

December 15, 2010

**TestAmerica Project Number: G0K270427** 

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 27, 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** 

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#### **Case Narrative**

### **TestAmerica West Sacramento Project Number G0K270427**

#### AIR, TO-13, Semivolatile Organics

Sample(s): 3, 4

The samples have surrogate recoveries that are low outside stated control limits. Re-injection confirms the low surrogate recovery. The low surrogate recovery in G0K270427-3 suggests a potential low bias for the target analyte. As air samples are unique, there is no possibility for re-extraction.

There were no other anomalies associated with this project.





#### TestAmerica Laboratories West Sacramento Certifications/Accreditations

<b>Certifying State</b>	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

<sup>\*</sup>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 G0K270427

<u> WO#</u>	Sample #	Client Sample ID	Sampling Date	Received Date
MAK00	1	UW-11232010A	11/23/2010 03:11 AM	11/27/2010 10:30 AM
MAK01	2	DW-11232010A	11/23/2010 03:35 AM	11/27/2010 10:30 AM
MAK02	3	UW-11232010B	11/23/2010 05:55 PM	11/27/2010 10:30 AM
MAK03	4	DW-11232010B	11/23/2010 06:18 PM	11/27/2010 10:30 AM
MAK04	5	UW-11232010A	11/23/2010 03:11 AM	11/27/2010 10:30 AM
MAK07	6	DW-11232010A	11/23/2010 03:34 AM	11/27/2010 10:30 AM
MAK08	7	UW-11232010B	11/23/2010 05:57 PM	11/27/2010 10:30 AM
MAK09	8	DW-11232010B	11/23/2010 06:20 PM	11/27/2010 10:30 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.

**Unorthgate** 

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. At neterant faults must be completed and accurate

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COC# 2027.07.0017

N / > YIN Tho Bisnk? Event Complete? Sample Receipt Conditions Z > 2 X / X SEC. 5 day Y/N ealymee on Ice 2: > 2/> Temp in 11-17-10 PS Total # of Samples 18 TIME × × SM4OWWANOXOS DATE × × 100 80H/00128/AE1-0T 2018/UF, SmithoKNA9-OT Comments/Lab Sample I.D. Volume (m³) 11/24/2010 1200 793.08 747 55 663 82 982 52 656.53 557.51 995 9 Send EDD to Frank Hagar@rgem.com
CC Hardcopy report to prof. give sincerronic Version Onty - FTP Upload
CC Hardcopy report to See Additional Comments Below Henderson, NV 89009 | Phone #: (949) 260-9263 SAMPLER NAME AND SIGNATURE Susan Crowley Tronox LLC. Ronda Bailey 120g/ DATE TIME NOF CONTAINERS 6.20 PM 3 11 AM 3:34 AM 3.11 AM 3.35 AM 5.55 PM 5 57 PM 6·18 PM Required invoice information SAMPLE TIME PO Box 55 11/23/2010 Send Invoice to. 11/23/2010 11/23/2010 11/23/2010 11/23/2010 11/23/2010 11/23/2010 11/23/2010 SAMPLE DATE City/Starte. Address. ₽O# RELINDUICHED BY LAFFILISTION SAMPLE TYPE Ronda S Bailey State, Zip NV, 88015 G=GRAB C=COMP Ted Splitter@ngem com SHIPPING INFO: Required Project Information: Sale 10 # 102 TRONOX L.C. HENDERSON Ste Address | 550 W Lake Mead Pkwy ₹ ¥ ₹ ₹ ¥ ₹ ₹ ð MATRIH CODE Ted Splitter Ste PM Name Ted Spire Phone/FaH. (510) 435-4609 2027.07 SAMPLE LOCATION Ody Henderson Site PM Email Project # envronmental management, inc. 300 Frank H. Ogawa Plaza, Ste 510 Oakland, CA 94612 (510) 839-0638 Samples IDs MUST BE UNIQUE David.Alflucker@testamericainc.com eb Name Test America Laboratories inc Additional Comments/Special Instructions: West Sacramento, CA 95805 ddress 880 Riverside Parkway (916) 373-5600 3-5 DAY TURN AROUND David Alltucker UW-11232010A DW-11232010A UW-11232010B UW-11232010B DW-11232010B DW-11232010B UVY-11232010A DW-11232010A Required Ship to Lab: at PM emay one/FeH ab P.M # W31



\*1 Acceptable temperature range for State of Wisconsin samples is  $\leq$ 4°C.

#### LOT RECEIPT CHECKLIST TestAmerica West Sacramento

CLIENT Northaate	PM_DA	LOG# 68324
LOT# (QUANTIMS ID)	70 427 QUOTE# 8401	LOCATION 4/140 AC
DATE RECEIVED 11-27-10	TIME RECEIVED	Checked (🗸)
DELIVERED BY FEDEX	☐ ON TRAC ☐ C	LIENT
☐ GOLDENSTATE ☐ UPS	☐ GO-GETTERS ☐ C	THER
☐ TAL COURIER ☐ TAL SF	☐ VALLEY LOGISTICS	
CUSTODY SEAL STATUS MINTACT	☐ BROKEN ☐ N/A	
CUSTODY SEAL #(S)		
SHIPPPING CONTAINER(S)		2
COC #(S) 20 2	1.07,001)	
TEMPERATURE BLANK Observed:	Corrected:	<del>\</del>
SAMPLE TEMPERATURE - (TEMPERATURE	•	
Observed: Average Average LABORATORY THERMOMETER ID:	Corrected Average	
IR UNIT: #4   #5	OTHER	
-	•	ar 11-27-co
		Initials Date
pH MEASURED YES	ANOMALY	VA 💆
LABELED BY		
LABELS CHECKED BY PEER REVIEW	<b> _</b> NA	
SHORT HOLD TEST NOTIFICATION	SAMPLE RECEIVIN	g 📶
	WETCHEM EIN	
	VOA-ENCORESE 1	VA Ł
☐ METALS NOTIFIED OF FILTER/PR	ESERVE VIA VERBAL & EMAIL 🗐	I/A 🔎
COMPLETE SHIPMENT RECEIVE APPROPRIATE TEMPERATURES, COI	D IN GOOD CONDITION WITH DIN	I/A 🗾
	TURE EXCEEDED (2 °C - 6 °C)*1 1	
	☐ GEL PACK ☐ NO COOLING AG	
·		ar 11-27-10
		Initials Date
Notes		

QA-185 10/09 RKE, Page 1



#### DOLLIE LOL HIVEHLOLY

Lot ID: <u>(20.K270427</u>

	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												<u> </u>								
500AGB																				
AGJ					-	-								-		<u> </u>				
500AGJ																				
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125AGJ						`						ļ								
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500CGJ			-		l															
250CGJ		•																		
125CGJ																				
PJ																<del>                                     </del>				
PJn																				
500PJ																				
500PJn									[							-	<b> </b>			
500PJna																				
500PJzn/na	ļ			<del> </del>	<del> </del>		-		-											
250PJ					<u> </u>															
250PJn																				
250PJna						-														
250PJzn/na																				
Acetate Tube																				
"CT																				
Encore			_																	
Folder/filter					(		(	(												,
PUF	1	1	(	1																
Petri/Filter	<del></del>																			
XAD Trap												<u> </u>								
Ziploc																				
	<b> </b>																			
	1	2	3	4	5	6	7	8	9	10	,	12			15	16	17	18	19	20

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

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

# AIR, TO-13, Semivolatile Organics

Sample ID: UW-11232010A

#### **Trace Level Compounds**

Lot - Sample #:	G0K270427 - 001	Work Order #:	MAK001AA	Matrix: AA
Date Sampled:	11/23/10	Date Received:	11/27/10	Dilution Factor: 1
Prep Date:	11/29/10	Analysis Date:	12/04/10	Volume: 550.62
Prep Batch #;	0333259	Instrument ID:	5MH	Method: EPA-2 TO-13

Initial Wgt/Vol: I Sample Analyst ID: Mark Onish	Initial Wgt/Vol:	1 Sample	Analyst ID:	Mark Onishi
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PARAMETER	RESULT	REPORTING LIMIT	DETECTION LI	MIT UNITS
Hexachlorobenzene	ND	0.018	0.0024	ug/m3
SURROGATE		PERCENT RECOVERY	RECOV	ERY LIMITS
1,2-Dichlorobenzene-d4		71	60 - 120	
2-Fluorobiphenyl		87	58 - 105	
2-Fluorophenol		72	41 - 105	
Nitrobenzene-d5		78	46 - 118	
Phenol-d5		81	43 - 122	
Terphenyl-d14		92	69 - 110	
2,4,6-Tribromophenol		111	61 - 118	

**Sample ID: DW-11232010A** 

#### **Trace Level Compounds**

Lot - Sample #:	G0K270427 - 002	Work Order #:	MAK011AA	Matrix: AA
Date Sampled:	11/23/10	Date Received:	11/27/10	Dilution Factor: 1
Prep Date:	11/29/10	Analysis Date:	12/04/10	Volume: 557.51
Prep Batch #:	0333259	Instrument ID:	5MH	Method: EPA-2 TO-13
Initial Wgt/Vol:	1 Sample	Analyst ID:	Mark Onishi	

PARAMETER	RESULT		REPORTING LIMIT	DETECT	ION LIMIT UNITS
Hexachlorobenzene	0.0082	J	0.018	0.0023	ug/m3
SURROGATE			PERCENT RECOVERY	l	RECOVERY LIMITS
1,2-Dichlorobenzene-d4			62	-	50 - 120
2-Fluorobiphenyl			72	4	58 - 105
2-Fluorophenol			65	4	41 - 105
Nitrobenzene-d5			68	2	<del>16 - 118</del>
Phenol-d5			75	4	13 - 122
Terphenyl-d14			88	6	59 ~ 110
2,4,6-Tribromophenol			103	6	51 - 118

#### **QUALIFIERS**

J Estimated Result.

Sample ID: UW-11232010B

#### **Trace Level Compounds**

Lot - Sample #:	G0K270427 - 003	Work Order #:	MAK021AA	Matrix: AA
Date Sampled:	11/23/10	Date Received:	11/27/10	Dilution Factor: 1
Prep Date:	11/29/10	Analysis Date:	12/04/10	Volume: 663.82
Prep Batch #:	0333259	Instrument ID:	5MH	Method: EPA-2 TO-13
Initial Wgt/Vol:	1 Sample	Analyst ID:	Mark Onishi	

PARAMETER	RESULT	R	EPORTING LIMIT	DETECTION LIMIT UNITS		
Hexachlorobenzene	ND		0.015	0.0020	ug/m3	
SURROGATE		PERCE	NT RECOVERY	RECO	VERY LIMITS	
1,2-Dichlorobenzene-d4		50	*	60 - 12	)	
2-Fluorobiphenyl		27	*	58 - 10:	5	
2-Fluorophenol		65		41 - 10:	5	
Nitrobenzene-d5		52		46 - 113	3	
Phenol-d5		74		43 - 12:	2	
Terphenyl-d14		13	*	69 - 110	)	
2,4,6-Tribromophenol		17	*	61 - 11	3	

<sup>\*</sup> Surrogate recovery is outside stated control limits.

Sample ID: DW-11232010B

#### **Trace Level Compounds**

Lot - Sample #:	G0K270427 - 004	Work Order #:	MAK031AA	Matrix: AA
Date Sampled:	11/23/10	Date Received:	11/27/10	Dilution Factor: 1
Prep Date:	11/29/10	Analysis Date:	12/04/10	Volume: 656.53
Prep Batch #:	0333259	Instrument ID:	5MH	Method: EPA-2 TO-13
Initial Wgt/Vol:	1 Sample	Analyst ID:	Mark Onishi	

PARAMETER	RESULT		R	EPORTING LIMIT	DETECTION	LIMIT UNITS
Hexachlorobenzene	0.0041	J		0.015	0.0020	ug/m3
SURROGATE			PERCE	NT RECOVERY	REC	OVERY LIMITS
1,2-Dichlorobenzene-d4			51	*	60 -	120
2-Fluorobiphenyl			78		58 -	105
2-Fluorophenol			67		41 -	105
Nitrobenzene-d5			69		46 -	118
Phenol-d5			76		43 -	122
Terphenyl-d14			93		69 -	110
2,4,6-Tribromophenol			107		61 -	118

<sup>\*</sup> Surrogate recovery is outside stated control limits

J Estimated Result.

# QC DATA ASSOCIATION SUMMARY

#### G0K270427

#### Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	AA	EPA-2 TO-13		0333259	
002	AA	EPA-2 TO-13		0333259	
003	AA	EPA-2 TO-13		0333259	
004	AA	EPA-2 TO-13		0333259	
005	AA AA	CFR50B APDX B SW846 6020		0337343 0336286	
006	AA AA	CFR50B APDX B SW846 6020		0337343 0336286	
007	AA AA	CFR50B APDX B SW846 6020		0337343 0336286	
800	AA AA	CFR50B APDX B SW846 6020		0337343 0336286	

#### Method Blank Report

#### **Trace Level Compounds**

Lot - Sample #:	G0K290000 - 259B	Work Order #:	MALNT1AA	Matrix: AIR
Date Sampled:	11/23/10	Date Received:	11/27/10	Dilution Factor: 1
Prep Date:	11/29/10	Analysis Date:	12/04/10	Volume: 0
Prep Batch #:	0333259	Instrument ID:	5MH	Method: EPA-2 TO-13

Initial Wgt/Vol....: 1 Sample Analyst ID....: Mark Onishi

PARAMETER	RESULT	REPORTING LIMIT	DETE	CCTION LIMIT UNITS
Hexachlorobenzene	ND	10.0	1.3	ug
SURROGATE		PERCENT RECOVERY		RECOVERY LIMITS
1,2-Dichlorobenzene-d4		65		60 - 120
2-Fluorobiphenyl		81		58 - 105
2-Fluorophenol		68		41 - 105
Nitrobenzene-d5		75		46 - 118
Phenol-d5		76		43 - 122
Terphenyl-d14		91		69 - 110
2,4,6-Tribromophenol		104		61 - 118

#### LABORATORY CONTROL SAMPLE DATA REPORT

#### **Trace Level Compounds**

Client Lot # ...: G0K270427 Work Order # ...: MALNT1AC-LCS Matrix .......: AIR

LCS Lot-Sample#: G0K290000 - 259 MALNT1AD-LCSD

Prep Date .....: 11/29/10 Analysis Date ..: 12/04/10

Prep Batch # ...: 0333259

Dilution Factor: 1

Analyst ID....: Mark Onishi Instrument ID.: 5MH Method....: EPA-2 TO-13

Initial Wgt/Vol: 1 Sample

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS
Hexachlorobenzene	100 100	95.8 101	ug ug	96 101	(70 - 110) (70 - 110)	5.1	(0 - 30)
SURROGATE			PERCENT RECOVERY		RECOVERY LIMITS	_	
2-Fluorobiphenyl			87 89	•	(58 - 105) (58 - 105)	_	
2-Fluorophenol			76 76		(41 - 105) (41 - 105)		
Nitrobenzene-d5			86 86		(46 - 118) (46 - 118)		
Phenol-d5			84 83		(43 - 122) (43 - 122)		
Terphenyl-d14			91		(69 - 110)		
2,4,6-Tribromophenol			89 104 102		(69 - 110) (61 - 118) (61 - 118)		

#### Notes:

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

Bold print denotes control parameters

# AIR, Metals by ICPMS (As and Mn)

Sample ID: UW-11232010A

#### Trace Level Compounds

Lot - Sample #:	G0K270427 - 005	Work Order #:	MAK041AC	Matrix: AA
Date Sampled:	11/23/10	Date Received:	11/27/10	Dilution Factor: 1
Prep Date:	12/02/10	Analysis Date:	12/03/10	Volume: 747.55
Prep Batch #:	0336286	Instrument ID:	M02	Method: SW846 6020
Initial Wgt/Vol:	0.08333 L	Analyst ID:	Sabine Hargrave	

PARAMETER	RESULT		REPORTING LIMIT	DETECTION LIMIT	UNITS
Arsenic	0.00097	ВЈ	0.0032	0.00066	ug/m3
Manganese	0.223		0.00161	0.000227	ug/m3

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

J Estimated Result

Sample ID: DW-11232010A

#### Trace Level Compounds

Lot - Sample #:	G0K270427 - 006	Work Order #:	MAK071AC	Matrix: AA
Date Sampled:	11/23/10	Date Received:	11/27/10	Dilution Factor: 1
Prep Date:	12/02/10	Analysis Date:	12/03/10	Volume: 793.08
Prep Batch #:	0336286	Instrument ID:	M02	Method: SW846 6020

Prep Batch # ....: 0336286 Instrument ID....: M02
Initial Wgt/Vol....: 0.08333 L Analyst ID....: Sabine Hargrave

PARAMETER	RESULT		REPORTING LIMIT	DETECTION LIMIT	UNITS
Arsenic	0.0017	ВЈ	0.0030	0.00062	ug/m3
Manganese	1.52		0.00151	0.000214	ug/m3

#### **QUALIFIERS**

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

J Estimated Result.

Sample ID: UW-11232010B

#### Trace Level Compounds

Lot - Sample #:	G0K270427 - 007	Work Order #:	MAK081AC	Matrix: AA
Date Sampled:	11/23/10	Date Received:	11/27/10	Dilution Factor: 1
Prep Date:	12/02/10	Analysis Date:	12/03/10	Volume: 995.9
Prep Batch #:	0336286	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
 0.0024
 0.00049
 ug/m3

 Manganese
 0.166
 0.00120
 0.000171
 ug/m3

#### **QUALIFIERS**

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

J Estimated Result.

Sample ID: DW-11232010B

#### Trace Level Compounds

Work Order # ....: MAK091AC Lot - Sample #....: G0K270427 - 008 Matrix....: AADilution Factor ....: 1 Date Received ....: 11/27/10 Date Sampled ....: 11/23/10 Volume...: 982.52 12/02/10 Analysis Date ....: 12/03/10 Prep Date ....: Method....: SW846 6020 Prep Batch # ....: 0336286 Instrument ID....: M02 Initial Wgt/Vol ....: 0.08333 L Analyst ID....: Sabine Hargrave

PARAMETER	RESULT		REPORTING LIMIT	DETECTION LIMIT	UNITS
Arsenic	0.00092	ВЈ	0.0024	0.00050	ug/m3
Manganese	2.00		0.00122	0.000173	ug/m3

#### **QUALIFIERS**

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

J Estimated Result.

#### Method Blank Report

#### Trace Level Compounds

 Lot - Sample #....:
 G0L020000 - 286B
 Work Order #....:
 MARD81AA
 Matrix....:
 AIR

 Date Sampled....:
 11/23/10
 Date Received....:
 11/27/10
 Dilution Factor....:
 1

 Prep Date....:
 12/02/10
 Analysis Date....:
 12/07/10
 Volume....:
 0

 Mathod
 SW846 6

Initial Wgt/Vol....: 0.08333 L Analyst ID....: Sabine Hargrave

PARAMETER RESULT REPORTING LIMIT DETECTION LIMIT UNITS

Arsenic 0.95 B 2.4 0.49 ug

#### **QUALIFIERS**

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

## QC DATA ASSOCIATION SUMMARY

#### G0K270427

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS_RUN#
005	AA	SW846 6020		0336286	
006	AA	SW846 6020		0336286	
007	AA	SW846 6020		0336286	
008	AA	SW846 6020		0336286	

#### Method Blank Report

#### Trace Level Compounds

Lot - Sample #....: G0L020000 - 286B Date Sampled ....: 11/23/10 12/02/10

Prep Date ....: Prep Batch # ....: 0336286 Initial Wgt/Vol....: 0.08333 L Date Received ....: 11/27/10 12/03/10 Analysis Date ....: M02

Instrument ID....: Analyst ID ....: Sabine Hargrave

Work Order #....: MARD81AC Matrix....: AIR Dilution Factor ....: 1 Volume....: 0

Method....: SW846 6020

**PARAMETER** RESULT REPORTING LIMIT **DETECTION LIMIT UNITS** 

ND 0.17 Manganese 1.2 ug

#### LABORATORY CONTROL SAMPLE DATA REPORT

#### **Trace Level Compounds**

Client Lot # ...: G0K270427 Work Order # ...: MARD81AF-LCS Matrix ........: AIR

LCS Lot-Sample#: G0L020000 - 286 MARD81AG-LCSD

Prep Date .....: 12/02/10 Analysis Date ..: 12/03/10
Prep Batch # ...: 0336286

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
Manganese	240	220	ug	92	(88 - 110)		
	240	216	ug	90	(88 - 110)	1.9	(0 - 15)
Arsenic	240	223	ug	93	(86 - 110)		

Notes:

Calculations are performed before rounding to avoid round-off errors in calculated results Bold print denotes control parameters

# AIR, TSP-Total Suspended Particulates

Sample ID: UW-11232010A

#### **Trace Level Compounds**

 Lot - Sample #....:
 G0K270427 - 005
 Work Order #....:
 MAK041AA
 Matrix....:
 AA

 Date Sampled....:
 11/23/10
 Date Received....:
 11/27/10
 Dilution Factor....:
 1

 Prep Date....:
 11/30/10
 Analysis Date....:
 12/03/10
 Volume....:
 747.55

Prep Batch # ....: 0337343 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 0.0000163 0.000000669 -- g/m3

Sample ID: DW-11232010A

#### Trace Level Compounds

Lot - Sample #:	G0K270427 - 006	Work Order #:	MAK071AA	Matrix: AA
Date Sampled:	11/23/10	Date Received:	11/27/10	Dilution Factor: 1
Prep Date:	11/30/10	Analysis Date:	12/03/10	Volume: 793.08

Prep Batch # ....: 0337343 Instrument ID....: QA-045 Method....: CFR50B APDX B
Initial Wgt/Vol...: Thep Phomsopha

PARAMETER RESULT REPORTING LIMIT DETECTION LIMIT UNITS

Total Suspended Particulates 0.0000175 0.000000630 -- g/m3

Sample ID: UW-11232010B

#### Trace Level Compounds

 Lot - Sample #...:
 G0K270427 - 007
 Work Order #...:
 MAK081AA
 Matrix...:
 AA

 Date Sampled...:
 11/23/10
 Date Received...:
 11/27/10
 Dilution Factor...:
 1

 Prep Date...:
 11/30/10
 Analysis Date....:
 12/03/10
 Volume....:
 995.9

Prep Batch # ....: 0337343 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 0.0000623 0.000000502 -- g/m3

Sample ID: DW-11232010B

#### Trace Level Compounds

Lot - Sample #:	G0K270427 - 008	Work Order #:	MAK091AA	Matrix: AA
Date Sampled:	11/23/10	Date Received:	11/27/10	Dilution Factor: 1
Prep Date:	11/30/10	Analysis Date:	12/03/10	Volume: 982.52

Prep Batch # ....: 0337343 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 0.0000662 0.000000509 -- g/m3

## QC DATA ASSOCIATION SUMMARY

#### G0K270427

#### Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX_	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
005	AA	CFR50B APDX B		0337343	
006	AA	CFR50B APDX B		0337343	
007	AA	CFR50B APDX B		0337343	
800	AA	CFR50B APDX B		0337343	

# AIR, TO-13, Semivolatile Organics

# Raw Data Package

# Run/Batch Data

Includes (as applicable):

runlogs

continuing calibration standards
interference/performance check standards
continuing calibration blanks
method blanks

lcs

ms/sd

sample raw data

ms tune data



#### West Sacramento

#### 8270C CCV Checklist

Instrument: SV5		<del></del>				
ICAL Date: 10/02/10_						
Initiator/Date: KT-12/06/10 Standard ID: HSL1204						
Reviewer/Date:	- Zy 13	16/10 I	NCM #:		_	
I: 8270C Criteria				Initiated	Reviewed	
Log Book page included.  CCV compared to correct ICAL.  Tune documentation is present and meets criteria.  Manual re-integrations are checked, initialed and hardcopies included.  Retention time correct for Isomers and all other analytes.  CCV Internal Standards are within 50-200% of ICAL mid-point.					A DOCTOR D	
Samples analyzed within 12 ho		<b>.</b>		$\boxtimes$		
Tailing and degradation criteria				_	<u> </u>	
Spot check manual integrations	in Target, Anal	lyte checked	l:	NA	124	
Non-CCC ≤ 50% D				<u> </u>		
II: 8270C SPCC Check SPCC RRFs must be greater than 0.050 Initiated Reviewed Initiated Reviewed  N-nitroso-di-n-propylamine						
Hexachlorocyclopentadiene	$\boxtimes$	Z	4-Nitrophenol	$\boxtimes$	<u>-</u>	
III: 8270C CCC Check		20%D (If Co Reviewed	CC are not targets, all analytes n	nust be <20%I Initiated	D.) Reviewed	
Phenol		2	Acenaphthene	$\boxtimes$	D	
1,4-Dichlorobenzene	$\boxtimes$		N-nitrosodiphenylamine	$\boxtimes$	Ď	
2-Nitrophenol	$\boxtimes$	Z,	Pentachlorophenol	$\boxtimes$		
2,4-Dinitrophenol	$\boxtimes$		Flouranthene	$\boxtimes$		
Hexachlorobutadiene			Di-n-octyl phthalate		<u> </u>	
4-Chloro-3-methylphenol			Benzo(a)pyrene	$\boxtimes$		
2,4,6-Trichlorophenol				<del></del>		
IV: AFCEE 3.1 and 4.0 (	OAPP Criter	<u>ia</u>		Initiated	Reviewed	
All analytes in CCV +/- 20%D	compared to ICA	AL. Gee	Note		San Note	
CCV and Sample Internal Standards are within 50-200% of ICAL mid-point.			$\boxtimes$			
Are the compounds which required manual integrations documented in the MI spreadsheet?					包	
Bengo (B) Fluoranthene = +22% High and ND isok.						
Q:\FORMS\Checklists\QA-511 MSSV CCV Checklist Page 1 of 2					QA-511 RBH 5/9/08	

Page 1 of 2



#### West Sacramento

#### 8270C CCV Checklist

V: DOD QSM V3 Criteria	Initiated	Reviewed
For 8270, CCCs must be ≤ 20% D.	$\boxtimes$	2
RRFs for SPCCs must meet minimum response factor criteria	$\boxtimes$	
CCV and sample Internal Standards are within 50-200% of ICAL mid-point.	$\boxtimes$	<b>a</b>
SIM: All analytes must be ≤ 20%	□NA	Æ <b>A</b>
Are the compounds which required manual integrations documented in the MI spreadsheet?	$\boxtimes$	团

# TestAmerica West Sacramento

Page#	

# GC/MS INSTRUMENT LOG SEMI-VOLATILES

Method Key (MTH Column)
QL = EPA 8270C (WS-MS-0005)
JZ = EPA TO-13A (WS-MS-0005)
VX = EPA 8270C-SIM (mod) CWM (WS-MS-0003)
QI = EPA 8270C-SIM (WS-MS-0008)
FX = PAH-SIM Isotope Dilution (WS-MS-0006)
F9 = EPA 8270C-SIM (mod) 1,4-Dioxane (WS-MS-0011) Inst ID : sv5.i

Batch ID: 120410.B ICAL Date: See Calib Report See raw data for standard IDs

Date	Time	USER	Sample ID	File ID   Vol or	_	Eutroot	l Dala	I METAL	Comments
Date	( IIII	1 OSEK	) sample in	/ clie ib / voi or	- 1	Vol	/ DIII	) titu	Comments
***************************************	' 	, 	 ====================================	, , NC	, 	VO1	! ========	 ====================================	 
04-DEC-2010	09:53	KT	PRIMER	QC001A.D   NA		NA	I NA	i	I
04-DEC-2010	10:15	KT	DFTPP 50ug/ml	DFT1204.D  NA	1	NA	l NA	i	i — — —
04-DEC-2010	10:36	KT	HSL 050 ug/ml CS-4	[HSL1204.D] NA	i	NA	NA	Ī	I
04-DEC-2010	11:00	KT	MALNT1AA G0K290000-259B	S120401.D  1000 Sa	1	1 mL	] 1	JZ	
04-DEC-2010	11:25	KT	MALNT1AC G0K290000-259C	S120402.D  1000 Sa	ı	1 mL	1	JZ	
04-DEC-2010	11:49	KT	[MALNT1AD G0K290000-259L	S120403.D  1000 Sa	I	1 mL	1	į JZ	Ittigh lo P
04-DEC-2010	12:14	{ KT	L99F61DL G0K180595-1S	S120404.D  30.06 g	ł	1 mL	1 1	QL	1 7
04-DEC-2010	12:38	l KT	L99F61DM G0K180595-1D	S120405.D  29.95 g	ı	1 mL	1	QL	1
04-DEC-2010	13:03	KT	MAK001AA G0K270427-1	S120406.D  1000 Sa	ı	1 mL	1	į JZ	I
04-DEC-2010	13:27	KT	MAK011AA G0K270427-2	S120407.D  1000 Sa	!	1 mL	1 1	j JZ	1
04-DEC-2010	13:52	KT	IMAK021AA G0K270427-3	[S120408.D] 1000 Sa	1	1 mL	1 1	JZ	1 Low Sur 10
04-DEC-2010	14:16	KT	MAK031AA G0K270427-4	S120409.D  1000 Sa	- 1	1 mL	J 1	] JZ	I low surr
04-DEC-2010	14:41	KT	MANG51AA G0K30000-389B	S120410.D  1000 Sa	ł	1 mL	[ 1	JZ	1 10W GWY
04-DEC-2010	15:05	KT	MANG51AC G0K30000-389C	[S120411.D] 1000 Sa	}	1 mL	1	\ JZ	1
04-DEC-2010	15:30	KT	MANG51AD G0K30000-389L	S120412.D  1000 Sa	1	1 mL	1 1	į JZ	1
04-DEC-2010	15:54	KT	MAMLW1AA G0K300434-1	S120413.D  1000 Sa	1	1 mL	1	JZ	1
04-DEC-2010	16:19	KT	MAML81AA G0K300434-4	(S120414.D) 1000 Sa	ţ	1 mL	1	1 JZ	1
04-DEC-2010	16:43	KT	L99G21AE G0K180595-8	S120415.D  29.99 g	- 1	1 mL	1	QL	1
04-DEC-2010	17:08	KT	L99G31AE G0K180595~9	S120416.D  30.07 g	i	1 mL	1	QL	1
04-DEC-2010	17:32	KT	L99G41AE G0K180595-10	(S120417.D) 30.08 g	Į	1 mL	l 1	( QL	
04-DEC-2010	17:57	KT	L99G51AE G0K180595-11	[S120418.D] 30.05 g	i	1 mL	1	l QL	1
04-DEC-2010	18:21	! KT	L99G61AE G0K180595-12	S120419.D  29.92 g	i	1 mL	1	! QL	1.
04-DEC-2010	18:46	KT	L99G91AE G0K180595-13	S120420.D  30.07 g	-	1 mL	1 1	QL	1
04-DEC-2010	19:10	KT	L99HA1AE GOK180595-14	S120421.D  30.03 g	i	1 mL	1	l QL	
04-DEC-2010	19:35	KT	L99HD1AE G0K180595-15	S120422.D  29.97 g	j	l mL	! 1	i QL	l
04-DEC-2010	19:59	KT	L99HF1AE G0K180595-16	S120423.D  30.01 g	1	1 mL	1 1	QL	1
04-DEC-2010	20:24	KT	L99HH1AE G0K180595-17	[S120424.D] 30.07 g	- 1	1 mL	! 1	i QL	<u> </u>
		•	•		·		•		

Report Date: 06-Dec-2010 09:21

# TestAmerica West Sacramento

#### CONTINUING CALIBRATION COMPOUNDS

Instrument ID: sv5.i Injection Date: 04-DEC-2010 10:36

Lab File ID: HSL1204.D Init. Cal. Date(s): 17-AUG-2010 02-OCT-2010 Analysis Type: Init. Cal. Times: 17:32 15:00 Lab Sample ID: HSL 050 ug/ml CS-4 Quant Type: ISTD

Method: \\SV5\C\chem\sv5.i\120410.B\8270f.m

	·	[		MIN	•	MAX	1
COMPOUND	RRF / AMOUNT	RF50	•		•	%D / %DRIFT	•
7 2-Fluorophenol	1.40992	1.46404	1.46404		•	•	•
8 Phenol-d5	1.77296	1.83375	1.83375	0.010	3.42888	50.00000	Average
9 2-Chlorophenol-d4	1.55698	1.61867	1.61867	0.010	3.96181	50.00000	Average
10 1,2-Dichlorobenzene-d4	0.98513	1.01892	1.01892	0.010	3.43026	50.00000	Average
11 Nitrobenzene-d5	0.33879	0.34944	0.34944	0.010	3.14130	50.00000	Average
12 2-Fluorobiphenyl	1.28852	1.29558	1.29558	0.010	0.54766	50.00000	Average
13 2,4,6-Tribromophenol	0.17381	0.18767	0.18767	0.010	7.97121	50.00000	Average
14 Terphenyl-d14	0.787891	0.81013	0.81013	0.010	2.82244	50.00000	Average
5 N-Nitrosodimethylamine	0.92154	0.90858	0.90858	0.010	-1.40620	50.00000	Average
6 Pyridine	1.54111	1.50575	1.50575	0.010	-2.29461	50.00000	Average
3 Aniline	2.25673	2.279391	2.279391	0.010	1.00413	50.00000	Average
4 Phenol	1 2.037291	2.08653	2.08653	0.010	2.41708	1 20.00000	Average
6 Bis(2-chloroethyl)ether	[ 1.42859]	1.46102	1.46102	0.010	2.26983	50.00000	Average
7 2-Chlorophenol	1.56381	1.59024	1.59024	0.010	1.68995	50.00000	Average
8 1,3-Dichlorobenzene	1.70337	1.79554	1.79554	0.010	5.41089	50.00000	Average
9 1,4-Dichlorobenzene	1.78118	1.80374	1.80374	0.010	1.26683	20.00000	Average
0 Benzyl Alcohol	1.05101	1.074901	1.07490	0.010	2.27311	50.00000	Average
1 1,2-Dichlorobenzene	1,63746	1.698401	1.69840	0.010	3.72162	50.00000	-
2 2-Methylphenol	1.430121	1.432941	1.43294	0.010	0.19697	1 50.00000	-
3 2,2'-oxybis(1-Chloropropane	2.27365	2.27329	2.273291			50.00000	-
4 4-Methylphenol	1.51904	1.51474	1.51474	0.010	-0.28351	50.00000	_
6 Hexachloroethane	0.606361	0.655721	0.655721			50,00000	
7 N-Nitrosodinpropylamine	1.01180	1.025421	1.02542				
2 Nitrobenzene	0.33116	0.34537	0.34537				
4 Isophorone	0.636791	0.655031	0.655031			•	
5 2-Nitrophenol	0.19648	0.20808	0.20808			1 20.00000	-
6 2,4-Dimethyphenol	0.34911	0.36705	0.36705			50.00000	_
7 Bis(2-chloroethoxy)methane	0.389081	0.389951	0.389951			50.00000	Average
9 2,4-Dichlorophenol	0.27010	0.27837	0.27837	0.010	3.06220	20.00000	Average
0 Benzoic Acid	0.19324	0.20608	0.20608			-	
1 1,2,4-Trichlorobenzene	0.29246	0.31045	0.31045			50.00000	-
2 Naphthalene	1.10443	1.13982	1.13982			-	
4 4-Chloroaniline	0.432881	0.44148	0.44148			•	
7 Hexachlorobutadiene	0.14313	0.15626	0.15626			•	
0 4-Chloro-3-Methylphenol	0.30164	0.31836	0.31836	•		•	
3 2-Methylnaphthalene	0.69378	0.73392	0.73392			-	
6 Hexachlorocyclopentadiene	0.298461	0.32035	0.32035			*	•
9 2,4,6-Trichlorophenol	0.29040	0.33680	0.33680			•	
0 2,4,5-Trichlorphenol	0.313131	0.368861	0.36886				
1 2-Chloronaphthalene	1.12571	1.15486	1.15486			•	
1 2-Chioronaphthaiene 3 2-Nitroaniline	0.34119	0.36528	0.36528			-	
						•	
6 Dimethylphthalate	1.29606	1.31651	1.31651	0.010	1.57746	50.00000	Average

Manual cacultin for Nitrobenjane: 252501 x 40 = 034537 12/6/1.

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Report Date: 06-Dec-2010 09:21

#### TestAmerica West Sacramento

# CONTINUING CALIBRATION COMPOUNDS

Instrument ID: sv5.i Injection Date: 04-DEC-2010 10:36

Lab File ID: HSL1204.D Init. Cal. Date(s): 17-AUG-2010 02-OCT-2010 Analysis Type: Init. Cal. Times: 17:32 15:00 Lab Sample ID: HSL 050 ug/ml CS-4 Quant Type: ISTD Method: \\SV5\C\chem\sv5.i\120410.B\8270f.m

l	1	1	CCAL   MIN	l	MAX	,
COMPOUND	RRF / AMOUNT	RF50	RRF50   RRF	%D / %DRIFT		
77 Acenaphthylene	1.96037	1.996641	1.99664 0.010	•	50.00000	
79 2,6-Dinitrotoluene	0.30197	0.30862	0.30862 0.010	•		-
80 3-Nitroaniline	0.37691	0.38778	0.38778[0.010	2.88550	50.00000	-
81 Acenaphthene	1.24787	1.26244	1.26244 0.010	1.16789	20.000001	Averaged
82 2,4-Dinitrophenol	[ 50.00000]	52.52788	0.18729 0.050	5.05576	0.000e+000	Quadratic
83 Dibenzofuran	1.65612	1.69133	1.69133 0.010	2.12631	50.000001	Averaged
84 4-Nitrophenol	( 0.15634)	0.17314	0.17314(0.050	1 10.747861	50.00000{	Averaged
86 2,4-Dinitrotoluene	0.396331	0.42188	0.42188 0.010	6.44559	50.00000	Averaged
91 Fluorene	1.37139	1.39249	1.39249 0.010	1.53868	50.000001	Averaged
92 Diethylphthalate	1.326991	1.37656	1.37656 0.010	3.73540	50.000001	_
93 4-Chlorophenyl-phenylether	0.57019	0.57433	0.57433 0.010	0.72546	50.000001	Averaged
94 4-Nitroaniline	0.37361	0.39990	0.39990 0.010	7.037071	50.00000	Averaged
97 4,6-Dinitro-2-methylphenol	[ 50.00000]	54.80273	0.15726 0.010	9.605461	0.000e+0001	Linear
98 N-Nitrosodiphenylamine	0.606281	0.62806	0.62806 0.010	3.59210	20.00000]	Averaged
100 Azobenzene	0.78660	0.80903	0.80903 0.010	2.85135	50.000001	Averaged
101 4-Bromophenyl-phenylether	0.19527	0.21480	0.21480 0.010	10.00406	50.00000	Averaged
108 Hexachlorobenzene	0.21807	0.22934	0.22934 0.010	5.17043	50.000001	Averaged
110 Pentachlorophenol	[ 50.00000]	48.80415	0.12675 0.010	-2.39170	0.000e+000	-
114 Phenanthrene	1.26074[	1.27780	1.27780 0.010	1.35252	50.000001	Averaged
115 Anthracene	1.25955	1.31316	1.31316 0.010	4.25662	50.000001	=
118 Carbazole	1.15061	1.17061	1.17061 0.010	1.73845	50.000001	Averaged
120 Di-n-Butylphthalate	1.38442	1.46886	1.46886 0.010	[ 6.09975]	50.00000]	Averaged
126 Fluoranthene	1.12969	1.22360	1.22360 0.010	8.31338	20.000001	Averaged
127 Benzidîne	0.81067	0.86515	0.86515 0.010	6.719491	50.000001	Averaged
128 Pyrene	1 1.25025	1.26571	1.26571 0.010	1.23579	50.00000	Averaged
134 3,3'-dimethylbenzidine	( 0.71564)	0.76105	0.76105 0.010	6.346301	50.000001	Averaged
136 Butylbenzylphthalate	0.62663	0.67343	0.67343 0.010	7.467921	50.00000	Averaged
138 Benzo(a)Anthracene	1.065481	1,12285	1.12285 0.010	5.38490	50.00000	Averaged
139 Chrysene	1.08994	1.07955	1.07955 0.010	-0.95314	50.000001	Averaged
140 3,3'-Dichlorobenzidine	0.401891	0.42573	0.42573 0.010	5.93261	50,000001	Averaged
141 bis(2-ethylhexyl)Phthalate	0.86316	0.90793	0.90793 0.010	5.18612	50.00000]	Averaged
142 Di-n-octylphthalate	1.37975	1.53772	1.53772 0.010	11.44900	20.00000	Averaged
144 Benzo(b)fluoranthene	0.905491	1.10333	1.10333 0.010	21.84870	50.000001	Averaged
145 Benzo(k)fluoranthene	1.16236	1.07851	1.07851 0.010	-7.21363	50.000001	Averaged
147 Benzo(e)pyrene	0.94425	0.98783	0.98783 0.010	4.61585	50.00000	Averaged
148 Benzo(a)pyrene	1.02655	1.07597	1.07597 0.010	4.81409	20.00000	Averaged
151 Indeno(1,2,3-cd)pyrene	0.830291	0.94746	0.94746 0.010	14.11161	50.000001	Averaged
152 Dibenzo(a,h)anthracene	0.927581	1.02615	1.02615 0.010	10.62663	50.000001	Averaged
153 Benzo(g,h,i)perylene	1.00427]	1.091661	1.09166 0.010	8.70201	50.000001	Averaged
M 162 benzo b,k Fluoranthene Tota	2.06785	2.18184	2.18184 0.010	5.51256	50.00000]	Averaged
·	1	ı	1	į į	Ī	

Data File: \\SV5\C\chem\sv5.i\120410.B\HSL1204.D

Report Date: 06-Dec-2010 09:21

#### TestAmerica West Sacramento

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Method 8270C

Data file: \\SV5\C\chem\sv5.i\120410.B\HSL1204.D

Lab Smp Id: HSL 050 ug/ml CS-4 Client Smp ID: 8270F.M

Inj Date : 04-DEC-2010 10:36

Operator : KT Inst ID: sv5.i

Smp Info : HSL 050 ug/ml CS-4;2;;4;;;4

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0310;0;8270F.M Comment: SOP SAC-MS-0005 Method: \\SV5\C\chem\sv5.i\120410.B\8270f.m Meth Date: 06-Dec-2010 09:21 semivoa Quant Type: Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 97 Continuing Calibration Sample

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

									AMOUI	NTS	
			QUANT SIG					CAL-	AMT	ON	-COL
Co	mpo	unds	Mass	RT	EXP RT	REL RT	RESPONSE	(	NG)	(	NG)
==	===		**==	====	******	=======	*======		===	==:	
*	1	1,4-Dichlorobenzene-d4	152	3.542	3,542	(1.000)	138327	40.0	000		
*	2	Naphthalene-d8	136	4.952	4.952	(1.000)	584888	40.0	0000		
*	3	Acenaphthene-d10	164	7.045	7.045	(1.000)	316560	40.0	0000		
*	4	Phenanthrene-d10	188	8.900	8.900	(1.000)	498828	40.0	000		
*	5	Chrysene-dl2	240	13.190	13.190	(1.000)	516170	40.0	000		
*	6	Perylene-d12	264	15.543	15.543	(1.000)	510499	40.0	000		
\$	7	2-Fluorophenol	112	2.340	2.340	(0.661)	253146	50.0	000		51.92
\$	8	Phenol-d5	99	3.231	3.231	(0.912)	317072	50.0	000	:	51.71
\$	9	2-Chlorophenol-d4	132	3.345	3.345	(0.944)	279882	50.0	000	!	51.98
\$	10	1,2-Dichlorobenzene-d4	152	3.739	3.739	(1.056)	176180	50.0	000	5	51.72
\$	11	Nitrobenzene-d5	82	4.174	4.174	(0.843)	255477	50.0	000	5	51.57
\$	12	2-Fluorobiphenyl	172	6.257	6.257	(0.888)	512661	50.0	000	5	50.27
\$	13	2,4,6-Tribromophenol	330	8.019	8.019	(1.138)	74261	50.0	000	9	53.98
\$	14	Terphenyl-d14	244	11.460	11.460	(0.869)	522707	50.0	000	5	51.41
	15	N-Nitrosodimethylamine	74	1.314	1,314	(0.371)	157102	50.0	000	4	19.30
	16	Pyridine	79	1.325	1.325	(0.374)	260357	50.0	000	4	18.85
	23	Aniline	93	3.252	3.252	(0.918)	394126	50.0	000	5	50.50
	24	Phenol	94	3.252	3.252	(0.918)	360779	50.0	000	5	51.21
	26	Bis(2-chloroethyl)ether	93	3.314	3.314	(0.936)	252623	50.0	000	Ę	51.13
	27	2-Chlorophenol	128	3.356	3.356	(0.947)	274966	50.0	000	5	50.84
	28	1,3-Dichlorobenzene	146	3.501	3.501	(0.988)	310465	50.0	000		52.70
	29	1,4-Dichlorobenzene	146	3.553	3.553	(1.003)	311883	50.0	000	Ę	50.63
	30	Benzyl Alcohol	108	3.718	3.718	(1.050)	185860	50.0	000	5	51.14
	31	1,2-Dichlorobenzene	146	3.760	3.760	(1.061)	293669	50.0	000	ş	31.86
	32	2-Methylphenol	108	3.874	3.874	(1.094)	247768	50.0	000	5	50.10
	33	2,2'-oxybis(1-Chloropropane)	45	3.895	3.895	(1.099)	393072	50.0	000	4	19.99
	34	4-Methylphenol	108	4.040	4.040	(1.140)	261911	50.0	000	4	19.86
	36	Hexachloroethane	117	4.081	4.081	(1.152)	113379	50.0	000	5	54.07
	37	N-Nitrosodinpropylamine	70	4.040	4.040	(1.140)	177304	50.0	000	5	50.67
	42	Nitrobenzene	77	4.185	4.185	(0.845)	252501	50.0	000	5	2.14
	44	Isophorone	82	4.454	4.454	(0.900)	478900	50.0	000	5	51.43
		2-Nitrophenol	139	4.547	4.547	(0.918)	152132	50.0	000	9	52.95
		2,4-Dimethyphenol	107	4.630	4.630	(0.935)	268351	50.0	000		52.57
	_					•					

							AMOUN	TS
		QUANT SIG					CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	( NG)	(NG)
		***	====	=======		========	======	
47 Bis(2-chlo	roethoxy) methane	93	4.734	4.734	(0.956)	285100	50.0000	50.11
49 2,4-Dichlo	rophenol	162	4.827	4.827	(0.975)	203520	50.0000	51.53
50 Benzoic Ac	id	122	4.765	4.765	(0.962)	150668	50.0000	53.32
51 1,2,4-Tric	hlorobenzene	180	4.910	4.910	(0.992)	226976	50.0000	53.08
52 Naphthalen	e	128	4.972	4.972	(1.004)	833332	50.0000	51.60
54 4-Chloroan	iline	127	5.086	5.086	(1.027)	322772	50.0000	50.99
57 Hexachloro	butadiene	225	5.200	5.200	(1.050)	114243	50.0000	54.59
60 4-Chloro-3	-Methylphenol	107	5.687	5.687	(1.149)	232755	50.0000	52.77
63 2-Methylna	phthalene	142	5.915	5.915	(1.195)	536574	50.0000	52.89
66 Hexachloro	cyclopentadiene	237	6.060	6.060	(0.860)	126762	50.0000	53.67
69 2,4,6-Tric	hlorophenol	196	6.174	6.174	(0.876)	133270	50.0000	52.77
70 2,4,5-Tric	hlorphenol	196	6.216	6.216	(0.882)	145957	50.0000	53.64
71 2-Chlorona	phthalene	162	6.361	6.361	(0.903)	456980	50.0000	51.29
73 2-Nitroanı	line	65	6.537	6.537	(0.928)	144542	50.0000	53.53
76 Dimethylph	thalate	163	6.817	6.817	(0.968)	520942	50.0000	50.79
77 Acenaphthy	lene	152	6.858	6.858	(0.974)	790071	50.0000	50.92
79 2,6-Dinitro	otoluene	165	6.889	6.889	(0.978)	122120	50.0000	51.10
80 3-Nitroani	line	138	7.045	7.045	(1.000)	153445	50.0000	51.44
81 Acenaphthe	ne	153	7.076	7,076	(1.004)	499548	50.0000	50.58
82 2,4-Dinitro	ophenol	184	7.169	7.169	(1.018)	74110	50.0000	52.53
83 Dibenzofur	an	168	7.273	7.273	(1,032)	669261	50.0000	51.06
84 4-Nitrophe	nol	109	7.304	7.304	(1.037)	68513	50.0000	55.37
86 2,4-Dinitro	otoluene	165	7.356	7,356	(1.044)	166937	50.0000	53.22
91 Fluorene		166	7.687	7.687	(1.091)	551010	50.0000	50.77
92 Diethylphtl	halate	149	7.677	7.677	(1.090)	544705	50.0000	51.87
93 4-Chloroph	enyl-phenylether	204	7.708	7.708	(1.094)	227261	50.0000	50.36
94 4-Nitroanı	line	138	7.781	7.781	(1.104)	158242	50.0000	53.52
97 4,6-Dinitro	o-2-methylphenol	198	7.843	7.843	(0.881)	98059	50.0000	54.80
98 N-Nitrosod:	iphenylamine	169	7.874	7.874	(0.885)	458977	58.6000	60.70
100 Azobenzene		77	7.905	7.905	(0.888)	504459	50.0000	51.42
101 4-Bromopher	nyl-phenylether	248	8.330	8.330	(0.936)	133936	50.0000	55.00
108 Hexachloro	penzene	284	8.496	8,496	(0.955)	143002	50.0000	52.58
110 Pentachlor	ophenol	266	8.755	8.755	(0.984)	79036	50.0000	48.80
114 Phenanthre	ne	178	8.931	8.931		796750	50.0000	50.68
115 Anthracene		178	8.993	8.993		818801	50.0000	52.13
118 Carbazole		167	9.263		(1.041)	729917	50.0000	50.87
120 Di-n-Butyl		149	9.957		(1.119)	915888	50.0000	53.05
126 Fluoranther	ne	202	10.745	10.745		762960	50.0000	54.16
127 Benzidine		184	11.035	11.035		558203	50.0000	53.36
128 Pyrene		202	11.087	11.087		816649	50.0000	50.62
134 3,3'-dimeth	-	212	12.309	12.309		491042	50.0000	53.17
136 Butylbenzyl		149		12.434		434505	50.0000	53.73
138 Benzo(a)Ant	thracene	228	13.159	13.159		724478	50.0000	52.69
139 Chrysene		228	13.232	13.232		696538	50.0000	49.52
140 3,3'-Dichle		252	13.221			274689	50.0000	52.97
	lhexyl)Phthalate	149	13.563	13.563		585805	50.0000	52.59
142 Di-n-octylg		149	14.610			992154	50.0000	55.72
144 Benzo(b) flu		252	14.973	14.973		704060	50.0000	60.92
145 Benzo(k)flu		252	15.014			688223	50.0000	46.39
147 Benzo(e)pyr		252	15.387	15.387		630359	50.0000	52.31
148 Benzo(a)pyr		252	15.460	15.460		686601	50.0000	52.41
151 Indeno(1,2,	= =	276	17.076	17.076		604594	50.0000	57.06
152 Dibenzo(a,h		278	17.118	17.118		654808	50.0000	55.31
153 Benzo(g,h,i	) perytene	276	17.439	17.439	(1.122)	696616	50.0000	54.35

Data File: \\SV5\C\chem\sv5.i\120410.B\HSL1204.D

Report Date: 06-Dec-2010 09:21

# QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Page 3

Report Date: 06-Dec-2010 09:21

# TestAmerica West Sacramento

Method 8270C

Page 1

Data file: \\SV5\C\chem\sv5.i\120410.B\HSL1204.D

Lab Smp Id: HSL 050 ug/ml CS-4 Client Smp ID: 8270F.M

Inj Date : 04-DEC-2010 10:36

Operator : KT Inst ID: sv5.i

Smp Info : HSL 050 ug/ml CS-4;2;;4;;;4

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0310;0;8270F.M Comment: SOP SAC-MS-0005 Method: \\SV5\C\chem\sv5.i\120410.B\8270f.m Meth Date: 06-Dec-2010 09:21 semivoa Quant Type: Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 97 Continuing Calibration Sample

Dil Factor: 1.00000 Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

								AMOU	NTS
			QUANT SIG					CAL-AMT	ON-COL
	-	unds	Mass	RT	EXP RT	REL RT	RESPONSE	(NG)	( NG)
*			==≠≍ 152			. ====================================		40.0000	n===:==
*		1,4-Dichlorobenzene-d4	136	3.542 4.952		(1.000)	138327		
*		Naphthalene-d8				(1.000)	584888	40.0000 40.0000	
*		Acenaphthene-d10	164	7.045		(1.000)	316560	40.0000	
*		Phenanthrene-d10	188	8.900 13.190		(1.000)	498828	40.0000	
		Chrysene-d12	240			(1.000)	516170		
*		Perylene-d12	264	15.543		(1.000)	510499	40.0000	
\$		2-Fluorophenol	112	2.340		(0.661)	253146	50.0000	51.92
\$		Phenol-d5	99	3.231		(0.912)	317072	50.0000	51.71
\$		2-Chlorophenol-d4	132	3.345		(0.944)	279882	50.0000	51.98
\$		1,2-Dichlorobenzene-d4	152	3.739		(1.056)	176180	50.0000	51.72
\$		Nitrobenzene-d5	82	4.174		(0.843)	255477	50.0000	51.57
\$		2-Fluorobiphenyl	172	6.257		(0.888)	512661	50.0000	50.27
\$		2,4,6-Tribromophenol	330	8.019		(1.138)	74261	50.0000	53.98
\$		Terphenyl-di4	244	11.460		(0.869)	522707	50.0000	51.41
		N-Nitrosodimethylamine	74	1.314		(0.371)	157102	50.0000	49.30
		Pyridine	79	1.325		(0.374)	260357	50.0000	48.85
		Anıline	93	3.252		(0.918)	394126	50.0000	50.50
		Phenol	94	3.252		(0.918)	360779	50.0000	51.21
		Bis(2-chloroethyl)ether	93	3.314		(0.936)	252623	50.0000	51.13
		2-Chlorophenol	128	3.356		(0.947)	274966	50.0000	50.84
	28	1,3-Dichlorobenzene	146	3.501		(0.988)	310465	50.0000	52,70
	29	1,4-Dichlorobenzene	146	3.553		(1.003)	311883	50.0000	50.63
	30	Benzyl Alcohol	108	3.718	3.718	(1.050)	185860	50.0000	51.14
		1,2-Dichlorobenzene	146	3.760	3.760	(1.061)	293669	50.0000	51.86
	32	2-Methylphenol	108	3.874	3.874	(1.094)	247768	50.0000	50.10
	33	2,2'-oxybis(1-Chloropropane)	45	3.895	3.895	(1.099)	393072	50.0000	49.99
	34	4-Methylphenol	108	4.040	4.040	(1.140)	261911	50.0000	49.86
	36	Hexachloroethane	117	4.081	4.081	(1.152)	113379	50.0000	54.07
	37	N-Nitrosodinpropylamine	70	4.040	4.040	(1.140)	177304	50.0000	50.67
	42	Nitrobenzene	77	4.185	4.185	(0.845)	252501	50.0000	52.14
	44	Isophorone	82	4.454	4.454	(0.900)	478900	50.0000	51.43
	45	2-Nitrophenol	139	4.547	4.547	(0.918)	152132	50.0000	52.95
	46	2,4-Dimethyphenol	107	4.630	4.630	(0.935)	268351	50.0000	52.57

AMOUNTS

						NUOMA	
		QUANT SIG				CAL-AMT	ON-COL
Сопро	unds	MASS	RT	EXP RT REL RT	RESPONSE	( NG)	( NG)
		====		=======================================		~=====	======
47	Bis(2-chloroethoxy)methane	93	4.734	4.734 (0.956)	285100	50.0000	50.11
	2,4-Dichlorophenol	162	4.827	4.827 (0.975)	203520	50.0000	51.53
50	Benzoic Acid	122	4.765	4.765 (0.962)	150668	50.0000	53.32
51	1,2,4-Trichlorobenzene	180	4.910	4.910 (0.992)	226976	50.0000	53.08
52	Naphthalene	128	4.972	4.972 (1.004)	833332	50.0000	51.60
54	4-Chloroaniline	127	5.086	5.086 (1.027)	322772	50.0000	50.99
57	Hexachlorobutadiene	225	5.200	5.200 (1.050)	114243	50.0000	54.59
60	4-Chloro-3-Methylphenol	107	5.687	5.687 (1.149)	232755	50.0000	52.77
63	2-Methylnaphthalene	142	5.915	5.915 (1.195)	536574	50.0000	52.89
66	Hexachlorocyclopentadiene	237	6.060	6.060 (0.860)	126762	50.0000	53.67
69	2,4,6-Trichlorophenol	196	6.174	6.174 (0.876)	133270	50.0000	52.77
70	2,4,5-Trichlorphenol	196	6.216	6.216 (0.882)	145957	50.0000	53.64
71	2-Chloronaphthalene	162	6.361	6.361 (0.903)	456980	50.0000	51.29
73	2-Nitroaniline	65	6.537	6.537 (0.928)	144542	50.0000	53.53
76	Dimethylphthalate	163	6.817	6.817 (0.968)	520942	50.0000	50.79
77	Acenaphthylene	152	6.858	6.858 (0.974)	790071	50.0000	50.92
79	2,6-Dinitrotoluene	165	6.889	6.889 (0.978)	122120	50.0000	51.10
80	3-Nitroaniline	138	7.045	7.045 (1.000)	153445	50.0000	51.44
81	Acenaphthene	153	7.076	7.076 (1.004)	499548	50.0000	50.58
	2,4-Dinitrophenol	184	7.169	7.169 (1.018)	74110	50.0000	52.53
83	Dibenzofuran	168	7.273	7.273 (1.032)	669261	50.0000	51.06
84	4-Nitrophenol	109	7.304	7,304 (1.037)	68513	50.0000	55.37
	2,4-Dinitrotoluene	165	7.356	7.356 (1.044)	166937	50.0000	53.22
	Fluorene	166	7.687	7.687 (1.091)	551010	50.0000	50.77
	Diethylphthalate	149	7.677	7.677 (1.090)	544705	50.0000	51.87
	4-Chlorophenyl-phenylether	204	7.708	7.708 (1.094)	227261	50.0000	50.36
	4-Nitroaniline	138	7.781	7.781 (1.104)	158242	50.0000	53.52
	4,6-Dinitro-2-methylphenol	198	7.843	7.843 (0.881)	98059	50.0000	54.80
	N-Nitrosodiphenylamine	169	7.874	7.874 (0.885)	458977	58.6000	60.70
	Azobenzene	77	7.905	7,905 (0.888)	504459	50.0000	51.42
	4-Bromophenyl-phenylether	248	8.330	8,330 (0.936)	133936	50.0000	55.00
	Hexachlorobenzene	284	8.496	8,496 (0.955)	143002	50.0000	52.58
	Pentachlorophenol	266	8.755	8.755 (0.984)	79036	50.0000	48.80
	Phenanthrene	178	8.931	8.931 (1.003)	796750	50.0000	50.68
	Anthracene	178	8,993	8.993 (1.010)	818801	50.0000	52.13
	Carbazole	167	9.263	9.263 (1.041)	729917	50.0000	50.87
	Di-n-Butylphthalate	149	9.957	9.957 (1.119)	915888	50.0000	53.05
	Fluoranthene	202	10.745	10.745 (1.207)	762960	50.0000	54.16
	Benzidine	184	11.035	11.035 (0.837)	558203	50.0000	53.36
		202	11.035	11.087 (0.841)	816649	50.0000	50.62
	Pyrene 3,3'-dimethylbenzidine	212	12.309	12.309 (0.933)	491042	50.0000	53.17
	Butylbenzylphthalate	149		12.434 (0.943)	434505	50.0000	53.73
	• •				724478		
	Benzo (a) Anthracene	228	13.159	13.159 (0.998)		50.0000 50.0000	52.69
	Chrysene	228	13.232		696538		49.52
	3,3'-Dichlorobenzidine	252	13.221	13.221 (1.002)	274689	50.0000	52.97
	bis (2-ethylhexyl) Phthalate	149	13.563	13.563 (1.028)	585805	50.0000	52.59
	Di-n-octylphthalate	149	14.610	14.610 (1.108)	992154	50.0000	55.72
	Benzo(b) fluoranthene	252	14.973	14.973 (0.963)	704060	50.0000	60.92
	Benzo(k) fluoranthene	252	15.014	15.014 (0.966)	688223	50.0000	46.39
	Benzo (e) pyrene	252	15.387	15.387 (0.990)	630359	50.0000	52.31
	Benzo(a)pyrene	252	15.460	15.460 (0.995)	686601	50.0000	52.41
	Indeno(1,2,3-cd)pyrene	276	17.076	17,076 (1.099)	604594	50.0000	57.06
152	Dibenzo(a,h)anthracene	278	17.118	17.118 (1.101)	654808	50.0000	55.31
153	Benzo(g,h,i)perylene	276	17.439	17.439 (1.122)	696616	50.0000	54.35

Data File: \\SV5\C\chem\sv5.i\120410.B\HSL1204.D

Report Date: 06-Dec-2010 09:21

Page 3

# QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\SV5\C\chem\sv5.i\120410.B\HSL1204.D Page 4

Report Date: 06-Dec-2010 09:21

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Calibration Date: 04-DEC-2010

Lab File ID: HSL1204.D Calibration Time: 09:53 Lab Smp Id: HSL 050 ug/ml CS-4 Client Smp ID: 8270F.M

Analysis Type: SV Level:
Quant Type: ISTD Sample Type:

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120410.B\8270f.m Misc Info: 3;;0;1 8270STD.SUB;10MSSV0310;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

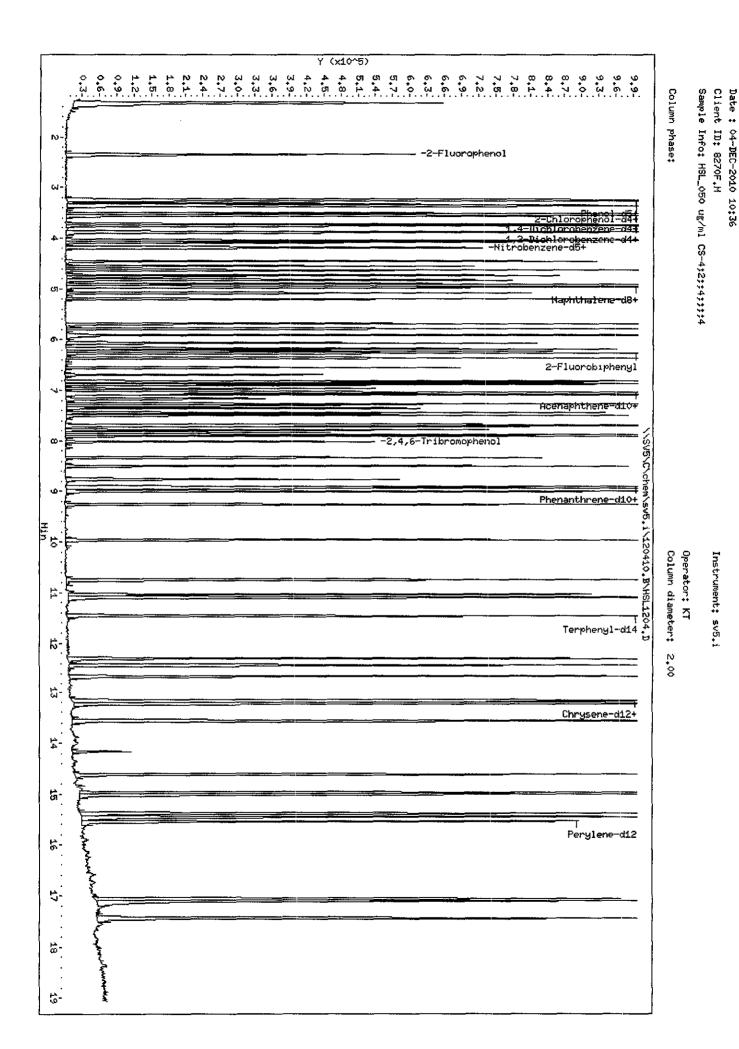
		AREA	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
	========	========	========	=======	======
1 1,4-Dichlorobenze	122625	61313	245250	138327	12.80
2 Naphthalene-d8	530514	265257	1061028	584888	10.25
3 Acenaphthene-d10	282538	141269	565076	316560	12.04
4 Phenanthrene-d10	462722	231361	925444	498828	7.80
5 Chrysene-d12	435850	217925	871700	516170	18.43
6 Perylene-d12	422284	211142	844568	510499	20.89
l					

		RT I	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
	========	=======	========	========	======
1 1,4-Dichlorobenze	3.54	3.04	4.04	3.54	0.00
2 Naphthalene-d8	4.95	4.45	5.45	4.95	0.00
3 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.00
4 Phenanthrene-d10	8.90	8.40	9.40	8.90	0.00
5 Chrysene-d12	13.19	12.69	13.69	13.19	0.00
6 Perylene-d12	15.54	15.04	16.04	15.54	0.00
					ļ

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Data File: \\SV5\C\chem\sv5.i\120410.B\HSL1204.D

# TAILING FACTOR/DEGRADATION SUMMARY RESULTS

# TAILING ANALYSIS SUMMARY

Compound	Tail	Factor	Max Allowed	Test
Pentachlorophenol Benzidine		9091184 3577715	5.000 3.000	

# DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown  M	ax Allowed Test
4,4-DDD + DDE	197771	9.6	20.5   PASS

Sample //SV5/C/chem/sv5.i/120410.B/DFT1204.D/DFT1204.D

\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\* PASSED \*\*\* \*\*\*\*\*\*\*\*

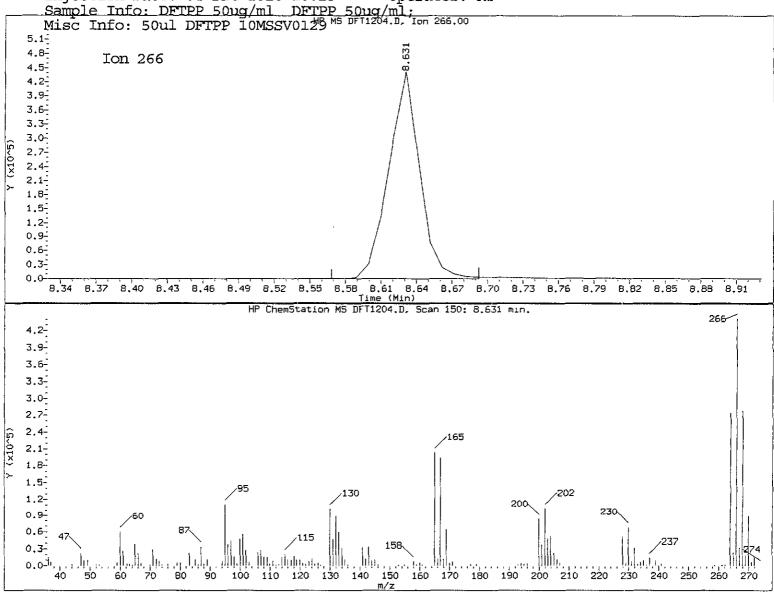
12/6/10

#### TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 12/06/2010 09:20

Datafile Analyzed: //SV5/C/chem/sv5.i/120410.B/DFT1204.D/DFT1204.D Method Used: \\SV5\C\chem\sv5.i\120410.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 04-DEC-2010 10:15 Operator: KT



# Pentachlorophenol

Exp. RT = 8.662 Found RT = 8.631

Time1 = 8.600923 Time2 = 8.630883 Time3 = 8.658121
Tailing Factor = (Time3 - Time2) / (Time2 - Time1)

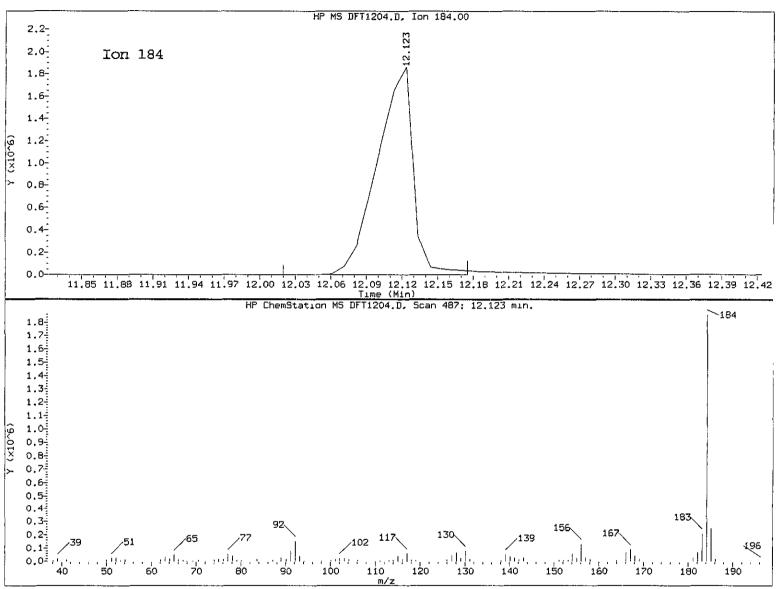
Tailing factor for Pentachlorophenol OK

Tail Factor = 0.909 Maximum Allowed = 5.0

Datafile Analyzed: //SV5/C/chem/sv5.i/120410.B/DFT1204.D/DFT1204.D Method Used: \\SV5\C\chem\sv5.i\120410.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 04-DEC-2010 10:15 Ope Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml; Operator: KT

Misc Info: 50ul DFTPP 10MSSV0129



# Benzidine

Exp. RT =12.144 Found RT = 12.123

Time2 = 12.12323Time3 = 12.13958Time1 = 12.07753Tailing Factor = (Time3 - Time2)/(Time2 - Time1)

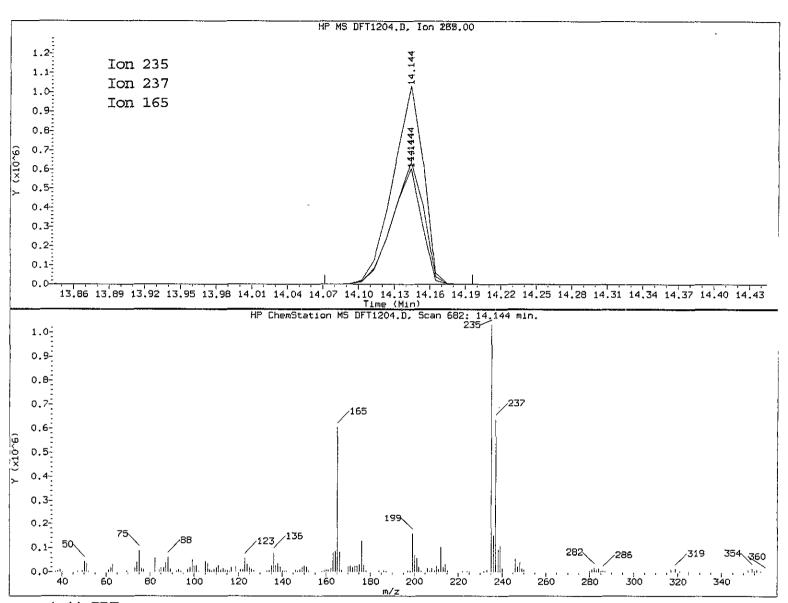
Tailing factor for Benzidine OK

Tail Factor = 0.358 Maximum Allowed = 3.0

Datafile Analyzed: //SV5/C/chem/sv5.i/120410.B/DFT1204.D/DFT1204.D Method Used: \\SV5\C\chem\sv5.i\120410.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 04-DEC-2010 10:15 Ope Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml; Operator: KT

Misc Info: 50ul DFTPP 10MSSV0129



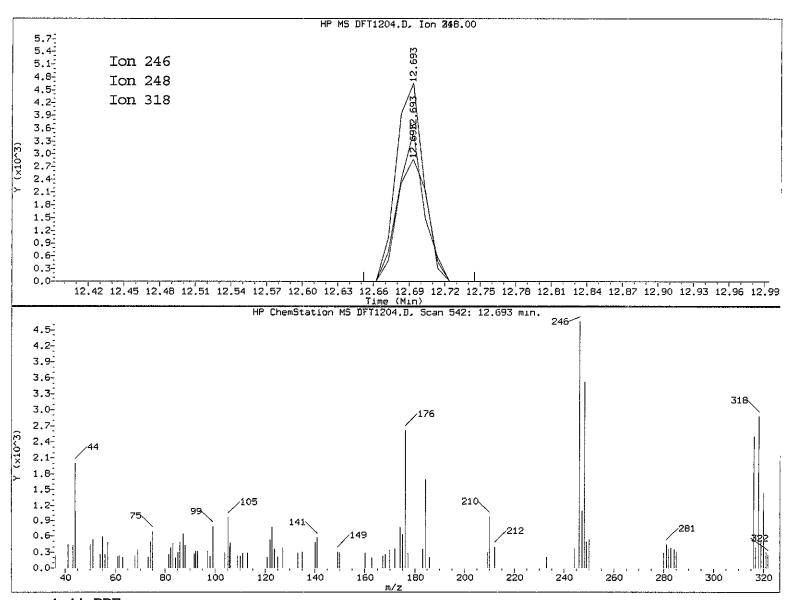
4,4'-DDT Exp. RT =14.165 Found RT = 14.144

Mass	Area	Ratio
235	1852497	100.00
237	1164121	62.84
165	1063113	57.39

Datafile Analyzed: //SV5/C/chem/sv5.i/120410.B/DFT1204.D/DFT1204.D Method Used: \\SV5\C\chem\sv5.i\120410.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 04-DEC-2010 10:15 Ope Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml; Operator: KT

Misc Info: 50ul DFTPP 10MSSV0129



4,4'-DDE Exp. RT = 12.714 Found RT =12.693

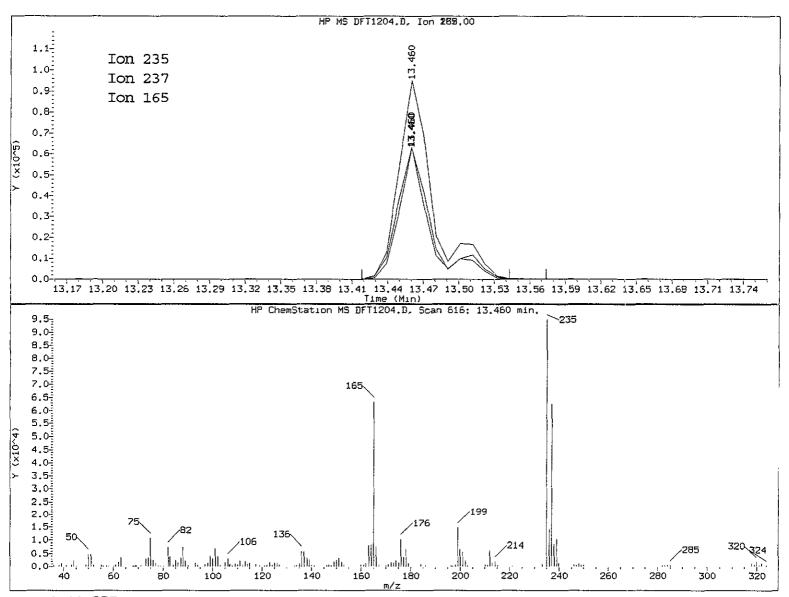
Mass	Area	Ratio
246	7573	100.00
248	5386	71.12
318	5062	66.85

Datafile Analyzed: //SV5/C/chem/sv5.i/120410.B/DFT1204.D/DFT1204.D Method Used: \\SV5\C\chem\sv5.i\120410.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 04-DEC-2010 10:15 Operator: KT

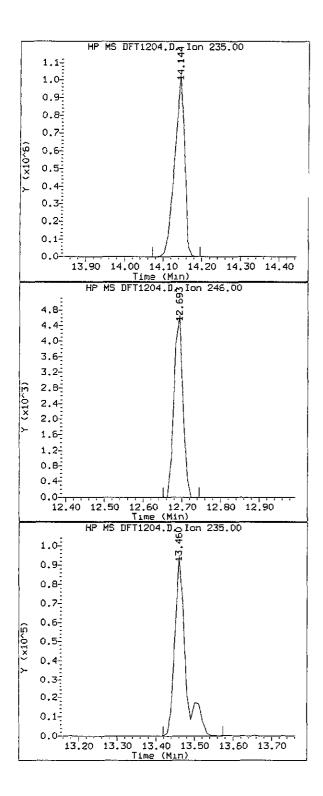
Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml;

Misc Info: 50ul DFTPP 10MSSV0129



4,4'-DDD ======= Exp. RT = 13.491 Found RT = 13.460

Mass	Area	Ratio
235	190198	100.00
237	120062	63.13
165	118067	62.08



Compound: 4,4'-DDT Quant Mass: 235

RT: 14.144 Area: 1852497

Compound: 4,4'-DDE Quant Mass: 246

RT: 12.693 Area: 7573

Compound: 4,4'-DDD Quant Mass: 235

RT: 13.460 Area: 190198

#### DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed Test
4,4-DDD + DDE	197771	9.6	20.5   PASS

Data File: \\SV5\C\chem\sv5.i\120410.B\DFT1204.D Page 1

Report Date: 07-Dec-2010 11:51

# TestAmerica West Sacramento

Data file : \\SV5\C\chem\sv5.i\120410.B\DFT1204.D Lab Smp Id: DFTPP 50ug/ml

Inj Date : 04-DEC-2010 10:15 Operator : KT Inst ID: sv5.i

Smp Info : DFTPP 50ug/ml;

Misc Info: 50ul DFTPP 10MSSV0129

Comment

: \\SV5\C\chem\sv5.i\120410.B\DFTPP.M Method

Quant Type: ISTD Cal File: Meth Date: 06-Dec-2010 17:52 onishim

Cal Date :

Als bottle: 96 QC Sample: DFTPP

CONCENTRATIONS

Dil Factor: 1.00000 Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 4.14 Sample Matrix: None

					CONCENTR	ATTONS			
					ON-COL	FINAL			
RT	EXP RT	REL RT	Mass	RESPONSE	( ug/L)	( ug/L)	TARGET	RANGE	RATIO
====	======		====		======	222222		=====	=====
1	dftpp					CAS #:	5074-71	-5	
10.102	10.714	( 0.000)	198	602112			0.00-	100.00	91.18
10.102	10.714	( 0.000)	51	242048			30.00-	60.00	40.20
10.102	2 10.714	( 0.000)	68	4023			0.00-	2.00	1.72
10.102	10.714	( 0.000)	69	233472			0.00-	0.00	38.78
10.102	10.714	( 0.000)	70	965			0.00-	2.00	0.41
10.102	2 10.714	( 0.000)	127	334016			40.00-	60.00	55.47
10.102	2 10.714	( 0.000)	197	0	0.0	0.0	0.00-	1.00	0.00
10.102	10.714	( 0.000)	199	41056			5.00-	9.00	6.82
10.102	10.714	( 0.000)	275	145792			10.00-	30.00	24.21
10.102	10.714	( 0.000)	365	20320			1.00-	0.00	3.37
10.102	10.714	( 0.000)	441	96904			0.01-	99.99	77.40
10.102	10.714	( 0.000)	442	660352			40.00-	0.00	109.67
10.102	10.714	( 0.000)	443	125192			17.00-	23.00	18.96
							<del></del>		

Client ID:

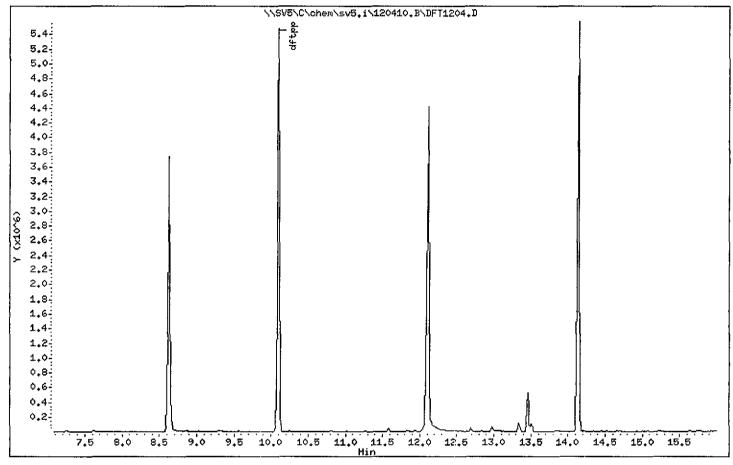
Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00



Client ID:

Instrument: sv5.i

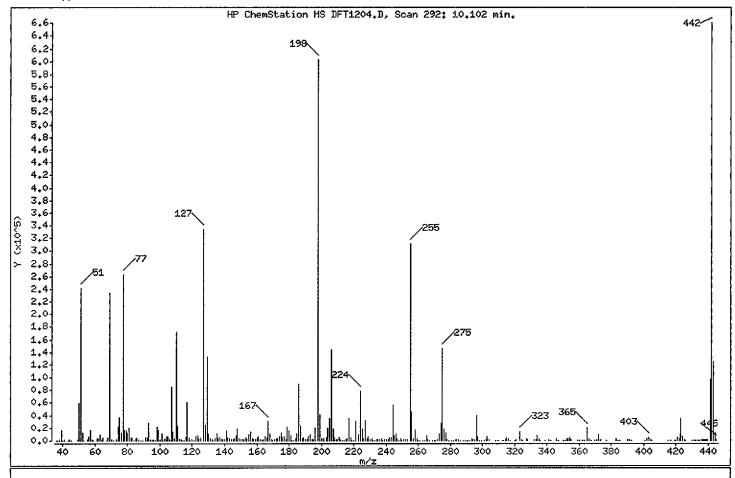
Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

1 dftpp



			% RELATIVE
m/e	ION ABUNDANCE CRITERIA		ABUNDANCE
]			
198	Base Peak, 100% relative abundance	1	100.00
1 51 I	30.00 - 60.00% of mass 198	1	40.20
I 68 I	Less than 2.00% of mass 69	1	0.67 ( 1.72)
1 69 1	Mass 69 relative abundance	I.	38,78
1 70 1	Less than 2.00% of mass 69	1	0.16 ( 0.41)
I 127 I	40.00 - 60.00% of mass 198	ı	55.47
1 197 I	Less than 1.00% of mass 198	1	0,00
199	5.00 - 9.00% of mass 198	1	6,82
I 275 I	10.00 - 30.00% of mass 198	1	24,21
1 365 I	Greater than 1.00% of mass 198	1	3,37
441	Present, but less than mass 443	1	16.09
442	Greater than 40.00% of mass 198	1	109,67
1 443 1	17.00 - 23.00% of mass 442	1	20,79 ( 18,96)

Client ID:

Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

Data File: DFT1204.D

Spectrum: HP ChemStation MS DFT1204.D, Scan 292: 10.102 min.

Location of Maximum: 442.00 Number of points: 339

	m/z	Y	m/z	Y	m/z	Y	m/z	Υ.
ı	36,00	282	1 131.00	2299	217.00	35008	1 312,20	230
ı	37,00	643	I 132,10	878	1 218.00	4584	I 312,90	363
1	38,00	2051	I 133,10	594	1 219,00	478	1 314,10	1902 I
1	39,10	16247	I 134.00	2704	1 219,70	438	I 315.00	3980 1
1	40,00	603	1 135,00	10782	1 221,00	31120	316,10	2632 1
+-			+		+		·	+
İ	41.00	769	136,00	4073	1 223,10		I 317 <sub>+</sub> 10	504 I
I	43,20		1 137,10		1 224.10	78848	319,90	314 I
1	44,10		1 138,10	1107	1 225.10		I 321,00	1385 I
1	45,00	506	1 139.00	794	1 226.00	2319	1 322,10	605
ı	49,10	1928	I 140.00	1381	1 227,00	32536	323,10	14145 (
+ [	50.00	E0600	1 141.00	45700	+   228.00	7/54	t   324.10	2152
1	51.10		141,00		1 229.00		1 325.00	292 1
1	52.10		143.00		1 230.00		1 326.10	456 1
i	53.00		1 144.00		1 231.00		1 327.00	
1	55.10		•		•		•	2717 I
1	99,10	1504	145 <sub>+</sub> 10 	1046	232,10 		328.00 }	1253
ì	56.00	6801	1 146.00	3121	I 233,10	706	1 332.00	950 I
1	57,00	16760	1 147.00	8217	1 234,00	1965	333.00	1578
ı	58,00	810	I 148.00	17856	I 235,00	2086	334.00	8020 1
ī	59.00	456	1 149.00	3070	236,00	2025	335,00	2458 1
ı	61.00	2995	150.00	961	1 237.00	2310	335.80	244
+-			+		+		·	+
I	62,00	2955	151.10	2143	1 238.10	219	338.90	273
!	63.00	9626	1 151.60	1146	1 239,10	1084	341.00	1467
ı	64,00	1222	1 152,10	1063	1 240,00	944	342,10	549 1
1	65,00	4996	i 153.¢¢	4760	I 241,10	2197	346,00	3223
I	67,10	580	I 154.00	3725	1 242.00	4221	347.00	590
+-	60 40	#A97	+   455 44	0770	   347 44			977
1	68,10		1 155,10		243,10		349,90	237 I
	69.00		1 156,10		244.10		351.00	499
!	70,00		1 157,10		245,10		352,10	3540
!	71,20		1 158,00		1 246.00		353,00	3314
!	73,00	1705	<b>159.</b> 00	1919	247.00 	2453	354.00 	5039
i	74,10	21304	160.00	4173	248.00	696	355.00	770 1
ī	75,00	36288	161.00	6612	249,00	2312	359,00	639
ı	76,10	11418	162,00	1584	250.00	753	359,90	247 I
1	77,10	263040	163.00	544	251,10	1024	361,70	243 I
1	78,10	16904	1 164,00	791	252,20	800	362,10	221
	•		•		•		•	

Client ID:

Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

Data File: DFT1204.D

Spectrum: HP ChemStation MS DFT1204.D, Scan 292: 10.102 min.

Location of Maximum: 442.00 Number of points: 339

	m/z	Y	m/z	Y	m/z	Y		m/z	Y	
1	79,00	14886	1 165.00	5326	253.10	2145	-+ 1	363.10	+ 258 I	
i			1 166.10		255.00			365.00	20320	
			1 167.00		256.00			366.00	2478	
1			1 168.00		257.00			367.00	219	
i			1 169.00		258.00			369.90	363 I	
+			+				.+.		·+	
1	84,10	492	I 170,10	678 1	259,00	2798	i	371.00	1013 I	
ı	85.10	3609	I 171,10	1130 I	260,00	379	ł	372,00	8795 I	
ı	86.00	4578	1 172,00	2700 I	260.90	614	ì	373,10	2196 I	
ı	86,90	2167	1 173,00	3318	263,00	275	ī	377,10	250 (	
ı	88,10	740	174,00	5695	263,90	367	I	383,00	2334	
+	89.10		+   175.10	11501	265.00	7260	+	384.00	 562 I	
1	=		1 176.00		266.00			385.10	343 I	
1			1 177.00		267.00			390.00	1301 i	
1	•		1 178,00		269.00			391.00	1006	
•	94.10		I 179,00		270.00			392.10	493	
+			+				<u>'</u>		+	
ı	95,10	323	180,00	14497 l	270.90	626	i	400.90	581 i	
i	96,00	1135	181,00	7240 I	272,10	1148	Ī	402,00	3325	
ŀ	97,10	651	1 182,00	718 1	273,00	10518	Ī	403,00	4794	
i	98,00	20656	1 182,90	645	274.00	27240	1	404,00	1537 l	
I	99,00	16022	I 184,10	2499 1	275,00	145792	1	405.00	386 1	
+			+	+			+-		+	
1	100,00	1745	185.00	11060	276,00			415,00	273	
	101.00		186.00		277,00			417,00	224	
	102,10		187.10		278,00	1987	İ	419.10	233	
	103,00		188,10		279,00			419,60	227	
!	104.00		189.00 +	4982	281.00	287		421,00	4715 l	
1	105.00		1 190.00	768 1	282,10	374	1	422.10	3771	
ī	106.00	2181	I 191.00	2137 I	283.00	1339	ı	423.00	35624 I	
ı	107.00	84768	I 192.00	6389 I	284.00	983	ı	424.00	6651 I	
ı	108.00	13676	I 193,00	8395 I	285,10	2122	ı	424.90	957 I	
ŀ	109,10	2829	1 194,10	2210	286,10	379	ı	425.60	303	
+			+				+		+	
Ī	110,00	171456	195,10	1405	287,90	227	i	429.90	366 I	
I	111.00	23344	196,10	20304	289,00	514	t	431,30	390 1	
I	112,00	3077	I 198₊00	602112	290,10	359	İ	431.70	340 1	
i	113.00	1269	1 199,00	41056 I	291,00	300	1	432,40	366 1	
ı	114.00	388	1 200,00	3296 I	292,00	493	1	433,20	577	

Client ID:

Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

Data File: DFT1204.D

Spectrum: HP ChemStation MS DFT1204.D, Scan 292: 10.102 min.

Location of Maximum: 442.00 Number of points: 339

m/z	Y		m/z			m/z			m/z	•	
1 114,90	452					293.00			433.80		
116,00	5524	ŀ	203,10	3879	į	294.00	949	ı	434.50	281	1
1 117.00	<b>6</b> 0416	1	204.00	<b>199</b> 28	ı	295.10	1820	ı	436.00	1026	i
1 118,10	4647	1	205.00	34544	1	296,00	39752	1	436.60	916	ţ
118.80	45◊	ŀ	206,10	144320	ı	297,00	6569	1	437,10	913	ļ
4	<del></del>	-+			-+	<b></b>		-+			-+
I 120,00	1298	1	207,10	18832	1	298,10	323	1	437,50	770	I
1 121,10	691	į	208.00	5234	ı	299,10	284	1	438,20	1061	1
122,00	6433	ſ	209,00	1417	١	301,00	284	I	439,10	1171	I
I 123,10	8001	ı	210.00	2055	ı	302,10	896	1	439.70	1680	ı
1 124.00	3774	ŧ	211,10	5005	ı	303.00	5368	į	441.00	96904	t
+		-+-			-+-			-+			-+
I 125,00	3919	ı	211.70	1342	ı	304.00	1186	1	442.00	660352	ŧ
127.00	334016	i	213.00	234	ı	305,10	218	ī	443,00	125192	I
1 128,00	23536	1	214.20	462	ł	308.00	716	1	444.00	11472	1
1 129,00	131520	í	215,00	1617	1	309,10	352	ı	445.00	808	ţ
130.00	9935	i	216.00	3149	ı	310.00	45◊	ı			ı
+		-+-			-+-			-+-			-+

Data File: \\sv5\c\chem\sv5.i\120410.B\S120401.D Page 1

Report Date: 06-Dec-2010 10:31

#### TestAmerica West Sacramento

Method 8270C

Data file : \\sv5\c\chem\sv5.i\120410.B\S120401.D

Lab Smp Id: MALNT1AA G0K290000-Client Smp ID: 0333259

Inj Date : 04-DEC-2010 11:00

Inst ID: sv5.i Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

Comment : SOP SAC-MS-0005
Method : \\sv5\c\chem\sv5.i\120410.B\8270f.m

Meth Date: 06-Dec-2010 09:40 onishim Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 1

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: S11JZHCB.SUB

Target Version: 4.14

Processing Host: SACP307UM

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

Name	Value	Description
DF Uf Vt Vo Vi Cpnd Variable	1.000 1000.000 1000.000	Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable

								CONCENTRA	ATIONS
			QUANT SIG					ON-COLUMN	FINAL
Ç	odino.	unds	MASS	RT	EXP RT	REL RT	response	( NG)	( ug/L)
=:	====	=======================================	====	====	======			======	======
*	1	1,4-Dichlorobenzene-d4	152	3.542	3.542	(1.000)	92992	40.0000	(Q)
*	2	Naphthalene-d8	136	4.952	4.952	(1.000)	398163	40.0000	
*	3	Acenaphthene-d10	164	7.045	7.045	(1.000)	211707	40.0000	
*	4	Phenanthrene-d10	188	8.900	8.900	(1.000)	364403	40.0000	
*	5	Chrysene-d12	240	13.180	13.190	(1.000)	367318	40.0000	
*	6	Perylene-d12	264	15,543	15.543	(1.000)	381925	40.0000	
\$	7	2-Fluorophenol	112	2.340	2.340	(0.661)	224112	68.3730	68.37
\$	8	Phenol-d5	99	3.231	3.231	(0.912)	313826	76.1385	76.14
\$	10	1,2-Dichlorobenzene-d4	152	3.739	3.739	(1.056)	74268	32.4283	32.43(q)
\$	11	Nitrobenzene-d5	82	4.164	4.174	(0.841)	125990	37.3593	37,36
\$	12	2-Fluorobiphenyl	172	6.257	6.257	(0.888)	276940	40.6086	40.61
\$	13	2,4,6-Tribromophenol	330	8.019	8.019	(1.138)	95756	104.089	104.1
\$	14	Terphenyl-d14	244	11.460	11.460	(0.869)	328660	45.4252	45.42
	108	Hexachlorobenzene	284	Con	pound No	ot Detecte	d.		

QC Flag Legend

Q - Qualifier signal failed the ratio test.

q - Qualifier signal exceeded ratio warning limit.



Data File: \\SV5\C\chem\sv5.i\120410.B\S120401.D Page 2

Report Date: 06-Dec-2010 09:28

# TestAmerica West Sacramento

# INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Calibration Date: 04-DEC-2010

Lab File ID: S120401.D Calibration Time: 10:36
Lab Smp Id: MALNT1AA G0K290000- Client Smp ID: 0333259

Analysis Type: SV Level: LOW Quant Type: ISTD Sample Type: AIR

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120410.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

Test Mode:

Use Initial Calibration Level 4.

