | 1103.037 |
| ⌞> | 169 | Tm-1 | | | 843057.332 | ug/L | 988769.324 |
| ⌜ | 50 | Cr | 274.738824 | 2.098 | 44485.570 | ug/L | -104.275 |
| \| | 53 | Cr | 5.543166 | 11.602 | 18176.399 | ug/L | 19477.777 |
| \| | 61 | Ni | 24.675186 | 7.423 | 1618.577 | ug/L | 1133.617 |
| \| | 63 | Cu | 3.635318 | 1.694 | 4700.857 | ug/L | 117.670 |
| ⌞> | 72 | Ge | | | 958557.244 | ug/L | 1119419.469 |
| ⌜ | 108 | Cd | 54.631762 | 3.249 | 5284.630 | ug/L | 10.568 |
| \| | 114 | Cd | 3.487633 | 3.430 | 12115.436 | ug/L | 206.332 |
| ⌞> | 115 | In | | | 944102.172 | ug/L | 1179651.477 |
| ⌜ | 208 | 207.977 | 0.487038 | 2.849 | 5638.165 | ug/L | 574.693 |
| \| | 207 | Pb | 0.511867 | 2.570 | 2413.458 | ug/L | 237.671 |
| \| | 206 | Pb | 0.463115 | 0.454 | 2854.974 | ug/L | 290.673 |
| ⌞> | 169 | Tm | | | 843057.332 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 85.630 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 80.032 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 85.263 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 85.630 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 80.032 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 85.263 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: ICSAB**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 18:20:54
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\ICSAB.072
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 1
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 27 | Al | 91148.176244 | 1.051 | 412219387.424 | ug/L | 75057.441 |
| | 44 | Ca | 91800.678373 | 0.712 | 16856456.405 | ug/L | 8762.363 |
| | 52 | Cr | 98.462172 | 1.238 | 641083.521 | ug/L | 20791.583 |
| | 55 | Mn | 98.416729 | 1.526 | 997942.098 | ug/L | 2457.808 |
| | 59 | Co | 94.422100 | 1.609 | 726522.243 | ug/L | 371.011 |
| | 60 | Ni | 91.532839 | 1.607 | 147471.392 | ug/L | 288.142 |
| | 65 | Cu | 85.398692 | 1.366 | 147410.429 | ug/L | 179.769 |
| | 75 | As | 99.323003 | 1.812 | 163527.661 | ug/L | 14942.004 |
| | 97 | Mo | 2127.384102 | 1.492 | 3048229.914 | ug/L | 267.339 |
| > | 72 | Ge-1 | | | 954715.764 | ug/L | 1119419.469 |
| | 111 | Cd | 97.496207 | 0.763 | 140706.823 | ug/L | 81.753 |
| | 121 | Sb | 51.547449 | 0.504 | 253759.499 | ug/L | 386.012 |
| > | 115 | In-1 | | | 953260.159 | ug/L | 1179651.477 |
| | 208 | Pb | 101.497476 | 1.253 | 2176932.691 | ug/L | 1103.037 |
| > | 169 | Tm-1 | | | 881010.252 | ug/L | 988769.324 |
| | 50 | Cr | 373.393304 | 2.747 | 60234.716 | ug/L | -104.275 |
| | 53 | Cr | 143.472980 | 1.247 | 55218.777 | ug/L | 19477.777 |
| | 61 | Ni | 155.135532 | 2.965 | 5023.883 | ug/L | 1133.617 |
| | 63 | Cu | 126.913556 | 1.708 | 160030.593 | ug/L | 117.670 |
| > | 72 | Ge | | | 954715.764 | ug/L | 1119419.469 |
| | 108 | Cd | 196.180291 | 2.178 | 19138.076 | ug/L | 10.568 |
| | 114 | Cd | 96.488835 | 0.742 | 479301.302 | ug/L | 206.332 |
| > | 115 | In | | | 953260.159 | ug/L | 1179651.477 |
| | 208 | 207.977 | 138.096496 | 1.182 | 1525790.771 | ug/L | 574.693 |
| | 207 | Pb | 141.241646 | 1.244 | 637661.635 | ug/L | 237.671 |
| | 206 | Pb | 140.789712 | 1.408 | 828509.836 | ug/L | 290.673 |
| > | 169 | Tm | | | 881010.252 | ug/L | 988769.324 |

## Internal Standard Recoveries

| Analyte | Mass | Int Std % Recovery |
|---|---|---|
| Al | 27 | |
| Ca | 44 | |
| Cr | 52 | |
| Mn | 55 | |
| Co | 59 | |
| Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \> | Ge-1 | 72 | 85.287 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \> | In-1 | 115 | 80.809 |
| ⌈ | Pb | 208 | |
| \> | Tm-1 | 169 | 89.102 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \> | Ge | 72 | 85.287 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \> | In | 115 | 80.809 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \> | Tm | 169 | 89.102 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 12**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 18:28:07
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 12.073
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 4
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | 4704.946337 | 1.620 | 24979617.514 | ug/L | 75057.441 |
| \| | 44 | Ca | 4885.711579 | 1.370 | 1058420.423 | ug/L | 8762.363 |
| \| | 52 | Cr | 96.392075 | 0.123 | 740950.914 | ug/L | 20791.583 |
| \| | 55 | Mn | 96.816820 | 0.771 | 1149988.279 | ug/L | 2457.808 |
| \| | 59 | Co | 96.366880 | 1.343 | 868127.439 | ug/L | 371.011 |
| \| | 60 | Ni | 96.840968 | 0.638 | 182726.991 | ug/L | 288.142 |
| \| | 65 | Cu | 97.226122 | 0.665 | 196502.731 | ug/L | 179.769 |
| \| | 75 | As | 98.334733 | 1.499 | 194139.446 | ug/L | 14942.004 |
| \| | 97 | Mo | 195.907509 | 1.008 | 328848.226 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1117570.700 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | 99.242826 | 0.090 | 174625.172 | ug/L | 81.753 |
| \| | 121 | Sb | 49.160411 | 0.554 | 295133.861 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1162050.298 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | 97.363568 | 0.934 | 2261841.050 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 954143.499 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | 92.239197 | 1.449 | 17344.379 | ug/L | -104.275 |
| \| | 53 | Cr | 104.845838 | 3.603 | 52482.857 | ug/L | 19477.777 |
| \| | 61 | Ni | 102.813608 | 4.141 | 4280.031 | ug/L | 1133.617 |
| \| | 63 | Cu | 97.361517 | 0.857 | 143748.391 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1117570.700 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | 100.446292 | 0.255 | 11951.363 | ug/L | 10.568 |
| \| | 114 | Cd | 99.156176 | 0.191 | 418405.581 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1162050.298 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | 97.062924 | 1.170 | 1161564.070 | ug/L | 574.693 |
| \| | 207 | Pb | 97.767049 | 0.875 | 478076.642 | ug/L | 237.671 |
| \| | 206 | Pb | 97.618482 | 0.959 | 622200.338 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 954143.499 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 99.835 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 98.508 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 96.498 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 99.835 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 98.508 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 96.498 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 12**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 18:31:41
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 12.074
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 5
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 27 | Al | 0.687112 | 72.488 | 79147.333 | ug/L | 75057.441 |
| \| | 44 | Ca | -4.063646 | 27.463 | 7933.277 | ug/L | 8762.363 |
| \| | 52 | Cr | 0.094551 | 7.702 | 21626.020 | ug/L | 20791.583 |
| \| | 55 | Mn | -0.000491 | 1458.290 | 2466.812 | ug/L | 2457.808 |
| \| | 59 | Co | -0.003328 | 19.633 | 343.009 | ug/L | 371.011 |
| \| | 60 | Ni | 0.003630 | 369.445 | 296.740 | ug/L | 288.142 |
| \| | 65 | Cu | -0.002704 | 275.358 | 175.279 | ug/L | 179.769 |
| \| | 75 | As | 0.393959 | 32.248 | 15754.130 | ug/L | 14942.004 |
| \| | 97 | Mo | 0.107892 | 22.484 | 451.016 | ug/L | 267.339 |
| ⌞> | 72 | Ge-1 | | | 1126024.219 | ug/L | 1119419.469 |
| ⌜ | 111 | Cd | -0.003117 | 351.548 | 75.301 | ug/L | 81.753 |
| \| | 121 | Sb | -0.022838 | 14.730 | 244.338 | ug/L | 386.012 |
| ⌞> | 115 | In-1 | | | 1166619.653 | ug/L | 1179651.477 |
| ⌜ | 208 | Pb | -0.002986 | 82.705 | 981.696 | ug/L | 1103.037 |
| ⌞> | 169 | Tm-1 | | | 941179.376 | ug/L | 988769.324 |
| ⌜ | 50 | Cr | -0.063836 | 237.724 | -116.920 | ug/L | -104.275 |
| \| | 53 | Cr | 8.414155 | 4.859 | 22263.186 | ug/L | 19477.777 |
| \| | 61 | Ni | 1.926578 | 84.118 | 1199.984 | ug/L | 1133.617 |
| \| | 63 | Cu | -0.001108 | 772.570 | 116.670 | ug/L | 117.670 |
| ⌞> | 72 | Ge | | | 1126024.219 | ug/L | 1119419.469 |
| ⌜ | 108 | Cd | -0.071820 | 60.721 | 1.890 | ug/L | 10.568 |
| \| | 114 | Cd | -0.002540 | 156.058 | 193.361 | ug/L | 206.332 |
| ⌞> | 115 | In | | | 1166619.653 | ug/L | 1179651.477 |
| ⌜ | 208 | 207.977 | -0.004242 | 29.629 | 497.019 | ug/L | 574.693 |
| \| | 207 | Pb | -0.003005 | 126.154 | 211.670 | ug/L | 237.671 |
| \| | 206 | Pb | -0.000614 | 1053.713 | 273.006 | ug/L | 290.673 |
| ⌞> | 169 | Tm | | | 941179.376 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \> | Ge-1 | 72 | 100.590 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \> | In-1 | 115 | 98.895 |
| ⌈ | Pb | 208 | |
| \> | Tm-1 | 169 | 95.187 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \> | Ge | 72 | 100.590 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \> | In | 115 | 98.895 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \> | Tm | 169 | 95.187 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 13**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 18:35:17
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 13.075
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 7
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| | 27 | Al | 4650.796843 | 0.937 | 24804457.252 | ug/L | 75057.441 |
| | 44 | Ca | 4849.482592 | 0.172 | 1055439.548 | ug/L | 8762.363 |
| | 52 | Cr | 95.782951 | 0.455 | 739682.315 | ug/L | 20791.583 |
| | 55 | Mn | 95.755957 | 1.033 | 1142589.627 | ug/L | 2457.808 |
| | 59 | Co | 95.735964 | 0.829 | 866354.386 | ug/L | 371.011 |
| | 60 | Ni | 96.283195 | 0.044 | 182502.456 | ug/L | 288.142 |
| | 65 | Cu | 97.991697 | 0.625 | 198943.245 | ug/L | 179.769 |
| | 75 | As | 99.173229 | 0.427 | 196561.734 | ug/L | 14942.004 |
| | 97 | Mo | 198.493857 | 0.649 | 334697.938 | ug/L | 267.339 |
| > | 72 | Ge-1 | | | 1122591.585 | ug/L | 1119419.469 |
| | 111 | Cd | 99.747716 | 0.836 | 174518.921 | ug/L | 81.753 |
| | 121 | Sb | 49.493668 | 0.835 | 295443.353 | ug/L | 386.012 |
| > | 115 | In-1 | | | 1155484.853 | ug/L | 1179651.477 |
| | 208 | Pb | 98.304883 | 0.426 | 2206187.943 | ug/L | 1103.037 |
| > | 169 | Tm-1 | | | 921748.272 | ug/L | 988769.324 |
| | 50 | Cr | 95.296958 | 1.483 | 18000.395 | ug/L | -104.275 |
| | 53 | Cr | 99.048957 | 1.673 | 50876.224 | ug/L | 19477.777 |
| | 61 | Ni | 97.370510 | 2.262 | 4130.417 | ug/L | 1133.617 |
| | 63 | Cu | 97.089376 | 1.352 | 143989.615 | ug/L | 117.670 |
| > | 72 | Ge | | | 1122591.585 | ug/L | 1119419.469 |
| | 108 | Cd | 101.300750 | 0.899 | 11984.191 | ug/L | 10.568 |
| | 114 | Cd | 99.858517 | 1.064 | 418970.822 | ug/L | 206.332 |
| > | 115 | In | | | 1155484.853 | ug/L | 1179651.477 |
| | 208 | 207.977 | 98.140112 | 0.237 | 1134599.551 | ug/L | 574.693 |
| | 207 | Pb | 98.782667 | 0.329 | 466654.425 | ug/L | 237.671 |
| | 206 | Pb | 98.247694 | 0.935 | 604933.967 | ug/L | 290.673 |
| > | 169 | Tm | | | 921748.272 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| | Al | 27 | |
| | Ca | 44 | |
| | Cr | 52 | |
| | Mn | 55 | |
| | Co | 59 | |
| | Ni | 60 | |

| | | |
|---|---|---|
| Cu | 65 | |
| As | 75 | |
| Mo | 97 | |
| Ge-1 | 72 | 100.283 |
| Cd | 111 | |
| Sb | 121 | |
| In-1 | 115 | 97.951 |
| Pb | 208 | |
| Tm-1 | 169 | 93.222 |
| Cr | 50 | |
| Cr | 53 | |
| Ni | 61 | |
| Cu | 63 | |
| Ge | 72 | 100.283 |
| Cd | 108 | |
| Cd | 114 | |
| In | 115 | 97.951 |
| 207.977 | 208 | |
| Pb | 207 | |
| Pb | 206 | |
| Tm | 169 | 93.222 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 13**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 18:38:53
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 13.076
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 8
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | -2.806830 | 3.631 | 61534.104 | ug/L | 75057.441 |
| \| | 44 | Ca | -5.231219 | 10.376 | 7809.123 | ug/L | 8762.363 |
| \| | 52 | Cr | 0.036296 | 55.259 | 21538.724 | ug/L | 20791.583 |
| \| | 55 | Mn | 0.013251 | 28.256 | 2674.229 | ug/L | 2457.808 |
| \| | 59 | Co | -0.015472 | 7.402 | 236.671 | ug/L | 371.011 |
| \| | 60 | Ni | -0.051201 | 5.755 | 195.845 | ug/L | 288.142 |
| \| | 65 | Cu | 0.004669 | 74.517 | 193.500 | ug/L | 179.769 |
| \| | 75 | As | 0.303240 | 25.642 | 15845.145 | ug/L | 14942.004 |
| \| | 97 | Mo | -0.005049 | 233.502 | 264.672 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1144689.620 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | -0.012560 | 40.882 | 58.822 | ug/L | 81.753 |
| \| | 121 | Sb | -0.028896 | 10.190 | 208.337 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1169650.204 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | -0.011918 | 4.481 | 765.018 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 926681.167 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | -0.111298 | 55.328 | -128.198 | ug/L | -104.275 |
| \| | 53 | Cr | 6.975231 | 16.935 | 22167.941 | ug/L | 19477.777 |
| \| | 61 | Ni | 1.351742 | 163.217 | 1201.652 | ug/L | 1133.617 |
| \| | 63 | Cu | -0.003082 | 64.792 | 115.670 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1144689.620 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | -0.069191 | 26.060 | 2.199 | ug/L | 10.568 |
| \| | 114 | Cd | -0.013514 | 20.717 | 147.210 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1169650.204 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | -0.010726 | 7.433 | 414.013 | ug/L | 574.693 |
| \| | 207 | Pb | -0.013848 | 3.864 | 157.002 | ug/L | 237.671 |
| \| | 206 | Pb | -0.012674 | 17.827 | 194.003 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 926681.167 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 102.257 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 99.152 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 93.721 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 102.257 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 99.152 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 93.721 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 14**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 19:03:23
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 14.083
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 7
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 27 | Al | 4640.375506 | 1.480 | 24009557.302 | ug/L | 75057.441 |
| \| | 44 | Ca | 4919.722629 | 0.805 | 1038610.547 | ug/L | 8762.363 |
| \| | 52 | Cr | 96.397734 | 0.687 | 722100.429 | ug/L | 20791.583 |
| \| | 55 | Mn | 95.488186 | 0.580 | 1105391.474 | ug/L | 2457.808 |
| \| | 59 | Co | 94.743737 | 0.568 | 831814.842 | ug/L | 371.011 |
| \| | 60 | Ni | 95.245574 | 0.333 | 175154.309 | ug/L | 288.142 |
| \| | 65 | Cu | 98.468576 | 0.990 | 193941.800 | ug/L | 179.769 |
| \| | 75 | As | 97.765258 | 0.980 | 188190.097 | ug/L | 14942.004 |
| \| | 97 | Mo | 196.070811 | 0.961 | 320746.282 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1089122.744 | ug/L | 1119419.469 |
| ⌜ | 111 | Cd | 99.415853 | 1.511 | 167410.523 | ug/L | 81.753 |
| \| | 121 | Sb | 49.365783 | 1.589 | 283626.156 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1112250.476 | ug/L | 1179651.477 |
| ⌜ | 208 | Pb | 99.126552 | 1.406 | 2078338.004 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 861220.586 | ug/L | 988769.324 |
| ⌜ | 50 | Cr | 95.386967 | 0.936 | 17480.661 | ug/L | -104.275 |
| \| | 53 | Cr | 99.798763 | 3.426 | 49591.472 | ug/L | 19477.777 |
| \| | 61 | Ni | 94.999102 | 0.858 | 3937.075 | ug/L | 1133.617 |
| \| | 63 | Cu | 96.858023 | 0.997 | 139367.559 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1089122.744 | ug/L | 1119419.469 |
| ⌜ | 108 | Cd | 101.417473 | 1.846 | 11547.999 | ug/L | 10.568 |
| \| | 114 | Cd | 100.342795 | 1.737 | 405204.371 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1112250.476 | ug/L | 1179651.477 |
| ⌜ | 208 | 207.977 | 98.956484 | 1.101 | 1068819.982 | ug/L | 574.693 |
| \| | 207 | Pb | 99.341067 | 1.541 | 438419.818 | ug/L | 237.671 |
| \| | 206 | Pb | 99.281284 | 1.875 | 571098.204 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 861220.586 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 97.294 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 94.286 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 87.100 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 97.294 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 94.286 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 87.100 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 14**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 19:06:59
Method File: E:\elandata\Method\0322434b.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 14.084
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 8
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 27 | Al | -3.093785 | 3.762 | 58292.114 | ug/L | 75057.441 |
| \| | 44 | Ca | -3.458645 | 18.448 | 7968.654 | ug/L | 8762.363 |
| \| | 52 | Cr | 0.163120 | 11.041 | 21876.873 | ug/L | 20791.583 |
| \| | 55 | Mn | 0.009032 | 51.846 | 2549.177 | ug/L | 2457.808 |
| \| | 59 | Co | -0.013950 | 17.290 | 243.671 | ug/L | 371.011 |
| \| | 60 | Ni | -0.045102 | 13.354 | 201.793 | ug/L | 288.142 |
| \| | 65 | Cu | 0.012252 | 63.829 | 203.275 | ug/L | 179.769 |
| \| | 75 | As | 0.306314 | 42.399 | 15406.543 | ug/L | 14942.004 |
| \| | 97 | Mo | -0.036352 | 9.626 | 205.003 | ug/L | 267.339 |
| ⌊> | 72 | Ge-1 | | | 1112545.814 | ug/L | 1119419.469 |
| ⌈ | 111 | Cd | -0.012804 | 16.737 | 56.373 | ug/L | 81.753 |
| \| | 121 | Sb | -0.024281 | 17.493 | 228.004 | ug/L | 386.012 |
| ⌊> | 115 | In-1 | | | 1129514.128 | ug/L | 1179651.477 |
| ⌈ | 208 | Pb | -0.009306 | 3.463 | 773.351 | ug/L | 1103.037 |
| ⌊> | 169 | Tm-1 | | | 869820.009 | ug/L | 988769.324 |
| ⌈ | 50 | Cr | -0.073510 | 75.435 | -117.473 | ug/L | -104.275 |
| \| | 53 | Cr | 5.763937 | 27.413 | 21164.786 | ug/L | 19477.777 |
| \| | 61 | Ni | 1.035157 | 137.936 | 1158.295 | ug/L | 1133.617 |
| \| | 63 | Cu | 0.013880 | 15.778 | 137.337 | ug/L | 117.670 |
| ⌊> | 72 | Ge | | | 1112545.814 | ug/L | 1119419.469 |
| ⌈ | 108 | Cd | -0.062571 | 69.796 | 2.902 | ug/L | 10.568 |
| \| | 114 | Cd | -0.015567 | 20.681 | 133.775 | ug/L | 206.332 |
| ⌊> | 115 | In | | | 1129514.128 | ug/L | 1179651.477 |
| ⌈ | 208 | 207.977 | -0.010199 | 4.989 | 394.346 | ug/L | 574.693 |
| \| | 207 | Pb | -0.008099 | 27.415 | 173.002 | ug/L | 237.671 |
| \| | 206 | Pb | -0.008554 | 29.192 | 206.003 | ug/L | 290.673 |
| ⌊> | 169 | Tm | | | 869820.009 | ug/L | 988769.324 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Al | 27 | |
| \| | Ca | 44 | |
| \| | Cr | 52 | |
| \| | Mn | 55 | |
| \| | Co | 59 | |
| \| | Ni | 60 | |

| | | | |
|---|---|---|---|
| \| | Cu | 65 | |
| \| | As | 75 | |
| \| | Mo | 97 | |
| \|> | Ge-1 | 72 | 99.386 |
| ⌈ | Cd | 111 | |
| \| | Sb | 121 | |
| \|> | In-1 | 115 | 95.750 |
| ⌈ | Pb | 208 | |
| \|> | Tm-1 | 169 | 87.970 |
| ⌈ | Cr | 50 | |
| \| | Cr | 53 | |
| \| | Ni | 61 | |
| \| | Cu | 63 | |
| \|> | Ge | 72 | 99.386 |
| ⌈ | Cd | 108 | |
| \| | Cd | 114 | |
| \|> | In | 115 | 95.750 |
| ⌈ | 207.977 | 208 | |
| \| | Pb | 207 | |
| \| | Pb | 206 | |
| \|> | Tm | 169 | 87.970 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 15**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 19:10:36
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 15.085
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 7
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 44 | Ca | 5428.928516 | 2.576 | 1205275.914 | ug/L | 8762.363 |
| \| | 55 | Mn | 98.811663 | 3.358 | 1203553.267 | ug/L | 2457.808 |
| \| | 75 | As | 95.680608 | 3.412 | 194136.388 | ug/L | 14942.004 |
| ⌞> | 72 | Ge-1 | | | 1146855.583 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌞> | Ge-1 | 72 | 102.451 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 15**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 19:13:15
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 15.086
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 8
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 44 | Ca | 13.122036 | 7.980 | 12100.828 | ug/L | 8762.363 |
| \| | 55 | Mn | 0.026538 | 11.802 | 2896.326 | ug/L | 2457.808 |
| \| | 75 | As | -0.002448 | 3951.492 | 15601.985 | ug/L | 14942.004 |
| ⌞> | 72 | Ge-1 | | | 1169360.735 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌞> | Ge-1 | 72 | 104.461 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 16**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 19:15:54
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 16.087
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 7
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 44 | Ca | 5357.468720 | 2.965 | 1195666.181 | ug/L | 8762.363 |
| \| | 55 | Mn | 98.358354 | 3.067 | 1204388.211 | ug/L | 2457.808 |
| \| | 75 | As | 95.642395 | 2.933 | 195101.952 | ug/L | 14942.004 |
| ⌊> | 72 | Ge-1 | | | 1152599.238 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌊> | Ge-1 | 72 | 102.964 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 16**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 19:18:32
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 16.088
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 8
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 44 | Ca | 12.689615 | 10.609 | 12221.391 | ug/L | 8762.363 |
| \| | 55 | Mn | 0.022186 | 16.593 | 2894.325 | ug/L | 2457.808 |
| \| | 75 | As | 0.066106 | 853.988 | 16002.322 | ug/L | 14942.004 |
| ⌞> | 72 | Ge-1 | | | 1190961.518 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌞> | Ge-1 | 72 | 106.391 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: L94MP**
Sample Description: G0K160437-1
Batch ID: 322435
Sample Date/Time: Sunday, November 21, 2010 19:21:05
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\L94MP.089
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 48
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 44 | Ca | 5815.979661 | 0.306 | 1310092.027 | ug/L | 8762.363 |
| \| | 55 | Mn | 1412.415477 | 1.091 | 17431841.013 | ug/L | 2457.808 |
| \| | 75 | As | 1.123731 | 22.537 | 17660.482 | ug/L | 14942.004 |
| ⌊> | 72 | Ge-1 | | | 1163525.456 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌊> | Ge-1 | 72 | 103.940 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: L94MPP5**
Sample Description: G0K160437-1 5X
Batch ID: 322435
Sample Date/Time: Sunday, November 21, 2010 19:23:38
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\L94MPP5.090
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 49
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 44 | Ca | 1159.575764 | 1.282 | 280129.946 | ug/L | 8762.363 |
| \| | 55 | Mn | 280.731885 | 1.396 | 3617149.147 | ug/L | 2457.808 |
| \| | 75 | As | 0.238954 | 108.957 | 16675.248 | ug/L | 14942.004 |
| ⌊> | 72 | Ge-1 | | | 1214066.578 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌊> | Ge-1 | 72 | 108.455 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: L94MPZ**
Sample Description: G0K160437-1 PS
Batch ID: 322435
Sample Date/Time: Sunday, November 21, 2010 19:26:10
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\L94MPZ.091
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 50
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 44 | Ca | 6406.184189 | 1.869 | 1453830.732 | ug/L | 8762.363 |
| \| | 55 | Mn | 1506.354913 | 2.059 | 18742228.017 | ug/L | 2457.808 |
| \| | 75 | As | 180.099830 | 2.527 | 360159.220 | ug/L | 14942.004 |
| ⌞> | 72 | Ge-1 | | | 1173413.272 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌞> | Ge-1 | 72 | 104.823 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: L94M4**
Sample Description: G0K160437-2
Batch ID: 322435
Sample Date/Time: Sunday, November 21, 2010 19:28:43
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\L94M4.092
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 51
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 44 | Ca | 4291.421220 | 1.682 | 914824.469 | ug/L | 8762.363 |
| \| | 55 | Mn | 93.947745 | 1.508 | 1096900.645 | ug/L | 2457.808 |
| \| | 75 | As | 0.485230 | 28.501 | 15530.377 | ug/L | 14942.004 |
| ⌞> | 72 | Ge-1 | | | 1098535.040 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌞> | Ge-1 | 72 | 98.134 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: L94M7**
Sample Description: G0K160437-3
Batch ID: 322435
Sample Date/Time: Sunday, November 21, 2010 19:31:16
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\L94M7.093
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 52
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 44 | Ca | 3234.023667 | 3.981 | 725912.322 | ug/L | 8762.363 |
| \| | 55 | Mn | 1400.091181 | 4.309 | 17123314.847 | ug/L | 2457.808 |
| \| | 75 | As | 0.555501 | 70.172 | 16433.956 | ug/L | 14942.004 |
| ⌊> | 72 | Ge-1 | | | 1153932.540 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌊> | Ge-1 | 72 | 103.083 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: L94M9**
Sample Description: G0K160437-4
Batch ID: 322435
Sample Date/Time: Sunday, November 21, 2010 19:33:49
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\L94M9.094
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 53
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 44 | Ca | 4152.824339 | 1.778 | 943022.260 | ug/L | 8762.363 |
| \| | 55 | Mn | 217.207798 | 2.047 | 2697051.553 | ug/L | 2457.808 |
| \| | 75 | As | 0.612382 | 23.781 | 16780.757 | ug/L | 14942.004 |
| ⌞> | 72 | Ge-1 | | | 1169827.741 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌞> | Ge-1 | 72 | 104.503 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCV 17**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 19:36:28
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\CCV 17.095
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 7
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌜ | 44 | Ca | 5449.913035 | 2.193 | 1200175.849 | ug/L | 8762.363 |
| \| | 55 | Mn | 99.055010 | 2.551 | 1196916.019 | ug/L | 2457.808 |
| \| | 75 | As | 95.417430 | 3.108 | 192092.505 | ug/L | 14942.004 |
| ⌞> | 72 | Ge-1 | | | 1137353.004 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌜ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌞> | Ge-1 | 72 | 101.602 |

**TAL-W.SACRAMENTO - Perkin Elmer Elan 6000 ICPMS M02 - Method 6020,200.8 - QUANTITATIVE ANALYSIS REPORT**
**SOP No. SAC-MT-0001**
**Analyst: SHargrave**

**Sample ID: CCB 17**
Sample Description:
Batch ID:
Sample Date/Time: Sunday, November 21, 2010 19:39:07
Method File: E:\elandata\Method\0322434c.mth
Dataset File: E:\elandata\Dataset\101121a2\CCB 17.096
Tuning File: e:\elandata\Tuning\default.tun
Optimization File: e:\elandata\Optimize\default.dac
Autosampler Position: 8
Number of Replicates: 3
Dual Detector Mode: Dual
Initial Sample Quantity (mg):
Sample Prep Volume (mL):

## Sample Result Summary

| | Mass | Analyte | Conc. Mean | Conc. RSD | Meas. Intens. Mean | Sample Unit | Blank Intensity |
|---|---|---|---|---|---|---|---|
| ⌈ | 44 | Ca | 14.431890 | 2.467 | 12254.455 | ug/L | 8762.363 |
| \| | 55 | Mn | 0.062773 | 18.388 | 3307.527 | ug/L | 2457.808 |
| \| | 75 | As | -0.085229 | 193.433 | 15267.432 | ug/L | 14942.004 |
| ⌊> | 72 | Ge-1 | | | 1155903.042 | ug/L | 1119419.469 |

## Internal Standard Recoveries

| | Analyte | Mass | Int Std % Recovery |
|---|---|---|---|
| ⌈ | Ca | 44 | |
| \| | Mn | 55 | |
| \| | As | 75 | |
| ⌊> | Ge-1 | 72 | 103.259 |

TAL West Sac

RUN SUMMARY

Method: 6020 (SOP: SAC-MT-001) | Instrument: M02 | Reported: 11/22/10 08:01:45

**File ID:** 101121A2 **Analyst:** hargraves

| # | Sample ID | Lot No. | Batch | | DF | Analyzed Date | Comment | Q |
|---|---|---|---|---|---|---|---|---|
| 1 | Rinse 2X | | | | 2.0 | 11/21/10 13:53 | | ☐ |
| 2 | Blank | | | | 1.0 | 11/21/10 13:58 | | ☐ |
| 3 | Standard1 | | | | 1.0 | 11/21/10 14:02 | | ☐ |
| 4 | ICV | | | | 1.0 | 11/21/10 14:06 | | ☐ |
| 5 | ICB | | | | 1.0 | 11/21/10 14:10 | | ☐ |
| 6 | LLSTD1 | | | | 1.0 | 11/21/10 14:16 | | ☐ |
| 7 | LLSTD2 | | | | 1.0 | 11/21/10 14:20 | | ☐ |
| 8 | ICSA | | | | 1.0 | 11/21/10 14:30 | | ☐ |
| 9 | ICSAB | | | | 1.0 | 11/21/10 14:34 | | ☐ |
| 10 | Rinse | | | | 1.0 | 11/21/10 14:41 | | ☐ |
| 11 | CCV 1 | | | | 1.0 | 11/21/10 14:49 | | ☐ |
| 12 | CCB 1 | | | | 1.0 | 11/21/10 14:53 | | ☐ |
| 15 | CCV 2 | | | | 1.0 | 11/21/10 14:57 | | ☐ |
| 16 | CCB 2 | | | | 1.0 | 11/21/10 15:01 | | ☐ |
| 17 | L9PGPB | G0K080000 | 0312269 | 2A | 1.0 | 11/21/10 15:06 | | ☐ |
| 18 | L93G4B | G0K150000 | 0319271 | 2A | 1.0 | 11/21/10 15:10 | | ☐ |
| 19 | L93HEC | G0K150000 | 0319273 | 2A | 1.0 | 11/21/10 15:14 | | ☐ |
| 20 | L93GPL | G0K150000 | 0319268 | 2A | 1.0 | 11/21/10 15:18 | | ☐ |
| 21 | L99FXB | G0K180000 | 0322434 | 2A | 1.0 | 11/21/10 15:22 | | ☐ |
| 22 | L99F3C | G0K180000 | 0322436 | 2A | 1.0 | 11/21/10 15:26 | | ☐ |
| 23 | L99F1L | G0K180000 | 0322435 | 2A | 1.0 | 11/21/10 15:30 | | ☐ |
| 24 | CCV 3 | | | | 1.0 | 11/21/10 15:34 | | ☐ |
| 25 | CCB 3 | | | | 1.0 | 11/21/10 15:38 | | ☐ |
| 26 | CCV 4 | | | | 1.0 | 11/21/10 15:42 | | ☐ |
| 27 | CCB 4 | | | | 1.0 | 11/21/10 15:46 | | ☐ |
| 30 | CCV 5 | | | | 1.0 | 11/21/10 15:49 | | ☐ |
| 31 | CCB 5 | | | | 1.0 | 11/21/10 15:53 | | ☐ |
| 32 | L9PGPC | G0K080000 | 0312269 | 2A | 1.0 | 11/21/10 15:56 | | ☐ |
| 33 | L9PGPL | G0K080000 | 0312269 | 2A | 1.0 | 11/21/10 16:00 | | ☐ |
| 34 | L9DNC | G0K010418-1 | 0312269 | 2A | 1.0 | 11/21/10 16:03 | | ☐ |
| 35 | L9DNCP5 | G0K010418 | 0312269 | | 5.0 | 11/21/10 16:07 | | ☐ |
| 36 | L9DNCZ | G0K010418-1 | 0312269 | | 1.0 | 11/21/10 16:10 | | ☐ |
| 37 | L9DNK | G0K010418-2 | 0312269 | 2A | 1.0 | 11/21/10 16:14 | | ☐ |
| 38 | L9DNM | G0K010418-3 | 0312269 | 2A | 1.0 | 11/21/10 16:17 | | ☐ |
| 39 | L9DNN | G0K010418-4 | 0312269 | 2A | 1.0 | 11/21/10 16:21 | | ☐ |
| 40 | L9DNR | G0K010418-5 | 0312269 | 2A | 1.0 | 11/21/10 16:24 | | ☐ |
| 41 | L9DNT | G0K010418-6 | 0312269 | 2A | 1.0 | 11/21/10 16:28 | | ☐ |
| 42 | CCV 6 | | | | 1.0 | 11/21/10 16:31 | | ☐ |
| 43 | CCB 6 | | | | 1.0 | 11/21/10 16:35 | | ☐ |
| 44 | CCV 7 | | | | 1.0 | 11/21/10 16:38 | | ☐ |
| 45 | CCB 7 | | | | 1.0 | 11/21/10 16:42 | | ☐ |
| 46 | L9RFH | G0K090544-1 | 0319268 | 2A | 1.0 | 11/21/10 16:45 | | ☐ |
| 47 | L9RFHP5 | G0K090544 | 0319268 | | 5.0 | 11/21/10 16:49 | | ☐ |
| 48 | L9RFHZ | G0K090544-1 | 0319268 | | 1.0 | 11/21/10 16:52 | | ☐ |
| 49 | L9RFJ | G0K090544-2 | 0319268 | 2A | 1.0 | 11/21/10 16:56 | | ☐ |
| 50 | L9RFK | G0K090544-3 | 0319268 | 2A | 1.0 | 11/21/10 16:59 | | ☐ |