		AREA	LIMIT		^
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
		========	045050	========	
1 1,4-Dichlorobenze	122625	61313	245250	92992	-24.17
2 Naphthalene-d8	530514	265257	1061028	398163	-24.95
3 Acenaphthene-d10	282538	141269	565076	211707	-25.07
4 Phenanthrene-d10	462722	231361	925444	364403	-21.25
5 Chrysene-d12	435850	217925	871700	367318	-15.72
6 Perylene-d12	422284	211142	844568	381925	-9.56
]					

		RT I	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
=======================================	=======	=======	========	=======	======
1 1,4-Dichlorobenze	3.54	3.04	4.04	3.54	0.00
2 Naphthalene-d8	4.95	4.45	5.45	4.95	0.00
3 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.00
4 Phenanthrene-d10	8.90	8.40	9.40	8.90	0.00
5 Chrysene-dl2	13.19	12.69	13.69	13.18	-0.08
6 Perylene-d12	15.54	15.04	16.04	15.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT. Data File: \\sv5\c\chem\sv5.i\120410.B\S120401.D

Report Date: 06-Dec-2010 10:31

# TestAmerica West Sacramento

Page 1

#### RECOVERY REPORT

Client Name: Client SDG: 090498

Sample Matrix: GAS Fraction: SV

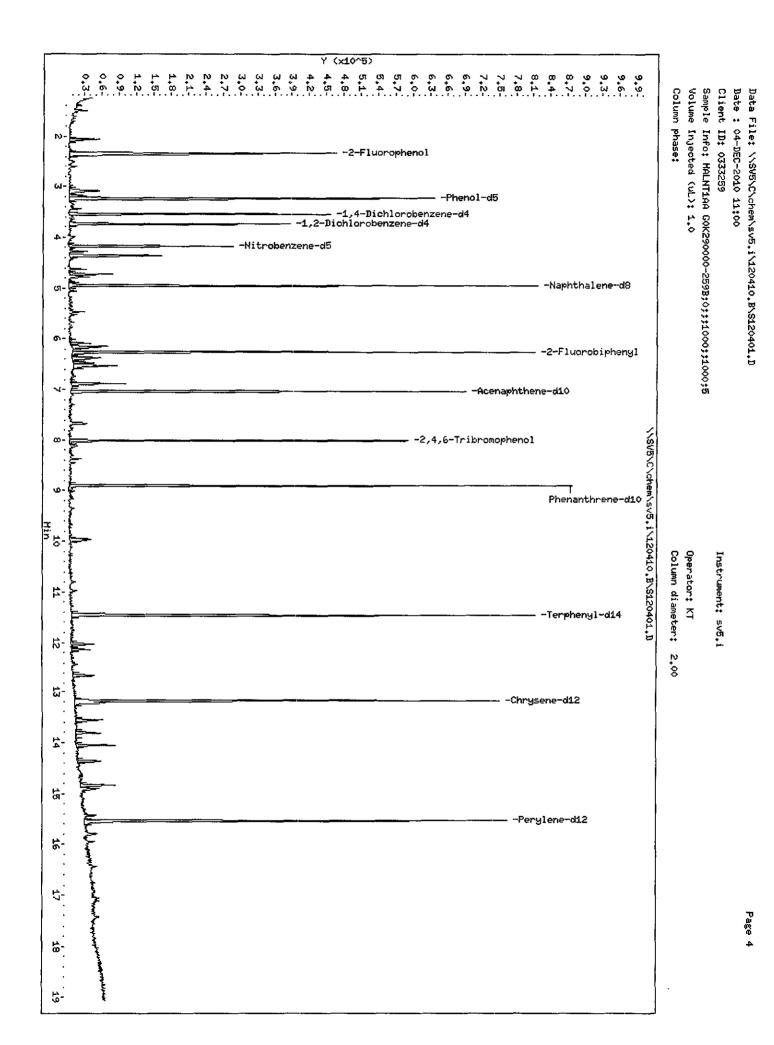
Lab Smp Id: MALNT1AA G0K290000-Client Smp ID: 0333259

Level: LOW Operator: KT

SampleType: SAMPLE Quant Type: ISTD Data Type: MS DATA SpikeList File:

Sublist File: S11JZHCB.SUB
Method File: \\sv5\c\chem\sv5.i\120410.B\8270f.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 7 2-Fluorophenol	100.0	68.37	68.37	41-105
\$ 8 Phenol-d5	100.0	76.14	76.14	43-122
\$ 10 1,2-Dichlorobenzen	50.00	32.43	64.86	60-120
\$ 11 Nitrobenzene-d5	50.00	37.36	74.72	46-118
\$ 12 2-Fluorobiphenyl	50.00	40.61	81.22	58-105
\$ 13 2,4,6-Tribromophen	100.0	104.1	104.09	61-118
\$ 14 Terphenyl-d14	50.00	45.42	90.85	69-110



Report Date: 06-Dec-2010 10:31

#### TestAmerica West Sacramento

Method 8270C

Data file : \\sv5\c\chem\sv5.i\120410.B\S120402.D

Lab Smp Id: MALNTIAC G0K290000-

Misc Info: 0;AIR;0;S11JZHCB.SUB;S11JZHCB.SPK;1;;8270F.M

Comment : SOP SAC-MS-0005 Method : \\sv5\c\chem\sv5.i\120410.B\8270f.m

Meth Date : 06-Dec-2010 09:40 onishim Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 2 QC Sample: LCS

Dil Factor: 1.00000 Integrator: Falcon

Compound Sublist: S11JZHCB.SUB

Target Version: 4.14

Processing Host: SACP307UM

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

Name	Value	Description
DF Uf Vt Vo Vi Cpnd Variable	1.000 1000.000	Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable

								CONCENT	RATIONS
			QUANT SIG					ON-COLUMN	FINAL
Co	ogmo	unds	MASS	RT	EXP RT	REL RT	RESPONSE	( NG)	( ug/L)
==		=======================================	====	====	=======		*=====	e=====	======
*	1	1,4-Dichlorobenzene-d4	152	3.542	3.542	(1.000)	109173	40.0000	
*	2	Naphthalene-d8	136	4.952	4.952	(1.000)	480655	40.0000	
*	3	Acenaphthene-d10	164	7.045	7.045	(1.000)	273170	40.0000	
*	4	Phenanthrene-dl0	188	8.900	8.900	(1.000)	457745	40.0000	
*	5	Chrysene-d12	240	13.190	13.190	(1.000)	453496	40.0000	
*	6	Perylene-d12	264	15.543	15.543	(1.000)	449517	40.0000	
\$	7	2-Fluorophenol	112	2.340	2.340	(0.661)	294060	76.4163	76.42
\$	8	Phenol-d5	99	3.242	3.231	(0.915)	407728	84.2590	84.26
\$	10	1,2-Dichlorobenzene-d4	152	Con	pound No	t Detecte	d.		
\$	11	Nitrobenzene-d5	82	4.174	4.174	(0.843)	174096	42.7640	42.76
\$	12	2-Fluorobiphenyl	172	6.257	6.257	(0.888)	381202	43.3201	43.32
\$	13	2,4,6-Tribromophenol	330	8.019	8.019	(1.138)	124056	104.510	104.5
\$	14	Terphenyl-d14	244	11.460	11.460	(0.869)	406284	45.4830	45.48
	108	Hexachlorobenzene	284	8.496	8.496	(0.955)	238942	95.7505	95.75



Data File: \\SV5\C\chem\sv5.i\120410.B\S120402.D Page 2

Report Date: 06-Dec-2010 09:28

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Calibration Date: 04-DEC-2010

Lab File ID: S120402.D Calibration Time: 10:36

Lab Smp Id: MALNT1AC G0K290000-

Analysis Type: SV Level: LOW Quant Type: ISTD Sample Type: AIR

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120410.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;S11JZHCB.SPK;1;;8270F.M

Test Mode:

Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER UPPER		SAMPLE	%DIFF
1 1,4-Dichlorobenze 2 Naphthalene-d8 3 Acenaphthene-d10 4 Phenanthrene-d10 5 Chrysene-d12 6 Perylene-d12	122625	61313	245250	109173	-10.97
	530514	265257	1061028	480655	-9.40
	282538	141269	565076	273170	-3.32
	462722	231361	925444	457745	-1.08
	435850	217925	871700	453496	4.05
	422284	211142	844568	449517	6.45

		RT I	TIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
=======================================	========	=======	========	=======	{== <b>=</b> ===
1 1,4-Dichlorobenze	3.54	3.04	4.04	3.54	0.00
2 Naphthalene-d8	4.95	4.45	5.45	4.95	0.00
3 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.00
4 Phenanthrene-d10	8.90	8.40	9.40	8.90	0.00
5 Chrysene-d12	13.19	12.69	13.69	13.19	0.00
6 Perylene-d12	15.54	15.04	16.04	15.54	0.00

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\sv5\c\chem\sv5.i\120410.B\S120402.D

Report Date: 06-Dec-2010 10:32

# TestAmerica West Sacramento

# RECOVERY REPORT

Client Name:

Client SDG: 090498

Sample Matrix: GAS

Fraction: SV

Lab Smp Id: MALNT1AC G0K290000-

Operator: KT SampleType: LCS

Quant Type: ISTD

Level: LOW Operator:
Data Type: MS DATA SampleType
SpikeList File: S11JZHCB.SPK Quant Type
Sublist File: S11JZHCB.SUB
Method File: \\sv5\c\chem\sv5.i\120410.B\8270f.m Misc Info: 0;AIR;0;S11JZHCB.SUB;S11JZHCB.SPK;1;;8270F.M

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
108 Hexachlorobenzene	100.0	95.75	95.75	70-100

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 7 2-Fluorophenol	100.0	76.42	76.42	41-105
\$ 8 Phenol-d5	100.0	84.26	84.26	43-122
\$ 10 1,2-Dichlorobenze	50.00	0.0000	*	60-120
\$ 11 Nitrobenzene-d5	50.00	42.76	85.53	46-118
\$ 12 2-Fluorobiphenyl	50.00	43.32	86.64	58-105
\$ 13 2,4,6-Tribromophen	100.0	104.5	104.51	61-118
\$ 14 Terphenyl-d14	50.00	45.48	90.97	69-110

Data File: \\SV5\C\chem\sv5.i\120410.B\S120402.D Page 1

Report Date: 06-Dec-2010 09:28

#### TestAmerica West Sacramento

Method 8270C

Data file : \\SV5\C\chem\sv5.i\120410.B\S120402.D Lab Smp Id: MALNT1AC G0K290000-

Inj Date : 04-DEC-2010 11:25
Operator : KT Inst ID: sv5.i Smp Info : MALNT1AC G0K290000-259C;3;LCS;;1000;;1000;2 Misc Info: 0;AIR;0;S11JZHCB.SUB;S11JZHCB.SPK;1;;8270F.M

Comment : SOP SAC-MS-0005
Method : \\SV5\C\chem\sv5.i\120410.B\8270F.m

Quant Type: ISTD Cal File: AP90817D.D Meth Date: 06-Dec-2010 09:27 onishim Cal Date: 17-AUG-2010 09:27
Cal Date: 17-AUG-2010 21:19
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon

QC Sample: LCS

Compound Sublist: S11JZHCB.SUB

Target Version: 4.14 Processing Host: SV5

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

Name	Value	Description
DF Uf Vt Vo Vi Cpnd Variable	1.000 1000.000 1000.000	Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable

								CONCENTRA	TIONS
			QUANT SIG					ON-COLUMN	FINAL
Co	mpo	unds	MASS	RT	EXP RT	REL RT	RESPONSE	( NG)	( ug/L)
==				====	=======		*:=======	ercenn=	======
*	1	1,4-Dichlorobenzene-d4	152	3.542	3.542	{1.000}	109173	40.0000	
*	2	Naphthalene-d8	136	4.952	4.952	(1.000)	480655	40.0000	
*	3	Acenaphthene-d10	164	7.045	7.045	(1.000)	273170	40.0000	
*	4	Phenanthrene-d10	188	8.900	8.900	(1.000)	457745	40.0000	
*	5	Chrysene-d12	240	13.190	13.190	(1.000)	453496	40.0000	
*	6	Perylene-d12	264	15.543	15.543	(1.000)	449517	40.0000	
\$	7	2-Fluorophenol	112	2.340	2.340	(0.661)	294060	76.4163	76.42
\$	8	Phenol-d5	99	3.242	3.231	(0.915)	407728	84.2590	84.26
\$	10	1,2-Dichlorobenzene-d4	152	3.542	3.739	(1.000)	109173	40.6039	40.60 (qR)
\$	11	Nitrobenzene-d5	82	4.174	4.174	(0.843)	174096	42.7640	42.76
\$	12	2-Fluorobiphenyl	172	6.257	6.257	(0.888)	381202	43.3201	43.32
\$	13	2,4,6-Tribromophenol	330	8.019	8.019	(1.138)	124056	104.510	104.5
\$	14	Terphenyl-dl4	244	11.460	11.460	(0.869)	406284	45.4830	45.48
	108	Hexachlorobenzene	284	8.496	8.496	(0.955)	238942	95.7505	95.75

# QC Flag Legend

R - Spike/Surrogate failed recovery limits.

q - Qualifier signal exceeded ratio warning limit.

Data File: \\SV5\C\chem\sv5.i\120410.B\S120402.D

Date : 04-DEC-2010 11:25

Client ID: Sample Info: HALNT1AC GOK290000-259C;3;LCS;;1000;;1000;2 Volume Injected (uL): 1.0

Instrument: sv5.i

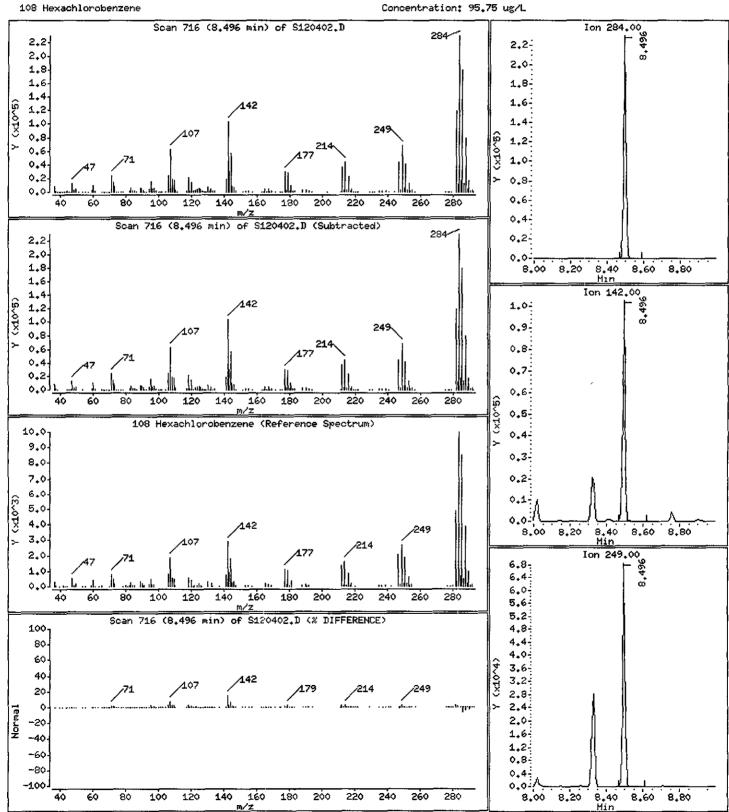
Operator: KT

Client ID: Instrument: sv5.i

Sample Info; MALNTIAC GOK290000-259C;3;LCS;;1000;;1000;2

Volume Injected (uL): 1.0 Operator: KT

Column diameter: 2.00 Column phase:



Report Date: 06-Dec-2010 10:32

# TestAmerica West Sacramento

Method 8270C

Data file : \\sv5\c\chem\sv5.i\120410.B\S120403.D

Lab Smp Id: MALNT1AD G0K290000-Inj Date : 04-DEC-2010 11:49

Operator : KT Inst ID: sv5,i Smp Info : MALNT1AD G0K290000-259L;3;LCSD;;1000;;1000;2 Misc Info : 0; AIR; 0; S11JZHCB.SUB; S11JZHCB.SPK; 1; ; 8270F.M

Comment : SOP SAC-MS-0005
Method : \\sv5\c\chem\sv5.i\120410.B\8270f.m

Meth Date: 06-Dec-2010 09:40 onishim Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 3 QC Sample: LCSD

Dil Factor: 1.00000 Integrator: Falcon

Compound Sublist: S11JZHCB.SUB

Target Version: 4.14

Processing Host: SACP307UM

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

Name	Value	Description
DF Uf Vt Vo Vi Cpnd Variable	1.000 1000.000	Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable

					CONCENTRA	ATIONS
	QUANT SIG				ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT REL RT	RESPONSE	( NG)	( ug/L)
=======================================	====	====		# <b>%</b> =988 <b>88</b>	=======	
* 1 1,4-Dichlorobenzene-d4	152	3.542	3.542 (1.000)	102713	40.0000	
* 2 Naphthalene-d8	136	4.952	4.952 (1.000)	430796	40.0000	
* 3 Acenaphthene-d10	164	7.045	7.045 (1.000)	236179	40.0000	
* 4 Phenanthrene-d10	188	8.900	8,900 (1.000)	365677	40.0000	
* 5 Chrysene-dl2	240	13.190	13.190 (1.000)	363411	40.0000	
* 6 Perylene-d12	264	15.543	15.543 (1.000)	362551	40.0000	
\$ 7 2-Fluorophenol	112	2.340	2,340 (0.661)	275728	76.1589	76.16
\$ 8 Phenol-d5	99	3.231	3.231 (0.912)	378621	83.1649	83.16
\$ 10 1,2-Dichlorobenzene-d4	152	Con	pound Not Detect	ed.		
\$ 11 Nitrobenzene-d5	82	4.174	4.174 (0.843)	156857	42.9888	42.99
\$ 12 2-Fluorobiphenyl	172	6.257	6.257 (0.888)	339574	44.6335	44.63
\$ 13 2,4,6-Tribromophenol	330	8.019	8.019 (1.138)	104614	101.935	101.9
\$ 14 Terphenyl-d14	244	11.459	11.460 (0.869)	320301	44.7458	44.74
108 Hexachlorobenzene	284	8.496	8.496 (0.955)	201002	100.827	100.8(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\SV5\C\chem\sv5.i\120410.B\S120403.D Page 2

Report Date: 06-Dec-2010 09:28

#### TestAmerica West Sacramento

# INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Calibration Date: 04-DEC-2010

Lab File ID: S120403.D Calibration Time: 10:36

Lab Smp Id: MALNT1AD G0K290000-

Analysis Type: SV Level: LOW Quant Type: ISTD Sample Type: AIR

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120410.B\8270F.m

Misc Info: 0; AIR; 0; S11JZHCB.SUB; S11JZHCB.SPK; 1;; 8270F.M

Test Mode:

Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LOWER	LIMIT UPPER	SAMPLE	%DIFF
=======================================	========	========	========	=======	======
1 1,4-Dichlorobenze	122625	61313	245250	102713	-16.24
2 Naphthalene-d8	530514	265257	1061028	430796	-18.80
3 Acenaphthene-d10	282538	141269	565076	236179	-16.41
4 Phenanthrene-d10	462722	231361	925444	365677	-20.97
5 Chrysene-d12	435850	217925	871700	363411	-16.62
6 Perylene-d12	422284	211142	844568	362551	-14.15
*					

		RT I	IMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
=======================================	=======	========	========	=======	======
1 1,4-Dichlorobenze	3.54	3.04	4.04	3.54	-0.00
2 Naphthalene-d8	4.95	4.45	5.45	4.95	-0.00
3 Acenaphthene-d10	7.05	6.55	7.55	7.05	-0.00
4 Phenanthrene-d10	8.90	8.40	9.40	8.90	-0.00
5 Chrysene-d12	13.19	12.69	13.69	13.19	-0.00
6 Perylene-d12	15.54	15.04	16.04	15.54	-0.00

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Report Date: 06-Dec-2010 10:32

### TestAmerica West Sacramento

### RECOVERY REPORT

Client Name:

Client SDG: 090498

Sample Matrix: GAS

Fraction: SV

Lab Smp Id: MALNT1AD G0K290000-

Level: LOW

Operator: KT

Data Type: MS DATA

SampleType: LCSD Quant Type: ISTD

SpikeList File: S11JZHCB.SPK Quant Tyr Sublist File: S11JZHCB.SUB Method File: \\sv5\c\chem\sv5.i\120410.B\8270f.m Misc Info: 0;AIR;0;S11JZHCB.SUB;S11JZHCB.SPK;1;;8270F.M

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
108 Hexachlorobenzene	100.0	100.8	100.83*	70-100

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 7 2-Fluorophenol	100.0	76.16	76.16	41-105
\$ 8 Phenol-d5	100.0	83.16	83.16	43-122
\$ 10 1,2-Dichlorobenze	50.00	0.0000	*	60-120
\$ 11 Nitrobenzene-d5	50.00	42.99	85.98	46-118
\$ 12 2-Fluorobiphenyl	50.00	44.63	89.27	58-105
\$ 13 2,4,6-Tribromophen	100.0	101.9	101.93	61-118
\$ 14 Terphenyl-d14	50.00	44.74	89.49	69-110

Data File: \\SV5\C\chem\sv5.i\120410.B\S120403.D Page 1

Report Date: 06-Dec-2010 09:28

### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\120410.B\S120403.D Lab Smp Id: MALNT1AD G0K290000-

Inj Date : 04-DEC-2010 11:49

Operator : KT Inst ID: sv5.i Smp Info : MALNT1AD G0K290000-259L;3;LCSD;;1000;;1000;2 Misc Info : 0;AIR;0;S11JZHCB.SUB;S11JZHCB.SPK;1;;8270F.M

Comment : SOP SAC-MS-0005

Method : \\SV5\C\chem\sv5.i\120410.B\8270F.m

Meth Date: 06-Dec-2010 09:27 onishim Quant Type: ISTD Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 3 QC Sample: LCSD

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: S11JZHCB.SUB

Target Version: 4.14 Processing Host: SV5

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

Name	Value	Description
DF Uf	1.000	Dilution Factor  ng unit correction factor
Vt Vo	1000.000	Volume of final extract (uL) Volume of sample extracted (mL)
Vi Cpnd Variable	1.000	Volume injected (uL) Local Compound Variable

								CONCENTRA	ATIONS
			QUANT SIG					ON-COLUMN	FINAL
Co	oqmo	unds	MASS	RT	EXP RT	REL RT	RESPONSE	( NG)	( ug/L)
==		######################################	<b>*</b> = <b>=</b> =	====	=======				
*	ı	1,4-Dichlorobenzene-d4	152	3.542	3.542	(1.000)	102713	40.0000	
*	2	Naphthalene-d8	136	4.952	4.952	(1.000)	430796	40.0000	
*	3	Acenaphthene-dl0	164	7.045	7.045	(1.000)	236179	40.0000	
*	4	Phenanthrene-d10	188	8.900	8.900	(1.000)	365677	40.0000	
*	5	Chrysene-d12	240	13.190	13.190	(1.000)	363411	40.0000	
*	6	Perylene-dl2	264	15.543	15.543	(1.000)	362551	40.0000	
\$	7	2-Fluorophenol	112	2.340	2.340	(0.661)	275728	76.1589	76.16
\$	8	Phenol-d5	99	3.231	3.231	(0.912)	378621	83.1649	83.16
\$	10	1,2-Dichlorobenzene-d4	152	3.542	3.739	(1.000)	102715	40.6047	40.60(qR)
\$	11	Nitrobenzene-d5	82	4.174	4.174	(0.843)	156857	42.9888	42.99
\$	12	2-Fluorobiphenyl	172	6.257	6.257	(0.888)	339574	44.6335	44.63
\$	13	2,4,6-Tribromophenol	330	8.019	8.019	(1.138)	104614	101.935	101.9
\$	14	Terphenyl-d14	244	11.459	11.460	(0.869)	320301	44.7458	44.74
	108	Hexachlorobenzene	284	8.496	8.496	(0.955)	201002	100.827	100.8(R)

### QC Flag Legend

R - Spike/Surrogate failed recovery limits.

q - Qualifier signal exceeded ratio warning limit.

Date : 04-DEC-2010 11:49 Data File: \\SV5\C\chem\sv5.i\120410.B\S120403.D

Client ID:

Sample Info: MALNTIAD GOK290000-259L;3;LCSD;;1000;;1000;2 Volume Injected (uL): 1.0

Instrument: sv5.i

Operator: KT

Bate : 04-DEC-2010 11:49

Client ID:

Sample Info: MALNT1AD GOK290000-259L;3;LCSD;;1000;;1000;2

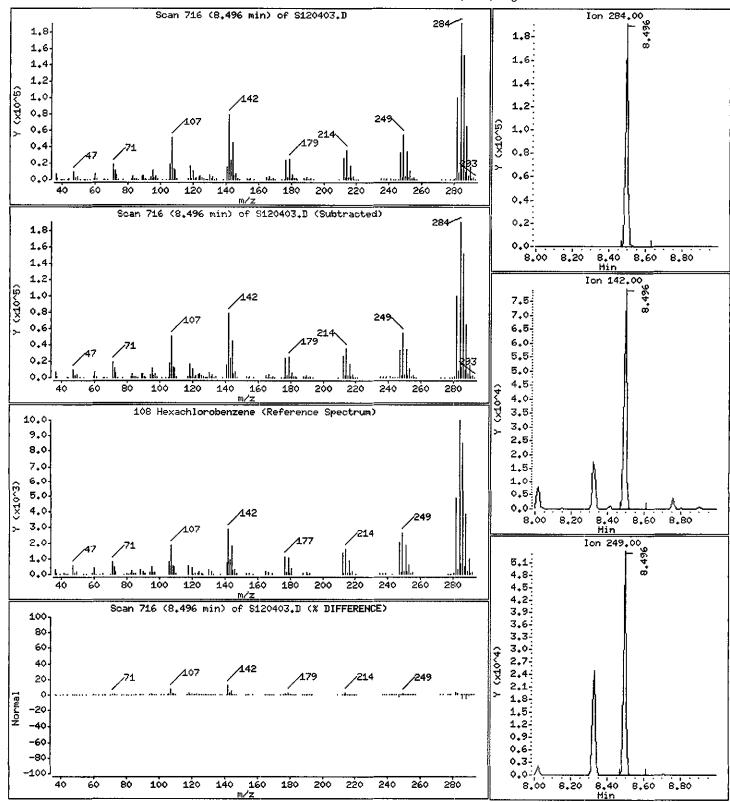
Volume Injected (uL): 1.0 Operator: KT

Column phase: Column diameter: 2.00

### 108 Hexachlorobenzene

Concentration: 100.8 ug/L

Instrument: sv5.i



Data File: \\sv5\c\chem\sv5.i\120410.B\S120406.D Page 1

Report Date: 06-Dec-2010 10:35

### TestAmerica West Sacramento

Method 8270C

Data file : \\sv5\c\chem\sv5.i\120410.B\S120406.D

Lab Smp Id: MAK001AA G0K270427-Client Smp ID: 0333259

Inj Date : 04-DEC-2010 13:03

Operator : KT Inst ID: sv5.i

Smp Info : MAK001AA G0K270427-1;0;;;1000;;1000;5 Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

Comment : SOP SAC-MS-0005

Method : \\sv5\c\chem\sv5.i\120410.B\8270f.m

Meth Date : 06-Dec-2010 09:40 onishim Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 4

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: S11JZHCB.SUB

Target Version: 4.14

Processing Host: SACP307UM

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

Name	Value	Description
DF Uf Vt Vo Vi Cpnd Variable	1.000 1000.000	Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable

								CONCENTRA	ATIONS
			QUANT SIG					ON-COLUMN	FINAL
Co	oqm	unds	MASS	RT	EXP RT	REL RT	RESPONSE	( NG)	( ug/L)
==	===		====	====					
*	1	1,4-Dichlorobenzene-d4	152	3.542	3.542	(1.000)	81705	40.0000	(Q)
*	2	Naphthalene-d8	136	4.952	4.952	(1.000)	350866	40.0000	
*	3	Acenaphthene-d10	164	7.045	7.045	(1.000)	183785	40.0000	
*	4	Phenanthrene-d10	188	8.900	8.900	(1.000)	316506	40.0000	
*	5	Chrysene-d12	240	13.180	13.190	(1.000)	326571	40.0000	
*	6	Perylene-d12	264	15.543	15.543	(1.000)	346494	40.0000	
\$	7	2-Fluorophenol	112	2.340	2.340	(0.661)	206149	71.5810	71.58
\$	8	Phenol-d5	99	3.231	3.231	(0.912)	292124	80.6640	80.66
\$	10	1,2-Dichlorobenzene-d4	152	3.739	3.739	(1.056)	71243	35.4047	35.40(q)
\$	11	Nitrobenzene-d5	82	4.164	4.174	(0.841)	115349	38.8147	38.81
\$	12	2-Fluorobiphenyl	172	6.257	6.257	(0.888)	257876	43.5581	43.56
\$	13	2,4,6-Tribromophenol	330	8.019	8.019	(1.138)	88558	110.890	110.9
\$	14	Terphenyl-d14	244	11.460	11.460	(0.869)	294541	45.7889	45.79
	108	Hexachlorobenzene	284	Con	pound No	ot Detecte	đ.	_	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

q - Qualifier signal exceeded ratio warning limit.

Data File: \\SV5\C\chem\sv5.i\120410.B\S120406.D Page 2

Report Date: 06-Dec-2010 09:28

### TestAmerica West Sacramento

### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Calibration Date: 04-DEC-2010 Calibration Time: 10:36 Instrument ID: sv5.i

Lab File ID: S120406.D Lab Smp Id: MAK001AA G0K270427-Client Smp ID: 0333259

Analysis Type: SV Level: LOW Quant Type: ISTD Sample Type: AIR

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120410.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

### Test Mode:

Use Initial Calibration Level 4.

		AREA	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
	========	=======	========	=======	======
1 1,4-Dichlorobenze	122625	61313	245250	81705	-33.37
2 Naphthalene-d8	530514	265257	1061028	350866	-33.86
3 Acenaphthene-d10	282538	141269	565076	183785	-34.95
4 Phenanthrene-d10	462722	231361	925444	316506	-31.60
5 Chrysene-d12	435850	217925	871700	326571	-25.07
6 Perylene-d12	422284	211142	844568	346494	-17.95

		RT I	LIMIT		·
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
=======================================	========	========	=======	=======	======
1 1,4-Dichlorobenze	3.54	3.04	4.04	3.54	0.00
2 Naphthalene-d8	4.95	4.45	5.45	4.95	0.00
3 Acenaphthene-d10	7.05	6.55	7.55	7.05	0.00
4 Phenanthrene-d10	8.90	8.40	9.40	8.90	0.00
5 Chrysene-d12	13.19	12.69	13.69	13.18	-0.08
6 Perylene-d12	15.54	15.04	16.04	15.54	0.00
				<u></u>	

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\sv5\c\chem\sv5.i\120410.B\S120406.D

Report Date: 06-Dec-2010 10:35

### TestAmerica West Sacramento

Page 1

### RECOVERY REPORT

Client Name: Client SDG: 090498

Sample Matrix: GAS Fraction: SV

Lab Smp Id: MAK001AA G0K270427- Client Smp ID: 0333259

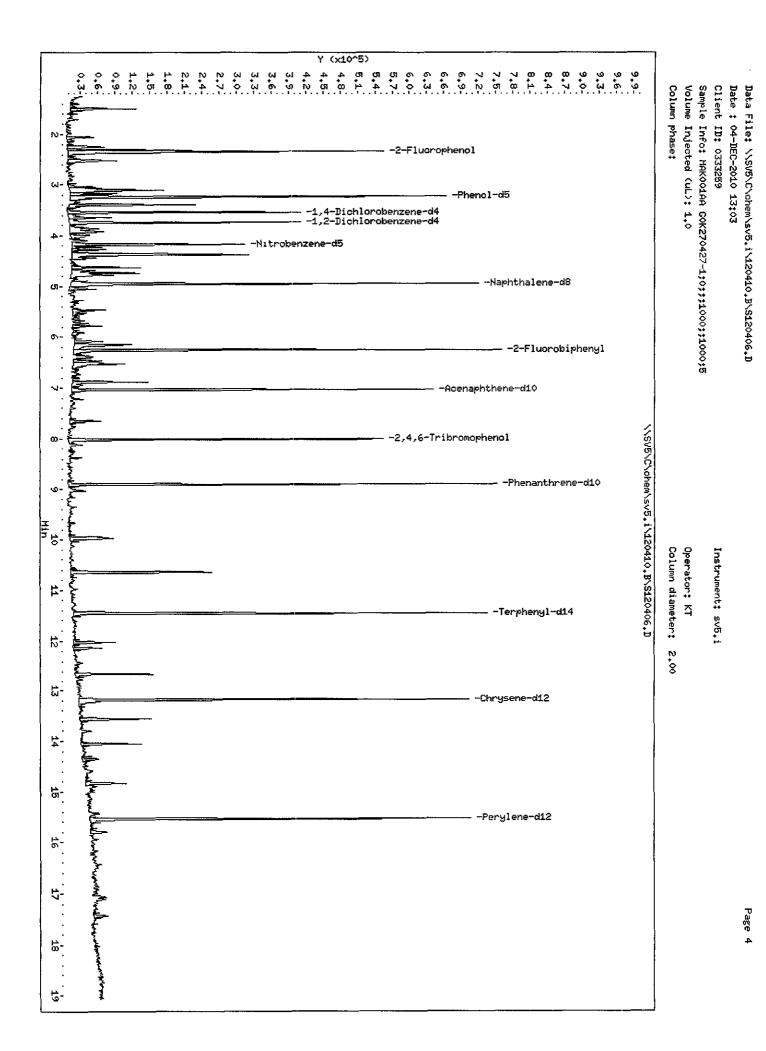
Level: LOW Operator: KT

Data Type: MS DATA SampleType: SAMPLE SpikeList File: Quant Type: ISTD

Sublist File: S11JZHCB.SUB

Method File: \\sv5\c\chem\sv5.i\120410.B\8270f.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 7 2-Fluorophenol	100.0	71.58	71.58	41-105
\$ 8 Phenol-d5	100.0	80.66	80.66	43-122
\$ 10 1,2-Dichlorobenzen	50.00	35.40	70.81	60-120
\$ 11 Nitrobenzene-d5	50.00	38.81	77.63	46-118
\$ 12 2-Fluorobiphenyl	50.00	43.56	87.12	58-105
\$ 13 2,4,6-Tribromophen	100.0	110.9	110.89	61-118
\$ 14 Terphenyl-d14	50.00	45.79	91.58	69-110



Data File: \\sv5\c\chem\sv5.i\120410.B\S120407.D Page 1

Report Date: 06-Dec-2010 10:35

### TestAmerica West Sacramento

Method 8270C

Data file : \\sv5\c\chem\sv5.i\120410.B\S120407.D

Lab Smp Id: MAK011AA G0K270427-Client Smp ID: 0333259

Inj Date : 04-DEC-2010 13:27

Operator : KT Inst ID: sv5.i

Smp Info : MAK011AA G0K270427-2;0;;;1000;;1000;5 Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

Comment : SOP SAC-MS-0005 Method : \\sv5\c\chem\sv5.i\120410.B\8270f.m

Meth Date: 06-Dec-2010 09:40 onishim Quant Type: ISTD Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 5

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: S11JZHCB.SUB

Target Version: 4.14

Processing Host: SACP307UM

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
U£		ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

								CONCENTRA	TIONS
			QUANT SIG					ON-COLUMN	FINAL
C	ogmo	ınds	MASS	RT	EXP RT	REL RT	RESPONSE	(NG)	( ug/L)
=:				====	=======			=======	
*	1	1,4-Dichlorobenzene-d4	152	3.542	3.542	(1.000)	127050	40.0000	(Q)
*	2	Naphthalene-d8	136	4.952	4.952	(1.000)	566097	40.0000	
*	3	Acenaphthene-d10	164	7.045	7.045	(1.000)	304247	40.0000	
*	4	Phenanthrene-d10	188	8.900	8.900	(1.000)	488035	40.0000	
*	5	Chrysene-d12	240	13.180	13.190	(1.000)	483446	40.0000	
*	6	Perylene-d12	264	15.543	15.543	(1.000)	508088	40.0000	
\$	7	2-Fluorophenol	112	2.340	2.340	(0.661)	291825	65.1648	65.16
\$	8	Phenol-d5	99	3.231	3.231	(0.912)	419654	74.5208	74.52
\$	10	1,2-Dichlorobenzene-d4	152	3.739	3.739	(1.056)	97648	31.2073	31.21(q)
\$	11	Nitrobenzene-d5	82	4.164	4.174	(0.841)	163368	34.0722	34.07
\$	12	2-Fluorobiphenyl	172	6.257	6.257	(0.888)	354443	36.1649	36.16
\$	13	2,4,6-Tribromophenol	330	8.019	8.019	(1.138)	136726	103.418	103.4
\$	14	Terphenyl-d14	244	11.460	11.460	(0.869)	419883	44.0933	44.09
	108	Hexachlorobenzene	284	8.496	8.496	(0.955)	12162	4.57116	4.571

QC Flag Legend

Q - Qualifier signal failed the ratio test.

q - Qualifier signal exceeded ratio warning limit.



Data File: \\SV5\C\chem\sv5.i\120410.B\S120407.D Page 2

Report Date: 06-Dec-2010 09:28

### TestAmerica West Sacramento

### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Calibration Date: 04-DEC-2010 Instrument ID: sv5.i

Calibration Time: 10:36 Lab File ID: S120407.D Lab Smp Id: MAK011AA G0K270427-Client Smp ID: 0333259

Analysis Type: SV Level: LOW Quant Type: ISTD Sample Type: AIR

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120410.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

Test Mode:

Use Initial Calibration Level 4.

		AREA	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
=======================================	========	=======	=======	========	
1 1,4-Dichlorobenze	122625	61313	245250	127050	3.61
2 Naphthalene-d8	530514	265257	1061028	566097	6.71
3 Acenaphthene-d10	282538	141269	565076	304247	7.68
4 Phenanthrene-d10	462722	231361	925444	488035	5.47
5 Chrysene-d12	435850	217925	871700	483446	10.92
6 Perylene-d12	422284	211142	844568	508088	20.32

COMPOUND	STANDARD	RT I LOWER	LIMIT UPPER	SAMPLE	%DIFF
1 1,4-Dichlorobenze 2 Naphthalene-d8 3 Acenaphthene-d10 4 Phenanthrene-d10 5 Chrysene-d12 6 Perylene-d12	3.54	3.04	4.04	3.54	-0.00
	4.95	4.45	5.45	4.95	-0.00
	7.05	6.55	7.55	7.05	-0.00
	8.90	8.40	9.40	8.90	-0.00
	13.19	12.69	13.69	13.18	-0.08
	15.54	15.04	16.04	15.54	-0.00

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\sv5\c\chem\sv5.i\120410.B\S120407.D Page 1

Report Date: 06-Dec-2010 10:35

### TestAmerica West Sacramento

### RECOVERY REPORT

Client Name:

Sample Matrix: GAS

Lab Smp Id: MAK011AA G0K270427-

Level: LOW

Data Type: MS DATA

SpikeList File:

Sublist File: S11JZHCB.SUB

Method File: \\sv5\c\chem\sv5.i\120410.B\8270f.m Misc Info: 0; AIR; 0; S11JZHCB.SUB; ; 0; 0333259; 8270F.M

Client SDG: 090498

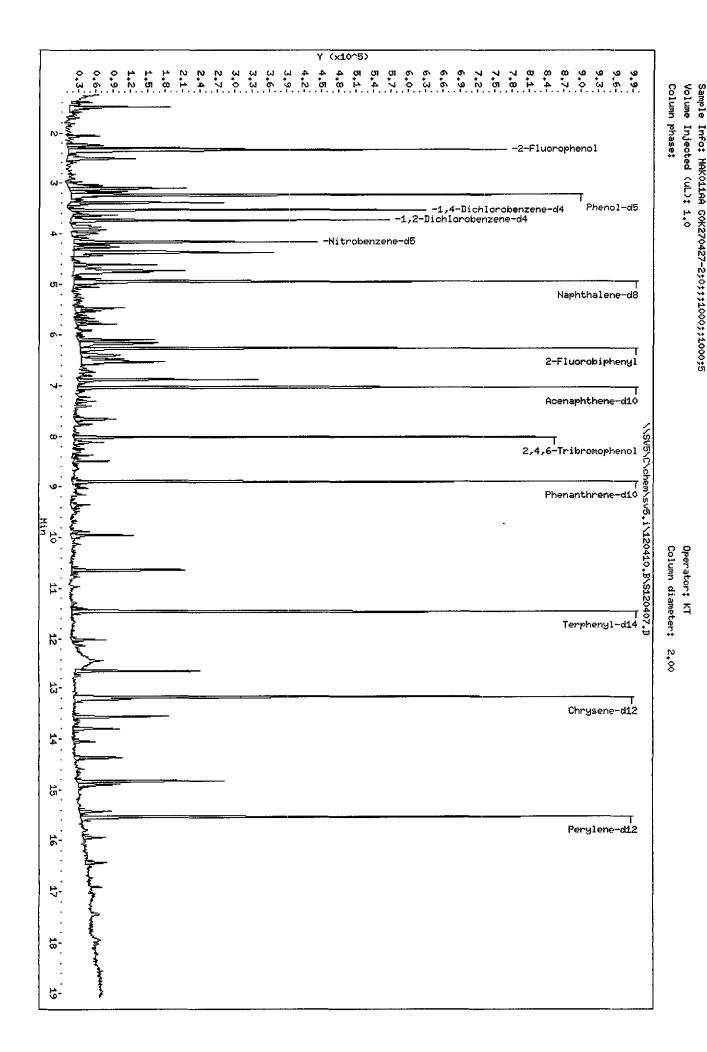
Fraction: SV

Client Smp ID: 0333259

Operator: KT

SampleType: SAMPLE Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 7 2-Fluorophenol	100.0	65.16	65.16	41-105
\$ 8 Phenol-d5	100.0	74.52	74.52	43-122
\$ 10 1,2-Dichlorobenzen	50.00	31.21	62.41	60-120
\$ 11 Nitrobenzene-d5	50.00	34.07	68.14	46-118
\$ 12 2-Fluorobiphenyl	50.00	36.16	72.33	58-105
\$ 13 2,4,6-Tribromophen	100.0	103.4	103.42	61-118
\$ 14 Terphenyl-d14	50.00	44.09	88.19	69-110



Client ID: 0333259

Instrument: sv5.i

Date : 04-DEC-2010 13:27

Data File: \\SV5\C\chem\sv5.i\120410.B\S120407.D

Date : 04-DEC-2010 13:27

Client ID: 0333259

Sample Info; MAK011AA GOK270427-2;0;;;1000;;1000;5

Volume Injected (uL): 1.0

Column phase:

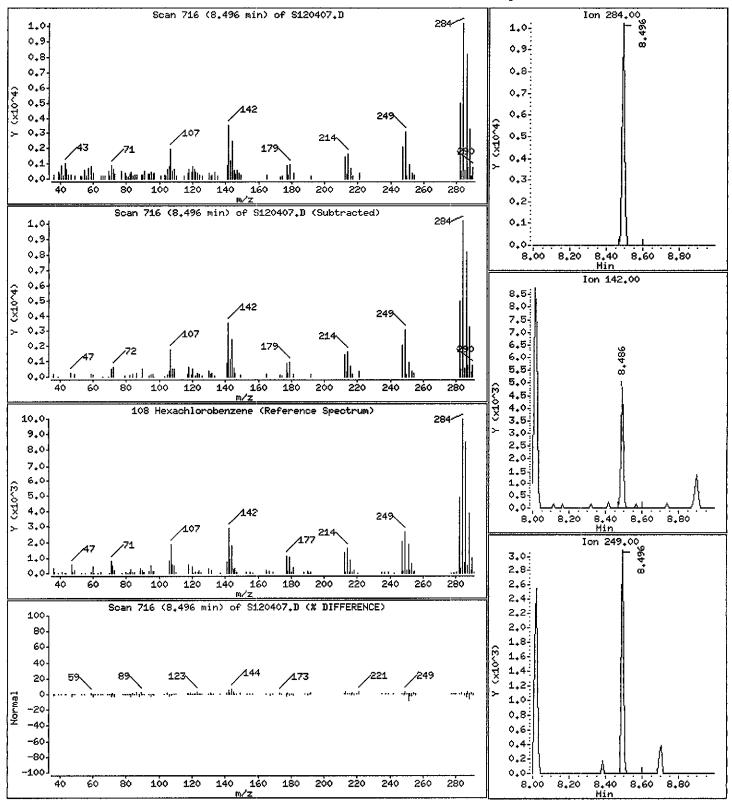
Instrument: sv5.i

Operator: KT

Column diameter: 2.00

### 108 Hexachlorobenzene

Concentration: 4.571 ug/L



Data File: \\sv5\c\chem\sv5.i\120410.B\S120408.D Page 1

Report Date: 06-Dec-2010 10:36

### TestAmerica West Sacramento

Method 8270C

Data file : \\sv5\c\chem\sv5.i\120410.B\S120408.D

Lab Smp Id: MAK021AA G0K270427-Client Smp ID: 0333259

Inj Date : 04-DEC-2010 13:52

Inst ID: sv5.i

Misc Info : 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

Comment : SOP SAC-MS-0005
Method : \\sv5\c\chem\sv5.i\120410.B\8270f.m

Meth Date: 06-Dec-2010 09:40 onishim Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 6

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: S11JZHCB.SUB

Target Version: 4.14

Processing Host: SACP307UM

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

Name	Value	Description
DF Uf Vt Vo Vi Cpnd Variable	1.000	Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable

								CONCENTE	ATIONS
			QUANT SIG					ON-COLUMN	FINAL
Co	ogmo	unds	MASS	RT	EXP RT	REL RT	RESPONSE	(NG)	( ug/L)
=:	====	****	====			****			========
*	1	1,4-Dichlorobenzene-d4	152	3.542	3.542	(1.000)	128752	40.0000	(Q)
*	2	Naphthalene-d8	136	4.952	4.952	(1.000)	551220	40.0000	
*	3	Acenaphthene-d10	164	7.035	7.045	(1.000)	297707	40.0000	
*	4	Phenanthrene-d10	188	8.900	8.900	(1.000)	475997	40.0000	
*	s	Chrysene-d12	240	13.180	13.190	(1.000)	455083	40.0000	
*	6	Perylene-d12	264	15.543	15.543	(1.000)	479573	40.0000	
\$	7	2-Fluorophenol	112	2.340	2.340	(0.661)	293667	64.7093	64.71
\$	8	Phenol-d5	99	3.231	3.231	(0.912)	419821	73.5650	73.56
\$	1.0	1,2-Dichlorobenzene-d4	152	3.739	3.739	(1.056)	79180	24.9706	24.97 (qR)
\$	11	Nitrobenzene-d5	82	4.164	4.174	(0.841)	122020	26.1354	26.14
\$	12	2-Fluorobiphenyl	172	6.257	6.257	(0.890)	130303	13.5873	13.59(R)
\$	13	2,4,6-Tribromophenol	330	8.019	8.019	(1.140)	21851	16.8910	16.89(R)
\$	14	Terphenyl-d14	244	11.460	11.460	(0.869)	58033	6.47406	6.474(aR)
	108	Hexachlorobenzene	284	Con	pound No	ot Detecte	d.		

### QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation (BLOQ).

Q - Qualifier signal failed the ratio test.

Data File: \\sv5\c\chem\sv5.i\120410.B\S120408.D Report Date: 06-Dec-2010 10:36 Page 2

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
q - Qualifier signal exceeded ratio warning limit.

Data File: \\SV5\C\chem\sv5.i\120410.B\S120408.D Page 3

Report Date: 06-Dec-2010 09:28

### TestAmerica West Sacramento

### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i Calibration Date: 04-DEC-2010

Lab File ID: S120408.D Calibration Time: 10:36 Client Smp ID: 0333259 Lab Smp Id: MAK021AA G0K270427-

Level: LOW Analysis Type: SV Quant Type: ISTD Sample Type: AIR

Operator: KT

Method File: \\SV5\C\chem\sv5.i\120410.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;03333259;8270F.M

Test Mode:

Use Initial Calibration Level 4.

		AREA	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
=======================================	========	========	========	========	======
1 1,4-Dichlorobenze	122625	61313	245250	128752	5.00
2 Naphthalene-d8	530514	265257	1061028	551220	3.90
3 Acenaphthene-d10	282538	141269	565076	297707	5.37
4 Phenanthrene-d10	462722	231361	925444	475997	2.87
5 Chrysene-d12	435850	217925	871700	455083	4.41
6 Perylene-d12	422284	211142	844568	479573	13.57
<u>.</u>					

COMPONE	CAMPLE	9.D.T.D.D.			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
1 1,4-Dichlorobenze 2 Naphthalene-d8 3 Acenaphthene-d10 4 Phenanthrene-d10 5 Chrysene-d12 6 Perylene-d12	3.54 4.95 7.05 8.90 13.19 15.54	3.04 4.45 6.55 8.40 12.69 15.04	4.04 5.45 7.55 9.40 13.69 16.04	3.54 4.95 7.04 8.90 13.18 15.54	0.00 0.00 -0.15 0.00 -0.08 0.00

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\sv5\c\chem\sv5.i\120410.B\S120408.D

Report Date: 06-Dec-2010 10:36

### TestAmerica West Sacramento

Page 1

### RECOVERY REPORT

Client Name: Client SDG: 090498

Sample Matrix: GAS Fraction: SV

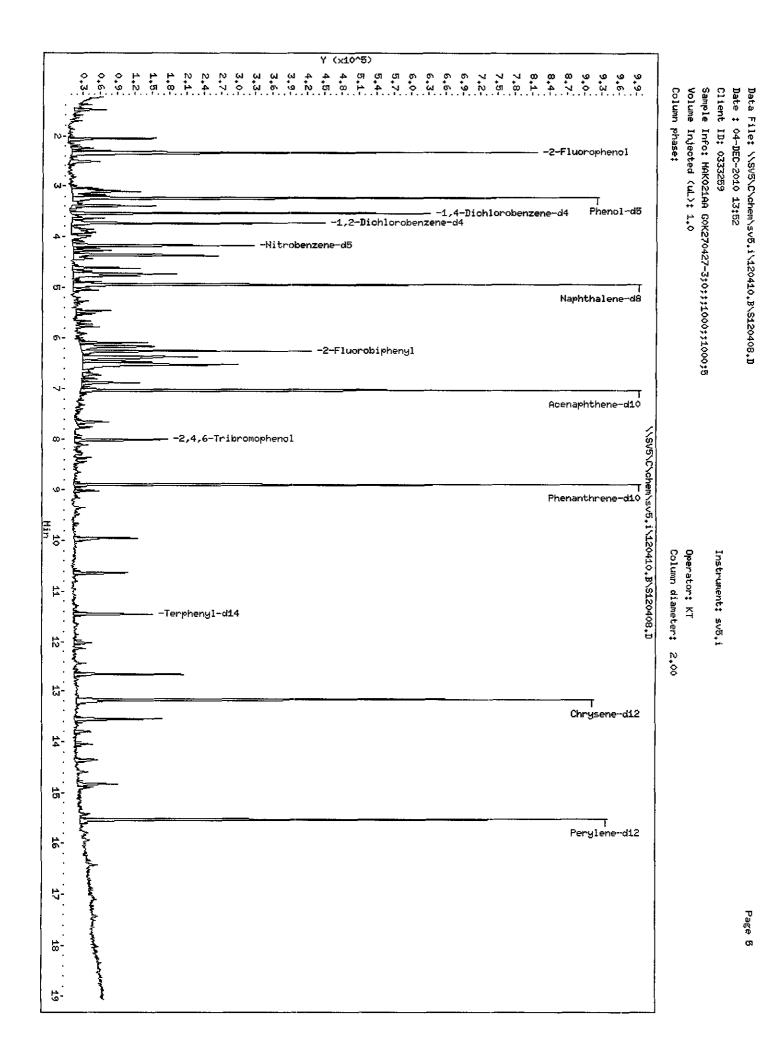
Lab Smp Id: MAK021AA G0K270427-Client Smp ID: 0333259

Level: LOW Operator: KT

SampleType: SAMPLE Quant Type: ISTD Data Type: MS DATA SpikeList File:

Sublist File: S11JZHCB.SUB
Method File: \\sv5\c\chem\sv5.i\120410.B\8270f.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;03333259;8270F.M

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 7 2-Fluorophenol \$ 8 Phenol-d5 \$ 10 1,2-Dichlorobenzen \$ 11 Nitrobenzene-d5 \$ 12 2-Fluorobiphenyl \$ 13 2,4,6-Tribromophen \$ 14 Terphenyl-d14	100.0 100.0 50.00 50.00 50.00 100.0 50.00	64.71 73.56 24.97 26.14 13.59 16.89 6.474	64.71 73.56 49.94* 52.27 27.17* 16.89* 12.95*	46-118 58-105 61-118



Report Date: 06-Dec-2010 10:36

### TestAmerica West Sacramento

Method 8270C

Data file : \\sv5\c\chem\sv5.i\120410.B\S120409.D

Lab Smp Id: MAK031AA G0K270427-Client Smp ID: 0333259

Inj Date : 04-DEC-2010 14:16

Inst ID: sv5.i

Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

Comment : SOP SAC-MS-0005
Method : \\sv5\c\chem\sv5.i\120410.B\8270f.m

Meth Date: 06-Dec-2010 09:40 onishim Quant Type: ISTD Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 7

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: S11JZHCB.SUB

Target Version: 4.14

Processing Host: SACP307UM

Concentration Formula: Amt \* DF \* Uf \* Vt/(Vo \* Vi) \* CpndVariable

Name	Value	Description
DF Uf Vt Vo Vi Cpnd Variable	1.000 1000.000	Dilution Factor ng unit correction factor Volume of final extract (uL) Volume of sample extracted (mL) Volume injected (uL) Local Compound Variable

								CO	NCENTRA	ATIONS
			QUANT SIG					ON-C	OLUMN	FINAL
Co	oqmo	unds	MASS	RT	EXP RT	REL RT	RESPONSE	(	NG)	( ug/L)
=:		= = = = = = = = = = = = = = = = = = =	=====	====	=======	*****	**=====			
*	1	1,4-Dichlorobenzene-d4	152	3.542	3.542	(1.000)	104245	40.	0000	(Q)
*	2	Naphthalene-d8	136	4.952	4.952	(1.000)	453452	40.	0000	
*	3	Acenaphthene-d10	164	7.045	7.045	(1.000)	243746	40.	0000	
*	4	Phenanthrene-d10	188	8.900	8.900	(1.000)	412267	40.	0000	
*	5	Chrysene-d12	240	13.180	13.190	(1.000)	397788	40.	0000	
*	6	Perylene-d12	264	15.543	15.543	(1.000)	404231	40.	0000	
\$	7	2-Fluorophenol	112	2.340	2.340	(0.661)	244971	66.	6691	66.67
\$	8	Phenol-d5	99	3.231	3.231	(0.912)	350245	75.	8015	75.80
\$	10	1,2-Dichlorobenzene-d4	152	3.739	3.739	(1.056)	65877	25.	6594	25.66 (QR)
\$	11	Nitrobenzene-d5	82	4.164	4.174	(0.841)	132030	34.	3767	34.38
\$	12	2-Fluorobiphenyl	172	6.257	6.257	(0.888)	305695	38.	9331	38.93
\$	13	2,4,6-Tribromophenol	330	8.019	8.019	(1.138)	113102	106	.784	106.8
\$	14	Terphenyl-d14	244	11.460	11.460	(0.869)	363650	46.	4114	46.41
	108	Hexachlorobenzene	284	8.496	8.496	(0.955)	6051	2.6	9228	2.692

QC Flag Legend

Q - Qualifier signal failed the ratio test.

R - Spike/Surrogate failed recovery limits.



Data File: \\SV5\C\chem\sv5.i\120410.B\S120409.D Page 2

Report Date: 06-Dec-2010 09:28

### TestAmerica West Sacramento

### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Calibration Date: 04-DEC-2010

Calibration Time: 10:36

Client Smp ID: 0333259

Level: LOW

Sample Type: AIR

Instrument ID: sv5.i

Lab File ID: S120409.D

Lab Smp Id: MAK031AA G0K270427-

Analysis Type: SV

Quant Type: ISTD Operator: KT

Method File: \\SV5\C\chem\sv5.i\120410.B\8270F.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

Test Mode:

Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LOWER	LIMIT UPPER	SAMPLE	%DIFF
1 1,4-Dichlorobenze 2 Naphthalene-d8 3 Acenaphthene-d10 4 Phenanthrene-d10 5 Chrysene-d12 6 Perylene-d12	122625	61313	245250	104245	-14.99
	530514	265257	1061028	453452	-14.53
	282538	141269	565076	243746	-13.73
	462722	231361	925444	412267	-10.90
	435850	217925	871700	397788	-8.73
	422284	211142	844568	404231	-4.28

		RT I	IMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
#=====================================	========	========	========	========	======
1 1,4-Dichlorobenze	3.54	3.04	4.04	3.54	-0.00
2 Naphthalene-d8	4.95	4.45	5.45	4.95	-0.00
3 Acenaphthene-d10	7.05	6.55	7.55	7.05	-0.00
4 Phenanthrene-d10	8.90	8.40	9.40	8.90	-0.00
5 Chrysene-d12	13.19	12.69	13.69	13.18	-0.08
6 Perylene-d12	15.54	15.04	16.04	15.54	-0.00
·					l

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT. Data File: \\sv5\c\chem\sv5.i\120410.B\S120409.D

Report Date: 06-Dec-2010 10:37

### TestAmerica West Sacramento

### RECOVERY REPORT

Client Name:

Client SDG: 090498

Sample Matrix: GAS

Fraction: SV

Lab Smp Id: MAK031AA G0K270427-

Client Smp ID: 0333259

Page 1

Level: LOW

Operator: KT

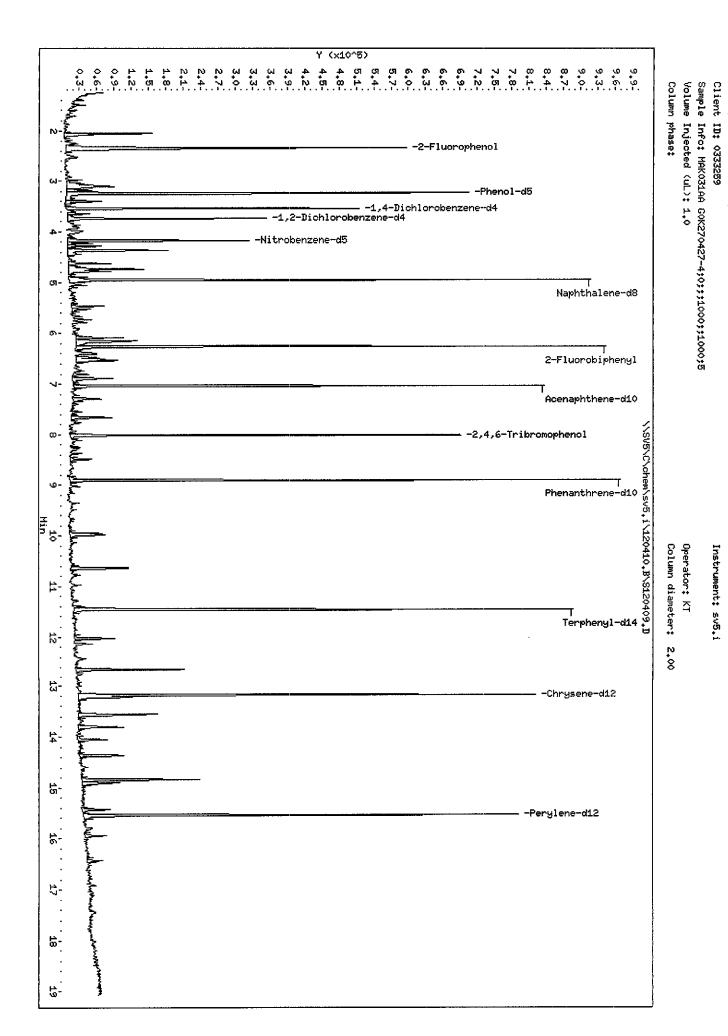
Data Type: MS DATA

SampleType: SAMPLE Quant Type: ISTD

SpikeList File:

Sublist File: S11JZHCB.SUB
Method File: \\sv5\c\chem\sv5.i\120410.B\8270f.m Misc Info: 0;AIR;0;S11JZHCB.SUB;;0;0333259;8270F.M

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	k RECOVERED	LIMITS
\$ 7 2-Fluorophenol	100.0	66.67	66.67	41-105
\$ 8 Phenol-d5	100.0	75.80	75.80	43-122
\$ 10 1,2-Dichlorobenzen	50.00	25.66	51.32*	60-120
\$ 11 Nitrobenzene-d5	50.00	34.38	68.75	46-118
\$ 12 2-Fluorobiphenyl	50.00	38.93	77.87	58-105
\$ 13 2,4,6-Tribromophen	100.0	106.8	106.78	61-118
\$ 14 Terphenyl-d14	50.00	46.41	92.82	69-110



4 age,

Data File: \\SV5\C\chem\sv5.i\120410.B\S120409.D

Date : 04-BEC-2010 14:16

Client ID: 0333259

Sample Info; MAK031AA GOK270427-4;0;;;1000;;1000;5

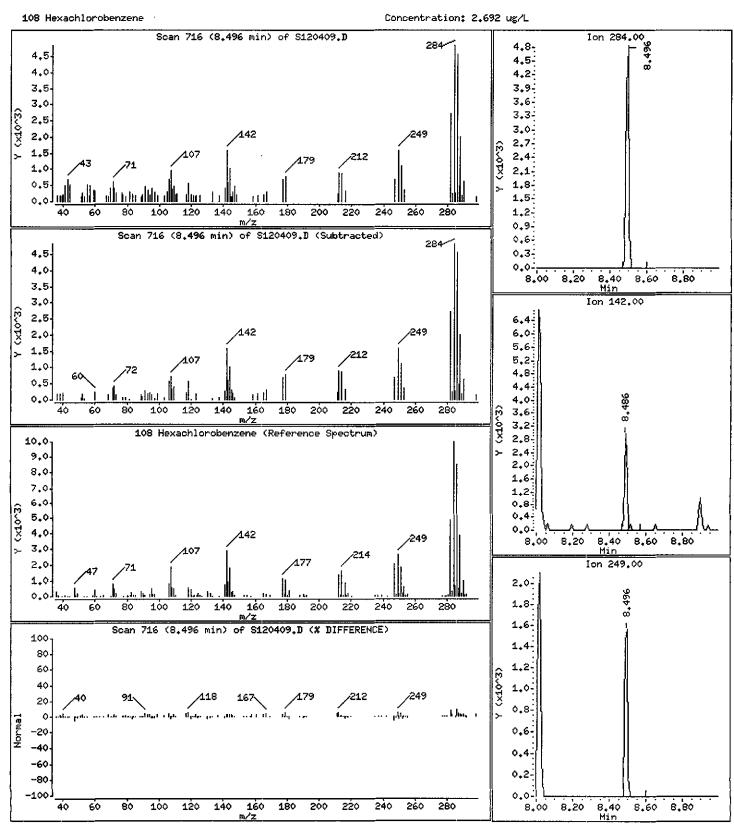
Volume Injected (uL): 1.0

Column diameter: 2.00

Instrument: sv5.i

Operator: KT

Column phase:



### Initial Calibration

Includes (as applicable):

runlog

standard raw data

statistical summary

ms tune data



THE LEADER IN ENVIRONMENTAL TESTING

Instrument: SV5

### TestAmerica West Sacramento MS SemiVOA ICAL Checklist Method 8270C

DFTPP Mix ID: 10MSSV0129 Injection Date: 10/02/10 STD Mix IDs: 10MSSV0307-0313 2<sup>nd</sup> Source Mfx ID: 10MSSV0314, 342 Initiator/Date: KT-10/03/10 Reviewer/Date: NCM I: SPCCs The SPCC RRFs must be greater than 0.050. initiated Reviewed Initiated Reviewed N-nitroso-di-n-propylamine 2,4-Dinitrophenol Hexachlorocyclopentadiene 4-Nitrophenol II: CCCs The CCC % RSDs must be less than 30% initiated Reviewed Initiated Reviewed Phenol Acenaphthene 1,4-Dichlorobenzene N-nitrosodiphenylamine 2-Nitrophenol Pentachlorophenol 2.4-Dichlorophenol Fluoranthene Hexachlorobutadiene Di-n-octvi phthalate 4-chloro-3-methylphenol Benzo(a)pyrene 2,4,6-Trichlorophenol III: Other Criteria Initiated Reviewed The custom.rp shows that the average of the average is less than 15%  $\boxtimes$ ♂ on the CCV level standard. Avg of AVG:\_ Tailing and degradation criteria are met. The Tune Documentation is present and meets criteria All Internal Standards within 50-200% of ICAL mid-point. Calibration History Included. Manual re-integrations are checked/initialed and hardcopies included. Standards analyzed with within 12 hours of Tune time. Retention time correct for Isomers and all other analytes. Linear Regressions > 0.990 and intercept < ± (1/2 RL / IS amount) The second source standard meets the SSCS criteria File Name: IV: Non-CCC Compounds Over 15% (Write compound and %D) None V: Second Source Compounds Over 25% (Write compound and %D) None

### TestAmerica West Sacramento

Page# 57

### GC/MS INSTRUMENT LOG SEMI-VOLATILES

Method Key (MTH Column) QL = EPA 8270C (WS-MS-0005) JZ = EPA TO-13A (WS-MS-0005).

Inst ID : sv5.i Batch ID : 100210.B

VX = EPA 8270C-SIM (mod) CWM (WS-MS-0003)QI = EPA 8270C-SIM (WS-MS-0008)

ICAL Date: See Calib Report See raw data for standard IDs

FX = PAH-SIM Isotope Dilution (WS-MS-0006) F9 = EPA 8270C-SIM (mod) 1,4-Dioxane (WS-MS-0011)

Date	Time	USER	Sample ID	File ID	Vol or	Extract	Diln	MTH	Comments
·		1	1	1	WС	Vol	1		1
02-OCT-2010	11:43	l er	Primer	00001.0	NA.	NA	NA.	}	[
02-OCT-2010	<u>'</u>	KT	DFTPP 50mg/ml	DFT1002.D	DZA.	NA.	NTA.	ì	
02-OCT-2010	12:27	KT	HSL_005 ug/m1 CS-1	[EST.1002A.	. WA	7£7	NA.	İ	
02-OCT-2010	12:53	KT	HSL_010 ng/ml CS-2	PSL100ZB.	NA	NA.	NA.	1	1
02-OCT-2010	13:18	KT	ESL_020 mg/ml CS-3	ESL1002C.	ADE.	NA.	NA.	1	
D2-OCT-2010	13:44	KT	HSI_050 ug/ml CS-4	ESL1002D.	NA.	E/A.	NA.	1	1
02-0CT-2010	14:09	i et	EST_080 mg/ml CS-5	PSTA1002E.	XZA.	NA.	MA	1	l
02-0CT-2016	14:35	KT	ESL_120 ug/ml C5-6	EST-1002F.	IVA.	Tere [	NA.	1	l
02-0CT-2010	15:00	ET	HSL_160 ug/ml CS-7	HST.1002G.	NA	NA.	N/A	1	<u> </u>
02-OCT-2010	16:11	KT	ESL_050 ug/ml ICV	HSL100ZH.	NA	N/A	NA.	1	l
02-0CT-2010	16:36	] ET	Benzidines ICV 50vg/mL	HSL1002EA	NA.	) NA	NA.	1	ļ

TestAmerica West Sacramento

03-Oct-2010 11:10

Report Date :

INITIAL CALIBRATION DATA

17:32 17-AUG-2010 02-OCT-2010 Start Cal Date End Cal Date Quant Method

CISI 4.14 Target Version

Falcon \\SV5\C\chem\sv5.1\100210.B\8270f.m 03-Oct-2010 11:09 on1shim Integrator Method file Last Edit

Calibration File

Level Level

Level Level

Level Level

Level

or R^3 \*RBD Ë Coafficients 0.92154 1,54111 2.35673 2.03729 겉 Curve AVRG 1 AVRG AVRG AVRO 0.93916 A.33400 1.53256 2.06089 Level 6 120.0000 0.93146 1.62299 2,29749 2.06683 80,000 Level 5 0.91970 2,26058 2.03430 1,56610 50,0000 Level 4 2.02834 0.91048 1.59449 .2,19988 20.0000 Level 3 2.15935 1.96212 0,89269 1.37423 10,0000 Level 2 0.92899 0.93833 1,67117 2,20796 2.04111 2.06740 1,52623 2,33783 -------Level 1 160.0000 Level 7 B.0000 15 N-Witrosodinethylamins 16 Pyzldine 23 And Line 24 Phenol Compound

6,85550

3,09753

2,16207

1.80250

2.4. F- Trichlerophenck 2668.0.4 7 3/2 いるとうないのと 8098€ € 6-555 Mannal

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TestAmerica West Sacramento

Btart Cal Date : 17-AUG-2010 17:32
End Cal Date : 02-OCT-2010 15:00
Quant Method : ISTD
 Target Version : 4.14
 Integrator : Falcon
 Method file : \\SV5\C\chem\sv5.1\\100210.B\\8270f.m
Last Edit : 03-Oct-2010 11:09 onlshim

\$RSD or R^2		2.17028	1.32808	1.29370	1.36229	3.59696	1,45894	2,50558	
200			t t t t					1	
Coeffloients mi		1.42859	1,96381	1.70337	1,78118	1,05101	1,63746	1,43012	-
g ,q									
Curve	- <del></del> -	AVA	AVRU	AVRG	AVRG	AVRG	AVRG	AVRG	
120.0000   Level 6		1.44300	1,58074	1.72299	1.79288	1.08952	1.64416	1.46164	
00.0000 Level 5	i i	1.42549	1,56789	1.68641	1.78200	1.07792	1.63410	1.45565	
so.oooo Level 4	1 2 - 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1.43824	1.50168	1.73135	1.76898	1.04980	1.68061	1.42620	
20.0000   Level 3	; ; ; ; ; ; ; ; ; ; ; ; ;	1,39491	1.56903	1.67754	1.74013	0.99182	1.60455	1.39110	
10.0000 Level 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1, 55592	1.69173	1.79861	1.03654	1,63185	1,38930	
B.0000 Level 1	160.0000 Level 7	1.44364	1.62099	1.68903	1,77132	1.01643	1,62008	1.40818	-
. punodwoj			27 2-Chlorophenol	28 1, 3-Dichlorobengene	29 1,4-Dichlorobensene	30 Benzyl Alcohol	31 1,2-Dichlorobenzene	32 2 Methylphenol	-

Report Date: 03-Oct-2010 11:10

TestAmerica West Sacramento

Start Cal Date End Cal Date Quant Method Target Version Integrator Method file Last Edit

17-AUG-2010 17:32 02-OCT-2010 15:00 1STD 4.14 Falcon \\SV5\C\chem\gv5.1\100210.B\8270f.m 03-Oct-2010 11:09 onishim

				<u> </u>	: #		1 2	7 7	60	274	
CUERTA	Or R'2			1	8.1788	1,04319	3.92615	1,48904	2.81109	4,42274	
	<u>۾</u>				t     ;   ;   ;   ;	 					
Coefficients	m,	-		2.27365	1,51904	0,60636	1.01180	0.33116	0.63679	0,19648	
Ď	æ	•									
_	Curve			AVRG	AVRG	AVRO	AVRG	AVRG	AVRG .	AVRG	
120.0000	Level 6	1		2.27830		0.89381	1.03627	0.33450	0.66468	0.20702	_
00000.00	Level 5	; ; ; ; ; ; ; ; ; ; ; ; ; ;		2.27018	1.52653	0.60427	1.04700	0.33379	0.63640	0.20023	
50.0000	Level 4	1 1 1 1 1		2.27938	1,6233	0.61394	1.02370	0.33083	0.63344	0.20021	
20.000	Level 3			2.28329	1.46270	0.60673	1.01302	0.32643	0.61160	0,18840	-
10.0000	Level 2	1			1.48913	0.60836	0,97005	0.32602	0,62291	0,18833	
B.0000	Level 1.	160.0000	Level 7	2,29602	1,58763	0,60928	0.94498	0.33855	0.63431	0.19508	
	Congound			33 2,2'-oxybis(1-Chloropropus)	34 4-Methylphenol	36 Hexachloroethane	37 N-Mitrosodinyropylamine	43 Міскорепкене	44 Іноріютопе	4H 2-Witrophenol	

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Btart Cal Date End Cal Date Quant Method Target Version Integrator Method file Last Edit

17-AUG-2010 17:32 02-OCT-2010 15:00 1STD 4.14 Falcon \\SV5\C\chem\sv5.1\100210.B\8270f.m 03-Oct-2010 11:09 onishim

5.0000
TEAST   TEAST   TEAST X TEAST
160.0000 Level 7
0.34167
0,38545 0,38545
0.27809
0.22180
0.29430 0.28827 0.29091
1,10247
0.40751 0.42534

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17-AUG-2010 17:32 02-OCT-2010 15:00 1STD 4.14 Falcon \\SV5\C\chem\sv5.1\100210.B\8270f.m 03-Oct-2010 11:09 onishim

	5.0000	10.0000	20.0000	50.0000	80.0000	120,0000			Cosffidents		\$ PLGD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	,q	뎔.	Le	e a io
	160.0000			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1					***
57 Hexachlorobutadlene	0.14473	0.13812		0.14415 0.14345		0.14379 AVRO	AVRO		0.14313		1,58904
50 4-Chloxo-3-Methylphenol	0.29329	0.28866	9.29070	0.30972	0,30298	0.31766	AVEG		0.30164		THE PERSON AND THE PE
63 2-Mathylnaphthalene	0.68483	0.68064	0,68080	0.70067	0,70560	0.71172	AVRG		0.69378		1,79740
66 Haxachlorocyclopentadiene	0,26876	0.27767	0,28896	0.29704	0.30236	0,3262	AVRG		0,29946		2 0 0 4 0 0 1 L
69 3,4,6-Trichlorophenol	0.33638	0.29820	0.30223	96816.0	0.32305	0.34225	AVRG		0.31913		8.15684
70 2,4,6-Trichlorphenol	0.30823	0.33892	0.33796	0.36290	0.35236	0.35480	AVRG		0.34380		B.80662
71 2-Chloronaphthalene	1,13629	1.09411	1.10012	1.14191	1,11220	1.14447	AVRG		1,12571		2.08064

::

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TestAmerica West Sacramento

	5.0000	10.0000	20,0000	50.0000	80.000	120,0000		0	Coefficients		*RRD
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	ц	Tu.	E E	or H'3
T			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 		<u> </u>		:			
73 2-Mitrosuiline	0 0	0.31759	0.33397	0.35205	0 + 34821	0.35794	AVRG	<del></del>	0.34119	n to a constant	6,87334
76 Dimethylphthalate	1,30237	1.26191	1,29803	1,34660	BETTE T	1.32891	AVRG	t : : : : : : : : : : : : : : : : : : :	1.29606	1 1 1 1 1 1 1 1 1	3,09317
77 Aconaphthylene	1.86531	1,91304	1.91818	2.01646	1.98204	1.99786	AVRO		1.96037	; ; ; ; ; ; ; ;	3,15026
-	0.31106	0.27378	0.29890	0.31220	0.31294	0.32140	AVRO	1 1 1 1 1 1	0.30197	1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	5 . 78579
80 J-Nitroanilins	0.39603	0.34623	0.35978	0,40036	0.38674	0.39559	AVRG		0.37691		6,06861
81 Adenaphtheus	1,25874	1.22468	1.26733	1,27046	1.21141	1.24761	AVRG		1.24787	#	1.76776
87 2,4-Dinitrophenol	4083	7537	23799	59864	110384	198007	quab	0.10620	5.32413	-0.71963	0.99813
				#							1

TestAmerica West Sacramento

Start Cal Date End Cal Date Quant Method Target Version Integrator Method file Last Edit

17-AUG-2010 17:32 02-OCT-2010 15:00 ISTD 4.14 Falcon \\Svs\C\chem\sv5.1\100210.B\8270f.m 03-Oct-2010 11:09 onishim

*RBD	or R'2		2,77923	10,96920	8.61892	2,00887	4.33889	2.42913	7.42395	
	tm2			-		-		8 2 2 8 4 3 7	; ; ; ; ;	!
doefflatents	MŢ		1.68612	0.15634	0.39633	1,37139	1,32699	0.67019	0,37361	
ב	д									-
_	Curve		AVRG	AVRG	AVRG	AVRG	AVRG	AVRG	AVRG	
120.0000	Lavel 6			0.16683	U,42305	1.37835	1.37345	0.57698	20166.0	
80.0000	Level 5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1,65117	0,17130	0.41038	1.36699	1.31873	0.66708	0.39216	
80.0000	Level 4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.69530	0.16076	0.42164	1 2 3 5 C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.37912	0,69265	0.38337	
20.0000	Level 3		1,62124 1.65200	0.15316	0.38479	1.34292	1.31549	0.86187	0.37329	
10.0000 }	Level 2	1 1 1 1 1 1 1 1 1 1 1 1 1	1.62124	0.14140	0.35989	1.33840	1,29689	0.55917	0.33747	
B.0000	Level 1	160.0000 Level 7	1,57786	0.12713	0.34360	1.34867	1.22240	0.87696	0.33346	
	Compound		B3 Dibenzofuren 1,97786	84 4-Mitrophenol	96 2,4-Dinitrotoluene	91 Fluorene	92 Diethylphthalate		94 4-Nitroaniline	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

TestAmerica West Sacramento

Start Cal Date End Cal Date Quant Method Taryet Version Integrator Method file Last Edit

17-AUG-2010 17:32 02-OCT-2010 15:00 ISTD 4.14 Falcon \\SV5\C\chem\sv5.i\100210.B\8270f.m 03-Oct-2010 11:09 onlshim

	B.0000	10.0000	20.0000	50,0000	80.0000	120.000		0	Coeffloients		4RBD
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	curve	q	m	Ę	or R^2
	Level 7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	\$	3						·
97 4,6-Dinitro-z-methylphenol	n	1,1282	32982	11.282 32982 76137 134784	134784		LINE	0.10840	236477 DINA 0.10840 0.15581	f b i i	0.99840
98 N-Mitroscodiphenylamine	0.87756	0,59736	0,60533	0.60433	0.62172	0.61801	AVRG		0.60628		2.57715
e .	0.77537	0.76968	0.77321	0.79522	0.80064	0.81892	AVRG		0.78660		2.37146
101 4-Bromophenyl-phenylether	0.19964	0.18507	THEGT.0	reast o	0,19607	D.20581	· AVRG		0.19527		3.48752
108 Неквойлохореплене	0.22959	0,22064	0.20740	0.21608	0.21731	0.21704	AVRO		0.21807	1 1 1 1 1 1 1 1	3.00928
110 Pentachlorophenol	293184	10551	30451	67882	126397	316360	LINE	0.09916	0.14133		0.99848
114 Phenanthrene	1,26611	1.26007	1,25408	1.24163	1,24375	1,25610	AVRG		1.26074		1,64308

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Btart Cal Date End Cal Date Quant Method Target Version Integrator Method file Last Edit

17-AUG-2010 17:32 02-0CT-2010 15:00 1STD 4.14 Falcon \\sv5\C\chem\sv5.i\100210.B\8270f.m 03-0ct-2010 11:09 onishim

	5.0000	10,0000	20.0000	50.0000	80.000	120,0000	_	0	Coefficients	-	RRED
Compound	Lavel 1	Level 2	Level 3	Level 4	Level B	Level 6	Curve	ቲ	TEI		OK R'R .
	160.0000 Level 7										
115 Authracene	1,26954	1,21759	.31769 1.25962 1.37529	1.25982		1.30214 AVRG	AVAG		1.25965		4.1.2888
116 Carbasole	1,13211	1,12547	1.13694	1.14260	1,17067		AVRG		1.15061	1	1.87826
120 Di-n-Butylphthalate	1.28492	1.33387	1.361.93	7.38164	1.41474	1.43847	AVRO		1,38442		4.97257
126 Flucranthene	1.03840	1.07611	1.17316	1.10620	1,16861	1,18294	AVRG		1.12969	] [ [ ] 1 1 1 1	B.01774
AZ7 Benaldine	0.86381	0,76431	0.75350	0.02658	0.83301	8763940	AVRG		0.81067	,	8.60614
128 Ругене	1.25791	1.23783	1,17078	1.38684	1,25586	1.28463	AVRG		1.28026		3.12172
134 3,3'-dimethylbenzidine	0.68472	0.64380	0.67361	0.70756	0.73630	0.79414	AVRG		0,71564		9,80815
111111111111111111111111111111111111111											

TestAmerica West Sacramento

Start Cal Date End Cal Date Quant Method Target Version Integrator Method file Last Edit

17-AUG-2010 17:32 02-OCT-2010 15:00 ISTD 4.14 Falcon \\SV5\C\chem\sv5.1\100210.B\8270f.m 03-Oct-2010 11:09 onlshim

	6,0000	10.0000	30.0000	50.0000	0000'08	120.0000	-	3	Comfficients		TRRD
Compound	Level 1	Level 2	Level 3	Level 4	Level B	Lavel 6	Curve	a	m1	<u> </u>	or n°2
,			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
136 Butylbenzylphthalate	0.64984	0.60187	0,69142	0.62586	0,61590	0.65233	AVRG		0,62663		3.95034
138 Benzo (a) Anthradene	1,10169	0.99731	1,03245	1,04489	1.06449	1.10831	AVRG		1.06548		4.08847
139 Сигунепе	1.05284	1.10176	1.06320	1.09706	1.06988	1.12341	AVRG		1.08994		2,59426
140 3,3'-Dioblorobenzidine	0.39148	0,37695	0,39090	0.39906	0.40253	0.42717	AVRG		0.40189		4.53885
141 bis (2-sthylbsxyl) Phthalste	0.91826	7.6808.0	0,64032	0,88193	0,84371	0.89539	AVRG	1	0.86316		4.34816
142 Di-n-octylphthalate	1.50770	1.23195	1.35627	1,34433	1.39356	1.47616	AVRG		1.37975		6,65055
. 4.	0.81018	0.81077	0.82747	0.99930	0,95373	0,91133	AVRG		0.90549		5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								

TestAmerica West Sacramento

17-AUG-2010 17;32 02-OCT-2010 15:00 19TD 4.14 Falcon \\Sv5\C\chem\sv5..i\100210.B\8270f.m 03-Oct-2010 11:09 onishim Start Cal Date End Cal Date Quant Method Target Version Integrator Method file Last Edit

	5.0000 ]	10.0000	20,0000	50.0000	80.0000	120,0000			Coefficients		*HSD
Compound	Lavel 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	д	<b>T</b> E	EM	or R^2
	160.0000	1	# # # # # # # # # # # # # # # # # # #	1	! ! ! !	1 					
		3			1	1 1 1 1 1					
145 Benzo (k) Eluorenthene	1.22939	1.16528	1,20022		1,14223	1,19597	AVRG				4.27893
147 Вепко (е) рукава	0.97185	0.92734	78706.0	0.95877	0.96997	0.96929	AVRG		0.94428	[	3,22007
148 Benzo(a)prtens	0.98300]	0,97686	0.99402	1 T	1.07610	1.06276	AVRG		1,02655	1 1 1 1 1 1 1 1 1	4.11137
151 Indeno (1, 2, 3-cd) pyrene	0.73783	0.73267	1,1967.0	0.84698	0.84057	0.93730	AVRG		0,83029	1 1 1 1 1 1 1 1 1	12.16083
162 Dibenzo (a, h) anthracene		0.64384	0.87256	0.92240	0.98990	1.00944			0.92758	1 1 1 1 1 1 1	7,07091
153 Benzo(g, b, 1) perylene		0.98487	0.97380	0.99974	1.01731	1,05397	AVRG		1.00427		3,45188
M 162 benzo b, k Fluoranthene Totale	2.13019	1.97605	2.02770		į.	2.10729	AVRG		2,06785		2,64859

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17-AUG-2010 17:32 02-OCT-2010 15:00 ISTD 4.14 Falcon \\SV5\C\chem\sv5.1\100210.B\8270f.m 03-Oct-2010 11:09 onishim Start Cal Date End Cal Date Quant Method Target Version Integrator Method file Last Edit

Compound	5.0000   Level 1	10.0000 Level 2	20.0000 Level 3	Bo.0000 Level 4	80.0000 . Level 5	120,0000 Level 6	Curve	, A	Coefficients ml	. 2	*ngo oz R^2
	160.0000 Level 7				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
\$ 7.2-fluorophenol	1.43625	1,30436	1,38373	1.44170	1.43636	1.42293	AVRG		1.40992		3.61494
\$ B Phenold5	1.13237	1.67338	1.74151	1,79006	1.80863	1.83864	AVRG		1.77296	1 1 1 1 1 1	3.52001
\$ 9 2.Chlorophenol-d4	1.47770	1.55530	1.53916	1.59414	1.67486	1.57967	AVRG		1,55698		2.52388
10 1,2-Dichlorobenzena-da	0.98776	0.98111	0.99827	0.98914	0,99518	0.98547	AVRG		0.98513		1.38859
11 M	0.33028	0.34256	0.33065	0.34108	0.33606	0.35127	AVRG		0.33879	1	2.16217
\$ 12 3-Fluorobiphanyl	1.28499	1,26007	1.27668	1.34206	1.25854	1,29723	AVRG		1.28852		2,28622
\$ 13 2,4,6-Tribromophenol	0.18034	0.16627	0.17466	0.17926	0.17826	0.18601	AVRO		0.17381		7.061.97
							<del>-</del>				

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Start Cal Date End Cal Date Quant Method Target Version Integrator Method file Last Edit

17-AUG-2010 17:32 02-OCT-2010 15:00 ISTD 4.14 Falcon \\SV5\C\chem\sv5.1\100210.B\8270f.m 03-Oct-2010 11:09 onishim

_	00000	10.0000	30.0000	50,0000	80.0000	120.0000	_		Coefficients		&RBD
Compound	Level 1	Level 3	Level 3	Level 2   Level 3   Level 4   Level B	Lavel B	Level 6   Curve	curve	Q	Щ	22	or R^2
_		3									
_	160.0000	_		_			_				
	Level 7			_			_				-
	THE SHEET STREET	1	MAKE TO COO MAKE	MANUAL MINISTRACTION OF STREET	THE PERSON NAMED IN COLUMN 1	BERBERH A MERRENER BERBERE BERBERE MER MER MER MER MER MER MER MER MER	20 12 12 13 15	PRESERVE STREET		marter per letter per me per per per per	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
\$ 14 Terphenyl-d14	0,78508		0.73917	0.80441	0.78047	0.81889					
	0.80107	_		_		_	AVRG		68787.0		3.21384
				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-   -   -   -   -   -   -   -   -   -		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1	
											_

TestAmerica West Sacramento

Start Cal Date Wnd Cal Date Quant Method Target Version Integrator Method file Last Edit

17-AUG-2010 17:32 02-OCT-2010 15:00 ISTD 4.14 Falcon \\SV5\C\chem\sv5.1\100210.B\8270f.m 03-Oct-2010 11:09 onishim

Curve	Formula	Unite
**********		
Averaged	Amt = Rep/ml	Response
Linear	Amt = 12 + Rep/ml	Response
Dung	Amt = b + ml*Rep + m2*Rep"z	Response
	And the state of t	

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Data File: \\SV5\C\chem\sv5.i\100210.B\8270f.m

Report Date: 04-Oct-2010 10:52

# Signal Calibration Report

Method : \\SV5\C\chem\sv5.i\100210.B\8270f.m Last Edit: 04-Oct-2010 09:00 onishim Compound: 82 2,4-Dinitrophenol

Mass: 184.00

3 Acenaphthene-d10 Istd Compound: \*

### Calibration Formulas

Calibration Mode: by Response

Curve Type: Averaged Origin: None

Amt = Rsp/m1

m1 = 0.15933171100000

RSD: 26.349

### Initial Calibration Table

Lv1	RT	Amount ]	-	•	•	_ •	Response Factor
•	7.572	5.00000	4083	7,468		'	0.10149173965865
2	7.572		7537	7.468	40.000	272639	0.11057845722732
3	7.572	20.06066	23799	7.468		328608	0.14484735512036
] 4]	7.582	50.00000]	58864	7.468	<u>4</u> 0.000	282538	0.16667209366528
[ 5]	7.572	00000.08	<u>11</u> 0384	7.468		. 300315	0.18378036395118
6	7.582	120.00000	19,9007	7.46B		322596	0.20563077864160)
		160.00000		7.478	-	•	•

<del>++</del>	
[Iv1] Sublist	Calibration File
111_8270STD	\\SV5\C\chem\sv5.i\100210.B\EST1002A
2 1_8270510	[\\SV5\C\chem\sv5.i\100210.B\ESIADO2B
3 1_8270STD	\\SV5\C\chem\sv5.i\lD0210.B\ESI1002C
4 1_8270STD	[\\sv5\C\chem\sv5.i\l002l0.B\ESLL002D
5 1_8270STD	\\sv5\C\chem\sv5.i\lDD2l0.E\ESL1002E
6 1_8270STD	\\SV5\C\chem\sv5.i\100210.B\ESL1002F
7 1_6270STD	\\\$Y\$\C\cbem\sv5.i\l002l0.E\ESL1D02G

# Continuing Calibration Table

÷+-		+-				-+-		<del></del>			+		÷
] Tad	PT	Ţ	Amount	1	Response	1	RI	Istd Amount	Istđ	Response	Response	Factor	1
+				-4		-+-					+ <b></b>		<del>-</del> +

[ :	ı[	7.582	50.000	50142	7.468	£0.000	236662	0.16949742670982
;	2 [	7.572	50.000	58864	7.468	<u>40.000</u>	282538	0.16667209366528
3	3	7.582	50.000	56608	7.458	40.000	239304	D.18924213552636
1 4	4 ]	7.589	. 50.DDD	98553	7.485	40.DOD)	440855	0.17883975456783
5	5   	7.599	50.000]	81881	7.485	40.000	371846	0.17616109894957
] 6	; ; ;	7.599	50.000	35068 <u> </u>	7.495	40.00D	283828	0.15521794889863
7		7.599	50.000]	52B96 [	7.496]	40.DOD	256342	0.16507946415336
8	1	7.599	50.000	50586	7.495]	40.000	224545	0.18022578993075
9	· [	7.610	50.000	31559	7.506]	48.000	165705	0.15236233064784
] 20		7.610[	50.000	50181	7.506	40.000]	226619	0.17714666466625
11	1	7.610	50.000]	44092	7.505	40.000	201923	0.17468837130986
1 12	 	7.620	50.000	81056	7.516	40.000	329174	0.19699247206645
j 23	; }	7.620  +	50.000	93793	7.516	40.000	378407]	0.19829020076267
24	] 	7.630	50.000	6854.9	7.516}	40.000	271629	0.20189007801082
1 15	[	7.630	50.000	5 <u>4</u> 835]	7.526	40.DDO)	21.9680	0.19969045884924
1 16	] 	7.630	50.000	67628]	7.527	40.000	267569	0.20219980540508
17		7.630	50.000]	94376	7.527	40.000	349016]	0.21632475301992
1 18	]	7.635	50.000	. 51607	7.532	40.000	209252	0.19730086211840
19	 	7.635	50.000	62563	7.531	40.000	268404	0.19220288474631
20	 	7.546	50.000	80386]	7.542[	40.000}	334425	0.19229662854153
] 21	`   	7.645	50.000	25473	7.542	40.000]	302573	D.06735035842590
22	i L	7.645	50.000	17649	7.542	40.000	223404	0.06320030080034
23	1	7.546	50.000	68382	7.562	•	292758)	D.18686286967393
24	İ	7.656]	50.000]	97952	7.552	4D.00D	390143	0.20085353319168
25	•		50.000		7.552	40.000		0.17605084001507
	]	7.666]		79703	7.563		331752	0.19219899201613
27	1	7.677	50.000]	59624	7.573	40.000]		0.19411618679418
] 28	ĺ	7.687			7.583			0.20354425053277
-	Ì	7.687	50,000]	•	•	•	172923	0.19535168832370
30	1	7.587	50.000	_	7.583	40,000	·	0.19977619932668
31		7.697	50.000		7.594	<b>6</b> 0,000]	•	0.20224630464151
32	•	7.697	50.000		7.594	€0.000	250339	0.20941523294413
33		7.760			7.656	40.DD0]		0.17829817371714
·								+

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34	7.759	50.000	58725	7.656	40.000	303207	0.18132826748723	
35] '	7.770]	50.000[	66249	7.666	40.000	3088 <del>6</del> 4	0.17159397016162	<b>-</b> 
36]	7.78D	50.000	 [3983	7.677	40.DDD	288883	0.17718730420274	<b>.</b>
37  3	7.780	50.000	61.267	7.677]	40.DDO}	292290	0.16768825481542	•
38  3	7.791	50.000	. 56069	7.687 j	40.000	238922	0.18773993186061	<u>-</u>
39 7	7.792]	50.000	50573	7.687	40.000	243613	0.16607652300986	•
40 7	7.792	50.000	[08828	7.687	40.000	256301	0.17457598682799	•
41 7	7.791	50.000	55930]	7.687	40.000	256301	0.17457598682799	•
42 7	7.791]	50.000	43995	7.687	4D.000	215682	0.16318468856928	=
43 7	.801	50.000	55663	7.697	40.000	269061	0.16550299002828]	•
44 7	801	50.000	52406	7.697	45.000	242418	0.17294425331452	•
45 7	.852]	50.000	49689	7.697	40.000	246748	0.16110039392417	-
46 7	.801	50.000	83728	7.697	40.000}	367827	0.18511044601231	
47) 7	1.801	50,000	69470	7.697	40.000	316865	0.17539330629763	
48 7	7.833	50.000	98764	7.708	46.000	4480D1	0.17636389204488	-
49 7	.811 )	50.000	65199	7.708	40.000]	319060	D.16347771579013	
50 7	.gii	50.DOO[	63819	7.708	40.000	326041	0.15659134894078	-  -
51] 7	.811	50.000	69420	7.708	40.000	325539	0.17059707131864	-
52 7	7.B22}	50.000]	66513	7.718	<u>40.000</u> ]	295770	D.17990465564459	
53 7	.822	50.000]	58901	7.718	4D.000	274779	0.17148617616339	
54   7	822	50.000}	58321	-	-	264752	0.17622831933281	
55 7	7.B15]	50.000	•	7.713	40.000}		0.17526620532459	
56 2	7.858	50.000	49564	7.754	40.000]	260934	0.15195873285965	
57  7	7.858	50.000}	63475	7.754	40.000	318667	0.15935129774969	, •
58 7	7.889]	50.000	58894	7.785	40.000	318462	0.14792094504211	_
59 7	1.283	50.000	52456	7.796	-	304639)	0.13775255302177	•
	7.B89	50.000	44B55	7.796[	40.000	283970]	0.12636546114026	-
a] រ	7.889	50.000	40711	7.785	40.000	264293	0.12322990014870	•
	  +	]	1	]	 ++		. ]	
Avg	7.729	50.000 j	ereer	7.615	40.000[	4333	0.17364233986573	

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Ind	Sublist	Calibration File	. 1
<u> </u>			
1 1_62		//sv5/c/chem/sv5.i/l002l0.B/ESL1002	•

2 1_82705TD	]\\SV5\C\chem\sv5.i\100210.B\ES120D2D	j
3]1_82705至>	]\\SV5\C\chem\sv5.i\lD02l0.B\QCD0l	1
4 1_8270510	[\\SVE\C\chem\svs.i\100110.B\HSL1001	1
5 1_8270STD	[\\SV5\C\chem\sv5.i\093010.B\ESL0930	]
6 1_8270ETD	\\sv5\c\chem\sv5.i\092910A_3\HSL0929A	1
7 [1_8270STD	\\SV5\C\chem\sv5.i\092910.B\HSL0929	
8 1_8270 <i>STD</i>	\\SV5\C\chem\sv5.i\092\$10.B\QC001	1
9 1_8270STD	\\SV5\C\chem\sv5.1\092810A.E\ESL0928	]
10 1_8270570	\\SV5\C\chem\sv5.i\D928l0.B\HSL0928	Ī
11 1_8270STD	\\SV5\C\chem\sv5.i\D92710.B\HSLD927	Ī
22 2_82705770	\\SV5\C\chem\sv5.i\092510.B\QCD01	
] 13  1_8270STD	{\\sv5\c\chem\sv5.i\092510.B\RSL0925	I
14 1_8270STD	{\\SV5\C\chem\sv5.i\092410.B\QC001	†   •
15 1_8270STD	\\SV5\C\chem\sv5.i\092410.B\HSL0924	1
16 1_82705TD	\\SV5\C\chem\sv5.i\D9231DA_B\HSLD923A	Ī
17 1_8270STD	\\SV5\C\chem\sv5.i\092310A_B\QC001	Ī
18 1_8270STD	[\\SV5\C\chem\sv5.i\092310.B\QC001	ļ
] 19[1_8270STD	]\\SV5\C\chem\sv5.i\092310.3\HSL0923	1
20 1_82705TD	]\\SV5\C\chem\sv5.i\092210.B\E5L0922a	]
21 1_8270STD	\\SV5\C\chem\sv5.i\092210.B\ESL0922	]
22]1_8270570	\\SV5\C\chem\sv5.i\0922l0.B\QC00l	Ī
23 1_8270STD	\\SV5\C\chem\sv5.i\092110.B\HSL0921	
24 1_8270STD	[\\SV5\C\chem\sv5.i\092010.B\QC001	]
25{1_8270STD	\\SV5\C\chem\sv5.i\0920l0.E\RSL0920	Ī
26 1_8270STD	/\/SV5\C\chem\sv5.i\091910a.B\HSL0919a	]
27 1_8270STD	\\SV5\C\chem\sv5.i\091910.B\ESL0919	
28 1_8270510	\\\$V\$\C\chem\\$V\$.i\091910.B\QC001	
29 1_82705TD	\\sv5\C\chem\sv5.i\091710.B\ESL0917	I
30 1_8270570	[\\SV5\C\chem\sv5.i\091710.E\QC001	Ī
· · -	]\\SV5\C\chem\sv5.i\091510b.B\ESL0915b	1
32 1_8270STD	\\SV5\C\chem\sv5.i\051510b.2\QC003	1
· · —	019042/d.2010/5/5/c/car/mada/5/5/5/5/05/0	+
34 1_6270STD	[\\SV5\C\chem\sv5.i\091010.B\QC001	1
++		+

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35 1_8270STD	[\\sv5\c\chem\sv5.i\090910a.B\ESL0999a	1	
36 1_6270 <i>5</i> 20	\\SV5\C\chem\sv5.i\090910.B\ESL0909	1	
37]1_8270STD	\\SV5\C\chem\sv5.i\\090910.B\\QC001		
38   1_#Z70STD	//5V5/C/chem/sv5.i/090810.B/ESL09D8	1	
39]1_6270STD	\\5V5\C\chem\sv5.1\090Bl0.B\Primer	1	
40 1_8270STD	\\sv5\c\chem\sv5.i\090710.B\ESIA907		
41]1_8270STD	\\SV5\C\chem\sv5.i\090710.B\ESL0907	. !	
42 1_8270STD	\\sv5\c\chem\sv5.i\090110.B\HSL0901	I	
43   1_8270STD	]\\5V5\C\chem\sv5.i\083110.B\ESL0831	- <del></del>	
44 1_6270STD	]/\sv5\c\chem\sv5.i\083020.B\QC001	]	
45   1_8270STD	/\sv5\c\chem\sv5.i\083010.B\E5Li0830	1	
46 )1_8270STD	\\\$V5\C\chem\sv5.1\0827L0.B\QC001	1	
47   1_82705TD	\\sv5\c\chem\sv5.i\082710.B\HSL0827	<del></del>	
48   1_8270STD	]\\SV5\C\chem\sv5.1\0826L0.B\ESL0826	- <del></del>   	
	}\\5V5\C\chem\sv5.i\082610.B\QC001	1	
50   1_8270 <i>5</i> TD	}\\SV5\C\chem\ev5.1\082510.B\QCOOL	 	
51   1_8270STD	1/\5V5\C\chem\sv5.i\0825l0.B\H5L0825		•
52   1_8270STD	/\sv5\c\chem\sv5.i\082310B.E\ESL0823	1	
+	\\sv5\c\chem\sv5.i\082310B.B\HSL0823H	}	
56 1_8270STD	[\\sv5\c\chem\sv5.i\082310B.B\HSL0823D	<del>-</del>	
55   1_82705TD	\\SV5\C\chem\sv5.i\082310A.B\ESL0823A		
+	//\SV5\C\cbem\sv5.i\082010.B\HSL0820		
57  1_8270STD	//sv5/c/chem/sv5.i/082010.B/QC0U1	1	
58   1_8270SID	\\sv5\c\chem\sv5.i\081810A.B\E5L0818A		
59   1_8270 <i>SI</i> ID	/\sv5\c\chem\sv5.i\081810.B\BSL0818	1 .	
60   1_8270SZD	\\\$Y5\C\chem\\$v5.i\081710.B\ESL0617D	[	
<del> </del>	\\SV5\C\chem\sv5.i\081710.B\ESL0817H	<u> </u>	

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Data File: \\SV5\C\chem\sv5.i\100210.B\8270f.m

Report Date: 04-Oct-2010 10:52

# Signal Calibration Report

Method : \\SV5\C\chem\sv5.i\100210.B\8270f.m Last Edit: 04-Oct-2010 09:00 onishim

Compound: 110 Pentachlorophenol Mass: 266.00

Istd Compound: \* 4 Phenauthrene-dl0

### Calibration Formulas

Calibration Mode: by Response

Curve Type: Averaged Origin: None

Amt = Rsp/ml m1 = 0.11930897400000

RSD: 15.221

### Initial Calibration Table

۰.						L		
•			Amount				Istd Response	Response Factor
1	1	9.240	5.00000	5849	9.406	-	496356	0.09427104739340
i	2	9.240		10551	9.406	€0.000	428440	0.09850620857063
	3 į	9.240	•	30451	9.406	40.000	525834	0.11581982146457
•	4	9.240		67882	9.406	40.000	462722	0.31736318014704
	5	9.240		126397	9,406	<u> </u>	477777	0.13227614556582
I	6	9.240	120.00000	215360	9.4D6	40.000	515607	D.13922748656761
			160.00000		9.406	40.000		0.13770092657303[

Ivl  Sublist	Calibration File	+ !
1 1_8270STD	\\SV5\C\chem\sv5.i\100210_B\ESL1002A	1
2 1_8270STD	\\SV5\C\chem\sv5.i\100210.E\H5II.002B	1
3 1_8270STD	\\5V5\C\chem\svs.i\100210.B\ESL1002C	1
4 1_82705TD	]\\SV5\G\chem\sv5.i\100210.B\ESL1002D	T 
5 1_8270SED	\\SV5\C\chem\svs.i\1002l0.B\RSL1002%	I
6 1_8270STD	\\\$V5\C\chem\sv5.i\100210.B\ESL1002F .	}
7 1_8270570	]\\SY5\C\chem\sv5.1\100210.B\ESL1002G	

### Continuing Calibration Table

+		+-		4	·	-÷.		·					<del></del>			
Ind	RT	1	Amount	1	Response	1	But.	j⊥std	Amount	Ist	d Resp	ဘာနှင့	Respo	mse	Factor	: [
					,	-4										

1  9	.240[	50.000	629051	9.406	<u>40.000</u> ]	380734]	0.13217837125132}		
	.240  .240	50.000	678\$2	9.406	40.000	462722	0.11735118014704		
	+ -257	50.000	111129	9,423	£0.000	692643	0.12835256742218		
	.257	50.000	88353	9.423	40.000	569627	0.12408541027725		
	.267	50.000[	65176	9.423	40.00D}	444572	0.11728313 <i>9</i> 73889		
+	. 268 ]	50.000	60910	9.433	40.000	402268	0.12113317489833		٠
+	.276	50.000	51724	9.433	40.000	3423BB	0.12085470285174		
	 .278	50.DOB	37406 j	9. <u>464</u>	40.000	257561]	0_11618529202791		
	278]	50.000	56153 ]	9.464	40.000[	367144	0.12235635064171		•
<del>-</del>	 .278[	50.000	49575	9.444	40.000	316244	0.12643148960928		
	2 <del>99</del>	50.000	89278	9.455	40.000	<del></del>	0.13391557714699 [		
	288 [	50.DOO[	102299	9.454	40.000	604130{	0.13546620760432		
13) 9.	299]	50.000]	7 <u>4</u> 887	9.254	40.DD0	434948	D.1377396B382427		
14 j 9.	+ 299	50.000]	· €1171 }	9.465	£0.000	350224]	0.13973399121680		
15  9.	309	50.000]		9.475	40.000]	436116	0.13325078648800		
16 9.	309	50.000]	99213	9.475	40.000	545533	0.14549147347640		
17] 9.	+ 314	50.000	56050 [	9. <u>4</u> 80]	40.000]	341600	0.13126463700234		
18  9.	314	50.000	67187	9.480	40.000	410196	0.13103394474836		
79   9.	324	50.000[	90596	9.490	40.000	530756	0.13655389670583		
20 9.	32 <b>4</b>	50.000	32043 ]	9.490[	40.000	484990	0.05285552279428		
<b>Z1</b>   9.	324	50.000	22238 [	9.490	40.000	346959	0.05127522272084		
22 9.	324	50.000	81528 ]	9.490	40.000	462218	0.14110744280837		
23   9.	335	50.000}	103580	9.511	4D. DDD]	589949	0.24045959905009		
24[ 9.	335	50.000]	72155	9.501]	40.000	446339	0.12932770831140]		
25 9.	355	50.000	91662]	9.521	40.000]	517550	0.14168602067433	•	
26   9.	366	50.000	67431	9.532	40.000	396847	0.13593349578049		
27  9.	366	50.000}	71407	9.542	40-000	407176	0.14029707055426		
28   9.	365	50.000	49946	9.532	40.000	298933	0.13366473423811		
29   9.	356	50.000	58621	9.542	40.DD0	335623	0.13973059057335		
30 9.	386	50.000}	53856	9.552	40.000	329730	0.13067176174446		
31 9.	387	50.000	69993	9.552	40.000	399673	0.14010053218506		
32   9.	459	50.000	87217	9.625	#0.000	539077	0.12943160253544		
33 j 9.	459 [	50.000	77540	9.625	40.000	458679]	0.13524054949104		

34	9.470]	50.000	79232	9.646	<b>40.000</b>	482971	0.1312€100618878
35	9.480	50.000	75075	9.656	€0.000	465501	0.12902227922174
36	9.480	50.000	69872	9.656	40.000	435300	0.12841167011257
37	9.490	50.000	60626]	9.656	40.000	378611	0.12810193047746
38	9.490	50.000]	60476	9.666]	40.DDO	383533]	0.12614507747704
39]	9.490	50.000	68275	9,656	40.000	401061	0.13618196823086
[ 40]	9.490	50.000	68275	9.656	40.000	401081	0.13618196823086
47	9.490	50.000	51783	9.666]	40.000	337799	0.12263624226241
42	9.501	50.000	70205	9.577	40.000	425699	0.13193359627342
43	3.511	50.000	. 60339	9.677	40.000]	381025	0.12794751000591
44	9.501]	50.000	61157	9.677	40.900	380328	0.12854054184809
45	9.500	50.000]	98266	9.676	40,000	586969	0.13393007126441
46	9.500	50.000	82460]	9.677	40.000	500580	0.13178313156738
4+	9.511	50.000	117721	9.687	40.000	687233	0.13703765680635
48	9.512	50.000	77582	9.687	<b>€</b> 0.000	485585	0.12761613929590
49	9.511	50.000	77449	9.687	40.000	498103	0.12439033693834
[ 50]	9.511	50.000	85917	9.687	40.000]	500311	0.13738174855240]
51	9.521	50.000	80098	9.697	40.000	46D974	0.13900653832971]
52	9.521	50.000	7 <u>11</u> 55	9.697	40.000	428920	0.13271472535671
53	9.521	50.000	72603	9.697	40.000	415811	D.13968461632809
54	9.525	50.000	108254	3.702	40.000	650674	0.13309768025155
55	9.568	50.000	64239	9.7 <u>44</u>	<u>4</u> 0.000	411802	0.12460162893818
56	9.578	50.000		9.754]	40.000		0.13336564203779
57						486034]	0.12936543533991
		50,000]		9.725	40.000	4676D7	0.12447204597023
59	9.609[	50.000		9.785	40,000	451801	0.12033262431911
			63635	9.785	40.000		0.12177840252031
	<del>-</del>		1	1	1		. [
YA3.  +	9.411]	50.000	=	9.581	•	5967	0.12849428241810
<del></del>	+				+		<del> </del>

Ind  Sublist	Calibration File	1
1 1_8270STD	{\\sv5\c\chem\sv5.i\100210.B\EST11002E	- [
2[1_8270STD	\\SV5\C\chem\sv5.i\100210_B\HST.1002D	[

3]1_8270 <i>5</i> 70	1/SV3/C/cbem/sv5.i\100110.EVEX11001	
4 1_827 <i>05</i> TD	[\\SV5\C\chem\sv5.i\093010.B\HSL0930	<del>-</del>
5 1_6270STD	\\sv5\c\chem\sv5.i\092910A.B\HSL0928A	
6[1_82705%D	\\SV5\C\chem\sv5_i\092910.B\HSL0929	·
7 1_8270SID	\\SV5\C\chem\sv5.i\0929l0.B\QC00l	
8   1_8270STD	\\SV5\C\chem\sv5.i\092810A_B\ESL0928	·
9 1 8270SED	}\SV5\C\chem\sv5.i\052810.B\HSL092B	·
10   1_8270 <i>SI</i> D	\\SV5\C\chem\sv5.i\0927l0.B\HSL0927	·; [
11   1_8270STD	\\SV5\C\chem\sv5.i\092510.B\QC001	·
12]1_8270STD	\\sv5\c\chem\sv5.i\092510.B\ESL0925	. <del></del>
13  1_8270SID	]\\SV5\C\chem\sv5.i\D92410.B\QC001	
14 1_8270STD	\\SV5\C\chem\sv5.i\D92410.B\HSL0924	
15 1_8270STD	\\SV5\C\chem\sv5.i\092310A_B\ESL0923A	· · · · · · · · · · · · · · · · · · ·
16 1 8270SID	{\\SV5\C\chem\sv5.i\092310A.B\QC001	
17]1 8270STD	}\\5V5\C\chem\sv5.i\D9231D.B\QC001	· · · · · · · · · · · · · · · · · · ·
18 1 B270STD	\\SV5\C\chem\sv5.i\092310.B\ESL0923	1
19 1 8270STD	}\\\$V\$\C\chem\sv5.i\092210.B\HSL0922a	
20 1_8270SED	\\SV5\C\chem\sv5.i\092210.B\ESL09Z2	
21 1 8270SED	\\sV5\C\cham\sv5.i\092210.B\QC001	
22 1_82705TD	}\\$V5\C\chem\\$v5.i\092110.B\E9L0921	
23 1_82705TD	\\5V5\C\chem\sv5.i\052010.B\QC001	1
25;1_82703ED 24 1_8270STD	\\SVE\C\chem\sv5.i\092010.B\ESL0920	
25 1_82705TD	\\SV5\C\chem\sv5.i\\091910a.B\ESL0919a	+
26 1 8270STD	/\5V5\C\chem\sv5.i\G91910.B\BSL0919	
20  1_8270SID	//SVE\C\chem\sv5.i\091910.B\QC001	· · · · · · · · · · · · · · · · · · ·
27 1_827051D 	[\\SV5\C\chem\sv5.1\091710.B\BSL0917	
28   1_82705ED	[\\\$V5\C\chem\\$V5.1\091710.B\QC001	
+		1 + 1
30   1_8270SED		· · · · · · · · · · · · · · · · · · ·
31[1_8270SED	]\\SV5\C\chem\sv5_i\091510b_B\QC003	; 
32]1_8270570	}\\sv5\c\chem\sv5.i\B91010.B\RSL0910	+
33  1_82705TD	\\\$V5\C\chem\\$V5.i\091010.B\QCOD1	+
34 1_5270STD	\\sv5\c\chem\sv5.i\050910a.B\ESL0909a	1

36 1_82705770	//sv5/C/cbem/sv5.i/090910.B/QCD01	į
37 1_82785ID	]//SV3/C/chem/sv5.i/090820.B/HSL0908	
38 1_8270STD	\\SV5\C\cbew\sv5.i\090810.B\P-imer	
39 1_8270STD	\\sv5\c\chem\sv5.i\0907l0.B\HSL0907	·
40 1_62705TD	\\\$V5\C\chem\sv5.i\090718.B\ESL0907	[
41 1_82705TD	\\sv5\c\chem\sv5.i\090110.B\ESL0901	1
42 1_8270 <i>S</i> TD	\\575\C\chem\sy5.i\083110.3\ESL0831	1
43   1_8270 <i>ST</i> D	\\sv5\c\chem\sv5.i\083010.B\QC001	1
44 1_827DSTD	\\sv5\c\chem\sv5.i\083010.B\HSL0830	1
45   1_82705TD	\\sv5\C\chem\sv5.i\082710.B\QC001	 
46]1_8270SID	\\sv5\c\chem\sv5.i\082710.B\ESL0827	<del></del>
47   1_82705TD	]\\SV5\C\chem\sv5.i\082610.B\H5L0826	
48 1_8270STD	\\SV5\C\chem\sv5.i\082610.B\QC001	·
49 1_8270SZD	[\\SV5\C\chem\sv5.i\082510.B\Q2001	
50]1_8270STD	\\SV5\C\chem\sv5.i\082510.B\FSL0825	 1
51 1_8270STD	\\sv5\c\chem\sv5.i\082310B.B\HSL0823	
52 1_8270SID	\\sv5\c\chem\sv5.i\082310B.B\ESL0823H	
53 1_82705750	]\\sv5\c\chem\sv5.i\082310B.B\HSL0823D	]
54 1_8270STD	\\svs\C\cbem\sv5.1\082310A_B\ESL0823A	
55 1_82705TD	/\SV5\C\chem\sv5.i\082010.B\HSL0820	<del></del> ;
56   1_8270STD	\\sv5\c\chem\sv5.i\082010.B\QC001	
57 1_8270STD	]\\sv5\c\chem\sv5.i\081810A.B\ESL0818A	1
58 1_8270STD	\\sv5\c\chem\sv5.i\081810.B\ESL0818	)
59   1_82705770	\\\$V5\C\chem\\$v5.i\081710.B\HSL0817D	1
60 1_82705TD	\\sv5\c\chem\sv5.i\081710.B\BSL0817E	

•

# TAILING FACTOR/DEGRADATION SUMMARY RESULTS

### TAILING ANALYSIS SUMMARY

Compound	·	Max Allowed Test
Pentachlorophenol Benzidine	0.6825896 0.6244503	5.000 PASS

### DDT DECERADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	&Breakdown Max	•
4,4-DDD + DDE	189907	8.9	20.5   PASS

Sample //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D

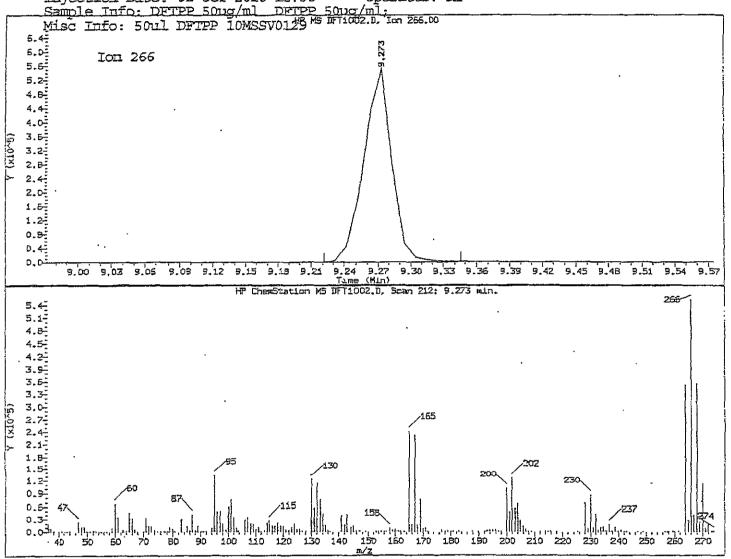
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* \*\*\* PASSED \*\*\* \*\*\*\*\*\*\*\*\*

### TAILING FACTOR/DECRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 10/03/2010 11:04

Datafile Analyzed: //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D Method Used: \\SV5\C\chem\sv5.i\100210.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 02-OCT-2010 12:06 Operator: KT



### Pentachlorophenol

9.387 . Exp. RT =

9.273 Found RT =

 $Time3 \approx 9.294038$ Time1 = 9.243001Time2 = 9.273333Tailing Factor = (Time3 - Time2) / (Time2 - Time1)

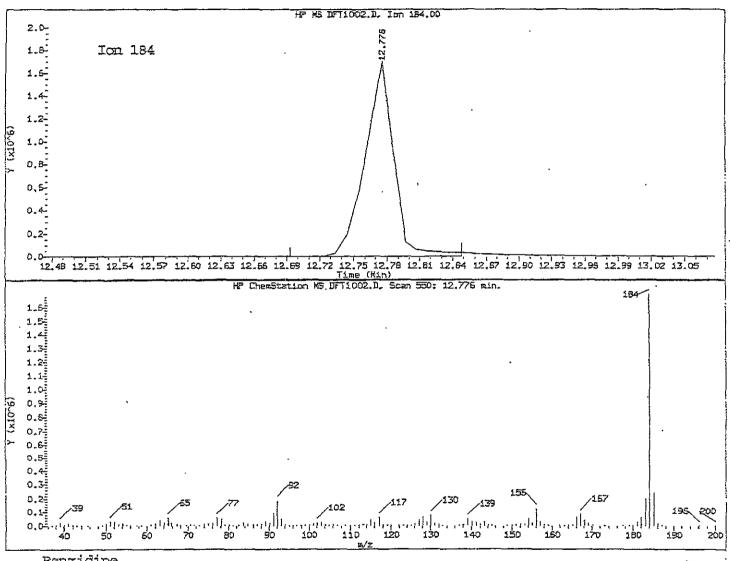
Tailing factor for Pentachlorophenol OK

Maximum Allowed = 5.0Tail Factor = 0.683

Datafile Analyzed: //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D Method Used: \\SV5\C\chem\sv5.i\100210.B\DFTPP.M\resol.m Inst: sv5

Injection Date: 02-OCT-2010 12:06 Ope Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml; Operator: KI

Misc Info: 50ul DFTPP 10MSSV0129



### Benzidine

Exp. RT = 12.911

Found RT = 12.776

Timel = 12.74377Time2 = 12.77603Tim=3 = 12.79618Tailing Factor = (Time3 - Time2)/(Time2 - Time1)

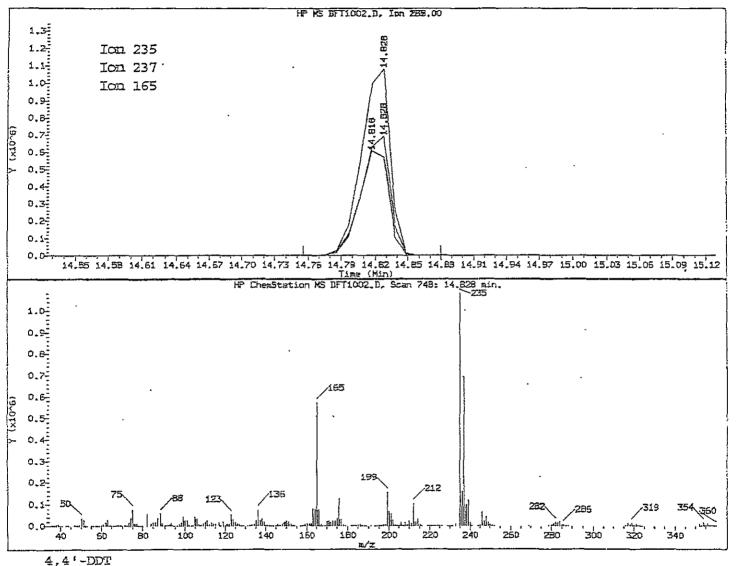
Tailing factor for Benzidine OK

Tail Factor = 0.624 Maximum Allowed = 3.0

Datafile Analyzed: //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D Method Used: \\SV5\C\chem\sv5.i\100210.B\DFTPP.M\resol.m Inst: sv5 Injection Date: 02-OCT-2010 12:06 Operator: KT

Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml;

Misc Info: 50ul DFTPP 10MSSV0129

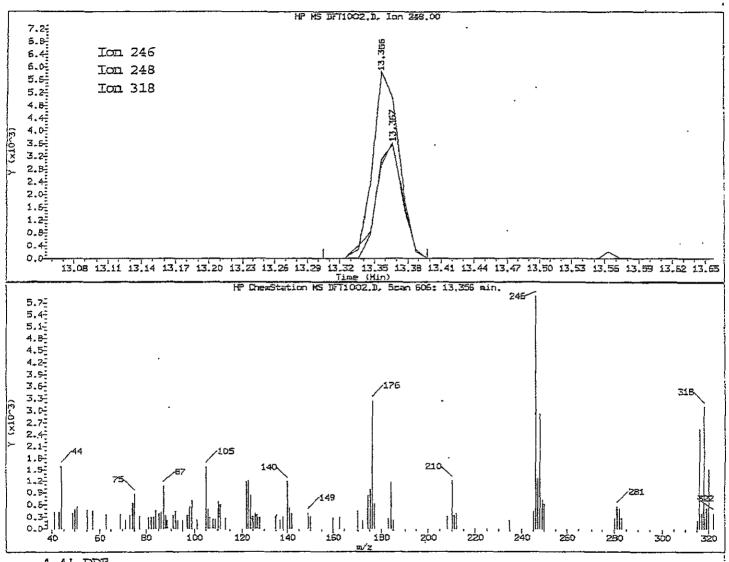


14.942 Exp. RT = Found RT = 14.828

Mass	Area	Ratio
235	1937042	100.00
237	1226081	63.30
165	1111108	57.36

Datafile Analyzed: //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D Method Used: \\SV5\C\chem\sv5.i\100210.B\DFTPP.M\resol.m Inst: sv5 Injection Date: 02-OCT-2010 12:06 Operator: KT Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml;

Misc Info: 50ul DFTPP 10MSSV0129



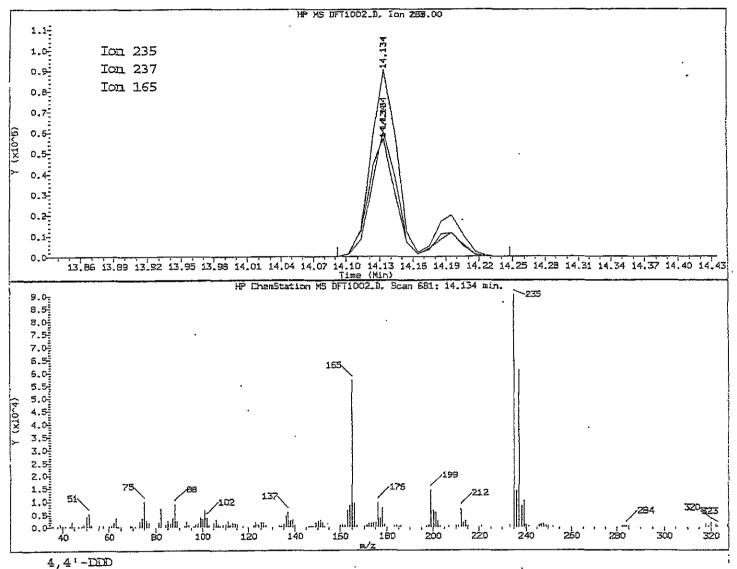
4,4'-DDE

Exp. RT =13.470 13.356 Found RT =

Mass	Area	Ratio
246	9630	100.00
248	5964	61.93
318	٥	0.00

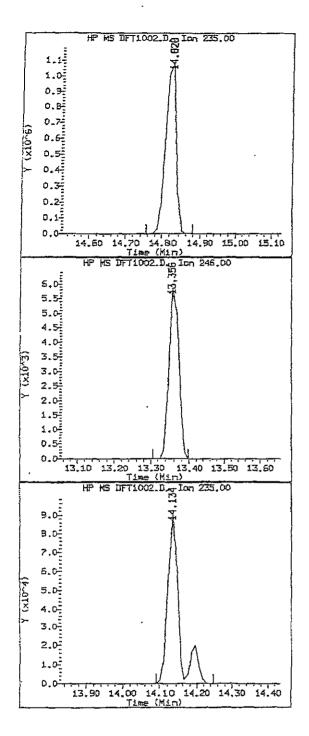
Datafile Analyzed: //SV5/C/chem/sv5.i/100210.B/DFT1002.D/DFT1002.D Method Used: \SV5\C\chem\sv5.i\100210.B\DFTPP.M\resol.m Inst: sv5 Injection Date: 02-OCT-2010 12:06 Operator: KT Sample Info: DFTPP 50ug/ml DFTPP 50ug/ml;

Misc Info: 50ul DFTPP 10MSSV0129



Exp. RT = 14.248Found RT = 14.134

Mass	Area	Ratio
235	180277	100.00
237	115795	64.23
165	113090	62.73



Compound: 4,4'-DDT Quant Mass: 235 RT: 14.828 Area: 1937042

Compound: 4,4'-DDE Quant Mass: 246

RT: 13.356 Area: 9630

Compound: 4,4'-DDD Quant Mass: 235 RT: 14.134

Area: 180277

# DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

4					+
	Compound	Response	%Breakdown	Max Allowed Test	ŀ
1					٠
3	* * 1777 : 1777			1	:
	4,4-DDD+DDE	189907	8.9	20.5 PASS	}

Data File: \\SV5\C\chem\sv5.i\100210.B\DFT1002.D

Report Date: 03-Oct-2010 11:04

### TestAmerica West Sacramento

Page 1

Data file : \\SV5\C\chem\sv5.i\100210.B\DFT1002.D Lab Smp Id: DFTPP 50ug/ml

Inj Date : 02-0CT-2010 12:06

: KT Inst ID: sv5.i Operator

: DFTPP 50ug/ml; Smp Info

Misc Info : 50ul DFTPP 10MSSV0129

Comment

Method : \\SV5\C\chem\sv5.i\100210.B\DFTPP.m Meth Date : 17-Aug-2010 14:10 scotts Quant T

Quant Type: ISTD

Cal Date : Cal File:

Als bottle: 96 QC Sample: DFTPP

Dil Factor: 1.00000 Integrator: HP RTE

Compound Sublist: all.sub

Target Version: 4.14 Sample Matrix: None

Processing Host: SV5

### CONCENTRATIONS

				•	OM-COT	FINAL		
RT.	exp rt	rel ri	MASS	RESPONSE	( ug/L)	( ug/L)	TARGET RANGE	RATTO
<del>(2000-0</del>	-		P. Balling	in the second second second	****	-		*****
3	dît <u>rp</u> p					CAS #:	5074-71-5	
0.000	11.201	(0.000)	198	746588			0.00- 100.DD	100.00
0.000	11.201	(0.000)	51	320640			30.00- 80.00	42.94
0.000	11.201	(0.000)	68	4826			0.00- 2.00	1.62
0.000	11.201	(0.000)	63	298D4B			0.00- 0.00	39.92
0.000	11.201	(0.000)	70	1913			0.00- 2.00	0.54
0.000	11.201	(0.000)	127	406528			25.00- 75.00	54.44
0.000	11.201	(0.000)	197	٥	0.9	0.0	0.00- 1.00	0.00
0.000	11.201	(0.000)	299	49104			5.00- 9.00	6.58
0.000	11.201	( D.DDD)	275	170816			10.00- 30.00	22.88
0.000	11.201	( 0.000)	365	20496			0.75- 0.00	2.74
0.000	11.201	{0.000}	441	100984			0.01- 99.99	74.22
0.000	11.201	(0.000)	442	702528			40.00- 110.00	94.09
0.000	11.201	( 0.000)	443	136064			15.00- 24.00	19.37

Page 2

Data File: \\SV5\D\chem\sv5\_i\100210\_B\DFT1002\_D

Bate : 02-007-2010 12:06

Client ID:

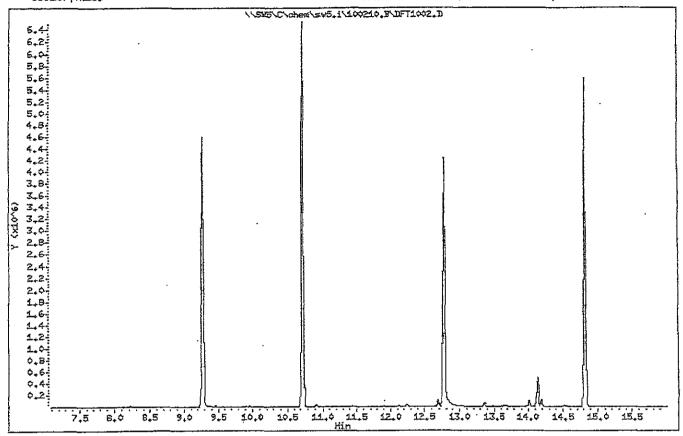
Instrument: sv5.i

Sample Info; DFTPP 50ug/ml;

Operator: KI

Column phase:

Column diameter: 2,00



...

Date : 02-DCT-2010 12:06

Client ID:

Instrument: sve.i

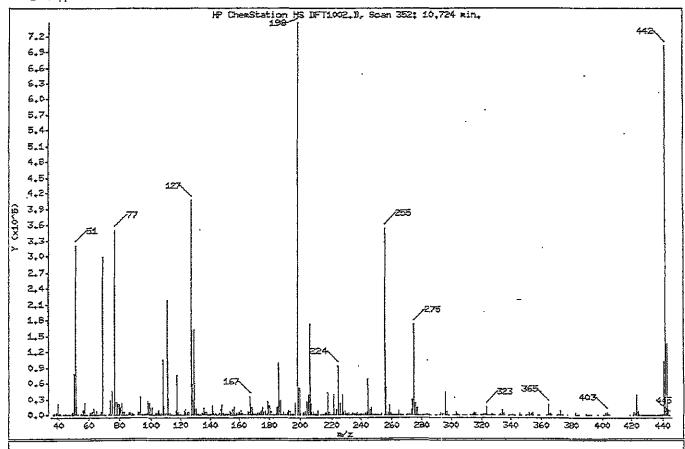
Sample Info: DFTPF 50ug/al;

Operator: Kī

Column phase:

Column diameter: 2.00

1 oftpp



R/e ION ABUNDANCE CRITERIA	# RELATIVE ABUNDANCE	
1	İ	1
198   Base Peak, 100% relative abundance	1 100.00	1
51   30.00 - 80.00% of mass 198	1 42.54	1
68 1 Less than 2,00% of mess 69	্য <b>०.</b> হে € 1.62)	i
69   Hass 69 relative abundance	1 33,92	1
70   Less than 2,00% of mass 69	( 0,26 ( 0,64)	1
127   25,00 - 75,00% of mass 193	l 54,44	I
157   Less than 1.00% of mass 198	1 0.00	1
199 ! 5,00 - 9,00% of mass 198	I 6+58	i
275   10.00 - 30.00% of mass 198	1 22,88	i
365   Greater than 0,75% of mass 198	1 2,74	1
441   Present, but less than mass 443	j 13.52	1
442   40.00 - 110.00% of mass 198	l 94 <b>.</b> ¢9	ì
443   15.00 - 24.00% of mass 442	18,22 (19,37)	1

Data File: \\SW5\C\chem\sv5.i\100210.B\DFT1002.D

Date : 02-DCT-2010 12:06

Client ID;

Instrument: sv5.i

Sample Info: DFTPP 50ug/al;

Operator: KT

Column phase:

Column diameter: 2.00

Data File: DFT1002.D Spectrum: HP ChemStation HS DFT1002.D, Scan 352: 10,724 min, Location of Haximum: 198.00 Number of points: 340

	m/z	¥	#√z	¥	m/z	¥	m/z	¥
1	36.10	203	1 130,00	12809 I	219,20	447	1351*∞	1763 !
ſ	37.10	1216	131.00	2287 (	221.00	37608	322.10	913
I	38.10	3314	1 132,00	1225	223,10	9674	1 323,10	16294
i	39,10		133,00	620 }	224,10	93432	1 324,10	2245 1
ī	40,00	1076	1 134.00	3794 [	225,10	21544	324,80	382 (
+-			<del></del>				<del></del>	<del></del>
ı	41,10	949	1.132*10	11378	226,10	1736	326,00	507 1
1	43,10	352	136.00	4886 1	227,00	37976	1 327,¢¢	2789
Į.	44,00	922	1 137,00	5203 (	228,00	4945	T 328₊¢¢	1262
Į	45.00	428	138.00	1265	229,00	7548	1 329,40	343
I	47.00	204	1 139.00	791 l	230,00	1024	I 331,90	894 l
<del>! -</del>							+	+
i	49,10	2676	140,00	2233 [	231.10	2757	1 333,60	1455
I	50,10	77024	141.00	17480 I	232,00	528	1 334,10	959 <b>0</b> 1
1	51.10	320640	1 142,00	72 <del>5</del> 9 I	233,00	64 <u>1</u>	1 332.00	2774
•	52,10	16189	143.00	3921. 1	234.00	2909	1 335,00	291 !
1	53,10	963	1 144.00	1375 [	235,00	2419	1 339.00	369 1
<del></del>		<u></u>	<del> </del>	<del></del>			<del> </del> -	
Į	55,00		1 145,10		236,10		1 340,00	399 }
ŧ	56.00		1 146,00		237,00		1 341,00	2042 1
ł	57,00		1 147,00		238,00		342,10	252 i
3	58.00		1 148,00		239,00		1 343,20	220 1
1	59,10	372	1 149,00	4031 }	240,00	1065	1 346,00	2819
 !	61,00	7000	1 150,10	4664 1	241.00	4070	1 345.90	608 1
1	62.00	•	1 151,20		242.00		1 350,30	205
1	•		1 152,10		243.10		1 351.00	283 i
; ]	63,10		155,00		244_10		1 352,00	5049 [
•	64,10 65,10		1 154.00		245.10		1 353,10	3110 1
!	221.10	6507	1 3274.00		240+14	2060	1 303414	
i	66,00	499	155.00	10151 1	246.00	14573	1 354,00	5432 1
ı	67.10	-	156.10		247_00		1 355.00	1087 (
ļ	88.00		1 157.10		248_10		1 358.00	241 1
í	69.00		158.10		249.00	•	355.00	574 i
	70.10		159.00		250.00		363,50	249 [
	. * * * * * * * * * * * * * * * * * * *							
ı	71,10	410	I 160.00	5246 1	250.90	1000	1 365.00	20496
i	73,10	•	161,10		252,00		1 366.00	3166
ì	74.00		162.00		253,10		1 367.00	225 1
ľ	75.00		1 163.10		255.00		1 370.10	477 I
ŀ	76.10		164.00		256.00		370.90	1541 [
r	* ****	فالمر يحييك	. 201544	ئى مىمار ئ				

Date : 02-DCT-2010 12:06

Client ID:

Instrument: sv5.i

Sample Info: DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00

Data File: DFT1002.D Spectrum: HP ChemStation HS DFT1002.D, Scan 352: 10.724 min. Location of Maximum: 198.00 Humber of points: 340

	n/z	Y	r⊈∕z	Y	m/z	<b>Y</b> ,	n/z	. Ч
1	77.10	349952	165.∞	6962 1	257,00	4474	372,10	84 <del>83</del> [
ţ	78,10	23464	166,00	5717	255,00	19504	373,10	1814
ı	79,00	20048	167.00	33648 [	259,10	3695	373₊8≎	34 <b>9</b> [
ı	90,00	14146	168,00	13622	260,00	645	377.10	263 I
1	81.00	22008	169.00	2802 i	261,10	797	383.00	2624
i	8Z.00	5822	170.00	1014	262,20	249	383*90	598 [
ı	£3,00	5093	171.00	1339 i	263,00	269	385.⇔	289 1
ŧ	84.00	814	172.00	3224 !	264,10	532	390.00	1367
1	85,00	3848	173.00	4109	265,00	7904	I 391.¢¢	75 <del>4</del> l .
1	86,00		174.00	7189	266,00	1181	1 392,10	664
ī	87,00	2652	175_10	13538 1	267,20	204	393,20	281
ŧ	88,00	1078	176,10	4293 1	267,60	232	397,00	230 i
1	8 <b>9.</b> ¢¢	472	177,00	6577 1	270,00	489	1 400,90	उउड ।
Į	91,00	5074	178,10	1972 1	271,00	901	1 402,00	3464 i
Ì	92,00	5292	179,00	25912	272,10	1129	1 403,00	5568 1
1	93.00	34848	1 180.00	16984	273.00	10953	1 404.10	1777 [
ı	94.00	2326	181.00	7182	274,00		1 405,00	292 [
1	95,00	749	1 1B200	1353	275,00		1 41B,90	239 1
£	96,00	1660	183.00	559 1	276,10	22944	1 425,00	5400
1	97,10	1007	184,10	2227	277.00	1.3493	1 422,00	41.63
1	98,00	25944	185,10	13301	278,10	2251.	1 423.00	37592 1
1	99.00	21.688 s	186,00	97584	279.00	648	1 424.00	6802 [
I	100.00	1844	187,10	27792	281.10	266	425,00	530 I
i	101,00	13609	188,10	2556 ]	282,00	217	426,50	251 !
1	102,10	646	189,00	5094	283,60	1957	427,30	538 I
1	103,00	3748	189 <sub>+</sub> 90	756 I	284,00	1097	, ( 428,40	200 1
1	104.00	8390	191,10	2995 1	285,10	2569	423,20	300 1
3	105.00	8359	192,00	7909	286,10	444	430,20	272
Į	105,10	3007	193,00	7605 l	289,00	691	1 431,10	404 (
!	107,00	104896	194,10	1998 i	290,10	529	431,50	324
1	108,00	17616	195,10	1331 1	292,10	763	432,20	298 !
I	109,00	3545	196,00	22448 1	533+00	3141	1 432,50	326 i
1	110.00	218112	198.00	745628 1	294,10	1275	(433,30	317
	144.00	30736	199.00	49104 1	256.00	42616	433,70	342
	112.00		200,00	4038 1	≊7.¢¢	61.96	434,30	363 [

Date : 02-DCT-2010 12:06

Client ID:

Instrument: sv5.i

Sample Info; DFTPP 50ug/ml;

Operator: KT

Column phase:

Column diameter: 2.00 .

Data File: DFT1002.D Spectrum: HP ChemStation HS DFT1002.D, Scan 352: 10.724 min. Location of Haximum: 198.00 Number of points: 340

n/z	Y	#√Z	Y	m/z	Y	ルセ	Υ.
1113.00	1310	1 201,60	4029	298,00	465	434.90	650 1
1 114,40	467	1 203,60	4788	301,00	504	435,90	530 I
1 115,00	646	1 204,00	23416	302,00	6 <del>9</del> 5	436,50	586 1
116,10	6327	1 205,00	38288	303,10	5810	1 436,90	846 1
1 117,00	75520	1 206,10	172352	304,00	2035	437,50	623 (
<del></del>		+		<del></del>		<del></del>	<del></del> +
1 118.00	5507	207,10	21328	305,10	290	438,20	1136
1 119.00	839	1 208,00	5487	308,00	764	439,30	1267
1 120.10	1180	1 209,00	21.86	309,10	446	441.00	100994
121,00	807	[ 210,00	2002	370-00	239	1 442,00	702528 1
1 122,00	6408	1 211,10	7473	312,20	271	1 443.00	136064
+		<del> </del>		<del></del>		<del> </del>	<del></del>
1 123.00	1,0302	1 213,00	410	312,90	292	444,00	12344 i
1 124.00	4600	1 214.10	372	314-00	2431	445,10	6 <del>8</del> 9 !
1 125,00	. 4447	1 215,10	1837	315,00	ಯಡ	1	·1
1 127.00	406528	1 216.00	3226	316.00	2960	I	1
128.00	28392	1 217,00	41648	1 317,10	363	i	ŧ
129,00	161024	1 218,00	5388	1 219.80	287	! ! !	!

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Report Date: 03-Oct-2010 11:11

### TestAmerica West Sacramento

# Method 8270C

Data file : \\sv5\c\chem\sv5.i\100210.B\HSL1002A.D

Lab Smp Id: HSL\_005 ug/ml CS-1 Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 12:27

Operator : KT Inst ID: sv5.i

Smp Info : HSL 005 ug/ml CS-1;1;;1;;;4

Misc Info : 3;;0;1 8270STD.SOB;10MSSV0307;0;8270F.M

: SOP SAC-MS-0005 Comment

: \\sv5\c\chem\sv5.i\100210.B\8270f.m Method

Meth Date : 03-Oct-2010 11:09 onishim Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Calibration Sample, Level: 1 Als bottle: 1.

Dil Factor: 1.00000

Compound Sublist: 1 8270STD.SUB Integrator: Falcon

Target Version: 4.14

Processing Host: SACP307UM

								AUCMA,	rrs	
		QUANT SIG					CAI	-ANT	ON-	-COL
රප	ಹರಿಯಾರ್ಥ	· Mass	RT	exp rt		RESPONSE	l	NG)	(	ng) .
*	1 1.4-Dichlorobenzene-de	152	3.955		(1,000)	141539		0000		(O)
*	2 Naphtbalene-d8	136	5.374	-	(1.000)	605687		0000		1967
*	3 Aceraphthene-dl0	164	7.468	_	(1.000)	321839		0000		
4	4 Phenanthrene-dil	188	9.406		(1.DOD)	496356		0000		
*	5 Chrysens-612	24D	13,779		(1.000)	453007	40.	0000		
*	6 Perylens-dl2	264	16,162	16.162	(1,000)	445119	40.	0000		
\$	7 2-Fluorophenol	112	2.742		(0.693)	25566	5.0	0000	<u> </u>	5,124
\$	8 Phanol-d5	99	3.613	3.623	(D.914)	30471	5.0	DOOD	4	£.857
ŝ	9 2-Chlorophenol-d4	132	3.758	3.758	(0.95D)	25144	5.0	0000	4	1.745
Ś	10 1,2-Dichlorobenzene-d4	3.52	4.152	4.162	(1.052)	16945	5.0	0000	4	1,861
\$	11 Witrobenzene-d5	82	4,576	4.576	(0.852)	25006	5.0	0000	4	1.874 (M)
\$	12 2-Fluorobiphenyl	172	6.680	6.580	(0.895)	51695	5.0	0000	4	1.986
\$	13 2,4,6-Tribromophenol	,330	8.473	8.473	(1.135)	6048	5.0	0000	4	1.325
\$	14 Temphenyl-d14	244	12.017	12.017	(0.872)	<del>24</del> 255	5.0	0000		1.982
	15 N-Nitrosodimethylamine	74	1.716	1.706	(0.434)	16436	5.0	0000	3	5.040 (g)
	16 Pyridine	79	1.737	1.726	(0.439)	29567	5.0	0000	5	.422 (q)
	23 Amiline	93	3.654	3.654	(0.924)	39064	5.0	0000	4	L.892 (Q)
	24 Phenol	94	3.523	3.523	(0.916)	36112	5.0	0000	<u> </u>	5.009 (Q)
	25 Bis (2-chloroethyl) ether	93	3.716	3.716	(0.940)	25057	5.0	0000		3.1.57
	27 2-Chlorophenol	128	3.768	3.768	(0.953)	26910	5.0	0000	4	1.863
	28 1,3-Dichlorobenzene	1 <b>4</b> 5 .	3.923	3.923	(0.992)	29863	5.0	0000	4	1.958
	29 1,4-Dichlorobenzene	146	3.975	3.975	(1.005)	31337	5.0	0000	4	1.972
	30 Bensyl Alcohol	108	4.120	4.120	(1.042)	17983	5.0	0000	4	1.E35
	31 1,2-Dichlorobenzene	146	4.172	4.172	(1.055)	.28663	5.0	0000	4	1.947
	32 2-Methylphenol	108	4.255	4.255	(1.075)	24914	5.0	0000	4	1.523
	33 2,2'-maybis (1-Chloropropens)	45	4.297	4.297	(1.086)	40622	5.0	0000		5.049
	34 4-Nethylphenol	108	4.421	4.421	(3.118)	25292	5.0	0000	4	1.891
	36 Herachloroethane	117	4.504	4.504	(1.139)	10779	5.0	0000	5	.024
	37 N-Mitrosodinpropylamine	70	4.442	4.442	(1,123)	16719	5.0	0000	4	1.670
	42 Nitrobenzene	77	4.597	4.597	(0.855)	24875	5.0	00000	4	1.960
	44 Isophorome	82	4.856	4.856	(0.904)	48024	5.0	0000	4	1.980
	45 2-Witrophenol	139	4.960	4.960	(0.923)	14088	5.1	0000	4	1.735
	46 2,4-Dimethyphenol	197	5.012	5.032	(0.933)	26089	5.0	0000	4	1.935

10-7-10

# Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002A.D Report Date: 03-Oct-2010 11:11

								AMOUR	TS	
		QUANT SIG					CAS	-AMI	OM-	-COL
Conpo	romās	Mass	RT	exp rt	per el	RESPONSE	(	NG)	(	NG)
	No. in the second secon		5702			<del></del>		<del>-</del>		
47	Bis (2-chloroethoxy) methane	<i>9</i> 3	5.126	5.126	(0.954)	31352	5.0	0000	5	.288
4.9	2.4-Dichlorophenol	162	5.229	5.229	(0.973)	1.9256	5.0	0000	<del>4</del>	.708
50	Benzoic Acid	122	5,084	5.335	(0.946)	3.2679	5.0	00000	4	.333
51	1,2,4-Trichlorobenzene	180	5.322	5,322	(0.9 <del>9</del> 0)	22282	5.t	0000	5	.032
52	Naphthalene	128	5.395	5.395	(1.004)	83236	5.0	0000	4	.977
54	4-Chlorozniline	127	5.488	5.488	(1.021)	30853	5.0	0000	4	.707
57	Hexachlorobutadiene	225	5.613	5.613	(1.D44)	1.0823	5.0	0000	4	.994
60	4-Chloro-3-Methylphenol	207	6.069	6.D69	(1.129)	22205	5.0	0000	Ą	.862
€3	2-Methylnaphthalene	142	6.203	6.203	(1.154)	51849	5.0	0000	4	.936
65	Bezachlorocyclopentadiene	237	6.483	6.483	(O.868)	10813	5.0	DDDD	4	.503
69	2,4,6-Trichlorophenol	1.96	6.576	6.576	(0.B81)	1.2546	5.0	0000	4	.886
70	2,4,5-Trichlorphenol	196	6.628	6.628	(0.888)	3.2400	5.0	0000	4	.483
71	2-Chloronaphthalene	162	6.784	6.784	(0.908)	· 4.5713	5.0	0000	5	.047
73	2-Nitropoiline	65	5.949	6.949	(0.931)	12703	5.0	0000	4	.627
76	Dimethylphthalate	163	7,219	7.229	(0.967)	. 49639	5.0	DDDD		.750
	Acenaphthylene	152	7.281		(0.975)	75041	5.0	0000		.758
	2,6-Dinitrotoluene	165	7.291		(0.976)	11404		0000		.694 (QM)
	3-Nitrosmiline	138	7.447		(0.997)	14226		0000		.691 (Q)
•	Acenaphthene	153	7.509		(1.006)	50639		0000		. D <u>44</u>
	2,4-Dinitrophenol	184	7.571		(1.014)	4083		0000		. 945 (σ)
	Dibersofwen	1.68	7.696		(1.031)	63477		0000		.764
	4-Ritrophenol	109	7.675		(I.028)	5174		0000		.055 (Q)
	2,4-Dinitrotoluene	165	7.758		(1.040)	13823		0000		.335 (g)
	Fluorene	166	8.131		(1.089)	54136		0000		906
	Diethylphthalate	149 '	8.100		(1.085)	49177		0000		.505
	4-Chlorophenyl-phenylether	204	8,152		(1.092)	22112		0000		
	4-Nitrosniline	138	8.214		(1.002)	13415				. 820
	4,6-Dinitro-2-methylphenol	19B	8.276		(D.880)	5780		0000		.463
	· ·							0000		.325 (q)
	N-Nitrosodiphenylamine	169	8.317		(0.384)	41998		6000		.582
	Azoberzene	77	8.348		(0.888)	48101		0000		928
	4-Bromophenyl-phenylether	248	B.794		(0.935)	11766		0000		.856
	Herachlorobenzene	284	8.981		(0.955)	14244		0000		.264
	Pentachlorophenol	266	9.240		(0.982)	5849		0000		.264
	Phenenthrene	178 178	9.437		(1.003)	\$0873		0000		.169
	Anthracene Carbazole		9.499		(2-030)	77577		0000		963
		<u> 1</u> 67	9.768		(1.039)	70241		0000		.920
	Di-n-Butylphthalate	149	10.463	10.463		79722		0000		. 541.
	Finoranthene	202	11.302	11.302		64427		0000		.596
	Benzidine	184	11.571	11.571		44267		0000		.B22
	Pyrene	202	11.665	11.665		72.230		DDDD		.030
	3,3'-dimethylbenzidine	212	12.867	12.857	-	37074	5.0	DDCD	4	.574
	Butylbenzylphthalate	149	12.991	12.991		36798	5.0	0000	5	.185
138	Benzo (a) Anthracene	228	13.758	13.758	(0.998)	62384	5.0	0000	5	.170
139	Cirrysens	228	13.820	13.831	(1.003)	59618	5.0	0000	4	.830
	3,3'-Dichlorobenzidine	252	13.799	13.799	(1.002)	22168	5.0	0000	4	.870
	his (2-ethylbexyl) Phthalate	149	14.110	14.110	(1.024)	51997	5.0	0000	5	.319
142	Di-n-octylphthalate	149	15.157	15.167	(1.100)	7 <b>6</b> 353 ·	5.0	0000	4	.886
144	Benzo (b) fluorenthene	252	15.572	15.582	(0.953)	45075	5.0	0000	4	.473 (Q)
145	Benzo (k) fluoranthene	252	រន.សរ	15.523	(0.956)	68403	5,0	0000		.288 (g)
147	Benzo (e) pyrene	252	15.996	16.007	(0.990)	50295	5.0	0000		.786
	Benzo (a) pyrene	252	16,069	16.079	(0.994)	54694	5.0	0000		.788
	Indeno (1,2,3-cd) pyrene	275	17.789	17.800		41053		0000		.443
	Dibenzo(a,h) antimacene	278	17.841	17.841		49018		0000		.743
	Benzo (g,h,i) perylene	275	18.224	18,235	-	5342B		0000		.781
					,,		2.0		-	

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002A.D Report Date: 03-Oct-2010 11:11

Page 3

						AND DING	rs	
	QUART SIG					CAL-AMI	CM-COF	
Compounds	Mass	P.T	EXP PT	eer er	RESPORSE	( RE)	( Big)	
	- 2446	******					<del></del> -	
M 162 benzo b.k Fluoranthema Totals	252				113478	5.00000	4.931 (A)	

# QC Flag Legend

- A Target compound detected but, quantitated amount exceeded maximum amount.

  Q - Qualifier signal failed the ratio test.

  M - Compound response manually integrated.

  q - Qualifier signal exceeded ratio warning limit.

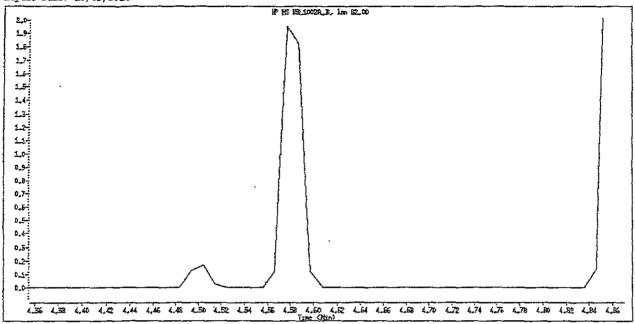
Data File Name: HSL100ZA.D

Inj. Date and Time: 02-007-2010 12:27

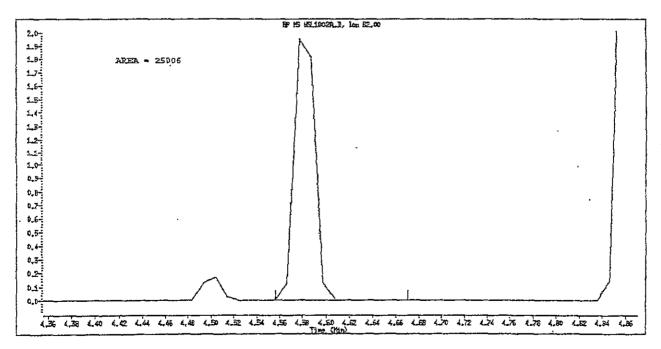
Instrument ID: sv5.i Client ID: 8270F.M

Compound Name: Nitrobenzene-25

CAS #: 4165-60-0 Report Date: 10/03/2010



Original Integration



Marmel Integration

Manuelly Integrated By: trucngk

Menuel Integration Reason: Peak Not Found

Data File Name: RST1002A.D

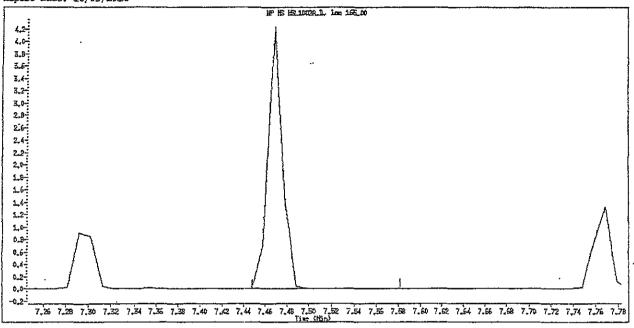
Inj. Date and Time: 02-00T-2010 12:27

Instrument ID: sv5.i Client ID: 82707.M

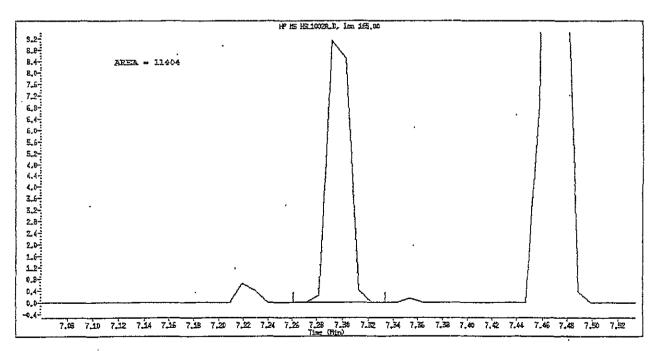
Compound Name: 2,6-Dinitrotoluene

CAS #: 606-20-2

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk
Manual Integration Reason: Wrong Peak

ZAMENCIA PROPERTY.

Report Date: 02-Oct-2010 16:57

### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\100210.B\HSL1002A.D Lab Smp Id: HSL\_005 ug/ml CS-1 Client Smp Client Smp ID: 8270F.M

Ini Date : 02-OCT-2010 12:27

Operator : KT Inst ID: sv5.i

Smp Info : HSL\_005 ug/ml CS-1;1;;1;;;4

Misc Info : 3;;0;1 8270STD.SUB;10MSSV0307;0;8270F.M

Comment : SOP SAC-MS-0005

Method : \\SV5\C\chem\sv5.i\100210.B\8270f.m Meth Date : 02-Oct-2010 16:57 onishim Quant To Cal Date : 17-AUG-2010 21:19 Cal Fil Quant Type: ISTD Cal File: AP90817D.D

Als bottle: 1 Dil Factor: 1.00000 Integrator: Falcon Calibration Sample, Level: 1

Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: 5V5

								MOOMA	T\$
		<u>.</u>	QUANT SIG					CAL-AMI	OM-COL
Ct	MID C	pnds	MASS	RI	end ei	REL RT	RESPONSE	(· 1933)	( NG)
-			Section 18		×	-		-	
*	1	1,4-Dichlorobenzene-d4	152	3.955	3.955	(1.000)	141539	40.0000	(Q)
*	2	Naphthalene-d8	136	5.374	5.374	(1.000)	6035687	40.0000	
*	3	Acenaphthene-dl0	154	7.468	7,46B	(1.000)	321639	48.0000	
*	4	Phenanthrane-dlo	188	9.406	9.405	(1.000)	496356	40.0000	
*	5	Chrysene-dl2	240	23.779	23.779	(1.00D)	453007	40.000D	
*	6	Perylene-dl2	264	15.162	16.162	(1.000)	445119	40.0000	
\$	7	2-Fluorophenol	13.2	2.742	2,732	(0.693)	25566	5.00000	4.894
\$	8	Phenol-d5	99	3,613	3.613	(0.914)	30471	5.00000	4.587
\$	9	2-Chlorophenol-d4	132	3.758	3.758	(0.950)	25144	5.00000	4.626
\$	10	1,2-Dichlorobenzene-d4	152	4.162	4.162	(1.052)	16945	5.00000	4.793
\$	31	Nitrobenzene-d5	82	Con	neound Ro	ot Detecte	d.		
ş	12	2-Fluorobiphenyl	172	6.680	6.680	(0.895)	51695	5.00000	5.015
Ş.	13	2,4,6-Tribromophenol	330	8.473	8.473	(1.135)	60 <del>2</del> 8	5.00000	4.760
\$	14	Terphenyl-dl4	244	12.017	12.017	(0.872)	44456	5.00000	5.032
	15	N-Ritrosodimethylamine	7≰	1.716	1,706	(D.434)	16436	5.00000	<b>4.767 (g)</b>
	16	Pyridine	79	1.737	1.726	(0.439)	29567	5.00000	5.146
	23	Aniline	93	3.654	3.654	(0.924)	39064	5.00000	4.689 (Q)
	24	Phenol	94	3,623	3.623	(0.916)	36112	5.00000	5.111 (0)
	25	Bis (2-chlorostbyl) ether	93	3.716	3.716	(0.940)	26057	5.00000	4.856
	27	2-Chlorophenol	128	3.768	3.768	(0.953)	2€310	5.00000	4.633
	28	1,3-Dichlorobenzene	146	3.923	3.923	(0.992)	29883	5.00000	4.837
	29	1,4-Dichlorobenzene	146	3.975	3.975	(1.005)	30.337	5.00000	5.017
	30	Benzyl Alcohol	108	4.120	4.120	(1.042)	17983	5.00000	4.681
	31	1,2-Dichlorobenzene	146	4.172	4.172	(1.055)	28663	5.00000	4.842
	32	2-Methylphenol	1.08	4.255	4.255	(1.076)	24914	5.00000	4.770 .
	33	2,2'-oxybis (1-Chloropropane)	45	4.257	4.297	(1.086)	4.0622	5.00000	4.077
	34	4-%sthylphenol	108	4.421	4,421	(1.118)	26252	5.00000	4.723
	36	Hexachloroethane	117	4.504	4.504	(1.139)	3.0779	5.00000	4.891
	37	W-Witroschinpropylamine	70	4.442	4.442	(1.123)	16719	5.00000	€.290
	42	Ritrobenzene	<b>77</b>	4.557	4.597	(0.855)	24875	5.00000	4.659
	44	Isophorone	E2	4.856	4.856	(0.904)	48024	5.00000	4.744
		2-Xitronhenol	3.39	4.950	4.960	(0.923)	1.4088	5.00000	4.833
		2.4-Dimethyphenol	3.07	5.012		(D.933)	26089	5.00000	4.82D
						•			

						t	AMOUE	TS
		QUANT SIG					CAL-AMI	ON-COL
COMPO	<del>ගා</del> ලීs	Mass	RT	exp ki	ser el	RESPONSE	( अड)	( 383)
5.5mm	-	***	and the same				Market we of	w#Perce
47	Bis (2-chlorosthory) methans	93	5.126	5.126	(0.954)	311.52	5.00000	5.159
4.9	2,4-Dichlorophenol	162	5.229	5.229	(0.973)	19256	5.00000	4.834
5D	Senzoic Acid	122	5.084	5,115	(0.946)	12679	5.00000	4.202
51	1,2,4-Trichlorobenzene	260	5.322	5.322	(0.990)	22282	5.00000	5.160
52	Naphthalene	128	5.395	5.395	(1.004)	83236	5.00000	4.937
54	4-Chloroaniline	127	5,488	5.488	(1.021)	30853	5.00000	4.652
57	Herachlorobutadiene	225	5.613	5,513	(1.044)	10823	5.00000	5.267
€0	4-Chloro-3-Methylphenol	107	6:069	6.069	(1.129)	22205	5.00000	4.844
63	2-Methylnaphthalene	142	6.203		(1.154)	51849	5.00000	5.040
56	Hexachlorocyclopentadiene	237	6.483	6,483	(0.B6B)	10813	5.00000	4,405
63	2,4,6-Trichlorophecol	196	6.57 <i>5</i>		(0.881)	12545	5.00000	5.149
70	2,4,5-Trichlorphesol	196	6.628		(D.888)	12400	5.00000	4,633
71	2-Chloronaphthalena	162	6.784		(0.908)	45713	5.00000	5.066
73	2-Nirrosniline	65	6.949		(0.931)	12703	5.00000	4.204
76	Dimethylphthalate	163	7.219		(0.967)	49639	5.00000	4.763
77	Acenaphthylene	152	7.281		(0.975)	75041	5,00000	4.757
	2,6-Dinitrotoluene	165	7.468		(1.000)	39415	5.00000	16.89(Q)
	3-Nitrosuiline	138	7.447		(0.997)	14226	5.00000	4.597(Q)
	Acenaphthene	153	7.509		(1.006)	50639	5.00000	5.038
	2,4-Dinitrophenol	184	7.571		(1.014)	£30&	5.00000	5.740 (g)
	Dibenzofuran	168	7.695		(1.031)	63-177	5.00000	4.780
	4-Nitrophenol	109	7.675		(1.028)	5314	5.00000	3.785 (Q)
	Z,4-Initrotoluene	1.65	7,768		(1.040)	13823	5.00000 5.00000	4.422 (g)
	Finorene	166	8.131		(1.089)	5 <b>41</b> 36 49177	5.00000	4.976 4.514
	Diethylphthalate	149	8.100		(1.085)	22112	5.00000	4.930
	4-Chlorophenyl-phenylether	204	8.152		(1.092)	13415	5.00000	4.435
	4-Nitroeniline	138	8.214		(1.100) (0.880)	578D	5.00000	8.075 (d)
	4,6-Dinitro-2-methylphenol	198 269	8,276 8,317		(0.884)	<u>47.9</u> 98	5.86000	5.£30
	M-Mitrosodiphenylamine	-69 77	8.348		(D.888)	48101	5.00000	4.670
	Azobenzene 4-Bromophenyl-phenylether	248	8.794		(0.935)	11766	5,00000	4.905
	#-Bromophenyl-phenylether	284	8.981		(0.955)	14244	5.00000	5.498
	Pentachlorophenol	265	9.240		(0.982)	5849	5.00000	3.762
	Phenanthrene	17B	9.437		(1.003)	80873	5.00000	5.224
	Anthracene	178	9.499		(1.010)	77577	5.00000	4.979
	Carbazole	167	9.768		(1.039)	70241	5.00000	4.847
120	Di-n-Butylphthalate	149	10.463	10.463	(1.112)	79722	5.00000	4.549
	Flucranthene	202	11.302	11,302	(1.202)	5 <b>442</b> 7	5.00000	4.524
	Benzidine	184	11.571	11.571	(0.840)	44257	5.00000	4.759
128	Pyrene	202	11.665	11.665	(D.B47)	71.230	5.00000	5,029
	3,3'-dimethylbenzidine	212	12.867	12,867	(0.934)	37074	5.00000	€.5 <del>44</del>
	Butylbenzylphthalate	169	12.991		(0.943)	36798	5.00000	5.084
	Benzo (a) Anthracens	228	13,758		(822.0)	62384	5.00000	5.220
	Chrysene	228		13.831		59618	5.00000	4.801
	3,3'-bichlorobenzidine	252	13.799		(1.DBZ)	22158	5.00000	5.069
	bis (2-ethylberyl) Phthelate	149	14.110		(1.024)	51.997	5.00000	5.218
	Di-n-octylphthalate	149	15.157		(1.100)	76353	5.00000	4,752
	Benzo (b) fluorenthene	252		15.562		45075	5.00000	4.270 (Q)
	Benzo (k) fluorantheme	252	35,613		(0.966)	68403	5.00000	5.545 (g)
	Benzo (e) pyrene	252	15.996		(0.990)	50295	5.00000	4.807
	Benzo(a) pyrene	252	16.069			54594	5.00000	4.761
	Indeno(1,2,3-cd)pyrene	275		17.800		41053	5.00000	4,039
	Dibenzo (a, h) anchracene	278		17.841	•	49018	5.00000	4,035
154	and the same of th	a			,/			2.700

276

18.224 18.235 (1.128) 53428 5.00000

4.784

153 Benzo(g,h,i)perylene

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002A.D Report Date: 02-Oct-2010 16:57

Page 3

	•				AMOUNTS					
	COMMIT SIG					CAI	_AMCT	ON-	COL	
Compounds	MASS	PT	ed rt	eel et	RESPONSE	{	NG)	€	M3)	
		<del>,,,,,,</del>	*********				-			
M 162 benzo b.k Fluoranthene Totals	252				133478	5.0	0000	Æ	958 (2	١

# QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

q - Qualifier signal exceeded ratio warning limit.

Page 1 Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002A.D

Report Date: 03-Oct-2010 11:11

### TestAmerica West Sacramento

### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Sup ID: 8270F.M Level:

Sample Type:

Instrument ID: sv5.i

Lab File ID: HSL1002A.D

Lab Smp Id: HSL 005 ug/ml CS-1 Analysis Type: SV

Quant Type: ISTD Operator: KT

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0307;0;8270F.M

Test Mode:

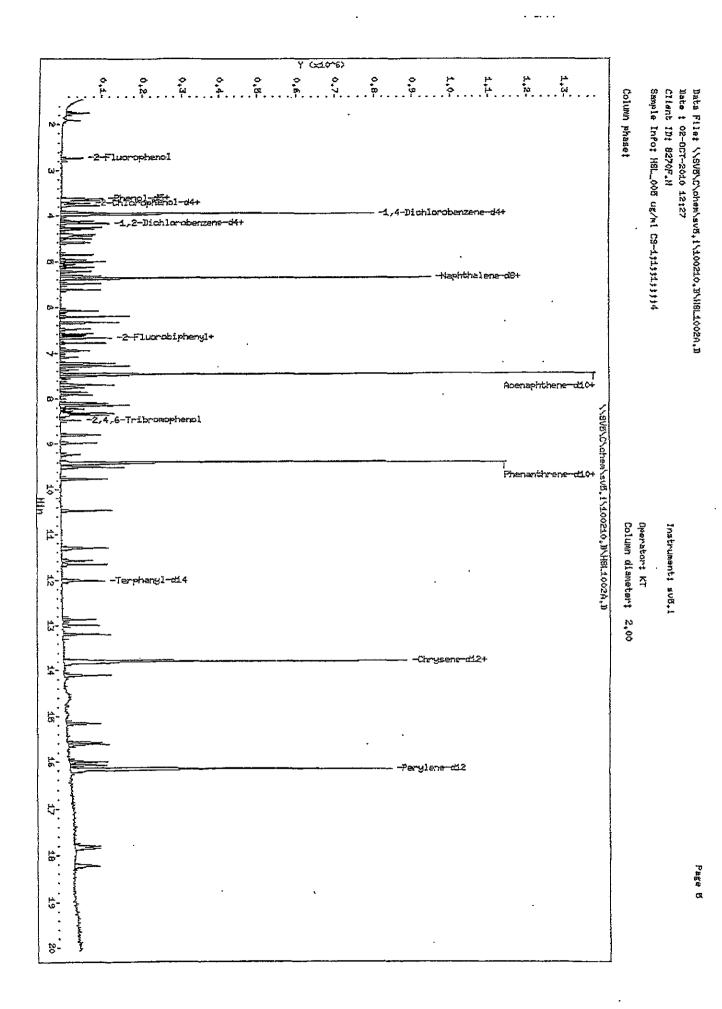
Use Initial Calibration Level 4.

		AREA	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	Sample	%DIFF
****	_========	========	========	=========	======
1 1.4-Dichlorobenze	122625	61313	245250	141539	15.42
2 Naphthalene-d8	530514	265257	1061028	605687	14.17
3 Acenaphthene-d10	282538	141269	565076	321839	13.91
4 Phenanthrene-dl0	462722	231361	925444	496356	7.27
5 Chrysene-dl2	435850	217925	871700	453007	3.94
6 Perylene-d12	422284	211142	844568	445119	5.41
					]

		RT I	IMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
	========	=======	========	=======	======
1 1,4-Dichlorobenze	3.96	3.46	4.46	3.96	0.00
2 Naphthalene-d8	5.37	4.87	5.87	5.37	0.00
3 Acenaphthene-d10	7,47	6.97	<b>7.</b> 97	7.47	0.00
4 Phenanthrene-dl0	.9,41	8.91	9.91	9.41	0.00
5 Chrysene-dl2	13.78	13.28	14.28	13.78	0.00
6 Perylene-dl2	16.16	15.66	16.66	16.16	0.00

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Report Date: 03-0ct-2010 11:12

# TestAmerica West Sacramento

Method 8270C

:

Data file : \\sv5\c\chem\sv5.i\100210.B\HSL1002B.D

Lab Smp Id: HSL\_010 ug/ml CS-2 Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 12:53

Operator : KT Inst ID: sv5.i

Smp Info : HSL 010 ug/ml CS-2;1;;2;;;4
Misc Info : 3;;0;1 8270STD.SUB;10MSSV0308;0;8270F.M

Comment : SOP SAC-MS-0005

: \\sv5\c\chem\sv5.i\100210.B\8270f.m Method

Meth Date: 03-Oct-2010 11:09 onishim Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Calibration Sample, Level: 2 Als bottle: 2

Dil Factor: 1.00000 Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14

Processing Host: SACP307UM

									21 TOUR 25			
			QUANT SIG					. CAI	-AMI	ON	-COL	
Co	uibo	mds	22.5M	<u>rt</u>	exp ri	pel rī	PESPORSE	{	ng)	ĺ	NG)	
HER			*******					===		1		
*		1,4-Dichlorobenzene-d4	152	3.955		(1.000)	116839		0000			(O)
*		Naphthalene-d8	136	5.364		(1.000)	493196		0000			
*		Acensphthene-d10	164	7,468		(1.000)	272639		DDDD			
*		Phenauthrene-dl0	188	9.406		(1.000)	438440		0000			
*		Chrysene-dl2	240	13.779		(1.000)	43.7250		0000			
4	_	Perylene-d12	264	16.162		(1.000)	43,9005		0000			
Ş		2-Fluor <del>opheno</del> I	112	2.732		(0.651)	36100		0000		9.251	
Ş		Phenol-d5	99	3.613		(0.924)	4887B		0000		9,438	
\$		2-Chlorophenol-d4	132	3.747		(0.948)	45430		0000		9.589	
\$		1,2-Dichlorobenzene-d4	152	4.251		(1.050)	28€58		0000		9.959	
\$		Nitrobenzene-d5	82	4.576		(0.853)	42237		0000		10.13	
Ş		2-Fluorobipheryl	172	6,580		(0.895)	85885		0000		9.779	
\$	-	2,4,6-T <del>ribromophen</del> ol	330	8.473		(1.135)	11265		0000		9.508	
ş		Temphenyl-dl4	244	12.017		(0.872)	21026		0000		9.978	
		N-Nitrosodimethylamine	7♣	1.706		(0.431)	25783		0000		9.578	
		Pyridine	79	1,737		(0.439)	40141		0000		B. <b>91</b> 7	
	23	Apiline	93	3.654		(0.924)	63074		0000		9.566	-
	24	· - <del></del>	94	3.623		(0.916)	57313		0000		9.631	
	26	Bis (2-chloroethyl) ether	93	3.716		(0.940)	40363		0000		9.677	
	27	2-Chlorophenol	128	3.768		(0.953)	45449		0000		9.950	
	28	1,3-Dichlorobenzene	146	3.913	3.923	(0.990)	49415	10.	0000		9.932	:
	29	1,4-Dichlomobenzene	146	3.975	3.975	(1,005)	52537	ID.	0000	:	10.70	1
	30	Benzyl Alcobol	108	4.120	4.120	(1.042)	30277	18.	0000		9.862	:
	31	1,2-Dichlorobenzene	146	4.172	4.172	(1.DSS)	47666	10.	0000		9.966	:
	32	Z-Methylphenol	108	4,255	4.255	(1.076)	405B1	10.	0000		9.714	
	33	2,21-oxybis(1-Chloropropass)	45	4.297	4.297	(1.DB5)	64869	20.	0000		9.768	:
	34	. 4-Methylphenol	3.08	4,421	4.421	(1.118)	43497	10.	0000		9,803	
	36	Hexachlomosthere	117	4.504	4.504	(1.139)	:L7770	10.	0000	;	10.03	
	37	N-Nitrosodimpropylamine	70	4.442	4.442	(1.123)	26235	10.	0000		9.587	
	42	Ritzobenzene	77	4.597	4.557	(0.857)	40198	10.	0000		9.845	:
	44	Isophorone	82	4.856	4.856	(0.905)	75804	10.	0000		9.782	:
	4.5	<del>"</del>	139	4.950	4.960	(0.325)	23221	10.	0000		9.58E	:
		2,4-Dimethyphenol	107	5.012	5.012	(D.534)	42128	20.	0000		9.787	

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002B.D Report Date: 03-Oct-2010 11:12

							AMOUR	TS
		QUART SIG					CAL-AMT	OM-COF
Compo	unis	miss	PT	exp rt	KEL RI	ppsporse	(MG)	( 290-)
-		-	estates.	-		- Constitue	*********	
	Bis (2-chlorosthoxy) methane	93	5.126		(D.956)	45230	10.0000	9.635
	2,4-Dichlorophenol	162	5,229		(0.575)	32450	10.0000	9.744
	Benzoic Acid	122	5.084		(0.9 <del>4</del> 8)	20056	10.0000	8.418
	1,2,4-Trichlorobenzene	180	5.323		(0.992)	35544	10.0000	9.257
52	Maghthelene	128	5,395	5.395	(1,006)	138665	10.0000	10.18
54	4-Chlorospiline	127	5.488	5.488	(1.023)	52 <del>444</del>	20.0000	9.825
57	Hexachlorobutadiene	225	5.613	5.613	(1.045)	17930	10.0000	9.630
60	4-Chloro-3-Methylphenol	107	6,069		(1.131)	35592	10.0000	9.570
63	2-Methylmaphthalene	142	6.203	6.203	(1.156)	83922	20.0000	9.811
	Hexachlorocyclopentadiene	237	6,483		(0.868)	18919	10.0000	9.3DD
	2,4,5-Trichlorophenol	396	5.57 <i>6</i>	6.57 <b>5</b>	(0.881)	20325	10.0000	9.344
70	2,4,5-Trichlorphenol	196	6.618	6.628	(0.886)	22419	10.0000	9.567
71	2-Chloronaphthalene	162	6.773	6.784	(0.907)	74574	10.0000	9.719
73	2-Nitroaniline	65	6.950	6.949	(0.931)	22.647	10.0000	9.308
76	Dimethylphthalate	163	7.219	7.229	(D.957)	85330	10.0000	9.639
77	Acenaphthylene	152	7.281	7.251	(0.975)	130392	10.0000	9.758
79	2,5-Dinitrotoluent	165	7.231	7.302	(D.976)	18661	10.0000	9.067 (QM)
80	3-Nitrosmiline	138	7.447	7.447	(0.997)	23598	10.0000	9.185 (g)
81	Acenaphthene	153	7.509	7.509	(J'ODE)	83474	10.0000	9.83.4
82	2,4-Dinitrophenol	184	7.571	7,572	(1.014)	7537	10.0000	19.31 (역)
83	Dibenzofuran	168	7.695	7.706	(1.031)	<u> 11</u> 0503	10.0000	9.789
84	4-Nitrophenol	109	7.675	7.675	(1.028)	9643	10.0000	9.049 (Q)
86	2,4-Dimitrotolvene	165	7.768	7.768	(1.D4Ó)	24530	10.0000	9.080
91	Fluorene	166	8.131	8.131	(1.DB9)	91,225	10.0000	9.759
92	Disthylphthelate	. 149	8.100	8.100	(1.085)	88532	10.0000	9.788
93	4-Chlorophenyl-phenylether	204	8.152	8.152	(1.092)	38113	10.0000	9.807
94	4-Nitrozniline	138	8.214	8.214	(1.100)	23002	10.0000	9.033
97	4,6-Dinitro-2-methylphenol	198	8.275	8.276	(0.B80)	11282	10.0000	22.20
98	N-Nitrosodiphenylamine	169	8.317	8.317	{0.884}	74860	11.7000	11.53
100	Azobenzene	77 .	8.349	8.348	(0.888)	82437	10.0000	9.784
101	4-Bromphanyl-phenylether	248	8.794	8.794	(0.935)	19623	10.0000	9.478
IOB	Berachlorobenzene	284	8.981	8.981	(0.955)	23622	10.0000	10,31
110	Pentachlorophenol	266	9,240	9.240	(0.982)	10551	10.0000	10.90
114	Phenanthrene	178	9.437	9.437	(1,003)	134966	10.0000	9.995
125	Anthracene	178	9.499	9.499	(1.010)	130416	10.0000	9.667
	Carbazole	167	9.768	9.768	(1.039)	120549	10.0000	9.782
120	Di-n-Bwylphthalate	149	10.463	10.463	(1.112)	141693	10,0000	9.555
126	Fluoranthene	202	11.302	11.302	(1.202)	115262	10.0000	9.525
127	Benzidine	184	11.571	11.571	(0.840)	78774	10,0000	9,428
128	Pyrene	202	21.654	11.665	(0.846)	127577	10.0000	9.901
134	3,3'-dimethylbensidine	21.2	12.867	12.867	(0.934)	6 <del>5</del> 361	10.0000	8.997
136	Butylbenzylphthalate	149	12.991	12.991	(0.943)	<b>e</b> 5035	10.0000	9.605
138	Benzo (a) Anthracebe	228	13.748	13,758	(828.0)	102768	10.0000	9.360
139	Chrysene	228	13.820	13.831	(1.003)	113552	10.0000	10.11
140	3,3'-Dichlorobenzidine	252	13.799	13.799	(1.002)	38850	10.0000	9.379
141	bis (2-ethylbexyl) Phthalate	149	14.110	14.110	(1.024)	83377	10.0000	9.372
142	Di-n-octylphthalate	149	15.157	15.167	(1.100)	126961	10.0000	8.928
	Benzo (b) fluoranthene	252	15.572	15.582	(0.963)	84929	10.0000	8.954 (Q)
	Benzo (k) fluoranthene	252	15.613			122065	10.0000	20.02(0)
	Benzo (e) pyrene	252	15.996	15.007	(0.990)	97140	10.0000	9.821
	Benzo (a) pyrene	252	16.069			102327	10.0000	9.516
	Indeno(1,2,3-cd) pyrene	276		17.800		75748	10.0000	8.624
	Dibenzo (a, h) authracens	278		17.841		88353	10.0000	9.097
	Benzo(g,h,i)perylene	276		18.235		103135	20.0000	
قحد	DOTTOO 18' H' TI BETATETTE	4/0	~0·~~ <del>~</del>	40.43D	ا تاكست و لد ا	وجدوب	20.0000	9.804

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002B.D Report Date: 03-Oct-2010 11:12

	QUART SIG						AMOUNTS		l .	
	QUART SIG					CAT	-AMT	OD;-	<u>ಎಂ.</u>	
Compounds	MASS	RT	EXP RT	PET PT	response	(	ng)	(	NF)	
					<u> </u>	*		******	- H-FF	
M 162 benzo b,k Fluorenthene Totals	252				206994	10.	0000	9	.556 (	A)

# QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.
q - Qualifier signal exceeded ratio warning limit.

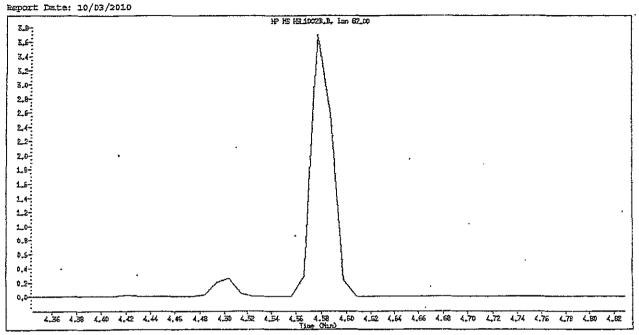
Data File Name: HSL1002B.D

Inj. Date and Time: 02-OCT-2010 12:53

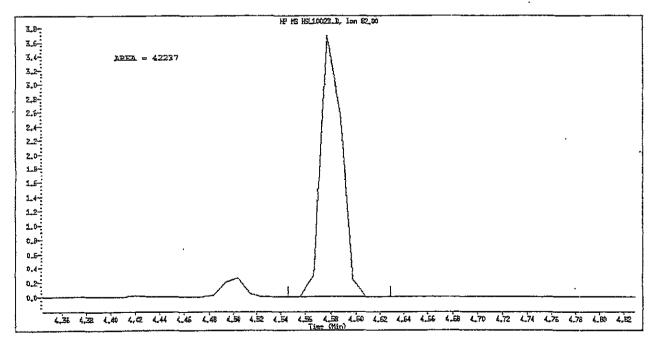
Tastrument ID: sv5.i Client ID: 8270F.M

Compound Name: Niturbenzene-da

CAS #: 4165-60-0



Original Integration



Manual Integration

Manuelly Integrated By: trucingk
Manuel Integration Reason: Peak Not Found

Data File Name: ESI100ZB.D

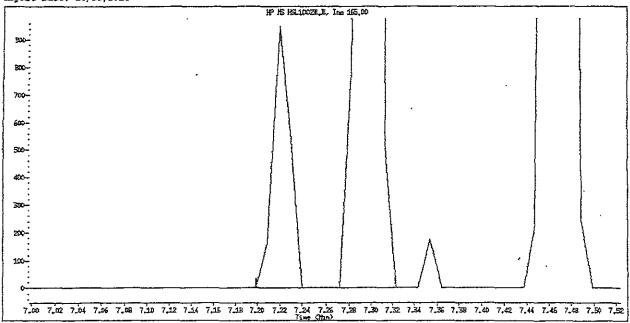
Inj. Date and Time: 02-007-2010 12:53

Instrument ID: sv5.i Client ID: 8270F.M

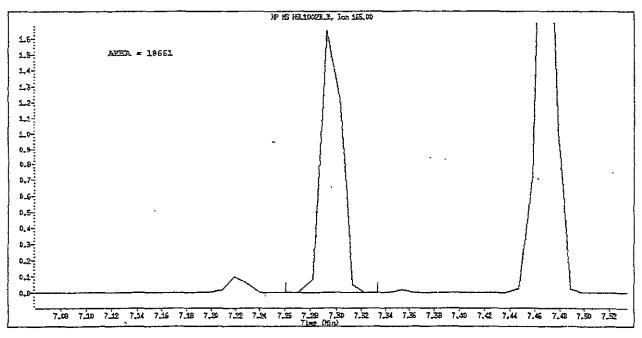
Compound Name: 2,6-Dinitrotoluene

CAS #: 606-20-2

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: troongk

Manuel Integration Reason: Poor Chromatography

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002B.D

Report Date: 02-Oct-2010 16:57

### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\100210.B\HSL1002B.D Lab Smp Id: HSL\_010 ug/ml CS-2 Client Smp Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 12:53

Inst ID: sv5.i Operator : KT

: HSL\_010 ug/ml CS-2;1;;2;;;4 Smp Info

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0308;0;8270F.M

Comment : SOP SAC-MS-0005

: \\SV5\C\chem\sv5.i\100210.B\8270f.m Method

Quant Type: ISTD Cal File: AP90817D.D Meth Date: 02-Oct-2010 16:57 onishim Cal Date : 17-AUG-2010 21:19

Calibration Sample, Level: 2

Als bottle: 2 Dil Factor: 1.00000 Integrator: Falcon Target Version: 4.14 Compound Sublist: 1 8270STD.SUB

Processing Host: SV5

							AMOUN	775
		QUART SIG					CAL-AMT	೦ಚ-ದುಗ
Ç	<del>ongo</del> nnás	mass	RT	.Rep Re	rel rt	RESPONSE	( NG)	(DR )
tes						2F		The second second
•	1 1.4-Dichlorobenzene-d4	152	3.955	3.955	(1.000)	116839	<b>€0.000</b> 0	(Q)
*	2 Naphthalene dB	136	5.364	5_374	(1.005)	493196	40.0000	
+	3 Acenzobthene dl0 ·	164	7.458	7.468	(1.000)	272639	40.0000	
*	4 Phenanthrene dl 0	188	9.406	9.405	(1.000)	428440	40.0000	
*	5 Chrysene-d12	240	13.779	13.779	(1.000)	<b>41.2</b> 260	40.0000	
*	6 Perylene-d12	254	16.152	16.152	(1.000)	. 41.9005	&D.0000	
\$	7 2-Fluorophenol	112	2.732	2.732	(0.691)	36100	10.0000	8.835
\$	8 Phenol-d5	وو .	3. <i>5</i> 13	3.613	(0.914)	4B87B	10.0000	8.913
\$	9 2-Chlorophenol-d4	132	3.747	3.758	(D.948)	4.5430	10.0000	9.716
\$	18 1,2-Dichlorobenzeme-d4	152	4.151	4.162	(1.050)	28658	10.0000	9.820
\$	11 Witrobenzene-d5	83	Con	ಹೆಂಗಾರ್ಗೆ 120	t Detect	ed.,		
\$		172	£.68D	6.68D	(0.895)	85886	10.0000	9,835
\$	13 2,4,6-Tribromophenol	330	8,473	B.473	(1.135)	1.1265	18.0000	lD.46
\$	14 Temphenyl-dl4	244	12.017	12.017	(0.672)	81026	10.0000	10.08
	15 M-Nitrosodimethylamine	74	1.706	1.706	(LEP.0)	25783	10.0000	9.059
	16 Pyridine	79	1.737	1.726	(0.439)	40141	10.0000	8.454
	23 Anilina	93	3.654	3.654	(0.924)	6307 <b>4</b>	10.0000	9.172 (g)
	24 Phenol	94	3,623		(0.916)	57313	19.0000	9.827 (Q)
	26 Bis(2-chloroethyl)ether	93	3.716	3.716	(0.940)	40353	10.0000	9.114
	27 2-Chlorophenol	128	3.768	3.768	(0.953)	<u> 15449</u>	10.0000	9.5 <u>4</u> 8
	28 1,3-Dichlorobenzene	146	3.913	3.923	(0.990)	49425	10.0000	3.f89
	29 1,4-Dichlorobenzene	146	3.975	3.975	(1.005)	52537	10.0000	10.29
	30 Benzyl Alcobol	1D8	4.120	4.120	(1.042)	30277	10.0000	9.547
	31 1,2-Dichlorobenzene	146	4.172	4.172	(1.055)	47665	10.0000	9.755
	32 2-Methylphenol	108	4.255	4.255	(1.076)	40581	10.0000	9.423
	33 2,2'-oxybis(1-Chloropropase)	45	4.297	4.297	(1.086)	64859	10.0000	7.888
	34 4-Methylphenol	IDB	4,421	4.421	(1.118)	45457	10.0000	9.466
	35 Harachloroethane	117	4.504	4.504	(1.139)	1.7770	10.0000	9.768
	37 N-Nitrosodinpropylamine	70	4.442	4.442	(1.123)	28335	10.0000	8.809
	42 Kitrobenzene	77	4.597	4.597	(0.257)	40758	10.0000	9.266
	44 Isophorona	۶2 <sup>`</sup>	4.856	4.856	(0.905)	76804	10.0000	9.318
	45 2-Nitrophenol	139	4.960	4.96D	(0.925)	23221	10.0000	9.784
	46 2,4-Dimethyphenol	207	5.01.2	5.012	(0.934)	42128	10.0000	9.559 15-3-10
		•			•			1.0

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002B.D Report Date: 02-Oct-2010 16:57

					•		AMOUN	es .
		QUART SIG					- CAL-AMT	OM-COF
Costribo	<u>ಸಾರ್</u> ವ	Mass	XT.	exd bi	REL RI	RESPONSE	( MG)	( 19G)
	الشناك المسترين بين الماكر المسترين والمسترين والمسترين والمسترين والمسترين والمسترين والمسترين والمسترين	Account.						Commerce and
	Ris (2-chloroethoxy) methane	93	5.126		(0.956)	46230	10.0000	9.421
	2,4-Dichlorophenol	162	5.229		(0.975)	32450	10.0000	10.00
	Bezzoic Acid	122	5.D84		(D.948)	20056	10.0000	8.164
	1,2,4-Trichlorobenzene	180	5.323 5.395		(0.992)	35544	10.0000	10.11
	Waphthalene 4-Chlorozriline	128 127	5.488		(1.005) (1.023)	138665 52444	10.0000	19.10 9.711
	Hexachlorobutadiens	225	5.613		(1.046)	17030	10.0000	10.18
60		107	6.069		(1,131)	35592	10.0000	9.535
	2-Methylnaphthalene	142	6.203		(1.156)	83922	10.0000	10.02
	Hexachlorocyclopentaciene	237	6.483		(0.868)	18919	10.0000	9.098
	2,4,6-Trichlorophenol	196	6.576		(0.881)	20325	10.0000	9.847
	2,4,5-Trichlorphenol	196	6.618		(0.886)	22419	10.0000	9.889
	2-Chloropaphthalene	162	6.773		(D.907)	74574	10.0000	9.756
73	2-Nitrozniline	65	6.950	6.949	(0.931)	21647	20.0000	8.456
76	Dimethylphthalate	1.63	7.219	7.229	(0.967)	85330	10.0000	9.665
77	Acenaphthylene	152	7.281	7.281	(0.975)	130392	20.0000	9.758
79	2,6-Dinitrotoluene	165	7.219	7.302	(0.967)	19698	20.0000	9.963 (Q)
80	3-Nitrosmiline	138	7.447	7.447	(0.997)	23598	10.0000	9. ೧೦2 (ଫୁ)
81	Aceraphthene	153	7.509	7.509	(1.006)	83474	10.0000	9.804
82	2,4-Dinitropheaol	184	7.571	7.571	(2.024)	7537	10.0000	9.147 (q)
83	Dibenzofuran	168	7.696	7.706	(1.031)	110503	10.0000	9.824
84	4-Kitrophenol	109	7.675	7.575	(1.028)	9643	10.0000	8.425 (Q)
86	2,4-Dimitrotoluene	165	7.768	7.768	(1.040)	24530	10.0000	9.262
91	Fluorene	166	8.131	8.131	(1,029)	91.225	10.0000	9.898
92	Disthylphthalate	149	B.100	8.100	(1.085)	88532	10.0000	9.594
93	4-Chlorophenyl-phenylether	204	8.152	8.152	(1.092)	38113	10.0000	10.03
	4- <u>Witrospiline</u>	138	8.214		(1.100)	23002	10.0000	8.977
	4,6-Dinitro-2-methylphenol	198	8.276		(0.880)	11282	10.0000	11.76
	R-Nitrosolipherylamine	169	8.317		(D.884)	7 <del>4</del> 860	11.7000	11,21
	Azobenzene	77	B.349		(888.0)	82437	10.0000	8.875
	4-Bromophenyl-phenylether	248	B.794		(0.935)	1.9823	10.0000	9.575
	Bexachlorobenzene	284	8.981		(0.955)	23622	10.0000	10.56
	Pentachlorophenol	265	9.240		(0.982)	10551	10.0000	7.861
-	Phenanthrene Anthracene	178 178	9.437 9.493		(1.003) (1.010)	134966 138416	ID.0000	10.10
	Carbazole	167	9.75B		(1.039)	120549	10.0000 10.0000	9.697 9.637
	Di-n-Butylphthalate	149	10.463	10.463		141693	10.0000	
	Finoranthene	202	11.302	11.302	•	115262	10.0000	9.367 9.583
	Benridine	184		11.571		78774	10.0000	9.305
	Pyrene	202		11.665		127577	10.0000	9.897
	3,3'-dimethylbenzidine	21.2		12.867		66351	10.0000	9.134
	Butylbenzylphthelate	149		12.991	-	62032	20.0000	9.418
	Beneo (a) Anthracens	228		13.758		102788	20.0000	9.450
	Chrysene	228		13.832		113552	10.0000	10.05
	3,3'-Dichlorobenzidine	252		13.799		38850	10.0000	9.762
	bis(2-ethylberyl)Phthalate	149		14.310		83377	10.0000	9.394
	Di-n-octylphthalata	149		15.267		126961	10.0000	8.756
	Senzo (b) fluoranthene	252		15.582	-	84929	10.0000	8.548 (Q)
	Benzo (h) fluoranthene	252		15.623		1.22065	10.0000	10.51 (g)
	Benzo (e) pyrene	252		16.007		97140	10.0000	9.863
	Benzo(a)pyrene	252		16.079		1.02327	10.0000	9.463
	Indeno(1,2,3-cd)pyrene	275		17.800		76748	10.0000	8.022
	Dibenzo (a, h) antimacene	278	17.841			88293	18.0000	9.016
	Benzo(g, h, i) perylene	276	18.224			1.03135	3.0.0000	9.511
دست					,			y , 0-L

Data File: \\SV5\C\chem\sv5.i\100210.B\HSI1002B.D Report Date: 02-Oct-2010 16:57

Page 3

		•				AWDURT	cs
•	QUANT SIG					CAL-AMT	OM-COL
<u> ೧೦ಞಾಯಾದೆತ</u>	mass	<b>≥T</b>	EXP PT	ker et	PESPONSE	( 19G)	( M(3)
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		P		<del></del>	
M 162 benzo b, k Fluoranthene Totals	252				205994	10.0000	9.607(2)

# QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

q - Qualifier signal exceeded ratio warning limit.