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 11/22/10 08:01:45

**File ID:** 101121A2 **Analyst:** hargraves

| # | Sample ID | Lot No. | Batch | | DF | Analyzed Date | Comment | Q |
|---|---|---|---|---|---|---|---|---|
| 51 | L9RFL | G0K090544-4 | 0319268 | 2A | 1.0 | 11/21/10 17:03 | | ☐ |
| 52 | L9RFM | G0K090544-5 | 0319268 | 2A | 1.0 | 11/21/10 17:06 | | ☐ |
| 53 | L9RFN | G0K090544-6 | 0319268 | 2A | 1.0 | 11/21/10 17:10 | | ☐ |
| 54 | L9RFP | G0K090544-7 | 0319268 | 2A | 1.0 | 11/21/10 17:13 | | ☐ |
| 55 | CCV 8 | | | | 1.0 | 11/21/10 17:17 | | ☐ |
| 56 | CCB 8 | | | | 1.0 | 11/21/10 17:20 | | ☐ |
| 57 | CCV 9 | | | | 1.0 | 11/21/10 17:24 | | ☐ |
| 58 | CCB 9 | | | | 1.0 | 11/21/10 17:28 | | ☐ |
| 59 | L90TF | G0K120496-1 | 0322434 | 2A | 1.0 | 11/21/10 17:31 | | ☐ |
| 60 | L90TFP5 | G0K120496 | 0322434 | | 5.0 | 11/21/10 17:35 | | ☐ |
| 61 | L90TFZ | G0K120496-1 | 0322434 | | 1.0 | 11/21/10 17:38 | | ☐ |
| 62 | L90TJ | G0K120496-2 | 0322434 | 2A | 1.0 | 11/21/10 17:42 | | ☐ |
| 63 | L90TK | G0K120496-3 | 0322434 | 2A | 1.0 | 11/21/10 17:45 | | ☐ |
| 64 | L90TL | G0K120496-4 | 0322434 | 2A | 1.0 | 11/21/10 17:49 | | ☐ |
| 65 | L90TM | G0K120496-5 | 0322434 | 2A | 1.0 | 11/21/10 17:52 | | ☐ |
| 66 | L90TN | G0K120496-6 | 0322434 | 2A | 1.0 | 11/21/10 17:56 | | ☐ |
| 67 | L90TP | G0K120496-7 | 0322434 | 2A | 1.0 | 11/21/10 17:59 | | ☐ |
| 68 | CCV 10 | | | | 1.0 | 11/21/10 18:03 | | ☐ |
| 69 | CCB 10 | | | | 1.0 | 11/21/10 18:06 | | ☐ |
| 70 | CCV 11 | | | | 1.0 | 11/21/10 18:10 | | ☐ |
| 71 | CCB 11 | | | | 1.0 | 11/21/10 18:13 | | ☐ |
| 72 | ICSA | | | | 1.0 | 11/21/10 18:17 | | ☐ |
| 73 | ICSAB | | | | 1.0 | 11/21/10 18:20 | | ☐ |
| 74 | CCV 12 | | | | 1.0 | 11/21/10 18:28 | | ☐ |
| 75 | CCB 12 | | | | 1.0 | 11/21/10 18:31 | | ☐ |
| 76 | CCV 13 | | | | 1.0 | 11/21/10 18:35 | | ☐ |
| 77 | CCB 13 | | | | 1.0 | 11/21/10 18:38 | | ☐ |
| 78 | L97JN | G0K170572-1 | 0322436 | 2A | 1.0 | 11/21/10 18:42 | | ☐ |
| 79 | L97JNP5 | G0K170572 | 0322436 | | 5.0 | 11/21/10 18:45 | | ☐ |
| 80 | L97JNZ | G0K170572-1 | 0322436 | | 1.0 | 11/21/10 18:49 | | ☐ |
| 81 | L97JP | G0K170572-2 | 0322436 | 2A | 1.0 | 11/21/10 18:52 | | ☐ |
| 82 | L97JR | G0K170572-3 | 0322436 | 2A | 1.0 | 11/21/10 18:56 | | ☐ |
| 83 | L97JT | G0K170572-4 | 0322436 | 2A | 1.0 | 11/21/10 18:59 | | ☐ |
| 84 | CCV 14 | | | | 1.0 | 11/21/10 19:03 | | ☐ |
| 85 | CCB 14 | | | | 1.0 | 11/21/10 19:06 | | ☐ |
| 86 | CCV 15 | | | | 1.0 | 11/21/10 19:10 | | ☐ |
| 87 | CCB 15 | | | | 1.0 | 11/21/10 19:13 | | ☐ |
| 88 | CCV 16 | | | | 1.0 | 11/21/10 19:15 | | ☐ |
| 89 | CCB 16 | | | | 1.0 | 11/21/10 19:18 | | ☐ |
| 90 | L94MP | G0K160437-1 | 0322435 | 2A | 1.0 | 11/21/10 19:21 | | ☐ |
| 91 | L94MPP5 | G0K160437 | 0322435 | | 5.0 | 11/21/10 19:23 | | ☐ |
| 92 | L94MPZ | G0K160437-1 | 0322435 | | 1.0 | 11/21/10 19:26 | | ☐ |
| 93 | L94M4 | G0K160437-2 | 0322435 | 2A | 1.0 | 11/21/10 19:28 | | ☐ |
| 94 | L94M7 | G0K160437-3 | 0322435 | 2A | 1.0 | 11/21/10 19:31 | | ☐ |
| 95 | L94M9 | G0K160437-4 | 0322435 | 2A | 1.0 | 11/21/10 19:33 | | ☐ |
| 96 | CCV 17 | | | | 1.0 | 11/21/10 19:36 | | ☐ |

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 11/22/10 08:01:45

**File ID: 101121A2** **Analyst: hargraves**

| # | Sample ID | Lot No. | Batch | | DF | Analyzed Date | Comment | Q |
|---|---|---|---|---|---|---|---|---|
| 97 | CCB 17 | | | | 1.0 | 11/21/10 19:39 | | ☐ |
| 98 | CCV 18 | | | | 1.0 | 11/21/10 19:41 | | ☐ |
| 99 | CCB 18 | | | | 1.0 | 11/21/10 19:45 | | ☐ |
| 102 | CCV 19 | | | | 1.0 | 11/21/10 19:49 | | ☐ |
| 103 | CCB 19 | | | | 1.0 | 11/21/10 19:52 | | ☐ |
| 104 | L9TFKB | G0K100000 | 0314283 | EC | 1.0 | 11/21/10 19:56 | | ☐ |
| 105 | L9TFKC | G0K100000 | 0314283 | EC | 1.0 | 11/21/10 20:00 | | ☐ |
| 106 | CCV 20 | | | | 1.0 | 11/21/10 20:04 | | ☐ |
| 107 | CCB 20 | | | | 1.0 | 11/21/10 20:07 | | ☐ |
| 108 | CCV 21 | | | | 1.0 | 11/21/10 20:11 | | ☐ |
| 109 | CCB 21 | | | | 1.0 | 11/21/10 20:15 | | ☐ |
| 110 | L9F0G | G0K020536-1 | 0314283 | EC | 1.0 | 11/21/10 20:18 | | ☐ |
| 111 | L9F0GP5 | G0K020536 | 0314283 | | 5.0 | 11/21/10 20:22 | | ☐ |
| 112 | L9F0GZ | G0K020536-1 | 0314283 | | 1.0 | 11/21/10 20:26 | | ☐ |
| 113 | CCV 22 | | | | 1.0 | 11/21/10 20:29 | | ☐ |
| 114 | CCB 22 | | | | 1.0 | 11/21/10 20:33 | | ☐ |
| 117 | CCV 23 | | | | 1.0 | 11/21/10 20:37 | | ☐ |
| 118 | CCB 23 | | | | 1.0 | 11/21/10 20:41 | | ☐ |
| 119 | L9F0G | G0K020536-1 | 0314283 | EC | 1.0 | 11/21/10 20:44 | | ☐ |
| 120 | L9F0GP5 | G0K020536 | 0314283 | | 5.0 | 11/21/10 20:48 | | ☐ |
| 121 | L9F0GZ | G0K020536-1 | 0314283 | | 1.0 | 11/21/10 20:52 | | ☐ |
| 122 | CCV 24 | | | | 1.0 | 11/21/10 20:55 | | ☐ |
| 123 | CCB 24 | | | | 1.0 | 11/21/10 20:59 | | ☐ |

TAL West Sac

# INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 11/22/10 08:01:45

**File ID: 101121A2** **Analyst: hargraves**

| # | Sample ID | Analyzed Date | Germanium | Indium | Lithium-6 | Thulium | Q |
|---|---|---|---|---|---|---|---|
| 1 | Rinse 2X | 11/21/10 13:53 | 96.5 | 95.3 | 95.4 | 95.6 | ☐ |
| 2 | Blank | 11/21/10 13:58 | 100.0 | 100.0 | 100.0 | 100.0 | ☑ |
| 3 | Standard1 | 11/21/10 14:02 | 99.3 | 98.1 | 111.1 | 97.4 | ☑ |
| 4 | ICV | 11/21/10 14:06 | 98.9 | 98.1 | 105.7 | 97.8 | ☑ |
| 5 | ICB | 11/21/10 14:10 | 99.3 | 98.6 | 107.8 | 97.9 | ☑ |
| 6 | LLSTD1 | 11/21/10 14:16 | 99.6 | 98.9 | 108.9 | 99.2 | ☑ |
| 7 | LLSTD2 | 11/21/10 14:20 | 100.7 | 99.2 | 108.9 | 100.0 | ☑ |
| 8 | ICSA | 11/21/10 14:30 | 87.1 | 80.3 | 104.9 | 85.5 | ☑ |
| 9 | ICSAB | 11/21/10 14:34 | 90.6 | 82.7 | 109.9 | 89.4 | ☑ |
| 10 | Rinse | 11/21/10 14:41 | 109.0 | 107.6 | 127.3 | 110.3 | ☑ |
| 11 | CCV 1 | 11/21/10 14:49 | 108.5 | 104.7 | 128.5 | 108.5 | ☑ |
| 12 | CCB 1 | 11/21/10 14:53 | 109.1 | 105.5 | 130.6 | 108.1 | ☑ |
| 15 | CCV 2 | 11/21/10 14:57 | 100.1 | 98.9 | 101.3 | 98.9 | ☑ |
| 16 | CCB 2 | 11/21/10 15:01 | 101.4 | 99.7 | 103.4 | 100.2 | ☑ |
| 17 | L9PGPB | 11/21/10 15:06 | 101.7 | 103.4 | 93.6 | 104.3 | ☑ |
| 18 | L93G4B | 11/21/10 15:10 | 100.7 | 102.1 | 93.0 | 101.1 | ☑ |
| 19 | L93HEC | 11/21/10 15:14 | 97.4 | 99.8 | 96.5 | 97.2 | ☑ |
| 20 | L93GPL | 11/21/10 15:18 | 95.5 | 97.7 | 96.4 | 93.9 | ☑ |
| 21 | L99FXB | 11/21/10 15:22 | 96.0 | 98.7 | 98.5 | 94.4 | ☑ |
| 22 | L99F3C | 11/21/10 15:26 | 96.0 | 97.7 | 100.2 | 92.5 | ☑ |
| 23 | L99F1L | 11/21/10 15:30 | 95.1 | 96.6 | 101.4 | 91.3 | ☑ |
| 24 | CCV 3 | 11/21/10 15:34 | 97.3 | 95.5 | 108.6 | 89.7 | ☑ |
| 25 | CCB 3 | 11/21/10 15:38 | 100.7 | 97.7 | 108.6 | 92.4 | ☑ |
| 26 | CCV 4 | 11/21/10 15:42 | 99.0 | 97.0 | | 91.6 | ☑ |
| 27 | CCB 4 | 11/21/10 15:46 | 101.0 | 98.9 | | 93.0 | ☑ |
| 30 | CCV 5 | 11/21/10 15:49 | 98.6 | 98.1 | | 98.4 | ☑ |
| 31 | CCB 5 | 11/21/10 15:53 | 100.3 | 99.7 | | 99.1 | ☑ |
| 32 | L9PGPC | 11/21/10 15:56 | 96.1 | 98.7 | | 97.2 | ☑ |
| 33 | L9PGPL | 11/21/10 16:00 | 92.4 | 95.4 | | 91.9 | ☑ |
| 34 | L9DNC | 11/21/10 16:03 | 92.8 | 95.5 | | 91.7 | ☑ |
| 35 | L9DNCP5 | 11/21/10 16:07 | 94.3 | 94.7 | | 91.0 | ☐ |
| 36 | L9DNCZ | 11/21/10 16:10 | 91.6 | 93.7 | | 89.8 | ☑ |
| 37 | L9DNK | 11/21/10 16:14 | 91.7 | 93.6 | | 88.6 | ☑ |
| 38 | L9DNM | 11/21/10 16:17 | 93.7 | 95.0 | | 90.9 | ☑ |
| 39 | L9DNN | 11/21/10 16:21 | 94.5 | 95.5 | | 91.3 | ☑ |
| 40 | L9DNR | 11/21/10 16:24 | 94.7 | 95.9 | | 91.6 | ☑ |
| 41 | L9DNT | 11/21/10 16:28 | 96.3 | 95.7 | | 92.7 | ☑ |
| 42 | CCV 6 | 11/21/10 16:31 | 97.2 | 95.2 | | 91.3 | ☑ |
| 43 | CCB 6 | 11/21/10 16:35 | 99.0 | 97.4 | | 93.3 | ☑ |
| 44 | CCV 7 | 11/21/10 16:38 | 96.9 | 95.9 | | 91.9 | ☑ |
| 45 | CCB 7 | 11/21/10 16:42 | 98.1 | 96.1 | | 92.7 | ☑ |
| 46 | L9RFH | 11/21/10 16:45 | 98.5 | 98.5 | | 94.3 | ☑ |
| 47 | L9RFHP5 | 11/21/10 16:49 | 99.3 | 97.6 | | 93.7 | ☐ |
| 48 | L9RFHZ | 11/21/10 16:52 | 94.4 | 95.1 | | 90.4 | ☑ |
| 49 | L9RFJ | 11/21/10 16:56 | 92.5 | 94.1 | | 88.3 | ☑ |
| 50 | L9RFK | 11/21/10 16:59 | 93.9 | 94.0 | | 88.3 | ☑ |

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 11/22/10 08:01:45

**File ID:** 101121A2 **Analyst:** hargraves

| # | Sample ID | Analyzed Date | Germanium | Indium | Lithium-6 | Thulium | Q |
|---|---|---|---|---|---|---|---|
| 51 | L9RFL | 11/21/10 17:03 | 94.1 | 95.0 | | 88.9 | ☑ |
| 52 | L9RFM | 11/21/10 17:06 | 95.7 | 96.7 | | 90.6 | ☑ |
| 53 | L9RFN | 11/21/10 17:10 | 96.7 | 96.6 | | 91.3 | ☑ |
| 54 | L9RFP | 11/21/10 17:13 | 98.2 | 98.0 | | 92.9 | ☑ |
| 55 | CCV 8 | 11/21/10 17:17 | 96.9 | 95.0 | | 90.3 | ☑ |
| 56 | CCB 8 | 11/21/10 17:20 | 98.4 | 95.9 | | 90.3 | ☑ |
| 57 | CCV 9 | 11/21/10 17:24 | 97.1 | 95.8 | | 90.7 | ☑ |
| 58 | CCB 9 | 11/21/10 17:28 | 98.7 | 96.8 | | 91.7 | ☑ |
| 59 | L90TF | 11/21/10 17:31 | 99.0 | 99.3 | | 94.5 | ☑ |
| 60 | L90TFP5 | 11/21/10 17:35 | 98.0 | 97.0 | | 91.7 | ☐ |
| 61 | L90TFZ | 11/21/10 17:38 | 93.7 | 94.1 | | 87.7 | ☑ |
| 62 | L90TJ | 11/21/10 17:42 | 92.0 | 93.3 | | 85.8 | ☑ |
| 63 | L90TK | 11/21/10 17:45 | 93.2 | 93.9 | | 86.7 | ☑ |
| 64 | L90TL | 11/21/10 17:49 | 93.2 | 93.7 | | 86.6 | ☑ |
| 65 | L90TM | 11/21/10 17:52 | 94.7 | 95.7 | | 88.3 | ☑ |
| 66 | L90TN | 11/21/10 17:56 | 95.7 | 96.1 | | 89.4 | ☑ |
| 67 | L90TP | 11/21/10 17:59 | 96.4 | 97.2 | | 90.5 | ☑ |
| 68 | CCV 10 | 11/21/10 18:03 | 97.6 | 95.4 | | 89.6 | ☑ |
| 69 | CCB 10 | 11/21/10 18:06 | 98.5 | 96.2 | | 90.0 | ☑ |
| 70 | CCV 11 | 11/21/10 18:10 | 97.3 | 95.5 | | 89.4 | ☑ |
| 71 | CCB 11 | 11/21/10 18:13 | 99.1 | 96.9 | | 90.0 | ☑ |
| 72 | ICSA | 11/21/10 18:17 | 85.6 | 80.0 | | 85.3 | ☑ |
| 73 | ICSAB | 11/21/10 18:20 | 85.3 | 80.8 | | 89.1 | ☐ |
| 74 | CCV 12 | 11/21/10 18:28 | 99.8 | 98.5 | | 96.5 | ☑ |
| 75 | CCB 12 | 11/21/10 18:31 | 100.6 | 98.9 | | 95.2 | ☑ |
| 76 | CCV 13 | 11/21/10 18:35 | 100.3 | 98.0 | | 93.2 | ☑ |
| 77 | CCB 13 | 11/21/10 18:38 | 102.3 | 99.2 | | 93.7 | ☑ |
| 78 | L97JN | 11/21/10 18:42 | 101.7 | 101.0 | | 95.3 | ☑ |
| 79 | L97JNP5 | 11/21/10 18:45 | 102.4 | 98.8 | | 93.5 | ☐ |
| 80 | L97JNZ | 11/21/10 18:49 | 96.1 | 95.2 | | 87.9 | ☑ |
| 81 | L97JP | 11/21/10 18:52 | 94.0 | 93.8 | | 84.6 | ☑ |
| 82 | L97JR | 11/21/10 18:56 | 92.4 | 91.5 | | 83.4 | ☑ |
| 83 | L97JT | 11/21/10 18:59 | 95.6 | 94.9 | | 86.2 | ☑ |
| 84 | CCV 14 | 11/21/10 19:03 | 97.3 | 94.3 | | 87.1 | ☑ |
| 85 | CCB 14 | 11/21/10 19:06 | 99.4 | 95.7 | | 88.0 | ☑ |
| 86 | CCV 15 | 11/21/10 19:10 | 102.5 | | | | ☑ |
| 87 | CCB 15 | 11/21/10 19:13 | 104.5 | | | | ☑ |
| 88 | CCV 16 | 11/21/10 19:15 | 103.0 | | | | ☑ |
| 89 | CCB 16 | 11/21/10 19:18 | 106.4 | | | | ☑ |
| 90 | L94MP | 11/21/10 19:21 | 103.9 | | | | ☑ |
| 91 | L94MPP5 | 11/21/10 19:23 | 108.5 | | | | ☐ |
| 92 | L94MPZ | 11/21/10 19:26 | 104.8 | | | | ☑ |
| 93 | L94M4 | 11/21/10 19:28 | 98.1 | | | | ☑ |
| 94 | L94M7 | 11/21/10 19:31 | 103.1 | | | | ☑ |
| 95 | L94M9 | 11/21/10 19:33 | 104.5 | | | | ☑ |
| 96 | CCV 17 | 11/21/10 19:36 | 101.6 | | | | ☑ |

TAL West Sac

# INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 11/22/10 08:01:45

**File ID: 101121A2** **Analyst: hargraves**

| # | Sample ID | Analyzed Date | Germanium | Indium | Lithium-6 | Thulium | Q |
|---|---|---|---|---|---|---|---|
| 97 | CCB 17 | 11/21/10 19:39 | 103.3 | | | | ☑ |
| 98 | CCV 18 | 11/21/10 19:41 | 97.2 | 93.5 | 103.9 | 85.4 | ☑ |
| 99 | CCB 18 | 11/21/10 19:45 | 99.2 | 94.9 | 103.9 | 87.1 | ☑ |
| 102 | CCV 19 | 11/21/10 19:49 | 97.8 | 98.7 | 99.9 | 98.2 | ☑ |
| 103 | CCB 19 | 11/21/10 19:52 | 100.5 | 101.0 | 100.9 | 100.4 | ☑ |
| 104 | L9TFKB | 11/21/10 19:56 | 100.3 | 102.0 | 102.4 | 100.9 | ☑ |
| 105 | L9TFKC | 11/21/10 20:00 | 96.3 | 99.5 | 101.6 | 99.3 | ☑ |
| 106 | CCV 20 | 11/21/10 20:04 | 95.1 | 96.6 | 101.6 | 95.5 | ☑ |
| 107 | CCB 20 | 11/21/10 20:07 | 95.6 | 97.1 | 100.1 | 95.3 | ☑ |
| 108 | CCV 21 | 11/21/10 20:11 | 96.6 | 98.5 | 101.6 | 98.2 | ☑ |
| 109 | CCB 21 | 11/21/10 20:15 | 95.5 | 97.2 | 100.1 | 95.9 | ☑ |
| 110 | L9F0G | 11/21/10 20:18 | 81.4 | 84.1 | 99.3 | 91.2 | ☑ |
| 111 | L9F0GP5 | 11/21/10 20:22 | 84.4 | 95.0 | 97.3 | 103.7 | ☐ |
| 112 | L9F0GZ | 11/21/10 20:26 | 78.3 | 86.7 | 91.7 | 99.8 | ☑ |
| 113 | CCV 22 | 11/21/10 20:29 | 86.0 | 100.7 | 82.6 | 122.6 | ☑ |
| 114 | CCB 22 | 11/21/10 20:33 | 86.5 | 101.9 | 80.7 | 123.3 | ☑ |
| 117 | CCV 23 | 11/21/10 20:37 | 99.0 | 98.5 | 100.2 | 100.0 | ☑ |
| 118 | CCB 23 | 11/21/10 20:41 | 99.5 | 99.7 | 97.7 | 100.5 | ☑ |
| 119 | L9F0G | 11/21/10 20:44 | 91.9 | 88.4 | 109.6 | 87.2 | ☑ |
| 120 | L9F0GP5 | 11/21/10 20:48 | 94.9 | 95.3 | 95.0 | 95.2 | ☐ |
| 121 | L9F0GZ | 11/21/10 20:52 | 86.7 | 84.3 | 98.8 | 84.5 | ☑ |
| 122 | CCV 24 | 11/21/10 20:55 | 94.4 | 95.4 | 82.4 | 99.5 | ☑ |
| 123 | CCB 24 | 11/21/10 20:59 | 93.4 | 95.6 | 76.9 | 99.3 | ☑ |