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002B.D

Report Date: 03-Oct-2010 11:12

# TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002B.D

Lab Smp Id: HSL 010 ug/ml CS-2

Analysis Type: SV Quant Type: ISTD

Operator: KT

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1 8270STD.SUB;10MSSV0308;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

		AREA	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
	========	========	=========	=========	======
1 1,4-Dichlorobenze	122625	61313	245250	116839	-4.72
2 Naphthalene-d8	530514	265257	1061028	493196	-7.03
3 Acenaphthene-dl0	282538	141269	565076	272639	-3.50
4 Phenanthrene-dl0	462722	231361	925444	428440	-7.41
5 Chrysene-d12	435850	217925	871700	412260	-5.41
6 Perylene-d12	422284	211142	844568	419005	-0.78

		RT I	TMT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	FDIFF
	=========	=========	=========	_=======	======
1 1,4-Dichlorobenze	3.96	3.46	4.46	3.96	0.00
2 Naphthalene-d8	5.37	4.87	5.87	5.36	-0.19
3 Acenaphthene-dl0	7.47	6,97	7.97	7.47	0.00
4 Phenanthrene-d10	9.41	8.91	9.91	9.41	0.00
5 Chrysene-dl2	13.78	13.28	14.28	13.78	0.00
6 Perylene-d12	16.16	15.66	16.66	16.16	0.00
					Í

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Page 1

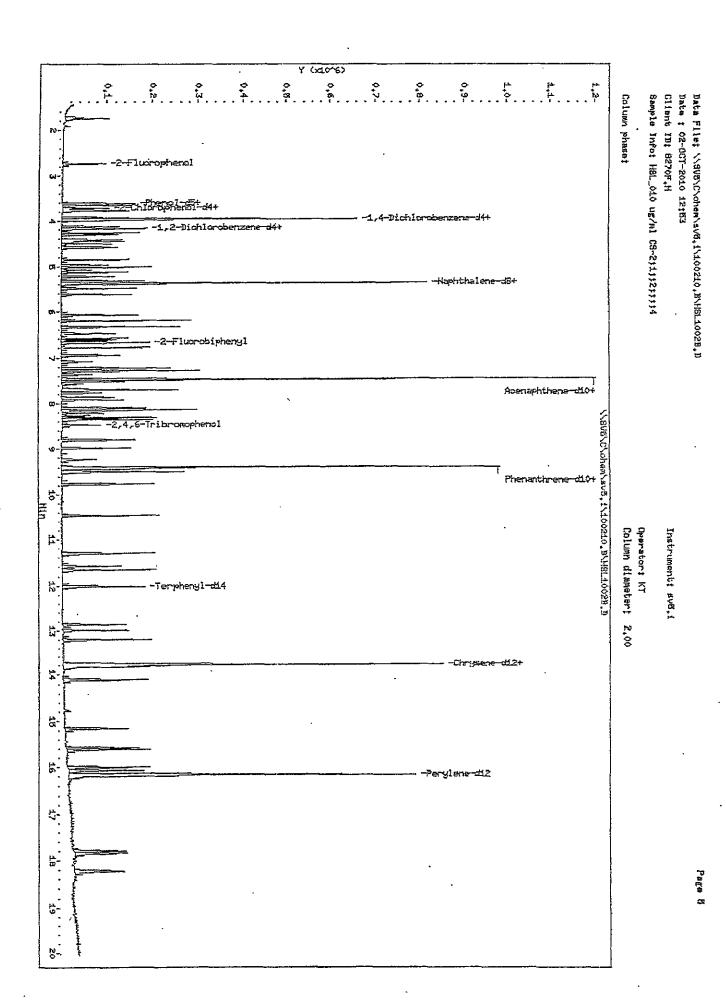
Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Level:

Sample Type:

Client Smp ID: 8270F.M



Report Date: 03-Oct-2010 11:13

#### TestAmerica West Sacramento

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002C.D Lab Smp Id: HSL 020 ug/ml CS-3 Client Smp Client Smp ID: 8270F.M

: 02-OCT-2010 13:18 Inj Date

Inst ID: sv5.i Operator : KT

: HSL\_020 ug/ml CS-3;1;;3;;;4 Smp Info

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0309;0;8270F.M Comment: SOP SAC-MS-0005

Method : \\sv5\c\chem\sv5.i\100210.B\8270f.m Meth Date : 03-Oct-2010 11:09 onishim Quant Quant Type: ISTD Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 3 Calibration Sample, Level: 3

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: 1 8270STD.SDB

Target Version: 4.14

Processing Host: SACP307UM

							AMOUR	TS
		DIR TRANG					CAL-AMT	DR-COL
Co	npowds	Mass	PT	EXP RT	REL RI	rksponse	( NG)	( 18G)
		****	**************************************	- AFR	(* 555)	145926	40.0000	***************************************
*	1 1,4-Dichlorobenzenc-d4	152	3.954		(1.000)	£45326 6256R2		(Q)
÷	2 Naphthalene-d8	136	5.364		(1.000)		40.0000	
*	3 Acenaphthene-d10	164	7.457		(1.000)	328608 525834	40.0000 40.0000	
±	4 Phenauthrene 010	1.88	9.405		(1.000)			
*	5 Chrysens-dl2	240	13.779		(1.000)	590727	40.0000	
*	6 Perylens-dl2	264	16.162		(1.000)	619266	40.0000	
\$	7 2-Fluorophenol	112	2.732		(0.691)	100961	20.0000	19.63
\$	8 Phenol-d5	99	3,512		(0,914)	127055	20.0000	19.64
\$	9 2-Chlorophenol-d4	132	3.747	•	(0.948)	112302	20.0000	19.77
\$	10 1,2-Dichlorobenzene-d4	352	4,162		(1.052)	72837	20.0000	20.27 (g)
\$	11 Nitrobenzene-d5	82	4.576		(0.853)	103440	20.0000	19.52
\$	12 2-Fluorobiphenyl	172	6.680		(0.895)	209764	20.0000	19.82
\$	13 2,4,6-Tribromphenol	330	B.473		(1.135)	28598	20.0000	20.10
\$	14 Temphenyl-dl4	244	12.017		(0.872)	218324	20.0000	1B.75
	15 N-Nitrosodimethylamine	74	1.706		(0.431)	66431	20.0000	19.76 (q)
	16 Pyridine	79	1.725		(0.437)	116339	20.0000	20.69 ( <u>Q</u> )
	23 Aniline	93	3.654		(0.924)	160510	20.0000	19.50
	24 Phenol-	94	3.523	3.623	(0.916)	147994	20,0000	19.91
	26 Bis(2-chloroethyl)ether	93	3.716	3.716	(D.94D)	101777	20.0000	19.53
	27 2-Chlorophenol	128	3.768	3.768	(0.953)	)144B1	20.0000	20.07
	28 1,3-Dichlorobenzene	146	3.913	3.923	(0.990)	122398	20.0000	19.70
	29 1,4-Dichlorobenzene	146	3.975	3.975	(1.005)	126965	,20.0000	19.54
	30 Benzyl Alcohol	108	4.120	4.120	(1.042)	72366	20.0000	18.87
	31 1,2-Dichlorobenzene	146	4.172	4.172	(1.055)	11.7073	20.0000	19.60
	32 2-Methylphenol	108	4.255	4.255	(1.075)	101499	20.0000	19.45
	33 2,21-oxybis (1-Chloropropene)	45	4.296	4.297	(1.086)	166396	20.0000	20.D8
	34 4-Methylphenol	108	4.421	4.421	(1.118)	106723	20.0000	19.26
	36 Bexachlorosthans	317	4.504	4.504	(1.139)	442.96	20.0000	19.98
	37 N-Nitrosodinoropylamine	70	4.441	4.442	(1.123)	73913	20.0000	20,02
	42 Nitrobenzene	77	4.597	4.597	(0.857)	101809	20.0000	19.65
	44 Isopharae	82	4.856	4.856	(0.905)	151333	20.0000	19,21
	45 2-Nitrophenol	139	4.96D		(0.925)	58938	20.0000	19.18
	46 2,4-Dinstinghenol	107	5.011		(0.934)	107325	20.0000	19.65

					AMOUN	TS
	QUART SIG				CAL-AMT	OP-COT
Compounds	Mass	RT	HEP RY REL RY	response	( NG)	( NG)
	<b>=:=£</b>			- Fabrance		-
47 Bis (2-chloroethoxy) methane	93	5,125	5.126 (0.956)	120646	20.0000.	19.62
49 2,4-Dichlorophenol	162	5.229	5.229 (0.975)	84525	20.0000	20.01
50 Benzois Acid	1,22	5.094	5.115 (0.950)	54506	20.0000	18.03
51 1,2,4-Trichlorobenzene	180	5.322	5.322 (0.992)	- 89082	20.0000	19.47
52 Naphthalene	128	5.395	5.395 (1.005)	336100	20.0000	19.46
54 4-Chlorospiline	127	5.488	5.488 (1.023)	135348	20.0000	19.99
57 Esachlorobutadiene	225	5.613	5.613 (1.046)	45138	20.0000	20.16
60 4-Chloro-3-Methylphenol	. 107	5.D68	6.069 (1.131)	90970	20.0000	19.28
f3 2-Methylnaphthalene	142	6.203	6.203 (1.156)	212981	20.0000	19.62
56 Hexachlorocyclopenradiene	237	6.483	6.483 (0.868)	47478	20.0000	19.36
69 2,4,6-Trichlorophenol	195	6.576	6.576 (0.881)	49658	20.0000	18.94(0)
70 2,4,5-Trichlorphenol	196	6.628	6.628 (0.888)	55529	20.0000	19.66(QM
71 2-Chloroumphthalene	1.62	6.784	6.784 (0.908)	180754	20.0000	19.54
73 2-Witroamiline	€5	6.943	6.949 (0.931)	54872	20,0000	19.58
76 Dimethylphthalate	1.63	7.219	7.229 (0.967)	213272	20.0000	20.03
77 Acenaphthylene	152	7.281	7.281 (0.975)	315165	20.0000	19.57
79 2,6-Dimitrotoluene	265	7.291	7.302 (0.976)	49111	20.0000	19.80 (QM)
80 3-Ritroamiline	138	7,447	7.447 (0.997)	59114	20.0000	19.09
81 Acenaphthene	. 1 <i>5</i> 3	7.509	7.509 (1.00%)	208228	20.0000	20.31
82 2,4-Dinitrophenol	184	7.571	7.572 (2.014)	23799	20.0000	19.52
83 Dibenzofuran	168	7.695	7.706 (1.031)	271431	20.0000	19.95
84 4-Nitrophenol	109	7.675	7_675 (1.028)	25164	20.0000	19.59(0)
86 2,4-Dinitrotolnene	165	7.768	7.768 (1.040)	63223	20.0000	. 19.42
91 Fluorene	166	8.232	8.131 (1.089)	220647	20.0000	19.58
92 Diethylpisthalate	149	8.100	8.100 (1.085)	216140	20.0000	19.83
93 4-Chlorophenyl-phenylether	204	8.151	8.152 (1.092)	93468	20.0000	19.95
94 4-Witroaniline	138 .	8.214	8.214 (1.100)	61333	20.0000	19,98
37 4,6-Dinitro-2-methylphesol	198	8.276	8.276 (0.880)	32982	20.0000	20.44
98 N-Nitrosodiphenylamine	-169	8.317	8.317 (0.884)	185206	23.4000	23.36
100 Azobenzene	77	B.348	8.348 (D.88B)	203290	20.6000	19.65
101 4-Bromophenyl-phenylether	248	B.794	8.794 (0.935)	50693	20.0000	19.75
108 Hexachlorobenzene	284	8.980	8.981 (0.955)	54528	20.0000	19.02
110 Pentachlorophenol	255	9.240	9.240 (0.982)	30451	20.0000	20.33
114 Phenanthrene	178	9.436	9.437 (1.003)	329718	20,0000	19.89
· 115 Anthracene	178	9.499	9.499 (1.010)	326558	20.0000	19.72
118 Carbazole	167	9.768	9.768 (1.039)	298921	20.0000	19.76
120 Di-n-Butylphthalate	149	10.462	10.463 (1.112)	358075	20.0000	19.58
126 Fluorauthene	202	11.302	11.302 (1.202)	3.0E182	20.0000	20.75
127 Benzidina	184	11.571	11.571 (0.840)	222260	20.0000	18.56
126 Pyrane	202		11.665 (D.847)	3458D5	20.0000	18.73
134 3.3'-dimethylbenzidine	212		12.867 (0.934)	198960	20.0000	18.82
136 Butylbensylphthalate	149		12.991 (0.943)	174685	20.0000	18.68
138 Benzo (a) Anthracene	228		13.758 (0.998)	304948	20.0000	19.38
139 Chrysene	228		13.831 (1.003)	314030	20.0000	19.51
140 3.3:-Dichlorobennidine	252		13.799 (1.002)	115458	20.0000	19.45
	149		14.110 (1.024)	246201		
141 bis (2-ethylhexyl) Phthalate	149		15.167 (1.100)	400592	20.0000 20.0000	19.47
142 Di-n-octylphthalate					20.0000	19.66
144 Benzo (b) Choranthens	252		15.582 (0.964)	255213	20.0000	18.28(Q)
145 Benzo (k) fluoranthene	252		15.623 (0.966)	371629	20.0000	20.65 (g)
147 Benzo(a) pyrene	252		16.007 (0.990)	267072	20.0000	19.72
148 Renzo(a) pyrene	252		16.079 (0.994)	307781	20.0000	19.37
151 Indeno (1,2,3-cd) pyrens	276		17.800 (1.101)	<b>222110</b>	20.0000	17.74
152 Dibenzo (a.h) anthracene	27B		17.841 (1.204)	270172	20.0000	18.81
153 Benzo(g,h,i)perylene	Z76 .	18.224	18.235 (1.128)	301520	20.0000	19.29

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002C.D Report Date: 03-Oct-2010 11:13

						AMOUN	es	
	CDANT SIG					CAI-AMT	CON-COL	
<del>රාකුටාගිය</del> ්	MASS	KT	er er	rel et	RESPONSE	( NG)	( DG)	
Market Market State of the Stat		-	<del></del>		-		-	
N 162 benzo b,k Fluoranthene Totals	252				627842	20,0000	19.61 (A	1

# QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
q - Qualifier signal exceeded ratio warning limit.

Deta File Name: HSL1002C.D

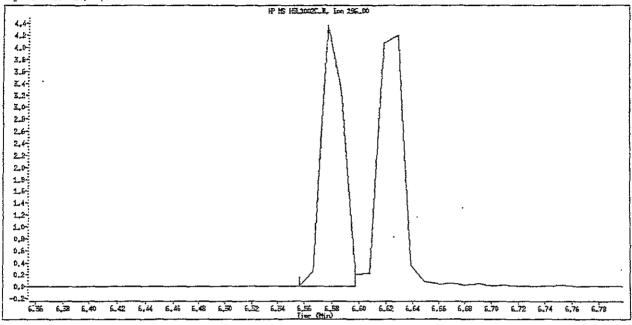
Inj. Date and Time: 02-DCT-2010 13:18

Instrument ID: sv8.i Client ID: 8270F.M

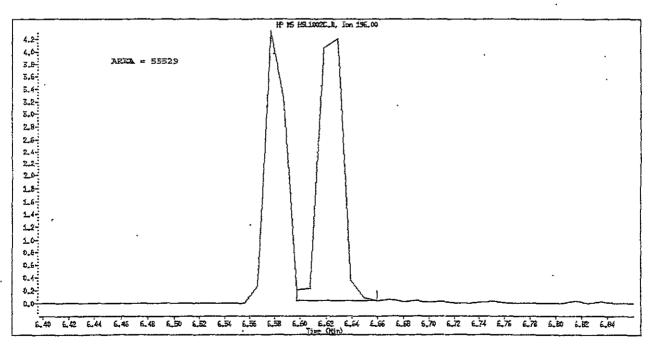
Compound Name: 2,4,5-Trichlorphenol

CAS \$: 95-95-4

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk
Manual Integration Reason: Wrong Peak

Data File Name: ESL1002C.D

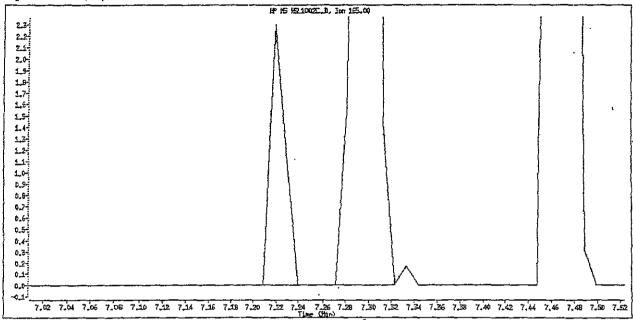
Inj. Date and Time: 02-007-2010 13:18

Instrument ID: sv5.i Client ID: 8270F.M

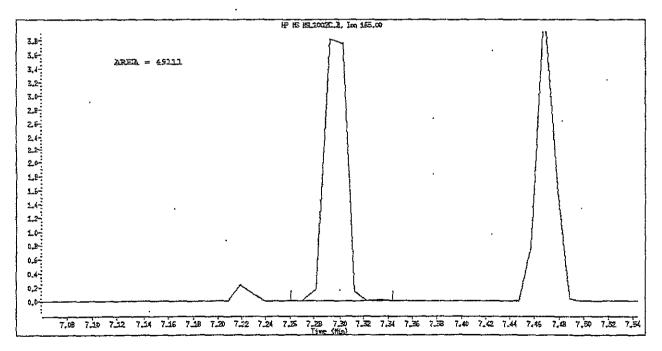
Compound Name: 2,6-Dimitrotologue

CAS #: 606-20-2

Report Date: 10/03/2010



Original Integration



Manual Integration

Menually Integrated By: truongh Menual Integration Reason: Poor Chromatography Report Date: 02-Oct-2010 16:57

#### TestAmerica West Sacramento

#### Method 8270C

Data file : \\SV5\C\chem\sv5.i\100210.B\HSL1002C.D

Lab Sup Id: HSL 020 ug/ml CS-3 Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 13:18

Inst ID: sv5.i Operator : KT

Smp Info : HSL 020 ug/ml CS-3;1;;3;;;4

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0309;0;8270F.M

Comment : SOP SAC-MS-0005

: \\SV5\C\chem\sv5.i\100210.B\8270f.m Method

Meth Date: 02-Oct-2010 16:57 onishim Quant Type: ISTD

Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 3 Calibration Sample, Level: 3

Dil Factor: 1.00000 Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

							STRUCMA			
		QUANT SIG	-				CAL-AMI	CDIN	-cor	
Com	ಹೆಯುತ್ತಣ	rese	RI	exp et	REL RT	RESPONSE	( Mg)	ŧ	ng)	
*	1 1,4-Dichlorobenzene-d4	152	3.954		(1.000)	145926	€0.0000	-	(0)	
*	2 Naphthalene-d8	136	5.364	5.374	(1.000)	625682	40.0000			
ŧ	3 Acenaphthene-di0	164	7.467	7.468	(1.000)	328608	40.0000			
*	4 Phenanthrene-dl0	188	9.405	9.405	(1.000)	525834	40.00DD			
*	5 Chrysene-dl2	240	13.779	13.779	(1.000)	590727	40.0000			
*	6 Perylene d12	254	16.162	16.162	(1.000)	63,9266	<b>≙</b> 0.8000			
ş	7 2-Fluorophenol	בננ	2,732	2,732	(0.591)	100961	20.0000		18.75	
Ş	8 Phenol-d5	وو	3.612	3.613	(0.914)	127066	20.0000		18.55	
\$	9 2-Chlorophenol-d4	132	3.747	3.758	(0.948)	112362	20.0000		19.23	
\$	10 1,2-Dichlorobenzene-d4	152	4.162	4.162	(1.052)	72837	20.0000		19.98 (q)	
\$	11 Nitrobenzene-d5	22	4.575	4.576	(0.853)	103 <u>44</u> 0	20.0000		18.64	
\$	12 2-Fluorobiphenyl	172	6.680	6.680	(0.895)	209764	20.0000		19.93	
\$	13 2,4,6-Tribromophenol	330	8.473	8.473	(1.135)	28698	20.0000		22.32	
ş	li Terphenyl-dli	244	12.017	22.017	(0.872)	21832£	20.0000		18.95	
	15 N-Nitrosodimethylamine	74	1.706	1.706	(0.431)	66€31	20,0000		28.69	
	16 Pyridine	79	1.725	1.726	(0.437)	116339	20.0000		19.64	
	23 Aniline	93	3.654	3.654	(D_924)	160510	20.0000		18.69	
	24 Phenol	94	3.623	3.523	(0.916)	147994	20.0000		20.32	
	26 Bis (2-chlorosthyl) ether	\$3	3.715	3.716	(0.940)	דקקבפב	20.0000		18.39	
	27 2-Chlorophenol	128	3.768	3.768	(0.953)	114681	20.0000		19.85	
	28 1,3-Dichlorobenzene	146	3.923	3.923	(0.990)	1.22398	20.0000		19.22	
	29 1,4-Dichlorobenzene	146	3.975	3.975	(1.005)	126965	20.0000		19.72	
	30 Benzyl Alcohol	108	4.120	4.120	(1.D42)	72366	20.0000		18.27	
	31 1,2-Dichlorobehzene	146	4.172	4.172	(1.055)	117073	20,0000		19.18	
	32 2-Methylphenol	708	4.255	4.255	(1.075)	101499	20.0000		18.85	
	33 2,2'-oxybis(1-Chloropropane)	45	4.296	4.257	(1.086)	166596	20.0000		15.22	
	34 4-Methylphenol	108	4,421	4.421	(1,218)	105723	20.0000		18.60	
	36 Hexachlorosthane	117	4.504	4.504	(1.139)	44196	20.0000		19.45	
	37 N-Nitrosodingropylamine	79	4.441	4.442	(1.123)	73913	20.0000		18.40	
	42 Nitrobenzene	77	4.597	4.557	(0.857)	101809	20,0000		18.46	
	44 Isophorone	82	4.856	4.836	(0.905)	191333	20.0000		18.30	
	45 2-Nitrophenol	139	4.960	4.95D	(0.925)	58538	20.0000		29.57	
	46 2.4-Dinethyphenol	207	5.011		(0.234)	107325	20.0000		19.20	

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002C.D Report Date: 02-Oct-2010 16:57

						MODE	TS
		QUART SIG				CPL-AMT	ON-COL
Compo	ands	mass	RT	exper em er	RESPONSE	{ BG}	( MG)
	···	<del></del>				20 0000	20.20
	Bis (2-chloroethoxy) methane	93	5.125	5.126 (0.956)	120648	20,0000	- 19.38
_	2,4-Dichlorophenol	162	5.229	5.229 (0.975)	84525	20.0000 20.0000	20.54
	Benzoic Acid	122	5.094	5.135 (0.950)	54506		17.49
	1,2,4-Trichlorobenzene	280	5.322	5.322 (0.992)	89082	20.0000	19.37
	Naphthalene	128	5.395	5.395 (1.006)	336100	20.0000	19.30
	4-Chlorospiline	127	5. <del>4</del> 88	5.488 (1.023)	135348	20.0000 20.0000	19.75 21.25
	Hexachlorobutadiene	225	5.613	5.613 (1.045)	45138	20,0000	19.21
60		107	6.068	6.069 (1.131)	90970		20.04
53	— ··· — • ·	142	6.203	6.203 (1.156)	212981	20.0000 20.0000	18.94
	Hexachlorocyclopentadiene	237	6.483	6.483 (D.868)	47478 49658	20.0000	19.96 (Q)
	2,4,6-michlorophenol	196	6.576	6.576 (0.881)		20.0000	<del>-</del> -
70		720	6.576	6.628 (0.881)	49658	20.0000	18.17(Q) 13.62
	2-Chloronaphthalene	162	6.784	6.784 (0.908) 6.949 (0.931)	180754 54872	20,0000	17.78
	2-Nitroaniline	65	6.949		213272	20.0000	20.04
	Dimethylphthalate	163	7.219	7.229 (0.967) 7.281 (0.975)			
	Acenaphthylens	152	7.281		315165	20.0000	19.57
	2,6-Dinitrotoluene	1.65	7.219	7.302 (0.967)	517.25	20.0000	21.45(0)
-	3-Kitrosniline	138	7.447	7.447 (0.997)	59114	20.0000	18.71
	Acenaphrhene	153	7.589	7.509 (1.006)	208228	20.0000	20.29
	2,4-Dinitrophenol	184	7.571	7.571 (1.014)	23799	20.0000	19.22
	Dibenzofuran	168	7.695	7.706 (1.031)	271431	20.0000	20.02
	4-Nitrophenol	109	7.675	7.675 (1.028)	25164	20.0000	18.24 (Q)
	2,4-Dinitrotoluene	165	7.768	7.768 (1.040)	63223	20.0000	19.81
	Fluorene	166	8.131	8.131 (1.089)	220647	20.0008	19.86
	Distrylphthalate	149	8.100	8.100 (1.085)	23.6140	20.0000	19.43
	4-Chlorophenyl-phenylether	204	8.151	8.152 (1.092)	93468	20,0000	20.41
	4-Nitrosniline	138	8.214	8.214 (1.100)	61333	20,0000	19.86
	4,6-Dinitro-2-methylphenol	198	8.276	8.276 (0.869)	32982	20.0000	20.90
	N-Nitrosodipherylamine	169	8.317	8.317 (0.884)	186206	23.4000	22.72
	Azobenzene	77	B.348	8.348 (0.888)	203290	20.0000	17.83
	4-Bromophenyl-phenylether	248	8.794	8.794 (0.935)	50693	20.0000	19.95
	Hexachlorobenzene	284	8.980	8.981 (0.955)	54528	20.0000	19.87
	Pentachlorophenol	266 178	9.240 9.436	9.240 (0.982) 9.437 (1.003)	30451 329718	20.0000 20.0000	18.48 20.10
	Phenanthrene	178	9.499	9.499 (1.010)	326558	20.0000	19.78
	Anthracene	167	9.768	9.768 (1.039)	298921	20,0000	19.47
	Carbazole	149	10.462	10.463 (1.112)	358075	20,0000	29.29
	Di-n-Butylphthalate Fluoranthene	202	11,302	11.302 (1.202)	308182	20.0000	20.88
		184	11.571	11.571 (0.840)	ZZ226D	20.0000	28.32
•	Benzidine			11.665 (0.847)	345805	20.0000	
	Pyrene	202	11.665				18.72
	3,3'-dimethylbenzidine	212	3.2.867		198960	20.0000	19.11
	Butylbensylphthalate	149		12.991 (0.943)	174685		18.51
	Benzo (a) Anthracens	228		13.758 (0.998)	304948	20.0000	19.57
	Chrysene	228	13.820		314030	20.0000	19.39
	3,3'-Dichloroberridine	252	13.799		115458	20.0000	20.25
	bis (z-ethylbexyl)Phthalate	149	14.120	14.110 (1.024)	248201	20.0000	13.10
	Di-n-octyl <u>nbthalate</u>	149	15.157		400592	20.0000	19.28
	Benzo (b) filmorauthens	252	15.582		256213	20.0000	17.45 (Q)
	Benzo (k) fluoranthena	252*	15.613		371629	20.0000	21.66 (g)
	Benzo (e) pyrene	252	15.996	•	281012	20,0000	19.30
	Benzo (a) pyrene	252	16.069		307781	20.0000	19.26
151	Indeno (1, 2, 3-cd) pyrene	276	17.789	•	225110	20,0000	15.23
152	Dibenzo (a, h) znihracene	278		17.841 (1.104)	270172	20,0000	18.64
253	Benzo(g,h,i)perylene	276	18.224	18.235 (1.128)	301520	20.0000	19.41

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002C.D Report Date: 02-Oct-2010 16:57

Page 3

							TO CMA	TS		
	QUANT SIG					CA1	-amt	OM-	COL	
Compounds	Mass	RT	KYP RT	ber ba	RESPONSE	₹	NG)	(	NG)	
	******	*	<del></del>				الدجيد ال	På enn	- E-15 - E-45	
M 162 benzo b,k Fluoranthene Totals	252				627842	20.	0000	3	9.72 (A)	

# QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

q - Qualifier signal exceeded ratio warning limit.

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002C.D

Report Date: 03-Oct-2010 11:13

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002C.D

Lab Smp Id: HSL 020 ug/ml CS-3 Analysis Type: SV

Quant Type: ISTD

Operator: KT

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1 8270STD.SUB;10MSSV0309;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

	_	AREA	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
	========	========		========	======
1 1,4-Dichlorobenze	122625	61313	245250	145926	19.00
2 Naphthalene-d8	530514	265257	1061028	625682	17.94
3 Acenaphthene-d10	282538	141269	565076	328608	16.31
4 Phenanthrene-d10	462722	231361	925444	525834	13.64
5 Chrysene-dl2	435850	217925	871700	590727	35.53
6 Perylene-dl2	422284	211142	844568	619266	46.65
_					

		RT I	TIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	TTICS
_======================================	<b>======</b>	========	========	=========	======
1 1,4-Dichlorobenze	3.96	3.46	4.46	3.95	-0.00
2 Naphthalene-d8	5.37	4.87	5.87	5.36	-0.20
3 Acenaphthene-d10	7.47	6.97	7.97	7.47	-0.00
4 Phenanthrene-dl0	9.41	8.91	9.91	9.41	-0.00
5 Chrysene-dl2	13.78	13.28	14.28	13.78	-0.00
6 Perylene-dl2	16.16	15.66	16.66	16.16	-0.00
<u> </u>					

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

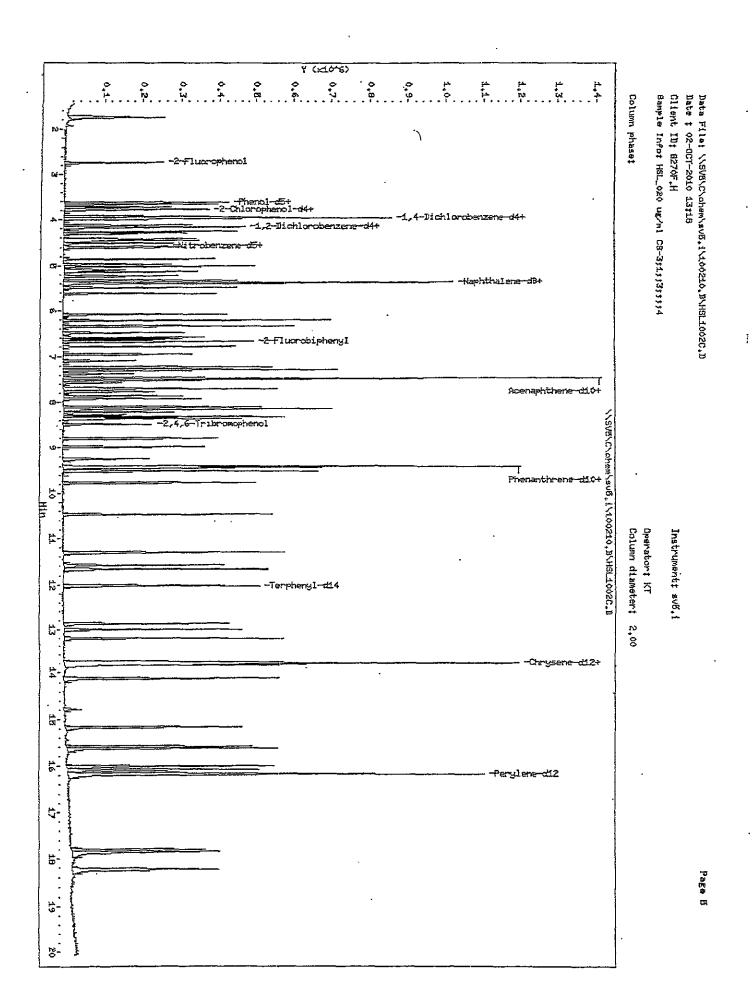
Page 1

Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Smp ID: 8270F.M Level:

Sample Type:



#### TestAmerica West Sacramento

#### Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002D.D Lab Smp Id: HSL\_050 ug/ml CS-4 Client Smp Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 13:44

Operator: KT Inst ID: SY SMP Info: HSL 050 ug/ml CS-4;1;;4;;;4 Misc Info: 3;;0;1 8270STD.SUB;10MSSV0310;0;8270F.M Comment: SOP SAC-MS-0005 Inst ID: sv5.i

: \\sv5\c\chem\sv5.i\100210.B\8270f.m Method

Meth Date : 03-Oct-2010 11:09 onishim Quant Type: ISTD Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 4 Calibration Sample, Level: 4

Dil Factor: 1.00000

Integrator: Falcon Compound Sublist: 1 8270STD.SDB

Target Version: 4.14

Processing Host: SACP307UM

								AWOUN	ITS	
	,	QUART SIG					CAL	AMI	OB-	-cor
	epanog.	Mass	et	exp RT	REL RT	RESPONSE	(	KG)	(	MG)
*	1 1.4-Dichlorobenzene-d4	152	3.955	3.955	(1.000)	122625	£0.4	000	#C547	
*	2 Naphthalene-d8	135	5.374	5.374	(2.000)	530514	40.	0000		
ŕ	3 Aceraphthene 010	164	7.45B	7.458	(1.000)	282538	40.9	0000		-
*	4 Phenenthrene-dl0	188	9.405	9.405	(I_00D)	462722	<b>40.</b> €	0000		
*	5 Chrysene-dl2 .	240	13.779	13.779	(1.000)	435850	40.0	0000		
*	6 Perylene-dl2	264	16.162	16.162	(1.000)	422284	40.	0000		
Ş	7 2-Fluorophenol	112	2.732	2,732	(0.691)	220986	50.	0000		51.13
\$	8 Phenol-d5	99	.3.613	3.613	(0.914)	274382	5D.1	0000		50.48
\$	9 2-Chlorophenol-d4	132	3.758	3.758	(0. <del>95</del> 0)	244352	50.0	0000		51.19
Ş	10 1,2-Dichlorobenzene-d4	152	4.162	4.152	(1.052)	151616	50.0	0000	3	50.20
\$	11 Nitrobenzene-d5	82	4.576	4.576	(0.B52)	226162	50.	0000		50.33
\$	12 2-Fluorobiphenyl	172	6.680	6.680	(0.895)	473978	50.6	000	:	52.0B
\$	13 2,4,6-Tribromophenol	330	8.473	8.473	(1.135)	63311	50.0	0000		51.57
\$	14 Terphenyl-d14	2 <del>44</del>	12.017	12.017	(0.872)	438253	50.0	0000		51.05
	15 M-Nitrosodimethylamine	7∉	1.706	1.706	(0.431)	140972	50.	0000	4	49.9D()
	16 Pyridine	79	1.726	1.726	(0.437)	240053	50.0	000 .	į	50_83.(P
	23 Amiline	, 93	3.654	3.65€	(0.924)	346504	50.0	1000	3	50.08
	24 Phenol	94	3.623	3.623	(D.916)	311820	50.0	000	4	£9.93
	26 Bis(2-chloroethyl)ether	93	3.716	3.716	(0.94D)	220455	50.0	000		50.34
	27 2-Chlorophenol	128	3.768	3.768	(0.953)	2424-62	50.0	000	3	50.57
	28 1,3-Dichlorobenzene	146	3.923	3.923	(0.992)	265384	50.0	0000	3	5D.82
	29 1,4-Dichlorobenzene	146	3.575	3.975	(1.005)	271151	50.0	000		19.66
	30 Benzyl Alcohol	TOB	4.120	4.120	(1.042)	150914	50.0	000	4	19.94
	31 1,2-Dichlorobenzene	146	4.172	4.172	(1.055)	257606	50.0	000	=	51.32
	32 2-Methylphenol	108	4.255	4.255	(1.076)	21B610	50.8	DDD	4	19.86
	33 2,21-oxybis(1-Chloropropane)	45	4,297	4.297	(1.D85)	349371	50.0	000		50.12
	34 4-Methylphemol	108	4,421	4,421	(1.118)	233354	50.0	000	. :	50.11
	36 Hexachlorosthans	<u> 11</u> 7	4.504	4.504	(1.139)	94106	50.0	000		58.62
	37 N-Nitrosodinoropylamine	70	4.442	4.442	(1.123)	156914	50-0	000	2	50.59
	42 Nitrobenzene	77	4.597	4.597	(0.855)	21,9387	50.0	000		19.95
	44 Isophorope	8.2	4,256		(D.904)	420051	50.1	000		9.74
	45 2-Nitrophenol	139	4.960	4.960	(D.523)	132771	50.0	000		D.95
	46 2.4-Dimethyphenol	107	5.012	5.012	(D.533)	231517	50.0			50.00

	QUART SIG					AMOUN	
වාත්දාලාගයින	MASS	RT	exp rt	PEL RT	RESPORSE	Callant ( NG)	ODE-COX
	2977						-
47 Bis (2-chlorosthoxy) methans	93	5.126	5.126	(0.954)	253648	50.0000	49,15
49 2,4-Dichlorophenol	162	5,229	5.229	(0.973)	179296	50.0000	50.05
50 Benzoic Acid	122	5.115	5.115	(0.952)	128366	50.DDDD	50.08
51 1,2,4-Trichlorobenzene	180	5.322	5.322	(D.99D)	157265	50.0000	50.86
52 Naphthalene	128	5.395	5.395	(1.004)	724980	50.0000	49.49
54 4-Chlorogniline	127	5.488	5.488	(1.021)	25118 <del>4</del>	50.0000	50,72
57 Hexachlorobutadiene	225	5.613	5.613	(1.044)	955\$2	50,0000	50.36
60 4-Chloro-3-Methylphenol	107	6.069	6.059	(1.129)	205388	50.0000	51.34
63 2-Methylnephthalene	142	6.203	6.203	(1.154)	4545 <u>4</u> 6	50. DODO	50.50
66 Hexachlorocyclopentaciene	237	6.483	6.483	(D.868)	104908	50.0000	49.75
69 2,4,6-Trichlorophenol	196	6.576	6.576	(0.881)	113001	50.0000	50.13
70 2,4,5-Trichlorphenol	196	5.628	5.628	•	128196	50.0000	52.79
71 2-Chloronaphthalene	152	5.784	6.784		403257	50.0000	50.72
73 2-Nitrosniline	65	5.949	6.949		124335	50.DODO	52.59
76 Dimethylphthalate	. 163	7,229	7.229		475258	50.0000	51.91
77 Acenaphthylene	152	7.281	7.281		712158	50.0000	51.43
79 2,6-Dinitrotoluene	165	7.302	7.302	-	110261	50.0000	\$1.69
80 3-Nitrosmiline	138	7.447	7,447	•	141396	50.0000	53,11
61 Acenaphthens	153	7.509	7.509		446691	50.0000	50.90
E2 2,4-Dimitrophenol	184	7.571	7.572	•	58864	50,0000	47.37
83 Dibenzofuran	168	7.706	7.706		598735	50.0000	51.18
84 4-Nitrophenol	109	7.675	7.675		56777	50,0000	51,41
86 2,4-Dinitrotoluene	165	7,768	7,768		148875	50.0000	53.18
91 Fluorena	166	8,131	8.131	-	494097	50.0000	51.01
52 Diethylphthalate	149	8.100	8.100		487057	50.0000	51.95
93 4-Chlorophenyl-phenylether	204	8.152	8.152		209308	50.0000	51.57
94 4-Nitroaniline	138	8.214	8.214		135397	50.0000	51.31
57 4,6-Dinitro-2-methylphenol	198	8.275	8.276	•	76137	50.000D	46.58
98 N-Nitrosodiphenylamine	169	8.317	B.317		409665	58.6000	58,4I
100 Azobenzene	203 77	8.348	B.348	-	45996D	50,0000	50.55
181 4-Bromophenyl-phanylather	248	8.794	8.794	-	115283	50.0000	51.04
101 #-stomopheny1-pheny1ernet	284	8.951	8.981	•	124963	50.0000	49.54
110 Pentachlorophenol	266	9.240	9.240		67882	50.0000	45.48
114 Phenanthreps	178	9.437	9.437	-	718164	50.0000	
115 Anthracene	278	9.499	9.499		728681	50.0000	.49.24 50.01
118 Carbazole	167	9.76B	9.768		660BB5	50.0000	- 49.65
	149	10.463	10.463		799142	50.0000	49.90
120 Di-n-Butylphthalate 126 Fluorapthere	202	11.302	11.302		639252	50.0000	48,92
125 FINOTABLE ==	202 184	11.571	11.571		450332	50.0000	
				•			50.9B
128 Pyrene	202		11.665		701084	50,0000	51.46
134 3,3'-dimethylbenzidine	212	12.867			385489	50.0000	49,44
136 Entylbenzylphthalate	749		12.991		340978	50.0000	49.94
138 Benzo (a) Anthracene	228		13.758		569271	50.D00D	49.03
139 Chrysene	228		13.831		597685	50.0000	50.33
140 3,3'-Dichlorobenzidine	252	13.799			217413	50.0000	49.65
141 bis (2-ethylberyl) Phthalate	149		14.210		<b>664144</b>	50.0000	£9.35
142 Di-n-octylphthelate	149		15.167		732406	50.0000	48.72
144 Benzo (b) finoranthene	252	25.582			527487	50,0000	£5.18
145 Benzo (k) fluoranthene	252	15.623			580084	50.0000	£7.27
147 Benzo (e) pyrene	252	16.007	16.007	(0.990)	506622	50.0000	50.62
148 Benzo(a) tyrene	252	16.079	16.079	(0.995)	542578	50.0000	50.06
151 Indeno (1,2,3-cd) pyrana	276	17.800	17.800	(1.101)	447085	50.0000	51.00
152 Dibenzo (a, h) anthracens	278	17.841	17.841	(1.104)	486893	50.0000	49.72
153 Benzo(g,h,i)perylene	275	18.235	18.235		527720	50,0000	49.77

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002D.D

Report Date: 03-Oct-2010 11:14

QUANT SIG CAT-AMP MASS RT EXP RT REL RT RESPONSE ರಯಾಂಬಾನತ 1107571 50.74 (A) 50.0000 M 162 benzo b,k Fluoranthene Totals 252

# QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
 M - Compound response manually integrated.

Data File Name: RSM1002D.D

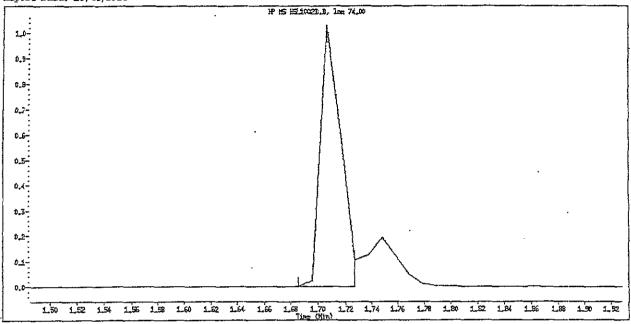
Inj. Date and Time: 02-007-2010 13:44

Instrument ID: sv5.i Client ID: 8270F.M

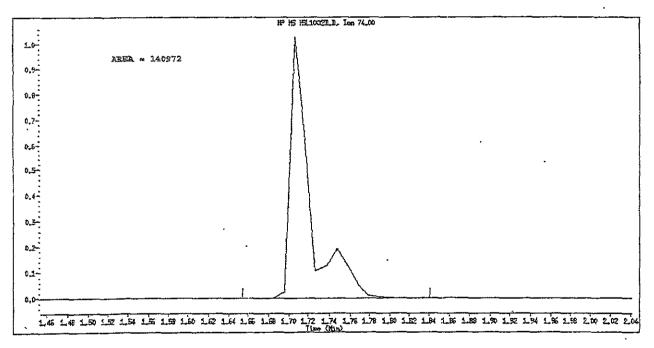
Compound Name: N-Nitrosodimethylamine

CAS \$: 62-75-9

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk
Manual Integration Reason: Poor Chromatography

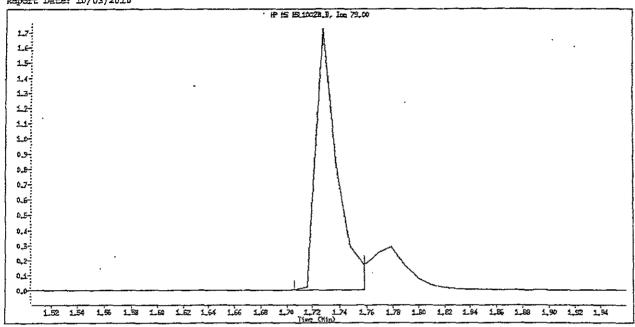
Data File Name: RSIA00ZD.D

Inj. Date and Time: 02-OCT-2010 13:44

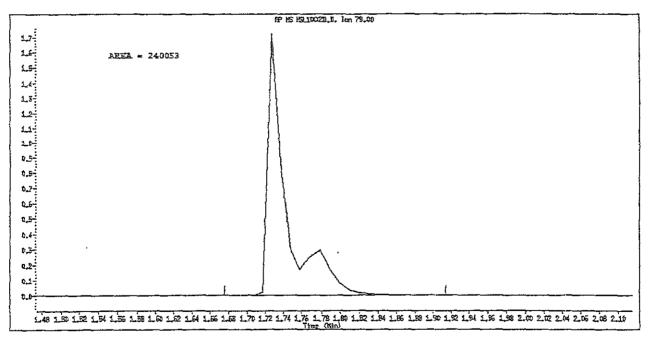
Instrument ID: svS.i Client ID: B270F.H Compound Name: Pyridine

CAS #: 110-86-1

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk Manual Integration Reason: Poor Chromatography Data Pile Name: EST1002D.D

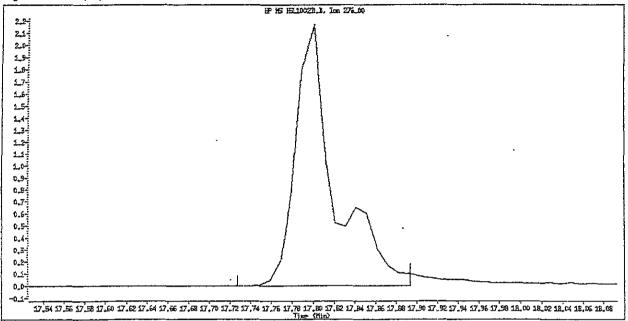
Inj. Date and Time: 02-00T-2010 13:44

Instrument ID: sv5.i Client ID: 62707.M

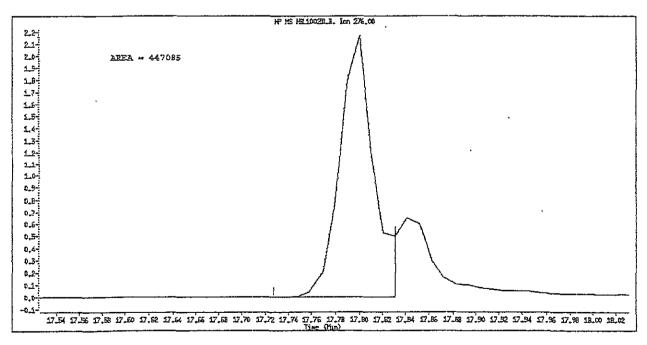
Compound Name: Indexo (1,2,3-cd)pyrene

CAS #: 193-39-5

Report Date: 10/03/2018



Original Integration



Manual Integration

Manually Integrated By: trucmqk
Manual Integration Reason: Poor Chromatography

Report Date: 02-Oct-2010 16:57

#### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\100210.B\HSL1002D.D Lab Smp Id: HSL 050 ug/ml CS-4 Client Smp Inj Date: 02-OCT-2010 13:44 Client Smp ID: 8270F.M

: KT Operator Inst ID: sv5.i

: HSL\_050 ug/ml CS-4;1;;4;;;;4 Smp Info

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0310;0;8270F.M

: SOP SAC-MS-0005 Comment

: \\SV5\C\chem\sv5.i\100210.B\8270f.m Method

Meth Date: 02-Oct-2010 16:57 onishim Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 4 Calibration Sample, Level: 4

Dil Factor: 1.00000 Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

								DCMA	XTR	
		QUANT SIG					(A)	-AMT	OM-	-col
Cc	ത്തുവന്നർട	Mass	RT	EEP EI	red rr	RESPONSE	{	NG)	{	KC)
-	<del></del>	ETHIRISE ETHIRISE	-	F-12-18-18-18-18-18-18-18-18-18-18-18-18-18-			-	-	tions	******
*	1 1,4-Dichlorobenzene-d4	152	3.955		(1.000)	122625		0000		
*	2 Naphthalene-d8	136	5.374	_ ,	(2.000)	53051 <u>4</u>	40.	0000		
*	3 Acenaphthene-dl0	1 <del>64</del>	7.468	7.458	(1.000)	282538	40.	0000		
*	4 Phenanthrens-610	188	9.405	9.405	(2.000)	462722	40.	0000		
*	5 Chrysens-dl2	240	13.779	13.779	(1.000)	435850	<b>4</b> 0.	0000		
*	6 Perylene-dl2	264	16.162	16.162	(1.000)	4222B4	40.	0000		
\$	7 2-Fluoroph=nol	112	2.732	2.732	(0.691)	220986	50.	0000	4	48.83
\$	8 Phenol-d5	99	3,613	3.613	(0.914)	274382	50.	0000	. 4	47.67
\$	9 2-Chlorophenol-d4	132	3.758	3.758	(0.950)	244352	50.	0000	4	e9.80
\$	10 l,2-Dichlorobenzene-64	152	4.162	4.162	(1.052)	121616	50.	0000	4	49.50
\$	11 Kitrobenzene d5	82	4.576	4.576	(0.852)	226162	50.	0000	4	≗B.D7
Ş	12 2-Fluorobiphenyl	172	5.680	6.680	(0.895)	473578	50.	0000		52.38
\$	13 2,4,6-Tribrowophenol ·	330	8.473	8.473	(1.135)	6333I	50.	0000	į	55.75
\$	14 Temphenyl-214	244	12.017	12.017	(0.272)	438253	50.	0000	5	51.56
	15 M-Nitrosodimethylamine	74	1.706	2.706	(0.431)	1D5836	50.	DDDD	3	35.43
	16 Pyridine	79	1.726	2.726	(D.437)	182664	5D.	0000	3	36,70
	23 Amiline	53	3,654	3,654	(D.524)	346504	50.	0000	4	48.01
	24 Phenol	94	3,523	3.623	(D.916)	311820	50.	0000	ī	50.94
	26 Bis (2-chlorosthyl) ether	93	3.716	3.716	(D.54D)	220455	50.	0000	4	≙7. <b>4</b> 0
	Z7 2-Chlorophenol	128	3.768	3.768	(0.953)	242442	50.	DDDB	5	50.D5
	28 1,3-Dichlorobenzene	146	3.923	3.923	(0.992)	265384	50.	0000	4	19.58
	29 1,4-Dichlorobenzene	145	3.975	3.975	(1.005)	271151	5D.	0000	5	50.11
	30 Benzyl Alcohol	208	4.120	4.120	(1.042)	160914	· 50.	0000	4	18.35
	31 1,2-Dichlorobenzene	146	€.172	4.172	(1.055)	2576D\$	50.	0000		50.23
	32 2-Methylphenol	108	4.255	4.255	(1.076)	218610	50.	0000	4	£8.31
	33 2,2'-oxyois(1-Chloropropane)	4.5	4.297	4.297	(1.086)	349371	50.	0000	ę	LD.48
	34 4-Methylmbenol	108	4,421	4.421	(1.118)	233354	50.	0000		18.35
	36 Hexachlorosthane	117	4.504		(1.139)	3 <u>41</u> 06		9000		19.29
	37 N-Nitrosodinoropylamine	70	4.642		(1323)	156914		0000		6.48
	42 Nitrobeuzene	77	4.597		(0.255)	21.9387		0000	_	16.91
	44 Isophoroce	£2.	4.856		(0.904)	420061		0000		17.38
	45 2-Nitrophenol	139	4.950		(0.923)	132771		0000	_	
	46 2.4-Dimethyphenol	107	5.012	· · · - <del>-</del>	(0.933)	231517				52,00
	40 5'4-namerilanenar	<i>EU )</i>	5. U.L2	3.012	10.2221	7317	50.	0000	4	8.84

•							AMOUN	ets
		QUART SIG					CAL-AMT	ON-COL
උපණ්ථය	<del>ਪੂਰਰ</del> ੰਡ	Mass	RT	<u> </u>	rel ri	RESPONSE	( NG)	( NG)
	***************************************	-		February P.	=== <del>===</del> ==			
£7	Bis (2-chlorosthoxy) methans	93	5.126	5-126	(0.954)	253646	50.0000	48.05
	2,4-Dichlorophenol	162	5.229		(0.973)	175296	50.0000	51.39
	Benzoic Acid	2.72	5.115		(0.952)	126366	50.0000	48.58
. 51	1,2,4-Trichlorobenzess	180	5.322		(0.990)	157265	50.0000	52.15
	Waphthelene	128	5.395		(1.00 <del>4</del> )	724380	50.0000	49.1D
	4-Chlorosniline	127	5.488		(1.021)	251184	50.0000	50.12
	Herachlorobutadiene	225	5.613		(2.044)	95592	50.0000	53.21
	4-Chloro-3-Methylphenol	107	6.069		(1.129)	205388	50.0000	51. <b>1</b> <i>6</i>
	2-Methylnaphthalene	142	6.203		(1.154)	464646	50.0000	51.57
	Hexachlonocyclopentadiene	237	6.483		(D.B68)	104908	50.0000	48.58
	2,4,6-Trichlorophenol	196	6.576		(0.881)	113001	50.0000	52.83
	2,4,5-Trichlorphenol	196	6.628		(0.886)	128196	50.000D	54.56
	2-Chloromaphthalene	162	5,784		(806.0)	403257	50.0000	50.91
	2-Nitrosniline	65	6.949		(0.931)	124335	50.0000	46.87
76	Dimethylphthalate	163	7.229		(0.968)	475258	50.0000	51.55
	ycenaphthylene	152	7.281		(0.975)	712158	50.0000	51.43
	2,5-Dinitrotoluene	165	7.302	•	(0.978)	110261	SD.DDDD	53.62
	3-Ritroariline	138	7.447		(0.997)	141396	50.0000	52.05
	Acenaphthene	153	7.509		(1.0DE)	448591	50.0000	50.85
	2,4-Dinitrophenol	184	7.571		(1.014)	58864	50.0000	48.70
	Dibenzofuran	168	7.706		(1.032)	598735	50.0000	51.36
	4-Nitrophenol	109	7,675		(1.028)	5677 <del>7</del>	50.0000	47.87
	2,4-Dinitrotaluese	165	7.768	-	(1.040)	148875	50.0000	54.2¢
	Fluorene	166	8.131		(1.DB9)	494097	50.0000	51.73
	Diethylphthalate	149	8.100		(1.DB5)	487067	50.0000	50.93
	4-Chlorophenyl-phenylether	204	8.352		(1.092)	209308	50.0000	53,15
	4-Nitrospiline	138	B.214		(1-100)	135397	50.0000	50.99
	4,6-Dinitro-2-methylphenol	198	8.276		(0.880)	76137	50.0000	46.45
98	N-Nitrosodiphenylamine	169	B.317		(0.884)	409666	58.6000	56.82
-	Azobenzena	77	8.348		(D.BBB)	459960	50.0000	45.55
	4-Bromophenyl-phenylether	248	8.794		(0.935)	115283	50,0000	51,56
	Hexachlorobenzene	284	8.981		(0.955)	124963	50.0000	51.74
	Pentachlorophenol	266	9.240		(0.982)	67882	50.0000	46.83
	Phenanthrene	178	9,437		(1.093)	71.8164	50,0000	49.76
	Anthracene	178	9.499		(1.010)	728681	50,0000	50.17
	Carbazole	167	9.768	•	(1.039)	660885	50.0000	48.92
	Di-n-Butylphthalate	149	10.463	10.463		799142	50.0900	48.91
	Fluoranthene	202	11.302	11.302	•	639252	50,0000	49.21
	Benzidine	184	11.571	11.571	•	450332	50.0000	50.32
	Pyrene	202	11.665			701084	50.0000	52,44
	3,31-dimethylbenzidine	212	12.867		-	385489	50,0000	50.19
	Burylbenzylphthelate	149	12.991			340978	50,0000	48.97
	Benzo (a) Anthracene	228	13.758	13.758		569271	50.0000	49.51
	Chrysene	228	13.831			597685	50.0000	50.03
	3,3'-Dichlorobenzidine	25,2	23.799	13.799	, ,	217413	50.0000	51.67
	his (2-ethylhezyl) Phthalate	149	14.110			46,4144	50.0000	≙B.€I
	Di-n-octylphthalate	149	15.167			732406	50.0000	<b>47</b> ,78
<u>144</u>	Benzo (b) fluoranthene	252	15.582	15.582		527467	50.0000	52,68
145	Benzo (k) fluorenthese	252	15.623		• • • • • • • • • • • • • • • • • • • •	58008 <b>4</b>	50.0000	49.57
147	Berro (e) bliene	252	16.007	16.007	(0. <del>99</del> 0)	506622	50,0000	51.04
148	Benzo (a) pyrene	252	16.079	16.079	(0.995)	542578	50.0000	49.78
151	Indeno (1, 2, 3-cd) pyrene	275	17.800	17.800	(1.101)	564014	50,0000	- 58.49
152	Dibenzo (z,h) zmihracene	278	17.841	17.841	(1.10£)	486B93	50.0000	49.27
153	Benzo (g,h,i) perylana	276	18.235	18.235	(1.128)	527720	50.0000	49.81

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002D.D Report Date: 02-Oct-2010 16:57

AMOUNTS QUAXY SIG CAL-AMI ON-COL MASS EXP RT REL RT RESPONSE ( MG) Compounds M 162 benzo b,k Fluoranthene Totals 252 1107571 51.00 (A)

# QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002D.D

Report Date: 03-Oct-2010 11:14

Page 1

Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Smp ID: 8270F.M

Level:

Sample Type:

### TestAmerica West Sacramento

### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002D.D

Lab Smp Id: HSL 050 ug/ml CS-4

Analysis Type: SV

Quant Type: ISTD

Operator: KT

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0310;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

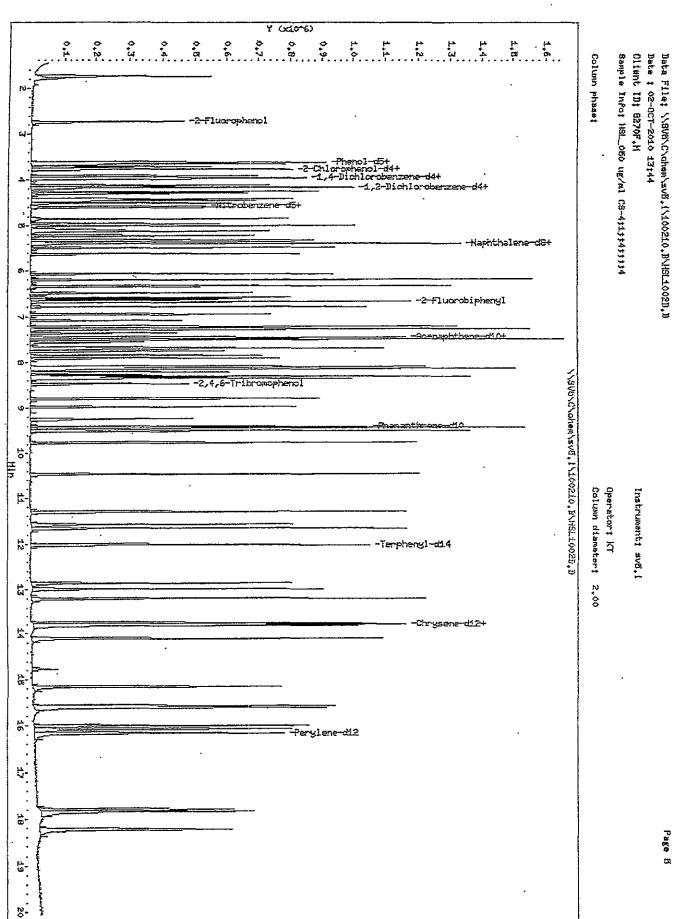
COMPOUND	STANDARD	AREA LOWER	LIMIT UPPER	SAMPLE	TTICS
1 1,4-Dichlorobenze 2 Naphthalene-d8 3 Acenaphthene-d10 4 Phenanthrene-d10 5 Chrysene-d12 6 Perylene-d12	122625 530514 282538 462722 435850 422284	61313 265257 141269 231361 217925 211142	245250 1061028 565076 925444 871700 844568	122625 530514 282538 462722 435850 422284	0.00 0.00 0.00 0.00 0.00

COMPOUND	STANDARD	RT I LOWER	IMIT OPPER	SAMPLE	TTICS
			=======================================		22111
1 1,4-Dichlorobenze 2 Naphthalene-d8 3 Acenaphthene-d10 4 Phenanthrene-d10 5 Chrysene-d12 6 Perylene-d12	3.96 5.37 7.47 9.41 13.78 16.16	3.46 4.87 6.97 8.91 13.28 15.66	4.46 5.87 7.97 9.91 14.28 16.66	3.96 5.37 7.47 9.41 13.78 16.16	0.00 0.00 0.00 0.00 0.00

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



Report Date: 03-Oct-2010 11:15

#### TestAmerica West Sacramento

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002E.D Lab Smp Id: HSL\_080 ug/ml CS-5 Client Smp Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 14:09

Inst ID: sv5.i Operator : KT

Smp Info : HSL 080 ug/ml CS-5;1;;5;;;4

Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0311;0;8270F.M

Comment : SOP SAC-MS-0005
Method : \\sv5\c\chem\sv5.i\100210.B\8270f.m
Meth Date : 03-Oct-2010 11:09 onishim Quant 1
Cal Date : 17-AUG-2010 21:19 Cal Fil Quant Type: ISTD Cal File: AP90817D.D

Calibration Sample, Level: 5

Compound Sublist: 1 8270STD.SUB

Als bottle: 5
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.14

Processing Host: SACP307UM

		•					AMOUN	TS		
•	DIR TMANO					CAL	-AMT	OM-	COT	
Compounds	PASS	RT	EXP RT	rel rt	response	(	ng)	(	ng)	
	· ===			********			<del></del>	-		
* 1 l,4-Dichlorobenzene-d4	152	3,954	3.955	(1,000)	126989	40.	0000		(1	đ)
* 2 Naphthelens-d8 .	136	5.374	5.374	(1.000)	553454	<del>4</del> 0.	0000		•	
* 3 Acenaphthene-dl0	164	7.468	7.468	(3.000)	308315	<del>4</del> 0.	0000			
* 4 Phenanthrens-dl0	188	9.405	9.405	(1.000)	- 477777	<b>4</b> D.	0000			
* 5 Chrysene-dl2	240	13.789	13.779	(1.000)	486125	40.	0000			
* 6 Peryleme-dl2	254	16.162	16.162	(1.000)	482762	40.	0000		•	
\$ 7 2-Fluorophenol	132	2.742	2,732	(0.693)	36 <del>454</del> 7	80.	0000	ξ	1.4	
\$ 8 Ph=nol-d5	99	3.612	3,613	(0.914)	459352	80.	0000	1	1.61	
\$ 9 2~Chloxophenol-d4	732	3.758	3.758	(0.950)	399981	в0.	0000	8	0.52	
\$ 10 1,2-Dichlorobenzene-04	152	4.162	4.162	(1.052)	<b>2</b> 52 <b>7</b> 5 <b>4</b>	BD.	0000	8	0.82	
\$ 11 Mitrobenzene-d5	62	4.587	4.576	(0.853)	371989	80.	0000	7	9.35	
\$ 12 2-Fluorobi <u>pheny</u> l	172	5.680	6.680	(0.895)	75591 <b>6</b>	80.	0000	7	8.14	
\$ 13 2,4,6-Tribromophenol	330	8,483	8.473	(1.136)	107063	80.	0000	8	2.04	
\$ 14 Terphenyl-d14	. 544	12.017	12.017	(0.871)	758812	80.	0000	7	9.25	
15 W-Nitrosodimethylamine	74	1.706	1,706	(D.431)	236570	80.	DODD	ŧ	0.86	ą)
15 Pyridine	79	1.726	1.726	(D.437)	386806	80.	0000	7	9.06(	Q)
23 Aniline	93	3.654	3.654	(0.924)	583 <b>51</b> 3	80.	0000	8	1.44(	<u>O</u> )
24 Phenol	94	3.623	3.623	(0.916)	524930	80.	0000	8	1.16(	Q)
26 Bis(2-chloroethyl) ether	93	3.716	3.716	(0.940)	352044	80.	0000	7	9.83	
27 2-Chlorophenol	128	3.76B	3.768	(0.953)	398210	80.	0000	ε	0.21	
28 1,3-Dichlorobenzene	146	3,923	3.923	(0.992)	428311	80.	0000	7	9.20	
29 1,4-Dichlorobenzene	146	3.975	3.975	(1.005)	4525B8	80.	0000	8	0.04	
30 Benzyl Alcobol	108	4,120	4.120	(1.042)	273768	80.	0000	ε	2.05	
31 1,2-Dichlorobenzene	146	4,172	4.172	(1.055)	415025	80.	DDDB	7	9.84	
32 2-Methylphenol	708	4.255	4.255	(1,076)	36570€	80.	0000	ε	1.43	
33 2,2'-myhis (1-Chloropropene	) 45	4.296	4.297	(1.085)	576575	80.	0000	;	9.88	
34 4-Methylphenol	2.08	4.421	4.421	(1.118)	387704	80.	0000	£	0.39	
36 Rexachloroethere	, 127	4.504	<b>4.</b> 504	(1.139)	153472	so.	0000	7	3.72	
37 N-Nitrosodinoropylamine	70	4.442	4.442	(1.123)	265916	80.	0000	8	2.78	
42 Nitroberzene	77	4.557		(0.855)	359479	80.	0000		0.54	
44 Isophorone	82	4.856		(0.904)	704520		DDOD		9.96	
45 2-Nitropherol	139	4.960		(D.923)	221628		0000		1.52	
46 2,4-Dimethyphenol	107	5.011		(0.933)	385073		0000		9.72	

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002E.D Report Date: 03-Oct-2010 11:15

							ANOUN	TS
		QUART SIG					CAL-AMT	ON-COL
Combo	<del>ಬಂದಿ</del> s	Mass	RT	en et	REL RT	response	( MG)	( MG)
<del></del>	**************************************	materis		***			popular benefi	
47	Bis (2-chloroethoxy) methane	93	5.125	5.126	(0.954)	426158	80.0000	79.15
49	2,4-Dichlorophenol	162	5.229		(0.973)	301897	80.0000	80.78
50	Benzoic Acid	122	5,125	5.115	(0.954)	232711	80.0000	87.04
51	1,2,4-Trichlorobenzene	180	5.322		(0.990)	323096	80.0000	79.84
52	Naphthalene	128	5.395	5.395	(1.004)	1215155	BO.0000	79.58
	4-Chlorosniline	1.27	5.488		(1.021)	484619	80.0000	80.91
57	<u> Hexachlorobutadiene</u>	225	5.613		(1.044)	159233	80.0000	80.41
50	4-Chloro-3-Methylphenol ·	107	6.069		(1.129)	335335	80,0000	80.35
	2-Methylmaphthalene	142	€.203		(1.154)	781029	80.0000	81.36
	<u>Herachloro</u> cyclopentadiene	237	6.483		(D.868)	181608	80,0000	81.05
69	2,4,6-Trichlorophenol	196	6.576		(0.881)	194036	80.0000	80.98
70	2,4,5-Trichlorphenol	196 -	5.628		(D.888)	211635	BD. D000	81.99
71	2-Chloropaphthalene	162	5.784		(0.908)	668DZ3	80.0000	79.04
73	2-Mitrosniline	65	6.949	6. <del>94</del> 9	(0.931)	209144	80.0000	B1.55
	Dimethylphthalate	163	7.229		(0.968)	787815	80.0000	80.9 <del>6</del>
77	Acenaphthylene	152	7.281		(0.975)	1190475	80.0000	BD.B8
79	2,6-Dinitrotoluene	165	7.302		(0.978)	187951	80.0000	82.91
80	3-Nitrosniline	138	7.457		(0.999)	232287	80.0000	82.D9
81	Acesephthene	153	7.509		(1.006)	727612	80.0000	77.66
82	2,4-Dimitrophenol	184	7.571	7.572	(1.014)	11.0384	80.0000	78. <del>64</del>
83	Dibenzo <del>furan</del> .	168	7.705		(1.032)	991760	80.0D00	79.76(q)
84	4-Mitrophenol	109	7.675	7.675	(1.02E)	102888	80.0000	87.65(Q)
85	2,4-Dimitrotoluene	165	7.768	7.768	(1.040)	246471	BD.DD00	\$2.23
91	Fluorene	166	B.131	8,131	(1.089)	834271	80.0000	81.03
92	Diethylphthalate	149	8.100	8.100	(I.085)	792071	80.0000	79.50
93	e-CularobperAl-bpenAletper	204	8.151	8,152	(1.092)	340608	80.0000	79.56
94	4-Nitroamiline	138	8.224	8.224	(1.101)	235541	80.0000	83.97
97	4,6-Dinitro-2-methylphenol	198	8.276	8.276	(0.880)	134784	80.0000	76.76
98	M-Kitrosodinhenylamine	169	8.317	8.317	(0.884)	695826	93.7000	95.08
	Azobenzene	77	8.348	8.348	(0.888)	765053	80.0000	81.43
101	4-Bromophenyl-phenylether	248	8.794	8.794	(0.935)	187352	80.0000	80.33
108	Hexachlorobenzene	284	8.981	8.961	(0.955)	207655	80.0000	79.72
130	Pentachlorophenol	266 ·	9.240	9.240	(0.982)	126397	80.0000	78.86
114	Phenanthrene	178	9.437		[1.003]	1188468	80.0000	78_92
775	Anthracene	178	9.509		(1.022)	1218608	80.0000	81,00
	Carbazole	167	9.768		(1.039)	1116637	80.0000	81.39
	Di-n-Butylphthalate	149	10.462	10.463		1351850	80.000	81.75
	Fluoranthene	202	11.302	11.302		1107116	80.0000	82.05
3.27	Benzidine	184		11.571		799205	80,0000	81.12
	Pyrene	202		11.665		1221015	80.0000	` B0.35
	3,3'-dimethyIbenzicine	21.2		12.867		715866	80.0000	82.31
136	Butylbenzylphthalate	149		12.991		598812	80.0000	78.53
23B	Benzo (a) Anthracene	228		23.758		1034950	80.0000	79.92
139	Chrysene	228		23.831		1040163	80.0000	78.52
140	3,3'-Dichlorobenzidine	252		13.799		392335	80.0000	80.33
	his (2-sthylhexyl) Phthalate	149	14.110	14.110	(1.023)	820296	80.0000	78.20
342	Di-n-octylphthalate	149	15.167	15,167	(1.100)	1354893	80.0000	80.80
344	Benzo (b) fluorauthene	252	15.522	15.582	(0.9 <del>6</del> 4)	920864	80.0000	84.26 (Q)
145	Benzo (k) fluoranthene	252	15.623	15.623	(0.957)	1102099	80.D000	78.61(0)
247	Benzo(e)pyrene	252	16.007	16.007	(0.990)	936566	80.0000	82.18
148	Benzo(a) pyrens	252	15.079	16.079	(0.995)	1039045	80.0000	E3.86
151	Indeno (1, 2, 3-cd) pyrene	276	17.799	17.800	(1.101)	8:17:5:22	80.0000	80.99
	Diberzo (e., h) anthracens	278	17.851	17.841	(1.105)	926841	80.0000	52.79
	Benzo (g, h, i) perylene	276	18.235			982275	80.0000	81.04
	·							

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002E.D Report Date: 03-Oct-2010 11:15

Page 3

•							AMOUNTS			
	QUART SIG					CAI	-ant	ON-	COL	
Compounds	Mass	KT	exp ri	rel er	RESPONSE	(	NG)	(	NG)	
Er W.L II St., com	BC-MDsC-M3					to realizational gard		-	244sk#30	
M 162 hence h.k Finanzizhene Thtels	257				2023783	80	กดอด	ķ.	1 09/2	١

# QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

q - Qualifier signal exceeded ratio warning limit.

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002E.D Page 1

Report Date: 02-Oct-2010 16:57

#### TestAmerica West Sacramento

Method 8270C

Data file: \\SV5\C\chem\sv5.i\100210.B\HSL1002E.D
Lab Smp Id: HSL 080 ug/ml CS-5 Client Smg
Inj Date: 02-OCT-2010 14:09
Operator: KT Inst ID: 8 Client Smp ID: 8270F.M

Inst ID: sv5.i

: HSL 080 ug/ml CS-5;1;;5;;;4 Sup Info

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0311;0;8270F.M

Comment: SOP SAC-MS-0005
Method: \SV5\C\chem\sv5.i\100210.B\8270f.m
Meth Date: 02-Oct-2010 16:57 onishim Quant 1 Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 5 Calibration Sample, Level: 5

Dil Factor: 1.00000 Integrator: Falcon Compound Sublist: 1\_8270STD.SUB

Target Version: 4.14 Processing Host: SV5

							AMOUN	AMOUNTS		
		QUANT SIG					CAL-AMT	DM-COT		
C	ంఖుంటుదేక	Mass	ET	erp ki	REL RT	response	( RG)	( MG)		
_	The state of the s					-	********			
*	1 1,4-Dichlorobenzene-dé	152	3.954	3.955	(1.000)	126989	40.00DD	(đ) .		
*	2 Naphthalene-d8	136	5.374	5_374	(1.DDD)	553454	4D.0000			
*	3 Acenaphthene-dl0	164	7.468	7.468	(1.000)	300335	40.0000			
*	4 Phenanthrene-dl0	128	9.405	9.405	(I.DDD)	£TTTTT	40.0000			
*	5 Chrysene-dl2	24D	13.769	13.779	(1,000)	485126	. 40.0000			
*	5 Perylene-d12	264	16,162	15.162	(1.000)	4837BZ .	40.0000			
Ş	7 2-Fluorophenol	112	2,742	2.732	(0.693)	364547	80.0000	77.78		
Ş	8 Phenol-d5	99	3.612	3.623	(0.914)	459352	80.0000	77.07		
\$	9 2-Chlorophenol-d4	133	3,758	3.758	(0.950)	399981	80.0000	78.71		
\$	10 1,2-Dichlorobenzene-d4	152	4.162	4.152	(1.052)	252754	80.0000	79.68		
\$	11 Nitrobenzene-d5	82	4.587	4.576	(0.853)	371589	80.0000	75.79		
\$	12 2-Fluorobiphenyl	172	5.680	6.680	(0.895)	755916	80.0000	78.58		
\$	13 2,4,6-Tribromophenol	330	8,483	8.473	(1.136)	107063	80.0000	90.29		
\$	14 Temphonyl-Cl4	244	12.017	12.017	(0.871)	758812	80.0000	80.04		
	15 N-Nitrosodin#thylamine	74	1.70€	1.705	(D.431)	236570	80.0000	76.48		
	16 Pyridine	79	1.726	1.726	(0.437)	386806	80.0000	75.04		
	23 Aniline	93	3.654	3.654	(B.924)	583513	80.0000	78 L D7 (Q)		
	24 Phenol	94	3.623	3.623	(D.916)	524930	BO. DDOD	82.81(Q)		
	26 Bis(2-chloroethyl)ether	23	3.716	3.716	(0.940)	352044	80.D000	75.18		
	27 2-Chlorophenol	128	3.768	3.768	(0.953)	398210	80-0000	79.39		
	28 1,3-Dichlorobenzene	145	3.923	3.923	(0.992)	<u> 426311</u>	80.0000	77.27		
	29 1,4-Dichlorobenzens	145	3.975	3.975	(1.005)	452588	BO.DDDD	80.76		
	30 Benzyl Alcohol	108	4.120	4.120	(1.042)	273768	80.0000	79.43		
	31 1,2-Dichlorobenzene	146	4.172	4.172	(1.055)	415025	80.0000	78.14		
	32 2-Methylphenol	108	4.255	4.255	(2.076)	369704	80.0000	78.30		
	33 2,21-oxybis(1-Chloropropens)	45	4,295	4.257	(1.086)	5 <b>765</b> 75	80.0000	64.50		
	34 4-Methylphenol	108	4.421	4.421	(3.118)	387704	80.0000	77.63		
	36 Hexachloroethane	11.7	4.504	4.504	(1.139)	153472	80.0000	77.52		
	37 N-Mitrosodinpropylamine	70	4.442	4.442	(1.123)	265916	80.0000	76.06		
	42 Nitrobenzene	77	4.557	4.597	(D.B55)	369479	80.0000	75.74		
	44 Isophorone	82	4.856	4.856	(0.904)	704520	80.0000	76.17		
	45 2-Witrophenol	139	4.95D		(0.923)	221628	80.0000	83.21		
	46 2,4-Dimethyphenol	207	5.011		(0.933)	385073	80.0000	77.86		
	, - ,	—- <b>-</b>								

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002E.D Report Date: 02-Oct-2010 16:57

							AMOUNT.	cs
•		QUART SIG					CAL-AMT	ON-COL
COMPO	യാര്ട	Mass	RT	exp rt	rkl r <i>t</i>	response	( NG)	( 18G)
al-Pangayan	**************************************							
47	Bis(2-chloroethoxy) methans	93	5.125	5.126	(0.954)	425158	80.0000	77.39
49	2,4-Dichlorophenol	162	5.229	5.229	(0.973)	301857	80.0000	82,94
50	Benzoic Acid	122	5.125	5.115	(D.954)	232711	80.0000	84.61
51	1,2,4-Trichlorobenzene	180	5.322	5.322	(0.990)	323096	20.0000	81.88
52	Naphthelene	128	5.395	5-395	(1.004)	1216155	80.0000	78.94
54	4-Chlorospiline	127	5.488	5. <b>4</b> 88	(1.021)	<del>4846</del> 19	80.0000	79.97
57	Herachlorobutadiene	225	5,613	5.51.3	(1.D44)	159233	BD. DDDD	84.61
60	4-Chloro-3-Methylphenol	107	6.069	6.069	(1.129)	335335	80.0000	80.06
63	2-Methylnaphthalene	142	6.203	6.203	(1.154)	781029	80.0000	83.09
66	Herachlorocyclopentadiene	237	6.483	6.483	(0.868)	181608	80.0000	79.29
69	2,4,6-Trichlorophenol	195	\$.57 <b>6</b>	6.575	(0.881)	194036	80.0000	85.34
70	2,4,5-Trichlorphenol	196	6.628	6.628	(0.888)	211635	80.0000	84.74
	2-Chlorosaphthalene	162	6.784	6.784	(0.908)	668023	80.0000	79.34
	2-Nitrosniline	€5	5.949	6.949	(0.931)	209144	80.0000	76.37
76	Dimethylphthalate	263	7.229	7.229	(836.0)	787815	80.0000	81.01
	Acenaphthylene	152	7.281	7.281	(0.975)	1190475	80.0000	\$8.0\$
	2,6-Dinitrotoluene	165	7.302	7.302	(0.978)	187961	80.0000	86.31
	3-Nitroariline	135	7.457	7.447	(D.999)	232287	8D. DDDD	80.44
	Acenaphthene	1.53	7.509		(1.006)	727612	0000.08	77.58
	2,4-Dinitrophenol	184	7.571	7.571	(1.014)	110384	80.0000	81.10
	Dibersofuran	168	7.706		(1.032)	991740	80.0000	80.04(g)
	4-Nitrophenol	109	7,675		(1.028)	102288	80.0000	E1.61(Q)
	2,4-Diritrotoluene	165	7.768		(1.040)	245471	80.0000	84.49
-	Fluciene	166	8.131		{1.089}	834271	80.0000	82.18
	Diethylphthalate	149	8.100		(1.085)	792071	80.0000	77.92
	4-Chlorophenyl-phanylether	204	8.151		(I.092)	34.0608	80.0000	81.38
	4-Nitroeniline	138	8.224		(1.101)	23.5541	80.0000	83,45
	4,6-Dinitro-2-methylphenol	198	8.276		(0.880)	134784	80.0000	75.96
	N-Nitrosodiphenylamine	169	B.317		(0.884)	595826	93.7000	93.46
	Azobenzene	77	8.348		(0.888)	765053	80.0000	73.86
	4-Bromophenyl-phenylether	248	8.794		(0.935)	187352	80.0000	61.15
	Herachjoropanacue	284	8.981		(0.955)	207655	80.0000	83.28
	Pentachlorophenol	266	9,240		(0.982)	126397	80.0000	84.45
	Phenenchic ophenoi	176	9.437		(1.003)	1188468	80.0000	79.75
	Apphracede	178	9.509		(1.032)	1218608	80.0000	81.25
	Carbasole	167	9.768		(1.039)	1118637	80.0000	80.29
	Di-n-Butylphthalate	149	10.462		(1.112)	1351860	80.0000	80.14
	Fluorenthene	202	11.302		(2.202)	פברלטבנ	80.0000	\$2.54
		184	11.571		(0.839)	799205	80.0000	8D.D6
	Benzidine	202		11.665		1221015	80.0000	80.33
	Pyrane 3,3'-dimethylbenzidine	212		12.857		715865	80.0000	83.56
		149		12.991		59B812	80.0000	77.10
	Butyloensylphthalate	228			(0.998)	1034250	80.0000	BO,70
	Benzo (a) Anthracene			13.831		1040163	80.0000	78.05
	Chrysene	228	13.799		(1.001)	392735		
	3,3'-Dichlorobenzidine	252					80.0000	83,60
	bis (2-ethylbexyl) Phthalate	149	14.110		(1.023)	820296	8D. DDDD	75.71
	Di-n-octylphthelate	149	15,167		(1.100)	1354893	80.0000	79.24
	Benzo(b) fluoranthene	252		15.582		920684	89.0000	8D. <u>44</u> (D)
345	Benzo (k) finoranthene	252	15.623		(0.967)	1102899	80.0000	82.44 (g)
247	Benzo (e) pyrene	252	15.007		(0-990)	936566	80.0000	82.53
148	Benzo (a) pyrene	252	16.079		(222,0)	1039045	80.0000	83.39
151	Indeno (1,2,3-cd) pyrene	276	17,799	17.800	(1.191)	811625	0000.03	73,52
152	Dibenzo (a, h) antimacene	276	17.851	17.841	(1.105)	926841	80.0000	E2.04
253	Benzo (g, h, i) perylena	276	18.235	18.235	(1.128).	982275	8D.0000	81.20

Data File: \\SV5\C\chem\sv5.i\\100210.B\HSL1002E.D

Report Date: 02-Oct-2010 16:57

## QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

q - Qualifier signal exceeded ratio warning limit.

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Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002E.D

Report Date: 03-Oct-2010 11:15

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002E.D

Lab Smp Id: HSL 080 ug/ml CS-5

Analysis Type: SV

Quant Type: ISTD

Operator: KT

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0311;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

		AREA.	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
	========	=======	=======		=====
1 1,4-Dichlorobenze	122625	61313	245250	126989	3.56
2 Naphthalene-d8	530514	265257	1061028	553454	4.32
3 Acenaphthene-d10	282538	141269	565076	300315	6.29
4 Phenanthrene-d10	462722	231361	925444	477777	3.25
5 Chrysene-dl2	435850	217925	871700	486126	11.54
6 Perylene-d12	422284	211142	844568	482782	14.33

		RT I	TIMIL		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
	========	========	=======	========	======
1 1,4-Dichlorobenze	3.96	3.46	4.46	3.95	-0.00
2 Naphthalene-d8	5.37	4.87	5.87	5.37	-0.00
3 Acenaphthene-dl0	7.47	6.97	7.97	7.47	-0.00
4 Phenanthrene-d10	9.41	8.91	9.91	9.41	-0.00
5 Chrysene-dl2	13.78	13.28	14.28	13.79	0.07
6 Perylene-d12	16.16	15.66	16.66	16.16	-0.00
			<u> </u>		l

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Page 1

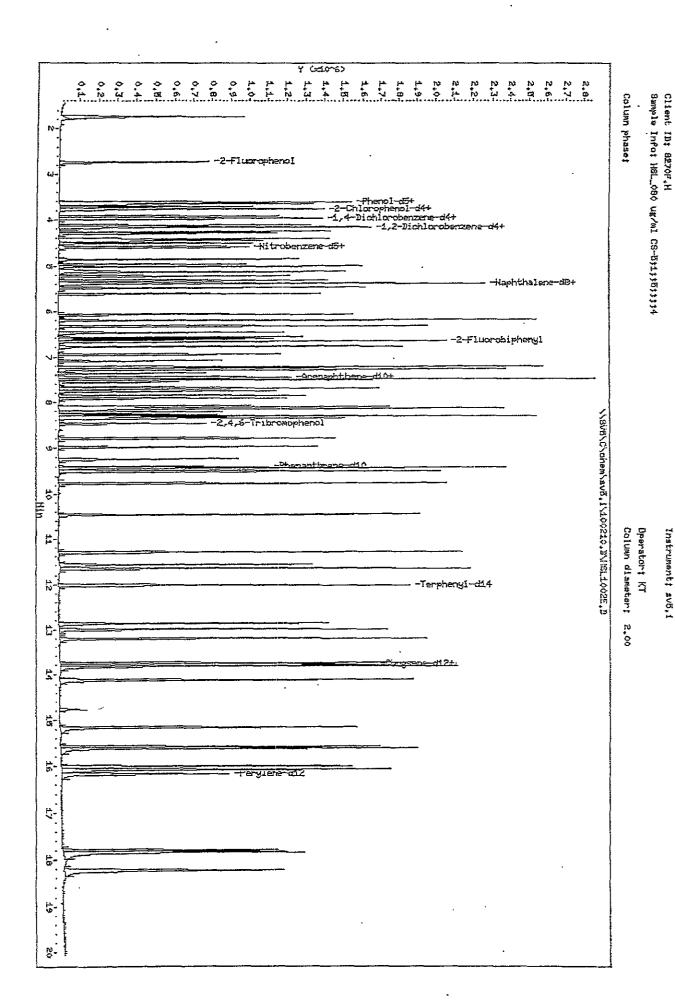
Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Smp ID: 8270F.M

Level:

Sample Type:



Page ti

Data File: \\SUE\C\chem\sv6.1\100210.B\HSL1002E.D Date: 1 02-007-2010 14:09

Page 1

Report Date: 03-Oct-2010 11:15

## TestAmerica West Sacramento

Method 8270C

Data file : \\sv5\c\chem\sv5.i\100210.B\HSL1002F.D

Lab Smp Id: HSL 120 ug/ml CS-6 Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 14:35

Operator : KT Inst ID: sv5.i

Smp Info : HSL\_120 ug/ml CS-6;1;;6;;;4

Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0312;0;8270F.M

: SOP SAC-MS-0005

Method : \\sv5\c\chem\sv5.i\100210.B\8270f.m

Meth Date : 03-Oct-2010 11:09 onishim Quant 7

Cal Date : 17-AUG-2010 21:19 Cal Fil Quant Type: ISTD Cal File: AP90817D.D

Als bottle: 6 Dil Factor: 1.00000 Integrator: Falcon Target Version: 4.14 Calibration Sample, Level: 6

Compound Sublist: 1\_8270STD.SUB

Processing Host: SACP307UM

							AMDUM	T.S
		QUART SIG					Cal-ant	ON-COL
C	ompounds	MASS	RT	EXP RT	rel ri	RESPORSE	( সভ)	( MG)
_	7 1.4-Dichlorobenzene-d4	152	3.955	2 222	(1.000)	137751	40.0000	en Arramonia de la Carta
*		152	3.955 5.374		(1.000)	591665		(Q)
*	2 Naphthalene-d8	156 164	7.458		(1.000)	322596	40.0000	
*	3 Aceraphthene-dl0	188	9.406		•	322396 515607	40.0000	
	4 Phenanthrene dl.0		13.769	3.405 13.779	(1.00b)	509570	40.0000	
	5 Chrysene dl2	24D 264	15.769	15.779		539588	40.0000 40.0000	
	6 Perylene-d12	•				588028	• • •	
ş	7 2-Fluorophenol	773	2.732		(D.691)	759824	120.000	121.1
\$	8 Phenol-d5	99		. 3.613			120.000	124.4
ş	9 2-Chlorophenol-d4	132	3.758		(0.950)	652805	120.000	121.7
\$	10 1,2-Dichlorobenzene-d4	152	4.162		(1.052)	407247	320.000	120.0
\$	11 Nitrobenzene-d5	82	4-587		(0.853)	62350 <u>)</u> 1255441	320.000	124.4
\$	12 2-Fluorobiphenyl	172	6.68D	-	(0.895)		120.000	120.8
ş	13 2,4,6-Tribromophenol 14 Terphenyl-dl4	330 244	8.483 12.D17		(1.135) (0.871)	179055 1251844	120.000	1.27 . 7
₽	15 N-Witrosodimethylamine	74	1.706		(0.431)	388111	3.20.000	124.7
	16 Pyridine	79	1.727		(0.437)	633334	120,000	1,72.3 (g)
	23 Amiline	75 93	3.654		(D.924)	964533	120,000	119.3(Q)
	<del></del>	94 ·	3.523		(0.916)	851671	120.000	124_1 (Q)
	24 Phenol		•		(D.940)			121.4(Q)
	26 Bis(2-chloroethyl)ether	93	3.716		• ••	E96323	120.000	121.2
	27 2-Chlorophenol	128	3.758		(0.953)	6235 <del>44</del>	120.000	221.3
	28 1,3-Dichlorobenzene	145	3.924		(0.992)	712032	120.000	121.4
	29 1,4-Dichlorobenzene	146	3.975		(1.005)	740915	220.000	120.8
	30 Benzyl Alcohol	108	4.120		(1.042)	450249	120.000	124.4
	31 1,2-Dichlorobenzene	146	4.172		(1.055)	679 <del>44</del> 8	120,000	120.5
	32 2-Methylphenol .	108	4.255		(1.075)	603987	120,000	122.6
	33 2,2'-orgbis(1-Chloropropens)	<u>45</u>	4.297		(1.025)	94 <u>1514</u>	120.000	120.2
	34 4-Wethylphenol	108	4.421		(1.118)	<del>644</del> 202	320,000	123.1
٠	36 Hexachioroethane	317	4.504		(1.139)	245394	120,000	117.5
	37 N-Witzosodingropylamine	70	4.452		(1.125)	428242	120.000	. 122.9
	42 Nitrobenzene	77	4.607	4.597	(0.857)	59373 <b>6</b>	120,000	1.212
	44 Isophorone	82	4.857	4.855	(0.905)	1179801	120.000	125.2
	45 2-Witrophenol	139	4.960	4.960	(0.923)	367467	120.000	126.4
	46 2,4-Dimethyph=nol	1.07	5,012	5.012	(0.933)	538328	120.000	123.6

AMOUNTS

		QUANT SIG				CAL-AMT	೦ಷ-೧೦೫
Compo	ന്നാർട	MASS	RT	etp ki eki ei	RESPORSS	( NG)	( NG)
-		***************************************				*****	
47	Bis(2-chloroethory)methane	93	5.126	5.126 (0.954)	707504	120.000	122.9
49	2,4-Dichlorophenol	162	5.229	5.229 (0.973)	500185	120.000	125.2
50	Benzoic Amid	122	5.146	5.115 ( <b>0.958</b> )	395333	120.000	138.3
51	1,2,4-Trichlorobenzene	180	5.333	5.322 (0.992)	531764	120.000	122.9
52	Naphthal ane	128	5.395	5,395 (1.004)	2020315	120.000	123.7
54	4-Chlorosniline	127	5.488	5.488 (1.021)	797064	129.000	124.5
57	Hexachlorobutadiene	225	5.613	5,613 (1.044)	255231	120.000	120.6
60	4-Chloro-3-Methylphenol	107	6.069	6.069 (1.129)	563840	120,000	125.4
63	2-Methylπaphth≥lene	142	5.203	6.203 (1.154)	1263302	120.000	123.1 .
65	Hexachlorocyclopentadiena	237	5.483	6.483 (D.868)	31.2226	120.000	129.7
£3	2,4,6~Trichlorophenol	196	6.587	6.576 (0.882)	331223	120.000	128.7
70	2,4,5-Trichlorphenol	196	6.628	6.628 (D.888)	343374	120.000	123.8
71	2-Chloromaphthalene	162	6.784	6.784 (0.908)	1107604	120.000	122.0
73	2-Witrozniline	65	6,950	6.949 (0.931)	346408	120.000	125.9
76	Dimethylphthalate	163	7.229	7.229 (0.968)	1286101	120.000	123.0
77	Acenaphthylene	152	7.281	7.281 (D.975)	1933504	120.000	122.3
79	2,5-Dimitrotoluene	1.65	7.302	7.302 (0.978)	33.3.050	120.000	127.7
80	3-Nitroaniline	138	7.457	7.447 (0.999)	382849	120.000	125.9
81	Acenaphthene	153	7.509	7.509 (1.006)	1207616	120.000	120.0
82	2,4-Dimitrophenol	184	7,582	7.572 (1.015)	199007	120.000	124.7
83	Dibenzofuran	168	7.706	7.706 (1.032)	1630240	120.000	122.0(g)
84	4-Nitrophenol	1.09	7.675	7.675 (1.028)	162269	120.000	127.8(Q)
38	2,4-Dimitrotolueme	1.65	7,768	7.768 (1.040)	<u>40947</u> 8	120.000	128.1
91	Fluorene	1.65	8.131	8.131 (1.089)	1333949	120,000	120.6
52	Diethylphthalate	149	8,13.0	8.100 (1.086)	1329206	120.000	124.2
93	4-Chlorophenyl-phenylether	204	8.152	8.152 (1.092)	5158370	120.000	222.4
94	4-Nitrosniline	138	8.224	8.214 (1.101)	378421	120.000	125.6
97	4,6-Dinitro-2-methylphenol	198	8.285	8.276 (0.881)	236477	120,000	122.1
98	N-Nitrosodiphenylamine	1.69	8.317	B.317 (0.884)	1123239	141.000	143.7
200	Azobenzene	77	8.359	8.348 (0.889)	1266722	120,000	124.9
181	4-Browophenyl-phenylether	248	8.794	8.794 (0.925)	318358	120,000	126.5
108	<u> Bezachlorobenzens</u>	284	8.981	8.981 (0.955)	335728	120.000	179.4
220	Pentachlorophenol	265	9.240	9.240 (0.982)	215360	120.000	122.2
114	Phenanthuene	178	9.437	9.437 (1.003)	1942962	120.000	119.6
115	Anthracene	178	9.509	9.499 (1.011)	2014183	128.000	124.D
118	Carbazole	167	9,758	9.768 (1.039)	1528217	120.000	,123.3
120	Di-p-Butylphthalate	149	10.453	18.463 (1.112)	2225048	120,000	124.7
126	Fluoranthena	202	11.302	11.302 (1.202)	1829791	120.000	125.6
127	Benzidine	184	11.582	11.571 (0.840)	1320429	120.000	227.8
128	Pyrene	202	11.665	11,665 (0.846)	1963825	120.000	123.3
134	3,31-dimethylbenzidine	21.2	12.877	12.867 (0.934)	3214012	120.000	133.2
136	Butylbenzylphthalate	149	12.951	12.991 (0.942)	997218	120.000	124.9
138	Benzo(a) Anthracens	228	13.758	13.758 (D.998)	1694281	. 220.000	124.8
139	Chrysene	228	13.831	13,831 (1.003)	1715841	120.000	123.6
14D	3,31-bichlorobenzidine	252	13.799	13.799 (1.001)	653016	120.000	127.5
	his (2-ethylhexyl) Phthalate	149	14.110	14.110 (1.023)	1358794	120,000	124.5
142	Di-2-octylphthalate	149	15.167	15.167 (1.100)	2256614	120,000	128.4
	Benzo (b) fluorenthens	252	15.592	15.582 (0.964)	1475217	120.000	120.8 (0)
	Benzo (h) fluoranthene	252	15.623	15.623 (0.966)	1935987	320,000	1.23.5 (g)
	Benzo (e) pyrene	252		16,007 (0.990)	1559049	120.000	123.2
	Berzo(a) pyrene	252		16.079 (0.994)	1720343	120,000	124.2
	Indeno (1,2,3-cd) pyrene	276		17.800 (1.101)	1517263	120,000	135.5 (M)
	Dibenzo (a, h) anthracene	278		17.841 (1.104)	1634040	120.000	130.5
	Benzo (g, b, i) perylene	276		18.235 (1.128)	1706123	120.000	125.9
223	عسس ري ومدر ها پيسان	~					

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002F.D Report Date: 03-Oct-2010 11:15

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						AUCMA	TS	
	QUART SIG					CAL-AMT	D01-0017	
<i>රාඥාරාක</i> ය්ද	Mass	KI	er rr	REL RT	RESPONSE	( ME)	( NG)	
		HESP		-	= 1-MM Res EC	-	eroekjes,	
M 162 betwo h.k Fluorenthene Totals	252				3411204	1.20,000	122.3	(2)

## QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

q - Qualifier signal exceeded ratio warning limit.

Data File Name: ESTADOZF.D

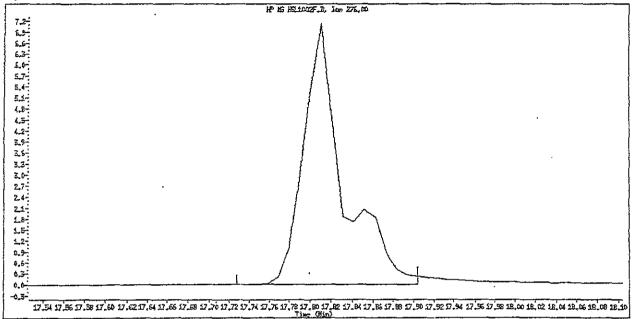
Inj. Date and Time: 02-007-2010 14:35

Instrument ID: SV5.i Client ID: 8270F.M

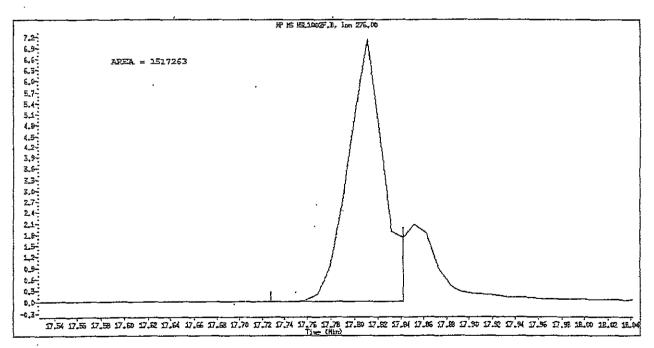
Compound Mame: Indeno (1,2,3-od) pyrene

CES #: 153-39-5

Report Date: 10/03/2010



Original Integration



Manual Integration

Manually Integrated By: truongk

Mamual Integration Reason: Poor Chromatography

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\*MANUTATE

Report Date: 02-Oct-2010 16:57

#### TestAmerica West Sacramento

Method 8270C

Data file : \\SV5\C\chem\sv5.i\100210.B\HSL1002F.D

Lab Smp Id: HSL 120 ug/ml CS-6 · Client Smp ID: 8270F.M

Inf Date : 02-OCT-2010 14:35

Operator : KT Inst ID: sv5.i

Smp Info : HSL 120 ug/ml CS-6;1;;6;;;;4

Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0312;0;8270F.M

: SOP SAC-MS-0005 Comment

Method : \\SV5\C\chem\sv5.i\100210.B\8270f.m Meth Date : 02-Oct-2010 16:57 onishim Quant 1 Cal Date : 17-AUG-2010 21:19 Cal Fil Quant Type: ISTD Cal File: AP90817D.D

Calibration Sample, Level: 6

Als bottle: 6 Dil Factor: 1.00000 Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

						AMOUN	ers
	QUANT SIG					CAL-AMT	OM-COL
ට <b>ා</b> කුරහාරිය	Mass	RT	eed eq	rel et	rrspomsk	( NG)	( 19G)
	===		STATE OF THE PARTY			<del>,</del>	
* 1 1,4-Dichlorobenzens-d4	152	3.955	3.955	(1.000)	137751	40.0000	(D)
* 2 Naphthalene-d8	136	5.374	5.374	(1,000)	591665	40.0000	
3 Acensphthene-dl0	164	7.468	7.468	(1.008)	322596	40.0000	
4 Phensathrene-d10	188	9.406	9,405	(1.000)	515607	40.0000	
5 Chrysene-dl2	260	23.789	13.779	(1.000)	509570	40.0000	
6 Perylens-dl2	264	16.173	16.162	(1.000)	539588	40.0000	
7 2-Fluorophenol	112	2.732	2.732	(0.691)	588028	220.000	115.7
8 Phenol-d5	99	3.613	3.613	(0.914)	759824	120.000	117.5
9 2-Chlorophenol-d4	132	3.758	3.758	(0.950)	652805	120.000	118.4
: 10 1,2-Dichlorobenzene-d4	152	4.162	4.162	(1.052)	407247	120.D00	228.4
11 Wittobenzene-d5	82	4.587	4,576	(0.853)	623501	120.000	118.8
12 2-Fluorobiphenyl	172	6.680	6.680	(0.895)	1255441	120.000	121.5
3 2,4,6-Tribromophenol	330	8.483	8,473	(1,136)	179055	120.000	140.6
14 Temphenyl-dl4	244	12.017	12.017	(0.671)	1251844	120.000	126.0
15 N-Witrosodimethylamine	7 <del>4</del>	1,706	1.706	(0.431)	388:111	120.000	115.7
16 Py <del>ri</del> dine	79	1.727	1.726	(0.437)	633334	120.000	113.3
23 Amiline	93	3.654	3.654	(0.924)	964533	320,000	119.0(Q
24 Phenol	94	3.623	3.623	(D.916)	851671	320.000	123.8 (0
26 Bis (2-chloroethyl) ether	93	3,716	3.716	(D.940)	596323	120,000	114.2
27 2-Chlorophenol	128	3.768	3.768	(D.953)	653244	120.000	120.0
28 1,3-Dichlorobenzene	246	3.924	3.923	(0.992)	7 <u>2.2</u> 032	120.000	118.4
29 1,4-Dichlorobenzene	146	3.975	3.975	(1.005)	740915	120.000	121.9
30 Benzyl Alcohol	208	4.120	4.120	(1.042)	450249	320.000	120.4
31 1,2-Dichlorobenzene	146	4.172	4.172	(1.055)	679 <u>44</u> 8	120.000	117.9
32 2-Methylphenol	108	4,255	4.255	(1.076)	603987	120.000	118.8
33 2,21-onybis (1-Chloropropro	æ) 45	4.297	4.297	(1.086)	· 941514	120.000	97.10
34 4-Methylphenol	108	4.421	4.421	(1.118)	644202	120.000	11B.9
36 Hexachloroethane	117	4.504	4.504	(1.139)	245394	120.000	214.4
37 K-Nitrosodineropylamine	70	4.452	4.442	(1.126)	428242	120,000	112.9
42 Mitrobenzene	77	4.607	4.597	(D.B57)	593736	120.000	113.8
44 Isophorone	82	4.867	4.856	(0.906)	1179861	120.000	119.3
45 2-Witrophenol	139	4.960		(0_923)	367467	120.000	129.0
46 2,4-Dimethyphenol	1.07	5.012		(0,933)	638328	120.000	120.7

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002F.D Report Date: 02-Oct-2010 16:57

							<b>ZMOUK</b>	rts .
		QUANT SIG		•			CAL-ANT	OM-COL
ത്ത്ര		MRSS	PT	exp RT	REL RI	RESPONSE	( MG)	( NG)
		93	5.126	E 106	(0.954)	707504	120.000	120.2
	Bis (2-chloroethoxy) methane 2,4-Dichlorophenol	162	5.229		(D.973)	500185	120.000	128.5
	Benzoic Acid	122	5.145		(0.958)	395333	120.000	134.1
	1,2,4-Trichlorobenzene		5.333		(0.932)	531764	120.000	126.0
	• •	180			(1.004)		120.000	
	Naphthalene	128 127	5.395 5.488			2020315 7970 <del>54</del>	120.000	122.7
	4-Chlorosuiline Hexachlorobutadiene		5.613		(1.021) (1.044)	255231	120.000	123.0 127.2
		225			(1.129)	563840		127.2
	4-Chloro-3-Mathylphenol	107	6.069		(1,254)	1263302	120.000 120.000	125.7
	Z-Methylnaphthalene	142	6.203		(0.868)	317226	120.000	126.5
	Hexachlorocyclopentadiene	237	6,483		(0.682)	331223	120,000	135.5
	2,4,6-Trichlarophenol	196	6.587		(0.882) (0.888)		120.000	128.0
	2,4,5-Trichlorphenol	196	6.628		(0.908)	343374 1107604	120.000	122.5
	2-Chloromaphthalene 2-Mitroamiline	162 65	6.784 6.950		(0.931)	34640B	120.000	114.4
	Dimethylphthalate	163	7.229		(0.968)	1286101	120.000	123.1
	Aceasphthylese		7.281		(0.575)	1933504	120.000	122.3
	· • •	152 165	7.302		(0.978)	311.050	120.000	133.0
	2,6-Dinitrotoluene 3-Nitrosniline	138	7.457		(0.939)	382849	120,000	123.4
		153	7.509		(1.806)	1207616	120.000	1123.4 219.9
	Acenaphthene	184	7.582		(1.015)	199007	120.000	127.2
	Z,4-Dinitropheool Dibanzoiuran	16B	7.706		(1.032)	1530240	120,000	
		109	7.675		(1.022)	161169	120.000	122.5 (g)
	4-Nitrophenol	165	7.768		(1.020) (1.040)	409418	120.000	119.0(Q) 130.6
	2,4-Dinitrotolusae Fluorena	166	2.131		(1.D89)	1323949	120.000	122.3
		149	8.110		(1.086)	1329205	120.000	122.3
	Diethylphthalate		8.152					
	4-Chlorophenyl-phenylether	204	8.224		(1.092)	558370 37 <del>84</del> 21	120.000	124.2
	4-Kitroaniline	138 198	8.286		(1.101) (0.881)	235477	120,000	124.8 120.3
	4,6-Diritro-2-methylphenol					1123239	141.000	
	N-Nitrosodiphenylamine	169	B.317 B.359		(0.884) (0.889)	1266722	120.000	139.8
_	Azobenzene	77 2 <del>4</del> 8	8.339		(0.935)	32,8358	120.000	113.3
	4-3romophenyl-phenylether	284	8.981		(0.955)	335728	120.000	127.8 124.5
	Heachlorobenzens Pentachlorophenol	266	9.240		(0.982)	215350	120.000	133.3
	Phenenthrepe	178	9.437		(1.003)	1942962	120.000	120.8
	Anthracene	178	9,509		(1.011)	2014183	120,000	124.4
	Carbazole	167	9.768		(1.D3S)	1828217	120,000	121,4
	Di-n-Butylphthalate	149	10.463	10.463	•	222504B	320.000	122.2
	Fluoranthene	202	21.302	11.302		1829791	120,000	125.4
	Benzidine	184	11.582	11.571	• • •	1320429	120.000	126.2
	Fyzene	202		11.665		1963825	120.000	123.2
	3,3'-dimethylbenzidine	212	12,877			1214012	120,000	135.2
	Butylbenzylphthalate	149		12.991		997218	120,000	122.5
	Benzo (a) Anthracene	228		13.758		1694281	120,000	126.0
	Chrysene	228		13.831		1715841	120,000	122.3
	3,3:-Dichlorobenzidine	252		13.799	-	653016	120.000	132.7
	bis(2-sthylhexyl)Phthalate	149		14.110		1368794	120.000	122.1
	` <b>-</b>	149		15.167	-	2256514	120.000	125.9
	Di-n-octylphthelate Benzo(b) fluoranthene	752 752		15.582		1475217	120.000	11.5.3 (0)
	Benzo (k) firoganthene	252		15.623		1935987	120.000	
				16.007				229.5 (g)
	Benzo (e) pyrene	252				1569049	120,000	123.7
	Benzo(a) pyrene	252		16.079		1720343	120.000	123.5
	Indeno (1, 2, 3-od) pyrene	276		17.800		1867193	320.000	151.5
	Dibenzo (a., h) anthracene	278		17.841		1634040	120.000	129.4
153	Benro(g,h,i)p≅rylene	27€	1E.245	18.235	(2.32B)	1706123	120.000	125.0

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002F.D

Report Date: 02-Oct-2010 16:57

QUANT SIG CAL-AMI OR-COT Compounds mass PT ELP RT REL RT RESPONSE ( DG) ( NG) 3433204 M 162 benzo b,k Fluoranthena Totals 252 120.000 122.9 (A)

## QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test. q - Qualifier signal exceeded ratio warning limit.

Page 3

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002F.D

Report Date: 03-Oct-2010 11:15

#### TestAmerica West Sacramento

## INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002F.D

Lab Smp Id: HSL\_120 ug/ml CS-6

Analysis Type: SV Quant Type: ISTD

Operator: KT

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0312;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

		AREA	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
	========	=========	========	=========	======
1 1,4-Dichlorobenze	122625	61313	245250	137751	12.34
2 Naphthalene-d8	530514	265257	1061028	591665	11.53
3 Acenaphthene-d10	282538	141269	565076	322596	14.18
4 Phenanthrene-d10	462722	231361	925444	515607	,11.43
5 Chrysene-d12	435850	217925	871700	509570	16.91
6 Perylene-d12	422284	211142	844568	539588	27.78
					1

		RT I	TIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
	========	=======================================	_========	========	======
1 1,4-Dichlorobenze	3.96	3.46	4.46	3.96	0.00
2 Naphthalene-d8	5.37	4.87	5.87	5.37	0.00
3 Acenaphthene-dl0	7.47	6.97	7.97	7.47	0.00
4 Phenanthrene-d10	9.41	8.91	9.91	9.41	0.00
5 Chrysene-d12	13.78	13.28	14.28	13.79	0.08
6 Perylene-d12	16.16	15.66	16.66	16.17	0.06
					l i

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT. Page 1

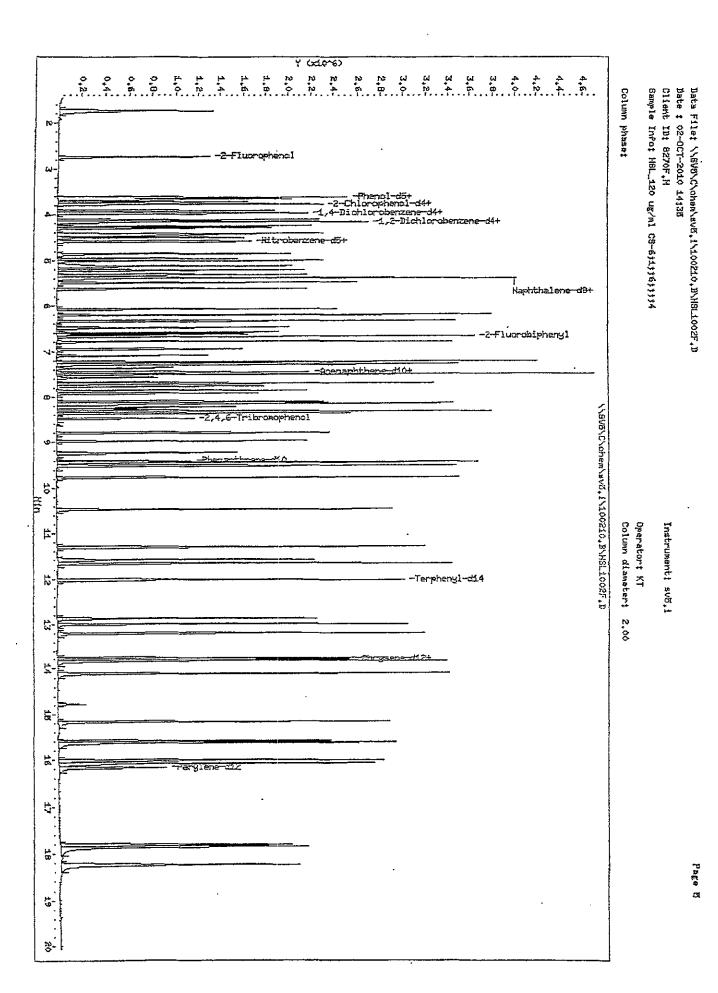
Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Smp ID: 8270F.M

Level:

Sample Type:



Report Date: 03-Oct-2010 11:16

## TestAmerica West Sacramento

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002G.D

Lab Sump Id: HSL 160 ug/ml CS-7 Client Sup ID: 8270F.M

Inj Date : 02-0CT-2010 15:00

Inst ID: sv5.i Operator : KT

: HSL 160 ug/ml CS-7;1;;7;;;4 Smp Info

Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0313;0;8270F.M

: SOP SAC-MS-0005 Comment

: \\sv5\c\chem\sv5.i\100210.B\8270f.m Method

Meth Date : 03-Oct-2010 11:09 onishim Quant Type: ISTD Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Calibration Sample, Level: 7 Als bottle: 7

Dil Factor: 1.00000 Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14

Processing Host: SACP307UM

							MICHA	<u>r</u> s
		QUANT SIG					CAL-AMT	0⊼-COF
œ	ompounds	res	RT	EEP RI	REL RI	response	( BG)	( %G)
*	1 1.4-Dichlorobenzene-da	152	3.954	2 055	(1.000)	14.1.009	40.0000	(O)
	2 Naphthalene d8	136	5.374		(1.000) (1.000)	622461	40.0000	(0)
*	· · · · · · · · · · · · · · · · ·	156	7.47B		(1.000)	328259	40.0000 40.0000	
*	3 Acenaphtheme-dl0	188	9.4D5		(1.000)	528233	40.0000	
*	4 Phenanthreps-dlD	240	13.789	13.779	•	539557	40.0000	
	5 Chrysene-dl2	2 <del>4</del> 0 2 <del>5</del> 4	16.172		(1,000)	550436	40.0000	
*	6 Perylene-dl2	26% 112	2.732		(0.691)	E10154	160.000	163.0(A)
\$	7 2-Fluorophenol	وو	3.623		(0.916)	1035724	160,000	165.7(A)
\$	8 Phenol-d5				• • • • • • •	B90073	160.000	
\$	9 2-Chlorophemol-d4	132	3.757		(0.950)		160.000	162.2(A)
\$	10 1,2-Dichlorobenzene-d4	152	4.162		(1.052)	557610		160.6(A)
<u>\$</u>	11 Witrobenzens-d5	82	4.587		(0.853)	845796	160.000	160.4(A)
\$	12 2-Fluorobiphenyl	172	6.680 8.483		(0.893)	1707074	160.000 160.000	161.4(A)
\$	13 2,4,6-Tribromophenol	330			(1.134)	241468		169.3 ( <u>A</u> )
\$	14 Terphenyl-d14	244	12.017		(0.872)	1728892	150.000	162.7(A)
	15 N-Witrosodimethylamine	7.6	1.706		(0.431)	529253	160.000	162,9 (Aq)
	16 Pyridine	79	1.726		(0.437)	860850	160.000	258.4 (Q)
	23 Aniline	93	3.554		(0.924)	1318620	160.000	165.8 (AQ)
	24 Phenol	94	3.633		(0.919)	1166090	160.000	162.4 (AQ)
	26 Bis (2-chloroethyl) ether	93	3.716		(0.940)	813702	160.000	161.6(A)
	27 2-Chlorophenol	228	3.768		(D.953)	885754	160.000	160.7(A)
	2B 1,3-Dichlorobenzens	146	3.923		(0.952)	972719	160.000	162.D(A)
	29 1,4-Dichlorobenzens	146	3.975		(1.005)	1023408	760-000	163.0 (A)
	30 Berzyl Alcohol	108	4.120	4.120	(1.042)	627623	160.000	166.7(A)
	31 1,2-Dichlorobenzene	145	4.172		(1.055)	928919	160.000	160.9(A)
	32 2-Methylphenol	108	4.255	4.255	(1.079)	834149	160,000	165.4 (A)
	33 2,2'-oxybis(1-Chloropropene)	45	4.296	4.297	(1.085)	1290345	160,000	151.0(A)
•	34 4-Methylphemol	708	4.421	4.421	(1.118)	895421	160.000	167.2 (%)
	35 Hexachloroethane	117	4.504	4.504	(1.139)	343605	150.000	150.7(%)
	37 M-Mitrosodingropylamine	70	4.452	4.442	(1.126)	590670	150.000	165.5 (A)
	42 Ritrobenzane	77	4.607	4.597	(0.857)	844093	160.000	263.8(A)
	44 Isophorone	<b>£2</b>	4.866	4.856	(0.905)	2628636	260,000	154.4(A)
	45 2-Witrophanol	139	4.96D	4.960	(0.923)	510613	160.000	167.0(A)
	46 2.4-Dimethyphenol	107	5.022		(0.934)	890294	160.000	164.0(A)

				AMOUNTS			
	QUANT SIG			-		Cai-ant	COX-COL
Combonuga	Mass	RI	eep ro	REL PT	RESPORSE	( E3)	( NG)
**		*****	FX		******	PROPER	2. Politica (de 18
47 Bis(2-chloroethoxy)methane	53	5.13 <i>6</i>		(0.956)	959710	160.000	158.5
49 2,4-Dichlorophenol	162	5.229	5.229	(0.973)	692405	160.000	164.7 (A)
50 Benzoic Acid	122	5.167	5,115	(0.9ബ)	552251	160.000	183. f (A)
51 1,2,4-Trichlorobenzene	180	5.333	5.322	(0.992)	724320	150.000	159.2
52 Na <u>phthalene</u>	128	5.395	5.395	(1.004)	274£968	150.000	159.7
54 4-Chlorospiline	1.27	5.488	5.488	(1,021)	1092223	160.000	162.1 (A)
57 Hexachlorobutadiene	225	5,612	5,613	(1.044)	360358	160.000	161.8(A)
60 4-Chlore-3-Methylphenol	107	6.068	6.069	(1.129)	767831	160.000	163.6 (A)
63 2-Methylmaphthalena	142	6.203	6,203	(1.254)	1723402	160,000	159.6
66 Hemachlorocyclopentadiene	237	6.453	6.4E3	(0.867)	435738	160.DDD	177.9 (A)
69 2,4,6-Trichlorophenol	196	6.587	6.576	(0.881)	441.685	160.000	168.6 (A)
70 2,4,5-Trichlorphenol	196	6.528	6. <i>6</i> 28	(0.886)	47 <del>44</del> 68	160.000	168.2(A)
71 Z-Chloronaphthalene	162	6.783	6.784	(0.907)	1511253	160.000	163.6 (A)
73 2-Nitroamiline	65	6.96D	6.949	(0.931)	476342	160.000	170.1(A)
76 Dimethylphthalate	163	7,229	7.229	(0.967)	1710061	160.000	160.8(A)
77 Acenaphthylene	152	7.251	7.281	(0.975)	2665048	160,000	(A) 8.231
79 2,6-Dinitrotolnene	165	7.302	7.302	(0.976)	408436	160,000	164.8(A)
80 3-Nitroaniline	138	7.457	7.447	(0.997)	520002	160.000	158.1(A)
81 Acenaphthene	153	7.509	7.509	(1.004)	1647377	160.000	160.9(A)
82 2,4-Dinitrophenol	184	7.581	7.572	(1.014)	265655	160.000	257.7
83 Dibenzoîwan	168	7.706		(1.030)	2246304	150.000	165.3(A)
84 4-Nitrophenol	1.09	7.685		(1.028)	228516	160.000	178.1(Aa)
86 2,4-Dinitrotoluene	165	7.778		(1.040)	566055	160.000	174.0(%)
SI Fluorene	156	8_141		(1.089)	1845653	160.DDD	164.1(A)
92 Diethylphthalate	149	8.320		(1.025)	1813127	250.000	166.5 (A)
93 4-Chlorophenyl-phenylether	204	8.151		(1.090)	757562	160.000	161.3(A)
94 4-Witrospiline	138	8.224		(1.100)	531151	160,000	173.2(A)
97 4,6-Dinitro-2-methylphenol	198	8.285		(0.881)	324244	160.000	160.7(A)
98 M-Nitrosodipherylamine	169	8.328		(0.885)	1542041	187.000	191.1(A)
100 Azobenzene	77	8.359		(0.889)	1646477	160.000	1.57.3
	248	8.804		(0,936)	421894	150.000	162.4(A)
101 4-Bromophenyl-phenylether	28 <del>4</del>	8.980		(0.955)	465305	160.000	160.3(A)
108' Hexachlorobenzene	265	9.250		(0.983)	293184	160.000	159.9
110 Pentachlorophenol	178	9.447		(1.004)	2695719	160.000	160.7(A)
114 Phenanthrene	178	9.509		(1.002)	2703105	. 160.000	161.3(A)
lis Anthracene lis Carbarole	167	9.509		(1.039)	2479487	160.000	161.9(2)
· 120 Di-n-Eutylphthalate	149	10.473		(1.000)	3164666	160.000	171.8 (A)
126 Fluoranthene	202	11.312		(1.203)	2500453	160.000	166.3(A)
	184	11.512		(D.840)	1854289	160.000	170.5(A)
127 Benzidine				(0.846)	2714930	160.000	
128 Pyrene	202	11.664					161.0(2)
134 3,3'-dimethylbenzidine	212	12.877	12.867	*	1724989	150.000	178.7(2)
136 Butylbensylphthalate	149		12.991		1401117	160.000	155.8(A)
138 Benzo(a)Anthracene	228		13.758		2393906	160.000	166.6(24)
139 Chrysene	228		13.831	• • • • • • • • • • • • • • • • • • • •	2422526	160.000	164.8 (A)
140 3.3'-Dichlorobenzidine	252	13.810		(1.DD2)	915413	160.000	168.9 (A)
141 bis(2-ethylhexyl)Phthalate	149	14.110	24.110		1906885	160.000	163.8(A)
142 Di-n-octylphthalate	149	15.167		(1.100)	3253965	160.000	174.8 (2)
144 Benzo(n) fluorenminene	252		15.582		2299398	160.00B	787.5 (20)
145 Benzo (k) fluoranthene	252	15.534	13.623		2475925	150,000	152. V (g)
147 Benzo(e)pyrene	252	15.017	16.007	-	2178528	160.000	154.7(A)
148 Benzo(a)pyrene	25 <b>2</b>	16.089	16.079	(0.995)	2387962	150,000	166.0(A)
151 Indeno (1,2,3-cd) pyrene	276	17.820	17.800	(1.102)	2196805	160.000	(MA) 8.88 <i>L</i>
152 Dibenzo (a, h) anchracene	278	17.862	17.841	(1.104)	225052B	250.000	173.2 (A)
		**					5 cs = (s)

18.255 18.235 (1.129)

275

153 Senzo(g,h,i)perylene

2332007 160.000

165.7 (A)

Data File: \\sv5\c\chem\sv5.i\100210.B\H5L1002G.D Report Date: 03-Oct-2010 11:16

Page 3

•						AMOUN.	rs	
	QUANT SIG					CAL-AMC	ON-COL	
Compounds	Mass.	RĪ	exp rt	EEL RT	RESPONSE	( NE)	( NG)	
<del></del>	· -							
M 162 benzo b,k Fluoranthene Totals	252				4775333	160.000	164.8 (A)	,

## QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

q - Qualifier signal exceeded ratio warning limit.

Data File Name: ESI1002G.D

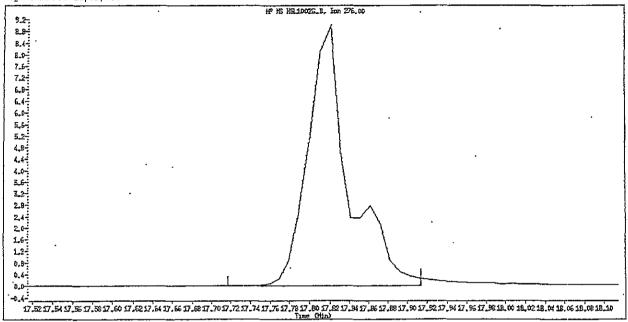
Inj. Date and Time: 02-OCT-2010 15:00

Instrument ID: sv5.i Client ID: 8270F.M

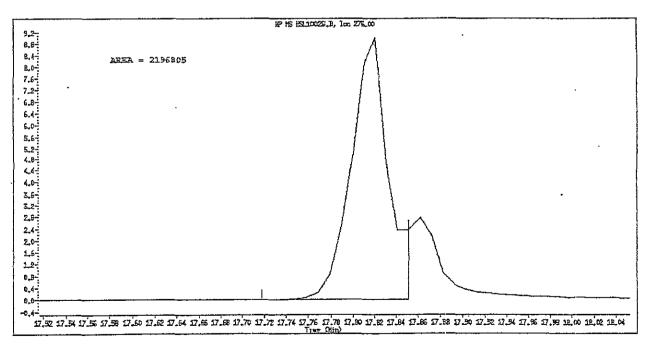
Compound Name: Indeno(1,2,3-cd)pyrene

CAS #: 193-39-5

Report Date: 10/03/2010



Original Integration



Marmal Integration

Manually Integrated By: truongk Manual Integration Reason: Poor Chromatography Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002G.D Report Date: 02-Oct-2010 16:57

#### TestAmerica West Sacramento

#### Method 8270C

Client Smp ID: 8270F.M

Data file: \\SV5\C\chem\sv5.i\100210.B\HSL1002G.D
Lab Smp Id: HSL 160 ug/ml CS-7 Client Smp
Inj Date: 02-OCT-2010 15:00
Operator: KT
Smp Info: HSL 160 ug/ml CS-7;1;;7;;;4 Inst ID: sv5.i

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0313;0;8270F.M

Comment : SOP SAC-MS-0005

Method : \\SV5\C\chem\sv5.i\100210.B\8270f.m

Meth Date: 02-Oct-2010 16:57 onishim Quant Type: ISTD Cal Date : 17-ADG-2010 21:19 Cal File: AP90817D.D

Als bottle: 7
Dil Factor: 1.00000 Calibration Sample, Level: 7

Integrator: Falcon Compound Sublist: 1 8270STD.SUB

Target Version: 4.14 Processing Host: SV5

								MUCINA	TS.	
		QUANT SIG					CAI	~AVI	OM-	-COL
Co	<del>ණුරාන</del> ය් ප	Mass	RT	EXP RE	rel et	RESPONSE	{	ng)	(	IZG)
_	<u> </u>	E-E-PE	****				14. Amer		==	than more
*	1 1,4-Dichlorobenzens-d4	152	3.954	3.955	(1.000)	141009	49.	0000		(Q)
*	2 Naphthelene-dB	136	5.374	5.374	(1.000)	622461	- <b>⊈</b> 0.	. 0000		
*	3 Acensphthens-dl0	164	7.478	7.468	(1.000)	328259	40.	0000		
*	4 Phenanthrene-dl0	188	9.405	9.405	(1.00D)	5322B4	<b>40</b> .	0000		
ŧ	5 Chrysene-dl2	240	13.789	13.779	(1,000)	539557	40.	0000		
*	6 Perylene-dl2	264	16.172	16.152	(1,000)	560436	40	0000		
\$	7 2-Fluoroph <del>an</del> ol	112	2.732	2.732	(0.591)	810154	16	0.000		155.7
\$	B Phenol-d5	99	3.623	3.613	(0.516)	1,035724	16	0.000	:	156.5
\$	9 Z-Chlorophenol-d4	132	3.757	3.758	(0.950)	890073	166	0.000	:	157.7
\$	10 1,2-Dichlorobenzene-d4	152	4.162	4.162	(1.052)	557810	16	0.000	:	158. <b>4</b>
\$	11 Nitrobenzene-dS	82	4.567	4.576	(0.853)	845796	16	0.000	:	153.2
\$	12 2-Fluorobipbenyl	172	6.680	6.680	(0.893)	1707074	160	0.000		162.4 (A)
Ş	13 2,4,6-Tribromophenol	330	8.483	B.473	(1.134)	241468	161	0.000	:	186.3 (24)
Ş	14 Terphenyl-d14	244	12.017	12.017	(0.871)	1728892	160	0.000		164.3 (A)
	15 M-Mitrosodimethylamine	74	1.706	1.706	(0.431)	529253	3.50	0.000	:	154.1
	16 Pyridine .	79	1.726	1.726	(0.437)	E60850	15	0.000	:	150. <u>4</u>
	23 Aniline	93	3.554	3.654	(0.924)	1318620	150	0.000		158.9 (Q)
	24 Phenol ·	9#	3.633	3.623	(0.919)	1166090	150	0.000	;	165.7 (AQ)
	26 Bis (2-chloroethyl) ether	93	3.716	3.716	(0.9 <u>4</u> 0)	813702	160	0.000		152.2
	27 2-Chlorophenol	128	3.758	3.758	(0.953)	885754	1,61	0.000	:	159.0
	28 1,3-Dichlorobenzene	146	3.923	3.923	(0.992)	9 <b>72719</b>	16	0.000	:	158.0
	29 1,4-Dichlorobenzene	1€6	3.975	3.975	(1.005)	1023408	260	0.000		154.5 (A)
	30 Benzyl Alcohol	108	4.120	4.720	(1.042)	65.7653	16	0.000	:	161.4(A)
	31 1,2-Dichlorobenzene	146	4.172	4.172	(1.055)	928919	161	0.000	:	157.5
	32 2-Methylphenel	108	4.265	4.255	(1.079)	834749	161	0.000	:	LEO.3 (A)
	33 2,2'-oxybis (1-Chloropropane)	4.5	4.295	4.297	(1.DB6)	1290345	16	0.000	:	130.0
	34 4-Methylphenol	108	4.421	4.421	( <u>1.118</u> )	395481	160	0.000	;	L61.5 (A)
	36 Herachloupethene	117	4.504	4.504	(1.139)	343605	16	0.000	:	156.5
	37 N-Witrosodinpropylamine	70	4.452	4.442	(1.126)	590870	26	0.000		252.2
	42 Nitrobenzene	77	4.607	4.557	(0.857)	B44093	16	0.000	:	153.B
	44 Isophorone	£2	4.855	4,856	(0.905)	1528636	26	0.000	:	156.E
	45 2-Mitrophenol	239	4.960	4.960	(0.923)	520613	26	0.000	:	170.5(A)
	45 2,4-Dimethyphenol	167	5.022	5.012	(0.934)	B90994	16	0.000	:	160.2(A)
	,				•					

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Compo	unds	Mess	RI	exp et	REL RT	rrsponse	Ç	NG)	( ਅਫ਼)
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47	Bis (2-chloroethoxy) methane	93	5.136	5.126	(0.956)	959710	160.	000	155.0
49	2,4-Dichlorophenol	162	5.229	5.229	(0.973)	692405	160.	000	169.1(A)
50	Benzoic Acid	122	5.167	5.115	(0.951)	552251	160.	000	175.1 (A)
51	1,2,4-Trichlorobenzene	180	5.333	5.322	(0.992)	724320	160.	000	· 163.2(A)
52	Naphthalene	128	5.395	5.395	(1.004)	27 <del>44</del> 958	160.	.000	158,4
54	4-Chlorosniline	127	5.488	5.488	(1,021)	1092223	160.	000	160.2(A)
57	Herachlorobutadiene	225	5.612	5.613	(1.0 <del>44</del> )	360358	160.	000	170.6(2)
60	4-Chloro-3-Mathylphenol	107	6.05B	6.059	(2.129)	757831	260.	DDD	163.0(A)
63	2-Methylmaphthalene	142	6.203	6.203	(1.154)	1723402	160.	000	153.0(A)
65	Bezachlorocyclopentadiena	237	6.483	6.483	(0.867)	435738	160.	000	174.0(A)
69	2,4,5-Trichlorophenol	196	6.587	6.576	(0.861)	441685	160.	000	177.7(A)
70	2,4,5-Trichlorphenol	196	6.628	6.628	(0.885)	474468	IED.	000	173.8(A)
71	2-Chloronaphthalene	162	6.783	6.784	(0.907)	1512253	250.	000	164.2(A)
73	2-Nitrospiline	65	6.960	6.949	(0.931)	476342	160.	000	154.5
76	Dimethylphthelate	163	7.229	7.229	(0.967)	1710061	<b>150</b> .	000	160.9(A)
77	Acenspirthylene	1.52	7.291	7.281	(0,975)	2665048	160,	000	165.6 (A)
79	2,6-Dinitrotoluene	165	7.302	7.302	(0.976)	408435	160.	000	171.6(A)
80	3-Nitroamiline	138	7,457	7.447	(0.957)	520002	160.	000	164.8(A)
81	<u>Acenembthene</u>	153	7.509	7.589	(1.004)	1647377	360.	000	160.7(A)
82	2,4-Dinitrophenol	184	7.581	7.571	(1.024)	265655	160	000	158.9
23	Dibenzofuren	168	7.706	7.706	(1.030)	2246304	160.	000	165.8(A)
	4-Kitrophenol	109	7.685	7.675	(1.D28)	228516	160	000	165.8 (Aq)
86	2,4-Dimitmotoluene	165	7.778	7.768	(I.040)	566055	160.	.000	177.5 (A)
91	Fluorene	166	8.147	8.131	(1.089)	1846653	160	.000	166.4(A)
	Diethylphthelete	149	8.110		(1.D85)	1813127	160	000	163.2(A)
93	4~Chlorophenyl-phenylether	204	8.151		(1.090)	757562		000	165,6 (A)
94	4-Nitrozniline	138	8.224		(1.100)	531151		.000	172.2(A)
	4,6-Dinitro-2-methylphenol	198	8.286		(0.881)	.324244		.000	158.0
98	W-Witrosodiphenylamine	169 .	8,328		(0.885)	1542041		,000	185,9( <u>A</u> )
	Azobenzene	77	B.359		(D.889)	1646477		.000	142.7
	4-Browophenyl-phanylether	248	8.804		(D.93 <i>6</i> )	421894		000	164.0(A)
	Rexachloroberzeus	284	8.980		(0.955)	465305		.000	167.5 (A)
	Pentachlorophenol	266	9.250		(0.983)	293184		000	175.8(A)
	Phenauthrene	178	9.447		(1.004)	2695719		.000	162.4 (A)
	Architecture	178	9.509		(1.011)	2703105		000	163.8(A)
	Cerbazola	167	9.768		(2.035)	2479487	_	.000	159.5
	Di-n-Burylphthelate	249	10.473	10.463		3164656 250D453		.000	168.4(A)
	Fluoranthene	202	11.312	11.571		1854289		.000 .000	167.3(A)
	Benridine	184							168.3(A)
	Pyrene	202		11.665 12.867		2714930 1724989		. 000 . 000	160.9 ( <u>1</u> ) 181.4 ( <u>1</u> )
	3,3'-dimethylbenzidine	212		12.991		1401117			
	Butylbenrylphthalate	149		13.75B		2393908	160.	•	162,5(A)
	Benzo (a) Anthracene	228		13.831		2422526			163.2(A)
	Chrysens	228					160.		163.8(A)
	3,3'-Dichlorobenzidine	257		13.799		515413		DDD	275.7(A)
	his (2-ethylbszyl) Phthalate	149		14.110 15.167		1906885	160.		160.7(A)
	Di-n-octylphthelate	149		15.582		3253965 2295398	160.		171.5(A)
	Benzo (b) fluoranthene	252					150.		173.0 (A <u>O</u> )
	Benzo(k) fluoranthene	252		15.623		2475535		000	159,4 (g)
	Benzo (e) pyrene	252		16.007		21.78628		.000	165.4(A)
	Benzo(a) pyrene	252		16.079		2387962		. DO0	165.1(A)
	Indens (1, 2, 3-cd) pyrese	276		17.800		2617878		000	204. 5 (A)
	Dibenzo (a, h) anthracene	278		17.841		2250528		DDD	171.6(A)
153	Benzo(g,h,i)perylene	275	TR-522	18.235	(1.14)	2332007	700.	000	165.9(A)

# Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002G.D Report Date: 02-Oct-2010 16:57

Page 3

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•	QUART SIG					CAI	-AMT	COR	-ಲಾ	
ತ <del>ರೆಯಲ್ಲ</del> ಾಯ	Mass	er	eep rt	REL RT	RESPONSE	{	NG)	(	ng)	•
#	<del></del>			****	**************************************	-		-	<b>RE==</b>	
M 162 benzo b,k Fluoranthene Totals	252				4775333	160	.000		165.76	(A)

## QC Flag Legend

- A Target compound detected but, quantitated amount exceeded maximum amount.

  Q Qualifier signal failed the ratio test.

  q Qualifier signal exceeded ratio warning limit.

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002G.D

Report Date: 03-Oct-2010 11:16

#### Page 1

Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Smp ID: 8270F.M

Level:

Sample Type:

#### TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002G.D Lab Smp Id: HSL 160 ug/ml CS-7

Analysis Type: SV

Quant Type: ISTD Sam
Operator: KT
Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1 8270STD.SUB;10MSSV0313;0;8270F.M

Test Mode:

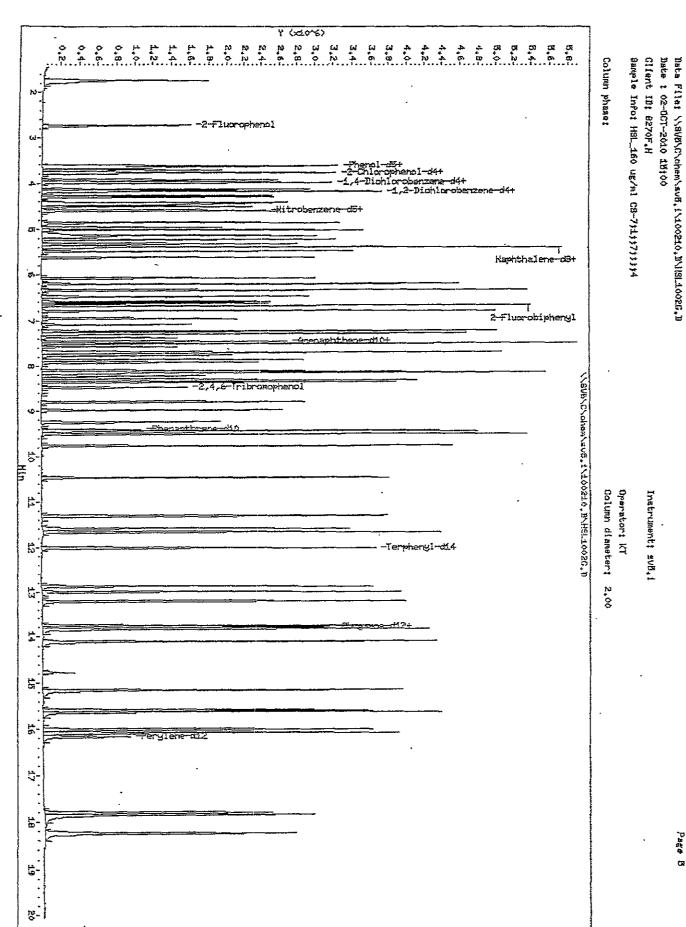
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LOWER	LIMIT UPPER	SAMPLE	%DIFF
1 1,4-Dichlorobenze 2 Naphthalene-d8 3 Acenaphthene-d10 4 Phenanthrene-d10 5 Chrysene-d12 6 Perylene-d12	122625 530514 282538 462722 435850 422284	61313 265257 141269 231361 217925 211142	245250 1061028 565076 925444 871700 844568	141009 622461 328259 532284 539557 560436	

		RT I	TIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
	_========	========	========	========	======
1 1,4-Dichlorobenze	3.96	3.46	4.46	3.95	-0.00
2 Naphthalene-d8	5.37	4.87	5.87	5.37	-0.00
3 Acenaphthene-dl0	7.47	6.97	7.97	7.48	0.14
4 Phenanthrene-dl0	9.41	8.91	9.91	9.41	-0.00
5 Chrysene-dl2	13.78	13.28	14.28	13.79	0.07
6 Perylene-d12	16.16	15.66	16.66	16.17	0.06

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



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Page 1

Report Date: 03-Oct-2010 11:20

#### TestAmerica West Sacramento

#### CONTINUING CALIBRATION COMPOUNDS

Injection Date: 02-OCT-2010 16:11 Instrument ID: sv5.i

Lab File ID: HSL1002H.D Init. Cal. Date(s): 17-AUG-2010 02-OCT-2010
Analysis Type: Init. Cal. Times: 17:32 15:00
Lab Sample ID: HSL 050 ug/ml ICV Quant Type: ISTD
Method: \\sv5\c\chem\sv5.i\100210.B\8270f.m

	1	1	CCAT	MIN	<u> </u>	YAM	
COMPOUND	RRF / AMOUNT	RF50	RRF50	KRF	*p / *drift	*D / *DRIFT	CURVE TYPE
			****	Descript to			
5 7 2-Fluorophenol	1,40992	1.41047	1.41047	0.010	0.03876	50.00000	Averaged
\$ 8 Phenol-d5	1.77296	1.74907	1.74907	0.010	-1.34746	50.00000	Averaged
\$ 9 2-Chlorophenol-d4	1.55698	1.55303	1.55303	0.010	-0.25385	50.00000	Averaged
\$ 10 1,2-Dichlorobenzene-de	0.98513	0.98502	0.98502	0.010	-0.01093	50.00000	Averaged
\$ 11 Nitrobenzene-d5	0.33875	0.32706	0.32706	0.010	-3.46219	50.00000	Averaged
\$ 12 2-Fluorobiphenyl	1.28852	1.25302	1.25302	0.018	-2.75502	50,00000	Averaged
\$ 13 2,4,6-Tribromophenol	0.17381	0.17822	0.17822	0.010	2.53174	50.00000	Averaged
\$ 14 Terphenyl-d14	0.78789	0.74054	0.74054	0.010	-6.00962	50.00000	Averaged
15 N-Nitrosodimethylamine	0.92154	0.91645	0.91645	0.010	-0.55265	50.00000	Averaged
16 Pyridine	1.54111	1.49084	1.49084	0.010	-3.26208	50.00000	Averaged
23 Aniline	2.25673	1.90520	1.90520	0.010	-15.57680	50.00000	Averaged
24 Phenol	2.03729	2.01343	2.01343	0.010	-1.17106	20.00000	Averaged
26 Bis(2-chloroethyl)ether	1.42859	1.41690	1.41690	0.010	-0.81844	50.00000	Averaged
27 2-Chlorophenol	1.56381	1.57626	1.57626	0.010	0.79611	50.00000	Averaged
28 1,3-Dichlorobenzene	[ 1.70337	1.74104	1.74104	0.010	2.21094	50.00000	Averaged
29 1,4-Dichlorobenzene	1.78338	1.77637	1.77637	0.010	-0.2697B	20.00000	] Averaged
30 Benzyl Alcohol	1.05101	1.07153	1.073.53	0.010	1.95228	50.00000	Averaged
31 1,2-Dichloxobenzese	[ 1.63746	1.64144	1.56144	0.010	0.24267	50.00000	Averaged
32 2-Methylphenol	1.43012	1.41817	1.41817	0.010	-0.83592	50.00000	Averaged
33 2,2'-oxymis(1-Chloropropane	2.27365	2.14153	2.14153	0.010	-5.81096	50.00000	Averaged
34 4-Methylphenol	1.51904	1.42403	1.42403	0.010	-5,25452	50.00000	Averaged
36 Hexachloroethens	0.60636	0.62081	0.62081	0.010	2.38271	50.00000	Averaged
37 N-Nittosodimpropylamine	1.01180	0.99863	0.99863	0.050	-1.30217	50.00000	[ Averaged
42 Nitrobenzene	0.33116	0.32452	0.32452	0.010	-2.00546	50.00000	Averaged
44 Isophorona	0.63679	0.62370	0.62370	0.010	-2.05513	50.00000	Averaged
45 2-Nitrophenol	0.19648	0.20090	0.20090	0.010	2.25050	20.00000	Averaged
46 2,4-Dimethyphenol	0.34911	0.33078	0.33078	0.010	-5.25153	[ 50.00000	Averaged
47 Bis (2-chloroethoxy) methane	0.38908	0.37434	0.37434	0.010	-3.78942	50.00000	Averaged
49 2,4-Dichlorophenol	0.27010	0.26945	0.26945	0.010	-0.23923	20.00000	Averaged
50 Benzoic Acid	0.15324	D.20284	0.20284	0.010	4.96710	50.00000	Averaged
51 1,2,4-Trichlorobenzene	0.29246	D.28203	0.28203	0.010	-3.56320	50.00000	Averaged
52 Naphthalene	1.10443	1,07116	1.07116	0.010	-3.01 <del>21</del> 7	50.00000	Averaged
54 4-Chlorospiline	0.43288	0.40664	0.40664	0.010	-6.06033	50.00000	Averaged
57 Hexachlorobutadiene	0.14313	0.14742	0.14742	0.010	2.99976	20,00000	Average
so e-Chloro-3-Methylphenol	0.30164	0.29442	0.29442	0.010	-2.39317	20.00000	Averaged
63 2-Methylnaphthalene	0.59378	0.71003	0.72003	0.010	2.34296	50.00000	Averaged
66 Hexachlorocyclopentadiene	0.29846	0.32228	0.32228	0.050	7.98199	50.00000	Average
69 2,4,6-Trichlorophenol	0.31913	0.32462	0.324E2	0.010	1.71977	20.00000	Averaged
70 2,4,5-Trichlorphenol	0.34380	0.34503	0.34503	0.010	0.35814	50.00000	] Averaged
71 2-Chloromaphthalene	1.12571	1.09768	1.09768	0.010	-2.48963	50.00000	
73 2-Nitrospiline	0.34115	0.32550	0.32550	0.010	-4.596DB	50.00000	: -
76 Dimethyiphthalate	1.29606	1.28355	1.28355	0.010	-0.96554	[ 50.00000	1
	,	1		i	i I	1	1
		·	·		·	·	·



Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002H.D

Report Date: 03-Oct-2010 11:20

## TestAmerica West Sacramento

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: sv5.i Injection Date: 02-0CT-2010 16:11

Lab File ID: HSL1002H.D Init. Cal. Date(s): 17-AUG-2010 02-OCT-2010 Analysis Type: Init. Cal. Times: 17:32 15:00 Lab Sample ID: HSL 050 ug/ml ICV Quant Type: ISTD Method: \\sv5\c\chem\sv5.i\l00210.B\8270f.m

	i l		CCFT	MIN	l i	MAX	
COMPOUND	PRF / AMOUNT!	RF50	RRF50	RRE	KD / KDRIFT	&D / &DRIFT	:
7 Acensphthylene	1.96037	1.90194	1.90194	0.010	-2.98044	50,00000	Averaged
9 2,6-pinitrotoluene	0.30197	0.30334	0.30334	0.010	. 0.45457	50.00000	Averaged
0 3-Nitrosmiline	0.37691	0.37836	0.37836	0.010	0.38563	50.00000	
I Acenaphthene	1.24787	1.19989	1.19989	0.010	-3.84461	20.00000	Averaged
2 2,4-Dinitrophenol	50.00000	48.07731	0.16950	0.050	-3.84537	0.000e÷000	Quadratic
3 Dibenzofuran	1.65612	1.64309	1.64309	0:010	-D.78683	50.00000	Averaged
4 4-Nitrophenol	0.15634	0.16205	0.16205	0.050	3.65012	50.00000	
5 2,4-Dinitrotolnene	0.39533	0.40639	0.40639			50.00000	
1 Fluorene	1.37139	1.36209		•	•		
2 Diethylphthalate	1.32699	1.28445	1.28445				
3 4-Chlorophenyl-phenylether	0.57019	0.56986		•	•		
4 4-Nitrozniline	0.37361	0.40608		-	•		-
7 4,6-Dinitro-2-methylphenol	50.00000	48.62001		•			
8 N-Nitrosodiphenylamine	0.60528	0.49066	0.49086	0.010	-19.03836		-
00 Azobenzene	0.78650	0.77322	0.77322	0.030	-1.70096	50.00000	· ·
01 4-Browophenyl-phenylether	0.19527	0.19536	0.19536	0.010	0.04546	•	
08 Hexachlorobenzene	0.21807	0.22026		•	•	•	,
10 Pentachlorophenol	50.00000	50.72441		•			•
14 Phenenthrene	1.26074	1.20864		•			•
15 Anthracene	1.25955	1.22825			•		
18 Carbazole	2.15061	1.15083			•		: -
20 Di-n-Butylphthalate	1.38442	1.39149		-	-		
26 Fluoranthene	1.12969	1.19302	•	•	•		
27 Benzidine	0.81067	0.30175	`	•			•
28 Pyrene	1.25025	1.13023		•		•	Averaged
34 3,3'-dimethylbenzidine	0.71564	0.26880					
36 Butylbenzylphthalste	0.62663	0.58836		0_010	-6.10747		
38 Beazo(a)Anthracena	1.06548	D.99285	0.99285	0.010	-6.81596	50.00000	
39 Chrysene	1.08994	1.04703	1.D47B3	0.010	-3.93621	50.00000	Averaged
40 3,31-Dichlorobenzidine	0.40189	0.37691		•	-		. •
el bis(2-ethylbexyl)Phthalate	0.86316]	0.80149	0.80149	0.01D	-7.14468	50.00000	1
42 Di-n-octylphthelate	1.37975	1.27404					•
44 Benzo (b) fluoranthene	0.90549	0.90498					
45 Benzo (k) fluoranthene	1.16236	1.22175	·		_		
47 Benzo(e) pyrene	0.94425	D.98421			<u>.</u>		: -
48 Benzo(a) pyrene	1.02655	0.95393					
51 Indeno(1,2,3-cd) pyrene	0.83029	0.81846					: -
52 Dibenzo (a, h) anthracene	0.52758	0.99090					
	1.00427	1.08674					
53 Benzo (g,h,i) parylene 162 benzo h,k Fluoranthena Tota	2.06785	2.12673					•
TON DEUTO IN VETROTERING TOTAL	4.00765	ر <i>در ۱</i> ۵۰۰ م	رة/ <del>ماسد</del> ، تم	0.520	2.85/68	50.00000	Averaged

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Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002H.D

Report Date: 03-Oct-2010 11:20

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## TestAmerica West Sacramento

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002H.D Lab Smp Id: HSL\_050 ug/ml ICV Client Smp Client Smp ID: 8270F.M

Inj Date : 02-OCT-2010 16:11

: KT Operator Inst ID: sv5.i

: HSL\_050 ug/ml ICV;2;;4;;;;4 Sup Info

Misc Info: 3;;0;1 8270STD.SUB;10MSSV0314;0;8270F.M

Comment : SOP SAC-MS-0005

: \\sv5\c\chem\sv5.i\100210.B\8270f.m Method

Meth Date : 03-Oct-2010 11:20 sv5.i Quant Type: ISTD Cal Date : 17-AUG-2010 21:19 Cal File: AP90817D.D

Als bottle: 8 Continuing Calibration Sample

Dil Factor: 1.00000 Integrator: Falcon

Compound Sublist: 1\_8270STD.SUB

Target Version: 4.14 Processing Host: SACP307UM

								MICHA	<u> </u>	
	•	DIZ TEAUQ					CAL	-ami	ON-	-COT
Cor	ம்காருக	Mass	RT	exp Ri	rel re	PESPONSE	(	NG)	(	M2)
<b>***</b>		<del></del>							<b>**</b>	-
*	1 1,4-Dichlorobenzens-d4	152	3.954		(1.000)	98364		0000		
*	2 Naphthalene-d8	. 136	5.374		(1.000)	431655		0000		
*	3 Acesephthene-dlo	154	7.468		(1.000)	236662		0000		
*	4 Phenanthrens-610	188	3.405		(1.000)	380734		0000		
*	5 Chrysene-dl2	240	13.789	-	(1.000)	421719	•	0000		
*	6 Perylene-dl2	264	16.173		(1.000)	419419		0000		
\$	7 2-Fluorophenol	22.2	2.732		(0.691)	173424		0000		50.02
Ş	8 Phenol-d5	99	3.623		(0.924)	225057		0000		19.33
\$	9 2-Chlorophenol-d4	132	3.747		(0.948)	1,90953	-	0000		19.87
\$	10 1,2-Dichlorobenzene-d4	152	4.151		(1.050)	121113		0000		£9.99
\$	11 Ritrobenzene-d5	82	4.576		(0.852)	176474		0000		18.27
\$	12 2-Fluorobiphenyl	172	6.680		(0.895)	370679		0000		£8.62
\$	13 2,4,6-Tribromophenol	330	8.483		(1.136)	52721	•	0000	_	1.26
\$	14 Temphemyl-dl4	2 <del>4</del> £	12.017		(0.871)	390377		0000		17.00
	15 %-Nitrosodimethylamine	74	1.706		(0.431)	112562		0000		≜\$.72 (Q
	16 Pyridine	79	1.726		(0.437)	1.83306		0000		48.37
	23 Amiline .	93	3.654		(0-924)	234254	•	0000		2.21
	24 Phenol	94	3.623		(0.516)	247561		0000	4	£9.41 {€
	26 Bis (2-chloroethyl) ether	53	3.716	3.715	(D.940)	1.7421.5	50.	0000	4	19.59
	27 2-Chlorophenol	128	3.76B	3.768	(0.953)	1.93ED9	50.	0000	1	50.40
	28 1,3-Dichlorobenzene	1 <del>4</del> 5	3.913	3.913	(0.990)	214069	50.	0000-	=	53.10
	29 1,4-Dichlorobenzene	145	3.975	3.975	(1.005)	218414	50.	0000	4	19.86
	30 Benzyl Alcohol	. 108	4.120	4.120	(1.042)	131750	50.	0000	3	50.98
	31 1,2-Dichlorobenzene	146	4.172	4.172	(1.055)	201823	50.	0000	5	0.12
	32 2-Methylphenol	108	4.255	4.255	(1.076)	174371	50.	DDDD	4	19.58
	33 2,2'-ozybis(1-Chloropropens)	45	4.296	4.295	(1.086)	263312	50.	0000	4	17.09
	34 4-Methylphenol	108	4,410	4.410	(1.115)	175052	50.	0000	4	¥5.87
	36 Herachloroethane	117	4.504	4.504	(1.139)	76332	50:	0000	3	51.19
	37 N-Nitrosodinpropylamine	70	4.442	4.442	(1.123)	122785	50.	0000	4	49.35
	42 Kitrobenzene	77	4.597	4.597	(0.855)	175102	50.	0000	4	19.00
	44 Isophorone	82	4.856	4.856	(0.90 <del>4</del> )	336530	50.	0000	4	£8.97
	45 2-Nitrophenol	239	4.95D	4.95D	(0_923)	108399	50.	0000	ī	1.12
	46 2,4-Dimethyphenol	107	5.03.2	5.012	(0.933)	178479	50	BDDD		£7.37

	•						AMOUN	TS
		QUANT SIG					CAL-AMT	OM-COL
Сопро	മാര്ട	Mass	RT	exp ky	rel ri	RESPONSE	( · NG)	( MG)
		D	Angel Spiller,		-	-	tale simplying	CHECK POINT
€7	Bis (2-chloroethoxy) methens	93	5.126	5.126	(0.954)	201982	50.0000	48.30
49	2,4-Dichlorophenol	162	5.229	5.229	(0.973)	245389	50.0000	49.88
50	Benzoic Acid	122	5.175	5.115	(0.952)	109446	50.0000	52.48
51	1,2,4-Trichlorobenzene	180	5.322	5.322	(0.990)	152177	50.0000	48.22
	Naphthalene	128	5.395	5.395	(1.004)	577964	50.0000	48.49
	4-Chloroaniline	127	5.488	5.488	(1.021)	<u> 71</u> 9411	50.0000	45.97
57	Bewachlorobutadiene	225	5.613	5,613	(1.94¢)	795 <del>4</del> 3	50.0000	51.50
60	4-Chloro-3-Methylphenol	107	6.069	5.069	(1.129)	158858	50.8000	48.50
63	2-Methylnaphthalene	142	6.203	-6.203	(1.154)	383210	50.0000	51.27
55	Renachlorocyclopentadiene	237	6.483	6.483	(0.866)	95339	50.0000	53.99
69	2,4,6-Trichlorophenol	196	6.587	6.587	(0.882)	96032	50.0000	50.86
70	2,4,5-Trichlorphenol	.196	6.628	6.628	(0.888)	102070	50.0000	50.38
71	2-Chloronaphthalene	162	6.734	6.784	(0.90B)	324725	50.0000	48.76
73	2-Nitrosmiline	65	6.949	6.949	(0.931)	96293	50.0000	<b>47.70</b>
76	Dimethylphthelate	163	7.229	7.229	(0.968)	379709	50.0000	49.52
77	Acenaphthylene	152	7.281	7.281	(0.975)	562546	50.0000	48.51
79	2,6-Dinitrotoluene	165	7.302	7.302	(0.978)	89736	50.0000	50.23
80	3-Nitrosmiline	138	7.457	7.457	(0.999)	221929	50.0000	50.19
81	Acenaphthens	153	7.509	7.509	(1.006)	354961	50.0000	48.08
82	2,4-Dinitrophenol,	184	7.582	7.582	(1.015)	50142	50.0000	48.08
83	Dibenzofuran	168	7,706	7.706	(1.032)	486071 .	50.0000	49.61
84	4-Mittophenol	109	7.675	7.675	(1.028)	47938	50.0000	51.82 (Q)
86	2,4-Dinitrotoluene	165	7.768	7.758	(1.D40)	120220	50.0000	51.27
	Flucrene	166	8.131	8.131	(1,089)	402944	50.0000	49.66
92	Diethylphthalate	149	8,100	8.100	(1.085)	379976	50.0000	48.40
	4-Chlorophenyl-phenylether	204	8.152	8.152	(1.092)	168579	50.0000	49.97
	4-Nitrospiline	138	8.214	8.214	(1,100)	120129	50.0000	54.34
97	4,5-Dinitro-2-methylphenol	198	8.276	8.276	(D.880)	65675	58.0000	48.52
98	N-Witrosodiphenylamine	169	8.317	8.317	(0.884)	273768	58,6000	47.44
100	Azobenzene	77	8.359	6.359	(0.889)	367990	50.0000	49.15
^ 101	4-Bromophemyl-phemylether	248	8.804	8.804	(0.936)	92973	50.0000	50.02
188	Hexachloroberzene	284	8.981	8.981	(0.955)	104824	50.0000	50.50
110	Pentachlorophenol	266	9.240	9.240	(0.982)	62906	50.0000	50.72
324	Phensuthrene	178	9.437	9,437	(1.003)	575211	50.0000	47.93
115	Anthracene	178	9.509	9.509	(1.011)	584548	50.0000	48.76
118	Carbazole	167	9.768	9.768	(1.039)	547701	50.0000	50.01
220	Di-n-Butylphthalate	149	10.473	10.473	(1.113)	662234	50.0000	50.26
125	Fluoranthena	202	11.302	11.302	(1.202)	567781	50.0000	52.80
1.27	3 <del>epzidine</del>	184	11,582	11.582	(D.840)	159069	50,0000	18.61
	Pyrena	202	11.555	11.665	(0.846)	595801	50.0000	45.20
134	3,3'-dimethylbenzidine	212	12.577	12.877	(0.934)	161696	50.0000	2.8.78
136	Butylbenzylphthalate	149	12.991	12.991	(0.942)	310154	50.0000	46.95
138	Benzo (a) Anthracene	228	13.758	13.758	(0.998)	523382	50.0000	46.59
139	Chrysene	228	13.830	13.830	(1.003)	551943	50.0000	48.03
140	3,3'-Dichlorobenzidine	252	13.799	13.799	(1.001)	198589	50.0000	46.89
141	bis (2-ethylhexyl) Phthalate	149	14.110	14.110	(1.023)	422505	50.0000	45.43
	Di-n-octylphtbalate	149	15.167	15.167	(1.100)	671608	50.0000	46.17
	Senso (b) fluoranthene	252	15.582	15,582	(0.963)	474456	50.0000	49.57 (Q)
	Benzo (k) fluoranthene	252		15.623		<del>54</del> 0533	50.0000	52.55
	Benzo (e) pyrena	252		16.007		51.5993	50.0000	52.12
	Benzo (s) pyrene	252		15.079		500123	50.0000	46.45
	Indeno (1,2,3-cd) pyrene	276		17.810		429096	50.0000	49.29
	Dibenzo (a, h) antimacene	278		17,851		51,9505	50.0000	53.41
	Benzo (g, h, i) perylene	276		18.235	-	569749	50.0000	54.10
دحد	مست الادماء المست				,		21.5000	

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002H.D Report Date: 03-Oct-2010 11:20

Page 3

							MUCMA	.TS		
	QUART SIG					CAL	-AVI	OM-	-cor	
Compounds	Mass	RT	TH CLH	rel rt	response	(	MG)	(	KG)	
	ACCOUNTS.	-	Market Commence				uwsp			
M 162 benzo b, k Finoranthene Totals	252				1114989	50.	0000			

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\SV5\C\chem\sv5.i\100210.B\HSL1002H.D

Report Date: 02-Oct-2010 17:02

Page 4

Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Smp ID: 8270F.M Level:

Sample Type:

#### TestAmerica West Sacramento

## INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002H.D

Lab Smp Id: HSL 050 ug/ml ICV Analysis Type: SV

Quant Type: ISTD

Operator: KT

Method File: \\SV5\C\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;1\_8270STD.SUB;10MSSV0314;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

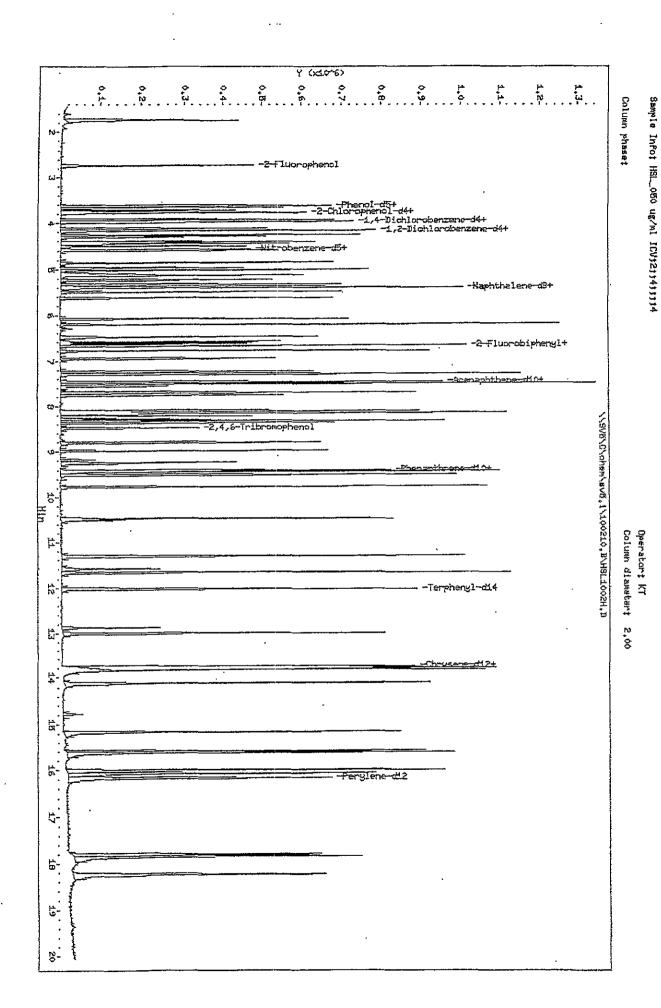
COMPOUND	STANDARD	AREA LOWER	LIMIT UPPER	SAMPLE	%DIFF
	=======================================	========	========	=======================================	======
1 1,4-Dichlorobenze	122625	61313	245250	98364	-19.78
2 Naphthalene-d8	530514	265257	1061028	431655	-18.63
3 Acenaphthene-d10	282538	141269	565076	236662	-16.24
4 Phenanthrene-dl0	462722	231361	925444	380734	-17.72
5 Chrysene-dl2	435850	217925	871700	421719	-3.24
6 Perylene-dl2	422284	211142	844568	419419	-0.68

		RT I	IMIT		
COMPOUND .	STANDARD	LOWER	UPPER	SAMPLE	TTICS.
=======================================	=========	========	========	========	======
1 1,4-Dichlorobenze	3.95	3.45	4.45	3.95	0.00
2 Naphthalene-d8	5.37	4.87	5.87	5.37	0.00
3 Acenaphthene-d10	7.47	6.97	7.97	7.47	0.00
4 Phenanthrene-dl0	9.41	8.91	9.91	9.41	0.00
5 Chrysene-dl2	13.79	13.29	14.29	13.79	0.00
6 Perylene-dl2	16.17	15.67	16.67	16.17	0.00

AREA UPPER LIMIT = +100% of internal standard area. AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



BE 40 CS

Data File: \\SUB\C\ohem\sv5.i\100210.B\HSL1002H.D
Date : 02-DCT-2010 16:11

Instrument; sv8.i

Client In; 8270F.H

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002H1.D

Report Date: 03-Oct-2010 11:13

Page 3

#### TestAmerica West Sacramento

## CONTINUING CALIBRATION COMPOUNDS

Instrument ID: sv5.i

Injection Date: 02-OCT-2010 16:36
Init. Cal. Date(s): 17-AUG-2010 02-OCT-2010
Init. Cal. Times: 17:32 15:00

Lab File ID: HSL1002H1.D Init. Cal. Date(s):
Analysis Type: Init. Cal. Times:
Lab Sample ID: Benzidines ICV 50ug Quant Type:
Method: \\sv5\c\chem\sv5.i\100210.B\8270f.m ISTD

1				CCAL	MCDM		MAX	
COMPOUND	.   EEE	TRIDCHA \	RFSO	RRF50	RRF	ed / edrift	D / DRIFT	CURVE TYPE
	سے   ۔۔۔۔۔	<del></del>	=			-		
1.27 Benzidine	1	0.81067	0.92336	0.92336	0.010	13.89989	50.00000	Averaged
134 3,3'-dimethylbenzidine	1	0.71564[	0.78974	0.78974	[0.010]	10.35398	50.00000	Averaged
140 3,31-bichlorobenzidine	1	0.40189	0.42433	0.42433	0.010	5.58428	50.00000	Avereged)
· !	[				. 1			

Report Date: 03-Oct-2010 11:13

## TestAmerica West Sacramento

Method 8270C

Data file: \\sv5\c\chem\sv5.i\100210.B\HSL1002H1.D Lab Smp Id: Benzidines ICV 50ug Client Smp Client Smp ID: 8270F.M

Inj Date : 02-0CT-2010 16:36

: KT Operator Inst ID: sv5.i

Smp Info : Benzidines ICV 50ug/mL;2;;4;;;4

Misc Info: 3;;0;BenzICV.SUB;10MSSV0342;0;8270F.M

Comment : SOP SAC-MS-0005

: \\sv5\c\chem\sv5.i\100210.B\8270f.m Method

Meth Date: 03-Oct-2010 11:13 truongk Quant Type: ISTD Cal File: AP90817D.D Cal Date : 17-AUG-2010 21:19

Als bottle: 9 Continuing Calibration Sample

Dil Factor: 1.00000

Compound Sublist: BenzICV.SUB Integrator: Falcon

Target Version: 4.14 Processing Host: SACP3070M

							MUCMA	rs .
		QUANT SIG					CAL-AMI	OM-0017
Co	റത്താവനാളം	ream	RT	exp rt	REIL RI	response	(DMG)	( 12G)
	**************************************	-	.——					
*	l 1,4-Dichlorobenzene-d4	152	3.954	3.954	(1.000)	115503	40.0000	
*	2 Naphthalene-dS	136	5.364	5.364	(I.000)	480485	40.0000	
ŧ	3 Acenaphthene-610	16 <del>4</del>	7.468	7,468	(1.000)	254190	40.0000	
*	4 Phenanthrane-dl0	188 .	9.405	9.405	(1.000)	405333	40.0000	
+	5 Chrysene-dl2	240	13,779	13.779	(0.000)	378068	40.0000	
•	6 Parylene-dl2	26 <b>4</b>	16.162	16.162	(2.000)	3723£2	40.DD00	
	127 Benzidine	184	11.571	11.571	(0.840)	436364	50.0000	56.95
	134 3,3'-dimethylbenridine	21.2	12.867	12.867	(0.934)	373217	50.0000	55.18
	140 3,31-Dichlorobenzidine	252	13,799	13.799	(1.002)	200534	50.0000	52.79

Data File: \\sv5\c\chem\sv5.i\100210.B\HSL1002H1.D

Report Date: 03-Oct-2010 11:13

## TestAmerica West Sacramento

#### INTERNAL STANDARD COMPOUNDS AREA AND RT SUMMARY

Instrument ID: sv5.i

Lab File ID: HSL1002H1.D

Lab Smp Id: Benzidines ICV 50ug

Analysis Type: SV Quant Type: ISTD

Operator: KT

Method File: \\sv5\c\chem\sv5.i\100210.B\8270f.m Misc Info: 3;;0;BenzICV.SUB;10MSSV0342;0;8270F.M

Test Mode:

Use Initial Calibration Level 4.

		AREA	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	\$DIFF
	========	========	=======	========	======
1 1,4-Dichlorobenze	122625	61313	245250	115503	-5.81
2 Naphthalene-d8	530514	265257	1061028	480485	-9.43
3 Acenaphthene-d10	282538	141269	565076	. 254190	-10.03
4 Phenanthrene-d10	462722	231361	925444	405333	-12.40
5 Chrysene-dl2	435850	217925	871700	378068	-13.26
6 Perylene-d12	422284	211142	844568	372382	-11.82
_					

		RT I	LIMIT		
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	FTICS
				========	======
1 1,4-Dichlorobenze	3.95	3.45	4.45	3.95	0.00
2 Naphthalene-d8	5.36	4.86	5.86	5.36	0.00
3 Acenaphthene-d10	7.47	6.97	7.97	7.47	0.00
4 Phenanthrene-d10	9.41	8.91	9.91	9.41	0.00
5 Chrysene-d12	13.78	13.28	14.28	13.78	0.00
6 Perylene-d12	16.16	15.66	16.66	16.16	0.00

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT. RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Page 2

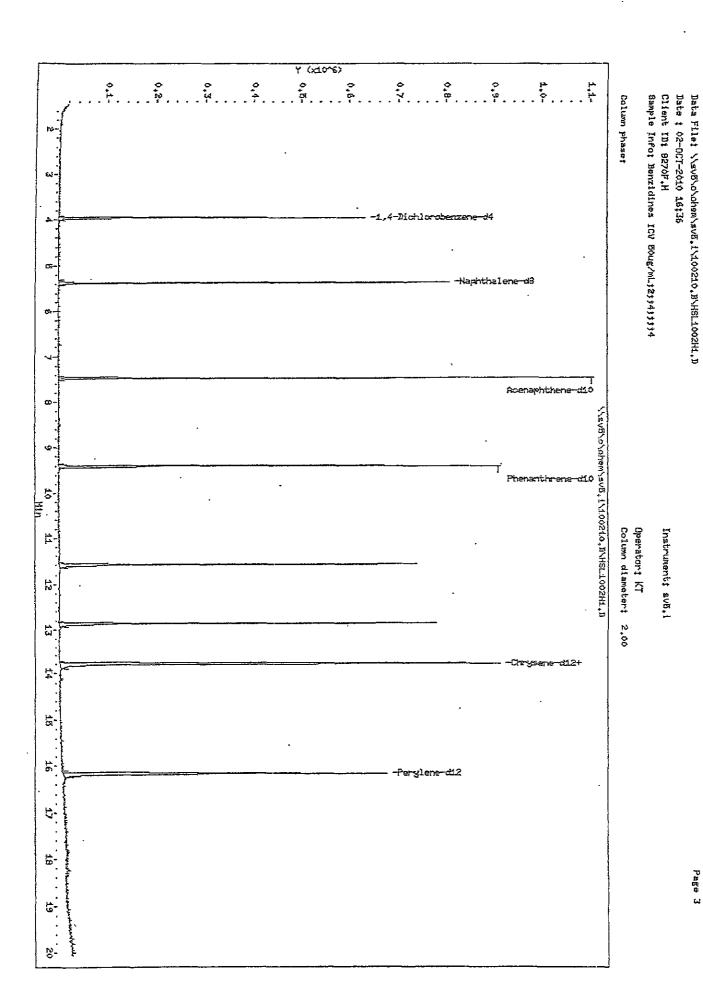
Calibration Date: 02-OCT-2010

Calibration Time: 13:44

Client Smp ID: 8270F.M

Level:

Sample Type:



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Instrument; svb.l

## TestAmerica West Sacramento INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32 End Cal Date : 02-OCT-2010 15:00
Quant Method : ISTD

: Disabled Origin Target Version : 4.14 Integrator : Falcon

Method file : \\SV5\C\chem\sv5.i\100210.B\8270f.m

Last Edit : 03-Oct-2010 11:07 sv5.i

Last Edit Curve Type : Average

Calibration File Names:

Level 1: \SV5\C\chem\sv5.i\081710.B\AP90817A.D Level 2: \SV5\C\chem\sv5.i\081710.B\AP90817A.D Level 3: \SV5\C\chem\sv5.i\081710.B\AP90817C.D Level 4: \SV5\C\chem\sv5.i\081710.B\AP90817C.D Level 5: \SV5\C\chem\sv5.i\081710.B\AP90817E.D Level 5: \SV5\C\chem\sv5.i\081710.B\AP90817E.D Level 5: \SV5\C\chem\sv5.i\081710.B\AP90817F.D Level 5: \SV5\C\chem\sv5.i\081710.B\AP90817F.D Level 7: \\SV5\C\chem\sv5.i\081710.B\AP90817G.D

| 5.000 | 10.000 | 20.000 | 50.000 | 80.000 | 120.000 | [ Level 1 | Level 2 | Level 3 | Level 4 | Level 5 | Level 6 | ( රාකාපහාර ਸ਼ਸ਼ਸ਼ 1 TREE & 15 N-Nitrosodinethylamine 0.52899 0.88268 0.91048 0.91970 0.93146 0.93916 1.57117 | 1.37423 | 1.59449 | 1.56610 | 1.52299 | 1.53256 16 Pyridine 1.52623 [ 1.54111] 5.855 2.20796 2.15935 2.19988 2.26056 2.29749 2.33400 1 2.04111 1.96212 2.02834 2.03430 2.06683 2.06089 [ | 2.03729 | 1.802] l \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_ | \_\_\_\_\_ | \_\_\_\_\_ | \_\_ 27 2-Chlorophenol 1.52099 | 1.55595 | 1.56903 | 1.58168 | 1.56789 | 1.58074 | 1.56381 1.328 1.68903 1.69173 1.67754 1.73135 1.68641 1.72299 1.72457 1.70337 1.294 1.77122 1.79851 1.74013 1.76898 1.78200 1.79288 29 1,4-Dichlorobenzene 1.81444 | | | 1.78118 | 1.352

## TestAmerica West Sacramento

## INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32 Énd Cal Date : 02-OCT-2010 15:00

Quant Method : ISTD Origin : Disabled Target Version : 4.14 Integrator

: Falcon : \\SV5\C\chem\sv5.i\100210.B\8270f.m : 03-Oct-2010 11:07 sv5.i Method file

Last Edit

Curve Type : Average

Compound	5.000   Level 1	10.000     Level 2	20.000   Level 3		80.000     Level 5	120.000     Level 6		t RSD
·	]						EEC	\$ 85D
	160.000					· . 		
	Level 7				1 1			
		'	RECORDED S		A			
30 Benzyl Alcohol	1.01643		0.99182	1.04980	1.07752	1.08952		
	1.09506			 	 	! !	1.05101	3.€57
31 1.2-Dichlorobenzens	1.62008	1		,	1.63410			
_	1.64691						1.63746	1.459
				]				
32 2-Methylpherol	1.40818	1.38930	1.39120	1.42620	1.45565	1.46154		
	1.47889	i			  1	]	1.43012	
33 2,2'-cxybis(1-Chloropropane)	2.29602	2.22080	2.28329	2.27928		2.27830		
33 2,2 Gigans (1 Gibbs of Logard)	2.28770		1120327		212/220	4027050;	2.27365	1,085
34 4-Methylphenol	1.48606	1.48913	1.46270	1.52239	1.52653	1.55886		
	1.58763		1			1	1.51904	2.584
36 Hexachloroethans	0.60925]	0 50005						
35 Hermon ordernans	0.60925	0.60836	0.60573	0.61394	0.60427	0.59381	0.60636	1.043
	[							
37 H-Nitrosodinpropylamina	D.9449B	0.97005	1.01302	1.02370	1.04700	1.03627		
	1.04757	ŀ	i		1		1.01180	3.926
	[							
42 Ritrobenzene	0.32855   0.33901	0.32602	0.32543) 1	0.33083	0.33379 	0.33450		
	U.SSFUL	1	! !!	: 			0.33116	1.489
44 Isopherone	0.63431	0.52291	0.51750	D.63344	0.63648	0.65468	1	
	0.65411	i	j	j	j	1	D.63679	2.811
				j		i		
45 2-Ritroph≅nol		0.18833	D.18840	0.20021	0.20022}	0.20702	1	
	0.20508]	ļ	1		. }	1	0.19648	4.423
16 o 4 minuthentant	   D 34450!		1.0585.0		0.34788	0.35050		
46 2.4-Dimethyphenol	0.34459 0.35785	0.34167	0.34307	0.34912	18813-6-0	0.35962	0.3 <u>4911</u>	2,028
			! 	· .		ا 	V.JeJLL	2.UZ8
	·		1			1	- :	

## TestAmerica West Sacramento

## INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32 : 02-OCT-2010 15:00 : ISTD End Cal Date

Quant Method Origin : Disabled Target Version : 4.14 Integrator : Falcon

: \\SV5\C\chem\sv5.i\100210.B\8270f.m : 03-Oct-2010 11:07 sv5.i Method file

Last Edit

Curve Type : Average

	5.000	20.000	20.000	50.000	B0:000	120.000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RZF	% RED
							ļ	. !
	160.000   Level 7		l I	] ]	] 	]   	i	·
		:	 	, 		,   <del></del>	<del></del>	*****
47 Ris (2-chlorostbory) methans	0.411.45		0.38565	0.38249	0.38500	0.39859	1	}
·	0.38545			 		 	8008.0	3.106
49 2,4-Dichlorophenol	0.25434	•	0.27019	0.27037	0.27274	0.28180		
	0.27809			!		}	0.27910	3.393
50 kenzoic Acid	0.15747		0.17423	   0.19257	0.21024	   0.22272		- <del></del> -  
	0.22180	'				 [	0.19324	13.252
51 1,2,4-Trichlorobenzene	D-29430	0.28827	0.28475	[    0.29747				
31 1,2,4-112010F0F61250E	0.29091		0.29€13	) V.29/4/  	0.29165	0.29959	D.29246]	1.760
		) <b></b>				- <b></b>		
52 Nephrhalene	1.09939   1.10247	'	1.07435	] 1.09325	1.09870	1.13821  	I.10443	
		 		 		! 		1.900
54 4-Chloroeniline	0.40751		0.43264	0.43910	0.43781	0.44905	į	ļ
	0.43867	 		 	 		0.43288	3.068
57 Hexachlorobntadiene	0.14295	0.13812	0.14428	0. <u>14415</u>	0.14385	0.14379		
	0.14473	! !		]		I	0.14313	1.589
60 4-Chloro-3-Methylphenol	   0.29329	0,28866	0.29579	0.30972	0.30295]	0.31766	<del></del>	
	0.30839	•		i		1	0.30164	3.644
63 2-Methylnsphthalene	0.68423     0.69217		02083.C	0.70067	0.70560}	0.7 <u>1172</u>	0.69378	]   1.797
			]			]		1.197
66 <u>Herach</u> lorocyclopentadiene	0.25878	•	0.28896)	0.29704	0.30235	0.32262		j
· 	0.33186]	1	<u></u>			1	0.29846	7.545
69 2,4,6-Trichlorophenol	0.31186	0.29820	0.30223	0.31996	0.32305	0.34225		
-	0.3363В]	ļ	ļ	ļ	ŀ		0.31913	5.257
		j	[	]				]
		<del></del> _	!		l	!.		}

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32 : 02-OCT-2010 15:00 : ISTD End Cal Date

Quant Method Origin : Disabled Target Version : 4.14

: Falcon : \\SV5\C\chem\sv5.i\100210.B\8270f.m : 03-Oct-2010 11:07 sv5.i Integrator Method file Last Edit

Curve Type : Average

<u> </u>	5.000	10.000	20.000	50.000	80,000	120.000		
<del>ശ്രമാവ</del> ൻ	•		Level 3			Level 6	REF	* RSD
-							i	
•	160.000	į				l į	Ì	
	Level 7				1		]	ļ
		,		'		[		
70 2,4,5-Trichlorphenol	0.30823 0.36135		0.33796	0.36298	0.35236	0.35480[ !	0.24200	
 				 			0.34380	5.807
71 2-Chloronaphtbalena	[ 1.13629]	1.09411	1.10012	'	1.11220	1.14447	]	
_	1.15096						1.12571	2.051
						[]		
73 2-Nitroaniline		0.31759	0.33397	0.35205	0.34821	0.35794	1	ļ
	0.36278						0.34229	5.573
76 Dimethylphthalate	1.23388	1.25151	1.29803	3 34550	1.31165	7 2205		
14 DIRECEA-DUCHAISE	1.23388;   1.30237		1.29803	1.34508	1.21102	1.32891	1.296061	3.093
				: 		 		
77 Acemanhthylene	1.86531	1.91304	1.91818	2.01646	1.98204	1.39786	1	
_	2.02968	į	j	j			1.96037	3.150
79 Z,6-Dinitrotoluene	0.28347	0.27378	0.29890	0.31220	0.31294	0.32140	ŀ	[
	8.31106		i	<u> </u>			0.30197[	5.786
80 3-Nitrosniline	0.35362	0.34622	0 35978	0.40036	0.38674	n 39559		
	0.39603		0,000,00	0120020]	1	]	0.37691	5.069
		]				 		
61 Acenaphthena	1.25874	1.22458	1.26733	1.27046	1,21141	1.24781	į	ļ
i	1.25463		J		1	]	1.24787	1.768
			]					
82 2,4-Dinitrophenol	0.10149	0.11058	0.14485	0.16667	0.18378	0.20563	1	, I
	0.20232[	ļ			ļ		0.15933	26.349
83 Dibenzofinan	1 577pcl	1.62124	 	1,69530	1.65117	1.68450		
פפ יייייתאארייייי פפ	1.71077	4.04442}	1.00200	1,05551	T+691T\	T.25420]	1.65612	) 1047 C
	1		! !		1		220022   11	2.779
84 4-Ritrophenol	0.12712	0.14148	0,15316	0.16076	0.17130	0.16653	1	<b></b>
<del>-</del> .	0.17404	i	ĺ	i	İ	,	0.15634	10.909
		<u> </u>						
	1	l		[		[		i

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32 End Cal Date : 02-OCT-2010 15:00

Quant Method : ISTD Origin : Disabled Target Version : 4.14 Integrator : Falcon

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Last Edit

Curve Type : Average

Compo		5.000							
	and I	Level 1	10.000     Level 2	20.000     Level 3	50.000 Level 4	80.000 Level 5	120.000     Level 6	l	% RSD
الالسالات	one.		LECVEL 2	Dever 3	TEAST #	Teser's	TEACT 0	KEE	* RSD
		160,000			<del>  </del>	<del>-</del>			
	, ,	Level 7	) 	)	· · · · · · · · · · · · · · · · · · ·		) ]	; ; }	
							 	i 	
85 2.	4-Dinitrotoluene	0.34360			0.42154	0.41035	0.42305		
		0.43110						0.39633	8,616
91 Fi	vorene [	1.34567	1.33840	1.34292	1.39902	1.38899	1.37835	i	•
	ì	1.4054D)		1		ĺ	İ	1.37139	2.086
\$2 Dir	ethylphthalate j	1.22240	1.29889	1.31549	1.37912	1.31673	1.37345	1	
	}	1.38087]		1		] ]		1.32699	4.319
	[						[]		
93 4-(	Chlorophenyl-phenylether	D.54964	0.55917	0.56867	0.59265	0.56708	0.57695	!	
		0.57695		J			ļ	0.57019	2.429
94 4-1	Nitroaniline	0.33346	0.33747	0.37329	0.38337	0.39216	0.39102		
	1	0.40452		i			.	0.37361	7.424
67 A (	6-Dinitro-2-methylphenol	0.09316	0.10533	0.12545	0.13163	0.14105	0.15288		
> \ = 1 \	1	0.15229		ر به <i>حد</i> ده ا	ן כטבניג.ט	1 0	ا هم∠جد.ه ا	0.12823	17,707
				: ]	! \	; 	 	\ }	11,707
98 1%-)	Nitrosodiphenylamine	0.57756	0.59736	0.60533	0.60433	0.62172	0.61801	, 	
	1	0.51968	į	ĺ		i	1	0.50628	2,577
100 Az	oberrene	0.77527	0.76965	0.77321	0.79522	0.80064	0.81892	i	
	1	0.77331]	j	Ī	Ì		i	0.78650	2.371
101 4-8	Exomophenyl-phenylether	0.16954]	0.18507	0.39261	0.19931	0.39607	0.20581	j	
	I	0.19815	]	]	İ	]		0.19527	3.488
108 Her	cachlorobenzene	0.22958	0.22054	D.20740[	0.21605	0.21731	0.21704	1	
	1	0.21854	1	1	1	ŀ	1	0.21807	3.009
170 5#1	etachlorophenol	0.09427	0.09851	0.33582	0.11736	0.33228	0.13923	1	
	}	0.13770]	[	į	1	1		0.12931	15.221
			]					[	
	·								

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32 End Cal Date : 02-OCT-2010 15:00

Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon

Method file : \\SV5\C\chem\sv5.i\100210.B\8270f.m

Last Edit : 03-Oct-2010 11:07 sv5.i

Curve Type : Average

				<del></del>				
Compound		10.000   Level 2	20.000 Level 3	50.000 Level 4	80.000 Level 5	120.000   Level 5	<del></del> ·	t RSD
							}	
	160.000     Level 7				!	<u> </u>	1	
# 1		<del></del>	14 0-20 <del>1-1-1</del>		<del>                                    </del>		 	
114 Phenanthrene	1.30347		1.25408	1.24163	1.24375	. •	•	
	1.26611		   <i></i>		 	: 	1.26074	1.643
115 Anthracene	1.25034		1.24206	1.25982	1.27529	1.30214	i	
	1.26958	 	  1	i		 	1.25955	2.329
13.8 Cambazole	1.13211	1.12547	1.13694	1.14260	1.17067	1.18192	1	
	1.16455				!		1.15062	1.878
120 Di-n-Butylphtbalare	] ] 1.28452]	1.32287	1.36193	1.38164	1.41474	1.43847		
<u>-</u>	1.48636	j	i	İ		į	1.3844%	4.973
126 Fluorauthene	   1.03840	1.07611	  מרכל כ	1.10520	7.75867	1.18294	<del></del> }	
	1.17440		202720	1120327	1.2002	1110112	1.12969	5.028
127 Benzidine			0.75250		0.82201	   0.86375		
12 / Benziume	] 0.76175     0.86381	ا (۱۹ <del>۳۶ )</del>	0.72250	 	0.82201	0.863/5	0.Bl067]	5.606
	]							
128 Pyrene	1.25791.    1.25794 <i> </i>	,	1.17078	1.28684	1.25586	1.28463	1.25025	3.122
			[					
134 3,3'-dimethylbenzidine	0.65472	0.64388	០.673៩១]	0.70756	0.73630	0.79414		
	0.79926  	; 			 	 	0.71564]	8.888
136 Butylbenzyl <u>phthalate</u>	0.54984	0.60187	0.59142	0.62586	0.61590	0.65233	į	
	0.64920		] !!		 	 	0.62663	3.950
138 Benso (a) Anthracene	1.10169		1.03245	1.04489		1.10631		
	1.10920	İ				}	1.06548	4.058
139 Chrysene	1.05284	1.10175	1.063201	1.09705	1.06985	1.12241	j.	
	1.12246		}		. ]		1.08994	2.594
	<b></b>							
	l						!.	