TAL West Sac

# CALIBRATION CHECK SUMMARY

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

**Method: 6020** **Instrument: M02** **Batch: 101121A2**

| Sample ID | Type | File - Sequence | Analyzed Date | Q |
|---|---|---|---|---|
| ICV | ICV | 101121A2, 4 | 11/21/2010 14:06:32 | ☐ |
| ICB | ICB | 101121A2, 5 | 11/21/2010 14:10:36 | ☐ |
| ICSA | ICSA | 101121A2, 8 | 11/21/2010 14:30:12 | ☐ |
| ICSAB | ICSAB | 101121A2, 9 | 11/21/2010 14:34:15 | ☐ |
| CCV 1 | CCV | 101121A2, 11 | 11/21/2010 14:49:44 | ☐ |
| CCB 1 | CCB | 101121A2, 12 | 11/21/2010 14:53:49 | ☐ |
| CCV 2 | CCV | 101121A2, 15 | 11/21/2010 14:57:54 | ☐ |
| CCB 2 | CCB | 101121A2, 16 | 11/21/2010 15:01:59 | ☐ |
| CCV 3 | CCV | 101121A2, 24 | 11/21/2010 15:34:21 | ☐ |
| CCB 3 | CCB | 101121A2, 25 | 11/21/2010 15:38:25 | ☐ |
| CCV 4 | CCV | 101121A2, 26 | 11/21/2010 15:42:30 | ☐ |
| CCB 4 | CCB | 101121A2, 27 | 11/21/2010 15:46:05 | ☐ |
| CCV 5 | CCV | 101121A2, 30 | 11/21/2010 15:49:39 | ☐ |
| CCB 5 | CCB | 101121A2, 31 | 11/21/2010 15:53:13 | ☐ |
| CCV 6 | CCV | 101121A2, 42 | 11/21/2010 16:31:42 | ☐ |
| CCB 6 | CCB | 101121A2, 43 | 11/21/2010 16:35:16 | ☐ |
| CCV 7 | CCV | 101121A2, 44 | 11/21/2010 16:38:51 | ☐ |
| CCB 7 | CCB | 101121A2, 45 | 11/21/2010 16:42:26 | ☐ |
| CCV 8 | CCV | 101121A2, 55 | 11/21/2010 17:17:19 | ☐ |
| CCB 8 | CCB | 101121A2, 56 | 11/21/2010 17:20:54 | ☐ |
| CCV 9 | CCV | 101121A2, 57 | 11/21/2010 17:24:28 | ☐ |
| CCB 9 | CCB | 101121A2, 58 | 11/21/2010 17:28:02 | ☐ |
| CCV 10 | CCV | 101121A2, 68 | 11/21/2010 18:03:06 | ☐ |
| CCB 10 | CCB | 101121A2, 69 | 11/21/2010 18:06:40 | ☐ |
| CCV 11 | CCV | 101121A2, 70 | 11/21/2010 18:10:14 | ☐ |
| CCB 11 | CCB | 101121A2, 71 | 11/21/2010 18:13:48 | ☐ |
| ICSA | ICSA | 101121A2, 72 | 11/21/2010 18:17:22 | ☐ |
| ICSAB | ICSAB | 101121A2, 73 | 11/21/2010 18:20:54 | ☐ |
| CCV 12 | CCV | 101121A2, 74 | 11/21/2010 18:28:07 | ☐ |
| CCB 12 | CCB | 101121A2, 75 | 11/21/2010 18:31:41 | ☐ |
| CCV 13 | CCV | 101121A2, 76 | 11/21/2010 18:35:17 | ☐ |
| CCB 13 | CCB | 101121A2, 77 | 11/21/2010 18:38:53 | ☐ |
| CCV 14 | CCV | 101121A2, 84 | 11/21/2010 19:03:23 | ☐ |
| CCB 14 | CCB | 101121A2, 85 | 11/21/2010 19:06:59 | ☐ |
| CCV 15 | CCV | 101121A2, 86 | 11/21/2010 19:10:36 | ☐ |
| CCB 15 | CCB | 101121A2, 87 | 11/21/2010 19:13:15 | ☐ |
| CCV 16 | CCV | 101121A2, 88 | 11/21/2010 19:15:54 | ☐ |
| CCB 16 | CCB | 101121A2, 89 | 11/21/2010 19:18:32 | ☐ |
| CCV 17 | CCV | 101121A2, 96 | 11/21/2010 19:36:28 | ☐ |
| CCB 17 | CCB | 101121A2, 97 | 11/21/2010 19:39:07 | ☐ |
| CCV 18 | CCV | 101121A2, 98 | 11/21/2010 19:41:46 | ☐ |
| CCB 18 | CCB | 101121A2, 99 | 11/21/2010 19:45:30 | ☐ |
| CCV 19 | CCV | 101121A2, 102 | 11/21/2010 19:49:14 | ☐ |
| CCB 19 | CCB | 101121A2, 103 | 11/21/2010 19:52:59 | ☐ |
| CCV 20 | CCV | 101121A2, 106 | 11/21/2010 20:04:01 | ☐ |
| CCB 20 | CCB | 101121A2, 107 | 11/21/2010 20:07:46 | ☐ |

TAL West Sac

# CALIBRATION CHECK SUMMARY

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

**Method: 6020** **Instrument: M02** **Batch: 101121A2**

| Sample ID | Type | File - Sequence | Analyzed Date | Q |
|---|---|---|---|---|
| ***CCV 21*** | ***CCV*** | ***101121A2, 108*** | ***11/21/2010 20:11:31*** | ☐ |
| ***CCB 21*** | ***CCB*** | ***101121A2, 109*** | ***11/21/2010 20:15:15*** | ☐ |
| ***CCV 22*** | ***CCV*** | ***101121A2, 113*** | ***11/21/2010 20:29:54*** | ☐ |
| ***CCB 22*** | ***CCB*** | ***101121A2, 114*** | ***11/21/2010 20:33:38*** | ☐ |
| ***CCV 23*** | ***CCV*** | ***101121A2, 117*** | ***11/21/2010 20:37:23*** | ☐ |
| ***CCB 23*** | ***CCB*** | ***101121A2, 118*** | ***11/21/2010 20:41:07*** | ☐ |
| ***CCV 24*** | ***CCV*** | ***101121A2, 122*** | ***11/21/2010 20:55:46*** | ☐ |
| ***CCB 24*** | ***CCB*** | ***101121A2, 123*** | ***11/21/2010 20:59:31*** | ☐ |

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **ICV (ICV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 4 Method 6020_
Acquired: 11/21/2010 14:06:32 M02
Calibrated: 11/21/2010 13:58:17 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| 7440-41-7 | Beryllium | 9 | 24654 | 81.443 | 80.000 | 102 | |
| 7429-90-5 | Aluminum | 27 | 3630941 | 827.61 | 800.00 | 103 | |
| 7440-47-3 | Chromium | 52 | 575657 | 80.643 | 80.000 | 101 | |
| 7439-89-6 | Iron | 57 | 195606 | 815.49 | 800.00 | 102 | |
| 7439-96-5 | Manganese | 55 | 909848 | 81.163 | 80.000 | 101 | |
| 7440-48-4 | Cobalt | 59 | 717157 | 80.964 | 80.000 | 101 | |
| 7440-02-0 | Nickel | 60 | 150316 | 81.106 | 80.000 | 101 | |
| 7440-50-8 | Copper | 65 | 153831 | 81.076 | 80.000 | 101 | |
| 7440-38-2 | Arsenic | 75 | 150016 | 81.449 | 80.000 | 102 | |
| 7782-49-2 | Selenium | 82 | 14609 | 82.777 | 80.000 | 103 | |
| 7439-98-7 | Molybdenum | 97 | 124183 | 79.497 | 80.000 | 99.4 | |
| 7440-22-4 | Silver | 107 | 315244 | 40.343 | 40.000 | 101 | |
| 7440-43-9 | Cadmium | 111 | 138535 | 81.961 | 80.000 | 102 | |
| 7440-36-0 | Antimony | 121 | 222155 | 39.685 | 40.000 | 99.2 | |
| 7440-39-3 | Barium | 135 | 142490 | 79.748 | 80.000 | 99.7 | |
| 7439-92-1 | Lead | 208 | 2015963 | 80.314 | 80.000 | 100 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| LITHIUM6 | Lithium-6 | 6 | 712841 | | ☑ |
| 7440-56-4 | Germanium | 72 | 1004434 | | ☑ |
| 7440-74-6 | Indium | 115 | 1109089 | | ☑ |
| 7440-30-4 | Thulium | 169 | 961880 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **ICB** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 5 Method 6020_
Acquired: 11/21/2010 14:10:36 M02
Calibrated: 11/21/2010 13:58:17 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| 7440-41-7 | Beryllium | 9 | 4 | -0.00442 | 1.0 | 0.078 | 0.0 | |
| 7429-90-5 | Aluminum | 27 | 66017 | 1.1380 | 50.0 | 2.1 | 0.0 | |
| 7440-47-3 | Chromium | 52 | 14274 | 0.26559 | 2.0 | 0.92 | 0.0 | |
| 7439-89-6 | Iron | 57 | 7884 | 0.21971 | 50.0 | 17.0 | 0.0 | |
| 7439-96-5 | Manganese | 55 | 2540 | 0.00369 | 1.0 | 0.083 | 0.0 | |
| 7440-48-4 | Cobalt | 59 | 183 | 0.00557 | 1.0 | 0.057 | 0.0 | |
| 7440-02-0 | Nickel | 60 | 293 | -0.02019 | 2.0 | 0.098 | 0.0 | |
| 7440-50-8 | Copper | 65 | 140 | 0.01441 | | | | |
| 7440-38-2 | Arsenic | 75 | 13419 | 0.16453 | 2.0 | 0.50 | 0.0 | |
| 7782-49-2 | Selenium | 82 | 998 | 0.30110 | 2.0 | 1.7 | 0.0 | |
| 7439-98-7 | Molybdenum | 97 | 249 | 0.12495 | | | | |
| 7440-22-4 | Silver | 107 | 91 | 0.00430 | 1.0 | 0.030 | 0.0 | |
| 7440-43-9 | Cadmium | 111 | 60 | 0.00471 | 1.0 | 0.074 | 0.0 | |
| 7440-36-0 | Antimony | 121 | 1846 | 0.27858 | 2.0 | 0.036 | 0.0 | |
| 7440-39-3 | Barium | 135 | 90 | 0.00675 | 1.0 | 0.96 | 0.0 | |
| 7439-92-1 | Lead | 208 | 683 | 0.00432 | 1.0 | 0.066 | 0.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| LITHIUM6 | Lithium-6 | 6 | 727227 | | ☑ |
| 7440-56-4 | Germanium | 72 | 1008547 | | ☑ |
| 7440-74-6 | Indium | 115 | 1114587 | | ☑ |
| 7440-30-4 | Thulium | 169 | 962250 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **ICSA** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 8 Method 6020_
Acquired: 11/21/2010 14:30:12 M02
Calibrated: 11/21/2010 13:58:17 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| 7440-41-7 | Beryllium | 9 | 25 | 0.06603 | | * | ☑ |
| 7429-90-5 | Aluminum | 27 | 92203484 | 103254 | 100000 | 103 | ☑ |
| 7440-47-3 | Chromium | 52 | 25338 | 2.3505 | | * | |
| 7439-89-6 | Iron | 57 | 19358513 | 95441 | 100000 | 95.4 | ☑ |
| 7439-96-5 | Manganese | 55 | 66029 | 6.4851 | | * | |
| 7440-48-4 | Cobalt | 59 | 13430 | 1.7074 | | * | |
| 7440-02-0 | Nickel | 60 | 3237 | 1.8098 | | * | ☑ |
| 7440-50-8 | Copper | 65 | -1311 | -0.84436 | | * | |
| 7440-38-2 | Arsenic | 75 | 12321 | 0.53688 | | * | ☑ |
| 7782-49-2 | Selenium | 82 | 565 | -1.8208 | | * | ☑ |
| 7439-98-7 | Molybdenum | 97 | 2800617 | 2037.1 | 2000.0 | 102 | ☐ |
| 7440-22-4 | Silver | 107 | 1052 | 0.15717 | | * | ☑ |
| 7440-43-9 | Cadmium | 111 | 1312 | 0.91749 | | * | ☑ |
| 7440-36-0 | Antimony | 121 | 1277 | 0.22927 | | * | ☑ |
| 7440-39-3 | Barium | 135 | 4419 | 2.9796 | | * | |
| 7439-92-1 | Lead | 208 | 11327 | 0.49346 | | * | ☑ |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| LITHIUM6 | Lithium-6 | 6 | 707133 | | ☑ |
| 7440-56-4 | Germanium | 72 | 884302 | | ☑ |
| 7440-74-6 | Indium | 115 | 907934 | | ☑ |
| 7440-30-4 | Thulium | 169 | 840851 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **ICSAB** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 9 Method 6020_
Acquired: 11/21/2010 14:34:15 M02
Calibrated: 11/21/2010 13:58:17 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| 7440-41-7 | Beryllium | 9 | 31747 | 100.86 | 100.00 | 101 | ☑ |
| 7429-90-5 | Aluminum | 27 | 98322248 | 100798 | 100100 | 101 | ☑ |
| 7440-47-3 | Chromium | 52 | 656518 | 100.84 | 100.00 | 101 | ☑ |
| 7439-89-6 | Iron | 57 | 19893681 | 94278 | 100100 | 94.2 | ☑ |
| 7439-96-5 | Manganese | 55 | 1076868 | 104.94 | 100.00 | 105 | ☑ |
| 7440-48-4 | Cobalt | 59 | 778808 | 95.996 | 100.00 | 96.0 | ☑ |
| 7440-02-0 | Nickel | 60 | 158302 | 93.285 | 100.00 | 93.3 | ☑ |
| 7440-50-8 | Copper | 65 | 152242 | 87.606 | 100.00 | 87.6 | ☑ |
| 7440-38-2 | Arsenic | 75 | 167738 | 101.15 | 100.00 | 101 | ☑ |
| 7782-49-2 | Selenium | 82 | 16514 | 103.48 | 100.00 | 103 | ☑ |
| 7439-98-7 | Molybdenum | 97 | 3025651 | 2115.5 | 2100.0 | 101 | ☑ |
| 7440-22-4 | Silver | 107 | 321775 | 48.856 | 50.000 | 97.7 | ☑ |
| 7440-43-9 | Cadmium | 111 | 143860 | 100.98 | 100.00 | 101 | ☑ |
| 7440-36-0 | Antimony | 121 | 249428 | 52.867 | 50.000 | 106 | ☑ |
| 7440-39-3 | Barium | 135 | 166774 | 110.76 | 100.00 | 111 | ☑ |
| 7439-92-1 | Lead | 208 | 2352423 | 102.54 | 100.00 | 103 | ☑ |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| LITHIUM6 | Lithium-6 | 6 | 741225 | | ☑ |
| 7440-56-4 | Germanium | 72 | 919914 | | ☑ |
| 7440-74-6 | Indium | 115 | 934777 | | ☑ |
| 7440-30-4 | Thulium | 169 | 879102 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 1 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 11 Method 6020_
Acquired: 11/21/2010 14:49:44 M02
Calibrated: 11/21/2010 13:58:17 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| 7440-41-7 | Beryllium | 9 | 38091 | 103.55 | 100.00 | 104 | |
| 7429-90-5 | Aluminum | 27 | 25229126 | 5317.4 | 5100.0 | 104 | |
| 7440-47-3 | Chromium | 52 | 782813 | 100.40 | 100.00 | 100 | |
| 7439-89-6 | Iron | 57 | 1282616 | 5043.4 | 5100.0 | 98.9 | |
| 7439-96-5 | Manganese | 55 | 1217842 | 99.083 | 100.00 | 99.1 | |
| 7440-48-4 | Cobalt | 59 | 955888 | 98.378 | 100.00 | 98.4 | |
| 7440-02-0 | Nickel | 60 | 200422 | 98.616 | 100.00 | 98.6 | |
| 7440-50-8 | Copper | 65 | 205017 | 98.510 | 100.00 | 98.5 | |
| 7440-38-2 | Arsenic | 75 | 197740 | 99.438 | 100.00 | 99.4 | |
| 7782-49-2 | Selenium | 82 | 18768 | 97.907 | 100.00 | 97.9 | |
| 7439-98-7 | Molybdenum | 97 | 341027 | 199.06 | 200.00 | 99.5 | |
| 7440-22-4 | Silver | 107 | 420218 | 50.374 | 50.000 | 101 | |
| 7440-43-9 | Cadmium | 111 | 180768 | 100.18 | 100.00 | 100 | |
| 7440-36-0 | Antimony | 121 | 304292 | 50.917 | 50.000 | 102 | |
| 7440-39-3 | Barium | 135 | 193860 | 101.64 | 100.00 | 102 | |
| 7439-92-1 | Lead | 208 | 2682018 | 96.387 | 100.00 | 96.4 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| LITHIUM6 | Lithium-6 | 6 | 866238 | | ☑ |
| 7440-56-4 | Germanium | 72 | 1101847 | | ☑ |
| 7440-74-6 | Indium | 115 | 1184084 | | ☑ |
| 7440-30-4 | Thulium | 169 | 1066408 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 1** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 12 Method 6020_
Acquired: 11/21/2010 14:53:49 M02
Calibrated: 11/21/2010 13:58:17 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| 7440-41-7 | Beryllium | 9 | 5 | -0.00291 | 1.0 | 0.078 | 0.0 | |
| 7429-90-5 | Aluminum | 27 | 86163 | 4.0053 | 50.0 | 2.1 | 0.0 | |
| 7440-47-3 | Chromium | 52 | 22478 | 1.1481 | 2.0 | 0.92 | 0.0 | |
| 7439-89-6 | Iron | 57 | 10511 | 7.5004 | 50.0 | 17.0 | 0.0 | |
| 7439-96-5 | Manganese | 55 | 2940 | 0.01584 | 1.0 | 0.083 | 0.0 | |
| 7440-48-4 | Cobalt | 59 | 225 | 0.00802 | 1.0 | 0.057 | 0.0 | |
| 7440-02-0 | Nickel | 60 | 301 | -0.03069 | 2.0 | 0.098 | 0.0 | |
| 7440-50-8 | Copper | 65 | 157 | 0.01593 | | | | |
| 7440-38-2 | Arsenic | 75 | 15258 | 0.44467 | 2.0 | 0.50 | 0.0 | |
| 7782-49-2 | Selenium | 82 | 1117 | 0.41382 | 2.0 | 1.7 | 0.0 | |
| 7439-98-7 | Molybdenum | 97 | 267 | 0.12105 | | | | |
| 7440-22-4 | Silver | 107 | 112 | 0.00596 | 1.0 | 0.030 | 0.0 | |
| 7440-43-9 | Cadmium | 111 | 74 | 0.00974 | 1.0 | 0.074 | 0.0 | |
| 7440-36-0 | Antimony | 121 | 245 | -0.00908 | 2.0 | 0.036 | 0.0 | |
| 7440-39-3 | Barium | 135 | 100 | 0.00883 | 1.0 | 0.96 | 0.0 | |
| 7439-92-1 | Lead | 208 | 804 | 0.00612 | 1.0 | 0.066 | 0.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| LITHIUM6 | Lithium-6 | 6 | 880852 | | ☑ |
| 7440-56-4 | Germanium | 72 | 1107890 | | ☑ |
| 7440-74-6 | Indium | 115 | 1192612 | | ☑ |
| 7440-30-4 | Thulium | 169 | 1062879 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 2 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 15 Method 6020_
Acquired: 11/21/2010 14:57:54 M02
Calibrated: 11/21/2010 13:58:17 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| 7440-41-7 | Beryllium | 9 | 38128 | 97.166 | 100.00 | 97.2 | |
| 7429-90-5 | Aluminum | 27 | 24995243 | 5019.5 | 5100.0 | 98.4 | |
| 7440-47-3 | Chromium | 52 | 784869 | 99.587 | 100.00 | 99.6 | |
| 7439-89-6 | Iron | 57 | 1273506 | 5029.9 | 5100.0 | 98.6 | |
| 7439-96-5 | Manganese | 55 | 1218652 | 99.405 | 100.00 | 99.4 | |
| 7440-48-4 | Cobalt | 59 | 948524 | 98.582 | 100.00 | 98.6 | |
| 7440-02-0 | Nickel | 60 | 199272 | 98.783 | 100.00 | 98.8 | |
| 7440-50-8 | Copper | 65 | 203964 | 98.835 | 100.00 | 98.8 | |
| 7440-38-2 | Arsenic | 75 | 197948 | 99.405 | 100.00 | 99.4 | |
| 7782-49-2 | Selenium | 82 | 18492 | 97.747 | 100.00 | 97.7 | |
| 7439-98-7 | Molybdenum | 97 | 339026 | 197.51 | 200.00 | 98.8 | |
| 7440-22-4 | Silver | 107 | 415719 | 49.683 | 50.000 | 99.4 | |
| 7440-43-9 | Cadmium | 111 | 179339 | 99.639 | 100.00 | 99.6 | |
| 7440-36-0 | Antimony | 121 | 302326 | 49.897 | 50.000 | 99.8 | |
| 7440-39-3 | Barium | 135 | 192031 | 99.499 | 100.00 | 99.5 | |
| 7439-92-1 | Lead | 208 | 2617396 | 99.016 | 100.00 | 99.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| LITHIUM6 | Lithium-6 | 6 | 892391 | | ☑ |
| 7440-56-4 | Germanium | 72 | 1109054 | | ☑ |
| 7440-74-6 | Indium | 115 | 1178927 | | ☑ |
| 7440-30-4 | Thulium | 169 | 1051051 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 2** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 16 Method 6020_
Acquired: 11/21/2010 15:01:59 M02
Calibrated: 11/21/2010 13:58:17 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| 7440-41-7 | Beryllium | 9 | 14 | 0.02122 | 1.0 | 0.078 | 0.0 | |
| 7429-90-5 | Aluminum | 27 | 82899 | -0.89295 | 50.0 | 2.1 | 0.0 | |
| 7440-47-3 | Chromium | 52 | 22923 | 0.01589 | 2.0 | 0.92 | 0.0 | |
| 7439-89-6 | Iron | 57 | 10447 | -0.84948 | 50.0 | 17.0 | 0.0 | |
| 7439-96-5 | Manganese | 55 | 2953 | -0.00239 | 1.0 | 0.083 | 0.0 | |
| 7440-48-4 | Cobalt | 59 | 239 | 0.00103 | 1.0 | 0.057 | 0.0 | |
| 7440-02-0 | Nickel | 60 | 318 | 0.00628 | 2.0 | 0.098 | 0.0 | |
| 7440-50-8 | Copper | 65 | 160 | 0.00028 | | | | |
| 7440-38-2 | Arsenic | 75 | 15520 | 0.02327 | 2.0 | 0.50 | 0.0 | |
| 7782-49-2 | Selenium | 82 | 1089 | -0.24167 | 2.0 | 1.7 | 0.0 | |
| 7439-98-7 | Molybdenum | 97 | 220 | -0.02942 | | | | |
| 7440-22-4 | Silver | 107 | 116 | 0.00055 | 1.0 | 0.030 | 0.0 | |
| 7440-43-9 | Cadmium | 111 | 62 | -0.00656 | 1.0 | 0.074 | 0.0 | |
| 7440-36-0 | Antimony | 121 | 256 | 0.00202 | 2.0 | 0.036 | 0.0 | |
| 7440-39-3 | Barium | 135 | 108 | 0.00444 | 1.0 | 0.96 | 0.0 | |
| 7439-92-1 | Lead | 208 | 894 | 0.00330 | 1.0 | 0.066 | 0.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| LITHIUM6 | Lithium-6 | 6 | 910408 | | ☑ |
| 7440-56-4 | Germanium | 72 | 1123806 | | ☑ |
| 7440-74-6 | Indium | 115 | 1189269 | | ☑ |
| 7440-30-4 | Thulium | 169 | 1064815 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 3 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 24 Method 6020_
Acquired: 11/21/2010 15:34:21 M02
Calibrated: 11/21/2010 13:58:17 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| 7440-41-7 | Beryllium | 9 | 39334 | 93.540 | 100.00 | 93.5 | |
| 7429-90-5 | Aluminum | 27 | 24430446 | 5048.1 | 5100.0 | 99.0 | |
| 7440-47-3 | Chromium | 52 | 762580 | 99.563 | 100.00 | 99.6 | |
| 7439-89-6 | Iron | 57 | 1212438 | 4926.7 | 5100.0 | 96.6 | |
| 7439-96-5 | Manganese | 55 | 1174181 | 98.552 | 100.00 | 98.6 | |
| 7440-48-4 | Cobalt | 59 | 888702 | 95.042 | 100.00 | 95.0 | |
| 7440-02-0 | Nickel | 60 | 185953 | 94.849 | 100.00 | 94.8 | |
| 7440-50-8 | Copper | 65 | 195280 | 97.368 | 100.00 | 97.4 | |
| 7440-38-2 | Arsenic | 75 | 190126 | 98.150 | 100.00 | 98.2 | |
| 7782-49-2 | Selenium | 82 | 17575 | 95.462 | 100.00 | 95.5 | |
| 7439-98-7 | Molybdenum | 97 | 322044 | 193.05 | 200.00 | 96.5 | |
| 7440-22-4 | Silver | 107 | 391371 | 48.427 | 50.000 | 96.9 | |
| 7440-43-9 | Cadmium | 111 | 172336 | 99.143 | 100.00 | 99.1 | |
| 7440-36-0 | Antimony | 121 | 292689 | 50.015 | 50.000 | 100 | |
| 7440-39-3 | Barium | 135 | 178938 | 95.990 | 100.00 | 96.0 | |
| 7439-92-1 | Lead | 208 | 2318014 | 96.640 | 100.00 | 96.6 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| LITHIUM6 | Lithium-6 | 6 | 956511 | | ☑ |
| 7440-56-4 | Germanium | 72 | 1077841 | | ☑ |
| 7440-74-6 | Indium | 115 | 1138593 | | ☑ |
| 7440-30-4 | Thulium | 169 | 953638 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 3** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 25 Method 6020_
Acquired: 11/21/2010 15:38:25 M02
Calibrated: 11/21/2010 13:58:17 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| 7440-41-7 | Beryllium | 9 | 16 | 0.02413 | 1.0 | 0.078 | 0.0 | |
| 7429-90-5 | Aluminum | 27 | 68454 | -3.6698 | 50.0 | 2.1 | 0.0 | |
| 7440-47-3 | Chromium | 52 | 21114 | -0.19716 | 2.0 | 0.92 | 0.0 | |
| 7439-89-6 | Iron | 57 | 9407 | -4.6615 | 50.0 | 17.0 | 0.0 | |
| 7439-96-5 | Manganese | 55 | 2539 | -0.03428 | 1.0 | 0.083 | 0.0 | |
| 7440-48-4 | Cobalt | 59 | 359 | 0.01360 | 1.0 | 0.057 | 0.0 | |
| 7440-02-0 | Nickel | 60 | 301 | -0.00114 | 2.0 | 0.098 | 0.0 | |
| 7440-50-8 | Copper | 65 | 177 | 0.00915 | | | | |
| 7440-38-2 | Arsenic | 75 | 15232 | -0.07121 | 2.0 | 0.50 | 0.0 | |
| 7782-49-2 | Selenium | 82 | 1064 | -0.33896 | 2.0 | 1.7 | 0.0 | |
| 7439-98-7 | Molybdenum | 97 | 340 | 0.04112 | | | | |
| 7440-22-4 | Silver | 107 | 160 | 0.00613 | 1.0 | 0.030 | 0.0 | |
| 7440-43-9 | Cadmium | 111 | 79 | 0.00399 | 1.0 | 0.074 | 0.0 | |
| 7440-36-0 | Antimony | 121 | 534 | 0.04924 | 2.0 | 0.036 | 0.0 | |
| 7440-39-3 | Barium | 135 | 111 | 0.00692 | 1.0 | 0.96 | 0.0 | |
| 7439-92-1 | Lead | 208 | 1100 | 0.01440 | 1.0 | 0.066 | 0.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| LITHIUM6 | Lithium-6 | 6 | 956818 | | ☑ |
| 7440-56-4 | Germanium | 72 | 1115621 | | ☑ |
| 7440-74-6 | Indium | 115 | 1165196 | | ☑ |
| 7440-30-4 | Thulium | 169 | 982620 | | ☑ |