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#### TestAmerica West Sacramento

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32 End Cal Date : 02-OCT-2010 15:00

Quant Method : ISTD Origin : Disabled Target Version : 4.14 Integrator : Falcon

: \\SV5\C\chem\sv5.i\100210.B\8270f.m : 03-Oct-2010 11:07 sv5.i Method file

Last Edit

Curve Type : Average

0.42415		RRF + RSD
160,000   Level 7	9090 D.39906 D.40353 O.42717	
Level 7	9090 0.39906 0.40353 0.42717	} }
140 3,3'-Dichlorobenzidine	39090 D.39906 D.40353 O.42717	) ************************************
140 3,3'-Dichlorobenzidine	9090 D.39906 D.40353 0.42717	*************************************
141 bis (2-ethylhexyl) Phthalate	i i i i	(
0.88354		0.40189] 4.539
0.88354		
142 Di-n-octylphthalate   1.34838   1.23185   1.3   1.50770	4032 0.85193 0.84371 0.89539	
1.50770		0.86316] 4.348
144 Benzo (b) fluoranthene   0.81012   0.81077   0.8   1.02572	5627   1.34433   1.39356   1.47516	[
144 Benzo (b) fluorantheme   0.81012   0.81077   0.8   1.02572		1.37975 6.653
1.02572		
145 Benzo(k) filucrenthene   1.22939   1.16528   1.3   1.10447	2747 0.99930 0.95373 0.91132	0.90549 10.058
1.10447		
147 Berzo(e)pyrene	0022 1.09895 1.14223 1.19597	Ì
0.97185		1.16236 4.275
0.97185		
148 Benzo(a)pyrene   0.98300 0.97686 0.5	1 1 1 1	0.94425  3.220
148 Benzo(E)pyrene   0.98300  0.97686  0.9	)	
	9402] 1.02789] 1.07610  1.05275	}
1.06523		1.02655 4.111
151 Indeno(1,2,3-cd)pyrene   0.73763   0.73267   0.7	3671 0.84698 0.84057 0.93730	
0.57995		0.83029 12.151
	7256   0.92240   0.95990   1.00944	ļ
1.00392		0.92758 7.071
153 Benzo (g,in,i) peryiene   0.96025  0.98457  0.9	 7380  0.99974  1.01731  1.05397	
1.04026		1.00427 3.452
	2770 2.09825 2.09596 2.10729	
2.13019		2.06785 2.649

#### INITIAL CALIBRATION DATA

Start Cal Date : 17-AUG-2010 17:32
End Cal Date : 02-OCT-2010 15:00
Quant Method : ISTD
Origin : Disabled

Target Version : 4.14 Integrator : Falcon

: \\SV5\C\chem\sv5.i\100210.B\8270f.m : 03-Oct-2010 11:07 sv5.i Method file

Last Edit

Curve Type : Average

	5.000	10.000	20.000	50.000	80.000	120.000 }	<del></del>	
Compound	Level 1	•	Level 3	•	Level 5	•	RRF	*RSD
j				[	:		ا	ا محمد
ì	150.000	, 	: 	, !		· ·		
1	Level 7					آ		
	-	No. C. C. C. C. C. C. C. C. C. C. C. C. C.	· 			-		 
\$ 7 2-Fluorophenol	1.44503	1.30436	1.38373	1.44170	1.43535	1.42292	İ	
[	1-43635			ĺ		ĺ	1.40992	3.615
]								
\$ 8 Phenol-d5	1.72227	1.57335	1.74151	1.79006	1.80863 (	1.83864	1	
1	1.83527		İ	!	]	ļ	1.77295	3.520
					i			
\$ 9 2-Chlorophenol-d4		1.55530	1.53916	1.59414	1.57486	1.57967		
[ •	1.57804				`	)	1.55698	2.524
\$ 10 1,2-Dichlorobenzene-d4	2 05776	0.98111	* * ****	0 0001/	A 00550	0,98547		
is to 1)5-promfotoperserre de	0.98896	•	0.33021 	V.3021*	V.55320  	.   0'5 <del>02</del> -1	0.98513	1.356
 		 	 	 	( 	' 	0.20222	 
  \$ 11 Nitrobenzens-d5	0.33028	0.34256	0.33065	0.34105	0.33606	0.35127		
1	0.33970				j	j	0.33879	2.162
\$ 12 2-Fluorobipheny1	1.28499	1.26007	1.27668	1.34206	1.25854	1.29723		i
]	1.30010			!	}	1	1.28852	2.225
\$ 13 2,4,6-Trib:compphenol	0.15034		0.17466	0.17926	D.17825	0.18501		
) .	0.18390		j			}	0.17381	7.052
[		<b>-</b>						
\$ 14 Terphenyl-d14	0.78508		0.73917	0.80441	0.78047	0.81889		
<b>1</b>	0.80107	ļ				Į,	0.78789	3.214
I						I		

# Sample Extraction/Preparation Log Copies and Checklists

#### **TestAmerica West Sacramento Organic Prep Log** 8270 Air

Box# Air Tox Shared QC Batch: No	4 290 TO		erico
QC With:	4 mele		NMENTAL TESTING
		Prep Read	gents
	Reag	ent Supplier	Lot #
	1:1 DCM:/	Acetone NA	NA
	DCI	VI Baker	J27808
JM*	Na2S	O4 Baker	3640-54B

Inte	rnal COC:
Delivered to Inst.:	12/1/10
Inst Receipt:	

Batch: 0333259

MS Run #:

Prep Date: 11/29/2010 Method: JZ TO-13

Matrix: S AIR Extraction: 11 SOXHLET (NONE, Na2SO4) QC: 3W AMBIENT AIR TESTING

SAC: JZ - S - 11 - 3W

WS-OP-0006

Soxhlet time on: 13:00 Soxhlet time off:

	liyoy	10)	Extraction T	able		<del>,</del> _	
Sample ID	Suff	Work Order	Extraction Hold	Sample size	Final	/olume	Analysis Hold
			Time Expires		1mL	Other	Time Expires
G0K270427 - 1		MAK001AA	11/30/2010	1.0	N		1/2/2011
G0K270427 - 2		MAK011AA	11/30/2010	1.0	V		1/2/2011
G0K270427 - 3		MAK021AA	11/30/2010	1.0	7		1/2/2011
G0K270427 - 4		MAK031AA	11/30/2010	1.0	N		1/2/2011
G0K290000 - 259	В	MALNT1AA	11/30/2010	1.0	V		1/2/2011
G0K290000 - 259	C	MALNT1AC	11/30/2010	1.0	7		1/2/2011
G0K290000 - 259	L	MALNT1AD	11/30/2010	1.0			1/2/2011

XAD / PUF /PUF-XAD

Filter

Impinger

Comments/NCMs:	QC Media: sup ?	661905C/P1019	10 ECF 18/1/10	<del></del>		
	ID	Spike Exp Date:	Spiked By:	Witnessed By:	Date:	
Surrogate Spike All Samples	500 my 10ATRO125/ABA	4/4/11	9CF	5	11/29/10	]//
Snika Miv	/ 16270		7-0			╡

MB only All Samples For 1/29/10 Internal Standard All Samples

> Soxhlet Extraction Analyst/Date

Liq Liq Extraction Analyst/Date

Spike Mix
LCS/LCSD/MS/MS
Pre-Spike Standard

750... / JOATEON 1.7.2 10AIR0128/DCB-44

Concentration

Analyst/Date

KD Analyst/Date - 12/1/10

11/29/10

11/29/10

KD Temp <u>45°C</u>

Analyst/Date

Review



#### West Sacramento

#### Preparation Data Review Checklist

Prep Date: 11/29/10 Holding Times: 11	/30/10 NC	VI: Y N
A. Spike Witness/Batch setup	Spike Witness	Reviewer
Holding times checked? NCMs filed as appropriate	V	
2. QAS checked for QC instructions (LCS, LCSD, MS,MSD, etc)		
<ol><li>Amount of samples in hood match amount of samples on bench sheet. Sample IDS match.</li></ol>	•	NA
<ol> <li>Worksheets have been checked for required spiking compounds</li> </ol>		
Spiking volumes are correctly documented	1	
6. Std ID numbers on spike labels match numbers on bench sheet	,	NA
Expiration dates have been checked		
Calibration expiration dates on pipettors have been checked		NA
9. Spiker and spike witness have signed and dated bench sheet		
B. Weights and Volumes		
Recorded weights are in anticipated range	NA	
Balance upload or raw data for weights is included	NA	
3. Weights and volumes have been transcribed correctly to LIMS.	NA	
Weights are not targeted to meet exact weights.	NA	
<ol><li>Each weight or volume measurement is a unique record (no dittos or line downs)</li></ol>	NA	
C. Standards and Reagents		
<ol> <li>Lot numbers for all reagents, including clean up stages, are recorded.</li> </ol>	NA	
2. Are dates and analysts for cleanups recorded?	NA	
3. Are correct IDs used for standards? Are expiration dates to day/month/year, when listed?	NA	
D. Documentation	_	
Are all nonconformances documented appropriately?	NA	
QuantIMs entry correct, including dates and times.	NA	
3. Are all fields completed?	NA	
Spike witness: Date:	11/2/10	
P <sup>nd</sup> Level Reviewer: Date:		
Comments:		

RQC058

# TestAmerica Laboratories, Inc. EXTRACTION BENCH WORKSHEET

Run Date: 12/01/10 Time: 11:45:06

		[ ]						<u> </u>		
			<u> </u>   							QC MEDIA:SUP2SV19056/P101910
.0 1.0ML/10AIR0126/8270 MIX 500UL/10AIR0125/ABN SURR	700.0	DCM	NA	AN AN	NA	1.0Sample 1.00mL	AIR	1 JZ	R 11	G0K290000-259 11/30/10 0/00/00 MALNT-1-ADL COMMENTS:
.0 1.0ML/10AIR0126/8270 MIX 500UL/10AIR0125/ABN SURR	700.0	DCM	NA	NA	NA	<b>1.0Sample</b> 1.00mL	AIR	11 JZ	<b>–</b>	G0K290000-259 11/30/10 0/00/00 MALNT-1-ACC COMMENTS:
.0 250UL/10AIR0128/1,2-DCB 500UL/10AIR0125/ABN SURR	700.0	DCM	NA	NA	NA	1.0Sample 1.00mL	AIR	1 JZ	11	G0K290000-259 11/30/10 0/00/00 MALNT-1-AAB COMMENTS:
.0 500UL/10AIR0125/ABN SURR	700.0	DCM	NA	NA	NA	1.0Sample 1.00mL	AIR	1 JZ	R 11	G0K270427-004 11/30/10 12/06/10 MAK03-1-AA COMMENTS:
.0 500UL/10AIR0125/ABN SURR	700.0	DCM	NA	NA	NA	1.0Sample 1.00mL	AIR	1 JZ	R 11	G0K270427-003 11/30/10 12/06/10 MAK02-1-AA COMMENTS:
.0 500UL/10AIR0125/ABN SURR	700.0	DCM	NA	NA	NA	1.0Sample 1.00mL	AIR	1 JZ	R 11	G0K270427-002 11/30/10 12/06/10 MAK01-1-AA COMMENTS:
.0 500UL/10AIR0125/ABN SURR	700.0	DCM	NA	NA	AN	1.0Sample 1.00mL	AIR	1 JZ	R 11	G0K270427-001 11/30/10 12/06/10 MAK00-1-AA COMMENTS:
NGE VOL SURROGATE ID	SOLVENTS EXTRACTION VOL EXCHANGE	EXTRAC	ADJ2	PH"S	TINI	INIT/FIN WT/VOL	MATRIX	HTH	S EXT	EXTR ANL LOT#, MSRUN#/ TEST EXPR DUE WORK ORDER FLGS
(TO-13A)	GCMS in Air	nics by SO4)	Organ S, Na2	Semivolatile Organ SOXHLET (NONE,Na2S	TVOL	Sem SOX			/10	Reviewer/Date: LARSONE / 12/01/10
P DATE: 11/29/10 12:00 P DATE: 12/01/10 15:00	259 * PREP ****** COMP		BATCH:	* QC BATCH: * ************	* <b>+ + +</b>			son	larson X. larson	Extractionist: 403162 erica X. lar Concentrationist: 403162 erica X.
Expanded Deliverable COC Completed Bench Sheet Copied Package Submitted to AnalyticalGroup Bench Sheet Copied per COC	1111	********	* * * *	**********	* *	et ume eets all match ethod	Weights/Volumes Spike & Surrogate Worksheet Vial contains correct volume Labels, greenbars, worksheets computer batch: correct & all   Anomalies to Extraction Method	mes ogate s corr nbars, cch: cc	/Volu Surr ntain gree r bat	LEV LEV  T Z  Blank Y  Check Y  MS/MSD Y  Labels, compute  Anomali

# TestAmerica West Sacramento GC/MS Data Review Checklist

Batch: 0333259 Method ID: Semivolatile Organics by GCMS in Air (TO-13A)

NCM: (Y) N			
A. Calibration/Instrument Run QC	Analyst	Reviewer	N/A
ICAL or ICAL Summary and CCV included.	ſ		
2. ICAL, CCV Criteria met.	1	1	
3. Peaks correctly ID'd by data system.	1		
4. Copy of logbook for ICAL included	/	-	
5. Tune criteria (including tailing factor and breakdown) met			
and copy included.			
6. Method Number is identified on data.	<i>J</i>		
B. QA/QC			
1. Method blank, LCS/LCSD and MS/SD frequencies met.			
2. LCS/LCSD and MB data is included.	/		
3. LCS/LCSD and MB data are within control limits. If not,	/	/	
NCM is present in Clouseau.	· · · · · · · · · · · · · · · · · · ·		
4. MS/MSD data complete.		,	/
5. Holding Times were met.	<i></i>		
6. All samples within tune time.	/		
C. Sample Analysis		(P) (S) (S) (S)	
1. Logbook copies for all injections made, including ICV			
standards and ICAL.			_
2. Logbooks/prep sheets properly filled out.			_
3. Manual Integrations reviewed and appropriate.			
4. All raw data for samples is included (applies to unused data	/		
as well)			
5. All analytes correctly reported.			
6. Correct reporting limits used. (based on client request, prep			
factors, and dilutions)			
7. Spectra present for all positives.			
D. Documentation			976.575
1. Are all nonconformances documented appropriately?			
2. Quantims entry correct, including dates and times.			
3. Appropriate footnotes used.			
Analyst: Date:	13/6/10	12/7/10	<del></del>
2 <sup>nd</sup> Level Reviewer: Date:	( )	3/10	
Comments:			
	· · · · · · · · · · · · · · · · · · ·		
			<del></del>
·····			<del></del>

# AIR, Metals by ICPMS (As and Mn)

## Raw Data Package

# <u>ICPMS</u>



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

Instrument ID (Circle one): M01 M02		hod 60 AC-MT-		_
File Number	Date SS NZ (3) NO	Sabra 1-la-	Analys ne nove	
Lot Numbers Cot 190601, Colcovolyo, Cok2305 Cot 20040, Colosolyo, Cok2305 ARC 12/6/17 Cok27007, Cok105/4	023) (CE 20)	YES	NO	NA
Copy of analysis protocol used included?		X		
2. ICVs & CCVs within 10% of true value or recal and rerun	?	X		
3. ICB & CCBs < reporting limit or recal and rerun?		X		
4. 10 samples or less analyzed between calibration checks?		X		
5. All parameters within linear range?		X		
6. LCS/LCSD within limits?		×		
7. Prep blank value < reporting limit or all samples >20x blank	ank?	X		
<ol> <li>Internal standard intensities for samples (unless followed &gt; 30% and &lt;120% of the Calibration Blank intensities)</li> </ol>	•	×		
Appropriate dilution factors applied to data?		X		
10. Matrix spike and spike dup within customer defined limits	?	X		
11. Each batch checked for presence of internal standard in s	samples?	X		
12. Anomalies entered using Clouseau?				×
COMMENTS:				
REVIEWED BY: WTL D. D. DATE: 12/12/10	ATA ENTERED BY: DATE:	BEV		

#### **Dataset Report**

Perkin Elmer M02 User Name: metal

Computer Name: SACP1223

Dataset File Path: E:\elandata\Dataset\101203b2\
Report Date/Time: Monday, December 06, 2010 09:25:24

#### The Dataset

		The Data	aset	
Batch ID	Sample ID	Date and Time	Read Type	Description
	Rinse 3X	15:18:42 Fri 03-Dec-10	Sample	·
	Blank	15:23:15 Fri 03-Dec-10	Blank	
	Standard 1	15:27:43 Fri 03-Dec-10	Standard #1	
	ICV	15:31:55 Fri 03-Dec-10	Sample	
	ICB	15:36:13 Frì 03-Dec-10	Sample	
	LLSTD1	15:46:28 Frì 03-Dec-10	Sample	LLSTD1@10X> AL V.
	LLSTD2	15:50:45 Fri 03-Dec-10	Sample	LLSTD2@5X
	ICSA	15:56:27 Fri 03-Dec-10	Sample	
	ICSAB	16:00:42 Fri 03-Dec-10	Sample	
3	Rinse	16:08:39 Fri 03-Dec-10	Sample	
Recen	CCV 1	16:16:38 Fri 03-Dec-10	Sample	
	CCB 1	16:20:56 Fri 03-Dec-10	Sample	
	CCV 2	16:25:14 Fri 03-Dec-10	Sample	
	CCB 2	16:29:31 Fri 03-Dec-10	Sample	
335253	MAPE7B	16:33:45 Fri 03-Dec-10	Sample	G0L010000-253 BLK
335251	MAPEVB	16:38:01 Fri 03-Dec-10	Sample	G0L010000-251 BLK
335251/53	MAPEVC	16:42:14 Fri 03-Dec-10	Sample	G0L010000-251 LCS > AL.V /
335253/51	MAPE7L	16:46:26 Fri 03-Dec-10	Sample	G0L010000-251 LCSD
335251	MAA80	16:50:37 Fri 03-Dec-10	Sample	G0K190601-3 7 terus AL
335251	MAA80P5	16:54:48 Fri 03-Dec-10	Sample	G0K190601-3 5X
335251	MAA80Z	16:58:59 Fri 03-Dec-10	Sample	G0K190601-3 PS
335251	MAA81	17:03:10 Fri 03-Dec-10	Sample	G0K190601-4
335251	MAKDV	17:07:21 Fri 03-Dec-10	Sample	G0K240587-1
335251	MAKD2	17:11:33 Fri 03-Dec-10	Sample	G0K240587-2
	CCV 3	17:15:50 Fri 03-Dec-10	Sample	·
	CCB 3	17:20:07 Fri 03-Dec-10	Sample	
	CCV 4	17:24:26 Fri 03-Dec-10	Sample	
	CCB 4	17:27:55 Fri 03-Dec-10	Sample	
	CCV 5	17:31:25 Fri 03-Dec-10	Sample	
	CCB 5	17:34:54 Fri 03-Dec-10	Sample	BOLODOOD TO LELL
333404	MAL4HB	17:38:21 Fri 03-Dec-10	Sample	G0K290000-404 BLK
333404	MAL4HC	17:41:46 Fri 03-Dec-10	Sample	G0K290000-404 LCS
935253 333404		17:45:10 Fri 03-Dec-10	Sample	G0L010000-259.LCSD
333404 5161	•	<b>o</b> 17:48:35 Fri 03-Dec-10	Sample	G0K230520-1
333404	MAGQRP5	17:51:58 Fri 03-Dec-10	Sample	G0K230520-1 5X
333404	MAGQRZ	17:55:23 Fri 03-Dec-10	Sample	G0K230520-1 PS
333404	MAGQW	17:58:47 Fri 03-Dec-10	Sample	G0K230520-2
	CCV 6	18:02:16 Fri 03-Dec-10	Sample	rerun AL
	CCB 6	18:05:46 Fri 03-Dec-10	Sample	00/000500 0
333404	MAGQX	18:09:11 Fri 03-Dec-10	Sample	G0K230520-3
333404	MAGQ0	18:12:36 Fri 03-Dec-10	Sample	G0K230520-4
333404	MAGQ1	18:16:01 Fri 03-Dec-10	Sample	G0K230520-5
333404	MAGQ2	18:19:26 Fri 03-Dec-10	Sample	G0K230520-6
333404	MAGQ3	18:22:52 Fri 03-Dec-10	Sample	G0K230520-7
	CCV 7	18:26:22 Fri 03-Dec-10	Sample	
	CCB 7	18:29:51 Fri 03-Dec-10	Sample	
	CCV 8	18:33:21 Fri 03-Dec-10	Sample	
	CCB 8	18:36:51 Fri 03-Dec-10	Sample	
	ICSA	18:40:20 Fri 03-Dec-10	Sample	
	ICSAB	18:43:46 Fri 03-Dec-10	Sample	

	CCV 9	18:50:54 Frì 03-Dec-10	Sample	
	CCB 9	18:54:24 Fri 03-Dec-10	Sample	
Recal <	CCV 10	18:57:53 Fri 03-Dec-10	Sample	
	CCB 10	19:01:27 Fri 03-Dec-10	Sample	
	CCV 11	19:05:01 Fri 03-Dec-10	Sample	
	CCB 11	19:08:35 Fri 03-Dec-10	Sample	
336282/86	MARDNB	19:12:05 Fri 03-Dec-10	Sample	G0L020000-282 BLK )
336282/86	MARDNC	19:15:36 Fri 03-Dec-10	Sample	GOLO20000-282 LCS ( serum for AS for batch
336286/82	MARD8L	19:19:04 Fri 03-Dec-10	Sample	GOLO20000-282 LCS & serum for AS for batch GOLO20000-286 LCSD 6 33 6286
336282	MAQPV	19:22:32 Fri 03-Dec-10	Sample	G0L020440-1
336282	MAQPVP5	19:25:59 Fri 03-Dec-10	Sample	G0L020440-1 5X
336282	MAQPVX	19:29:26 Fri 03-Dec-10	Sample	G0L020440-1 DU
336282	MAQPVZ	19:32:54 Fri 03-Dec-10	Sample	G0L020440-1 PS
336282	MAQP0	19:36:22 Fri 03-Dec-10	Sample	G0L020440-2
336282	MAQP3	19:39:50 Fri 03-Dec-10	Sample	G0L020440-3
	CCV 12	19:43:23 Fri 03-Dec-10	Sample	
	CCB 12	19:46:56 Fri 03-Dec-10	Sample	
336282	MAQP4	19:50:25 Fri 03-Dec-10	Sample	G0L020440-4
336282	MAQP6	19:53:54 Fri 03-Dec-10	Sample	G0L020440-5
336282	MANX4	19:57:23 Fri 03-Dec-10	Sample	G0L010474-1
336282	MANX9	20:00:52 Fri 03-Dec-10	Sample	G0L010474-2
336282	MANOF	20:04:21 Fri 03-Dec-10	Sample	G0L010474-3
336282	MAN0P	20:07:51 Fri 03-Dec-10	Sample	G0L010474-4
336282	MAN0Q	20:11:21 Fri 03-Dec-10	Sample	G0L010474-5
	CCV 13	20:14:57 Fri 03-Dec-10	Sample	
	CCB 13	20:18:33 Fri 03-Dec-10	Sample	
	CCV 14	20:22:09 Fri 03-Dec-10	Sample	
	CCB 14	20:25:27 Fri 03-Dec-10	Sample	· ·
335253	MAFD3	20:28:39 Fri 03-Dec-10	Sample	G0K220523-1
335253	MAFD3P5	20:31:50 Fri 03-Dec-10	Sample	G0K220523-1 5X
335253	MAFD3Z	20:35:01 Fri 03-Dec-10	Sample	GOK220523-1 PS ( renu As.
335253	MAFD5	20:38:09 Fri 03-Dec-10	Sample	G0K220523-2
335253	MAFD6	20:41:18 Fri 03-Dec-10	Sample	G0K220523-3
335253	MAFD7	20:44:27 Fri 03-Dec-10	Sample	G0K220523-4
335253	MAFD8	20:47:37 Fri 03-Dec-10	Sample	G0K220523-5 ノ
	CCV 15	20:50:53 Fri 03-Dec-10	Sample	
	CCB 15	20:54:10 Fri 03-Dec-10	Sample	
Recol	CCV 16	20:57:27 Fri 03-Dec-10	Sample	
	CCB 16	21:00:05 Fri 03-Dec-10	Sample	·
	CCV 17	21:02:44 Fri 03-Dec-10	Sample	
00000	CCB 17	21:05:23 Fri 03-Dec-10	Sample	00K070407 F
336286	MAK04	21:07:56 Fri 03-Dec-10	Sample	G0K270427-5
336286	MAK04P5	21:10:28 Fri 03-Dec-10	Sample	G0K270427-5 5X
336286	MAK04Z	21:13:00 Fri 03-Dec-10	Sample	G0K270427-5 PS G0K270427-6
336286	MAK07	21:15:32 Fri 03-Dec-10 21:18:05 Fri 03-Dec-10	Sample	G0K270427-0 G0K270427-7
336286	MAK08		Sample	G0K270427-7 G0K270427-8
336286	MAK09 CCV 18	21:20:38 Fri 03-Dec-10 21:23:16 Fri 03-Dec-10	Sample	GUN210421-6
	CCV 18	21:25:55 Fri 03-Dec-10	Sample Sample	
Rical -	CCB 18  ✓ CCV 19	21:28:34 Fri 03-Dec-10	Sample	
<	CCV 19	21:32:19 Fri 03-Dec-10	Sample	
`	CCV 20	21:36:03 Fri 03-Dec-10	Sample	3
	CCV 20 CCB 20	21:39:48 Fri 03-Dec-10	Sample	> Li out.
327486	MAHGVB	21:43:27 Fri 03-Dec-10	Sample 1000m	© G0K230000-486 BLK
327486	MAHGVC	21:47:06 Fri 03-Dec-10	Sample Be	G0K230000-486 LCS
327486	MAHGVL	21:50:43 Fri 03-Dec-10	Sample	GOK230000-486 LCS //2 spite level
UZ1700	CCV 21	21:54:27 Fri 03-Dec-10	Sample	1 401.20000 100 2000 2
	CCV 21 CCB 21	21:58:12 Fri 03-Dec-10	Sample	
327486	L9612	22:01:51 Fri 03-Dec-10	Sample	GOK170514-1 Do not report
327486	L9635	22:05:30 Fri 03-Dec-10	Sample	GOK170514-3 Do not report
UL1700	20000	ZE.00.00 1 11 00 D00-10	Campio	Walling

327486	L9636	22:09:09 Fri 03-Dec-10	Sample	G0K170514-4 )
327486	L9637	22:12:48 Fri 03-Dec-10	Sample	GOK170514-5 Donat report
327486	L9638	22:16:26 Fri 03-Dec-10	Sample	G0K170514-6
327486	L9639	22:20:02 Fri 03-Dec-10	Sample	G0K170514-7
Recol	CCV 22	22:23:44 Fri 03-Dec-10	Sample G	e Int 8td <80% R
. 1200	CCB 22	22:27:29 Fri 03-Dec-10	Sample -	*
	CCV 23	22:31:14 Fri 03-Dec-10	Sample	
	CCB 23	22:34:58 Fri 03-Dec-10	Sample	
327486	L9612	22:38:37 Fri 03-Dec-10	Sample	G0K170514-1
327486	L9635	22:42:16 Fri 03-Dec-10	Sample	G0K170514-3 🛴 🐆
327486	L9636	22:45:55 Fri 03-Dec-10	Sample	GOK170514-3 GOK170514-4 GOK170514-5 SET, revu dilution
· 327486	L9637	22:49:35 Fri 03-Dec-10	Sample	GOK170514-5 Set, seru didin
327486	L9638	22:53:12 Fri 03-Dec-10	Sample	G0K170514-6
327486	L9639	22:56:49 Fri 03-Dec-10	Sample	G0K170514-7 , )
	CCV 24	23:00:31 Frì 03-Dec-10	Sample	•
	CCB 24	23:04:15 Fri 03-Dec-10	Sample	
	CCV 25	23:08:00 Fri 03-Dec-10	Sample	
	CCB 25	23:11:44 Fri 03-Dec-10	Sample	
327486	L9612	23:15:24 Fri 03-Dec-10	Sample	G0K170514-1
327486	L9635	23:19:02 Fri 03-Dec-10	Sample	G0K170514-3
327486	L9636	23:22:41 Fri 03-Dec-10	Sample	GOK170514-3 Donat report
327486	L9637	23:26:21 Fri 03-Dec-10	Sample	G0K170514-5
327486	L9638	23:29:58 Fri 03-Dec-10	Sample	G0K170514-6
327486	L9639	23:33:35 Fri 03-Dec-10	Sample	G0K170514-7
	CCV 26	23:37:17 Fri 03-Dec-10	Sample	
	CCB 26	23:41:01 Fri 03-Dec-10	Sample	
	CCV 27	23:44:46 Fri 03-Dec-10	Sample	
	CCB 27	23:48:30 Fri 03-Dec-10	Sample	
327486	L9634	23:52:09 Fri 03-Dec-10	Sample	G0K170514-2
327486	L9634	23:55:45 Fri 03-Dec-10	Sample	G0K170514-2 5X
327486	L9634	23:59:21 Fri 03-Dec-10	Sample	G0K170514-2 DU
327486	L9634	00:02:57 Sat 04-Dec-10	Sample	G0K170514-2 PS
	CCV 28	00:06:40 Sat 04-Dec-10	Sample	
	CCB 28	00:10:24 Sat 04-Dec-10	Sample	

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 12/07/10 10:11:43

File ID: 101203B2A

Analyst: hargraves

110 11	D. 101203					Alla	iiyst. Halylaves	
#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
1	Blank	1			1.0	12/03/10 15:23		
2	Standard1			1	1.0	12/03/10 15:27		
3	ICV			1 1	1.0	12/03/10 15:31		
4	ICB		7	1-1	1.0	12/03/10 15:36		<u>-</u>
5	LLSTD1			1 1	1.0	12/03/10 15:46		
6	LLSTD2		<del></del>	1	1.0	12/03/10 15:50		
7	ICSA				1.0	12/03/10 15:56		
8	ICSAB				1.0	12/03/10 16:00		
9	Rinse				1.0	12/03/10 16:08		
10	CCV 1				1.0	12/03/10 16:16		
11	CCB 1				1.0	12/03/10 16:20		
14	CCV 2				1.0	12/03/10 16:25		
15	CCB 2				1.0	12/03/10 16:29		
16	MAPE7B	G0L010000	0335253	2A	1.0	12/03/10 16:33		
17	MAPEV8	G0L010000	0335251	2A	1.0	12/03/10 16:38		
18	MAPEVC	G0L010000	0335251	2A	1.0	12/03/10 16:42		
19	MAPE7L	G0L010000	0335253	2A	1.0	12/03/10 16:46		
20	MAA80	G0K190601-3	0335251	2A	1.0	12/03/10 16:50		
21	MAA80P5	G0K190601	0335251		5.0	12/03/10 16:54		
22	MAA80Z	G0K190601-3	0335251		1.0	12/03/10 16:58		
23	MAA81	G0K190601-4	0335251	2A	1.0	12/03/10 17:03		
24	MAKDV	G0K240587-1	0335251	2A	1.0	12/03/10 17:07		
25	MAKD2	G0K240587-2	0335251	2A	1.0	12/03/10 17:11		
26	CCV 3			1 1	1.0	12/03/10 17:15		
27	CCB 3				1.0	12/03/10 17:20		
28	CCV 4				1.0	12/03/10 17:24		
29	CCB 4				1.0	12/03/10 17:27		
30	CCV 5		1		1.0	12/03/10 17:31		
31	CCB 5	<del></del>			1.0	12/03/10 17:34		
32	MAL4HB	G0K290000	0333404	2A	1.0	12/03/10 17:38		<u> </u>
33	MAL4HC	G0K290000	0333404	2A	1.0	12/03/10 17:41		
34	MAPE7L	G0L010000	0335253	2A	1.0	12/03/10 17:45		
35	MAGQR	G0K230520-1	0333404	2A	1.0	12/03/10 17:48		
36	MAGQRP5	G0K230520	0333404		5.0	12/03/10 17:51		
37	MAGQRZ	G0K230520-1	0333404		1.0	12/03/10 17:55		
	MAGQW	G0K230520-2	0333404	2A	1.0	12/03/10 17:58		
39	CCV 6				1.0	12/03/10 18:02		
40	CCB 6				1.0	12/03/10 18:05		
41	MAGQX	G0K230520-3	0333404	2A	1.0	12/03/10 18:09		
42	MAGQ0	G0K230520-4	0333404	2A	1.0	12/03/10 18:12		
43	MAGQ1	G0K230520-5	0333404	2A	1.0	12/03/10 18:16		
	MAGQ2	G0K230520-6	0333404	2A	1.0	12/03/10 18:19		
45	MAGQ3	G0K230520-7	0333404	2A	1.0	12/03/10 18:22		
	CCV 7			1-1	1.0	12/03/10 18:26		
47	CCB 7		+	† †	1.0	12/03/10 18:29		⊣_
	CCV 8		<del></del>	† †	1.0	12/03/10 18:33		
. •		<del></del>					l	

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 12/07/10 10:11:43

File ID:	404202024
FIIE IU:	101203B2A

#### Analyst: hargraves

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
49	CCB 8				1.0	12/03/10 18:36		
50	ICSA			1	1.0	12/03/10 18:40		
51	ICSAB			† †	1.0	12/03/10 18:43		
52	CCV 9				1.0	12/03/10 18:50		
53	CCB 9				1.0	12/03/10 18:54		
54	CCV 10				1.0	12/03/10 18:57		
55	CCB 10				1.0	12/03/10 19:01		
58	CCV 11				1.0	12/03/10 19:05		$\neg$ $\Box$
59	CCB 11				1.0	12/03/10 19:08		
60	MARDNB	G0L020000	0336282	$\top$	1.0	12/03/10 19:12		
61	MARDNC	G0L020000	0336282		1.0	12/03/10 19:15		
62	MARD8L	G0L020000	0336286	2A	1.0	12/03/10 19:19		
63	MAQPV	G0L020440-1	0336282	2A	· 1.0	12/03/10 19:22		
64	MAQPVP5	G0L020440	0336282		5.0	12/03/10 19:25		
65	MAQPVX	G0L020440-1	0336282	2A	1.0	12/03/10 19:29		
66	MAQPVZ	G0L020440-1	0336282		1.0	12/03/10 19:32		
67	MAQP0	G0L020440-2	0336282	2A	1.0	12/03/10 19:36		
68	MAQP3	G0L020440-3	0336282	2A	1.0	12/03/10 19:39		
69	CCV 12				1.0	12/03/10 19:43		$\neg \Box$
70	CCB 12				1.0	12/03/10 19:46		
71	MAQP4	G0L020440-4	0336282	2A	1.0	12/03/10 19:50		
72	MAQP6	G0L020440-5	0336282	2A	1.0	12/03/10 19:53		
73	MANX4	G0L010474-1	0336282		1.0	12/03/10 19:57		
74	MANX9	G0L010474-2	0336282		1.0	12/03/10 20:00		
75	MAN0F	G0L010474-3	0336282		1.0	12/03/10 20:04		
76	MANOP	G0L010474-4	0336282		1.0	12/03/10 20:07		
77	MANOQ	G0L010474-5	0336282		1.0	12/03/10 20:11		
78	CCV 13				1.0	12/03/10 20:14		
79	CCB 13				1.0	12/03/10 20:18		
80	CCV 14				1.0	12/03/10 20:22		
81	CCB 14				1.0	12/03/10 20:25		$\neg \neg$
82	MAFD3	G0K220523-1	0335253	2A	1.0	12/03/10 20:28		
83	MAFD3P5	G0K220523	0335253		5.0	12/03/10 20:31		
84	MAFD3Z	G0K220523-1	0335253		1.0	12/03/10 20:35		
85	MAFD5	G0K220523-2	0335253	2A	1.0	12/03/10 20:38		
86	MAFD6	G0K220523-3	0335253	2A	1.0	12/03/10 20:41		
87	MAFD7	G0K220523-4	0335253	2A	1.0	12/03/10 20:44		
88	MAFD8	G0K220523-5	0335253	2A	1.0	12/03/10 20:47		
89	CCV 15				1.0	12/03/10 20:50		
90	CCB 15				1.0	12/03/10 20:54		
91	CCV 16			$\uparrow \neg \uparrow$	1.0	12/03/10 20:57		
92	CCB 16				1.0	12/03/10 21:00		
95	CCV 17			T	1.0	12/03/10 21:02		$\neg \Box$
96	CCB 17				1.0	12/03/10 21:05		$\neg  _{\Box}$
97	MAK04	G0K270427-5	0336286	2A	1.0	12/03/10 21:07		
98	MAK04P5	G0K270427	0336286	<del>                                     </del>	5.0	12/03/10 21:10		
		1		4				

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 12/07/10 10:11:43

File I	File ID: 101203B2A				Analyst: hargraves			
#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	<u>Q</u>
99	MAK04Z	G0K270427-5	0336286		1.0	12/03/10 21:13		
100	MAK07	G0K270427-6	0336286	2A	1.0	12/03/10 21:15		
101	MAK08	G0K270427-7	0336286	2A	1.0	12/03/10 21:18		
102	MAK09	G0K270427-8	0336286	2A	1.0	12/03/10 21:20		
103	CCV 18				1.0	12/03/10 21:23		
104	CCB 18				1.0	12/03/10 21:25		
105	CCV 19				1.0	12/03/10 21:28		
106	CCB 19				1.0	12/03/10 21:32	739777	
109	CCV 20				1.0	12/03/10 21:36		
110	CCB 20				1.0	12/03/10 21:39		
111	MAHGVB	G0K230000	0327486	EC	1.0	12/03/10 21:43		
112	MAHGVC	G0K230000	0327486	EC	1.0	12/03/10 21:47		
113	MAHGVL	G0K230000	0327486	EC	1.0	12/03/10 21:50		
114	CCV 21				1.0	12/03/10 21:54		
115	CCB 21				1.0	12/03/10 21:58		
116	L9612	G0K170514-1	0327486	EC	1.D	12/03/10 22:01		
117	L9635	G0K170514-3	0327486	EC	1.0	12/03/10 22:05		
118	L9636	G0K170514-4	0327486	EC	1.0	12/03/10 22:09		
119	L9537	G0K170514-5	0327486	EC	1.0	12/03/10 22:12		
120	L9638	G0K170514-6	0327486	EC	1.0	12/03/10 22:16		
121	L9639	G0K170514-7	0327486	EC	1.0	12/03/10 22:20		
122	CCV 22				1.0	12/03/10 22:23		
123	CCB 22				1.0	12/03/10 22:27		
126	CCV 23				1.0	12/03/10 22:31		
127	CCB 23				1.0	12/03/10 22:34		
128	L9612	G0K170514-1	0327486	EC	1.0	12/03/10 22:38		
129	L9635	G0K170514-3	0327486	EC	1.0	12/03/10 22:42		
130	L9636	G0K170514-4	0327486	EC	1.0	12/03/10 22:45		
131	L9637	G0K170514-5	0327486	EC	1.0	12/03/10 22:49		
132	L9638	G0K170514-6	0327486	EC	1.0	12/03/10 22:53		
133	L9639	G0K170514-7	0327486	EC	1.0	12/03/10 22:56		
134	CCV 24				1.0	12/03/10 23:00		
135	CCB 24				1.0	12/03/10 23:04		
136	CCV 25				1.0	12/03/10 23:08		
137	CCB 25				1.0	12/03/10 23:11		
138	L9612	G0K170514-1	0327486	EC	1.0	12/03/10 23:15		
139	L9635	G0K170514-3	0327486	EC	1.0	12/03/10 23:19		
140	L9636	G0K170514-4	0327486	EC	1.0	12/03/10 23:22		
141	L9637	G0K170514-5	0327486	EC	1.0	12/03/10 23:26		□
142	L9638	G0K170514-6	0327486	EC	1.0	12/03/10 23:29		
143	L9639	G0K170514-7	0327486	EC	1.0	12/03/10 23:33		
144	CCV 26				1.0	12/03/10 23:37		
145	CCB 26					12/03/10 23:41		□
146	CCV 27				1.0	12/03/10 23:44		
147	CCB 27				1.0	12/03/10 23:48		
148	L9634	G0K170514-2	0327486	EC	1.0	12/03/10 23:52		

TAL West Sac

**RUN SUMMARY** 

Method: 6020 (SOP: SAC-MT-001)	Instrument: M02	Reported: 12/07/10 10:11:43

File ID: 101203B2A

Analyst: hargraves

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
149	L9634P5	G0K170514	0327486		5.0	12/03/10 23:55		
150	L9634X	G0K170514-2	0327486	EC	1.0	12/03/10 23:59		
151	L9634Z	G0K170514-2	0327486		1.0	12/04/10 00:02		
152	CCV 28				1.0	12/04/10 00:06		
153	CCB 28				1.0	12/04/10 00:10		

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 12/07/10 10:11:43

File ID: 101203B2A				Analyst: hargraves				
			Germanium	Indium	Lithium-6	Thulium		
#	Sample ID	Analyzed Date						
1	Blank	12/03/10 15:23	100.0	100.0	100.0	100.0		
2	Standard1	12/03/10 15:27	99.4	97.7	111.5	97.6		
3	ICV	12/03/10 15:31	96.6	96.4	100.3	95.6		
4	ICB	12/03/10 15:36	95.1	96.4	98.5	95.0		
5	LLSTD1	12/03/10 15:46	95.3	96.2	101.0	94.8		
6	LLSTD2	12/03/10 15:50	95.2	95.7	102.6	94.8		
7	ICSA	12/03/10 15:56	73.8	71.6	84.1	71.7		
8	ICSAB	12/03/10 16:00	71.3	69.3	84.4	69.0		
9	Rinse	12/03/10 16:08	89.1	88.8	114.8	86.0		
10	CCV 1	12/03/10 16:16	87.3	86.5	108.0	85.9		
11	CCB 1	12/03/10 16:20	88.3	88.5	110.7	87.2		
14	CCV 2	12/03/10 16:25	98.4	97.2	98.1	98.4		
15	CCB 2	12/03/10 16:29	99.7	100.0	101.9	100.9		
16	MAPE7B	12/03/10 16:33	97.6	100.4	79.0	102.6		
17	MAPEVB	12/03/10 16:38	97.4	99.8	80.0	101,7		
18	MAPEVC	12/03/10 16:42	93.0	97.8	77.0	98.8		
19	MAPE7L	12/03/10 16:46	90.1	96.6	76.5	97.3		
20	MAA80	12/03/10 16:50	92.2	97.6	76.4	98.6		
21	MAA80P5	12/03/10 16:54	98.6	101.3	104.6	100.8		
22	MAA80Z	12/03/10 16:58	89.0	94.1	76.5	95.3		
23	MAA81	12/03/10 17:03	90.5	96.8	76.7	97.8		
24	MAKDV	12/03/10 17:07	93.3	98.6	81.5	99.6		
25	MAKD2	12/03/10 17:11	94.3	99.2	83.5	100.9		
26	CCV 3	12/03/10 17:15	96.3	97.6	105.0	99.3		
27	CCB 3	12/03/10 17:20	98.8	100.5	104.0	102.2		
28	CCV 4	12/03/10 17:24	96.1	97.6	0.0	100.1		
29	CCB 4	12/03/10 17:27	98.5	101.5	0.0	104.4		
30	CCV 5	12/03/10 17:31	97.0	98.4	0.0	101.4		
31	CCB 5	12/03/10 17:34	98.2	101.0	0.0	102.9		
32	MAL4HB	12/03/10 17:34	97.0	102.5	0.0	106.0		
33	MAL4HC	12/03/10 17:41	91.5	98.3	0.0	100.3		
34	MAPE7L	12/03/10 17:45	90.1	98.2	0.0	100.0		
35	MAGQR	12/03/10 17:48	92.7	98.5	0.0	101.1		
36	MAGQRP5	12/03/10 17:51	96.0	101.2	0.0	101.7		
37	MAGQRZ	12/03/10 17:55	90.5	96.9	0.0	98.8		
38	MAGQW	12/03/10 17:58	91.8	98.0	0.0	99.9		
39	CCV 6	12/03/10 18:02	97.1	99.1	0.0	100.5		
40	CCB 6	12/03/10 18:05	97.9	100.4	0.0	102.2		
41	MAGQX	12/03/10 18:09	95.7	101.1	0.0	103.8		
	MAGQ0		96.4	101.0	0.0	103.3		
42		12/03/10 18:12	98.0	102.2	0.0	104.8		
43	MAGQ1	12/03/10 18:16	99.3	103.0	0.0			
44	MAGQ2	12/03/10 18:19	· · · · · · · · · · · · · · · · · · ·			105.5		
45	MAGQ3	12/03/10 18:22	100.9	104.5	0.0	108.3		
46	CCV 7	12/03/10 18:26	100.4	99.8	0.0	102.6		
47	CCB 7	12/03/10 18:29	101.6	103.1	0.0	105.5		
48	CCV 8	12/03/10 18:33	100.4	100.6	0.0	103.2		

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 12/07/10 10:11:43

# Sample ID Analyzed Date  Germanium Indium Lithium-6 Thullium  Q  CCB 8 12/03/10 18:38 101.4 103.0 0.0 105.7 Ø  CGSA 12/03/10 18:40 79.7 78.6 0.0 83.4 Ø  51 ICSAB 12/03/10 18:43 78.4 77.6 0.0 91.7 Ø  52 CCV 9 12/03/10 18:59 96.7 97.3 0.0 97.8 Ø  53 CCB 9 12/03/10 18:54 98.5 99.5 0.0 101.0 Ø  54 CCV 10 12/03/10 18:57 97.1 97.8 103.8 103.8 Ø  55 CCB 10 12/03/10 18:57 97.1 97.8 103.8 103.8 Ø  56 CCB 10 12/03/10 19:01 99.6 6 100.8 106.3 103.8 Ø  58 CCV 11 12/03/10 19:01 99.6 6 100.8 106.3 103.8 Ø  58 CCV 11 12/03/10 19:05 97.1 98.4 98.1 99.1 97.9 Ø  60 MARDNB 12/03/10 19:12 99.0 101.5 82.6 102.8 Ø  61 MARDNC 12/03/10 19:12 99.0 101.5 82.6 102.8 Ø  62 MARDNE 12/03/10 19:12 99.0 101.5 82.6 102.8 Ø  63 MAQPV 12/03/10 19:12 99.0 101.5 82.6 102.8 Ø  64 MAQPVS 12/03/10 19:2 93.3 97.5 81.2 97.0 Ø  65 MAQPVV 12/03/10 19:25 97.4 98.3 81.6 98.5 Ø  66 MAQPVZ 12/03/10 19:25 97.4 98.3 81.6 98.5 Ø  67 MAQPV 12/03/10 19:25 97.4 98.3 81.6 98.5 Ø  68 MAQPVZ 12/03/10 19:25 93.0 96.2 81.0 96.7 Ø  69 CCV 12 12/03/10 19:39 93.4 96.2 80.7 96.7 Ø  69 MAQPV 12/03/10 19:39 93.4 96.2 80.7 96.7 Ø  60 MAQPV 12/03/10 19:39 93.4 96.2 80.7 96.7 Ø  60 MAQPV 12/03/10 19:39 93.4 96.2 80.7 96.7 Ø  60 MAQPV 12/03/10 19:39 93.4 96.2 80.7 96.7 Ø  60 MAQPV 12/03/10 19:39 93.4 96.2 80.7 96.7 Ø  60 MAQPV 12/03/10 19:39 93.4 96.2 80.7 96.7 Ø  60 MAQPV 12/03/10 19:39 93.4 96.2 80.7 96.7 Ø  60 MAQPV 12/03/10 19:39 93.4 96.5 97.4 100.5 97.2 Ø  61 MAQP 12/03/10 19:49 98.5 101.0 103.2 100.3 Ø  62 MAQP 12/03/10 19:49 98.5 101.0 103.2 100.3 Ø  63 MAQP 12/03/10 19:49 98.5 101.0 103.2 100.3 Ø  64 MAQP 12/03/10 19:49 98.5 101.0 103.2 100.3 Ø  65 MAQP 12/03/10 19:49 98.5 101.0 103.0 86.2 80.7 96.7 Ø  66 MAQP 12/03/10 19:57 96.8 99.5 101.0 103.2 100.3 Ø  67 MAQP 12/03/10 19:49 98.9 98.1 101.0 103.2 100.3 Ø  68 MAQP 12/03/10 19:49 98.9 98.1 101.0 103.2 100.3 Ø  68 MAQP 12/03/10 20.0 99.7 99.9 99.9 99.9 99.9 99.9 99.9 9	File II	D: 101203	B2A	Analyst: hargraves					
# Sample ID Analyzed Date  CCB 8 12/03/10 18:38 101.4 103.0 0.0 105.7    CCB 8 12/03/10 18:40 79.7 76.6 0.0 83.4    51 ICSAB 12/03/10 18:40 79.7 76.6 0.0 83.4    52 CCV 9 12/03/10 18:50 96.7 97.3 0.0 97.8    53 CCB 9 12/03/10 18:50 96.7 97.3 0.0 97.8    54 CCV 10 12/03/10 18:51 98.6 98.6 0.0 101.0    55 CCB 9 12/03/10 18:57 97.1 97.8 103.9 101.1    56 CCB 10 12/03/10 18:57 97.1 97.8 103.9 101.1    57 CCB 10 12/03/10 19:01 99.8 100.1 100.8 106.3 103.3 103.8    58 CCV 11 12/03/10 19:05 97.1 96.4 98.1 97.9    59 CCB 11 12/03/10 19:05 97.1 96.4 98.1 97.9    50 MROND 12/03/10 19:12 99.0 101.5 82.6 100.8 100.4 100.4    61 MARDNC 12/03/10 19:15 94.6 99.0 81.9 99.4    62 MARDN 12/03/10 19:12 99.0 101.5 82.6 102.6    63 MAQPV 12/03/10 19:22 99.3 97.4 99.2 102.6 98.2    64 MAQPVP 12/03/10 19:25 97.4 99.2 102.6 98.2    65 MAQPV 12/03/10 19:29 96.1 98.3 81.6 98.5    66 MAQPVX 12/03/10 19:29 96.1 98.3 81.6 98.5    67 MAQPV 12/03/10 19:29 96.1 98.3 81.6 98.5    68 MAQPVX 12/03/10 19:29 96.1 98.3 81.6 98.5    69 CCV 12 12/03/10 19:32 93.3 97.5 81.2 99.0    69 CCV 12 12/03/10 19:32 93.4 96.2 80.7 96.7    69 MAQPV 12/03/10 19:32 93.3 96.5 81.0 96.7 96.7    60 MAQPV 12/03/10 19:32 93.0 66.2 80.7 96.7    60 MAQPV 12/03/10 19:32 93.0 96.1 98.8 80.6 98.6    60 MAQPV 12/03/10 19:32 93.0 96.5 97.4 100.5 96.7    60 MAQPV 12/03/10 19:32 93.0 96.5 97.4 100.5 96.7    60 MAQPV 12/03/10 19:32 93.0 96.5 97.4 100.5 96.7    60 MAQPV 12/03/10 19:32 93.0 96.5 97.4 100.5 96.7    61 MAQPV 12/03/10 19:32 93.0 96.5 97.4 100.5 96.7    62 MAQPS 12/03/10 19:33 99.6 100.0 100.0 100.0 100.0    62 MAQPS 12/03/10 19:33 99.5 96.7 82.2    63 MAQPS 12/03/10 19:35 99.4    64 MAQPV 12/03/10 19:35 99.4    65 MAQPS 12/03/10 19:30 99.4    66 MAQPV 12/03/10 19:30 99.4    67 MAQPS 12/03/10 19:30 99.5    68 MAQPV 12/03/10 19:30 99.5    69 CCV 12 12/03/10 19:30 99.5    60 CCB 12 12/03/10 19:30 99.5    60 CCB 13 12/03/10 19:30 99.5    60 OC OC B 12 12/03/10 19:57 96.8 99.5    60 OC OC B 13 12/03/10 20:04 99.5    60 OC OC B 13 12/03/10 20:04 99.5    60 CCB 13 12/03/10				Germanium	Indium	Lithium-6	Thulium		
SO   ICSA   12/03/10   1840   79.7   78.6   0.0   83.4   51   ICSAB   12/03/10   1843   78.4   77.6   0.0   81.7   52   CCV 9   12/03/10   1843   78.4   77.6   0.0   81.7   52   CCV 9   12/03/10   1850   98.7   97.3   0.0   97.8   53   CCB 9   12/03/10   1857   98.5   98.6   0.0   101.0   54   75   75   75   77.1   97.8   103.9   101.1   54   75   75   77.1   97.8   103.9   101.1   55   CCB 10   12/03/10   1857   97.1   98.6   100.8   106.3   106.3   103.8   55   CCV 11   12/03/10   19.05   97.1   98.4   98.1   97.9   55   CCV 11   12/03/10   19.05   97.1   98.4   98.1   97.9   56   56   CCV 11   12/03/10   19.08   100.1   100.6   100.4   100.4   57   57   57   57   57   57   57   5	#	Sample ID	Analyzed Date					Q	
SO   ICSA   12/03/10   1840   79.7   78.6   0.0   83.4   51   ICSAB   12/03/10   1843   78.4   77.6   0.0   81.7   52   CCV 9   12/03/10   1843   78.4   77.6   0.0   81.7   52   CCV 9   12/03/10   1850   98.7   97.3   0.0   97.8   53   CCB 9   12/03/10   1857   98.5   98.6   0.0   101.0   54   75   75   75   77.1   97.8   103.9   101.1   54   75   75   77.1   97.8   103.9   101.1   55   CCB 10   12/03/10   1857   97.1   98.6   100.8   106.3   106.3   103.8   55   CCV 11   12/03/10   19.05   97.1   98.4   98.1   97.9   55   CCV 11   12/03/10   19.05   97.1   98.4   98.1   97.9   56   56   CCV 11   12/03/10   19.08   100.1   100.6   100.4   100.4   57   57   57   57   57   57   57   5	49	CCB 8	12/03/10 18:36	101.4	103.0	0.0	105.7	াব	
STATE   CICAB   12/03/10 18:43   78.4   77.6   0.0   81.7								1 .	
SCCV 9		<del></del>	12/03/10 18:43	78.4		0.0		4	
53 CCB 9 12/03/10 18:54 98.5 99.6 0.0 101.0 \( \top \) 54 CCV 10 12/03/10 18:57 97.1 97.8 103.9 101.1 \( \top \) 55 CCB 10 12/03/10 18:01 98.6 100.8 106.3 108.8 \( \top \) 56 CCB 11 12/03/10 19:05 97.1 98.4 98.1 97.9 \( \top \) 58 CCB 11 12/03/10 19:08 100.1 100.6 100.4 100.4 \( \top \) 59 CCB 11 12/03/10 19:08 100.1 100.6 100.4 100.4 \( \top \) 60 MARDNB 12/03/10 19:15 99.0 101.5 82.6 102.8 \( \top \) 61 MARDNC 12/03/10 19:15 94.6 99.0 81.9 99.4 \( \top \) 62 MARDSL 12/03/10 19:19 92.4 97.2 81.8 97.5 \( \top \) 63 MAQPV 12/03/10 19:19 92.4 97.2 81.8 97.5 \( \top \) 64 MAQPV5 12/03/10 19:25 97.4 99.2 102.6 98.2 \( \top \) 65 MAQPV 12/03/10 19:25 97.4 99.2 102.6 98.2 \( \top \) 66 MAQPVZ 12/03/10 19:29 96.1 98.3 81.6 98.5 \( \top \) 67 MAQPV 12/03/10 19:32 93.0 96.2 81.0 98.7 \( \top \) 68 MAQPV 12/03/10 19:39 94.2 96.1 98.3 81.6 98.5 \( \top \) 68 MAQPV 12/03/10 19:39 94.2 96.7 82.2 80.7 96.7 \( \top \) 69 CCV 12 12/03/10 19:39 94.2 96.7 82.2 96.9 \( \top \) 69 CCV 12 12/03/10 19:49 99.3 101.0 103.2 100.3 \( \top \) 69 CCV 12 12/03/10 19:49 99.3 101.0 103.2 100.3 \( \top \) 70 CCB 12 12/03/10 19:49 99.3 101.0 103.2 100.3 \( \top \) 71 MAQPA 12/03/10 19:50 96.0 98.8 80.6 99.5 \( \top \) 72 MAQPA 12/03/10 19:57 98.8 99.5 81.9 99.4 \( \top \) 73 MANXA 12/03/10 19:57 98.8 99.5 81.9 99.4 \( \top \) 74 MAQPA 12/03/10 19:57 98.8 99.5 81.9 99.4 \( \top \) 75 MANDF 12/03/10 20:04 93.8 97.4 76.1 98.6 \( \top \) 76 CCB 12 12/03/10 20:04 93.8 97.4 76.1 98.6 \( \top \) 77 MANDF 12/03/10 20:04 93.8 97.4 76.1 98.6 \( \top \) 78 CCV 13 12/03/10 20:04 93.8 97.5 97.5 95.9 99.9 \( \top \) 79 CCB 14 12/03/10 20:04 93.8 97.4 76.1 98.6 \( \top \) 70 CCB 15 12/03/10 20:04 93.8 97.4 76.1 98.6 \( \top \) 71 MANDR 12/03/10 20:04 93.8 97.4 76.1 98.6 \( \top \) 72 MANDR 12/03/10 20:04 93.8 97.4 76.1 98.6 \( \top \) 73 MANXA 12/03/10 20:04 93.8 97.7 99.9 75.9 95.9 99.9 \( \top \) 74 MANDR 12/03/10 20:04 93.8 97.7 99.9 97.5 95.8 99.9 \( \top \) 75 MAPPD 12/03/10 20:04 93.8 97.7 90.0 0.0 101.7 \( \top \) 76 CCB 13 12/03/10 20:04 99.9 99.1 10				96.7	97.3		97.8	4	
CCV 10						0.0		1	
Second   12/03/10 19:01   99.8   100.8   106.3   103.8				97.1		103.9		-	
Second		<del></del>						1	
CCB 11	58	CCV 11	12/03/10 19:05	97.1		98.1		4	
60 MARDNB 12/03/10 19:12 99.0 101.5 82.6 102.8 ☑ MARDNC 12/03/10 19:15 94.6 99.0 81.9 99.4 ☑ 81.9 99.4 ☑ 81.8 97.5 ☑ 81.2 97.0 ☑ 81.8 97.5 ☑ 81.2 97.0 ☑ 81.8 97.5 ☑ 81.2 97.0 ☑ 81.8 97.5 ☑ 81.2 97.0 ☑ 81.2 97.0 ☑ 81.2 97.0 ☑ 81.2 97.0 ☑ 81.2 97.0 ☑ 81.2 97.0 ☑ 81.2 97.0 ☑ 81.2 97.0 ☑ 81.2 97.0 ☑ 81.2 97.0 ☑ 81.2 97.0 ☑ 81.2 97.2 ☑ 81.0 96.7 ☑ 81.0 96.7 ☑ 81.0 96.7 ☑ 81.0 96.7 ☑ 81.0 96.7 ☑ 81.0 96.7 ☑ 81.0 96.7 ☑ 81.0 96.7 ☑ 81.0 96.7 ☑ 81.0 96.7 ☑ 81.0 96.7 ☑ 91.0 ☑ 9	59		12/03/10 19:08	100.1	100.6	100.4		-	
61 MARDNC 12/03/10 19:15 94.6 99.0 81.9 99.4 ☑ MARDBL 12/03/10 19:19 92.4 97.2 81.8 97.5 ☑ MARDBL 12/03/10 19:22 93.3 97.5 81.2 97.0 ☑ MARDPV 12/03/10 19:25 97.4 99.2 102.6 98.2 ☑ MARDPV 12/03/10 19:29 96.1 98.3 81.6 99.5 ☑ MARDPV 12/03/10 19:32 93.0 96.2 81.0 96.7 ☑ MARDPV 12/03/10 19:35 93.0 96.2 81.0 96.7 ☑ MARDPV 12/03/10 19:36 93.4 96.2 80.7 96.7 ☑ MARDP 12/03/10 19:39 94.2 96.7 82.2 96.9 ☑ MARDP 12/03/10 19:39 94.2 96.7 82.2 96.9 ☑ MARDP 12/03/10 19:39 94.2 96.7 82.2 96.9 ☑ MARDP 12/03/10 19:50 96.0 98.8 80.6 99.5 ☑ MARDP 12/03/10 19:53 99.6 103.0 86.2 103.2 ☑ MARDP 12/03/10 19:53 99.6 103.0 86.2 103.2 ☑ MARDP 12/03/10 19:53 99.6 103.0 86.2 103.2 ☑ MARDP 12/03/10 19:57 96.8 99.5 81.9 99.4 ☑ MARDP 12/03/10 20:00 93.7 95.9 77.5 96.7 ☑ MARDP 12/03/10 20:00 93.7 95.9 77.5 96.7 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:04 93.6 97.4 76.1 96.6 ☑ MARDP 12/03/10 20:05 99.1 101.6 0.0 101.6 ☑ MARDP 12/03/10 20:05 99.1 101.6 0.0 101.6 ☑ MARDP 12/03/10 20:05 99.1 101.6 0.0 101.9 ☑ MARDP 12/03/10 20:05 99.1 101.6 0.0 101.9 ☑ MARDP 12/03/10 20:05 99.1 101.6 0.0 101.7 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑ MARDP 12/03/10 20:05 99.9 ☑	60			99.0	101.5	82.6	102.8	Ø	
62         MARDBL         12/03/10 19:19         92.4         97.2         81.8         97.5         Z           63         MAQPV         12/03/10 19:22         93.3         97.5         81.2         97.0         Z           64         MAQPVV         12/03/10 19:25         97.4         99.2         102.6         98.2         I           65         MAQPVX         12/03/10 19:35         95.1         98.3         81.6         98.5         Z           66         MAQPVZ         12/03/10 19:32         93.0         96.2         81.0         96.7         Z           67         MAQPO         12/03/10 19:38         93.4         95.2         80.7         96.7         Z           68         MAQP3         12/03/10 19:39         94.2         96.7         82.2         96.9         Z           70         CCB 12         12/03/10 19:48         99.3         101.0         103.2         100.3         Z           71         MAQP6         12/03/10 19:50         96.0         98.8         80.6         99.5         Z           72         MANCP         12/03/10 19:57         96.8         99.5         81.9         99.4         Z           73 </td <td>61</td> <td>MARDNC</td> <td>12/03/10 19:15</td> <td>94.6</td> <td>99.0</td> <td>81.9</td> <td>99.4</td> <td>Ø</td>	61	MARDNC	12/03/10 19:15	94.6	99.0	81.9	99.4	Ø	
64         MAQPVP5         12/03/10 19:25         97.4         99.2         102.6         98.2         I           65         MAQPVX         12/03/10 19:29         96.1         98.3         81.6         98.5         I           66         MAQPVZ         12/03/10 19:32         93.0         96.2         81.0         96.7         I           67         MAQPO         12/03/10 19:36         93.4         96.2         80.7         96.7         I           68         MAQP3         12/03/10 19:39         94.2         96.7         82.2         96.9         I           69         CCV 12         12/03/10 19:46         99.3         101.0         103.2         100.3         I           70         CCB 12         12/03/10 19:50         96.0         98.8         80.6         99.5         I           71         MAQP4         12/03/10 19:53         99.6         103.0         86.2         103.2         I           72         MAQP6         12/03/10 20:00         93.7         95.9         77.5         96.7         I           74         MANYA         12/03/10 20:00         93.7         95.9         77.5         96.7           75	62	<del></del>		92.4	97.2	81.8	97.5	$\square$	
65 MAQPVX 12/03/10 19:29 96.1 98.3 61.6 98.5 \\ 66 MAQPVZ 12/03/10 19:32 93.0 96.2 81.0 96.7 \\ 67 MAQPO 12/03/10 19:32 93.0 96.2 80.7 96.7 \\ 68 MAQP3 12/03/10 19:39 93.4 96.2 80.7 96.7 \\ 68 MAQP3 12/03/10 19:39 94.2 96.7 82.2 96.9 \\ 69 CCV 12 12/03/10 19:43 96.5 97.4 100.5 97.2 \\ 70 CCB 12 12/03/10 19:50 96.0 98.8 80.6 99.5 \\ 71 MAQP4 12/03/10 19:50 96.0 98.8 80.6 99.5 \\ 72 MAQP6 12/03/10 19:57 96.8 99.5 81.9 99.4 \\ 74 MANXA 12/03/10 19:57 96.8 99.5 81.9 99.4 \\ 75 MANOF 12/03/10 20:00 93.7 95.9 77.5 96.7 \\ 76 MANOP 12/03/10 20:04 93.6 97.4 76.1 96.6 \\ 77 MANOQ 12/03/10 20:01 93.6 97.4 76.1 96.6 \\ 78 CCV 13 12/03/10 20:11 98.2 101.7 80.9 101.5 \\ 79 CCB 13 12/03/10 20:14 97.5 97.5 95.6 98.2 \\ 79 CCB 13 12/03/10 20:14 97.5 97.5 95.6 98.2 \\ 79 CCB 13 12/03/10 20:14 97.5 97.5 95.6 98.2 \\ 79 CCB 13 12/03/10 20:25 99.1 101.7 80.9 101.5 \\ 70 CCB 14 12/03/10 20:25 99.1 101.6 0.0 101.7 \\ 70 MAPD3 12/03/10 20:25 99.1 101.6 0.0 101.7 \\ 70 MAPD3 12/03/10 20:25 99.1 101.6 0.0 101.7 \\ 70 MAPD3 12/03/10 20:25 99.1 101.6 0.0 101.7 \\ 70 MAPD3 12/03/10 20:31 100.7 103.9 0.0 104.0 \\ 70 CCB 14 12/03/10 20:35 93.9 99.7 0.0 99.9 \\ 71 MAPD3 12/03/10 20:38 95.7 100.9 0.0 102.8 \\ 71 MAPD3 12/03/10 20:38 95.7 100.9 0.0 102.8 \\ 72 MAPD3 12/03/10 20:38 95.7 100.9 0.0 102.3 \\ 73 MAPD3 12/03/10 20:34 97.5 102.5 0.0 102.8 \\ 74 MAPD3 12/03/10 20:35 93.9 99.7 0.0 99.9 \\ 75 MAPD6 12/03/10 20:36 95.7 100.9 0.0 102.3 \\ 76 MAPD6 12/03/10 20:35 93.9 99.7 0.0 102.6 \\ 77 MAPD6 12/03/10 20:44 98.5 102.1 0.0 0.0 102.6 \\ 78 MAPD8 12/03/10 20:44 98.5 102.1 0.0 0.0 102.6 \\ 79 CCB 16 12/03/10 20:54 100.5 103.7 0.0 0.0 0.0 102.6 \\ 70 CCB 16 12/03/10 20:57 103.7 0.0 0.0 0.0 0.0 \\ 70 CCB 17 12/03/10 20:57 103.7 0.0 0.0 0.0 0.0 \\ 70 CCB 17 12/03/10 21:00 104.0 0.0 0.0 0.0 0.0 \\ 70 CCB 17 12/03/10 21:00 104.0 0.0 0.0 0.0 0.0 \\ 70 CCB 18 12/03/10 21:00 104.0 0.0 0.0 0.0 0.0 \\ 70 CCB 16 12/03/10 21:00 104.0 0.0 0.0 0.0 0.0 \\ 70 MAKO4 12/03/10 21:00 104.0 0.0 0.0 0.0 0.0 \\ 70 MAKO4 12/03/10 12:00 100.0 0.0 0.0 0.0 0.0 \\ 70 M	63	MAQPV	12/03/10 19:22	93.3	97.5	81.2	97.0	Ø	
66         MAQPVZ         12/03/10         19:32         93.0         96.2         81.0         96.7         Ø           67         MAQPO         12/03/10         19:36         93.4         96.2         80.7         96.7         Ø           68         MAQP3         12/03/10         19:39         94.2         96.7         82.2         96.9         Ø           69         CCV 12         12/03/10         19:43         96.5         97.4         100.5         97.2           70         CCB 12         12/03/10         19:46         99.3         101.0         103.2         100.3         Ø           71         MAQP4         12/03/10         19:50         96.0         98.8         80.6         99.5         Ø           72         MAQP6         12/03/10         19:53         99.6         103.0         86.2         103.2         Ø           74         MANDP         12/03/10         20:00         93.7         95.9         77.5         96.7           75         MANDP         12/03/10         20:04         93.6         97.4         76.1         96.6         Ø           76         MANDP         12/03/10         20:07 <t< td=""><td>64</td><td>MAQPVP5</td><td>12/03/10 19:25</td><td>97.4</td><td>99.2</td><td>102.6</td><td>98.2</td><td></td></t<>	64	MAQPVP5	12/03/10 19:25	97.4	99.2	102.6	98.2		
67         MAQPO         12/03/10 19:36         93.4         96.2         80.7         96.7         Ø           68         MAQP3         12/03/10 19:39         94.2         96.7         82.2         96.9         Ø           69         CCV 12         12/03/10 19:43         96.5         97.4         100.5         97.2           70         CCB 12         12/03/10 19:50         96.0         98.8         80.6         99.5         Ø           71         MAQP4         12/03/10 19:53         99.6         103.0         86.2         103.2         Ø           72         MAQP6         12/03/10 19:53         99.6         103.0         86.2         103.2         Ø           73         MANX4         12/03/10 19:57         96.8         99.5         81.9         99.4         Ø           74         MANX9         12/03/10 20:04         93.6         97.4         76.1         96.6         Ø           75         MANDF         12/03/10 20:07         92.7         95.9         77.5         96.9         Ø           76         MANDP         12/03/10 20:07         92.7         95.9         75.9         95.9         Ø           77         MAND<	65	MAQPVX	12/03/10 19:29	96.1	98.3	81.6	98.5	Ø	
68         MAQP3         12/03/10 19:39         94.2         96.7         82.2         96.9         ☑           69         CCV 12         12/03/10 19:43         96.5         97.4         100.5         97.2         ☑           70         CCB 12         12/03/10 19:46         99.3         101.0         103.2         100.3         ☑           71         MAQP4         12/03/10 19:50         96.0         98.8         80.6         99.5           72         MAQP6         12/03/10 19:57         96.8         99.5         81.9         99.4         ☑           73         MANX4         12/03/10 20:00         93.7         95.9         77.5         96.7         ☑           75         MANOF         12/03/10 20:04         93.6         97.4         76.1         96.6         ☑           76         MANOP         12/03/10 20:07         92.7         95.9         75.9         95.9           77         MANOQ         12/03/10 20:01         93.6         97.4         76.1         96.6         ☑           78         CCV 13         12/03/10 20:01         97.5         95.9         75.9         95.9            79         CCB 13         1	66	MAQPVZ	12/03/10 19:32	93.0	96.2	81.0	96.7	Ø	
68         MAQP3         12/03/10 19:39         94.2         96.7         82.2         96.9         ☑           69         CCV 12         12/03/10 19:43         96.5         97.4         100.5         97.2         ☑           70         CCB 12         12/03/10 19:46         99.3         101.0         103.2         100.3         ☑           71         MAQP4         12/03/10 19:50         96.0         98.8         80.6         99.5         ☑           72         MAQP6         12/03/10 19:57         96.8         99.5         81.9         99.4         ☑           73         MANX4         12/03/10 20:00         93.7         95.9         77.5         96.7         ☑           74         MANX9         12/03/10 20:04         93.6         97.4         76.1         96.6         ☑           76         MANOP         12/03/10 20:04         93.6         97.4         76.1         96.6         ☑           76         MANOP         12/03/10 20:04         93.6         97.4         76.1         96.9         ☑           76         MANOP         12/03/10 20:14         97.5         95.9         75.9         95.9         ☑           78	67	MAQP0	12/03/10 19:36	93.4	96.2	80.7	96.7	Ø	
70         CCB 12         12/03/10 19:46         99.3         101.0         103.2         100.3         ☑           71         MAQP4         12/03/10 19:50         96.0         98.8         80.6         99.5         ☑           72         MAQP6         12/03/10 19:57         96.8         99.5         81.9         99.4         ☑           74         MANX4         12/03/10 20:00         93.7         95.9         77.5         96.7         ☑           75         MANOF         12/03/10 20:04         93.6         97.4         76.1         96.6         ☑           76         MANOP         12/03/10 20:07         92.7         95.9         75.9         95.9         ☑           77         MANOQ         12/03/10 20:11         98.2         101.7         80.9         101.5         ☑           78         CCV 13         12/03/10 20:14         97.5         97.5         95.6         98.2         ☑           79         CCB 13         12/03/10 20:18         101.2         103.6         101.9         102.1         ☑           80         CCV 14         12/03/10 20:25         99.1         101.6         0.0         101.4         ☑ <td< td=""><td>68</td><td></td><td>12/03/10 19:39</td><td>94.2</td><td>96.7</td><td>82.2</td><td>96.9</td><td>Ø</td></td<>	68		12/03/10 19:39	94.2	96.7	82.2	96.9	Ø	
MAQP4	69	CCV 12	12/03/10 19:43	96.5	97.4	100.5	97.2	Ø	
72       MAQP6       12/03/10 19:53       99.6       103.0       86.2       103.2       ☑         73       MANX4       12/03/10 19:57       96.8       99.5       81.9       99.4       ☑         74       MANX9       12/03/10 20:00       93.7       95.9       77.5       96.7       ☑         75       MANOF       12/03/10 20:04       93.6       97.4       76.1       96.6       ☑         76       MANOP       12/03/10 20:07       92.7       95.9       75.9       95.9       ☑         77       MANOQ       12/03/10 20:11       98.2       101.7       80.9       101.5       ☑         78       CCV 13       12/03/10 20:14       97.5       97.5       95.6       98.2       ☑         79       CCB 13       12/03/10 20:18       101.2       103.6       101.9       102.1       ☑         80       CCV 14       12/03/10 20:22       96.0       99.1       0.0       100.4       ☑         81       CCB 14       12/03/10 20:25       99.1       101.6       0.0       101.7       ☑         82       MAFD3       12/03/10 20:31       100.7       103.9       0.0       104.0	70	CCB 12	12/03/10 19:46	99.3	101.0	103.2	100.3	Ø	
73       MANX4       12/03/10 19:57       96.8       99.5       81.9       99.4       ✓         74       MANX9       12/03/10 20:00       93.7       95.9       77.5       96.7       ✓         75       MANOF       12/03/10 20:04       93.6       97.4       76.1       96.6       ✓         76       MANOP       12/03/10 20:07       92.7       95.9       75.9       95.9       ✓         77       MANOQ       12/03/10 20:11       98.2       101.7       80.9       101.5       ✓         78       CCV 13       12/03/10 20:18       101.2       103.6       101.9       102.1       ✓         80       CCV 14       12/03/10 20:22       96.0       99.1       0.0       100.4       ✓         81       CCB 14       12/03/10 20:25       99.1       101.6       0.0       101.7       ✓         82       MAFD3       12/03/10 20:28       97.2       102.0       0.0       102.9       ✓         83       MAFD3P5       12/03/10 20:31       100.7       103.9       0.0       104.0       □         84       MAFD3Z       12/03/10 20:35       93.9       99.7       0.0       99.9	71	MAQP4	12/03/10 19:50	96.0	98.8	80.6	99.5	Ø	
74       MANX9       12/03/10 20:00       93.7       95.9       77.5       96.7       ✓         75       MANOF       12/03/10 20:04       93.6       97.4       76.1       96.6       ✓         76       MANOP       12/03/10 20:07       92.7       95.9       75.9       95.9       ✓         77       MANOQ       12/03/10 20:11       98.2       101.7       80.9       101.5       ✓         78       CCV 13       12/03/10 20:14       97.5       97.5       95.6       98.2       ✓         79       CCB 13       12/03/10 20:18       101.2       103.6       101.9       102.1       ✓         80       CCV 14       12/03/10 20:22       96.0       99.1       0.0       100.4       ✓         81       CCB 14       12/03/10 20:25       99.1       101.6       0.0       101.7       ✓         82       MAFD3       12/03/10 20:28       97.2       102.0       0.0       102.9       ✓         83       MAFD3P5       12/03/10 20:31       100.7       103.9       0.0       104.0       ✓         84       MAFD3Z       12/03/10 20:35       93.9       99.7       0.0       99.9 <td< td=""><td>72</td><td>MAQP6</td><td>12/03/10 19:53</td><td>99.6</td><td>103.0</td><td>86.2</td><td>103.2</td><td>Ø</td></td<>	72	MAQP6	12/03/10 19:53	99.6	103.0	86.2	103.2	Ø	
MANOF       12/03/10       20:04       93.6       97.4       76.1       96.6       ✓         76       MANOP       12/03/10       20:07       92.7       95.9       75.9       95.9       ✓         77       MANOQ       12/03/10       20:11       98.2       101.7       80.9       101.5       ✓         78       CCV 13       12/03/10       20:14       97.5       97.5       95.6       98.2       ✓         79       CCB 13       12/03/10       20:18       101.2       103.6       101.9       102.1       ✓         80       CCV 14       12/03/10       20:22       96.0       99.1       0.0       100.4       ✓         81       CCB 14       12/03/10       20:25       99.1       101.6       0.0       101.7       ✓         82       MAFD3       12/03/10       20:28       97.2       102.0       0.0       102.9       ✓         83       MAFD35       12/03/10       20:31       100.7       103.9       0.0       104.0       □         84       MAFD3Z       12/03/10       20:35       93.9       99.7       0.0       99.9       ✓         85 <td< td=""><td>73</td><td>MANX4</td><td>12/03/10 19:57</td><td>96.8</td><td>99.5</td><td>81.9</td><td>99.4</td><td>Ø</td></td<>	73	MANX4	12/03/10 19:57	96.8	99.5	81.9	99.4	Ø	
MANOP         12/03/10         20:07         92.7         95.9         75.9         95.9         ✓           77         MANOQ         12/03/10         20:11         98.2         101.7         80.9         101.5         ✓           78         CCV 13         12/03/10         20:14         97.5         97.5         95.6         98.2         ✓           79         CCB 13         12/03/10         20:18         101.2         103.6         101.9         102.1         ✓           80         CCV 14         12/03/10         20:22         96.0         99.1         0.0         100.4         ✓           81         CCB 14         12/03/10         20:25         99.1         101.6         0.0         101.7         ✓           82         MAFD3         12/03/10         20:28         97.2         102.0         0.0         102.9         ✓           83         MAFD3F5         12/03/10         20:31         100.7         103.9         0.0         104.0         □           84         MAFD3Z         12/03/10         20:38         95.7         100.9         0.0         101.2         ✓           85         MAFD5         12/03/10	74	MANX9	12/03/10 20:00	93.7	95.9	77.5	96.7	Ø	
77       MANOQ       12/03/10 20:11       98.2       101.7       80.9       101.5       ✓         78       CCV 13       12/03/10 20:14       97.5       97.5       95.6       98.2       ✓         79       CCB 13       12/03/10 20:18       101.2       103.6       101.9       102.1       ✓         80       CCV 14       12/03/10 20:22       96.0       99.1       0.0       100.4       ✓         81       CCB 14       12/03/10 20:25       99.1       101.6       0.0       101.7       ✓         82       MAFD3       12/03/10 20:28       97.2       102.0       0.0       102.9       ✓         83       MAFD3P5       12/03/10 20:31       100.7       103.9       0.0       104.0       □         84       MAFD3Z       12/03/10 20:35       93.9       99.7       0.0       99.9       ✓         85       MAFD5       12/03/10 20:38       95.7       100.9       0.0       101.2       ✓         86       MAFD6       12/03/10 20:41       97.5       102.5       0.0       102.8       ✓         87       MAFD7       12/03/10 20:44       98.5       102.1       0.0       102.8	75	MANOF	12/03/10 20:04	93.6	97.4	76.1	96.6	Ø	
78         CCV 13         12/03/10 20:14         97.5         97.5         95.6         98.2         ✓           79         CCB 13         12/03/10 20:18         101.2         103.6         101.9         102.1         ✓           80         CCV 14         12/03/10 20:22         96.0         99.1         0.0         100.4         ✓           81         CCB 14         12/03/10 20:25         99.1         101.6         0.0         101.7         ✓           82         MAFD3         12/03/10 20:28         97.2         102.0         0.0         102.9         ✓           83         MAFD3P5         12/03/10 20:31         100.7         103.9         0.0         104.0         ✓           84         MAFD3Z         12/03/10 20:35         93.9         99.7         0.0         99.9         ✓           85         MAFD5         12/03/10 20:38         95.7         100.9         0.0         101.2         ✓           86         MAFD6         12/03/10 20:41         97.5         102.5         0.0         102.8         ✓           87         MAFD8         12/03/10 20:47         97.6         101.2         0.0         102.3         ✓	76	MANOP	12/03/10 20:07	92.7	95.9	75.9	95.9	Ø	
79 CCB 13 12/03/10 20:18 101.2 103.6 101.9 102.1	77	MAN0Q	12/03/10 20:11	98.2	101.7	80.9	101.5	Ø	
80 CCV 14 12/03/10 20:22 96.0 99.1 0.0 100.4   81 CCB 14 12/03/10 20:25 99.1 101.6 0.0 101.7   82 MAFD3 12/03/10 20:28 97.2 102.0 0.0 102.9   83 MAFD3P5 12/03/10 20:31 100.7 103.9 0.0 104.0   84 MAFD3Z 12/03/10 20:35 93.9 99.7 0.0 99.9   85 MAFD5 12/03/10 20:38 95.7 100.9 0.0 101.2   86 MAFD6 12/03/10 20:41 97.5 102.5 0.0 102.8   87 MAFD7 12/03/10 20:44 98.5 102.1 0.0 103.6   88 MAFD8 12/03/10 20:47 97.6 101.2 0.0 102.3   89 CCV 15 12/03/10 20:50 98.9 100.9 0.0 101.7   90 CCB 15 12/03/10 20:54 100.5 103.0 0.0 102.6   91 CCV 16 12/03/10 20:57 103.7 0.0 0.0 0.0   92 CCB 16 12/03/10 21:00 104.0 0.0 0.0   93 CCV 17 12/03/10 21:02 100.1 0.0 0.0   94 CCB 17 12/03/10 21:05 102.1 0.0 0.0   95 CCV 17 12/03/10 21:05 102.1 0.0 0.0   96 CCB 17 12/03/10 21:05 102.1 0.0 0.0   97 MAKO4 12/03/10 21:07 100.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0 0.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	78	CCV 13	12/03/10 20:14	97.5	97.5	95.6	98.2	$\square$	
81 CCB 14 12/03/10 20:25 99.1 101.6 0.0 101.7 ☑ 82 MAFD3 12/03/10 20:28 97.2 102.0 0.0 102.9 ☑ 83 MAFD3P5 12/03/10 20:31 100.7 103.9 0.0 104.0 ☑ 84 MAFD3Z 12/03/10 20:35 93.9 99.7 0.0 99.9 ☑ 85 MAFD5 12/03/10 20:38 95.7 100.9 0.0 101.2 ☑ 86 MAFD6 12/03/10 20:41 97.5 102.5 0.0 102.8 ☑ 87 MAFD7 12/03/10 20:44 98.5 102.1 0.0 103.6 ☑ 88 MAFD8 12/03/10 20:47 97.6 101.2 0.0 102.3 ☑ 89 CCV 15 12/03/10 20:50 98.9 100.9 0.0 101.7 ☑ 90 CCB 15 12/03/10 20:54 100.5 103.0 0.0 102.6 ☑ 91 CCV 16 12/03/10 20:57 103.7 0.0 0.0 0.0 ☑ 92 CCB 16 12/03/10 21:00 104.0 0.0 0.0 0.0 ☑ 93 CCCV 17 12/03/10 21:00 104.0 0.0 0.0 0.0 ☑ 94 CCB 17 12/03/10 21:05 102.1 0.0 0.0 ☑ 95 CCV 17 12/03/10 21:05 102.1 0.0 0.0 ☑ 96 CCB 17 12/03/10 21:05 102.1 0.0 0.0 ☑ 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 ☑ 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 ☑ 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 ☑ 98 GCB 17 12/03/10 21:07 100.0 0.0 0.0 ☑ 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 ☑ 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 ☑ 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 ☑ 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 ☑ 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 □ 98 GCB 17 12/03/10 21:07 100.0 0.0 0.0 □ 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 □ 98 GCB 17 12/03/10 21:07 100.0 0.0 0.0 □	79	CCB 13	12/03/10 20:18	101.2	103.6	101.9	102.1	Ø	
82 MAFD3 12/03/10 20:28 97.2 102.0 0.0 102.9   83 MAFD3P5 12/03/10 20:31 100.7 103.9 0.0 104.0   84 MAFD3Z 12/03/10 20:35 93.9 99.7 0.0 99.9   85 MAFD5 12/03/10 20:38 95.7 100.9 0.0 101.2   86 MAFD6 12/03/10 20:41 97.5 102.5 0.0 102.8   87 MAFD7 12/03/10 20:44 98.5 102.1 0.0 103.6   88 MAFD8 12/03/10 20:47 97.6 101.2 0.0 102.3   89 CCV 15 12/03/10 20:50 98.9 100.9 0.0 101.7   90 CCB 15 12/03/10 20:54 100.5 103.0 0.0 102.6   91 CCV 16 12/03/10 20:57 103.7 0.0 0.0 0.0   92 CCB 16 12/03/10 21:00 104.0 0.0 0.0 0.0   95 CCV 17 12/03/10 21:02 100.1 0.0 0.0 0.0   96 CCB 17 12/03/10 21:05 102.1 0.0 0.0 0.0   97 MAK04 12/03/10 21:07 100.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0   90 MAK04 12/03/10 21:07 100.0 0.0 0.0   90 CCB 15 12/03/10 21:07 100.0 0.0 0.0 0.0   90 CCB 17 12/03/10 21:07 100.0 0.0 0.0 0.0   97 MAK04 12/03/10 21:07 100.0 0.0 0.0 0.0 0.0   97 MAK04 12/03/10 21:07 100.0 0.0 0.0 0.0 0.0   98 PS PS PS PS PS PS PS PS PS PS PS PS PS	80	CCV 14	12/03/10 20:22	96.0		0.0	100.4	☑	
83       MAFD3P5       12/03/10 20:31       100.7       103.9       0.0       104.0         84       MAFD3Z       12/03/10 20:35       93.9       99.7       0.0       99.9       ✓         85       MAFD5       12/03/10 20:38       95.7       100.9       0.0       101.2       ✓         86       MAFD6       12/03/10 20:41       97.5       102.5       0.0       102.8       ✓         87       MAFD7       12/03/10 20:44       98.5       102.1       0.0       103.6       ✓         88       MAFD8       12/03/10 20:47       97.6       101.2       0.0       102.3       ✓         89       CCV 15       12/03/10 20:50       98.9       100.9       0.0       101.7       ✓         90       CCB 15       12/03/10 20:54       100.5       103.0       0.0       102.6       ✓         91       CCV 16       12/03/10 20:57       103.7       0.0       0.0       0.0       ✓         92       CCB 16       12/03/10 21:00       104.0       0.0       0.0       0.0       ✓         95       CCV 17       12/03/10 21:02       100.1       0.0       0.0       0.0       ✓      <	81	CCB 14	12/03/10 20:25	99.1	101.6	0.0	101.7	团	
84       MAFD3Z       12/03/10 20:35       93.9       99.7       0.0       99.9       Ø         85       MAFD5       12/03/10 20:38       95.7       100.9       0.0       101.2       Ø         86       MAFD6       12/03/10 20:41       97.5       102.5       0.0       102.8       Ø         87       MAFD7       12/03/10 20:44       98.5       102.1       0.0       103.6       Ø         88       MAFD8       12/03/10 20:47       97.6       101.2       0.0       102.3       Ø         89       CCV 15       12/03/10 20:50       98.9       100.9       0.0       101.7       Ø         90       CCB 15       12/03/10 20:54       100.5       103.0       0.0       102.6       Ø         91       CCV 16       12/03/10 20:57       103.7       0.0       0.0       0.0       Ø         92       CCB 16       12/03/10 21:00       104.0       0.0       0.0       0.0       Ø         95       CCV 17       12/03/10 21:02       100.1       0.0       0.0       0.0       Ø         96       CCB 17       12/03/10 21:05       102.1       0.0       0.0       0.0       Ø	82	MAFD3	12/03/10 20:28	97.2	102.0	0.0			
85       MAFD5       12/03/10 20:38       95.7       100.9       0.0       101.2       ✓         86       MAFD6       12/03/10 20:41       97.5       102.5       0.0       102.8       ✓         87       MAFD7       12/03/10 20:44       98.5       102.1       0.0       103.6       ✓         88       MAFD8       12/03/10 20:47       97.6       101.2       0.0       102.3       ✓         89       CCV 15       12/03/10 20:50       98.9       100.9       0.0       101.7       ✓         90       CCB 15       12/03/10 20:54       100.5       103.0       0.0       102.6       ✓         91       CCV 16       12/03/10 20:57       103.7       0.0       0.0       0.0       ✓         92       CCB 16       12/03/10 21:00       104.0       0.0       0.0       0.0       ✓         95       CCV 17       12/03/10 21:02       100.1       0.0       0.0       0.0       ✓         96       CCB 17       12/03/10 21:05       102.1       0.0       0.0       0.0       ✓         97       MAK04       12/03/10 21:07       100.0       0.0       0.0       0.0       0.0	83	MAFD3P5	12/03/10 20:31	100.7	103.9	0.0	104.0		
86       MAFD6       12/03/10 20:41       97.5       102.5       0.0       102.8       ✓         87       MAFD7       12/03/10 20:44       98.5       102.1       0.0       103.6       ✓         88       MAFD8       12/03/10 20:47       97.6       101.2       0.0       102.3       ✓         89       CCV 15       12/03/10 20:50       98.9       100.9       0.0       101.7       ✓         90       CCB 15       12/03/10 20:54       100.5       103.0       0.0       102.6       ✓         91       CCV 16       12/03/10 20:57       103.7       0.0       0.0       0.0       ✓         92       CCB 16       12/03/10 21:00       104.0       0.0       0.0       0.0       ✓         95       CCV 17       12/03/10 21:02       100.1       0.0       0.0       0.0       ✓         96       CCB 17       12/03/10 21:05       102.1       0.0       0.0       0.0       ✓         97       MAK04       12/03/10 21:07       100.0       0.0       0.0       0.0       ✓	84	MAFD3Z	12/03/10 20:35						
87       MAFD7       12/03/10 20:44       98.5       102.1       0.0       103.6       ✓         88       MAFD8       12/03/10 20:47       97.6       101.2       0.0       102.3       ✓         89       CCV 15       12/03/10 20:50       98.9       100.9       0.0       101.7       ✓         90       CCB 15       12/03/10 20:54       100.5       103.0       0.0       102.6       ✓         91       CCV 16       12/03/10 20:57       103.7       0.0       0.0       0.0       ✓         92       CCB 16       12/03/10 21:00       104.0       0.0       0.0       0.0       ✓         95       CCV 17       12/03/10 21:02       100.1       0.0       0.0       0.0       ✓         96       CCB 17       12/03/10 21:05       102.1       0.0       0.0       0.0       ✓         97       MAK04       12/03/10 21:07       100.0       0.0       0.0       0.0       ✓	85	MAFD5	12/03/10 20:38		<del></del>			4	
88 MAFD8 12/03/10 20:47 97.6 101.2 0.0 102.3   89 CCV 15 12/03/10 20:50 98.9 100.9 0.0 101.7   90 CCB 15 12/03/10 20:54 100.5 103.0 0.0 102.6   91 CCV 16 12/03/10 20:57 103.7 0.0 0.0 0.0   92 CCB 16 12/03/10 21:00 104.0 0.0 0.0   95 CCV 17 12/03/10 21:02 100.1 0.0 0.0   96 CCB 17 12/03/10 21:05 102.1 0.0 0.0   97 MAK04 12/03/10 21:07 100.0 0.0 0.0   98.9 100.9 0.0 101.7   97 MAK04 12/03/10 20:57   97.6 101.2   97.6 10	86	MAFD6	12/03/10 20:41	97.5	102.5	0.0		4	
89         CCV 15         12/03/10 20:50         98.9         100.9         0.0         101.7         ✓           90         CCB 15         12/03/10 20:54         100.5         103.0         0.0         102.6         ✓           91         CCV 16         12/03/10 20:57         103.7         0.0         0.0         0.0         ✓           92         CCB 16         12/03/10 21:00         104.0         0.0         0.0         0.0         ✓           95         CCV 17         12/03/10 21:02         100.1         0.0         0.0         0.0         ✓           96         CCB 17         12/03/10 21:05         102.1         0.0         0.0         0.0         ✓           97         MAK04         12/03/10 21:07         100.0         0.0         0.0         0.0         ✓	87	MAFD7	12/03/10 20:44	98.5					
90 CCB 15 12/03/10 20:54 100.5 103.0 0.0 102.6 91 CCV 16 12/03/10 20:57 103.7 0.0 0.0 0.0 92 CCB 16 12/03/10 21:00 104.0 0.0 0.0 0.0 95 CCV 17 12/03/10 21:02 100.1 0.0 0.0 0.0 96 CCB 17 12/03/10 21:05 102.1 0.0 0.0 0.0 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 9.0 97	88	MAFD8	12/03/10 20:47					ľ	
91 CCV 16 12/03/10 20:57 103.7 0.0 0.0 0.0 0.0 92 CCB 16 12/03/10 21:00 104.0 0.0 0.0 0.0 95 CCV 17 12/03/10 21:02 100.1 0.0 0.0 0.0 96 CCB 17 12/03/10 21:05 102.1 0.0 0.0 0.0 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 9.0 97	89	CCV 15	12/03/10 20:50	98.9			101.7	☑	
92 CCB 16 12/03/10 21:00 104.0 0.0 0.0 0.0 0.0 95 CCV 17 12/03/10 21:02 100.1 0.0 0.0 0.0 96 CCB 17 12/03/10 21:05 102.1 0.0 0.0 0.0 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 0.0 97	90	CCB 15	12/03/10 20:54		103.0		102.6	Ø	
95 CCV 17 12/03/10 21:02 100.1 0.0 0.0 0.0 0.0 96 CCB 17 12/03/10 21:05 102.1 0.0 0.0 0.0 0.0 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 0.0 9.0	91	CCV 16	12/03/10 20:57				0.0	M	
96 CCB 17 12/03/10 21:05 102.1 0.0 0.0 0.0 0.0 97 MAK04 12/03/10 21:07 100.0 0.0 0.0 0.0 0.0	92	CCB 16	12/03/10 21:00				·-···	Į	
97 MAK04 12/03/10 21:07 100.0 0.0 0.0 0.0	95	CCV 17	12/03/10 21:02	100.1	0.0	0.0		Į.	
	96	CCB 17	12/03/10 21:05	102.1	0.0	0.0	0.0	Ø	
98 MAK04P5   12/03/10   21:10   103.9   0.0   0.0   0.0	97	MAK04	12/03/10 21:07		0.0	0.0		1	
	98	MAK04P5	12/03/10 21:10	103.9	0.0	0.0	0.0		

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 12/07/10 10:11:43

				, ,	nalyst: hargraves		
			Germanium	Indium	Lithium-6	Thulium	
#	Sample ID	Analyzed Date			·		Q
99	MAK04Z	12/03/10 21:13	96.6	0.0	0.0	0.0	回
100	MAK07	12/03/10 21:15	96.1	0.0	0.0	0.0	Ø
101	MAK08	12/03/10 21:18	98.8	0.0	0.0	0.0	፟⊠
102	MAK09	12/03/10 21:20	103.2	0.0	0.0	0.0	Ø
103	CCV 18	12/03/10 21:23	98.6	0.0	0.0	0.0	团
104	CCB 18	12/03/10 21:25	101.7	0.0	0.0	0.0	Ø
105	CCV 19	12/03/10 21:28	96.1	0.0	0.0	0.0	囡
106	CCB 19	12/03/10 21:32	97.5	0.0	0.0	0.0	团
109	CCV 20	12/03/10 21:36	99.1	98.4	98.6	100.1	Ø
110	CCB 20	12/03/10 21:39	98.9	99.7	97.5	99.6	Ø
111	MAHGVB	12/03/10 21:43	100.0	101.1	80.6	104.1	Ø
112	MAHGVC	12/03/10 21:47	97.1	99.0	80.9	100.8	团
113	MAHGVL	12/03/10 21:50	96.6	99.0	80.5	100.3	Ø
114	CCV 21	12/03/10 21:54	96.8	96.4	97.7	97.8	Ø
115	CCB 21	12/03/10 21:58	99.8	99.8	97.9	100.7	☑
116	L9612	12/03/10 22:01	81.7	83.2	76.1	81.8	☑
117	L9635	12/03/10 22:05	76.2	81.8	74.4	81.3	Ø
118	L9636	12/03/10 22:09	71.5	75.0	69.1	76.0	Ø
119	L9637	12/03/10 22:12	73.1	75.7	66.4	76.9	团
120	L9638	12/03/10 22:16	67.8	71.0	63.7	74.8	
121	L9639	12/03/10 22:20	70.7	75.0	64.0	75.9	☑
122	CCV 22	12/03/10 22:23	77.3	81.1	73.9		Ø
123	CCB 22	12/03/10 22:27	77.5	82.3	67.1		Ø
126	CCV 23	12/03/10 22:31	102.1	100.4	109.4		v
127	CCB 23	12/03/10 22:34	101.9	101.2	100.5		1
128	L9612	12/03/10 22:38	92.8	92.9	97.7		
129	L9635	12/03/10 22:42	90.8	94.8	98.8	· · ·	Ø
130	L9636	12/03/10 22:45	86.7	87.7	94.0	89.9	Ø
131	L9637	12/03/10 22:49	90.3	89.8	93.4	92.2	
132	L9638	12/03/10 22:53	84.9	84.0	91.9	88.4	図
133	L9639	12/03/10 22:56	88.6	88.9	91.7	90.5	Ø
134	CCV 24	12/03/10 23:00	95.6	95.1	103.0	97.0	Ø
135	CCB 24	12/03/10 23:04	96.9	97.7	94.0	98.9	Ø
136	CCV 25	12/03/10 23:08	98.4	99.4	105.2	101.2	$\square$
137	CCB 25	12/03/10 23:11	98.0	100.6	98.3	101.3	Ø
138	L9612	12/03/10 23:15	87.2	89.2	92.4	90.7	Ø
139	L9635	12/03/10 23:19	86.2	91.0	95.1	92.5	$\square$
140	L9636	12/03/10 23:22	83.8	86.0	90.7	88.1	$\square$
141	L9637	12/03/10 23:26	87.0	87.7	89.4	89.8	$\square$
ŀ	L9638	12/03/10 23:29	82.6	83.7	87.5	87.0	
143	L9639	12/03/10 23:33	86.4	88.4	87.2	89.1	
144	CCV 26	12/03/10 23:37	94.8	95.1	98.0	96.9	
	CCB 26	12/03/10 23:41	94.0	96,1	90.0	97.1	
-	CCV 27	12/03/10 23:44	95.9	96.7	99.1	98.7	
	CCB 27	12/03/10 23:48	94.3	97.3	92.1	98.5	
-	L9634	12/03/10 23:52	88.0	90.5	88.9	91.6	

#### TAL West Sac

#### INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001)	M02 (M02)	Reported: 12/07/10 10:11:43
		· ·

File ID: 101203B2A			Analyst: hargraves				
			Germanium	Indium	Lithium-6	Thulium	
#	Sample ID	Analyzed Date				Q	
149	L9634P5	12/03/10 23:55	89.7	93.3	90.6	93.7	
150	L9634X	12/03/10 23:59	85.6	87.9	86.9	88.8	
151	L9634Z	12/04/10 00:02	83.3	86.1	84.7	87.5 ☑	
152	CCV 28	12/04/10 00:06	92.6	93.8	96.3	95.2 ☑	
153	CCB 28	12/04/10 00:10	92.2	95.6	86.3	96.5 ☑	

#### **Quantitative Method Report**

File Name:

000-USGS-SH.mth

File Path:

E:\elandata\Method\000-USGS-SH.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		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
В	11.009	Peak Hopping		14.0 ms	700 ms
Al	26.982	Peak Hopping		14.0 ms	700 ms
Ca	43.956	Peak Hopping	1	14.0 ms	700 ms
٧	50.944	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
Zn	67.925	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
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
Ва	134.906	Peak Hopping	; 1	14.0 ms	700 ms
In-1	114.904	Peak Hopping	1	14.0 ms	700 ms
TI	204.975	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
Zn	66.927	Peak Hopping	1	5.0 ms	250 ms
Zn	65.926	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

Report Date/Time:

Monday, December 06, 2010 10:51:38

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#### TAL-W.Sacramento Elan 6000 ICPMS M02

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
łn	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:

Measurement Units:

AutoLens:

Spectral Peak Processing:

Signal Profile Processing:

Average

Average

Blank Subtraction: After Internal Standard

Baseline Readings: 0

Smoothing: Yes, Factor 5

#### **Equations**

Mass	Corrections
50.944	-3.108 * Cr 53 + 0.3524 * Cr 52
53.940	- 0.028226 * Cr 52
56.935	-0.074 * Ca 43
59.933	-0.005 * Ca 43
64.928	-0.0078 * Ti 49
67.925	-0.015 * Ba 136
74.922	-3.1278 * Se 77 + 1.0177 * Se 78
81.917	- 0.00155 * Br 79
110.904	-1.073 * Pd 108 + 0.712 * Pd 106
114.904	- 0.014032 * Sn 118
207.977	+ 1.0 * Pb 207 + 1.0 * Pb 206
49.946	- 0.739726 * Ti 47 - 0.002506 * V 51
75.919	- 0.268980 * Ge 72
77.917	- 0.030435 * Kr 83
107.904	- 1.184953 * Pd 105
113.904	- 0.026826 * Sn 118
114.904	- 0.014032 * Sn 118
	50.944 53.940 56.935 59.933 64.928 67.925 74.922 81.917 110.904 114.904 207.977 49.946 75.919 77.917 107.904 113.904

#### **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			
В	11.009	Linear Thru Zero	ug/L	ug/L	500			
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			
V	50.944	Linear Thru Zero	ug/L	ug/L	100			
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			

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TAL-W.Sacramento Elan 6000 ICPMS M02

_						
	Со	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
	Zn	67.925	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
	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
	Ва	134.906	Linear Thru Zero	ug/L	ug/L	100
	in-1	114.904	Linear Thru Zero	ug/L	ug/L	
	TI	204.975	Linear Thru Zero	ug/L	ug/L	50
	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
	Zn	66.927	Linear Thru Zero	ug/L	ug/L	100
	Zn	65.926	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
	ln	114.904	Linear Thru Zero	ug/L	ug/L	
	207.97	7207.977	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	

Report Date/Time: Page 3 Monday, December 06, 2010 10:51:38

## 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: 4075-25B

Internal standard: 4075-22C

Blank, CCBs: 3185-42D

Standard 1, CCVs: <u>4075-21E</u>

ICV: 4075-20D

ICSA: 4075-27B

ICSAB: <u>4075-27C</u>

File Number: 101203B2

#### Instrument Tuning Report - Elan 6000

File Name:

default.tun

#### **Sample Information**

Sample Date/Time: Friday, December 03, 2010 08:08:27

Sample ID: TUNE SHARGRAVE

Analyte	Exact Mass	Meas. Mass	Mass DAC	Meas. Pk. Width	Res. DAC	Custom Res.
Li	7.016	7.027	1573	0.700	2034	
Be	9.012	8.878	2049	0.679	2024	
Mg	23.985	23.978	5725	0.721	1973	
Co	58.933	58.979	14297	0.728	1884	
In	114.904	114.928	27960	0.734	1839	
Ce	139.905	139.878	34033	0.738	1878	
TI	204.975	204.979	49758	0.736	2096	
Pb	207.977	207.979	50472	0.721	2111	
U	238.050	238.026	57706	0.725	2273	

Report Date/Time: Friday, December 03, 2010 08:10:18

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#### **Instrument Tuning Report - Elan 6000**

File Name:

default.tun

#### **Sample Information**

Sample Date/Time: Friday, December 03, 2010 08:10:50

Sample ID: TUNE SHARGRAVE

Analyte	Exact Mass	Meas. Mass	Mass DAC	Meas. Pk. Width	Res. DAC	Custom Res.
Li	7.016	6.926	1552	0.750	2032	
Be	9.012	9.029	2052	0.713	2019	
Mg	23.985	23.979	5723	0.720	1973	
Co	58.933	58.879	14283	0.725	1884	
In	114.904	114.928	27965	0.724	1839	
Ce	139.905	139.878	34026	0.729	1878	
TI	204.975	204.979	49758	0.734	2096	
Pb	207.977	208.028	50484	0.721	2111	
U	238.050	238.076	57712	0.725	2273	

Report Date/Time: Friday, December 03, 2010 08:12:40

#### **Elan 6000 Instrument Optomization Report**

File Name c:\elandata\Optimize\default.dac

Path c:\elandata\Optimize

#### Sample Information

Sample Date/Time: Friday, December 03, 2010 08:10:50

Sample ID: TUNE SHARGRAVE

#### **Parameter Settings**

Nebulizer Gas Flow	0.8
Lens Voltage	6.8
ICP RF Power	1050.0
Analog Stage Voltage	-1725.0
Pulse Stage Voltage	1300.0
Discriminator Threshold	70.0
AC Rod Offset	-7.0
Service DAC 1	60.0
Quadrupole Rod Offset	0.0

#### **AutoLens Calibration**

Date:

08:14:20 Fri 03-Dec-10

Sample Filename:

**TUNE SHARGRAVE.002** 

Dataset Pathname:

101203a1\

Lens Voltage Start: Lens Voltage End:

5.50 V 10.00 V

Lens Voltage Step:

0.25 V

Slope:

Intercept:

0.0237 5.4738

Analyte	Mass	Optimum Voltage	Maximum Intensity	# Points
Be	9.012	5.8 V	6490 cps	19
Co	58.933	6.8 V	176877 cps	19
In	114.904	8.3 V	362013 cps	19

#### **Dual Detector Calibration**

Date:

13:20:08 Wed 24-Nov-10

Sample Filename:

**DAILY SHARGRAVE.1151** 

Dataset Pathname:

c:\elandata\Dataset\dual detector calibration\

Points Acquired: 37 Lens Voltage Start: -3.00 V Lens Voltage End: 15.00 V

Lens Voltage Step:

0.50 V

Analyte	Mass	Gain	N(max)
Li	6.013	6136	2.04e+009 cps
Li	7.016	5712	2.19e+009 cps
Be	9.011	5227	2.40e+009 cps
В	11.009	5334	2.35e+009 cps
Na	22.992	5285	2.37e+009 cps

Report Date/Time:

Friday, December 03, 2010 08:17:07

TAL-W.SACRAMENTO - Elan 6000 ICPMS, M01 - Methods 6020, 200.8

~			
Mg	23.985	4877	2.57e+009 cps
Mg	24.984	4692	2.67e+009 cps
Al	26.982	4539	2.76e+009 cps
Р	30.994	4220	2.97e+009 cps
K	38.965	4072	3.07e+009 cps
Ca	42.957		cps
Ca	43.956	4123	3.04e+009 cps
Sc	44.955	4161	3.01e+009 cps
V	50.945	4128	3.03e+009 cps
Cr	51.940	3926	3.19e+009 cps
Fe	53.942	3884	3.22e+009 cps
Mn	54.936	3868	3.24e+009 cps
Fe	56.934	3694	3.39e+009 cps
Co	58.934	3697	3.39e+009 cps
Ni	59.933	3626	3.45e+009 cps
Cu	62.931	3539	3.54e+009 cps
Cu	64.929	3497	3.58e+009 cps
Zn	67.927	3556	3.52e+009 cps
Ge	71.924	3614	3.46e+009 cps
As	74.921	3430	3.65e+009 cps
Se	77.919	3623	3.46e+009 cps
Br	78.918		cps
Se	81.916	3485	3.59e+009 cps
Sr	87.907		cps
Мо	96.908	3530	3.55e+009 cps
Ag	106.904	3016	4.15e+009 cps
Ag	108.906	3153	3.97e+009 cps
Cd	110.905	3237	3.87e+009 cps
Cd	113.902	3261	3.84e+009 cps
ln •	114.903	3297	3.80e+009 cps
Sn	117.902	3334	3.75e+009 cps
Sb	120.905	3336	3.75e+009 cps
Ba -	134.907	3168	3.95e+009 cps
Tm	168.934	3095	4.04e+009 cps
T!	204.975	2951	4.24e+009 cps
Pb Bi	207.979	2937	4.26e+009 cps
	208.978	0000	cps
U	238.050	2982	4.20e+009 cps

Report Date/Time: Page 2

Friday, December 03, 2010 08:17:07

#### **Daily Performance Report - Elan 6000**

Sample ID: DAILY SHARGRAVE

Sample Date/Time: Friday, December 03, 2010 08:17:20

Sample Description:

Sample File: C:\elandata\Sample\0333406X.sam
Method File: C:\elandata\Method\000-DAILY\_EPA.mth

Dataset File: C:\elandata\Dataset\101203a1\DAILY SHARGRAVE.003

Tuning File: c:\elandata\Tuning\default.tun

Optimization File: c:\elandata\Optimize\default.dac

Number of Replicates: 5 Dual Detector Mode: Dual

#### **Summary**

	Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24	47913.723	1316.646	2.748
	Rh	103	243658.164	3781.915	1.552
	Pb	208	198846.420	1603.215	0.806
>	Ba	138	296040.302	1447.446	0.489
L	Ba++	69	0.022	0.000	1.897
[>	Ce	140	374664.562	2114.282	0.564
L	CeO	156	0.025	0.001	2.636
	Bkgd	220	8.000	4.116	51.446
	Li	7	8576.049	355.032	4.140
	Be	9	3302.314	52.171	1.580
	Co	59	125428.407	2165.638	1.727
	ln	115	341848.964	1188.683	0.348
	TI	205	273152.139	1281.563	0.469

#### 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 3X Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 15:18:42 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\Rinse 3X.001

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			1327820.249	ug/L	0.000
Γ>	6 Li-1			931759.428	ug/L	0.000
-	9 Be			2.333	ug/L	0.000
L	11 B			885.395	ug/L	0.000
Γ	27 AI			387956.952	ug/L	0.000
	44 Ca	-5.668690	10.979	5997.159	ug/L	7343.235
	51 V			-7678.114	ug/L	0.000
1	52 Cr			10288.310	ug/L	0.000
	55 Mn			6988.837	ug/L	0.000
	54 Fe			61258.826	ug/L	0.000
	57 Fe			4847.900	ug/L	0.000
	59 Co			92.001	ug/L	0.000
1	60 Ni			944.947	ug/L	0.000
l	65 Cu	0.137508	10.955	352.695	ug/L	114.077
ĺ	68 Zn			1988.822	ug/L	0.000
[	75 As			13063.129	ug/L	0.000
ĺ	82 Se			1075.258	ug/L	0.000
Ĺ>	72 Ge-1			1348171.474	ug/L	1391155.971
Γ	107 Ag			65.667	ug/L	0.000
	111 Cd			28.243	ug/L	0.000
	121 Sb			255.338	ug/L	0.000
1	135 Ba			120.668	ug/L	0.000
<u></u>  >	115 In-1			1625575.144	ug/L	0.000
Γ	205 TI			1994.647	ug/L	0.000
	208 Pb			1090.370	ug/L	0.000
[>	169 Tm-1			1701994.529	ug/L	0.000
Γ	50 Cr			-152.075	ug/L	0.000
	53 Cr			27220.446	ug/L	0.000
1	61 Ni			1212.324	ug/L	0.000
	63 Cu	0.150246	8.827	292.686	ug/L	94.335
	67 Zn			1251.678	ug/L	0.000
1	66 Zn			917.519	ug/L	0.000
1	76 Se			-184981.916	ug/L	0.000
İ	77 Se			5073.751	ug/L	0.000
İ	78 Se			14172.628	ug/L	0.000
-						

Report Date/Time: Friday, December 03, 2010 15:20:47

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Sample ID: Rinse 3X

	79 Br	123237.205	ug/L	0.000
Ĺ>	72 Ge	1348171.474	ug/L	1391155.971
Γ	108 Cd	3.655	ug/Ł	0.000
	114 Cd	73.660	ug/L	0.000
1	109 Ag	17.667	ug/L	0.000
<u>_</u> >	115 ln	1625575.144	ug/L	0.000
Γ	208 207.977	580.026	ug/L	0.000
	207 Pb	215.337	ug/L	0.000
	206 Pb	295.007	ug/L	0.000
L>	169 Tm	1701994.529	ug/L	0.000

#### Internal Standard Recoveries

111	ternar 5	tandart	riccoveries
	Analyte	Mass	Int Std % Recovery
_	Sc	45	
[>	Li-1	6	
	Be	9	
Ĺ	В	11	
Ţ	Αl	27	
ļ	Ca	44	
	٧	51	
	Cr	52	
	Mn	55	
Ì	Fe	54	
	Fe	57	
1	Со	59	
	Ni	60	
	Cu	65	
	Zn	68	,
	As	75	
]	Se	82	
<u></u> [>	Ge-1	72	96.910
Γ	Ag	107	
1	Cd	111	
}	Sb	121	
}	Ва	135	
[>	In-1	115	
Γ	TI	205	
	Pb	208	
L>	Tm-1	169	
٢	Cr	50	
	Cr	53	
	Ni	61	
	Cu	63	
	Zn	67	
	Zn	66	
	Se	76	
İ	Se	77	
İ	Se	78	
į	Br	79	
İ>	Ge	72	96.910
Ī	Cd	108	
i	Cd	114	
ì	Ag	109	
İ	In	115	
-	207.977	208	
1	_0,,0,,	_50	

| Pb 207 | Pb 206 |> Tm 169

Report Date/Time: Friday, December 03, 2010 15:20:47

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Sample ID: Rinse 3X

SOP No. SAC-MT-0001 Analyst: SHargrave

## Sample ID: Blank Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 15:23:15 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\Blank.002

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		1335621.243	ug/L	
۲>	6 Li-1		934249.375	ug/L	
1	9 Be		5.667	ug/L	
L	11 B		692.038	ug/L	
Γ	27 AI		141997.254	ug/L	
1	44 Ca		4828.832	ug/L	
1	51 V		-6165.420	ug/L	
	52 Cr		12075.780	ug/L	
	55 Mn		2840.300	ug/L	
	54 Fe		60152.727	ug/L	
Ì	57 Fe		4668.089	ug/L	
	59 Co		208.337	ug/L	
1	60 Ni		258.242	ug/L	
1	65 Cu		112.112	ug/L	
Ì	68 Zn		3266.631	ug/L	
	75 As		12778.670	ug/L	
1	82 Se		1123.078	ug/L	
L>	72 Ge-1		1346399.819	ug/ <b>L</b>	
ſ	107 Ag		102.667	ug/L	
	111 Cd		53.438	ug/L.	
}	121 Sb		203.337	ug/L	
İ	135 Ba		168.669	ug/L	
L>	115 ln-1		1635973.207	ug/L	
Γ	205 TI		1761.577	ug/L	
l	208 Pb		1127.373	ug/L	
[>	169 Tm-1		1704328.816	ug/L	
Γ	50 Cr		-115.435	ug/L	
	53 Cr		25460.847	ug/L	
	61 Ni		1136.951	ug/L	
1	63 Cu		97.002	ug/L	
1	67 Zn		1201.651	ug/L	
1	66 Zn		1609.570	ug/L	
ļ	76 Se		-185426.319	ug/L	
	77 Se		4670.533	ug/L	
	78 Se		13968.780	ug/L	

Report Date/Time: Friday, December 03, 2010 15:25:20

Page 1

Sample ID: Blank

1	79 Br	63058.114	ug/L
<u> </u>	72 Ge	1346399.819	ug/L
Γ	108 Cd	3.778	ug/L
	114 Cd	143.501	ug/L
į	109 Ag	32.667	ug/L
<u> </u>	115 ln	1635973.207	ug/L
Γ	208 207.977	595.695	ug/L
	207 Pb	237.671	ug/L
	206 Pb	294.007	ug/L
L>	169 Tm	1704328.816	ug/L

1331	icinai o	tanuan	riccoveries
	Anaiyte	Mass	Int Std % Recovery
	Sc	45	
Γ>	Li-1	6	
	Be	9	
L	В	11	
ſ	Al	27	
[	Ca	44	
	V	51	
į	Cr	52	
İ	Mn	55	
	Fe	54	
ĺ	Fe	57	
İ	Co	59	
j	Ni	60	
i	Cu	65	
i	Zn	68	
İ	As	75	
į	Se	82	
1-	Ge-1	72	
ř	Ag	107	
•	Cd	111	
Ì	Sb	121	
i	Ba	135	
i.	In-1	115	
	TI	205	
i	Pb	208	
1	Tm-1	169	
r	Cr	50	
1	Cr	53	
j	Ni	61	
1	Cu	63	
1	Zn	67	
} 	Zn	66	
-			
1	Se	76	
-	Se	77 70	
-	Se	78 70	
!	Br	79 	
<u> </u>	Ge	72	
	Cd	108	
ļ	Cd	114	
ļ	Ag	109	
Ī>	in	115	
	207.977	208	

Report Date/Time: Friday, December 03, 2010 15:25:20

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Sample ID: Blank

| Pb 207 | Pb 206 |> Tm 169

SOP No. SAC-MT-0001 Analyst: SHargrave

# Sample ID: Standard 1 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 15:27:43
Method File: E:\elandata\Method\000-USGS-SH.mth
Dataset File: E:\elandata\Dataset\101203b2\Standard 1.003

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			1346136.118	ug/L	1335621.243
[>	6 Li-1			1041438.503	ug/L	934249.375
1	9 Be	100.000000	1.638	28461.518	ug/L	5.667
L	11 B	500.000000	0.682	182323.061	ug/L	692.038
ſ	27 Al	5100.000000	1.418	20960978.084	ug/L	141997.254
	44 Ca	5100.000000	0.366	925736.642	ug/L	4828.832
	51 V	100.000000	0.336	676011.108	ug/L	-6165.420
]	52 Cr	100.000000	0.559	618934.384	ug/L	12075.780
1	55 Mn	100.000000	0.282	1019222.187	ug/L	2840.300
j	54 Fe	5100.000000	0.821	2563384.642	ug/L	60152.727
	57 Fe	5100.000000	0.531	1088582.427	ug/L	4668.089
	59 Co	100.000000	0.560	806037.995	ug/L	208.337
	60 Ni	100.000000	0.721	168832.817	ug/L	258.242
	65 Cu	100.000000	0.481	170825.533	ug/L	112.112
-	68 Zn	100.000000	0.600	58170.195	ug/L	3266.631
	75 As	100.000000	0.992	156821.092	ug/L	12778.670
-	82 Se	100.000000	1.809	16617.782	ug/L	1123.078
<u> </u>	72 Ge-1			1337723.436	ug/L	1346399.819
٢	107 Ag	50.000000	0.759	379647.295	ug/L	102.667
	111 Cd	100.000000	0.709	162588.906	ug/L	53.438
	121 Sb	50.000000	0.762	277418.627	ug/L	203.337
1	135 Ba	100.000000	0.662	185594.545	ug/L	168.669
Ĺ>	115 In-1			1598326.414	ug/L	1635973.207
Γ	205 TI	50.000000	2.238	1129981.632	ug/L	1761.577
	208 Pb	100.000000	0.822	3181053.116	ug/L	1127.373
L>	169 Tm-1			1663698.781	ug/L	1704328.816
Γ	50 Cr	100.000000	2.374	13767.969	ug/L	-115.435
[	53 Cr	100.000000	1.527	105619.697	ug/L	25460.847
	61 Ni	100.000000	0.389	4003.523	ug/L	1136.951
1	63 Cu	100.000000	0.576	129771.542	ug/L	97.002
	67 Zn	100.000000	1.082	6164.349	ug/L	1201.651
}	66 Zn	100.000000	1.237	30345.593	ug/L.	1609.570
1	76 Se	100.000000	11.629	-181226.659	ug/L	-185426.319
1	77 Se	100.000000	0.285	17304.788	ug/L	4670.533
1	78 Se	100.000000	0.412	50745.827	ug/L	13968.780

Report Date/Time: Friday, December 03, 2010 15:29:48

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Sample ID: Standard 1

İ	79 Br	100.000000	11.762	136570.604	ug/L	63058.114
Ĺ>	72 Ge			1337723.436	ug/L	1346399.819
ſ	108 Cd	100.000000	0.788	10984.094	ug/L	3.778
	114 Cd	100.000000	0.672	388483.484	ug/L	143.501
1	109 Ag	50.000000	0.570	131153.653	ug/L	32.667
حا	115 In			1598326.414	ug/L	1635973.207
Γ	208 207.977	100.000000	1.043	1626184.976	ug/L	595.695
	207 Pb	100.000000	0.666	673084.916	ug/L	237.671
	206 Pb	100.000000	0.547	881783.225	ug/L	294.007
·L>	169 Tm			1663698.781	ug/L	1704328.816

	Analyte	Mass	Int Std % Recovery
	Sc	45	int old 70 Hood tory
Γ>	Li-1	6	
1	Be	9	
Ĺ	В	11	
į	Al	27	
	Ca	44	
ί	٧	51	
į	Cr	52	
Ì	Mn	55	
i	Fe	54	
i	Fe	57	
ĺ	Co	59	
i	Ni	60	
i	Cu	65	
į	Zn	68	•
	As	75	
ĺ	Se	82	
[>	Ge-1	72	
Γ	Ag	107	
1	Cd	111	
	Sb	121	
1	Ba	135	
<u>L</u> >	in-1	115	
Γ	TI	205	
[    > 	Pb	208	
<u>_</u> >	Tm-1	169	
ļ	Cr	50	
ļ	Cr	53	
	Ni	61	
!	Cu	63	
ļ	Zn	67	
1	Zn	66	
ļ	Se	76	
ļ	Se	77	
ļ	Se	78 <del>-</del>	
1	Br	79	
[>	Ge	72	
ŗ	Cd	108	
	Cd	114	
1	Ag	109	
Ĺ> Γ	ln	115	
ļ	207.977	208	

| Pb 207 | Pb 206 |> Tm 169

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: ICV Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 15:31:55 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\ICV.004

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

	Mana Arabas	0 11	0 505	Adama Int. 32:	0	DI I I
	Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
_	45 Sc			1279031.221	ug/L	1335621.243
[>	6 Li-1	20 405005	2.000	937453.722	ug/L	934249.375
!	9 Be	80.465325	0.920	20615.343	ug/L	5.667
Ĺ	11 B	813.382481	1.189	266514.529	ug/L	692.038
ļ	27 AI	763.015645	0.268	3165653.764	ug/L	141997.254
ļ	44 Ca	816.666440	0.587	148040.860	ug/L	4828.832
ļ	51 V	79.020547	0.332	518115.410	ug/L	-6165.420
ļ	52 Cr	80.026791	0.035	483898.413	ug/L	12075.780
	55 Mn	80.966953	0.215	802857.117	ug/L	2840.300
-	54 Fe	817.664291	0.306	448362.853	ug/L	60152.727
1	57 Fe	817.333926	0.437	173404.255	ug/L	4668.089
	59 Co	81.409324	0.310	638017.875	ug/L	208.337
	60 Ni	81.135963	0.287	133231.126	ug/L	258.242
	65 Cu	81.811300	0.319	135898.042	ug/L	112.112
}	68 Zn	82.681295	0.654	47308.507	ug/L	3266.631
[	75 As	81.281196	0.334	126240.636	ug/L	12778.670
l	82 Se	83.786163	0.374	13713.286	ug/L	1123.078
حا	72 Ge-1			1300594.776	ug/L	1346399.819
٢	107 Ag	40.245887	0.417	301683.470	ug/L	102.667
	111 Cd	81.888740	0.349	131447.156	ug/L	53.438
	121 Sb	39.123620	0.872	214336.982	ug/L	203.337
	135 Ba	80.079671	0.124	146753.559	ug/L	168.669
L>	115 ln-1			1577824.948	ug/L	1635973.207
Γ	205 TI	42.559109	0.783	942071.806	ug/L	1761.577
	208 Pb	81.782233	0.456	2547603.186	ug/L	1127.373
حا	169 Tm-1			1629081.674	ug/L	1704328.816
Γ	50 Cr	66.271548	0.335	8832.949	ug/L	-115.435
	53 Cr	73.818427	0.831	82243.747	ug/L	25460.847
İ	61 Ni	81.112882	1.995	3364.823	ug/L	1136.951
İ	63 Cu	81.159450	0.592	102415.785	ug/L	97.002
İ	67 <b>Z</b> n	79.671530	0.657	5010.851	ug/L	1201.651
į	66 Zn	83.016036	0.371	24756.775	ug/L	1609.570
İ	76 Se	91.955173	51.627	-176435.213	ug/L	-185426.319
i	77 Se	71.824464	0.763	13355.470	ug/L	4670.533
i	78 Se	81.869715	0.416	42838.890	ug/L	13968.780
'		· •	- · · · · · · · · · · · · · · · · · · ·		<b>J</b> =	

Report Date/Time: Friday, December 03, 2010 15:33:59

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Sample ID: ICV

1	79 Br	-13.331705	15.824	51333.636	ug/L	63058.114
i>	72 Ge			1300594.776	ug/L	1346399.819
Ī	108 Cd	80.524038	0.055	8732.293	ug/L	3.778
ĺ	114 Cd	81.711557	0.392	313397.995	ug/L	143.501
1	109 Ag	40.319519	0.320	104410.141	ug/L	32.667
[>	115 In			1577824.948	ug/L	1635973.207
Γ	208 207.977	84.497468	0.501	1345581.670	ug/L	595.695
	207 Pb	84.753912	0.447	558628.366	ug/L	237.671
	206 Pb	74.506623	0.903	643393.150	ug/L	294.007
1>	169 Tm			1629081.674	ug/L	1704328.816

••••	. Ciliai O		11000101100
	Analyte	Mass	Int Std % Recovery
_	Sc	45	
[>	Li-1	6	100.343
ļ	Be	9	
Ĺ	В	11	
ļ	Al	27	
1	Ca	44	
!	V	51	
	Cr	52	
[	Mn	55	
ļ	Fe	54	
1	Fe	57	
}	Со	59	
1	Ni	60	
	Cu	65	
	Zn	68	
	As	75	
-	Se	82	
_>	Ge-1	72	96.598
Γ	Ag	107	
j	Cd	111	
	Sb	121	
1	Ba	135	
[>	In-1	115	96.446
Γ	TI	205	
1	Pb	208	
ر]	Tm-1	169	95.585
F	Cr	50	
	Cr	53	
İ	Ni	61	
	Cu	63	
	Zn	67	
	Zn	66	
	Se	76	
ļ	Se	77	
1	Se	78	
İ	Br	79	
L>	Ge	72	96.598
Γ	Cd	108	
1	Cd	114	
1	Ag	109	
<b>\</b> >	In	115	96.446
Γ	207.977	208	

Pb 207 Pb 206 Tm 169 95.585

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: ICB Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 15:36:13 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\ICB.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

Ju	inpro mocun	· · · · · · · ·				
	Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
_	45 Sc			1264022.376	ug/L	1335621.243
>	6 Li-1			920643.727	ug/L	934249.375
ļ	9 Be	0.002852	673.901	6.333	ug/L	5.667
L	11 B	6.696697	20.707	2833.642	ug/L	692.038
Γ	27 Al	2.688008	54.297	145595.488	ug/L	141997.254
	44 Ca	0.605941	142.565	4698.068	ug/L	4828.832
	51 V	-0.011142	857.656	-5937.115	ug/L	-6165.420
	52 Cr	0.047468	46.715	11763.530	ug/L	12075.780
	55 Mn	0.021070	11.280	2906.997	ug/L	2840.300
	54 Fe	-0.084221	1120.680	57183.380	ug/L	60152.727
	57 Fe	2.152700	16.551	4878.979	ug/L	4668.089
	59 Co	0.003310	103.321	223.671	ug/L	208.337
	60 Ni	-0.007380	132.119	233.799	ug/L	258.242
ļ	65 Cu	0.007341	99.289	118.618	ug/L	112.112
1	68 Zn	0.025393	306.586	3120.836	ug/L	3266.631
Ì	75 As	-0.141816	87.989	11961.306	ug/L	12778.670
j	82 Se	0.475514	38.131	1139.060	ug/L	1123.078
	72 Ge-1			1280847.604	ug/L	1346399.819
Γ	107 Ag	-0.000170	1093.803	97.667	ug/L	102.667
	111 Cd	0.000567	1167.015	52.412	ug/L	53.438
	121 Sb	0.177552	25.270	1167.444	ug/L	203.337
	135 Ba	0.005163	158.639	172.002	ug/L	168.669
L>	115 ln-1			1576845.565	ug/L.	1635973.207
Γ	205 TI	0.254608	16.112	7267.191	ug/L	1761.577
	208 Pb	0.001003	189.498	1102.370	ug/L	1127.373
[>	169 Tm-1			1619445.102	ug/L	1704328.816
Γ	50 Cr	-0.139603	100.084	-128.327	ug/L	-115.435
[	53 Cr	1.354356	59.384	25261.724	ug/L	25460.847
I	61 Ni	3.873601	74.115	1188.312	ug/L	· 1136.951
{	63 Cu	0.002451	233.425	95.335	ug/L.	97.002
ĺ	67 Zn	0.655277	45.428	1174.303	ug/L	1201.651
1	66 Zn	0.147604	37.607	1571.877	ug/L	1609.570
į	76 Se	-2.114351	386.181	-176459.639	ug/L	-185426.319
i	77 Se	0.038931	780.355	4447.754	ug/L	4670.533
i	78 Se	-0.677728	52.513	13049.806	ug/L	13968.780
•						

Ţ	79 Br	-36.243054	1.401	34328.360	ug/L	63058.114
را_	72 Ge			1280847.604	ug/L	1346399.819
Γ	108 Cd	0.012804	279.771	5.025	ug/L	3.778
]	114 Cd	-0.001279	213.122	133.406	ug/L	143.501
]	109 Ag	0.002387	96.660	37.667	ug/L	32.667
<u> </u>	115 ln			1576845.565	ug/L	1635973.207
Γ	208 207.977	0.000333	688.940	571.359	ug/L	595.695
	207 Pb	0.000841	51.405	231.338	ug/L	237.671
	206 Pb	0.002364	128.540	299.674	ug/L	294.007
<u></u>  >	169 Tm	•		1619445.102	ug/L	1704328.816

*****	ciliai o	.a.iaaia	11000401103
	Analyte	Mass	Int Std % Recovery
	Sc	45	
[>	Li-1	6	98.544
1	Be	9	
Ĺ	В	11	
Γ	Al	27	
ĺ	Ca	44	
	٧	51	
ļ	Cr	52	
Ì	Mn	55	
	Fe	54	
ļ	Fe	57	
	Co	59	
	Ni	60	
1	Cu	65	
	Zn	68	
}	As	75	
1	Se	82	
<u> </u> >	Ge-1	72	95.131
ſ	Ag	107	
	Cd	111	
Į	Sb	121	
Ī	Ba	135	
Ĺ>	ln-1	115	96.386
Ī	TI	205	
Ì	Pb	208	
Ĺ>	Tm-1	169	95.020
Γ	Cr	50	
	Cr	53	
	Ni	61	
ĺ	Cu	63	
1	Zn	67	
	<i>Z</i> n	66	
Ì	Se	76	
	Se	77	
İ	Se	78	
į	Br	79	
Ĺ>	Ge	72	95.131
Ī	Cd	108	
İ	Cd	114	
İ	Ag	109	
1>	In	115	96.386
Ī	207.977	208	

| Pb 207 | Pb 206 |> Tm 169 95.020

Report Date/Time: Friday, December 03, 2010 15:38:18

Page 3 Sample ID: ICB

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: LLSTD1

Sample Description: LLSTD1@10X

Batch ID:

Sample Date/Time: Friday, December 03, 2010 15:46:28 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\LLSTD1.006

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			1273785.839	ug/L	1335621.243
Γ>	6 Li-1			943672.711	ug/L	934249.375
1	9 Be	0.997918	2.288	263.005	ug/L	5.667
Į.	11 B	52.008848	1.322	17809.555	ug/L	692.038
Γ	27 Al	17.771957	6.590	204956.648	นg/L	141997,254
1	44 Ca	54.492444	1.214	14045.151	ug/L	4828.832
į	51 V	9.892826	3.491	58867.105	ug/L	-6165.420
	52 Cr	1.326651	4.454	19237.037	ug/L	12075.780
	55 Mn	0.961968	0.805	12089.474	ug/L	2840.300
ļ	54 Fe	49.836902	2.633	80816.135	ug/L	60152.727
ĺ	57 <b>F</b> e	53.643108	1.543	15388.755	ug/L	4668.089
-	59 Co	1.013797	0.679	8037.072	ug/L	208.337
1	60 Ni	4.153453	1.739	6963.811	ug/L	258.242
ĺ	65 Cu	1.064700	2.330	1850.753	ug/L	112.112
	68 Zn	7.000061	2.525	6803.047	ug/L	3266.631
1	75 As	1.097832	30.036	13697.680	ug/L	12778.670
ļ	82 Se	1.257198	25.279	1257.381	ug/L	1123.078
Ĺ>	72 Ge-1			1283554.361	ug/L	1346399.819
Ţ	107 Ag	0.497185	2.630	3812.809	ug/L	102.667
ĺ	111 Cd	0.987149	5.762	1629.926	ug/L	53.438
Ī	121 Sb	0.491692	3.772	2877.984	ug/L	203.337
	135 Ba	1.008829	0.465	2003.982	ug/L	168.669
L>	115 ln-1			1573480.194	ug/L	1635973.207
Γ	205 TI	0.550278	2.067	13723.116	ug/L	1761.577
	208 Pb	1.031727	1.465	32916.110	ug/L	1127.373
L>	169 Tm-1			1615118.728	ug/L	1704328.816
Γ	50 Cr	0.835637	35.158	1.337	ug/L	-115.435
	53 Cr	5.324513	9.621	28377.146	ug/L	25460.847
	61 Ni	5.933249	38.608	1247.343	ug/L	1136.951
	63 Cu	1.079187	3.258	1435.120	ug/L	97.002
	67 Zn	8.189775	16.960	1536.520	ug/L	1201.651
	66 Zn	6.922181	2.489	3443.941	ug/L	1609.570
	76 Se	-19.861076	78.712	-177343.282	ug/L	-185426.319
}	77 Se	2.852776	5.552	4799.267	ug/L	4670.533
[	78 Se	0.618406	95.899	13534.269	ug/L	13968.780

Report Date/Time: Friday, December 03, 2010 15:48:32

Page 1

Sample ID: LLSTD1

í	79 Br	-34.707631	2.146	35492.501	ug/L	63058.114
حا	72 Ge			1283554.361	ug/L	1346399.819
Γ	108 Cd	1.003302	9.781	112.113	ug/L	3.778
ł	114 Cd	0.945546	2.646	3751.620	ug/L	143.501
ĺ	109 Ag	0.496911	4.954	1313.380	ug/L	32.667
L>	115 In			1573480.194	ug/L	1635973.207
Γ	208 207.977	1.074007	1.232	17512.731	ug/L	595.695
	207 Pb	1.047952	2.289	7069.592	ug/L	237.671
	206 Pb	0.941371	1.530	8333.787	ug/L	294.007
<u> </u> >	169 Tm			1615118.728	ug/L	1704328.816

	Analyte	Mass	Int Std % Recovery
	Sc	45	
Γ>	Li-1	6	101.009
	Be	9	
L	В	11	
Γ	Al	27	
	Ca	44	
	٧	51	
1	Cr	52	
į	Mn	55	
	Fe	54	
	Fe	57	
	Со	59	
	Ni	60	
	Cu	65	
	Zn	68	
	As	75	
	Se	82	
L>	Ge-1	72	95.332
Γ	Ag	107	
	Cd	111	
ļ	Sb	121	
	Ва	135	
L>	In-1	115	96.180
Γ	TI	205	
	Pb	208	
ا	Tm-1	169	94.766
!	Cr	50	
ļ	Cr	53	
!	Ni	61	
!	Cu	63	
	Zn	67	
	Zn	66	
	Se	76	
	Se	77	
1	Se	78	
	Br	79 70	
حإ	Ge	72	95.332
	Cd	108	
	Cd	114	
ļ	Ag	109	مدند بسيس
[>	In	115	96.180
	207.977	208	

Report Date/Time: Friday, December 03, 2010 15:48:32

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Sample ID: LLSTD1

| Pb 207 | Pb 206 |> Tm 169 94.766

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: LLSTD2

Sample Description: LLSTD2@5X

Batch ID:

Sample Date/Time: Friday, December 03, 2010 15:50:45 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\LLSTD2.007

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			1279852.198	ug/L	1335621.243
Γ>	6 Li-1			958289.799	ug/L	934249.375
	9 Be	1.946940	4.055	515.688	ug/L	5.667
L	11 B	103.389111	0.289	35252.717	ug/L	692.038
٢	27 AI	69.758442	1.673	408183.870	ug/L	141997.254
	44 Ca	105.305611	0.434	22825.866	ug/L,	4828.832
]	51 V	19.991544	0.299	124842.255	ug/L	-6165.420
1	52 Cr	2.393660	1.201	25425.695	ug/L	12075.780
	55 Mn	1.936198	1.170	21567.487	ug/L	2840.300
	54 Fe	98.722838	2.559	103735.628	ug/L	60152.727
1	57 Fe	106.215951	0.707	26084.388	ug/L	4668.089
	59 Co	2.054959	1.377	16070.937	ug/L	208.337
Ì	60 Ni	2.002658	0.493	3481.982	ug/L	258.242
ł	65 Cu	2.083399	2.446	3515.938	ug/L	112.112
	68 Zn	11.717757	0.366	9280.052	ug/L	3266.631
	75 As	1.834371	8.649	14703.430	ug/L	12778.670
}	82 Se	2.337298	19.042	1416.715	ug/L	1123.078
<u> </u>	72 Ge-1			1282237.445	ug/L	1346399.819
Γ	107 Ag	1.004128	1.873	7562.825	ug/L	102.667
	111 Cd	2.023048	1.626	3272.032	ug/L	53.438
1	121 Sb	0.990430	2.038	5572.439	ug/L	203.337
	135 Ba	2.007959	2.956	3807.472	ug/L	168.669
L>	115 ln-1			1565505.459	ug/L	1635973.207
Γ	205 TI	1.026441	0.681	24175.839	ug/L	1761.577
1	208 Pb	2.113750	0.409	66377.077	ug/L	1127.373
<u> </u>	169 Tm-1			1616450.860	ug/L	1704328.816
Γ	50 Cr	0.977018	53.271	20.073	ug/L	-115.435
Į	53 Cr	8.080727	2.301	30469.105	ug/L	25460.847
	61 Ni	1.393285	126.526	1121.277	ug/L	1136.951
	63 Cu	2.091719	2.985	2692.261	ug/L	97.002
ł	67 Zn	13.498569	10.489	1787.370	ug/L	1201.651
	66 Zn	11.904233	2.187	4812.757	ug/L	1609.570
]	76 Se	6.889190	236.518	-176391.765	ug/L	-185426.319
1	77 Se	7.178151	4.201	5319.222	ug/L	4670.533
	78 Se	1.754423	20.688	13922.613	ug/L	13968.780

Report Date/Time: Friday, December 03, 2010 15:52:49

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Sample ID: LLSTD2

]	79 Br	-25.597819	2.680	41909.382	ug/L	63058.114
<u></u> [>	72 Ge			1282237.445	ug/L	1346399.819
Γ	108 Cd	1.985929	6.720	217.239	ug/L	3.778
	114 Cd	1.953733	2.540	7567.351	ug/L	143.501
1	109 Ag	1.004219	1.496	2610.833	ug/L	32.667
L>	115 <b>l</b> n			1565505.459	ug/L	1635973.207
Γ	208 207.977	2.193325	0.296	35207.460	ug/L	595.695
	207 Pb	2.194673	0.610	14573.336	ug/L	237.671
}	206 Pb	1.905233	1.125	16596.281	ug/L	294.007
L>	169 Tm			1616450.860	ug/L	1704328.816

Be       9           Be       9           B       11           AI       27           Ca       44           V       51           Cr       52           Mn       55           Fe       54           Fe       57           Co       59           Ni       60           Cu       65           Zn       68           As       75           Se       82           > Ge-1       72       95.235           Ag       107           Cd       111           Sb       121           Ba       135           > In-1       115       95.693           Pb       208           > Tm-1       169       94.844           Cr       53           Ni       61           Cu       63           Zn       67           Zn       66		Analyte	Mass	Int Std % Recovery
Be 9	_	Sc	45	400 570
L B 11				102.573
Ca       Ai       27         Ca       44         V       51         Cr       52         Mn       55         Fe       54         Fe       57         Co       59         Ni       60         Cu       65         Zn       68         As       75         Se       82         Se       82         Se       82         Se       82         Se       82         Se       82         Se       82         Se       82         Image: Second S				
Ca	Ļ			
V	1			
Cr   52   Mn   55   Fe   54   Fe   57   Co   59   Ni   60   Cu   65   Zn   68   As   75   Se   82   Se   82   95.235   Ag   107   Cd   111   Sb   121   Ba   135   In-1   115   95.693   Tl   205   Pb   208   Tm-1   169   94.844   Cr   50   Cr   53   Ni   61   Cu   63   Zn   67   Zn   66				
Mn	•			
Fe				
Fe				
Co	ļ			
Ni 60	ļ			
Cu 65   Zn 68   As 75   Se 82  > Ge-1 72 95.235   Ag 107   Cd 111   Sb 121   Ba 135  > In-1 115 95.693   Tl 205   Pb 208  > Tm-1 169 94.844   Cr 50   Cr 53   Ni 61   Cu 63   Zn 67   Zn 66	!			
Zn 68	!			
As 75   Se 82  > Ge-1 72 95.235   Ag 107   Cd 111   Sb 121   Ba 135  > In-1 115 95.693   Tl 205   Pb 208  > Tm-1 169 94.844   Cr 50   Cr 53   Ni 61   Cu 63   Zn 67   Zn 66				
Se	!			
Se-1 72 95.235	!			
Ag				
Cd 111   Sb 121   Ba 135  > In-1 115 95.693   Tl 205   Pb 208  > Tm-1 169 94.844   Cr 50   Cr 53   Ni 61   Cu 63   Zn 67   Zn 66	حيا			95.235
Sb 121   Ba 135  > In-1 115 95.693   Tl 205   Pb 208  > Tm-1 169 94.844   Cr 50   Cr 53   Ni 61   Cu 63   Zn 67   Zn 66				
Ba				
In-1	1			
TI       205         Pb       208         > Tm-1       169       94.844         Cr       50         Cr       53         Ni       61         Cu       63         Zn       67         Zn       66	1	Ва		
Pb 208  > Tm-1 169 94.844   Cr 50   Cr 53   Ni 61   Cu 63   Zn 67   Zn 66	L>		115	95.693
Tm-1	Γ			
Cr 50 Cr 53 Ni 61 Cu 63 Zn 67 Zn 66	l			
Cr 53   Ni 61   Cu 63   Zn 67   Zn 66	حيا			94.844
Ni 61   Cu 63   Zn 67   Zn 66	Γ			
Cu 63   Zn 67   Zn 66				
Zn 67   Zn 66	1			
Zn 66	ĺ			
•		Zn		
Se 76	1			
•		Se	76	
Se 77		Se	77	
Se 78	1	Se	78	
Br 79	1	Br	79	
[> Ge 72 95.235	<u> </u>	Ge	72	95.235
Γ Cd 108	Γ	Cd	108	
) Cd 114	1	Cd	114	
Ag 109	İ	Ag	109	
> In 115 95.693	Ĺ>	_		95.693
207.977 208	Ĩ			

Pb 207 Pb 206 L> Tm 169

94.844

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: ICSA
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 15:56:27 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\ICSA .008

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 Analyt	e Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	45 Sc			970027.955	ug/L	1335621.243
[>	6 Li-1			785275.710	ug/L	934249.375
	9 Be	0.038610	28.558	13.000	ug/L	5.667
Ĺ	11 B	1.929563	11.580	1111.097	ug/L	692.038
Γ	27 AI	99317.490377	0.962	301310809.524	ug/L	141997.254
	44 Ca	95673.660305	1.086	12837998.050	ug/L	4828.832
1	51 V	-0.028708	324.677	-4695.118	ug/L	-6165.420
	52 Cr	3.969147	3.530	26807.025	ug/L	12075.780
	55 Mn	6.305706	1.321	49709.432	ug/L	2840.300
	54 Fe	94772,613639	1.031	34607015.310	ug/L	60152.727
j	57 Fe	93752.881663	1.363	14806291.617	ug/L	4668.089
1	59 Co	1.697018	2.314	10312.686	ug/L	208.337
	60 Ni	1.910438	8.917	2582.484	ug/L	258.242
	65 Cu	-0.712480	22.073	-821.346	ug/L	112.112
)	68 Zn	-0.410687	11.429	2243.475	ug/L	3266.631
1	75 As	-0.088177	513.531	9337.273	ug/L	12778.670
	82 Se	2.030739	160.399	1084.707	ug/L	1153.346
حا	72 Ge-1			993746.947	ug/L	1346399.819
Γ	107 Ag	0.149110	5.394	903.064	ug/L	102.667
}	111 Cd	0.861089	7.950	1063.862	ug/L	53.438
	121 Sb	0.204831	10.984	977.742	ug/L	203.337
	135 Ba	2.757113	0.289	3867.842	ug/L	168.669
<u></u>	115 ln-1			1171413.826	ug/L.	1635973.207
Ţ	205 TI	0.214435	4.433	4813.487	ug/L	1761.577
	208 Pb	0.530037	0.788	13181.369	ug/L	1127.373
L>	169 Tm-1			1221352.694	ug/L	1704328.816
Γ	50 Cr	307.909093	6.756	31673.327	ug/L	-115.435
	53 Cr	28.544837	6.738	35821.591	ug/L	25460.847
	61 Ni	40.138226	6.115	1695.966	ug/L	1136.951
	63 Cu	3.924818	3.139	3852.264	ug/L	97.002
	67 Zn	22.951678	2.473	1734.328	ug/L	1201.651
	66 Zn	4.064634	2.810	2055.930	ug/L	1609.570
	76 Se	-128.668697	16.562	-139731.254	ug/L	-185426.319
	77 Se	63.852665	3.632	9453.914	ug/L	4670.533
	78 Se	3.441052	15.971	11252.570	ug/L	13968.780

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Sample ID: ICSA

	79 Br	7421.150671	21.756	4120519.188	ug/L	63058.114
حا	72 Ge			993746.947	ug/L	1346399.819
Γ	108 Cd	56.292640	4.723	4532.477	ug/L	3.778
1	114 Cd	3.540923	4.004	10180.018	ug/L	143.501
1	109 Ag	0.121030	3.978	256.014	ug/L	32.667
<u> </u>	115 In			1171413.826	ug/L	1635973.207
Γ	208 207.977	0.551871	2.158	7012.863	ug/L	595.695
	207 Pb	0.536097	1.205	2818.624	ug/L	237.671
1	206 Pb	0.485147	1.661	3349.882	ug/L	294.007
L>	169 Tm			1221352.694	ug/L	1704328.816

111	lemai S	lanuaru	necoveries
	Analyte	Mass	Int Std % Recovery
	Sc	45	
Γ>	Li-1	6	84.054
	Be	9	
L	В	11	
Γ	Al	27	
-	Ca	44	
	V	51	
	Cr	52	
	Mn	55	
	Fe	54	
ļ	Fe	57	
	Co	59	
	Ni	60	
1	Cu	65	
	Zn	68	
-	As	75	
1	Se	82	
_>	Ge-1	72	73.808
Γ	Ag	107	
	Cd	111	
	Sb	121	
	Ba	135	
[>	In-1	115	71.603
Γ	TI	205	
1	Pb	208	
<b>L&gt;</b>	Tm-1	169	71.662
٢	Cr	50	
ì	Cr	53	
	Ni	61	
	Cu	63	
	Zn	67	
	Zn	66	
	Se	76	
1	Se	77	
	Se	78	
	Br	79	
L>	Ge	72	73.808
Γ	Cd	108	
1	Cd	114	
	Ag	109	
[>	ln	115	71.603
٢	207.977	208	

Pb 207 Pb 206 Tm 71.662 169

Report Date/Time: Monday, December 06, 2010 09:44:36 Page 3

Sample ID: ICSA

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: ICSAB Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 16:00:42 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\ICSAB.009

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

	•	e Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
_	45 Sc			932770.015	ug/L	1335621.243
[>	6 Li-1			788098.191	ug/L	934249.375
!	9 Be	98.099083	0.711	21128.017	ug/L	5.667
Ĩ	11 B	456.853322	0.492	126112.736	ug/L	692.038
F	27 AI	99141.655212	1.047	290386365.103	ug/L	141997.254
	44 Ca	94958.535887	0.717	12301868.337	ug/L	4828.832
	51 V	104.140187	0.254	505119.618	ug/L	-6165.420
	52 Cr	102.879522	0.543	456454.345	ug/L	12075.780
	55 Mn	102.695149	0.323	750676.601	ug/L	2840.300
	54 Fe	93746.858001	0.093	33051217.552	ug/L	60152.727
1	57 Fe	92498.574393	0.351	14103875.179	ug/L	4668.089
	59 Co	97.213645	0.513	562007.116	ug/L	208.337
	60 Ni	94.209397	0.370	114091.672	ug/L	258.242
Į	65 Cu	88.204548	0.172	108081.014	ug/L	112.112
1	68 Zn	92.882763	0.376	38918.187	ug/L	3266.631
	75 As	103.758523	0.938	116362.046	ug/L	12778.670
	82 Se	109.781495	0.016	13056.597	ug/L	1153.346
L>	72 Ge-1			959471.299	ug/L	1346399.819
Γ	107 Ag	46.107447	0.729	248222.928	ug/L	102.667
1	111 Cd	95.602532	0.611	110213.475	ug/L	53.438
İ	121 Sb	48.817346	0.496	192052.024	ug/L	203.337
	135 Ba	103.993029	0.532	136842.709	ug/L	168.669
L>	115 in-1			1133276.201	ug/L	1635973.207
ſ	205 TI	52.932071	2.334	844883.572	ug/L	1761.577
	208 Pb	107.382713	0.278	2412792.554	ug/L	1127.373
<u></u>  >	169 Tm-1			1175160.737	ug/L	1704328.816
Γ	50 Cr	364.276511	2.703	36186.045	ug/L	-115.435
ĺ	53 Cr	123.529144	0.715	89308.996	ug/L	25460.847
	61 Ni	127.839368	1.887	3445.276	ug/L	1136.951
	63 Cu 🕜	91.554427	0.484	85223.923	ug/L	97.002
}	67 Zn	117.745782	1.434	5053.612	ug/L	1201.651
)	66 Zn	98.046369	0.240	21362.599	ug/L	1609.570
ĺ	76 Se	-38.034323	105.114	-132961.926	ug/L	-185426.319
ĺ	77 Se	162.797049	0.407	18116.033	ug/L	4670.533
į	78 Se	110.156098	0.678	39082.900	ug/L	13968.780

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Sample ID: ICSAB

1	79 Br	603.028250	39.169	365121.020	ug/L	63058.114
Ĺ>	72 Ge			959471.299	ug/L	1346399.819
ſ	108 Cd	155.250930	0.832	12089.391	ug/L	3.778
1	114 Cd	98.270284	0.610	270684.093	ug/L	143.501
	109 Ag	46.068732	0.196	85682.314	ug/L	32.667
<u> </u>	115 <b>i</b> n			1133276.201	ug/L	1635973.207
ſ	208 207.977	108.692531	0.202	1248489.093	ug/L	595.695
	207 Pb	106.157366	0.288	504700.572	ug/L	237.671
1	206 Pb	105.902521	0.429	659602.889	ug/L	294.007
L>	169 Tm			1175160.737	ug/L	1704328.816

	Analyte	Mass	Int Std % Recovery
	Sc	45	
[>	Li-1	6	84.356
	Be	9	
L	В	11	
ſ	Al	27	
1	Ca	44	
1	V	51	
1	Cr	52	
1	Mn	55	
1	Fe	54	
Ì	Fe	57	
Ì	Co	59	
Ì	Ni	60	
ĺ	Cu	65	
ĺ	Zn	68	
ĺ	As	75	
[	Se	82	
<u>_</u> >	Ge-1	72	71.262
Γ	Ag	107	
	Cd	111	
	Sb	121	
1	Ba	135	
L>	In-1	115	69.272
Ĺ	TI	205	
ļ İ	Pb	208	
[>	Tm-1	169	68.952
Ţ	Cr	50	
ļ	Cr	53	
	Ni	61	
}	Cu	63	
1	Zn	67	
1	Zn	66	
į	Se	76	
-	Se	77	
1	Se	78	
	Br	79	
حيا	Ge	72	71.262
Ţ	Cd	108	
1	Cd	114	
	Ag	109	
Į>	In	115	69.272
ſ	207.977	208	

Report Date/Time: Monday, December 06, 2010 09:46:08

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Sample ID: ICSAB

| Pb 207 | Pb 206 |> Tm 169 68.952

Report Date/Time: Monday, December 06, 2010 09:46:08

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Sample ID: ICSAB

SOP No. SAC-MT-0001 Analyst: SHargrave

#### Sample ID: Rinse Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 16:08:39 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\Rinse.010

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			1218571.241	ug/L	1335621.243
[>	6 Li-1			1072587.499	ug/L	934249.375
	9 Be	-0.011950	57.616	3.000	ug/L	5.667
L	11 B	1.075290	8.353	1196.446	ug/L	692.038
Γ	27 Al	42.707503	6.253	282798.795	ug/L	141997.254
	44 Ca	2.262192	10.123	4667.044	ug/L	4828.832
	51 V	-1.214537	20.361	-12913.671	ug/L	-6165.420
1	52 Cr	1.528373	0.607	19071.536	ug/L	12075.780
į	55 Mn	0.250323	2.981	4810.818	ug/L	2840.300
[	54 Fe	26.893457	0.562	65412.007	ug/L	60152.727
	57 Fe	21.726824	3.426	8297.512	ug/L	4668.089
	59 Co	-0.013367	13.716	89.001	ug/L	208.337
	60 Ni	0.249056	10.528	606.467	ug/L	258.242
	65 Cu	0.088909	13.088	235.972	ug/L	112.112
	68 Zn	-1.189861	5.706	2323.674	ug/L	3266.631
	75 As	-0.553072	112.206	10665.151	ug/L	12778.670
	82 Se	1.048633	4.790	1173.304	ug/L	1153.346
L>	72 Ge-1			1199207.227	ug/L	1346399.819
F	107 Ag	-0.006164	28.881	48.667	ug/L	102.667
	111 Cd	-0.016975	38.371	22.358	ug/L	53.438
	121 Sb	-0.016786	5.557	96.001	ug/L	203.337
Į	135 Ba	-0.013339	16.111	127.335	ug/L	168.669
L>	115 In-1			1453070.355	ug/L	1635973.207
Γ	205 TI	0.314143	15.597	7747.084	ug/L	1761.577
	208 Pb	-0.006848	5.847	777.352	ug/L	1127.373
L>	169 Tm-1			1465217.182	ug/L	1704328.816
Γ	50 Cr	-1.970818	4.072	<b>-</b> 348.078	ug/L	<b>-</b> 115.435
1	53 Cr	46.033096	0.629	55824.124	ug/L	25460.847
	61 Ni	20.660411	14.930	1545.193	ug/L	1136.951
	63 Cu	0.082828	12.353	182.674	ug/L	97.002
1	67 Zn	4.515018	22.809	1271.356	ug/L	1201.651
1	66 Zn	-1.305772	17.868	1096.932	ug/L	1609.570
1	76 Se	60.847880	22.423	-163516.844	ug/L	-185426.319
	77 Se	43.022289	4.248	9044.833	ug/L	4670.533
	78 Se	1.184207	11.656	12833.010	ug/L	13968.780

Report Date/Time: Monday, December 06, 2010 09:46:11

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Sample ID: Rinse

	79 Br	61.357323	16.912	96855.151	ug/L	63058.114
L>	72 Ge			1199207.227	ug/L	1346399.819
Ĺ	108 Cd	0.035429	171.949	6.902	ug/L	3.778
1	114 Cd	-0.016995	21.660	67.463	ug/L	143.501
1	109 Ag	-0.004341	14.305	18.667	ug/L	32.667
L>	115 ln			1453070.355	ug/L	1635973.207
Γ	208 207.977	-0.008016	1.218	397.346	ug/L	595.695
	207 Pb	-0.005512	83.570	171.669	ug/L	237.671
	206 Pb	-0.005715	41.877	208.337	ug/L	294.007
<b>L&gt;</b>	169 Tm			1465217.182	ug/L	1704328.816

	Analyte	Mass	Int Std % Recovery
	Sc	45	·
[>	Li-1	6	114.807
Ì	Be	9	
Ĺ	В	11	
Ī	Al	27	
Ì	Ca	44	
Í	٧	51	
1	Cr	52	
1	Mn	55	
1	Fe	54	
	Fe	57	
	Co	59	
	Ni	60	
	Cu	65	
	Zn	68	
	Ás	75	
	Se	82	
L>	Ge-1	72	89.068
Γ	Ag	107	
	Cd	111	
	Sb	121	
	Ba	135	
L>	In-1	115	88.820
Γ	ŢI	205	
	Pb	208	
حا	Tm-1	169	85.970
Γ	Cr	50	
1	Cr	53	
	Ni	61	
	Cu	63	
-	Zn	67	
	Zn	66	
1	Se	76	
	Se	77	
-	Se	78	
-	Br	79	
<u>[</u> >	Ge	72	89.068
Ţ	Cd	108	
ļ	Cd	114	
-	Ag	109	
>	ln	115	88.820
Γ	207.977	208	

Report Date/Time: Monday, December 06, 2010 09:46:11 Page 2 Sample ID: Rinse

Pb 207 Pb 206 Tm 169 85.970

Report Date/Time: Monday, December 06, 2010 09:46:11 Page 3

Sample ID: Rinse

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 1
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 16:16:38 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCV 1.011

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			1200840.412	ug/L	1335621.243
Γ>	6 Li-1			1008929.675	ug/L	934249.375
1	9 Be	97.971344	1.043	27010.873	ug/L	5.667
Ļ	11 B	471.312133	2.302	166500.889	ug/L	692.038
٢	27 Al	5344.704753	0.321	19302984.870	ug/L	141997.254
	44 Ca	5244.434285	0.288	836646.222	ug/L	4828.832
	51 V	100.326829	0.528	596163.619	ug/L	-6165.420
	52 Cr	100.614393	0.416	547315.320	ug/L	12075.780
1	55 Mn	98.931895	0.555	886334.910	ug/L	2840.300
1	54 Fe	5034.278847	0.616	2224809.237	ug/L	60152.727
1	57 Fe	5076.970014	0.367	952546.242	ug/L	4668.089
	59 Co	100.973040	0.291	715393.039	ug/L	208.337
-	60 Ni	100.718361	0.543	149465.720	ug/L	258.242
	65 Cu	101.255475	0.464	152037.988	ug/L	112.112
1	68 Zn	100.440734	0.714	51347.122	ug/L	3266.631
	75 As	102.680530	0.417	141242.197	ug/L	12778.670
	82 Se	104.972828	1.305	15343.519	ug/L .	1153.346
L>	72 Ge-1			1175873.942	ug/L	1346399.819
Γ	107 Ag	51.077066	1.137	343299.803	ug/L	102.667
	111 Cd	102.050152	0.568	146888.567	ug/L	53.438
	121 Sb	50.509896	1.319	248076.868	ug/L	203.337
	135 Ba	101.548355	1.425	166828.568	ug/L	168.669
L>	115 ln-1			1415030.168	ug/L	1635973.207
Γ	205 TI	51.804179	1.871	1029976.064	ug/L	1761.577
	208 Pb	102.420358	0.938	2866630.104	ug/L	1127.373
L>	169 Tm-1			1463921.714	ug/L	1704328.816
Γ	50 Cr	93.069522	2.437	11255.488	ug/L	-115.435
	53 Cr	124.683092	2.540	110285.037	ug/L	25460.847
	61 Ni	116.530906	1.092	3936.740	ug/L	1136.951
1	63 Cu	100.860349	0.224	115050.338	ug/L.	97.002
1	67 <b>Z</b> n	105.495131	1.344	5658.034	ug/L	1201.651
1	66 Zn	101.036497	0.359	26936.024	ug/L	1609.570
ĺ	76 Se	147.842638	18.571	-158040.529	ug/L	-185426.319
	77 Se	127.065202	1.837	18224.922	ug/L	4670.533
-	78 Se	104.651744	0.345	46113.436	ug/L	13968.780

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Sample ID: CCV 1

	79 Br	121.788345	6.215	134261.290	ug/L	63058.114
L>	72 Ge			1175873.942	ug/L	1346399.819
Γ	108 Cd	103.231205	0.487	10038.665	ug/L	3.778
1	114 Cd	101.776201	1.172	349997.538	ug/L	143.501
	109 Ag	51.181128	1.269	118837.186	ug/L	32.667
Ĺ>	115 ln			1415030.168	ug/L	1635973.207
Γ	208 207.977	102.480599	1.215	1466282.760	ug/L	595.695
1	207 Pb	102.355427	0.874	606187.421	ug/L	237.671
-	206 Pb	102.358828	0.591	794159.924	ug/L	294.007
L>	169 Tm			1463921.714	ug/L	1704328.816

internal Standard Recoveries							
	Analyte	Mass	Int Std % Recovery				
	Sc	45					
[>	Li-1	6	107.994				
1	Be	9					
L	В	11					
Γ	Al	27					
}	Ca	44					
	V	51					
	Cr	52					
	Mn	55					
ĺ	Fe	54					
Ì	Fe	57					
Į	Co	59					
	Ni	60					
	Cu	65					
-	Zn	68					
{	As	75					
	Se	82					
<u>L</u> >	Ge-1	72	87.335				
Γ	Ag	107					
	Cd	111					
	Sb	121					
1	Ba	135					
[>	In-1	115	86.495				
Γ	TI	205					
	Pb	208					
Ļ>	Tm-1	169	85.894				
ſ	Cr	50					
ļ	Cr	53					
ł	Ni	61					
1	Cu	63					
	Zn	67					
	Zn	66					
	Se	76					
	Se	77					
	Se	78					
Į	Br	79					
[>	Ge	72	87.335				
Γ	Cd	108					
	Cd	114					
Į	Ag	109					
L>	in	115	86.495				
Γ	207.977	208					

Report Date/Time: Monday, December 06, 2010 09:46:14 Page 2

Sample ID: CCV 1

Рb 207 Pb 206 Tm 169 85.894

SOP No. SAC-MT-0001 Analyst: SHargrave Sample ID: CCB 1 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 16:20:56 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCB 1.012

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			1219505.239	ug/L	1335621.243
Γ>	6 Li-1			1034155.415	ug/L	934249.375
1	9 Be	-0.010361	71.544	3.333	ug/L	5.667
Ĺ	11 B	3.719155	21.008	2105.685	ug/L	692.038
ſ	27 Al	-1.182571	44.839	121122.053	ug/L	141997.254
1	44 Ca	-1.453250	66.148	4031.278	ug/L	4828.832
	51 V	-0.767390	27.209	-10100.788	ug/L	-6165.420
	52 Cr	1.540763	0.967	18977.923	ug/L	12075.780
1	55 Mn	-0.011488	20.288	2404.788	ug/L	2840.300
-	54 Fe	25.041410	1.875	64054.811	ug/L	60152.727
1	57 Fe	19.780062	1.180	7859.972	ug/L	4668.089
	59 Co	0.002003	43.991	198.336	ug/L	208.337
1	60 Ni	-0.010499	49.992	212.335	ug/L	258.242
	65 Cu	0.008214	46.018	111.493	ug/L	112.112
	68 Zn	0.306796	15.479	3034.819	ug/L	3266.631
	75 As	0.028845	559.494	11323.472	ug/L	12778.670
}	82 Se	1.032434	15.678	1161.241	ug/L	1153.346
5	72 Ge-1			1189136.614	ug/L	1346399,819
Γ	107 Ag	0.000655	94.501	95.334	ug/L	102.667
	111 Cd	-0.002180	655.995	44.104	ug/L	53.438
- [	121 Sb	-0.010276	37.139	128.335	ug/L	203,337
1	135 Ba	-0.000152	7318.221	149.002	ug/L	168,669
_>	115 ln-1			1447436.345	ug/L	1635973.207
Γ	205 TI	0.670376	20.935	15021.408	ug/L	1761.577
İ	208 Pb	0.000198	438.983	988.364	ug/L	1127.373
Ĺ>	169 Tm-1			1485663.579	ug/L	1704328.816
Γ	50 Cr	-1.323297	6.640	-265.227	ug/L	-115.435
1	53 Cr	33.468432	0.452	46384.100	ug/L	25460.847
l	61 Ni	19.164189	17.466	1493.825	ug/L	1136.951
	63 Cu	-0.002032	256.067	83.335	ug/L	97.002
	67 Zn	4.575552	26.246	1263.351	ug/L	1201.651
ĺ	66 Zn	0.140479	54.032	1457.467	ug/L	1609.570
	76 Se	70.206993	43.254	-161893.608	ug/L	-185426.319
i	77 Se	29.718569	3.717	7470.402	ug/L	4670.533
j	78 Se	1.441674	7.469	12809.738	ug/L	13968.780

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Sample ID: CCB 1

1	79 Br	-21.736424	14.459	41402.874	ug/L	63058.114
L>	72 Ge			1189136.614	ug/L	1346399.819
ſ	108 Cd	0.022131	319.940	5.532	ug/L	3.778
1	114 Cd	0.003614	64.243	139.686	ug/L	143.501
	109 Ag	0.003688	45.186	37.667	ug/L	32.667
L>	115 ln			1447436.345	ug/L	1635973.207
Γ	208 207.977	0.000929	214.817	532.689	ug/L	595.695
	207 Pb	-0.000265	642.217	205.670	ug/L	237.671
1	206 Pb	-0.000794	77.937	250.005	ug/L	294.007
İ>	169 Tm			1485663.579	ug/L	1704328.816

1111	emai 5	lanuaru	necoveries
	Analyte	Mass	Int Std % Recovery
	Sc	45	
[>	Li-1	6	110.694
	Be	9	
L	В	11	
ſ	Al	27	
i	Ca	44	
	٧	51	
	Cr	52	
	Mn	55	
1	Fe	54	
	Fe	57	
	Co	59	
	Ni	60	
ĺ	Cu	65	
1	Zn	68	
	As	75	
ļ	Se	82	
<u>L</u> >	Ge-1	72	88.320
ſ	Ag	107	
}	Cd	111	
	Sb	121	
1	Ba	135	
[>	In-1	115	88.476
{	TI	205	
ĺ	Pb	208	
L>	Tm-1	169	87.170
Γ	Cr	50	
}	Cr	53	
1	Ni	61	
	Cu	63	
	Zn	67	
	Zn	66	
	Se	76	
1	Se	77	
	Se	78	
Ì	Br	79	
į>	Ge	72	88.320
Ī	Cd	108	
[    -	Cd	114	
İ	Ag	109	
İs	ln	115	88.476
Ī	207.977	208	
1			

Pb 207 Pb 206 169 Tm 87.170

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Sample ID: CCB 1

SOP No. SAC-MT-0001 Analyst: SHargrave

#### Sample ID: BLK RECAL

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 16:20:56 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCB 1.012

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

M	lass Analyte	Conc. Mean Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
	45 Sc		1219505.239	ug/L	
[>	6 Li-1		1034155.415	ug/L	
-	9 Be		3.333	ug/L	
L	11 B		2105.685	ug/L	
Γ	27 AI		121122.053	ug/L	
1	44 Ca		4031.278	ug/L	
	51 V		-10100.788	ug/L	
	52 Cr		18977.923	ug/L	
1	55 Mn		2404.788	ug/L	
Į	54 Fe		64054.811	ug/L	
[	57 Fe		7859.972	ug/L	
	59 Co		198.336	ug/L	
	60 Ni		212.335	ug/L	
ĺ	65 Cu		111.493	ug/L	
}	68 Zn		3034.819	ug/L	
]	75 As		11323.472	ug/L	
	82 Se		1161.241	ug/L	
L>	72 Ge-1		1189136.614	ug/L	
ſ	107 Ag		95.334	ug/L	
į	111 Cd		44.104	ug/L	
1	121 Sb		128.335	ug/L	
	135 Ba		149.002	ug/ <b>L</b>	
L>	115 ln-1		1447436.345	ug/L	
٢	205 TI		15021.408	ug/L	
	208 Pb		988.364	ug/L	
[>	169 Tm-1		1485663.579	ug/L	
Ţ	50 Cr		-265.227	ug/L	
l	53 Cr		46384.100	ug/L	
	61 Ni		1493.825	ug/L	
	63 Cu		83.335	ug/L	
	67 Zn		1263.351	ug/L	
]	66 Zn		1457.467	ug/L	
i	76 Se		-161893.608	ug/L	
1	77 Se		7470.402	ug/L	
ı				•	

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Sample ID: BLK RECAL

1	79 Br	41402.874	ug/L
Ĺ>	72 Ge	1189136.614	ug/L
ſ	108 Cd	5.532	ug/L
	114 Cd	139.686	ug/L
İ	109 Ag	37.667	ug/L
Ĺ>	115 in	1447436.345	ug/L
ſ	208 207.977	532.689	ug/L
}	207 Pb	205.670	ug/L
	206 Pb	250.005	ug/L
<u>L</u> >	169 Tm	1485663.579	ug/L

	.orr.a. o		
	Analyte	Mass	Int Std % Recovery
	Sc	45	
Γ>	Li-1	6	
[ [	Be	9	
L	В	11	
ſ	Al	27	
1	Ca	44	
}	V	51	
	Cr	52	
	Mn	55	
	Fe	54	
-	Fe	57	
1	Co	59	
1	Ni	60	
ĺ	Cu	65	
	Zn	68	
1	As	75	
1	Se	82	
<u> </u>	Ge-1	72	
٢	Ag	107	
1	Cd	111	
	Sb	121	
	Ва	135	
L>	In-1	115	
Γ	TI	205	
	Pb	208	
L>	Tm-1	169	
Γ	Cr	50	
1	Cr	53	
ļ	Ni	61	
	Cu	63	
	Zn	67	
1	Zn	66	
}	Se	76	
Ì	Se	77	
ļ	Se	78	
į	Br	79	
[>	Ge	72	
ļ	Cd	108	
!	Cd	114	
    -	Ag	109	
<u>[</u> >	ln	115	
ſ	207.977	208	

Pb 207 Pb 206 Tm 169

Report Date/Time: Monday, December 06, 2010 09:48:50 Page 3

Sample ID: BLK RECAL

SOP No. SAC-MT-0001 Analyst: SHargrave

#### Sample ID: STD1RECAL

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 16:16:38 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCV 1.011

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			1200840.412	ug/L	1219505.239
Γ>	6 Li-1			1008929.675	ug/L	1034155.415
-	9 Be	100.000000	1.043	27010.873	ug/L	3.333
Ł	11 B	500.000000	2.320	166500.889	ug/L	2105.685
Γ	27 AI	5100.000000	0.321	19302984.870	ug/L	121122.053
ļ	44 Ca	5100.000000	0.288	836646.222	ug/L	4031.278
	51 V	100.000000	0.524	596163.619	ug/L	-10100.788
1	52 Cr	100.000000	0.423	547315.320	ug/L	18977.923
	55 Mn	100.000000	0.555	886334.910	ug/L	2404.788
-	54 Fe	5100.000000	0.619	2224809.237	ug/L	64054.811
	57 Fe	5100.000000	0.368	952546.242	ug/L	7859.972
	59 Co	100.000000	0.291	715393.039	ug/L	198.336
1	60 Ni	100.000000	0.543	149465.720	ug/L	212.335
	65 Cu	100.000000	0.464	152037.988	ug/L	111.493
	68 Zn	100.000000	0.716	51347.122	ug/L	3034.819
	75 As	100.000000	0.417	141242.197	ug/L	11323.472
	82 Se	100.000000	1.318	15343.519	ug/L	1161.241
L>	72 Ge-1			1175873.942	ug/L	1189136.614
٢	107 Ag	50.000000	1.137	343299.803	ug/L	95.334
}	111 Cd	100.000000	0.568	146888.567	ug/L	44.104
}	121 Sb	50.000000	1.319	248076.868	ug/L	128.335
	135 Ba	100.000000	1.425	166828.568	ug/L	149.002
L>	115 ln-1			1415030.168	ug/L	1447436.345
٢	205 TI	50.000000	1.895	1029976.064	ug/L	15021.408
	208 Pb	100.000000	0.938	2866630.104	ug/L	988.364
<u> </u> >	169 Tm-1			1463921.714	ug/L	1485663.579
ſ	50 Cr	100.000000	2.403	11255.488	ug/L	-265.227
1	53 Cr	100.000000	3.472	110285.037	ug/L	46384.100
]	61 Ni	100.000000	1.306	3936.740	ug/L	1493.825
	63 Cu	100.000000	0.224	115050.338	ug/L	83.335
	67 Zn	100.000000	1.405	5658.034	ug/L	1263.351
1	66 Zn	100.000000	0.360	26936.024	ug/L	1457.467
	76 Se	100.000000	35.346	-158040.529	ug/L	-161893.608
ĺ	77 Se	100.000000	2.398	18224.922	ug/L	7470.402
	78 Se	100.000000	0.349	46113.436	ug/L	12809.738

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Sample ID: STD1RECAL

	79 Br	100.000000	5.274	134261.290	ug/L	41402.874
_>	72 Ge			1175873.942	ug/L	1189136.614
Γ	108 Cd	100.000000	0.487	10038.665	ug/L	5.532
1	114 Cd	100.000000	1.172	349997.538	ug/L	139.686
1	109 Ag	50.000000	1.269	118837.186	ug/L	37.667
L>	115 ln			1415030.168	ug/L	1447436.345
Γ	208 207.977	100.000000	1.215	1466282.760	ug/L	532.689
	207 Pb	100.000000	0.874	606187.421	ug/L	205.670
	206 Pb	100.000000	0.591	794159.924	ug/L	250.005
<u> </u>	169 Tm			1463921.714	ug/L	1485663.579

# Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
	Sc	45	
Γ>	Li-1	6	
1	Be	9	
L	В	11	
Γ	Al	27	
	Ca	44	
	V	51	
	Cr	52	
ł	Mn	55	
1	Fe	54	
	Fe	57	
ł	Co	59	
	Ni	60	
Ì	Cu	65	
1	Zn	68	
1	As	75	
	Se	82	
L>	Ge-1	72	
Γ	Ag	107	
1	Cd	111	
{	Sb	121	
	Ва	135	
Ĺ>	In-1	115	
Ţ	TI	205	
ļ	Pb	208	
L>	Tm-1	169	
Γ	Cr	50	
	Cr	53	
	Ni	61	
1	Cu	63	
1	Zn	67	
ì	Zn	66	
	Se	76	
1	Se	- 77	
	Se	78	
	Br	79	
L>	Ge	72	
Γ	Cd	108	
	Cd	114	
l	Ag	109	
<u></u>  >	In	115	
٢	207.977	208	

Report Date/Time: Monday, December 06, 2010 09:48:58

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Sample ID: STD1RECAL

| Pb 207 | Pb 206 |> Tm 169

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 2
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 16:25:14 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCV 2.013

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			1191442.266	ug/L	1219505.239
Γ>	6 Li-1			1014781.140	ug/L	1034155.415
1	9 Be	98.408276	0.460	26738.060	ug/L	3.333
Ĺ	11 B	498.862971	1.513	167113.876	ug/L	2105.685
F	27 AI	5100.429695	0.808	19207126.636	ug/L	121122.053
	44 Ca	5092.724593	0.352	831233.934	ug/L	4031.278
	51 V	99.173832	0.838	588154.132	ug/L	-10100.788
	52 Cr	98.993348	0.396	539255.727	ug/L	18977.923
	55 Mn	99.217803	0.301	874991.635	ug/L	2404.788
	54 Fe	5046.326164	0.779	2190908.891	ug/L	64054.811
	57 Fe	5063.998045	0.811	941067.857	ug/L	7859.972
	59 Co	99.389342	0.633	707414.646	ug/L	198.336
-	60 Ni	99.922053	0.918	148589.886	ug/L	212.335
1	65 Cu	99.953315	0.844	151194.561	ug/L	111.493
]	68 Zn	99.437920	1.079	50814.266	ug/L	3034.819
1	75 As	99.227340	0.498	139527.384	ug/L	11323.472
	82 Se	99.869991	1.544	15247.096	ug/L	1161.241
Ĺ>	72 Ge-1			1169930.891	ug/L	1189136.614
Γ	107 Ag	49.586069	0.797	338489.378	ug/L	95.334
	111 Cd	99.233380	0.543	144909.183	ug/L	44.104
1	121 Sb	49.670701	0.660	245020.667	ug/L	128.335
Ì	135 Ba	99.467869	0.260	164990.945	ug/L	149.002
<u> </u>	115 ln-1			1406701.417	ug/L	1447436.345
ſ	205 TI	49.799396	2.193	1024454.331	ug/L	15021.408
1	208 Pb	99.254369	0.703	2841229.527	ug/L	988.364
[>	169 Tm-1			1461813.523	ug/L	1485663.579
ŗ	50 Cr	98.725891	0.215	11053.146	ug/L	-265.227
]	53 Cr	96.924884	1.917	107750.195	ug/L	46384.100
]	61 Ni	97.117636	1.574	3846.587	ug/L	1493.825
1	63 Cu	100.075983	0.722	114550.542	ug/L	83.335
}	67 <b>Z</b> n	97.383726	0.721	5515.352	ug/L	1263.351
	66 Zn	99.988884	0.897	26797.070	ug/L	1457.467
-	76 Se	68.639254	59.305	-157877.524	ug/L	-161893.608
İ	77 Se	96.581036	1.300	17764.344	ug/L	7470.402
1	78 Se	98.746131	1.322	45460.424	ug/L	12809.738

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	79 Br	89.794442	2.184	124088.168	ug/L	41402.874
را>	72 <b>G</b> e			1169930.891	ug/L	1189136.614
Γ	108 Cd	98.903188	1.624	9869.610	ug/L	5.532
1	114 Cd	99.427800	1.463	345962.415	ug/L	139.686
l	109 Ag	49.636409	0.908	117292.306	ug/L	37.667
[>	115 ln			1406701.417	ug/L	1447436.345
٢	208 207.977	99.162239	0.876	1451959.738	ug/L	532.689
	207 Pb	99.539211	0.913	602511.843	ug/L	205.670
	206 Pb	99.207057	0.293	786757.946	ug/L	250.005
L>	169 Tm			1461813.523	ug/L	1485663.579

# **Internal Standard Recoveries**

****	ciriai o	tanuan u	11000101100
	Analyte	Mass	Int Std % Recovery
_	Sc	45	
Γ>	Li-1	6	98.127
	Be	9	
L	В	11	
Γ	Al	27	
	Ca	44	
	V	51	
	Cr	52	
	Mn	55	
1	Fe	54	
1	Fe	57	
1	Co	59	
ł	Ni	60	
l	Cu	65	
1	Zn	68	
İ	As	75	
İ	Se	82	
L>	Ge-1	72	98.385
Ī	Ag	107	
1	Cd	111	
ĺ	Sb	121	
	Ba	135	
[>	In-1	115	97.186
Γ	T!	205	
	Pb	208	
L>	Tm-1	169	98.395
٢	Cr	50	
	Cr	53	
	Ni	61	
}	Cu	63	
Ì	Zn	67	
	Zn	66	
	Se	76	
İ	Se	77	
1	Se	78	
Ì	Br	79	
L>	Ge	72	98.385
Ī	Cd	108	
İ	Cd	114	
	Ag	109	
İ,	In	115	97.186
ř	207.977	208	
ı	····	_,_	

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| Pb 207 | Pb 206 |> Tm 169

98.395

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 2
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 16:29:31 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCB 2.014

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 Moon	Conc DSD	Meac Intone Mach	Comple Linia	Diank Intensity
	45 Sc	Conc. Mean	CONG. NOD	Meas. Intens. Mean 1214088.171	Sample Unit ug/L	Blank Intensity 1219505,239
г.	45 30 6 Li-1			1054187.385	-	
>	9 Be	0.013966	30.560	7.333	ug/L	1034155.415
l I	11 B	0.013900	307.105	2228.394	ug/L	3.333
L	27 Al	0.233979	100.940		ug/L	2105.685
1	44 Ca	0.253979	159.220	121654.853	ug/L	121122.053
1	44 Ca 51 V	-0.148564		4045.619	ug/L	4031.278
] }	51 V 52 Cr		64.653	-10981.590	ug/L	-10100.788
j }		0.090425	29.462	19404.206	ug/L	18977.923
į I	55 Mn	0.010986	78.872	2495.823	ug/L	2404.788
ŀ	54 Fe	0.314334	66.624	64002.703	ug/L	64054.811
l l	57 Fe	0.383280	137.233	7909.037	ug/L	7859.972
ļ	59 Co	0.001973	22.790	212.004	ug/L	198.336
ļ	60 Ni	-0.006911	197.988	201.245	ug/L	212.335
ļ	65 Cu	0.003938	71.064	117.188	ug/L	111.493
ŀ	68 Zn	0.008561	2304.853	3030.359	ug/L	3034.819
ļ	75 As	-0.025021	1177.375	11256.859	ug/L	11323.472
ļ	82 Se	-0.126883	58.796	1139.697	ug/L	1161.241
Ľ>	72 Ge-1			1185681.010	ug/L	1189136.614
1	107 Ag	0.000854	129.938	101.334	ug/L	95.334
ļ	111 Cd	0.001784	429.017	46.849	ug/L	44.104
ļ	121 Sb	0.003356	99.259	145.335	ug/L	128.335
-	135 Ba	0.004097	194.397	156.002	ug/L	149.002
<u>_</u> >	115 ln-1			1447859.436	ug/L	1447436.345
ſ	205 TI	0.043023	337.227	16055.704	ug/L	15021.408
l	208 Pb	0.001038	162.413	1028.033	ug/L	988.364
L>	169 Tm-1			1499479.869	ug/L	1485663.579
Γ	50 Cr	0.026190	174.368	-261.398	ug/L	-265.227
	53 Cr	-1.401240	26.752	45338.943	ug/L	46384.100
	61 Ni	-3.206694	76.375	1409.771	ug/L	1493.825
	63 Cu	-0.002380	357.187	80.335	ug/L	83.335
	67 Zn	-0.412638	277.451	1241.339	ug/L	1263.351
	66 Zn	-0.015500	1031.111	1449.129	ug/L	1457.467
ļ	76 Se	-21.168025	162.867	-161861.468	ug/L	-161893.608
Į	77 Se	-1.572777	13.295	7276.911	ug/L	7470.402
ĺ	78 Se	0.301057	189.517	12874.152	ug/L	12809.738
•					-	

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]	79 Br	-2.925189	79.216	38526.284	ug/L	41402.874
Ĺ>	72 Ge			1185681.010	ug/L	1189136.614
Γ	108 Cd	-0.021332	313.249	3.347	ug/L	5.532
1	114 Cd	-0.004820	49.780	122.503	ug/ <b>L</b>	139,686
	109 Ag	0.003687	61.268	46.667	ug/L	37.667
<u> </u> >	115 in			1447859.436	ug/L	1447436.345
Γ	208 207.977	0.000293	418.539	542.023	ug/L	532.689
]	207 Pb	0.001087	199.539	214.337	ug/L	205.670
i	206 Pb	0.002376	170.040	271.673	ug/L	250.005
Ĺ>	169 Tm			1499479.869	ug/L	1485663.579

# Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
	Sc	45	int old 70 Hoodvery
Γ>	Li-1	6	101.937
	Be	9	
i	В	11	
Ē	Al	27	
İ	Ca	44	
ĺ	٧	51	
	Cr	52	
1	Mn	55	
ł	Fe	54	
[	Fe	57	
}	Со	59	
	Ni	60	
	Cu	65	
Ì	Zn	68	
1	As	75	
}	Se	82	
Ļ>	Ge-1	72	99.709
1	Ag	107	
1	Cd	111	
}	Sb	121	
}	Ba	135	100.000
إ>	In-1	115	100.029
ì	TI	205	
1	Pb Tm 1	208	100.930
[>	Tm-1 Cr	169 50	100.930
l I	Cr	53	
	Ni	61	
	Cu	63	
!	Zn	67	
l I	Zn	66	
i	Se	76	
i	Se	77	
i	Se	78	
	Br	79	
<u> </u>  >	Ge	72	99.709
۲	Cd	108	
i	Cd	114	
i	Ag	109	
	In	115	100.029
ſ	207.977	208	
[>			100.029