Reviewed by: Date:

TAL West Sac

# CALIBRATION REPORT

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 4 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02**
File: 101121A2 # 26
Acquired: 11/21/2010 15:42:30
Calibrated: 11/21/2010 13:58:17

Channel 262
Method 6020_
M02

Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***26568913*** | ***5396.2*** | ***5100.0*** | ***106*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***753618*** | ***96.605*** | ***100.00*** | ***96.6*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1165714*** | ***96.139*** | ***100.00*** | ***96.1*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***884144*** | ***92.916*** | ***100.00*** | ***92.9*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***185175*** | ***92.812*** | ***100.00*** | ***92.8*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***198354*** | ***97.190*** | ***100.00*** | ***97.2*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***193522*** | ***98.175*** | ***100.00*** | ***98.2*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***329496*** | ***194.10*** | ***200.00*** | ***97.1*** | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***175070*** | ***99.174*** | ***100.00*** | ***99.2*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***298649*** | ***50.256*** | ***50.000*** | ***101*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***2370157*** | ***96.801*** | ***100.00*** | ***96.8*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1096785*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1156238*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***973550*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 4** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 27 Method 6020_
Acquired: 11/21/2010 15:46:05 M02
Calibrated: 11/21/2010 15:42:30 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 27 | 75057 | -2.3964 | 50.0 | 2.1 | 0.0 | |
| 7440-47-3 | Chromium | 52 | 20792 | -0.24796 | 2.0 | 0.92 | 0.0 | |
| 7439-96-5 | Manganese | 55 | 2458 | -0.04154 | 1.0 | 0.083 | 0.0 | |
| 7440-48-4 | Cobalt | 59 | 371 | 0.01476 | 1.0 | 0.057 | 0.0 | |
| 7440-02-0 | Nickel | 60 | 288 | -0.00782 | 2.0 | 0.098 | 0.0 | |
| 7440-50-8 | Copper | 65 | 180 | 0.01018 | | | | |
| 7440-38-2 | Arsenic | 75 | 14942 | -0.25648 | 2.0 | 0.50 | 0.0 | |
| 7439-98-7 | Molybdenum | 97 | 267 | -0.00135 | | | | |
| 7440-43-9 | Cadmium | 111 | 82 | 0.00485 | 1.0 | 0.074 | 0.0 | |
| 7440-36-0 | Antimony | 121 | 386 | 0.02373 | 2.0 | 0.036 | 0.0 | |
| 7439-92-1 | Lead | 208 | 1103 | 0.01427 | 1.0 | 0.066 | 0.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| 7440-56-4 | Germanium | 72 | 1119419 | | ☑ |
| 7440-74-6 | Indium | 115 | 1179651 | | ☑ |
| 7440-30-4 | Thulium | 169 | 988769 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 5 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 30 Method 6020_
Acquired: 11/21/2010 15:49:39 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***26397282*** | ***5036.1*** | ***5100.0*** | ***98.7*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***748360*** | ***98.660*** | ***100.00*** | ***98.7*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1154607*** | ***98.438*** | ***100.00*** | ***98.4*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***878229*** | ***98.717*** | ***100.00*** | ***98.7*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***184072*** | ***98.796*** | ***100.00*** | ***98.8*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***197806*** | ***99.116*** | ***100.00*** | ***99.1*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***193497*** | ***99.324*** | ***100.00*** | ***99.3*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***330649*** | ***199.48*** | ***200.00*** | ***99.7*** | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***174519*** | ***99.615*** | ***100.00*** | ***99.6*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***296910*** | ***49.672*** | ***50.000*** | ***99.3*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***2359474*** | ***99.586*** | ***100.00*** | ***99.6*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1103586*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1157043*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***973148*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 5** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 31 Method 6020_
Acquired: 11/21/2010 15:53:13 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 27 | 73170 | -0.39852 | 50.0 | 2.1 | 0.0 | |
| 7440-47-3 | Chromium | 52 | 22100 | 0.16543 | 2.0 | 0.92 | 0.0 | |
| 7439-96-5 | Manganese | 55 | 2468 | 0.00022 | 1.0 | 0.083 | 0.0 | |
| 7440-48-4 | Cobalt | 59 | 295 | -0.00848 | 1.0 | 0.057 | 0.0 | |
| 7440-02-0 | Nickel | 60 | 293 | 0.00234 | 2.0 | 0.098 | 0.0 | |
| 7440-50-8 | Copper | 65 | 179 | -0.00066 | | | | |
| 7440-38-2 | Arsenic | 75 | 14855 | -0.07425 | 2.0 | 0.50 | 0.0 | |
| 7439-98-7 | Molybdenum | 97 | 232 | -0.02158 | | | | |
| 7440-43-9 | Cadmium | 111 | 68 | -0.00771 | 1.0 | 0.074 | 0.0 | |
| 7440-36-0 | Antimony | 121 | 300 | -0.01392 | 2.0 | 0.036 | 0.0 | |
| 7439-92-1 | Lead | 208 | 933 | -0.00672 | 1.0 | 0.066 | 0.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| 7440-56-4 | Germanium | 72 | 1123062 | | ☑ |
| 7440-74-6 | Indium | 115 | 1175954 | | ☑ |
| 7440-30-4 | Thulium | 169 | 980052 | | ☑ |

Reviewed by: Date:

TAL West Sac

# CALIBRATION REPORT

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 6 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02**
File: 101121A2 # 42
Acquired: 11/21/2010 16:31:42
Calibrated: 11/21/2010 15:46:05

Channel 262
Method 6020_
M02

Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***25678746*** | ***4969.0*** | ***5100.0*** | ***97.4*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***747808*** | ***100.03*** | ***100.00*** | ***100*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1145226*** | ***99.037*** | ***100.00*** | ***99.0*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***860753*** | ***98.142*** | ***100.00*** | ***98.1*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***180869*** | ***98.459*** | ***100.00*** | ***98.5*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***196558*** | ***99.901*** | ***100.00*** | ***99.9*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***191780*** | ***99.901*** | ***100.00*** | ***99.9*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***323867*** | ***198.18*** | ***200.00*** | ***99.1*** | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***170950*** | ***100.56*** | ***100.00*** | ***101*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***290773*** | ***50.135*** | ***50.000*** | ***100*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***2188805*** | ***99.535*** | ***100.00*** | ***99.5*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1088034*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1122738*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***903223*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 6** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 43 Method 6020_
Acquired: 11/21/2010 16:35:16 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 27 | 69322 | -0.95365 | 50.0 | 2.1 | 0.0 | |
| 7440-47-3 | Chromium | 52 | 21771 | 0.15920 | 2.0 | 0.92 | 0.0 | |
| 7439-96-5 | Manganese | 55 | 2456 | 0.00183 | 1.0 | 0.083 | 0.0 | |
| 7440-48-4 | Cobalt | 59 | 260 | -0.01198 | 1.0 | 0.057 | 0.0 | |
| 7440-02-0 | Nickel | 60 | 265 | -0.01070 | 2.0 | 0.098 | 0.0 | |
| 7440-50-8 | Copper | 65 | 173 | -0.00272 | | | | |
| 7440-38-2 | Arsenic | 75 | 15082 | 0.15718 | 2.0 | 0.50 | 0.0 | |
| 7439-98-7 | Molybdenum | 97 | 186 | -0.04755 | | | | |
| 7440-43-9 | Cadmium | 111 | 64 | -0.00907 | 1.0 | 0.074 | 0.0 | |
| 7440-36-0 | Antimony | 121 | 251 | -0.02112 | 2.0 | 0.036 | 0.0 | |
| 7439-92-1 | Lead | 208 | 848 | -0.00806 | 1.0 | 0.066 | 0.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| 7440-56-4 | Germanium | 72 | 1108592 | | ☑ |
| 7440-74-6 | Indium | 115 | 1148655 | | ☑ |
| 7440-30-4 | Thulium | 169 | 922471 | | ☑ |

Reviewed by: Date:

TAL West Sac

# CALIBRATION REPORT

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 7 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02**
File: 101121A2 # 44
Acquired: 11/21/2010 16:38:51
Calibrated: 11/21/2010 15:46:05

Channel 262
Method 6020_
M02

Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***25343800*** | ***4920.3*** | ***5100.0*** | ***96.5*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***737117*** | ***98.905*** | ***100.00*** | ***98.9*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1125029*** | ***97.609*** | ***100.00*** | ***97.6*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***847682*** | ***96.983*** | ***100.00*** | ***97.0*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***178573*** | ***97.535*** | ***100.00*** | ***97.5*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***193712*** | ***98.773*** | ***100.00*** | ***98.8*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***189880*** | ***99.187*** | ***100.00*** | ***99.2*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***323645*** | ***198.71*** | ***200.00*** | ***99.4*** | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***170904*** | ***99.798*** | ***100.00*** | ***99.8*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***290862*** | ***49.777*** | ***50.000*** | ***99.6*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***2188229*** | ***98.870*** | ***100.00*** | ***98.9*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1084503*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1131167*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***909092*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 7** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 45 Method 6020_
Acquired: 11/21/2010 16:42:26 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***70097*** | ***-0.68302*** | ***50.0*** | ***2.1*** | ***0.0*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***21832*** | ***0.19475*** | ***2.0*** | ***0.92*** | ***0.0*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***2435*** | ***0.00204*** | ***1.0*** | ***0.083*** | ***0.0*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***286*** | ***-0.00878*** | ***1.0*** | ***0.057*** | ***0.0*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***275*** | ***-0.00414*** | ***2.0*** | ***0.098*** | ***0.0*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***176*** | ***-0.00003*** | | | | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***14974*** | ***0.17418*** | ***2.0*** | ***0.50*** | ***0.0*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***206*** | ***-0.03396*** | | | | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***60*** | ***-0.01065*** | ***1.0*** | ***0.074*** | ***0.0*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***248*** | ***-0.02095*** | ***2.0*** | ***0.036*** | ***0.0*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***869*** | ***-0.00688*** | ***1.0*** | ***0.066*** | ***0.0*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1098444*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1133443*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***916864*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 8 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 55 Method 6020_
Acquired: 11/21/2010 17:17:19 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***25450660*** | ***4940.0*** | ***5100.0*** | ***96.9*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***749452*** | ***100.58*** | ***100.00*** | ***101*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1138797*** | ***98.790*** | ***100.00*** | ***98.8*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***860710*** | ***98.448*** | ***100.00*** | ***98.4*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***181086*** | ***98.893*** | ***100.00*** | ***98.9*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***194948*** | ***99.390*** | ***100.00*** | ***99.4*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***190991*** | ***99.786*** | ***100.00*** | ***99.8*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***323957*** | ***198.85*** | ***200.00*** | ***99.4*** | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***170647*** | ***100.60*** | ***100.00*** | ***101*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***291184*** | ***50.310*** | ***50.000*** | ***101*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***2170952*** | ***99.881*** | ***100.00*** | ***99.9*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1084570*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1120388*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***892790*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 8** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 56 Method 6020_
Acquired: 11/21/2010 17:20:54 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***69956*** | ***-0.74431*** | ***50.0*** | ***2.1*** | ***0.0*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***21683*** | ***0.16708*** | ***2.0*** | ***0.92*** | ***0.0*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***2333*** | ***-0.00729*** | ***1.0*** | ***0.083*** | ***0.0*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***300*** | ***-0.00728*** | ***1.0*** | ***0.057*** | ***0.0*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***273*** | ***-0.00558*** | ***2.0*** | ***0.098*** | ***0.0*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***170*** | ***-0.00344*** | | | | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***14809*** | ***0.06167*** | ***2.0*** | ***0.50*** | ***0.0*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***197*** | ***-0.04010*** | | | | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***69*** | ***-0.00559*** | ***1.0*** | ***0.074*** | ***0.0*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***307*** | ***-0.01082*** | ***2.0*** | ***0.036*** | ***0.0*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***882*** | ***-0.00525*** | ***1.0*** | ***0.066*** | ***0.0*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1101200*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1131455*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***892804*** | | ☑ |

Reviewed by: Date:

TAL West Sac

# CALIBRATION REPORT

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 9 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 57 Method 6020_
Acquired: 11/21/2010 17:24:28 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***25112941*** | ***4863.9*** | ***5100.0*** | ***95.4*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***736047*** | ***98.510*** | ***100.00*** | ***98.5*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1119463*** | ***96.892*** | ***100.00*** | ***96.9*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***847355*** | ***96.701*** | ***100.00*** | ***96.7*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***178002*** | ***96.989*** | ***100.00*** | ***97.0*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***193433*** | ***98.401*** | ***100.00*** | ***98.4*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***188716*** | ***98.266*** | ***100.00*** | ***98.3*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***321978*** | ***197.20*** | ***200.00*** | ***98.6*** | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***169294*** | ***98.897*** | ***100.00*** | ***98.9*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***288903*** | ***49.466*** | ***50.000*** | ***98.9*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***2154490*** | ***98.675*** | ***100.00*** | ***98.7*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1087030*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1130612*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***896854*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 9** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 58 Method 6020_
Acquired: 11/21/2010 17:28:02 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 27 | 70106 | -0.75726 | 50.0 | 2.1 | 0.0 | |
| 7440-47-3 | Chromium | 52 | 21962 | 0.19537 | 2.0 | 0.92 | 0.0 | |
| 7439-96-5 | Manganese | 55 | 2325 | -0.00855 | 1.0 | 0.083 | 0.0 | |
| 7440-48-4 | Cobalt | 59 | 332 | -0.00380 | 1.0 | 0.057 | 0.0 | |
| 7440-02-0 | Nickel | 60 | 276 | -0.00471 | 2.0 | 0.098 | 0.0 | |
| 7440-50-8 | Copper | 65 | 163 | -0.00740 | | | | |
| 7440-38-2 | Arsenic | 75 | 15137 | 0.21721 | 2.0 | 0.50 | 0.0 | |
| 7439-98-7 | Molybdenum | 97 | 207 | -0.03404 | | | | |
| 7440-43-9 | Cadmium | 111 | 77 | -0.00111 | 1.0 | 0.074 | 0.0 | |
| 7440-36-0 | Antimony | 121 | 282 | -0.01563 | 2.0 | 0.036 | 0.0 | |
| 7439-92-1 | Lead | 208 | 897 | -0.00517 | 1.0 | 0.066 | 0.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| 7440-56-4 | Germanium | 72 | 1104745 | | ☑ |
| 7440-74-6 | Indium | 115 | 1142060 | | ☑ |
| 7440-30-4 | Thulium | 169 | 906340 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 10 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02**
File: 101121A2 # 68
Acquired: 11/21/2010 18:03:06
Calibrated: 11/21/2010 15:46:05

Channel 262
Method 6020_
M02

Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 27 | 24848058 | 4787.1 | 5100.0 | 93.9 | |
| 7440-47-3 | Chromium | 52 | 729478 | 97.086 | 100.00 | 97.1 | |
| 7439-96-5 | Manganese | 55 | 1112395 | 95.771 | 100.00 | 95.8 | |
| 7440-48-4 | Cobalt | 59 | 838294 | 95.163 | 100.00 | 95.2 | |
| 7440-02-0 | Nickel | 60 | 176879 | 95.870 | 100.00 | 95.9 | |
| 7440-50-8 | Copper | 65 | 193073 | 97.699 | 100.00 | 97.7 | |
| 7440-38-2 | Arsenic | 75 | 188236 | 97.443 | 100.00 | 97.4 | |
| 7439-98-7 | Molybdenum | 97 | 318889 | 194.29 | 200.00 | 97.1 | |
| 7440-43-9 | Cadmium | 111 | 167813 | 98.449 | 100.00 | 98.4 | |
| 7440-36-0 | Antimony | 121 | 284646 | 48.945 | 50.000 | 97.9 | |
| 7439-92-1 | Lead | 208 | 2106057 | 97.627 | 100.00 | 97.6 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| 7440-56-4 | Germanium | 72 | 1092723 | | ☑ |
| 7440-74-6 | Indium | 115 | 1125770 | | ☑ |
| 7440-30-4 | Thulium | 169 | 886020 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 10** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 69 Method 6020_
Acquired: 11/21/2010 18:06:40 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 27 | 69544 | -0.83686 | 50.0 | 2.1 | 0.0 | |
| 7440-47-3 | Chromium | 52 | 22120 | 0.22307 | 2.0 | 0.92 | 0.0 | |
| 7439-96-5 | Manganese | 55 | 2265 | -0.01326 | 1.0 | 0.083 | 0.0 | |
| 7440-48-4 | Cobalt | 59 | 323 | -0.00481 | 1.0 | 0.057 | 0.0 | |
| 7440-02-0 | Nickel | 60 | 279 | -0.00257 | 2.0 | 0.098 | 0.0 | |
| 7440-50-8 | Copper | 65 | 168 | -0.00448 | | | | |
| 7440-38-2 | Arsenic | 75 | 14864 | 0.08325 | 2.0 | 0.50 | 0.0 | |
| 7439-98-7 | Molybdenum | 97 | 231 | -0.01950 | | | | |
| 7440-43-9 | Cadmium | 111 | 68 | -0.00621 | 1.0 | 0.074 | 0.0 | |
| 7440-36-0 | Antimony | 121 | 274 | -0.01663 | 2.0 | 0.036 | 0.0 | |
| 7439-92-1 | Lead | 208 | 890 | -0.00474 | 1.0 | 0.066 | 0.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| 7440-56-4 | Germanium | 72 | 1102373 | | ☑ |
| 7440-74-6 | Indium | 115 | 1135126 | | ☑ |
| 7440-30-4 | Thulium | 169 | 890209 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 11 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 70 Method 6020_
Acquired: 11/21/2010 18:10:14 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***24873765*** | ***4810.0*** | ***5100.0*** | ***94.3*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***728337*** | ***97.296*** | ***100.00*** | ***97.3*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1114821*** | ***96.345*** | ***100.00*** | ***96.3*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***841901*** | ***95.932*** | ***100.00*** | ***95.9*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***175886*** | ***95.686*** | ***100.00*** | ***95.7*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***190688*** | ***96.849*** | ***100.00*** | ***96.8*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***187342*** | ***97.321*** | ***100.00*** | ***97.3*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***318939*** | ***195.06*** | ***200.00*** | ***97.5*** | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***168418*** | ***98.710*** | ***100.00*** | ***98.7*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***286402*** | ***49.203*** | ***50.000*** | ***98.4*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***2109256*** | ***98.012*** | ***100.00*** | ***98.0*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1088814*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1126960*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***883965*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 11** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 71 Method 6020_
Acquired: 11/21/2010 18:13:48 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***69829*** | ***-0.86504*** | ***50.0*** | ***2.1*** | ***0.0*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***22021*** | ***0.19137*** | ***2.0*** | ***0.92*** | ***0.0*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***2401*** | ***-0.00295*** | ***1.0*** | ***0.083*** | ***0.0*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***337*** | ***-0.00350*** | ***1.0*** | ***0.057*** | ***0.0*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***275*** | ***-0.00571*** | ***2.0*** | ***0.098*** | ***0.0*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***170*** | ***-0.00414*** | | | | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***14973*** | ***0.09289*** | ***2.0*** | ***0.50*** | ***0.0*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***257*** | ***-0.00466*** | | | | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***70*** | ***-0.00507*** | ***1.0*** | ***0.074*** | ***0.0*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***259*** | ***-0.01943*** | ***2.0*** | ***0.036*** | ***0.0*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***998*** | ***0.00024*** | ***1.0*** | ***0.066*** | ***0.0*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1109345*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1142898*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***889946*** | | ☑ |

Reviewed by: Date:

TAL West Sac

# CALIBRATION REPORT

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **ICSA** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 72 Method 6020_
Acquired: 11/21/2010 18:17:22 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 27 | 05953439 | 89397 | 100000 | 89.4 | ☑ |
| 7440-47-3 | Chromium | 52 | 32821 | 2.3436 | | " | |
| 7439-96-5 | Manganese | 55 | 66665 | 6.3502 | | " | |
| 7440-48-4 | Cobalt | 59 | 13176 | 1.6646 | | " | |
| 7440-02-0 | Nickel | 60 | 2801 | 1.5800 | | " | ☑ |
| 7440-50-8 | Copper | 65 | -1146 | -0.75055 | | " | |
| 7440-38-2 | Arsenic | 75 | 14109 | 0.84185 | | " | ☑ |
| 7439-98-7 | Molybdenum | 97 | 2834781 | 1970.3 | 2000.0 | 98.5 | ☐ |
| 7440-43-9 | Cadmium | 111 | 1464 | 0.97896 | | " | ☑ |
| 7440-36-0 | Antimony | 121 | 1226 | 0.18835 | | " | ☑ |
| 7439-92-1 | Lead | 208 | 10907 | 0.48570 | | " | ☑ |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| 7440-56-4 | Germanium | 72 | 958557 | | ☑ |
| 7440-74-6 | Indium | 115 | 944102 | | ☑ |
| 7440-30-4 | Thulium | 169 | 843057 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **ICSAB** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 73 Method 6020_
Acquired: 11/21/2010 18:20:54 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***12219387*** | ***91148*** | ***100100*** | ***91.1*** | ☑ |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***641084*** | ***98.462*** | ***100.00*** | ***98.5*** | ☑ |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***997942*** | ***98.417*** | ***100.00*** | ***98.4*** | ☑ |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***726522*** | ***94.422*** | ***100.00*** | ***94.4*** | ☑ |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***147471*** | ***91.533*** | ***100.00*** | ***91.5*** | ☑ |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***147410*** | ***85.399*** | ***100.00*** | ***85.4*** | ☑ |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***163528*** | ***99.323*** | ***100.00*** | ***99.3*** | ☑ |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***3048230*** | ***2127.4*** | ***2100.0*** | ***101*** | ☑ |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***140707*** | ***97.496*** | ***100.00*** | ***97.5*** | ☑ |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***253759*** | ***51.547*** | ***50.000*** | ***103*** | ☑ |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***2176933*** | ***101.50*** | ***100.00*** | ***101*** | ☑ |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***954716*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***953260*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***881010*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 12 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 74 Method 6020_
Acquired: 11/21/2010 18:28:07 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***24979618*** | ***4704.9*** | ***5100.0*** | ***92.3*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***740951*** | ***96.392*** | ***100.00*** | ***96.4*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1149988*** | ***96.817*** | ***100.00*** | ***96.8*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***868127*** | ***96.367*** | ***100.00*** | ***96.4*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***182727*** | ***96.841*** | ***100.00*** | ***96.8*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***196503*** | ***97.226*** | ***100.00*** | ***97.2*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***194139*** | ***98.335*** | ***100.00*** | ***98.3*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***328848*** | ***195.91*** | ***200.00*** | ***98.0*** | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***174625*** | ***99.243*** | ***100.00*** | ***99.2*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***295134*** | ***49.160*** | ***50.000*** | ***98.3*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***2261841*** | ***97.364*** | ***100.00*** | ***97.4*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1117571*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1162050*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***954143*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 12** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 75 Method 6020_
Acquired: 11/21/2010 18:31:41 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 27 | 79147 | 0.68711 | 50.0 | 2.1 | 0.0 | |
| 7440-47-3 | Chromium | 52 | 21626 | 0.09455 | 2.0 | 0.92 | 0.0 | |
| 7439-96-5 | Manganese | 55 | 2467 | -0.00049 | 1.0 | 0.083 | 0.0 | |
| 7440-48-4 | Cobalt | 59 | 343 | -0.00333 | 1.0 | 0.057 | 0.0 | |
| 7440-02-0 | Nickel | 60 | 297 | 0.00363 | 2.0 | 0.098 | 0.0 | |
| 7440-50-8 | Copper | 65 | 175 | -0.00270 | | | | |
| 7440-38-2 | Arsenic | 75 | 15754 | 0.39396 | 2.0 | 0.50 | 0.0 | |
| 7439-98-7 | Molybdenum | 97 | 451 | 0.10789 | | | | |
| 7440-43-9 | Cadmium | 111 | 75 | -0.00312 | 1.0 | 0.074 | 0.0 | |
| 7440-36-0 | Antimony | 121 | 244 | -0.02284 | 2.0 | 0.036 | 0.0 | |
| 7439-92-1 | Lead | 208 | 982 | -0.00299 | 1.0 | 0.066 | 0.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| 7440-56-4 | Germanium | 72 | 1126024 | | ☑ |
| 7440-74-6 | Indium | 115 | 1166620 | | ☑ |
| 7440-30-4 | Thulium | 169 | 941179 | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 13 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 76 Method 6020_
Acquired: 11/21/2010 18:35:17 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***24804457*** | ***4650.8*** | ***5100.0*** | ***91.2*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***739682*** | ***95.783*** | ***100.00*** | ***95.8*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1142590*** | ***95.756*** | ***100.00*** | ***95.8*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***866354*** | ***95.736*** | ***100.00*** | ***95.7*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***182502*** | ***96.283*** | ***100.00*** | ***96.3*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***198943*** | ***97.992*** | ***100.00*** | ***98.0*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***196562*** | ***99.173*** | ***100.00*** | ***99.2*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***334698*** | ***198.49*** | ***200.00*** | ***99.2*** | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***174519*** | ***99.748*** | ***100.00*** | ***99.7*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***295443*** | ***49.494*** | ***50.000*** | ***99.0*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***2206188*** | ***98.305*** | ***100.00*** | ***98.3*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1122592*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1155485*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***921748*** | | ☑ |

Reviewed by: Date:

TAL West Sac

# BLANK REPORT

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 13** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 77 Method 6020_
Acquired: 11/21/2010 18:38:53 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 27 | 61534 | -2.8068 | 50.0 | 2.1 | 0.0 | |
| 7440-47-3 | Chromium | 52 | 21539 | 0.03630 | 2.0 | 0.92 | 0.0 | |
| 7439-96-5 | Manganese | 55 | 2674 | 0.01325 | 1.0 | 0.083 | 0.0 | |
| 7440-48-4 | Cobalt | 59 | 237 | -0.01547 | 1.0 | 0.057 | 0.0 | |
| 7440-02-0 | Nickel | 60 | 196 | -0.05120 | 2.0 | 0.098 | 0.0 | |
| 7440-50-8 | Copper | 65 | 194 | 0.00467 | | | | |
| 7440-38-2 | Arsenic | 75 | 15845 | 0.30324 | 2.0 | 0.50 | 0.0 | |
| 7439-98-7 | Molybdenum | 97 | 265 | -0.00505 | | | | |
| 7440-43-9 | Cadmium | 111 | 59 | -0.01256 | 1.0 | 0.074 | 0.0 | |
| 7440-36-0 | Antimony | 121 | 208 | -0.02890 | 2.0 | 0.036 | 0.0 | |
| 7439-92-1 | Lead | 208 | 765 | -0.01192 | 1.0 | 0.066 | 0.0 | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| 7440-56-4 | Germanium | 72 | 1144690 | | ☑ |
| 7440-74-6 | Indium | 115 | 1169650 | | ☑ |
| 7440-30-4 | Thulium | 169 | 926681 | | ☑ |

Reviewed by: Date:

TAL West Sac

# CALIBRATION REPORT

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 14 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 84 Method 6020_
Acquired: 11/21/2010 19:03:23 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***24009557*** | ***4640.4*** | ***5100.0*** | ***91.0*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***722100*** | ***96.398*** | ***100.00*** | ***96.4*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1105391*** | ***95.488*** | ***100.00*** | ***95.5*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***831815*** | ***94.744*** | ***100.00*** | ***94.7*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***175154*** | ***95.246*** | ***100.00*** | ***95.2*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***193942*** | ***98.469*** | ***100.00*** | ***98.5*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***188190*** | ***97.765*** | ***100.00*** | ***97.8*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***320746*** | ***196.07*** | ***200.00*** | ***98.0*** | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***167411*** | ***99.416*** | ***100.00*** | ***99.4*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***283626*** | ***49.366*** | ***50.000*** | ***98.7*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***2078338*** | ***99.127*** | ***100.00*** | ***99.1*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1089123*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1112250*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***861221*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 14** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 85 Method 6020_
Acquired: 11/21/2010 19:06:59 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| ***7429-90-5*** | ***Aluminum*** | ***27*** | ***58292*** | ***-3.0938*** | ***50.0*** | ***2.1*** | ***0.0*** | |
| ***7440-47-3*** | ***Chromium*** | ***52*** | ***21877*** | ***0.16312*** | ***2.0*** | ***0.92*** | ***0.0*** | |
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***2549*** | ***0.00903*** | ***1.0*** | ***0.083*** | ***0.0*** | |
| ***7440-48-4*** | ***Cobalt*** | ***59*** | ***244*** | ***-0.01395*** | ***1.0*** | ***0.057*** | ***0.0*** | |
| ***7440-02-0*** | ***Nickel*** | ***60*** | ***202*** | ***-0.04510*** | ***2.0*** | ***0.098*** | ***0.0*** | |
| ***7440-50-8*** | ***Copper*** | ***65*** | ***203*** | ***0.01225*** | | | | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***15407*** | ***0.30631*** | ***2.0*** | ***0.50*** | ***0.0*** | |
| ***7439-98-7*** | ***Molybdenum*** | ***97*** | ***205*** | ***-0.03635*** | | | | |
| ***7440-43-9*** | ***Cadmium*** | ***111*** | ***56*** | ***-0.01280*** | ***1.0*** | ***0.074*** | ***0.0*** | |
| ***7440-36-0*** | ***Antimony*** | ***121*** | ***228*** | ***-0.02428*** | ***2.0*** | ***0.036*** | ***0.0*** | |
| ***7439-92-1*** | ***Lead*** | ***208*** | ***773*** | ***-0.00931*** | ***1.0*** | ***0.066*** | ***0.0*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1112546*** | | ☑ |
| ***7440-74-6*** | ***Indium*** | ***115*** | ***1129514*** | | ☑ |
| ***7440-30-4*** | ***Thulium*** | ***169*** | ***869820*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 15 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 86 Method 6020_
Acquired: 11/21/2010 19:10:36 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1203553*** | ***98.812*** | ***100.00*** | ***98.8*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***194136*** | ***95.681*** | ***100.00*** | ***95.7*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1146856*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 15** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 87 Method 6020_
Acquired: 11/21/2010 19:13:15 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***2896*** | ***0.02654*** | ***1.0*** | ***0.083*** | ***0.0*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***15602*** | ***-0.00245*** | ***2.0*** | ***0.50*** | ***0.0*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1169361*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 16 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 88 Method 6020_
Acquired: 11/21/2010 19:15:54 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1204388*** | ***98.358*** | ***100.00*** | ***98.4*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***195102*** | ***95.642*** | ***100.00*** | ***95.6*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1152599*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 16** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 89 Method 6020_
Acquired: 11/21/2010 19:18:32 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***2894*** | ***0.02219*** | ***1.0*** | ***0.083*** | ***0.0*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***16002*** | ***0.06611*** | ***2.0*** | ***0.50*** | ***0.0*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1190962*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCV 17 (CCV)** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 96 Method 6020_
Acquired: 11/21/2010 19:36:28 M02
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Found | True | %R | Q |
|---|---|---|---|---|---|---|---|
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***1196916*** | ***99.055*** | ***100.00*** | ***99.1*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***192093*** | ***95.417*** | ***100.00*** | ***95.4*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1137353*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:06:31

Department: 120 (Metals) Source: MetEdit

Sample: **CCB 17** Mult: **1.00** Dilf: **1.00** Divs: **1.000**

Instrument: **ICPMS M02**
File: 101121A2 # 97
Acquired: 11/21/2010 19:39:07
Calibrated: 11/21/2010 15:46:05

Channel 262
Method 6020_
M02

Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | RL | MDL | %RSD | Q |
|---|---|---|---|---|---|---|---|---|
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***3308*** | ***0.06277*** | ***1.0*** | ***0.083*** | ***0.0*** | |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***15267*** | ***-0.08523*** | ***2.0*** | ***0.50*** | ***0.0*** | |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1155903*** | | ☑ |

Reviewed by: Date:

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 11/22/10 08:12:19

Department: 120 (Metals) Source: MetEdit

Sample: **L94MPP5** Serial Dilution: **5.00** Sample Dilution: **1.00**

Instrument: **ICPMS M02** Channel 262
File: 101121A2 # 91 Method 6020_
Acquired: 11/21/2010 19:23:38 M02 Matrix: AIR
Calibrated: 11/21/2010 15:46:05 Units: ug/L

| CASN | Analyte Name | M/S | Area | Dilution | Sample | %Diff. | MDL | Flag | Q |
|---|---|---|---|---|---|---|---|---|---|
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***3617149*** | ***1403.7*** | ***1412.4*** | ***0.620*** | ***0.14*** | ***0.6*** | ☑ |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***16675*** | ***1.1948*** | ***1.1237*** | ***6.32*** | ***0.41*** | ***NC*** | ☑ |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1214067*** | | ☐ |

**** Analyte not requested for this batch, no MDL***

***NC : Serial dilution concentration < 100 X MDL***

***E : Difference greater than Limit (10%)***

Reviewed by: Date:

TAL West Sac

# SAMPLE SPIKE

Method: 6020 (SOP: SAC-MT-001) | M02 | Reported: 11/22/10 08:12:25

Department: 120 (Metals) | Source: MetEdit

Sample: **L94MPZ** | Spike Dilution: **1.00** | Sample Dilution: **1.00**

Instrument: **ICPMS M02** | Channel 262
File: 101121A2 # 92 | Method 6020_
Acquired: 11/21/2010 19:26:10 | M02 | Matrix: AIR
Calibrated: 11/21/2010 15:46:05 | Units: ug/L

| CASN | Analyte Name | M/S | Area | Amount | Sample | %Rec. | Spike | Flag | Q |
|---|---|---|---|---|---|---|---|---|---|
| ***7439-96-5*** | ***Manganese*** | ***55*** | ***18742228*** | ***1506.4*** | ***1412.4*** | ***47.0*** | ***200*** | * | ☐ |
| ***7440-38-2*** | ***Arsenic*** | ***75*** | ***360159*** | ***180.10*** | ***1.1237*** | ***89.5*** | ***200*** | | ☑ |

| CASN | ISTD Name | M/S | Area | Amount | Q |
|---|---|---|---|---|---|
| ***7440-56-4*** | ***Germanium*** | ***72*** | ***1173413*** | | ☑ |

Reviewed by: Date:

# Sample Preparation Log

# TestAmerica - West Sacramento
## Metals - Air Toxics - Preparation Log

**Date:** 19-Nov-10 **Analyst:** jz **Matrix:** AIR

**Fraction:** Filter **SOP:** WS-IP-0010 **Method:** ICPMS

| LOT ID | | Workorder | | Volume Received | Volume Removed | Initial Prep Volume | Final Prep Volume | Batch | Prep Factor |
|---|---|---|---|---|---|---|---|---|---|
| G0K180000 | 435 | L99F1B | 2A | NA | NA | NA | 100 mL | 322435 | 1.2 |
| G0K180000 | 435 | L99F1C | 2A | NA | NA | NA | 100 mL | 322435 | 1.2 |
| G0K180000 | 435 | L99F1L | 2A | NA | NA | NA | 100 mL | 322435 | 1.2 |
| G0K160437 | 1 | L94MP | 2A | 9 inches | 0.75 inches | 0.75 inches | 100 mL | 322435 | 1.2 |
| G0K160437 | 2 | L94M4 | 2A | 9 inches | 0.75 inches | 0.75 inches | 100 mL | 322435 | 1.2 |
| G0K160437 | 3 | L94M7 | 2A | 9 inches | 0.75 inches | 0.75 inches | 100 mL | 322435 | 1.2 |
| G0K160437 | 4 | L94M9 | 2A | 9 inches | 0.75 inches | 0.75 inches | 100 mL | 322435 | 1.2 |

QCs shared with batches 0322434 and 0322436

For the cassette filter digest the whole filter is used.
For 1" filter: factor = 9 (9/1).
For 0.75" filter factor = 12 (9/0.75).

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# West Sacramento

## Metals Spiking Documentation Form

Lot #(s): 60K120496 60K160437 60K170572

Batch Number: 0322434 0322435 0322436

EPA Analytical Method ID: 6020

Spiked Date: 11/18/10

MS Sample(s): NA

EPA Prep Method ID: WS-IP-0010

Hot Plate Microwave ID: Met II

Analyst Initial/Date: JZ 11/18/10

Witness Initial/Date: TP 11/18/10

Hot Plate Temp Initial: 93oc Final: 93oc

Correct Folder ID Witness: NA

Digestion Cup Lot #: 1008257-0307

Filter Paper Lot #: 390427

Thermometer ID: BT09

Fin Vol Cup Lot: 100911

| Check If Used | Bottle Name | Elements | Stock Concentration (mg/L) | Tracking Number | LCS/LCSD Volume Spiked | MS/SD Volume Spiked | Expiration Date |
|---|---|---|---|---|---|---|---|
| | ICP Part 1 5% $HNO_3$ | Ca, Mg | 5,000 | | | | |
| | | Al, As, Ba, Se, Sn, Ti | 200 | | | | |
| | | Fe,Mo,Ti | 100 | | | | |
| | | Sb,Co,Pb,Mn,Ni,V,Zn | 50 | | | | |
| | | Cu | 25 | | | | |
| | | Cr | 20 | | | | |
| | | ,Be,Cd | 5 | | | | |
| | | Ag | 5.0 | | | | |
| | ICP Part 2 2% $HNO_3$ | K,Na | 5,000 | | | | |
| | | P,S | 1,000 | | | | |
| | | B,Li,Sr | 100 | | | | |
| | Si H20/Tr HF | Si | 1,000 | | | | JZ 11/18/10 |
| | TACA-1 5% $HNO_3$ | Al,K,Mg,Ca,Na,Fe,P,B | 500 | | | | |
| | | As,Be,Cd,Cr,Co,Cu,Pb, Mn,Ni,Se,U,V,Zn,Ba,Li Sr | 100 | 3189-6-5 | 200 µl | NA | 8/31/11 |
| | | Ag,Tl | 25 | | | | |
| | TACA-2 5% $HNO_3$ | Mo, Sb, Sn, Ti | 100 | 3189-6-6 | 200 µl | NA | 8/31/11 |
| | Misc. Elements | | | | | | JZ 11/18/10 |

### Prep Reagents:

| Check If Used | Reagent | Supplier | Lot Number | Check If Used | Reagent | Supplier | Lot Number |
|---|---|---|---|---|---|---|---|
| | 70% $HNO_3$ | Mallinckrodt | | | 30% $H_2O_2$ | Mallinckrodt | |
| | 37% HCl | Mallinckrodt | | | 49% HF | Fisher | |
| X | 3M $HNO_3$ | In-House | 4028-28-7 | | 1:1 HCl | In-House | JZ 11/8/10 |

ICP matrix spike and LCS: For final volumes of 100ml, add 1mL from bottles ICP Part 1, ICP Part 2. Add 1ml of Silica (Si) when requested.
ICPMS matrix spike and LCS: For final volumes of 100ml, add 0.2 mL each of TACA-1 and TACA-2.
Amount to spike is as listed above for final volumes of 100ml. If a different final volume is used, increase or decrease the amount you spike proportionally.

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West Sacramento

# Preparation Data Review Checklist

**Prep Batch(es)** 0322434 0322435 0322436 **Test:** 6020

**Prep Date:** 11/18/10 **Holding Times:** 5/21/11 5/10/11 5/16/11 **NCM:** Y (N)

| A. Spike Witness/Batch setup | Spike Witness | Reviewer |
|---|---|---|
| 1. **Holding times checked?** NCMs filed as appropriate | ✓ | ✓ |
| 2. QAS checked for QC instructions (LCS, LCSD, MS,MSD, etc) | ✓ | ✓ |
| 3. Amount of samples in hood match amount of samples on bench sheet. Sample IDS match. | ✓ | NA |
| 4. Worksheets have been checked for required spiking compounds | ✓ | ✓ |
| 5. Spiking volumes are correctly documented | ✓ | ✓ |
| 6. Std ID numbers on spike labels match numbers on bench sheet | ✓ | NA |
| 7. Expiration dates have been checked | ✓ | ✓ |
| 8. Calibration expiration dates on pipettors have been checked | ✓ | NA |
| 9. Spiker and spike witness have signed and dated bench sheet | ✓ | ✓ |
| **B. Weights and Volumes** | | |
| 1. Recorded weights are in anticipated range | NA | NA |
| 2. Balance upload or raw data for weights is included | NA | NA |
| 3. Weights and volumes have been transcribed correctly to LIMS. | NA | ✓ |
| 4. Weights are not targeted to meet exact weights. | NA | NA |
| 5. Each weight or volume measurement is a unique record (no dittos or line downs) | NA | ✓ |
| **C. Standards and Reagents** | | |
| 1. Lot numbers for all reagents, including clean up stages, are recorded. | NA | ✓ |
| 2. Are dates and analysts for cleanups recorded? | NA | NA |
| 3. Are correct IDs used for standards? Are expiration dates to day/month/year, when listed? | NA | ✓ |
| **D. Documentation** | | |
| 1. Are all nonconformances documented appropriately? | NA | NA |
| 2. QuantIMs entry correct, including dates and times. | NA | ✓ |
| 3. Are all fields completed? | NA | ✓ |

Spike witness: TP Date: 11/18/10

2nd Level Reviewer: SH Date: 11/21/10

Comments:

# AIR, TSP-
# Total Suspended
# Particulates

# ***Raw Data Package***

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**TestAmerica West Sacramento**

**Air Toxics Laboratory**

## PARTICULATE ANALYSIS

LEVEL 1 & 2 REVIEW CHECKLIST

**LAB NUMBERS:** G0K160437 (1 - 4) Batch #: 0323364

**ANALYSIS:** (circle) ~~TSP/PM10~~ or METHOD 5

**DATE:** 11/19/10 **ANALYST:** JZ

| LEVEL 1 ANALYSIS REVIEW | YES | NO | NA |
|---|---|---|---|
| 1. Samples are in good condition. | ✓ | | |
| 2. Sample filter number matches the folder or petri ID number. | ✓ | | |
| 3. Desiccator temperature and % humidity criteria in control. | ✓ | | |
| 4. Balance calibration criteria met. | ✓ | | |
| 5. Beginning and ending calibration sample bracket weights are in calibration. | ✓ | | |
| 6. Samples reached stable weight. | ✓ | | |
| 7. Samples exceeded 5 consecutive final weighings. | | | ✓ |
| **LEVEL 1 DATA REVIEW** | | | |
| 1. Benchsheet is complete. | ✓ | | |
| 2. QAS or QAPP consulted and followed for client specifics. | ✓ | | |
| 3. Data entered in properly. | ✓ | | |
| 4. Copy of spreadsheet or logbook raw data entry attached to data package. | ✓ | | |
| 5. Analyst observations, HTV's, Anomalies properly documented and attached to data package. | | | ✓ |

**Completed By & Date:** JZ 11/19/10

| LEVEL 2 REVIEW: | | | |
|---|---|---|---|
| 1. Level 1 checklist complete and verified. | ✓ | | |
| 2. Deviations, Anomalies, Holding times checked and approved. | ✓ | | |
| 3. Reanalysis documented and chemist notified. | | | ✓ |
| 4. Client specific criteria met. | ✓ | | |
| 5. Data entry checked and released in Quantims. | ✓ | | |
| 6. Indication on benchsheet or spreadsheet on review and released (dated & signed). | ✓ | | |

**Completed By & Date:** SJ 11/24/10

**Comments:** Dessicator 2A

RQC050 TestAmerica Laboratories, Inc. Run Date: 11/19/10
WET CHEM BATCHSHEET Time: 18:27:17

TestAmerica West Sacramen

PRODUCTION FIGURES - WET CHEM

| TOTAL NUMBER | SAMPLE NUMBER | QC | RE-RUN MATRIX | RE-RUN OTHER | MISC NUMBER | TOTAL HOURS | EXPANDED DELIVERABLE |
|---|---|---|---|---|---|---|---|

METHOD: AO Particulates in Air, Suspended "TSP HiVol" (APP B)
QC BATCH #: **0323369** INITIALS: DATA ENTRY:
PREP DATE: 11/17/10 11:50 PREP JZ INITIALS JZ
COMP DATE: 11/17/10 11:50 ANAL JZ DATE 11/19/10
USER: PHOMSOPT

| Work Order | Lab Number | Structured Analysis | Exp. Del. | Analysis Date | Sample ID: |
|---|---|---|---|---|---|
| L94MP-1-AA | G-0K160437-001 | XX S 88 AO 3W | M | 11/19/10 | UW-11022010B |
| L94M4-1-AA | G-0K160437-002 | XX S 88 AO 3W | M | 11/19/10 | DW-11022010B |
| L94M7-1-AA | G-0K160437-003 | XX S 88 AO 3W | M | 11/19/10 | UW-11032010B |
| L94M9-1-AA | G-0K160437-004 | XX S 88 AO 3W | M | 11/19/10 | DW-11032010B |

Control Limits

PDE115

TestAmerica Laboratories, Inc.
Inorganics Batch Review
QC Batch **0323369**

Date 11/24/2010
Time 10:31:43

Method Code:**AO Particulates in Air, Suspended "TSP HiVol" (APP B)**
Analyst:**Thep Phomsopha**

| Work Order | Result | Units | LDL/Dil | Prep. - Anal. | Total Solids | PSRL Flag | R/R | Rounded Result | Output LDL | Dil. |
|---|---|---|---|---|---|---|---|---|---|---|
| L94MP-1-AA | 0.0540 | g | 0.0005 | 11/17-11/19/10 | .00 | N | | 0.0540 | 0.0005 | 1.00 |
| L94M4-1-AA | 0.0374 | g | 0.0005 | 11/17-11/19/10 | .00 | N | | 0.0374 | 0.0005 | 1.00 |
| L94M7-1-AA | 0.0453 | g | 0.0005 | 11/17-11/19/10 | .00 | N | | 0.0453 | 0.0005 | 1.00 |
| L94M9-1-AA | 0.0433 | g | 0.0005 | 11/17-11/19/10 | .00 | N | | 0.0433 | 0.0005 | 1.00 |

**Notes:**

**PRODUCTION TOTALS**

| TEST | TOTAL # | SAMPLE # | QC # | MATRIX # | OTHER # | MISC # | HOURS |
|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | .0 |

SOP# : Sac-IP-0006

GRAVIMETRIC BALANCE: QA-45

TestAmerica

WEST SACRAMENTO

AIR TOXICS GRAVIMETRIC ANALYSES

| Lab ID | Filter ID | Initial Weight (g) date/time initials | Initial Weight (g) date/time initials | Final Weight (g) date/time initials | Final Weight (g) date/time initials | Final Weight (g) date/time initials | Final Weight (g) date/time initials | Final Weight (g) date/time initials | Final Weight (g) date/time initials | Wt of Particulate (g) |
|---|---|---|---|---|---|---|---|---|---|---|
| | 5g wt | 4.9996 102710ecl1651 | 4.9998 102810ecl1227 | 4.9999 110410ecl1554 | 4.9999 110510ecl1842 | 4.9998 110810jz1826 | 4.9995 111010jz1812 | 5.0001 111110jz1750 | 4.9999 111610jz1745 | 0.0001 |
| | 5g wt | 4.9996 102710ecl1651 | 4.9998 102810ecl1227 | 4.9997 111710jz1140 | 4.9998 111710jz1757 | | | | | 0.0000 |
| | tron102810-56 | 4.5524 102710ecl1657 | 4.5524 102810ecl1233 | 4.7302 110410ecl1554 | 4.7286 110510ecl1843 | 4.7260 110810jz1829 | 4.7249 111010jz1820 | 4.7240 111110jz1800 | 4.7241 111610jz1748 | 0.1717 |
| | tron102810-57 | 4.5515 102710ecl1657 | 4.5517 102810ecl1234 | 4.5813 110410ecl1555 | 4.5810 110510ecl1844 | | | | | 0.0293 |
| G0K160437 - 3 L94M7 | tron102810-58 | 4.5586 102710ecl1658 | 4.5589 102810ecl1234 | 4.6043 111710jz1143 | 4.6042 111710jz1802 | | | | | 0.0453 |
| | tron102810-59 | 4.5519 102710ecl1658 | 4.5523 102810ecl1235 | | | | | | | NC |
| | tron102810-60 | 4.5552 102710ecl1659 | 4.5556 102810ecl1236 | | | | | | | NC |
| G0K160437 - 4 L94M9 | tron102810-61 | 4.5422 102710ecl1659 | 4.5425 102810ecl1237 | 4.5855 111710jz1146 | 4.5858 111710jz1804 | | | | | 0.0433 |
| G0K160437 - 1 L94MP | tron102810-62 | 4.5471 102710ecl1700 | 4.5475 102810ecl1239 | 4.6019 111710jz1149 | 4.6015 111710jz1812 | | | | | 0.0540 |
| G0K160437 - 2 L94M4 | tron102810-63 | 4.5376 102710ecl1700 | 4.5379 102810ecl1241 | 4.5753 111710jz1153 | 4.5753 111710jz1808 | | | | | 0.0374 |
| | tron102810-64 | 4.5488 102710ecl1700 | 4.5488 102810ecl1241 | 4.5932 110410ecl1556 | 4.5930 110510ecl1845 | | | | | 0.0442 |
| | tron102810-65 | 4.5445 102710ecl1701 | 4.5450 102810ecl1243 | 4.5719 110410ecl1557 | 4.5713 110510ecl1845 | 4.5692 110810jz1833 | 4.5692 111010jz1817 | | | 0.0242 |
| | 5g wt | 4.9999 102710ecl1702 | 4.9996 102810ecl1244 | 5.0004 110410ecl1558 | 5.0001 110510ecl1847 | 4.9999 110810jz1835 | 4.9997 111010jz1821 | 4.9999 111110jz1801 | 4.9998 111610jz1750 | 0.0002 |
| | 5g wt | 4.9999 102710ecl1702 | 4.9996 102810ecl1244 | 4.9996 111710jz1154 | 4.9995 111710jz1814 | | | | | -0.0001 |



rev 020303

N:/atg/air/airgrav3k.xls

Page 1 of 1 Batch#: 0323369

Reviewed by: SW 11/24/15

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# TestAmerica West Sacramento
# Balance Calibration Check Log

| WEIGHT #1 | | | | WEIGHT #2 | | | | DATE | INIT. | WEIGHT ID | P/F *1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Working WT Denomination (g) | OBSERVED WEIGHT (g) | Acceptance limits*2 Lower (g) | Acceptance limits*2 Upper (g) | Working WT Denomination (g) | OBSERVED WEIGHT (g) | Acceptance limits*2 Lower (g) | Acceptance limits*2 Upper (g) | | | | |
| 0.2000 | 0.2003 | 0.1995 | 0.2005 | 10.00 | 10.0003 | 9.900 | 10.100 | 11/10/10 | JZ | QA 011 | P |
| 0.2g | 0.2000 | 0.1995 | 0.2005 | 10.0g | 10.0001 | 9.9000 | 10.100 | 11/11/10 | [illegible] | QA-11 | P |
| 0.2g | 0.1999 | 0.1995 | 0.2005 | 10.0g | 10.0002 | 9.9000 | 10.100 | 11/12/10 | ECJ | QA-11 | P |
| 0.2 | 0.2001 | 0.1995 | 0.2005 | 10.0 | 10.0001 | 9.9000 | 10.100 | 11/15/10 | ECJ | QA-11 | P |
| 0.2000 | 0.1998 | 0.1995 | 0.2005 | 10.0 | 9.9997 | 9.9000 | 10.100 | 11/16/10 | JZ | QA 011 | P |
| 0.2000 | 0.2001 | 0.1995 | 0.2005 | 10.0 | 10.0000 | 9.9000 | 10.100 | 11/17/10 | ECJ | QA-011 | P |
| 0.2000 | 0.2001 | 0.1995 | 0.2005 | 10.0 | 10.000 | 9.9000 | 10.100 | 11/18/10 | JZ | QA-011 | P |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

1 P= Pass, F= Fail. The observed weight must be with in the listed tolerances in order to pass. If calibration check values fall outside acceptance limits, the balance is considered to be out of calibration.
a) Do not move or use the balance
b) Attach a sign instructing others not to use the balance (see front of logbook).
c) Notify the QA department.

*2 Balance Tolerances (grams):

| Denomination | Range | Denomination | Range |
|---|---|---|---|
| 0.2000 | 0.1995 – 0.2005 | 10 | 9.9000 – 10.100 |
| 0.5000 | 0.4995 – 0.5005 | 20 | 19.8000 – 20.200 |
| 1 | 0.9900 – 1.0100 | 50 | 49.5000 – 50.500 |
| 2 | 1.9800 – 2.0200 | 100 | 99.0000 – 101.000 |
| 5 | 4.9500 – 5.0500 | | |

Calibration range is (+/-) 1% for top loading balances. The above tolerances have been rounded to meet balance read out capability.

*3 When performing Method 1664A, the following Class 1 weights and tolerances must be used (in grams).

| Denomination | Range |
|---|---|
| 0.0020 | 0.0018 – 0.0022 |
| 1 | 0.9950 – 1.0050 |
| Calibration range is (±) 10% for 2 mg weight and (±) 0.5% for 1 g weight. The above tolerances have been modified to meet balance read out capability. | |

Reviewed 11/5/10 TP

TestAmerica
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# TestAmerica West Sacramento
## Air Toxics
Desiccator Humidity/Temperature Logbook

| Desiccator # | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | 6 | | | 7 | | | Amb | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Init | T | RH | FN | T | RH | FN | T | RH | FN | T | RH | FN | T | RH | FN | T | RH | FN | T | RH | FN | T | RH |
| 11/9/10 | ECf | 66 | 34 | – | 66 | 29 | – | 68 | 27 | (2) | 66 | 32 | – | 67 | 34 | – | 68 | 36 | – | 68 | 32 | – | 70 | 34 |
| 11/10/10 | ECf | 67 | 34 | – | 68 | 28 | – | 69 | 27 | (2) | 68 | 32 | – | 68 | 34 | – | 70 | 36 | – | 70 | 32 | – | 70 | 39 |
| 11/11/10 | SV | 69 | 32 | – | 66 | 29 | – | 67 | 27 | (2) | 66 | 33 | – | 66 | 34 | – | 68 | 36 ~~35~~ | | 68 | 32 | – | 68 | 33 |
| 11/12/10 | ECf | 65 | 33 | – | 66 | 29 | – | 67 | 28 | – | 66 | 33 | – | 66 | 34 | – | 68 | 35 | – | 68 | 32 | – | 69 | 33 |
| 11/15/10 | ECf | 65 | 32 | – | 69 | 29 | – | 70 | 27 | (2) | 68 | 33 | – | 69 | 37 | – | 70 | 35 | – | 70 | 32 | – | 70 | 39 |
| 11/16/10 | TV | 69 | 32 | – | 69 | 30 | – | 71 | 27 | (2) | 70 | 34 | – | 70 | 38 | – | 70 | 35 | – | 72 | 32 | – | 73 | 34 |
| 11/17/10 | ECf | 66 | 33 | – | 67 | 31 | – | 68 | 27 | (2) | 67 | 34 | – | 68 | 36 | – | 70 | 35 | – | 70 | 32 | – | 70 | 33 |
| 11/18/10 | ECf | 66 | 44 | (1) | 66 | 32 | – | 67 | 28 | – | 66 | 34 | – | ~~66~~ 68 ECf 11/19/10 | 38 | (1) | 68 | 35 | – | 68 | 32 | – | 68 | 37 |
| 11/19/10 | ECf | 67 | 29 | – | 67 | 33 | – | 68 | 27 | (2) | 67 | 34 | – | 67 | 29 | – | 70 | 35 | – | 68 | 33 | – | 70 | 46 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

Abbreviations: T = Temperature (°F) RH = Relative Humidity (%) FN = Foot Note
Limits: RH 33± 5% Temperature 22± 5 °C or 71.6± 9°F
Foot Notes: 1 = Desiccant Changed 2 = Desiccator < 28% Humidity

Revised 11/15/10 TF

## Particulate Checklist

PROJECT#: G0K160437
Client: Tron

Dessicator ID#: 2A
IN DESSICATOR: 11/16/10 10:50

☑ Need FWT1 11/17/10 10:50
☑ Need FWT2 11/17/10 17:54
☐ Need FWT3 _____
☐ Need FWT _____

☑ Done
☐ READY TO CUT
☐ Finished , File away

Requested By: VALMORES

| Batch | Lot/Sample ID | Analysis Code | W/O# | Group | Message |
|---|---|---|---|---|---|
| 0323369 | | | | | Release Requested |
| 0323369 | | | | | Successfully Released |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# TestAmerica West Sacramento
# Balance Calibration Check Log

| WEIGHT #1 | | | | WEIGHT #2 | | | | DATE | INIT. | WEIGHT ID | P/F *1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Working WT Denomination (g) | OBSERVED WEIGHT (g) | Acceptance limits*2 Lower (g) | Upper (g) | Working WT Denomination (g) | OBSERVED WEIGHT (g) | Acceptance limits*2 Lower (g) | Upper (g) | | | | |
| 0.2000 | 0.1996 | 0.1995 | 0.2005 | 10.000 | 10.0002 | ~~10.1~~ ECF 10/4/10 9.9000 | 10.100 | 10/3/10 | ECF | QA-011 | P |
| 0.2000 | 0.2003 | 0.1995 | 0.2005 | 10.000 | 10.0001 | 9.9000 | 10.100 | 10/22/10 | ECF | QA-011 | P |
| 0.2000 | 0.2001 | 0.1995 | 0.2005 | 10.0 | 10.0005 | 9.9000 | 10.0100 | 10/24/10 | ECF | QA-011 | P |
| 0.29 | 0.2002 | 0.1995 | 0.2005 | 10.09 | 10.0011 | 9.9000 | 10.0100 | 10/25/10 | ECF | QA-011 | P |
| 0.2000 | 0.2000 | 0.1995 | 0.2005 | 10.0 | 10.0004 | 9.9000 | 10.0100 | 10/26/10 | ECF | QA-011 | P |
| 0.2000 | 0.2001 | 0.1995 | 0.2005 | 10.0 | 9.9997 | 9.9000 | 10.0100 | 10/27/10 | ECF | QA-011 | P |
| 0.2000 | 0.1998 | 0.1995 | 0.2005 | 10.0 | 10.0000 | 9.9000 | 10.0100 | 10/28/10 | ECF | QA-011 | P |
| 0.2000 | 0.1999 | 0.1995 | 0.2005 | 10.0 | 9.9999 | 9.9000 | 10.0100 | 10/29/10 | ECF | QA-011 | P |
| 0.2000 | 0.1996 | 0.1995 | 0.2005 | 10.0 | 9.9993 | 9.9000 | 10.0100 | 11/1/10 | ECF | QA-011 | P |
| 0.2000 | 0.1996 | 0.1995 | 0.2005 | 10.0 | 9.9999 | 9.9000 | 10.0100 | 11/2/10 | ECF | QA-011 | P |
| 0.2000 | 0.2001 | 0.1995 | 0.2005 | 10.0 | 10.0004 | 9.9000 | 10.0100 | 11/3/10 | ECF | QA-011 | P |
| 0.2000 | 0.2000 | 0.1995 | 0.2005 | 10.0 | 10.0004 | 9.9000 | 10.0100 | 11/4/10 | ECF | QA-011 | P |
| 0.2000 | 0.1999 | 0.1995 | 0.2005 | 10.0 | 10.0004 | 9.9000 | 10.0100 | 11/5/10 | ECF | QA-011 | P |
| 0.2000 | 0.1999 | 0.1995 | 0.2005 | 10.0 | 10.0000 | 9.9000 | 10.0100 | 11/8/10 | ECF | QA-011 | P |

1 P= Pass, F= Fail. The observed weight must be with in the listed tolerances in order to pass. If calibration check values fall outside acceptance limits, the balance is considered to be out of calibration.
- a) Do not move or use the balance
- b) Attach a sign instructing others not to use the balance (see front of logbook).
- c) Notify the QA department.

*2 Balance Tolerances (grams):

| Denomination | Range | Denomination | Range |
|---|---|---|---|
| 0.2000 | 0.1995 – 0.2005 | 10 | 9.9000 – 10.100 |
| 0.5000 | 0.4995 – 0.5005 | 20 | 19.8000 – 20.200 |
| 1 | 0.9900 – 1.0100 | 50 | 49.5000 – 50.500 |
| 2 | 1.9800 – 2.0200 | 100 | 99.0000 – 101.000 |
| 5 | 4.9500 – 5.0500 | | |

Calibration range is (+/-) 1% for top loading balances. The above tolerances have been rounded to meet balance read out capability.

*3 When performing Method 1664A, the following Class 1 weights and tolerances must be used (in grams).

| Denomination | Range |
|---|---|
| 0.0020 | 0.0018 – 0.0022 |
| 1 | 0.9950 – 1.0050 |
| Calibration range is (±) 10% for 2 mg weight and (±) 0.5% for 1 g weight. The above tolerances have been modified to meet balance read out capability. | |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# TestAmerica West Sacramento
## Air Toxics
Desiccator Humidity/Temperature Logbook

| Desiccator # | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | 6 | | | 7 | | | Amb | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Init | T | RH | FN | T | RH | FN | T | RH | FN | T | RH | FN | T | RH | FN | T | RH | FN | T | RH | FN | T | RH |
| 10/22/10 | ECf | 70 | 33 | – | 71 | 28 | – | 72 | 35 | – | 71 | 37 | – | 71 | 38 | – | 73 | 35 | – | 72 | 31 | – | 73 | 45 |
| 10/24/10 | ✓ | 70 | 33 | – | 71 | 28 | – | 72 | 36 | – | 72 | 41 | (1) | 71 | 42 | (1) | 73 | 35 | – | 72 | 32 | | 73 | 56 |
| 10/25/10 | ✓ | 69 | 33 | – | 69 | 28 | – | 70 | 37 | – | 69 | 28 | – | 70 | 28 | – | 72 | 35 | – | 72 | 31 | – | 72 | 43 |
| 10/26/10 | ECf | 68 | 33 | – | 68 | 28 | – | 70 | 36 | – | 68 | 28 | – | 69 | 28 | – | 70 | 35 | – | 70 | 32 | – | 70 | 34 |
| 10/27/10 | ECf | 67 | 33 | – | 68 | 28 | – | 69 | 35 | – | 68 | 28 | – | 68 | 28 | – | 70 | 34 | – | 70 | 31 | – | 70 | 30 |
| 10/28/10 | ECf | 65 | 34 | – | 66 | 29 | – | 66 | 36 | – | 65 | 29 | – | 66 | 29 | – | 68 | 34 | – | 66 | 31 | – | 68 | 40 |
| 10/29/10 | ECf | 65 | 33 | – | 66 | 29 | – | 67 | 37 | – | 65 | 29 | – | 66 | 29 | – | 68 | 34 | – | 66 | 31 | – | 68 | 48 |
| 10/1/10 | ECf | 65 | 34 | – | 65 | 30 | – | 66 | 40 | – | 65 | 29 | – | 66 | 29 | – | 68 | 35 | – | 66 | 32 | – | 68 | 49 |
| 11/2/10 | ECf | 65 | 34 | – | 66 | 32 | – | 67 | 41 | | 65 | 30 | – | 66 | 29 | – | 68 | 35 | – | 68 | 32 | – | 68 | 50 |
| 11/3/10 | ECf | 65 | 34 | – | 66 | 34 | – | 66 | 42 | | 65 | 29 | – | 66 | 29 | – | 68 | 36 | – | 66 | 33 | – | 68 | 51 |
| 11/4/10 | ECf | 68 | 33 | – | 69 | 36 | (1) | 70 | 42 | (1) | 68 | 29 | – | 69 | 29 | – | 70 | 37 | – | 70 | 32 | – | 72 | 49 |
| 11/5/10 | ECf | 69 | 33 | – | 69 | 28 | – | 70 | 43 | (1) | 69 | 30 | – | 70 | 32 | – | 70 | 37 | – | 70 | 33 | – | 72 | 49 |
| 11/5/10 (PM) | ECf | 72 | 33 | – | 72 | 27 | (2) | 74 | 28 | – | 72 | 29 | – | 73 | 33 | – | 73 | 37 | – | 73 | 32 | – | 75 | 43 |
| 11/7/10 | ✓ | 69 | 33 | – | 70 | 28 | – | 71 | 27 | (2) | 70 | 31 | – | 70 | 36 | – | 72 | 37 | – | 72 | 32 | – | 72 | 54 |
| 11/8/10 | ECf | 66 | 34 | – | 66 | 29 | – | 67 | 28 | – | 66 | 32 | – | 67 | 35 | – | 68 | 36 | – | 68 | 33 | – | 68 | 55 → 37 ECf 11/8/10 |

Abbreviations: T = Temperature (°F); RH = Relative Humidity (%); FN = Foot Note
Limits: RH 33± 5%; Temperature 22± 5 °C or 71.6± 9°F
Foot Notes: 1 = Desiccant Changed; 2 = Desiccator < 28% Humidity