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Pb 207
Pb 206
Tm 169

Tm 169 100.930

Report Date/Time: Monday, December 06, 2010 09:49:10

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SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 3
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 17:15:50 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\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			1157733.417	ug/L	1219505.239
[>	6 Li-1			1085406.195	ug/L	1034155.415
	9 Be	93.426972	0.438	27151.136	ug/L	3.333
L	11 B	451.205364	1.464	161888.595	ug/L	2105.685
Γ	27 AI	4996.888808	0.552	18426594.537	ug/L	121122.053
	44 Ca	5051.527236	0.342	807329.923	ug/L	4031.278
	51 V	98.762946	0.295	573477.056	ug/L	-10100.788
	52 Cr	99.226404	0.325	529207.425	ug/L	18977.923
	55 Mn	100.054038	0.922	863925.942	ug/L	2404.788
	54 Fe	5174.173129	0.360	2198047.577	ug/L	64054.811
	57 Fe	5105.854118	0.380	929033.117	ug/L	7859.972
	59 Co	100.016692	0.173	697047.527	ug/L	198.336
	60 Ni	100.393580	0.376	146180.753	ug/L	212.335
	65 Cu	100.436842	0.021	148761.751	ug/L	111.493
	68 <b>Z</b> n	100.175175	0.713	50100.541	ug/L	3034.819
	75 As	98.049860	0.593	135123.922	ug/L	11323.472
	82 Se	100.475451	0.582	15014.252	ug/L	1161.241
L>	72 Ge-1			1145496.938	ug/L	1189136.614
ſ	107 Ag	48.563108	0.390	332888.692	ug/L	95.334
1	111 Cd	97.644639	0.006	143182.776	ug/L.	44.104
1	121 Sb	49.137062	0.114	243400.180	ug/L	128.335
	135 Ba	96.873852	0.256	161356.760	ug/L	149.002
L>	115 ln-1			1412505.203	ug/L	1447436.345
Γ	205 TI	47.863443	1.033	993967.441	ug/L	15021.408
	208 Pb	96.125771	0.507	2775866.879	ug/L	988.364
L>	169 Tm-1			1474597.104	ug/L	1485663.579
ſ	50 Cr	100.448970	0.915	11015.841	ug/L	-265.227
1	53 Cr	95.983231	2.934	104907.273	ug/L	46384.100
1	61 Ni	92.908776	1.537	3665.287	ug/L	1493.825
	63 Cu	100.692348	0.693	112855.274	ug/L	83.335
	67 Zn	96.377102	1.329	5356.639	ug/L	1263.351
	66 Zn	100.163511	1.117	26280.070	ug/L	1457.467
1	76 Se	43.483162	81.012	-155080.958	ug/L	-161893.608
1	77 Se	94.274211	3.751	17149.835	ug/L	7470.402
Ì	78 Se	98.203403	0.654	44336.738	ug/L	12809.738

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1	79 Br	33.267998	18.147	70096.831	ug/L	41402.874
<u> </u>	72 Ge			1145496.938	ug/L	1189136.614
ſ	108 Cd	97.830657	0.317	9803.605	ug/L	5.532
	114 Cd	97.865967	0.485	341966.308	ug/L	139.686
į	109 Ag	48.611555	0.528	115350.211	ug/L	37.667
_>	115 In			1412505.203	ug/L	1447436.345
F	208 207.977	96.717968	0.470	1428635.492	ug/L	532.689
	207 Pb	95.598665	0.266	583762.091	ug/L	205.670
Į	206 Pb	95.434714	0.786	763469.295	ug/L	250.005
(>	169 Tm			1474597.104	ug/L	1485663.579

## Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
	Sc	45	
[>	Li-1	6	104.956
i	Be	9	
ì	В	11	
ī	Al	27	
ĺ	Ca	44	
į	٧	51	
j	Cr	52	
i	Mn	55	
ĺ	Fe	54	
Ì	Fe	57	
Ì	Co	59	
1	Ni	60	
1	Cu	65	
1	Zn	68	
}	As	75	
1	Se	82	
>	Ge-1	72	96.330
Γ	Ag	107	
1	Cd	111	
i	Sb	121	
	Ba	135	
L>	ln-1	115	97.587
Γ	TI	205	
1	Pb	208	
<u>_</u> >	Tm-1	169	99.255
1	Cr	50	
ĺ	Cr	53	
	Ni	61	
ļ	Cu	63	
ļ	Zn	67	
ļ	Zn	66	
ļ	Se	76 	
1	Se	77	
ļ	Se	78	
	Br	79	00.000
ļ>	Ge	72	96.330
	Cd	108	
	Cd	114	
-	Ag	109	Am r
۲>	In	115	97.587
	207.977	208	

| Pb 207 | Pb 206 |> Tm 169 99.255

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 3
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 17:20:07 Method File: E:\elandata\Method\000-USGS-SH.mth Dataset File: E:\elandata\Dataset\101203b2\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			1193027.589	ug/L	1219505.239
[>	6 Li-1			1075596.389	ug/L	1034155.415
ļ	9 Be	0.000697	765.877	3.667	ug/L	3.333
Ĺ	11 B	2.569160	57.231	3088.095	ug/L	2105.685
Γ	27 Al	-0.075216	288.408	119370.924	ug/L	121122.053
	44 Ca	1.230494	6.300	4183.041	ug/L	4031.278
	51 V	0.007958	2914.695	-9927.621	ug/L	-10100.788
	52 Cr	0.229236	24.489	19958.925	ug/L	18977.923
	55 Mn	-0.001607	62.364	2361.438	ug/L	2404.788
]	54 Fe	4.014425	22.761	64977.773	ug/L	64054.811
İ	57 Fe	-0.764825	31.859	<b>762</b> 3.167	ug/L	7859.972
į	59 Co	0.004536	60.491	228.337	ug/L	198.336
1	60 Ni	0.011336	140.466	226.634	ug/L	212.335
ĺ	65 Cu	0.007331	66.743	121.262	ug/L	111.493
ĺ	68 <b>Z</b> n	0.129826	54.068	3060.615	ug/L	3034.819
ĺ	75 As	-0.240332	143.444	10874.007	ug/L	11323.472
l l	82 Se	-0.110185	82.660	1131.566	ug/L	1161.241
Ĺ>	72 Ge-1			1174711.355	ug/L	1189136.614
ŗ	107 Ag	0.001593	38.825	107.001	ug/L	95.334
	111 Cd	0.003949	193.593	50.250	ug/L	44.104
1	121 Sb	0.016835	34.642	214.670	ug/L	128.335
	135 Ba	0.009140	97.959	165.335	ug/L	149.002
L>	115 ln-1			1454130.069	ug/L	1447436.345
Γ	205 TI	0.087853	272.073	17200.198	ug/L	15021.408
1	208 Pb	0.004250	28.499	1136.372	ug/L	988.364
L>	169 Tm-1			1518270.267	ug/L	1485663.579
Γ	50 Cr	0.261721	48.131	-231.936	ug/L	-265.227
	53 Cr	-5.818895	7.034	42077.323	ug/L	46384.100
	61 Ni	-6.105052	40.274	1325.720	ug/L	1493.825
	63 Cu	0.006717	173.784	90.002	ug/L	83.335
	67 Zn	-1.746233	81.174	1170.969	ug/L	1263.351
	66 Zn	0.149351	138.768	1477.814	ug/L	1457.467
1	76 Se	-96.933511	58.584	-161918.245	ug/L	-161893.608
ĺ	77 Se	-4.025820	4.578	6943.984	ug/L	7470.402
ĺ	78 Se	0.300115	160.073	12754.569	ug/L	12809.738

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	79 Br	-2.444829	223.968	38610.044	ug/L	41402.874
L>	72 Ge			1174711.355	ug/L	1189136.614
Γ	108 Cd	-0.012050	385.946	4.322	ug/L	5.532
1	114 Cd	0.002017	247.818	147.593	ug/L	139.686
1	109 Ag	0.001567	92.190	41.667	ug/L	37.667
L>	115 ln			1454130.069	ug/L	1447436.345
Γ	208 207.977	0.002301	77.117	579.360	ug/L	532.689
	207 Pb	0.005115	78.408	242.338	ug/L	205.670
	206 Pb	0.007186	34.335	314.674	ug/L	250.005
حاً	169 Tm			1518270.267	ug/L	1485663.579

# Internal Standard Recoveries

internal Standard Recoveries					
	Anaiyte	Mass	Int Std % Recovery		
	Sc	45			
Γ>	Li-1	6	104.007		
	Be	9			
L	В	11			
Γ	Al	27			
	Ca	44			
	V	51			
	Cr	52			
	Mn	55			
į	Fe	54			
Ì	Fe	57			
	Co	59			
ŀ	Ni	60			
Į	Cu	65			
	Zn	68			
ŀ	As	75			
1	Se	82			
L>	Ge-1	72	98.787		
Γ	Ag	107			
1	Cd	111			
ļ	Sb	121			
į	Ba	135			
Ĺ>	In-1	115	100.462		
Γ	TI	205			
ļ	Pb	208			
L>	Tm-1	169	102.195		
Γ	Cr	50			
	Cr	53			
ŀ	Ni	61			
ŀ	Cu	63			
İ	Zn	67			
İ	Zn	66			
İ	Se	76			
ĺ	Se	77			
İ	Se	78			
İ	Br	79			
Ĺ>	Ge	72	98.787		
Ī	Cd	108			
į	Cd	114			
i	Ag	109			
i,	In	115	100.462		
Γ	207.977	208			

| Pb 207 | Pb 206 |> Tm 169 102.195

Report Date/Time: Monday, December 06, 2010 09:49:44

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SOP No. SAC-MT-0001 Analyst: SHargrave

# Sample ID: CCV 4 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 17:24:26

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\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
ſ	27 Al	5309.403332	0.685	19517242.775	ug/L	121122.053
1	44 Ca	5217.162795	0.807	831352.945	ug/L	4031.278
	52 Cr	100.394054	0.452	533725.954	ug/L	18977.923
	55 Mn	100.612919	0.788	866304.763	ug/L	2404.788
1	59 Co	100.040359	0.510	695255.126	ug/L	198.336
1	60 Ni	100.486807	0.511	145908.466	ug/L	212.335
	65 Cu	100.750277	0.395	148808.550	ug/L	111.493
1	75 As	99.448600	1.149	136512.649	ug/L	11323.472
<b>-</b> >	72 Ge-1			1142316.241	ug/L	1189136.614
Γ	111 Cd	98.258271	1.311	144123.191	ug/L	44.104
L>	115 ln-1			1413063.991	ug/L	1447436.345
Γ	208 Pb	97.074166	0.593	2825987.571	ug/L	988.364
<u> </u>	169 Tm-1			1486586.295	ug/L	1485663.579
Γ	50 Cr	110.210088	2.903	12075.836	ug/L	-265.227
	53 Cr	-11.917154	1.645	37102.075	ug/L	46384.100
İ	61 Ni	96.790703	0.305	3747.754	ug/L	1493.825
1	63 Cu	100.732577	0.984	112580.652	ug/L	83.335
Ĺ>	72 Ge			1142316.241	ug/L	1189136.614
ſ	108 Cd	97.637840	0.876	9787.614	ug/L	5.532
	114 Cd	98.707609	1.111	345010.895	ug/L	139.686
<u>_</u> >	115 ln			1413063.991	ug/L	1447436.345
Γ	208 207.977	97.502716	0.852	1451889.714	ug/L	532.689
1	207 Pb	96.788484	0.427	595820.525	ug/L	205.670
1	206 Pb	96.500983	0.265	778277.331	ug/L	250.005
L>	169 Tm			1486586.295	ug/L	1485663.579

## **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Al .	27	•
	Ca	44	
1	Cr	52	
	Mn	55	
	Co	59	•
	Ni	60	
	Cu	65	
1	As	75	

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[>	Ge-1	72	96.063
Γ	Cd	111	
<u></u>  >	In-1	115	97.625
Γ	Pb	208	
L>	Tm-1	169	100.062
٢	Cr	50	
1	Cr	53	
1	Ni	61	
1	Cu	63	
L>	Ge	72	96.063
Γ	Cd	108	
	Cd	114	
L>	In	115	97.625
Γ	207.977	208	
1	Pb	207	
1	Pb	206	
[>	Tm	169	100.062

Analyst: SHargrave
Sample ID: CCB 4
Sample Description:

SOP No. SAC-MT-0001

Batch ID:

Sample Date/Time: Friday, December 03, 2010 17:27:55

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\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
Γ	27 AI	1.410512	18.059	124544.608	ug/L	121122.053
ĺ	44 Ca	-1.181786	31.474	3777.121	ug/L	4031.278
ĺ	52 Cr	0.167283	34.699	19566.035	ug/L	18977,923
1	55 Mn	-0.007981	26.963	2297.748	ug/L	2404.788
1	59 Co	0.005569	24.122	235.004	ug/L	198.336
1	60 Ni	-0.004823	85.162	201.882	ug/L	212,335
	65 Cu	0.006135	312.178	118.928	ug/L	111.493
}	75 As	0.175446	147.400	11375.461	ug/L	11323,472
<u> </u>	72 Ge-1			1170915.736	ug/L	1189136.614
Γ	111 Cđ	0.008603	128.644	57.988	ug/L	44.104
>	115 ln-1			1469510.974	ug/L	1447436.345
Γ	208 Pb	0.002891	49.494	1119.705	ug/L	988,364
>	169 Tm-1			1551139.714	ug/L	1485663.579
Ī	50 Cr	1.806941	13.506	-54.030	ug/L	-265.227
ĺ	53 Cr	-48.789141	0.729	14383.373	ug/L	46384.100
ĺ	61 Ni	-4.489191	75.558	1361.409	ug/L	1493.825
1	63 Cu	0.008096	33.063	91.335	ug/L	83.335
<u> </u> >	72 Ge			1170915.736	ug/L	1189136.614
Γ	108 Cd	0.015078	161.064	7.199	ug/L	5.532
	114 Cd	0.000727	741.638	144.608	ug/L	139.686
L>	115 In			1469510.974	ug/L	1447436.345
Γ	208 207.977	0.002179	8.215	590.027	ug/L	532.689
	207 Pb	0.001749	216.739	226.004	ug/L	205.670
	206 Pb	0.005077	52.390	303.674	ug/L	250.005
>	169 Tm			1551139.714	ug/L	1485663.579

## Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	A!	27	
ĺ	Ca	44	
1	Cr	52	
	Mn	55	
1	Co	59	
1	Ni	60	
ĺ	Cu	65	
	As	75	

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L>	Ge-1	72	98.468
Γ	Cd	111	
L>	In-1	115	101.525
[	Pb	208	
[>	Tm-1	169	104.407
Γ	Cr	50	
	Cr	53	
Į	Ni	61	
	Cu	63	
[>	Ge	72	98.468
Γ	Cd	108	
İ	Cd	114	
L>	ln	115	101.525
Γ	207.977	208	
	Pb	207	
1	Pb	206	
15	Tm	169	104,407

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 5
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 17:31:25

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\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
Γ	27 Al	5235.514436	1.368	19424359.874	ug/L	121122.053
1	44 Ca	5170.830566	1.203	831581.849	ug/L	4031.278
1	52 Cr	99.955811	0.996	536373.187	ug/L	18977.923
1	55 Mn	100.291037	1.092	871506.683	ug/L	2404.788
]	59 Co	99.685828	1.382	699153.312	ug/L	198.336
	60 Ni	100.172756	0.996	146793.834	ug/L	212.335
1	65 Cu	100.547412	0.688	149881.824	ug/L	111.493
	75 As	98.549737	1.326	136624.226	ug/L	11323.472
<u> </u> >	72 Ge-1			1152926.909	ug/L	1189136.614
Γ	111 Cd	97.905646	0.518	144790.130	ug/L	44.104
L>	115 In-1			1424602.205	ug/L	1447436.345
Γ	208 Pb	96.626882	0.848	2849837.855	ug/L	988.364
<u> </u>	169 Tm-1			1506140.530	ug/L	1485663.579
Γ	50 Cr	109.645077	3.290	12122.286	ug/L	-265.227
ì	53 Cr	-12.580910	5.334	37025.183	ug/L	46384.100
	61 Ni	93.034263	1.256	3691.997	ug/L	1493.825
1	63 Cu	100.398646	1.278	113241.983	ug/L	83.335
L>	72 Ge			1152926.909	ug/L	1189136.614
Γ	108 Cd	97.968750	2.012	9899.990	ug/L	5.532
1	114 Cd	98.105599	1.266	345708.895	ug/L	139.686
L>	115 ln			1424602.205	ug/L	1447436.345
Γ	208 207.977	97.045069	0.701	1464054.734	ug/L	532.689
	207 Pb	96.089192	1.132	599251.105	ug/L	205.670
	206 Pb	96.265182	0.928	786532.016	ug/L	250.005
[>	169 Tm			1506140.530	ug/L	1485663.579

## **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
	Ca	44	
1	Cr	52	
	Mn	55	
	Co	59	
]	Ni	60	
	Cu	65	
]	As	75	

Report Date/Time: Monday, December 06, 2010 10:00:12

Page 1

L>	Ge-1	72	96.955
Γ	Cd	111	
Ĺ>	In-1	115	98.422
Γ	Pb	208	
[>	Tm-1	169	101.378
٢	Cr	50	
	Cr	53	
	Ni	61	
1	Cu	63	
L>	Ge	72	96.955
Γ	Cd	108	
	Cd	114	
<u></u>  >	ln	115	98.422
ſ	207.977	208	
	Pb	207	
Į	Pb	206	
Ĺ>	Tm	169	101.378

Analyst: SHargrave
Sample ID: CCB 5
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 17:34:54

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\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
٢	27 AI	1.714439	11.560	125287.721	ug/L	121122.053
1	44 Ca	-0.608317	25.043	3858.169	ug/L	4031.278
	52 Cr	0.280386	7.643	20098.691	ug/L	18977.923
	55 Mn	-0.003071	258.712	2333.428	ug/L	2404.788
1	59 Co	0.002303	73.219	211.004	ug/L	198.336
	60 Ni	0.000352	5769.541	208.882	ug/L	212.335
	65 Cu	0.006103	75.502	118.621	ug/L	111.493
	75 As	-0.169468	143.270	10895.359	ug/L	11323.472
<u> </u> >	72 Ge-1			1167171.730	ug/L	1189136.614
Γ	111 Cd	0.003550	117.400	49.941	ug/L	44.104
Ĺ>	115 ln-1			1461289.986	ug/L	1447436.345
Γ	208 Pb	0.001503	76.221	1061.368	ug/L	988.364
Ĺ>	169 Tm-1			1528297.923	ug/L	1485663.579
Γ	50 Cr	1.795750	5.870	-55.048	ug/L	-265.227
	53 Cr	-48.148425	0.538	14747.696	ug/L	46384.100
-	61 Ni	-4.063328	21.353	1367.078	ug/L	1493.825
	63 Cu	0.007490	41.428	90.335	ug/L	83.335
Ĺ>	72 Ge			1167171.730	ug/L	1189136.614
Γ	108 Cd	-0.011755	215.965	4.358	ug/L	5.532
	114 Cd	-0.003778	86.189	127.406	ug/L	139.686
ح]	115 in			1461289.986	ug/L	1447436.345
Γ	208 207.977	0.000906	272.632	561.692	ug/L	532.689
1	207 Pb	0.000560	394.737	215.004	ug/L	205.670
	206 Pb	0.003323	44.744	284.673	ug/L	250.005
L>	169 Tm			1528297.923	ug/L	1485663.579

### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
٢	Αl	27	-
1	Ca	44	
	Cr	52	•
	Mn	55	
	Co	59	
	Ni	60	
	Cu	65	
1	As	75	

L>	Ge-1	72	98.153
Γ	Cd	111	
L>	In-1	115	100.957
Γ	Pb	208	
Ĺ>	Tm-1	169	102.870
Γ	Cr	50	
1	Cr	53	
	Ni	61	
	Cu	63	
L>	Ge	72	98.153
Γ	Cd	108	
	Cd	114	
L>	In	115	100.957
Γ	207.977	208	
1	Pb	207	
1	Pb	206	
Ĺ>	Tm	169	102.870

SOP No. SAC-MT-0001 Analyst: SHargrave

## Sample ID: CCV 6

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 18:02:16

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\CCV 6.038

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
Γ	27 AI	5314.044877	1.942	19744231.553	ug/L	121122.053
-	44 Ca	5161.544436	1.791	831369.087	ug/L	4031.278
	52 Cr	100.154569	1.610	538228.209	ug/L	18977.923
	55 Mn	100.123686	1.358	871419.248	ug/L	2404.788
	59 Co	98.717003	1.310	693466.715	ug/L	198.336
	60 Ni -	99.018121	1.456	145329.788	ug/L	212.335
	65 Cu	99.535980	1.140	148606.214	ug/L	111.493
	75 As	98.233086	1.262	136438.536	ug/L	11323.472
<u></u> [>	72 Ge-1			1154771.259	ug/L	1189136.614
Γ	111 Cd	96.735461	1.202	143995.457	ug/L	44.104
L>	115 ln-1			1434059.611	ug/L	1447436.345
Ţ	208 Pb	94.984815	1.900	2777990.900	ug/L	988.364
Ļ>	169 Tm-1			1493686.927	ug/L	1485663.579
Γ	50 Cr	110.102907	3.645	12197.886	ug/L	-265.227
-	53 Cr	-11.814675	2.296	37569.671	ug/L	46384.100
1	61 Ni	94.966847	2.216	3744.082	ug/L	1493.825
1	63 Cu	99.325655	1,292	112211.407	ug/L	83.335
<u>_</u> >	72 Ge			1154771.259	ug/L	1189136.614
Γ	108 Cd	97.090882	1.688	9877.407	ug/L	5.532
	114 Cd	97.336805	1.587	345250.231	ug/L	139.686
Ļ>	115 ln			1434059.611	ug/L	1447436.345
Γ	208 207.977	95.630351	2.035	1430615.252	ug/L	532.689
	207 Pb	94.395909	2.030	583776.492	ug/L	205.670
	206 Pb	94.242449	1.581	763599.155	ug/L	250.005
L>	169 Tm			1493686.927	ug/L	1485663.579

### Internal Standard Recoveries

	Anaiyte	Mass	Int Std % Recovery
Γ	Ai	27	
	Ca	44	
	Cr	52	
	Mn	55	
1	Co	59	
	Ni	60	
	Cu	65	
i	As	75	

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را_>	Ge-1	72	97.110
Γ	Cd	111	
<b>L&gt;</b>	In-1	115	99.076
Γ	Pb	208	
L>	Tm-1	169	100.540
Γ	Cr	50	
1	Cr	53	
	Ni	61	
1	Cu	63	
<b>L&gt;</b>	Ge	72	97.110
Γ	Cd	108	
	Cd	114	
[>	In	115	99.076
Γ	207.977	208	
	Pb	207	
-	Pb	206	
<u></u>  >	Tm	169	100.540

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 6
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 18:05:46

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\CCB 6.039

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
ſ	27 AI	1.449403	19.002	123939.972	ug/L	121122.053
1	44 Ca	0.912019	122.819	4093.986	ug/L	4031.278
	52 Cr	0.417061	10.904	20756.466	ug/L	18977.923
}	55 Mn	-0.001201	298.449	2343.098	ug/L	2404.788
1	59 Co	0.003982	25.375	222.337	ug/L	198.336
	60 Ni	0.004708	108.441	214.807	ug/L	212.335
1	65 Cu	0.011760	36.328	126.777	ug/L	111.493
	75 As	-0.066754	419.542	10997.409	ug/L	11323,472
L>	72 Ge-1			1163876.891	ug/L	1189136.614
Γ	111 Cd	0.002286	259.698	47.748	ug/L	44.104
1>	115 ln-1			1453468.260	ug/L	1447436.345
ſ	208 Pb	0.004424	56.059	1142.040	ug/L	988.364
L>	169 Tm-1			1518863.005	ug/L	1485663.579
Γ	50 Cr	1.714317	2.504	-64.133	ug/L	-265.227
}	53 Cr	-48.308067	1.247	14606.489	ug/L	46384.100
}	61 Ni	-3.453379	44.719	1378.085	ug/L	1493.825
1	63 Cu	0.004201	38.546	86.335	ug/L	83.335
حا	72 Ge			1163876.891	ug/L	1189136.614
٢	108 Cd	0.005310	1348.915	6.112	ug/L	5.532
	114 Cd	0.001175	189.310	144.499	ug/L	139.686
ا_>	115 <b>in</b>			1453468.260	ug/L	1447436.345
Γ	208 207.977	0.003206	77.160	593.361	ug/L	532.689
}	207 Pb	0.004991	34.793	241.671	ug/L	205.670
1	206 Pb	0.006239	52.954	307.007	ug/L	250.005
<u>L</u> >	169 Tm			1518863.005	ug/L	1485663.579

## **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
	Ca	44	
İ	Cr	52	
]	Mn	55	
	Co	59	
1	Ni	60	
1	Cu	65	
1	As	75	

[>	Ge-1	72	97.876
Γ	Cd	111	
Ĺ>	In-1	115	100.417
Γ	Pb	208	
L>	Tm-1	169	102.235
1	Cr	50	
]	Cr	53	
	Ni	61	
1	Cu	63	
L>	Ge	72	97.876
ſ	Cd	108	
	Cd	114	
[>	In	115	100.417
Γ	207.977	208	
	Pb	207	
	Pb	206	
>	Tm	169	102.235

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 7
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 18:26:22

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\CCV 7.045

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
ſ	27 Ai	5378.996167	1.226	20659229.278	ug/L	121122.053
1	44 Ca	5247.942210	0.491	873791.301	ug/L	4031.278
1	52 Cr	101.583905	0.364	564075.077	ug/L	18977.923
1	55 Mn	101.414005	0.564	912402.065	ug/L	2404.788
	59 Co	101.139459	0.126	734462.207	ug/L	198.336
	60 Ni	101.892410	0.269	154590.053	ug/L	212.335
}	65 Cu	102.122938	0.219	157606.693	ug/L	111.493
	75 As	99.525303	0.573	142744.148	ug/L	11323.472
<u> </u>	72 Ge-1			1193589.240	ug/L	1189136.614
٢	111 Cd	99.127115	0.410	148579.045	ug/L	44.104
Ĺ>	115 in-1			1443831.457	ug/L	1447436.345
Γ	208 Pb	96.164992	0.261	2871031.390	ug/L	988.364
<u></u>  >	169 Tm-1			1524521.511	ug/L	1485663.579
Γ	50 Cr	110.728232	2.403	12680.021	ug/L	-265.227
ĺ	53 Cr	-10.560435	3.933	39654.998	ug/L	46384.100
	61 Ni	94.936720	3.952	3869.961	ug/L	1493.825
	63 Cu	102.160003	0.299	119305.449	ug/L	83.335
<u> </u>	72 Ge			1193589.240	ug/L	1189136.614
Γ	108 Cd	99.316054	0.339	10173.113	ug/L	5.532
	114 Cd	99.793674	0.242	356433.856	ug/L	139.686
L>	115 In			1443831.457	ug/L	1447436.345
Γ	208 207.977	96.717543	0.314	1477002.746	ug/L	532.689
1	207 Pb	95.813931	0.163	604884.695	ug/L	205.670
[	206 Pb	95.412761	0.347	789143.950	ug/L	250.005
[>	169 Tm			1524521.511	ug/L	1485663.579

#### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	•
ĺ	Ca	44	
ĺ	Cr	52	
ĺ	Mn	55	
1	Co	59	
l	Ni	60	
İ	Cu	65	
[	As	75	

Report Date/Time: Monday, December 06, 2010 10:00:49

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<u></u>	Ge-1	72	100.374
ſ	Cd	111	
L>	ln-1	115	99.751
Γ	Pb	208	
<u></u> L>	Tm-1	169	102.616
Γ	Cr	50	
ĺ	Cr	53	
ŀ	Ni	61	
	Cu	63	
L>	Ge	72	100.374
Γ	Cd	108	
1	Cd	114	
<u></u>  >	In	115	99.751
Γ	207.977	208	
1	Pb	207	
	Pb	206	
<u> </u> >	Tm	169	102.616

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 7

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 18:29:51

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\CCB 7.046

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
Γ	27 AI	0.808016	20.767	126156.939	ug/L	121122.053
	44 Ca	0.546387	119.577	4186.711	ug/L	4031.278
ì	52 Cr	0.174205	23.508	20223.420	ug/L	18977.923
1	55 Mn	-0.001394	286.577	2430.131	ug/L	2404.788
	59 Co	0.008376	31.489	263.005	ug/L	198.336
Ì	60 Ní	0.004828	204.862	223.122	ug/L	212.335
	65 Cu	0.011896	11.481	131.816	ug/L	111.493
1	75 As	-0.054196	799.453	11428.737	ug/L	11323.472
[>	72 Ge-1			1207912.017	ug/L	1189136.614
Ī	111 Cd	0.008612	38.473	58.797	ug/L	44.104
<u></u>  >	115 ln-1			1491801.688	ug/L	1447436.345
٢	208 Pb	0.004623	38.956	1184.711	ug/L	988.364
Ĺ>	169 Tm-1			1567846.364	ug/L	1485663.579
Ī	50 Cr	1.894675	4.994	-45.252	ug/L	-265.227
Ì	53 Cr	-49.051937	0.258	14665.165	ug/L	46384.100
Ì	61 Ni	-5.289874	18.171	1383.755	ug/L	1493.825
Ì	63 Cu	0.018658	66.026	106.669	ug/L	83.335
<u> </u>	72 Ge			1207912.017	ug/L	1189136.614
Ţ	108 Cd	0.012485	227.211	7.050	ug/L	5.532
1	114 Cd	0.001806	153.518	150.572	ug/L	139.686
L>	115 ln			1491801.688	ug/L	1447436.345
Ī	208 207.977	0.005354	55.068	646.033	ug/L	532.689
1	207 Pb	0.003891	117.977	242.338	ug/L	205.670
Ì	206 Pb	0.003831	53.966	296.340	ug/L	250.005
حاً	169 Tm			1567846.364	ug/L	1485663.579

### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
	Ca	44	
1	Cr	52	
}	Mn	55	
	Co	59	
ĺ	Ni	60	
ĺ	Cu	65	
	As	75	

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(>	Ge-1	72	101.579
Γ	Cd	111	
<u>_</u> >	In-1	115	103.065
Γ	Pb	208	
حا	Tm-1	169	105.532
Γ	Cr	50	
]	Cr	53	
	Ni	61	
1	Cu	63	
Į>	Ge	72	101.579
Γ	Cd	108	
	Cd	114	
1>	In	115	103.065
Γ	207.977	208	
İ	Pb	207	
1	Pb	206	
[>	Tm	169	105.532

SOP No. SAC-MT-0001 Analyst: SHargrave Sample ID: CCV 8

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 18:33:21

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\CCV 8.047

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
ſ	27 AI	5300.758173	0.817	20368044.390	ug/L	121122.053
Ì	44 Ca	5198.178211	0.407	865847.904	ug/L	4031.278
1	52 Cr	100.632734	0.918	559160.994	ug/L	18977.923
	55 Mn	100.909888	1.096	908180.567	ug/L	2404.788
	59 Co	100.318667	0.348	728768.315	ug/L	198.336
1	60 Ni	100.868127	0.943	153089.515	ug/L	212.335
1	65 Cu	101.180928	0.299	156211.407	ug/L	111.493
İ	75 As	99.052063	0.179	142176.295	ug/L	11323,472
L>	72 Ge-1			1194035.970	ug/L	1189136.614
Γ	111 Cd	98.587091	0.280	149020.564	ug/L	44.104
ح]	115 ln-1			1456056.508	ug/L	1447436.345
Γ	208 Pb	95.857548	0.216	2878315.151	ug/L	988.364
[>	169 Tm-1			1533284.253	ug/L	1485663.579
Γ	50 Cr	112.606916	1.383	12903.341	ug/L	-265.227
1	53 Cr	-11.496111	2.645	39057.092	ug/L	46384.100
1	61 Ni	94.509057	2.054	3860.610	ug/L	1493.825
1	63 Cu	101.349023	0.761	118399.450	ug/L	83.335
Ĺ>	72 Ge			1194035.970	ug/L	1189136.614
Γ	108 Cd	96.738560	0.181	9993.079	ug/L	5.532
1	114 Cd	98.477108	0.152	354710.340	ug/L	139.686
[>	115 ln			1456056.508	ug/L	1447436.345
Γ	208 207.977	96.145386	0.487	1476709.920	ug/L	532.689
	207 Pb	95.833573	0.374	608483.933	ug/L	205.670
Ì	206 Pb	95.344408	0.366	793121.298	ug/L	250.005
حإ	169 Tm			1533284.253	ug/L	1485663.579

### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
1	Ca	44	
1	Cr	52	
ĺ	Mn	55	
1	Co	59	
ĺ	Ni	60	
1	Cu	65	
Ĺ	As	75	

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SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 8
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 18:36:51

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\CCB 8 .048

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
ſ	27 AI	0.916027	71.376	126295.445	ug/L	121122.053
1	44 Ca	1.032652	46.371	4258.758	ug/L	4031.278
	52 Cr	0.231104	11.751	20489.269	ug/L	18977.923
ļ	55 Mn	0.001377	428.644	2450.138	ug/L	2404.788
1	59 Co	0.007637	11.916	257.005	ug/L	198.336
1	60 Ni	0.011939	79.584	233.443	ug/L	212.335
}	65 Cu	0.004623	314.145	120.296	ug/L	111.493
1	75 As	-0.366492	123.658	10988.106	ug/L	11323.472
ا_>	72 Ge-1			1205343.197	ug/L	1189136.614
[	111 Cd	0.010657	109.661	61.990	ug/L	44.104
<u> </u>	115 ln-1			1491181.086	ug/L	1447436.345
ſ	208 Pb	0.005785	18.458	1222.379	ug/L	988.364
L>	169 Tm-1			1570125.654	ug/L	1485663.579
Ţ	50 Cr	1.804633	2.854	-55.771	ug/L	-265.227
1	53 Cr	-48.921541	0.474	14720.527	ug/L	46384.100
l	61 Ni	-5.138958	40.263	1384.756	ug/L	1493.825
ŀ	63 Cu	0.009782	44.959	96.002	ug/L	83.335
L>	72 Ge			1205343.197	ug/L	1189136.614
ſ	108 Cd	-0.044612	142.291	0.952	ug/L	5.532
1	114 Cd	0.000818	213.653	146.948	ug/L	139.686
L>	115 in			1491181.086	ug/L	1447436.345
ſ	208 207.977	0.004795	8.459	638.365	ug/L	532.689
İ	207 Pb	0.005176	59.061	251.005	ug/Ĺ	205.670
1	206 Pb .	0.008079	15.601	333.009	ug/L	250.005
Ĺ>	169 Tm			1570125.654	ug/L	1485663.579

### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
[	Al	27	
	Ca	44	
	Cr	52	
ĺ	Mn	55	
i	Co	59	
1	Ni	60	
ĺ	Cu	65	
	As	75	

L>	Ge-1	72	101.363
ſ	Cd	111	
L>	In-1	115	103.022
Γ	Pb	208	
L>	Tm-1	169	105.685
Ţ	Cr	50	
ĺ	Cr	53	
	Ni	61	
	Cu	63	
し	Ge	72	101.363
Γ	Cd	108	
1	Cd	114	
L>	In	115	103.022
Γ	207.977	208	
	Pb	207	
[	Pb	206	
[>	Tm	169	105.685

Analyst: SHargrave
Sample ID: CCV 9
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 18:50:54

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\CCV 9.051

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
ſ	27 AI	5082.367701	0.828	18803623.948	ug/L	121122.053
1	44 Ca	5129.128088	0.582	822467.309	ug/L	4031.278
	52 Cr	99.932534	0.454	534656.064	ug/L	18977.923
1	55 Mn	101.162663	0.818	876443.912	ug/L	2404.788
l	59 Co	99.020431	1.034	692436.152	ug/L	198.336
	60 Ni	99.154615	1.049	144869.104	ug/L	212.335
	65 Cu	99.277341	1.103	147542.542	ug/L	111.493
1	75 As	99.028254	0.680	136828.276	ug/L	11323.472
L>	72 Ge-1			1149405.779	ug/L	1189136.614
Γ	111 Cd	98.856965	0.966	144576.688	ug/L	44.104
Ĺ>	115 In-1			1408843.876	ug/L	1447436.345
Γ	208 Pb	95.169722	1.163	2707746.915	ug/L	988.364
L>	169 Tm-1			1452916.346	ug/L.	1485663.579
٢	50 Cr	114.522609	0.281	12637.501	ug/L	-265.227
	53 Cr	-9.893151	4.746	38606.838	ug/L	46384.100
	61 Ni	98.493925	1.267	3811.861	ug/L	1493.825
	63 Cu	99.534371	1.015	111934.946	ug/L	83.335
L>	72 Ge			1149405.779	ug/L	1189136.614
ſ	108 Cd	99.547565	1.762	9949.124	ug/L	5.532
	114 Cd	99.253569	1.119	345891.580	ug/L	139.686
Ĺ>	115 ln			1408843.876	ug/L	1447436.345
Γ	208 207.977	95.020145	1.473	1382859.115	ug/L	532.689
	207 Pb	95.393661	0.582	573931.516	ug/L	205.670
1	206 Pb	95.274960	1.165	750956.285	ug/L	250.005
L>	169 Tm			1452916.346	ug/L	1485663.579

## Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	•
ĺ	Ca	44	
1	Cr	52	
	Mn	55	
	Co	59	
	Ni	60	
	Cu	65	
{	As	75	

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1.	0-1	70	22.252
Ľ>	Ge-1	72	96.659
	Cd	111	
L>	In-1	115	97.334
Γ	Pb	208	
حا	Tm-1	169	97.796
Γ	Cr	50	
	Cr	53	
	Ni	61	
1	Cu	63	
<u></u>	Ge	72	96.659
Γ	Cd	108	
1	Cd	114	
[>	ln	115	97.334
Γ	207.977	208	
l	Pb	207	
}	Pb	206	
L>	Tm	169	97.796

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 9
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 18:54:24

Method File: E:\elandata\Method\000-B&C.mth

Dataset File: E:\elandata\Dataset\101203b2\CCB 9.052

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
٢	27 AI	1.198662	18.071	123752.403	ug/L	121122.053
[	44 Ca	-1.906532	19.493	3659.385	ug/L	4031.278
ĺ	52 Cr	-0.137677	15.898	17962.316	ug/L	18977.923
	55 Mn	0.007487	164.767	2433.799	ug/L	2404.788
	59 Co	0.011616	9.455	278.006	ug/L	198.336
	60 Ni	0.000148	10332.908	209.277	ug/L	212.335
1	65 Cu	0.008777	133.226	123.018	ug/L	111.493
	75 As	0.074542	135.134	11246.547	ug/L	11323.472
L>	72 Ge-1			1170890.013	ug/L	1189136.614
Γ	111 Cd	0.011131	40.285	60.592	ug/L	44.104
L>	115 ln-1			1442097.936	ug/L	1447436.345
Γ	208 Pb	0.005190	11.004	1150.375	ug/L	988.364
L>	169 Tm-1			1500176.488	ug/L	1485663.579
Γ	50 Cr	1.793756	9.709	-55.442	ug/L	-265.227
	53 Cr	-46.217086	0.175	16033.694	ug/L	46384.100
	61 Ni	0.132339	544.630	1474.145	ug/L	1493.825
	63 Cu	0.022361	26.494	107.669	ug/L	83.335
L>	72 Ge			1170890.013	ug/L	1189136.614
Γ	108 Cd	-0.026094	83.063	2.840	ug/L	5.532
	114 Cd	0.003422	174.807	151.345	ug/L	139.686
L>	115 ln			1442097.936	ug/L	1447436.345
Γ	208 207.977	0.005267	5.450	617.030	ug/L	532.689
	207 Pb	0.005636	45.906	242.671	ug/L	205.670
	206 Pb	0.004705	61.387	290.673	ug/L	250.005
L>	169 Tm			1500176.488	ug/L	1485663.579

#### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
1	Ca	44	
1	Cr	52	
	Mn	55	
1	Co	59	
Ì	Ni	60	
İ	Cu	65	
1	As	75	

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L>	Ge-1	72	98.466
Γ	Cd	111	
<u>_</u> >	in-1	115	99.631
٢	Pb	208	
L>	Tm-1	169	100.977
Γ	Cr	50	
	Cr	53	
1	Ni	61	
	Cu	63	
L>	Ge	72	98.466
ſ	Cd	108	
1	Cd	114	
Ļ>	in	115	99.631
Γ	207.977	208	
1	Pb	207	
1	Pb	206	
[>	Tm	169	100.977

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 10

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 18:57:53 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCV 10.053

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			1170572.132	ug/L	0.000
Γ>	6 Li-1			1074267.758	ug/L	0.000
L	9 Be			26837.473	ug/L	0.000
Γ	44 Ca	5064.719520	0.291	816188.406	ug/L	4031.278
	52 Cr	100.156069	0.323	538442.283	ug/L	18977.923
	55 Mn	100.647083	0.097	876286.353	ug/L	2404.788
	60 Ni	99.528377	0.022	146132.329	ug/L	212.335
	65 Cu	99.368748	0.119	148407.393	ug/L	111.493
	68 Zn			50232.677	ug/L	0.000
L>	72 Ge-1			1155045.035	ug/L	1189136.614
Γ	111 Cd	97.197892	0.828	142798.172	ug/L	44.104
1	121 Sb			242641.118	ug/L	0.000
1	135 Ba			160884.014	ug/L	0.000
<u></u>  >	115 ln-1			1415176.355	ug/L	1447436.345
Γ	208 Pb	94.472438	0.499	2778659.444	ug/L	988.364
<b>L&gt;</b>	169 Tm-1			1501918.038	ug/L	1485663.579
Ī	50 Cr	111.595680	2.867	12367.372	ug/L	-265.227
Ì	53 Cr	-10.087341	10.942	38674.034	ug/L	46384.100
Ì	61 Ni	99.905321	2.862	3864.951	ug/L	1493.825
1	63 Cu	99.923935	0.617	112925.479	ug/L	83.335
	67 Zn			5456.209	ug/L	0.000
ĺ	66 Zn			26337.057	ug/L	0.000
<b> </b> >	72 Ge			1155045.035	ug/L	1189136.614
Γ	108 Cd	97.379021	1.176	9776.742	ug/L	5.532
Ì	114 Cd	97.744556	0.511	342190.052	ug/L	139.686
>	115 ln			1415176.355	ug/L	1447436.345
Ĩ	208 207.977	95.255151	0.816	1433072.446	ug/L	532.689
j	207 Pb	93.789098	0.343	583324.799	ug/L	205.670
İ	206 Pb	93.548878	0.175	762262.199	ug/L	250.005
حا	169 Tm			1501918.038	ug/L	1485663.579

#### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
	Sc	45	
[>	Li-1	6	
L	Be	9	

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ſ	Ca	44	
	Cr	52	
	Mn	55	
	Ni	60	
	Cu	65	
1	Zn	68	
l>	Ge-1	72	97.133
Γ	Cd	111	
ļ	Sb	121	
1	Ba	135	
[>	In-1	115	97.771
Γ	Pb	208	
L>	Tm-1	169	101.094
Γ	Cr	50	
1	Cr	53	
	Ni	61	
1	Cu	63	
)	Zn	67	
]	Zn	66	•
<u></u>  >	Ge	72	97.133
Γ	Cd	108	
	Cd	114	
ر>	In	115	97.771
٢	207.977	208	
	Pb	207	
1	Pb	206	
L>	Tm	169	101.094

SOP No. SAC-MT-0001 Analyst: SHargrave

## Sample ID: CCB 10

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 19:01:27 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCB 10.054

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			1205738.109	ug/L	0.000
Γ>	6 Li-1			1099244.140	ug/L	0.000
L	9 Be			6.000	ug/L	0.000
Γ	44 Ca	-1.119329	67.368	3832.488	ug/L	4031.278
	52 Cr	-0.023710	261.663	18784.691	ug/L	18977.923
Ì	55 Mn	0.004218	50.049	2433.799	ug/L	2404.788
1	60 Ni	0.002892	268.741	215.904	ug/L	212.335
1	65 Cu	0.011934	71.365	129.333	ug/L	111.493
İ	68 <b>Z</b> n			2957.387	ug/L	0.000
L>	72 Ge-1			1184928.862	ug/L	1189136.614
Γ	111 Cd	0.013797	32.081	65.381	ug/L.	44.104
1	121 Sb			162.669	ug/L	0.000
	135 Ba			177.002	ug/L	0.000
Ĺ>	115 ln-1			1459062.274	ug/L	1447436.345
Γ	208 Pb	0.006197	8.881	1212.712	ug/L	988.364
<b>L&gt;</b>	169 Tm-1			1541729.238	ug/L	1485663.579
Ī	50 Cr	1.900103	5.521	-43.784	ug/L	-265.227
İ	53 Cr	-46.143272	0.754	16273.054	ug/L	46384.100
ĺ	61 Ni	-2.968551	92.663	1414.774	ug/L	1493.825
	63 Cu	0.010609	17.863	95.335	ug/L	83.335
İ	67 <b>Z</b> n			1252.011	ug/L	0.000
	66 Zn			1450.463	ug/L	0.000
L>	72 Ge			1184928.862	ug/L	1189136.614
Γ	108 Cd	-0.015492	128.868	3.963	ug/L	5.532
1	114 Cd	0.002100	250.146	148.458	ug/L	139.686
<u> </u> >	115 ln			1459062.274	ug/L	1447436.345
Ī	208 207.977	0.005521	7.707	638.032	ug/L	532.689
Ì	207 Pb	0.005835	39.206	250.672	ug/L	205.670
İ	206 Pb	0.007721	22.206	324.008	ug/L	250.005
Ĺ>	169 Tm			1541729.238	ug/L	1485663.579

#### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
	Sc	45	
[>	Li-1	6	
L	Be	9	

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Γ	Ca	44	
	Cr	52	
-	Mn	55	
	Ni	60	
	Cu	65	
	Zn	68	
L>	Ge-1	72	99.646
Ī	Cd	111	
1	Sb	121	
	Ba	135	
L>	In-1	115	100.803
Γ	Pb	208	
1>	Tm-1	169	103.774
Ī	Cr	50	
	Cr	53	
1	Ni	61	
f	Cu	63	
	Zn	67	
Ì	Zn	66	
L>	Ge	72	99.646
Γ	Cd	108	
}	Cd	114	
L>	ln	115	100.803
Γ	207.977	208	
1	Pb	207	
	Pb	206	
[>	Tm	169	103.774

SOP No. SAC-MT-0001 Analyst: SHargrave

## Sample ID: BLK RECAL Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 19:01:27 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCB 10.054

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**

	•••				
	· ·	Conc. Mean Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
_	45 Sc		1205738.109	ug/L	
Γ>	6 Li-1		1099244.140	ug/L	
L	9 Be		6.000	ug/L	
٢	44 Ca		3832.488	ug/L	
	52 Cr		18784.691	ug/L	
}	55 Mn		2433.799	ug/L	
	60 Ni		215.904	ug/L	
1	65 Cu		129.333	ug/L	
1	68 Zn		2957.387	ug/L	
L>	72 Ge-1		1184928.862	ug/L	
Γ	111 Cd		65.381	ug/L	
1	121 Sb		162.669	ug/L	
1	135 Ba		177.002	ug/L	
<b>L</b> >	115 ln-1		1459062.274	ug/L	
F	208 Pb		1212.712	ug/L	
<u> </u>	169 Tm-1		1541729.238	ug/L	
Ī	50 Cr		-43.784	ug/L	
İ	53 Cr		16273.054	ug/L	
Ì	61 Ni		1414.774	ug/L	
1	63 Cu		95.335	ug/L	
1	67 Zn		1252.011	ug/L	
	66 Zn		1450.463	ug/L	
>	72 Ge		1184928.862	ug/L	
Ī	108 Cd		3.963	ug/L	
ĺ	114 Cd		148.458	ug/L	
->	115 In		1459062.274	ug/L	
Ī	208 207.977		638.032	ug/L	
İ	207 Pb		250.672	ug/L	
İ	206 Pb		324.008	ug/L	
>	169 Tm		1541729.238	ug/L	
_		ard Recoveries		÷	

	Analyte	Mass	Int Std % Recovery
	Sc	45	
<b>[</b> >	Li-1	6	
ĺ	Re	a	

Ĺ	Ca	44
1	Cr	52
	Mn	55
	Ni	60
1	Cu	65
1	Zn	68
L>	Ge-1	72
Γ	Cd	111
	Sb	121
1	Ba	135
>	In-1	115
F	Pb	208
>	Tm-1	169
Γ	Cr	50
	Cr	53
-	Ni	61
-	Cu	63
	Zn	67
	Zn	66
[>	Ge	72
Γ	Cd	108
1	Cd	114
[>	In	115
Γ	207.977	208
	Pb	207
	Pb	206
_>	Tm	169

SOP No. SAC-MT-0001 Analyst: SHargrave

#### Sample ID: STD1 RECAL

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 18:57:53 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCV 10.053

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			1170572.132	ug/L	1205738.109
[>	6 Li-1			1074267.758	ug/L	1099244.140
L	9 Be	100.000000	0.383	26837.473	ug/L	6.000
٢	44 Ca	5100.000000	0.291	816188.406	ug/L	3832.488
1	52 Cr	100.000000	0.323	538442.283	ug/L	18784.691
1	55 Mn	100.000000	0.097	876286.353	ug/L	2433.799
Ì	60 Ni	100.000000	0.022	146132.329	ug/L	215.904
	65 Cu	100.000000	0.119	148407.393	ug/L	129.333
-	68 Zn	100.000000	0.717	50232.677	ug/L.	2957.387
Ĺ>	72 Ge-1			1155045.035	ug/L	1184928.862
Γ	111 Cd	100.000000	0.828	142798.172	ug/L	65.381
	121 Sb	50.000000	0.545	242641.118	ug/L	162.669
	135 Ba	100.000000	0.289	160884.014	ug/L	177.002
[>	115 ln-1			1415176.355	ug/L	1459062.274
Γ	208 Pb	100.000000	0.499	2778659.444	ug/L	1212.712
<u> </u>	169 Tm-1			1501918.038	ug/L	1541729.238
Γ	50 Cr	100.000000	2.917	12367.372	ug/L	-43.784
	53 Cr	100.000000	3.061	38674.034	ug/L	16273.054
1	61 Ni	100.000000	2.779	3864.951	ug/L	1414.774
	63 Cu	100.000000	0.617	112925.479	ug/L	95.335
}	67 Zn	100.000000	0.391	5456.209	ug/L	1252.011
Ì	66 Zn	100.000000	0.207	26337.057	ug/L	1450.463
Ĺ>	72 Ge			1155045.035	ug/L	1184928.862
Γ	108 Cd	100.000000	1.176	9776.742	ug/L	3.963
	114 Cd	100.000000	0.511	342190.052	ug/L	148.458
L>	115 In			1415176.355	ug/L	1459062.274
Γ	208 207.977	100.000000	0.816	1433072.446	ug/L	638.032
	207 Pb	100.000000	0.343	583324.799	ug/L.	250.672
	206 Pb	100.000000	0.175	762262.199	ug/L	324.008
L>	169 Tm			1501918.038	ug/L	1541729.238

## **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
	Sc	45	
[>	Li-1	6	
Ì	Be	9	

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Sample ID: STD1 RECAL

٢	Ca	44
1	Cr	52
	Mn	55
1	Ni	60
ļ	Cu	65
	Zn	68
[>	Ge-1	72
Γ	Cd	111
	Sb	121
	Ba	135
L>	In-1	115
Γ	Pb	208
[>	Tm-1	169
Γ	Cr	50
	Cr	53
	Ni	61
1	Cu	63
	Zn	67
	Zn	66
[>	Ge	72
Γ	Cd	108
-	Cd	114
[>	ln	115
Γ	207.977	208
1	Pb	207
1	Pb	206
Ĺ>	Tm	169

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 11 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 19:05:01 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCV 11.055

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			1169602.169	ug/L	1205738.109
[>	6 Li-1			1077999.243	ug/L	1099244.140
L	9 Be	100.763890	1.728	27128.706	ug/L	6.000
Γ	44 Ca	5157.405573	0.947	822442.363	ug/L	3832.488
	52 Cr	100.334223	0.978	538294.504	ug/L	18784.691
	55 Mn	100.328596	0.463	876114.115	ug/L	2433.799
	60 Ni	100.579769	1.000	146463.834	ug/L	215.904
1	65 Cu	100.560975	0.985	148716.638	ug/L	129.333
	68 Zn	99.893009	1.423	50005.452	ug/L	2957.387
حاً	72 Ge-1			1151082.041	ug/L	1184928.862
Ī	111 Cd	100.472752	0.732	142627.261	ug/L	65.381
Ì	121 Sb	50.647689	1.285	244322.368	ug/L	162.669
İ	135 Ba	100.820111	1.690	161230.988	ug/L	177.002
Ĺ>	115 In-1			1406944.901	ug/L	1459062.274
Ī	208 Pb	100.276474	0.910	2800703.874	ug/L	1212.712
حا	169 Tm-1			1509727.510	ug/L	1541729.238
Ī	50 Cr	99.843640	1.402	12306.124	ug/L	-43.784
i	53 Cr	99.005286	2.574	38317.440	ug/L	16273.054
1	61 Ni	98.745416	1.397	3820.208	ug/L	1414.774
ĺ	63 Cu	100.473217	0.803	113065.533	ug/L	95.335
	67 Zn	100.598774	0.764	5462.892	ug/L	1252.011
ĺ	66 Zn	99.705211	1.301	26171.155	ug/L	1450.463
حا	72 Ge			1151082.041	ug/L	1184928.862
Ē	108 Cd	99.408056	2.896	9659.647	ug/L	3.963
i	114 Cd	100.073425	1.200	340405.077	ug/L	148.458
Ĺ>	115 ln			1406944.901	ug/L	1459062.274
Ĩ	208 207.977	100.302837	0.936	1444836,422	ug/L	638.032
İ	207 Pb	100.401655	1.151	588666.322	ug/L	250.672
İ	206 Pb	100.131115	0.699	767201.131	ug/L	324.008
Ĺ>	169 Tm			1509727.510	ug/L	1541729.238

	Anaiyte	Mass	Int Std % Recovery
	Sc	45	
[>	Li-1	6	98.067
1	Be	9	

Γ	Ca	44		
1	Cr	52		
ł	Mn	55		
	Ni	60		
1	Cu	65		
	Zn	68		
[>	Ge-1	72	9	97.144
Γ	Cd	111		
1	Sb	121		
1	Ba	135		
<b>L&gt;</b>	in-1	115	ę	6.428
Γ	Pb	208		
Ĺ>	Tm-1	169	9	7.924
Γ	Cr	50		
	Cr	53		
	Ni	61		
	Cu	63		
1	Zn	67		
	Zn	66		
L>	Ge	72	9	7.144
Γ	Cd	108		
}	Cd	114		
<u></u>  >	ln	115	9	6.428
Γ	207.977	208		
	Pb	207		
1	Pb	206		
<u> </u>	Tm	169	9	7.924

Analyst: SHargrave Sample ID: CCB 11 Sample Description:

SOP No. SAC-MT-0001

Batch ID:

Sample Date/Time: Friday, December 03, 2010 19:08:35 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCB 11.056

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			1207542.242	ug/L	1205738.109
[>	6 Li-1			1104176.662	ug/L	1099244.140
L	9 Be	0.016964	89.616	10.667	ug/L	6.000
Γ	44 Ca	0.074361	1081.985	3847.497	ug/L	3832.488
1	52 Cr	0.030955	141.641	18960.204	ug/L	18784.691
{	55 Mn	-0.000598	452.478	2429.797	ug/L	2433.799
1	60 Ni	0.001250	533.593	217.874	ug/L	215.904
1	65 Cu	-0.006356	41.768	119.748	ug/L	129.333
1	68 Zn	0.002445	4731.983	2960.566	ug/L	2957.387
L>	72 Ge-1			1185636.803	ug/L	1184928.862
Γ	111 Cd	-0.008185	30.661	53.628	ug/L	65.381
-	121 Sb	-0.002172	127.816	152.669	ug/L	162.669
1	135 Ba	-0.005771	168.913	168.336	ug/L	177.002
L>	115 ln-1			1467295.029	ug/L	1459062.274
Γ	208 Pb	-0.000612	64.872	1200.378	ug/L	1212.712
Ĺ>	169 Tm-1			1548243.243	ug/L	1541729.238
Ī	50 Cr	-0.075667	79.141	-53.422	ug/L	-43.784
1	53 Cr	-1.168520	55.126	16008.854	ug/L	16273.054
	61 Ni	3.567395	49.567	1506.833	ug/L	1414.774
	63 Cu	0.002013	631.793	97.669	ug/L	95.335
	67 Zn	-0.702833	113.309	1222.329	ug/L	1252.011
1	66 Zn	-0.137885	195.621	1415.775	ug/L	1450.463
L>	72 Ge			1185636.803	ug/L	1184928.862
Γ	108 Cd	0.008646	199.069	4.865	ug/L	3.963
	114 Cd	-0.000191	1000.851	148.639	ug/L	148.458
Ĺ>	115 ln			1467295.029	ug/L	1459062.274
Γ	208 207.977	-0.000306	594.169	636.365	ug/L	638.032
ĺ	207 Pb	-0.000113	2078.170	251.005	ug/L	250.672
	206 Pb	-0.001567	85.677	313.008	ug/L	324.008
Ĺ>	169 Tm			1548243.243	ug/L	1541729.238

Int Std % Recovery	Mass	Anaiyte	
	45	Sc	
100.449	6	Li-1	Γ>
	9	Be	

Γ	Ca	44	
}	Cr	52	
1	Mn	55	
	Ni	60	
1	Çu	65	
	Zn	68	
Ĺ>	Ge-1	72	100.060
Γ	Cd	111	
	Sb	121	
	Ba	135	
L>	In-1	115	100.564
ſ	Pb	208	
L>	Tm-1	169	100.423
ſ	Cr	50	
	Cr	53	
	Ni	61	
	Cu	63	
	Zn	67	
	Zn	66	
را_	Ge	72	100.060
Γ	Cd	108	
ĺ	Cd	114	
<u></u>	In	115	100.564
Γ	207.977	208	
	Pb	207	
	Pb	206	
>	Tm	169	100.423

SOP No. SAC-MT-0001 Analyst: SHargrave Sample ID: MARDNB

Sample Description: G0L020000-282 BLK

Batch ID: 336282/86

Sample Date/Time: Friday, December 03, 2010 19:12:05 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\MARDNB.057

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 97 Number of Replicates: 3 Dual Detector Mode: Dual Initial Sample Quantity (mg): Sample Prep Volume (mL):

## Sample Result Summary

						<b>-</b> 1 11 1 1
	Mass Analyte	Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
_	45 Sc			1171147.636	ug/L	1205738.109
Γ>	6 Li-1			907975.367	ug/L	1099244.140
Ĺ	9 Be	-0.018883	27.246	0.667	ug/L	6.000
Γ	44 Ca	105.387731	1.140	20847.092	ug/L	3832.488
1	52 Cr	-0.899989	4.547	13843.375	ug/L	18784.691
J	55 Mn	-0.049548	45.577	1968.306	ug/L	2433.799
	60 Ni	-0.011565	52.495	196.583	ug/L	215.904
	65 Cu	0.411855	3.777	748.227	ug/L	129.333
	68 Zn	-4.932371	0.190	555.939	ug/L	2957.387
[>	72 Ge-1			1173295.932	ug/L	1184928.862
Γ	111 Cd	-0.031046	6.847	20.032	ug/Ĺ	65.381
	121 Sb	-0.025230	4.649	37.000	ug/L	162.669
ĺ	135 Ba	0.501118	4.533	1022.082	ug/L	177.002
Ĺ>	115 ln-1			1481134.511	ug/L	1459062.274
Ī	208 Pb	0.006100	22.627	1425.395	ug/L	1212.712
Ĺ>	169 Tm-1			1585347.405	ug/L	1541729,238
Γ̈́	50 Cr	0.562759	17.352	27.537	ug/L	-43.784
Ì	53 Cr	-44.214524	3.568	5870.933	ug/L	16273.054
Ì	61 Ni	2.466514	68.967	1463.138	ug/L	1414.774
ĺ	63 Cu	0.419699	0.968	575.406	ug/L	95.335
i	67 Zn	-17.036553	6.941	507.057	ug/L	1252.011
Ĺ	66 Zn	-4.700011	0.409	246.347	ug/L	1450.463
حا	72 Ge			1173295.932	ug/L	1184928.862
Ē	108 Cd	-0.028617	55.965	1.087	ug/L	3.963
į	114 Cd	-0.024552	7.929	62.896	ug/L	148.458
حا	115 ln			1481134.511	ug/L	1459062.274
Ĭ	208 207.977	0.005957	43.314	745.710	ug/L	638.032
i	207 Pb	0.009424	14.451	315.674	ug/L	250.672
i	206 Pb	0.003826	29.722	364.010	ug/L	324.008
>	169 Tm			1585347.405	ug/L	1541729.238

#### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
	Sc	45	
<b>[&gt;</b>	Li-1	6	82.600
1	Be	9	

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Sample ID: MARDNB

Γ	Ca	44	
	Cr	52	
1	Mn	55	
1	Ni	60	
	Cu	65	
	<b>Z</b> n	68	
را_	Ge-1	72	99.018
Γ	Cd	111	
	Sb	121	
1	Ba	135	
[>	In-1	115	101.513
Γ	Pb	208	
[>	Tm-1	169	102.829
Γ	Cr	50	
	Cr	53	
	Ni	61	
	Cu	63	
	Zn	67	
	Zn	. 66	
L>	Ge	72	99.018
Γ	Cd	108	
1	Cd	114	
حا	In	115	101.513
ſ	207.977	208	
{	Pb	207	
1	Pb	206	
<u></u>  >	Tm	169	102.829

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MARDNC

Sample Description: G0L020000-282 LCS

Batch ID: 336282/86

Sample Date/Time: Friday, December 03, 2010 19:15:36 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\MARDNC.058

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			1102059.111	ug/L	1205738.109
\[ >	6 Li-1			899952.826	ug/L	1099244.140
Ļ	9 Be	179.568204	2.163	40349.866	ug/L	6.000
Γ	44 Ca	1054.569742	1.017	166727.396	ug/L	3832.488
	52 Cr	184.249755	1.469	948146.478	ug/L	18784.691
	55 Mn	183.278298	1.666	1557164.086	ug/L	2433.799
İ	60 Ni	186.752213	1.146	264770.605	ug/L	215.904
1	65 Cu	188.591334	1.411	271605.033	ug/L	129.333
	68 Zn	186.544850	1.787	88546.297	ug/L	2957.387
>	72 Ge-1			1121497.194	ug/L	1184928.862
Γ	111 Cd	178.158142	2.310	259653.977	ug/L	65.381
	121 Sb	176.035766	2.062	871661.465	ug/L	162.669
ĺ	135 Ba	184.598850	1.871	303038.067	ug/L	177.002
>	115 ln-1			1445096.727	ug/L	1459062.274
Ť	208 Pb	184.640032	1.765	5230683.931	ug/L	1212.712
>	169 Tm-1			1531756.578	ug/L	1541729.238
Ī	50 Cr	160.801213	1.132	19334.260	ug/L	-43.784
į	53 Cr	136.448533	1.574	45623.541	ug/L	16273.054
Ì	61 Ni	178.414807	2.535	5646.345	ug/L	1414.774
Ì	63 Cu	187.036137	1.315	204979,411	ug/L	95.335
i	67 Zn	170.054630	3.283	8178.029	ug/L	1252.011
j	66 Zn	184.440886	1.637	45998.170	ug/L	1450.463
Ĺ>	72 Ge			1121497.194	ug/L	1184928.862
Ī	108 Cd	176.590808	2.487	17620.555	ug/L	3.963
i	114 Cd	177.935331	1.763	621479.259	ug/L	148.458
حا	115 <b>I</b> n			1445096.727	ug/L	1459062.274
Γ	208 207.977	189.464459	1.852	2768156.326	ug/L	638.032
i	207 Pb	199.192290		1184607.544	ug/L	250.672
İ	206 Pb	164.433787		1277920.061	ug/L	324.008
>	169 Tm			1531756.578	ug/L	1541729.238
					_	

	Analyte	Mass	Int Std % Recovery
	Sc	45	
[>	Li-1	6	81.870
ĺ	Be	9	

Γ	Ca	44	
ĺ	Cr	52	
ĺ	Mn	55	
Ì	Ni	60	
1	Cu	65	
	Zn	68	
[>	Ge-1	72	94.647
Γ	Cd	111	
	Sb	121	
	Ba	135	
L>	In-1	115	99.043
ſ	Pb	208	
L>	Tm-1	169	99.353
Γ	Cr	50	
	Cr	53	
1	Ni	61	
	Cu	63	
	Zn	67	
	Zn	66	
[>	Ge	72	94.647
Γ	Cd	108	
	Cd	114	
[>	In	115	99.043
Γ	207.977	208	
ĺ	Pb	207	
1	Pb	206	
[>	Tm	169	99.353

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MARD8L Sample Description: G0L020000-286 LCSD

Batch ID: 336286/82

Sample Date/Time: Friday, December 03, 2010 19:19:04 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\MARD8L.059

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			1066680.722	ug/L	1205738.109
[>	6 Li-1			899523.294	ug/L	1099244.140
Ĺ	9 Be	170.983368	1.058	38415.945	ug/L	6.000
Γ	44 Ca	1021.087979	1.285	157694.992	ug/L	3832.488
}	52 Cr	178.696641	1.134	898208.485	ug/L	18784.691
	55 Mn	179.850631	1.205	1491784.632	ug/L	2433.799
	60 Ni	180.781338	0.928	250205.755	ug/L	215.904
	65 Cu	182.289531	0.990	256288.345	ug/L	129.333
	68 Zn	179.893322	1.350	83456.529	ug/L	2957.387
L>	72 Ge-1			1094712.316	ug/L	1184928.862
Γ	111 Cd	174.690563	0.974	249867.030	ug/L	65.381
	121 Sb	172.517784	0.724	838360.517	ug/L	162.669
	135 Ba	180.465259	1.421	290735.216	ug/L	177.002
<u> </u> >	115 ln-1			1417835.041	ug/L	1459062.274
٢	208 Pb	179.471113	0.814	4990533.366	ug/L	1212.712
<u> </u> >	169 Tm-1			1503292.945	ug/L	1541729.238
Γ	50 Cr	156.237774	2.195	18335.303	ug/L	-43.784
1	53 Cr	128.878336	0.999	42894.336	ug/L	16273.054
1	61 Ni	169.264649	1.181	5294.493	ug/L	1414.774
1	63 Cu	180.082622	1.501	192653.674	ug/L	95.335
1	67 Zn	165.873003	3.154	7814.414	ug/L	1252.011
-	66 Zn	179.454725	1.341	43726.301	ug/L	1450.463
Ĺ>	72 Ge			1094712.316	ug/L	1184928.862
٢	108 Cd	171.210195	0.650	16767.240	ug/L	3.963
	114 Cd	173.419686	0.790	594416.958	ug/L	148.458
L>	115 ln			1417835.041	ug/L.	1459062.274
Γ	208 207.977	184.506585	0.815	2646060.522	ug/L	638.032
	207 Pb	193.104024	0.829	1127207.506	ug/L	250.672
l	206 Pb	159.571627	0.890	1217265.338	ug/L	324.008
Ĺ>	169 Tm			1503292.945	ug/L	1541729.238

	Analyte	Mass	Int Std % Recovery
	Sc	45	
[>	Li-1	6	81.831
1	Be	9	

Γ	Ca	44		
	Cr	52		
1	Mn	55		
1	Ni	60		
	Cu	65		
1	Zn	68		
[>	Ge-1	72		92.386
Γ	Cd	111	•	
-	Sb	121		
ł	Ba	135		
<u> </u> >	in-1	115		97.174
Γ	Pb	208		
Ĺ>	Tm-1	169		97.507
Γ	Cr	50		
ĺ	Cr	53		
1	Ni	61		
İ	Cu	63		
l	Zn	67		
1	Zn	66		
L>	Ge	72		92.386
Γ	Cd	108		
	Cd	114		
L>	ln	115		97.174
Γ	207.977	208		
	Pb	207		
]	Pb	206		
1>	Tm	169		97.507

Analyst: SHargrave Sample ID: CCV 12 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 19:43:23 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCV 12.066

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

•	Conc. Mean	Conc. RSD		•	Blank Intensity
				_	1205738.109
					1099244.140
				-	6.000
				ug/L	3832.488
			540646.669	ug/L	18784.691
55 Mn	100.785110	0.201	874120.439	ug/L	2433.799
60 Ni	100.726609	0.298	145687.742	ug/L	215.904
65 Cu	100.956480	0.478	148294.068	ug/L	129.333
68 Zn	101.236198	0.193	50299.021	ug/L	2957.387
72 Ge-1			1143237.116	ug/L	1184928.862
111 Cd	99,278401	0.102	142308.677	ug/L	65.381
121 Sb	49.831101	0.879	242743.330	ug/L	162.669
135 Ba	99.071319	0.442	159998.418	ug/L	177.002
115 ln-1			1420581.805	ug/L	1459062.274
208 Pb	99.957290	0.293	2770609.541	ug/L	1212.712
169 Tm-1			1498190.511	ug/L	1541729.238
50 Cr	99.737734	1.962	12209.823	ug/L	-43.784
53 Cr	101.796658	3.045	38682.819	ug/L	16273.054
61 Ni	96.008033	1.656	3727.054	ug/L	1414.774
63 Cu	100.509757	0.612	112341.969	ug/L	95.335
67 Zn	99.069496	1.667	5361.317	ug/L	1252.011
66 Zn	100.213905	0.715	26120.582	ug/L	1450.463
72 Ge			1143237.116	ug/L	1184928.862
108 Cd	98.567955	1.076	9673.428	ug/L	3.963
114 Cd	98.987367	0.538	340015.646	ug/L	148.458
115 ln			1420581.805	ug/L	1459062.274
208 207.977	100.573129	0.202	1437757.666	ug/L	638.032
207 Pb	99.268348	0.874	577608.428	ug/L	250.672
206 Pb	99.326704	0.561	755243.447	ug/L	324.008
169 Tm			1498190.511	ug/L	1541729.238
	45 Sc 6 Li-1 9 Be 44 Ca 52 Cr 55 Mn 60 Ni 65 Cu 68 Zn 72 Ge-1 111 Cd 121 Sb 135 Ba 115 In-1 208 Pb 169 Tm-1 50 Cr 53 Cr 61 Ni 63 Cu 67 Zn 66 Zn 72 Ge 108 Cd 114 Cd 115 In 208 207.977 207 Pb 206 Pb	45 Sc 6 Li-1 9 Be 99.863974 44 Ca 5177.579582 52 Cr 101.496839 55 Mn 100.785110 60 Ni 100.726609 65 Cu 100.956480 68 Zn 101.236198 72 Ge-1 111 Cd 99.278401 121 Sb 49.831101 135 Ba 99.071319 115 In-1 208 Pb 99.957290 169 Tm-1 50 Cr 99.737734 53 Cr 101.796658 61 Ni 96.008033 63 Cu 100.509757 67 Zn 99.069496 66 Zn 100.213905 72 Ge 108 Cd 98.567955 114 Cd 98.987367 115 In 208 207.977 100.573129 207 Pb 99.268348 206 Pb 99.326704	45 Sc 6 Li-1 9 Be 99.863974 1.692 44 Ca 5177.579582 0.109 52 Cr 101.496839 0.473 55 Mn 100.785110 0.201 60 Ni 100.726609 0.298 65 Cu 100.956480 0.478 68 Zn 101.236198 0.193 72 Ge-1 111 Cd 99.278401 0.102 121 Sb 49.831101 0.879 135 Ba 99.071319 0.442 115 In-1 208 Pb 99.957290 0.293 169 Tm-1 50 Cr 99.737734 1.962 53 Cr 101.796658 3.045 61 Ni 96.008033 1.656 63 Cu 100.509757 0.612 67 Zn 99.069496 1.667 66 Zn 100.213905 0.715 72 Ge 108 Cd 98.567955 1.076 114 Cd 98.987367 0.538 115 In 208 207.977 100.573129 0.202 207 Pb 99.268348 0.874 206 Pb 99.326704 0.561	45 Sc	45 Sc

## **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
	Sc	45	
Γ>	Li-1	6	100.453
L	Be	9	

Report Date/Time: Monday, December 06, 2010 10:11:41

Page 1

Γ	Ca	44	
	Cr	52	
	Mn	55	
J	Ni	60	
]	Cu	65	
	Zn	68	
>	Ge-1	72	96.481
٢	Cd	111	
1	Sb	121	
	Ba	135	
L>	In-1	115	97.363
٢	Pb	208	
L>	Tm-1	169	97.176
ſ	Cr	50	
1	Cr	53	
	Ni	61	
	Cu	63	
ł	Zn	67	
i	Zn	66	
L>	Ge	72	96.481
Γ	Cd	108	
1	Cd	114	
L>	ln	115	97.363
Γ	207.977	208	
1	Pb	207	
1	Pb	206	
_>	Tm	169	97.176

Analyst: SHargrave Sample ID: CCB 12 Sample Description:

SOP No. SAC-MT-0001

Batch ID:

Sample Date/Time: Friday, December 03, 2010 19:46:56 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\CCB 12.067

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			Blank Intensity
45 Sc				•	1205738.109
6 Li-1			1134767.648	-	1099244.140
9 Be	0.012320	74.887	9.667	ug/L	6.000
44 Ca	0.849515	75.634	3941.888	ug/L	3832.488
52 Cr	0.446485	6.556	21012.974	ug/L	18784.691
55 Mn	-0.003142	75.200	2388.115	ug/L	2433.799
60 Ni	0.012209	78.651	232.514	ug/L	215.904
65 Cu	0.005601	83.223	136.856	ug/L	129.333
68 Zn	0.241098	30.957	3052.108	ug/L	2957.387
72 Ge-1			1176255.797	ug/L	1184928.862
111 Cd	-0.003296	143.778	61.172	ug/L	65.381
121 Sb	0.005896	47.064	194.003	ug/L	162.669
135 Ba	-0.002475	138.046	174.669	ug/L	177.002
115 ln-1			1473728.568	ug/L	1459062.274
208 Pb	0.000801	346.723	1239.047	ug/L	1212.712
169 Tm-1			1546562.801	ug/L	1541729.238
50 Cr	-0.121130	127.743	<b>-</b> 58.864	ug/L	-43.784
53 Cr	-0.841757	57.072	15957.828	ug/L	16273.054
61 Ni	0.895933	71.323	1427.115	ug/L	1414.774
63 Cu	0.000625	998.908	95.335	ug/L	95.335
67 Zn	-1.029712	57.756	1198.316	ug/L	1252.011
66 Zn	0.079895	325.715	1460.470	ug/L	1450.463
72 Ge			1176255.797	ug/L	1184928.862
108 Cd	0.032347	70.125	7.297	ug/L.	3.963
114 Cd	0.000577	789.912	151.928	ug/L	148.458
115 In			1473728.568	ug/L	1459062.274
208 207.977	0.000531	441.742	647.700	ug/L	638.032
207 Pb	0.002664	150.068	267.339	ug/L	250.672
206 Pb	-0.000117	2399.351	324.008	ug/L	324.008
169 Tm			1546562.801	ug/L	1541729.238
	45 Sc 6 Li-1 9 Be 44 Ca 52 Cr 55 Mn 60 Ni 65 Cu 68 Zn 72 Ge-1 111 Cd 121 Sb 135 Ba 115 In-1 208 Pb 169 Tm-1 50 Cr 53 Cr 61 Ni 63 Cu 67 Zn 66 Zn 72 Ge 108 Cd 114 Cd 115 In 208 207.977 207 Pb 206 Pb	45 Sc 6 Li-1 9 Be 0.012320 44 Ca 0.849515 52 Cr 0.446485 55 Mn -0.003142 60 Ni 0.012209 65 Cu 0.005601 68 Zn 72 Ge-1 111 Cd -0.003296 121 Sb 0.005896 135 Ba -0.002475 115 In-1 208 Pb 0.000801 169 Tm-1 50 Cr -0.121130 53 Cr -0.841757 61 Ni 0.895933 63 Cu 0.000625 67 Zn -1.029712 66 Zn 0.079895 72 Ge 108 Cd 0.0032347 114 Cd 0.000577 115 In 208 207.977 0.000531 207 Pb 0.002664 206 Pb -0.000117	45 Sc 6 Li-1 9 Be 0.012320 74.887 44 Ca 0.849515 75.634 52 Cr 0.446485 6.556 55 Mn -0.003142 75.200 60 Ni 0.012209 78.651 65 Cu 0.005601 83.223 68 Zn 0.241098 30.957 72 Ge-1 111 Cd -0.003296 143.778 121 Sb 0.005896 47.064 135 Ba -0.002475 138.046 115 In-1 208 Pb 0.000801 346.723 169 Tm-1 50 Cr -0.121130 127.743 53 Cr -0.841757 57.072 61 Ni 0.895933 71.323 63 Cu 0.000625 998.908 67 Zn -1.029712 57.756 66 Zn 0.079895 325.715 72 Ge 108 Cd 0.032347 70.125 115 In 208 207.977 0.000531 441.742 207 Pb 0.002664 150.068 206 Pb -0.000117 2399.351	45 Sc       1195269.980         6 Li-1       1134767.648         9 Be       0.012320       74.887       9.667         44 Ca       0.849515       75.634       3941.888         52 Cr       0.446485       6.556       21012.974         55 Mn       -0.003142       75.200       2388.115         60 Ni       0.012209       78.651       232.514         65 Cu       0.005601       83.223       136.856         68 Zn       0.241098       30.957       3052.108         72 Ge-1       1176255.797       111 Cd       -0.003296       143.778       61.172         121 Sb       0.005896       47.064       194.003       135 Ba       -0.002475       138.046       174.669         115 In-1       1473728.568       208 Pb       0.000801       346.723       1239.047         169 Tm-1       1546562.801       1546562.801       1546562.801         50 Cr       -0.121130       127.743       -58.864         53 Cr       -0.841757       57.072       15957.828         61 Ni       0.895933       71.323       1427.115         63 Cu       0.000625       998.908       95.335         67 Zn       -	45 Sc

Int Std % Recovery	Mass	Analyte	
	45	Sc	
103.232	6	Li-1	[>
	9	Re	t

ſ	Ca	44	
1	Cr	52	
ŀ	Mn	55	
-	Ni	60	
	Cu	65	
j	Zn	68	
<u></u>  >	Ge-1	72	99.268
Γ	Cd	111	
1	Sb	121	
	Ba	135	
۲۶	In-1	115	101.005
Γ	Pb	208	
>	Tm-1	169	100.314
٢	Cr	50	
	Cr	53	
ļ	Ni	61	
1	Cu	63	
į	Zn	67	
1	Zn	66	
L>	Ge	72	99.268
Γ	Cd	108	
	Cd	114	
<u> </u> >	In	115	101.005
Γ	207.977	208	
	Pb	207	
	Pb	206	
1>	Tm	169	100.314

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 13 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 20:14:57 Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth Dataset File: E:\elandata\Dataset\101203b2\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
	45 Sc			1155092.718	ug/L	1205738.109
[>	6 Li-1			1050970.537	ug/L	1099244.140
Ĺ	9 Be	101.783338	1.492	26718.307	ug/L	6.000
Ī	44 Ca	5104.270870	1.662	816752.428	ug/L	3832.488
1	52 Cr	100.430277	2.854	540540.272	ug/L	18784.691
	55 Mn	100.769304	2.210	882833.101	ug/L	2433.799
	60 Ni	100.048718	2.119	146175.417	ug/L	215.904
1	65 Cu	100.758356	2.092	149504.060	ug/L	129.333
	68 Zn	99.985405	2.338	50216.381	ug/L	2957.387
_>	72 Ge-1			1155110.248	ug/L	1184928.862
Γ	111 Cd	100.878279	2.843	144760.296	ug/L	65.381
1	121 Sb	50.789540	2.473	247698.729	ug/L	162.669
1	135 Ba	99.941437	2.806	161582.371	ug/L	177.002
L>	115 In-1			1422813.875	ug/L	1459062.274
Γ	208 Pb	99.907492	1.999	2796662.403	ug/L	1212.712
<u> </u>	169 Tm-1			1513332.822	ug/L	1541729.238
Γ	50 Cr	100.332290	2.745	12407.374	ug/L	-43.784
1	53 Cr	101.164840	2.424	38935.368	ug/L	16273.054
ł	61 Ni	101.946181	2.647	3912.699	ug/L	1414.774
1	63 Cu	100.185446	2.311	113112.479	ug/L	95.335
	67 Zn	98.588848	3.944	5396.069	ug/L	1252.011
1	66 Zn	99.844796	2.322	26293.221	ug/L	1450.463
[>	72 Ge			1155110.248	ug/L	1184928.862
Γ	108 Cd	102.097264	2.868	10031.418	ug/L	3.963
1	114 Cd	100.792606	2.574	346614.477	ug/L	148.458
<u></u>  >	115 ln			1422813.875	ug/L	1459062.274
Γ	208 207.977	100.687526	2.132	1453614.843	ug/L	638.032
	207 Pb	99.350445	2.190	583812.228	ug/L	250.672
1	206 Pb	98.867277	1.605	759235.332	ug/L	324.008
<u> </u>	169 Tm			1513332.822	ug/L	1541729.238

## **Internal Standard Recoveries**

	Anaiyte	Mass	Int Std % Recovery
	Sc	45	
Γ>	Li-1	6	95.608
L	Be	9	

Report Date/Time: Monday, December 06, 2010 10:12:03

Page 1

Γ	Ca	44		
İ	Cr	52		
-	Mn	55		
ł	Ni	60		
ļ	Cu	65		
	Zn	68		
L>	Ge-1	72	97	7.484
٢	Cď	111		
	Sb	121		
	Ba	135		
Ĺ>	In-1	115	97	7.516
Γ	Pb	208		
L>	Tm-1	169	98	8.158
Γ	Cr	50		
1	Cr	53		
1	Ni	61		
	Cu	63		
1	Zn	67		
1	Zn	66		
[>	Ge	72	97	7.484
Γ	Cd	108		
ŀ	Cd	114		
L>	ln	115	97	7.516
Γ	207.977	208		
ł	Pb	207		
1	Pb	206		
حا	Tm	169	98	3.158

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 13
Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 20:18:33
Method File: E:\elandata\Method\000-TRC+AIRTEK-SH.mth
Dataset File: E:\elandata\Dataset\101203b2\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
	45 Sc			1203084.508	ug/L	1205738.109
Γ>	6 Li-1			1119709.198	ug/L	1099244.140
i	9 Be	0.003165	298.704	7.000	ug/L	6.000
ĩ	44 Ca	-1.573236	40.423	3620.364	ug/L	3832.488
i	52 Cr	0.040861	128.682	19240.051	ug/L	18784.691
i	55 Mn	-0.094138	2.306	1609.537	ug/L	2433.799
i	60 Ni	-0.048989	2.018	144.340	ug/L.	215.904
i	65 Cu	-0.002121	297.851	127.725	ug/L	129.333
İ	68 Zn	-0.753367	11.856	2623.680	ug/L	2957.387
Ĺ>	72 Ge-1			1199649.337	ug/L	1184928.862
Ī	111 Cd	-0.015115	24.867	44.691	ug/L	65.381
Ì	121 Sb	0.002617	11.088	182.003	ug/L	162.669
j	135 Ba	-0.016277	41.019	155.335	ug/L	177.002
Ĺ>	115 ln-1			1510988.424	ug/L	1459062.274
Ī	208 Pb	-0.009098	1.520	973.695	ug/L	1212.712
>	169 Tm-1			1574714.789	ug/L	1541729.238
Ī	50 Cr	-0.119616	108.076	-59.838	ug/L	-43.784
1	53 Cr	7.168613	4.117	18173.373	ug/L	16273.054
]	61 Ni	3.763821	12.531	1529.515	ug/L	1414.774
	63 Cu	0.006984	123.540	104.669	ug/L	95.335
1	67 Zn	-1.628457	77.222	1195.648	ug/L	1252.011
	66 Zn	-0.892910	9.167	1237.337	ug/L	1450.463
[>	72 Ge			1199649.337	ug/L	1184928.862
Γ	108 Cd	-0.014781	246.022	2.568	ug/L	3.963
	114 Cd	-0.003439	130.039	141.230	ug/L	148.458
<u></u>  >	115 ln			1510988.424	ug/L	1459062.274
Ī	208 207.977	-0.010051	11.873	500.686	ug/L	638.032
	207 Pb	-0.007423	19.747	210.670	ug/L	250.672
-	206 Pb	-0.008589	16 <i>.</i> 573	262.339	ug/L	324.008
Ĺ>	169 Tm			1574714.789	ug/L	1541729.238

	Analyte	Mass	Int Std % Recovery
	Sc	45	
[>	Li-1	6	101.862
Ì	Be	9	

Γ	Ca	44	
	Cr	52	
İ	Mn	55	
-	Ni	60	
1	Cu	65	
1	Zn	68	
Į>	Ge-1	72	101.242
Γ	Cd	111	
	Sb	121	
	Ba	135	
L>	in-1	115	103.559
٢	Pb	208	
<u></u>	Tm-1	169	102.140
٢	Cr	50	
}	Cr	53	
j	Ni	61	
1	Cu	63	
1	Zn	67	
1	Zn	66	
{>	Ge	72	101.242
٢	Cd	108	
1	Cd	114	
<u></u>	In	115	103.559
ſ	207.977	208	
ļ	Pb	207	
1	Pb	206	
Ĺ>	Tm	169	102.140

Analyst: SHargrave

Sample ID: CCV 14 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 20:22:09 Method File: E:\elandata\Method\000-CleanHarbor.mth Dataset File: E:\elandata\Dataset\101203b2\CCV 14.077

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
ſ	44 Ca	5414.103996	0.595	853299.150	ug/L	3832.488
ì	52 Cr	103.588026	0.823	548794.411	ug/L	18784.691
1	60 Ni	101.730607	0.708	146439.170	ug/L	215.904
1	75 As			137806.832	ug/L	0.000
l>	72 Ge-1			1137839.767	ug/L.	1184928.862
Γ	111 Cd	100.245872	0.216	146232.025	ug/L	65.381
L>	115 ln-1			1445646.430	ug/L	1459062.274
Γ	208 Pb	99.796580	0.433	2857623.254	ug/L	1212.712
L>	169 Tm-1			1547723.834	ug/L	1541729.238
ſ	50 Cr	104.600512	1.276	12747.302	ug/L	-43.784
-	53 Cr	104.956257	2.285	39208.325	ug/L	16273.054
1	61 Ni	96.175631	2.361	3713.699	ug/L	1414.774
L>	72 Ge			1137839.767	ug/L	1184928.862
Γ	108 Cd	99.984452	1.064	9985,241	ug/L	3.963
1	114 Cd	100.040756	0.545	349695.348	ug/L	148.458
L>	115 in			1445646.430	ug/L	1459062.274
Γ	208 207.977	100.426246	0.450	1483107.536	ug/L	638.032
Ì	207 Pb	99.121466	0.493	595838.621	ug/L	250.672
İ	206 Pb	99.129417	0.462	778677.097	ug/L	324.008
L>	169 Tm			1547723.834	ug/L	1541729.238

## **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
İ	Cr	52	
j	Ni	60	
ĺ	As	75	
L>	Ge-1	72	96.026
Γ	Cd	111	
[>	In-1	115	99.081
Γ	Pb	208	
Ĺ>	Tm-1	169	100.389
Γ	Cr	50	
1	Cr	53	
1	Ni	61	
Ĺ>	Ge	72	96.026

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Γ	Cd	108	
1	Cd	114	
[>	in	115	99.081
Γ	207.977	208	
1	Pb	207	
	Pb	206	
<u></u> [>	Tm	169	100.389

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SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 14 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 20:25:27 Method File: E:\elandata\Method\000-CleanHarbor.mth Dataset File: E:\elandata\Dataset\101203b2\CCB 14.078

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
Γ	44 Ca	-1.880252	12.104	3493.959	ug/L	3832.488
1	52 Cr	0.331654	26.309	20371.900	ug/L	18784.691
	60 Ni	-0.046315	3.520	145.273	ug/L	215.904
1	75 As			11160.994	ug/L	0.000
ا_>	72 Ge-1			1174414.068	ug/L	1184928.862
Γ	111 Cd	-0.012190	48.187	48.145	ug/L	65.381
[>	115 ln-1			1481880.691	ug/L	1459062.274
Γ	208 Pb	-0.008000	19.137	1001.031	ug/L	1212.712
[>	169 Tm-1			1567730.261	ug/L	1541729.238
Γ	50 Cr	-0.183930	11.383	-66.603	ug/L	-43.784
	53 Cr	5.678200	11.029	17445.367	ug/L	16273.054
	61 Ni	2.699623	64.066	1470.476	ug/L	1414.774
L>	72 Ge			1174414.068	ug/L	1184928.862
Γ	108 Cd	0.005804	340.940	4.630	ug/L	3.963
}	114 Cd	-0.004369	129.485	135.245	ug/L	148.458
L>	115 ln			1481880.691	ug/L	1459062.274
Γ	208 207.977	-0.008624	25.394	519.688	ug/L	638.032
ĺ	207 Pb	-0.008195	7.875	205.003	ug/L	250.672
1	206 Pb	-0.006677	30.986	276.339	ug/L	324.008
L>	169 Tm			1567730.261	ug/L	1541729.238

#### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
5	Ca	44	
ĺ	Cr	52	
1	Ni	60	
Ì	As	75	
حاً	Ge-1	72	99.113
Ī	Cd	111	
Ĺ>	In-1	115	101.564
Ī	Pb	208	
حأ	Tm-1	169	101.686
Ī	Cr	50	
İ	Cr	53	
}	Ni	61	
Ĺ>	Ge	72	99.113

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Γ	Cd	108	
	Cd	114	
L>	In	115	101.564
Γ	207.977	208	
1	₽b	207	
1	Pb	206	
[>	Tm	169	101.686

Report Date/Time: Monday, December 06, 2010 10:17:06 Page 2

Analyst: SHargrave Sample ID: CCV 15 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 20:50:53 Method File: E:\elandata\Method\000-CleanHarbor.mth Dataset File: E:\elandata\Dataset\101203b2\CCV 15.086

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
Γ	44 Ca	5397.629796	1.262	876020.191	ug/L	3832.488
	52 Cr	102.720928	0.856	560568.129	ug/L	18784.691
1	60 Ni	100.555657	1.077	149059.807	ug/L	215.904
1	75 As			139695.445	ug/L	0.000
[>	72 Ge-1			1171786.720	ug/L	1184928.862
ſ	111 Cd	97.992333	0.271	145619.582	ug/L	65.381
Ļ>	115 ln-1			1472717.216	ug/L	1459062.274
Γ	208 Pb	97.629482	0.502	2831729.906	ug/L	1212.712
حا	169 Tm-1			1567736.371	ug/L	1541729.238
Γ	50 Cr	102.369564	0.875	12846.527	ug/L	<b>-</b> 43.784
ĺ	53 Cr	108.623877	2.461	41234.216	ug/L	16273.054
	61 Ni	99.124148	3.604	3898.341	ug/L	1414.774
<u> </u>	72 Ge			1171786.720	ug/L	1184928.862
Γ	108 Cd	98.061753	0.494	9977.417	ug/L	3.963
	114 Cd	97.942474	0.162	348780.048	ug/L	148.458
<u> </u>	115 ln			1472717.216	ug/L	1459062.274
Γ	208 207.977	98.237158	0.735	1469542.043	ug/L	638.032
	207 Pb	97.038277	0.518	590858.834	ug/L	250.672
İ	206 Pb	96.939449	0.070	771329.029	ug/L	324.008
1>	169 Tm			1567736.371	ug/L	1541729.238

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
ĺ	Cr	52	
1	Ni	60	
	As	75	
Ĺ>	Ge-1	72	98.891
Γ	Cd	111	
[>	ln-1	115	100.936
Γ	Pb	208	
_>	Tm-1	169	101.687
Ī	Cr	50	
	Cr	53	
İ	Ni	61	
>	Ge	72	98.891

Γ	Cd	108	
1	Cd	114	
[>	ln	115	100.936
٢	207.977	208	
1	Pb	207	
1	Pb	206	
15	Tm	169	101.687

Report Date/Time: Monday, December 06, 2010 10:17:23

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SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 15 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 20:54:10 Method File: E:\elandata\Method\000-CleanHarbor.mth Dataset File: E:\elandata\Dataset\101203b2\CCB 15.087

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
Γ	44 Ca	-0.098518	552.139	3833.822	ug/L	3832.488
	52 Cr	0.656261	10.848	22387.313	ug/L	18784.691
	60 Ni	-0.050090	7.213	141.538	ug/L	215.904
Į	75 As			11473.141	ug/L	0.000
L>	72 Ge-1			1190416.220	ug/L	1184928.862
٢	111 Cd	-0.010364	73.174	51,641	ug/L	65.381
L>	115 ln-1			1503028.103	ug/L	1459062.274
Γ	208 Pb	-0.007672	18.147	1019.698	ug/L.	1212.712
L>	169 Tm-1			1581467.111	ug/L	1541729.238
Γ	50 Cr	-0.207552	64.511	-70.658	ug/L	-43.784
	53 Cr	5.538287	17.798	17650.623	ug/L	16273.054
ĺ	61 Ni	-2.079248	222.625	1368.748	ug/L	1414.774
[>	72 Ge			1190416.220	ug/L	1184928.862
Γ	108 Cd	-0.018452	206.818	2.199	ug/L	3.963
	114 Cd	-0.007510	39.496	125.565	ug/L	148.458
<u> </u> >	115 ln			1503028.103	ug/L	1459062.274
Γ	208 207.977	-0.008636	30.719	524.355	ug/L	638.032
1	207 Pb	-0.006039	28.723	220.004	ug/L	250.672
}	206 Pb	-0.007109	5.057	275.339	ug/L	324.008
L>	169 Tm			1581467.111	ug/L	1541729.238

#### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
ĺ	Cr	52	
1	Ni	60	
[	As	75	
<b>[</b> >	Ge-1	72	100.463
Γ	Cd	111	
L>	In-1	115	103.013
Γ	Pb	208	
L>	Tm-1	169	102.577
Γ	Cr	50	
1	Cr	53	
ĺ	Ni	61	
L>	Ge	72	100.463

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Sample ID: CCB 15

Γ	Cd	108	
	Cd	114	
>	In	115	103.013
Γ	207.977	208	
	Pb	207	
	Pb	206	
>	Tm	169	102.577

Report Date/Time: Monday, December 06, 2010 10:17:25

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Sample ID: CCB 15

SOP No. SAC-MT-0001 Analyst: SHargrave

#### Sample ID: CCV 16

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 20:57:27 Method File: E:\elandata\Method\000-CleanHarbor.mth Dataset File: E:\elandata\Dataset\101203b2\CCV 16.088

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
Γ	44 Ca	5237.533526	2.243	891482.265	ug/L	3832.488
	52 Cr				ug/L	18784.691
	60 Ni				ug/L	215.904
}	75 As			144579.351	ug/L	0.000
<u> </u>	72 Ge-1			1229013.819	ug/L	1184928.862
Γ	111 Cd				ug/L	65.381
Ĺ>	115 In-1				ug/L	1459062.274
Γ	208 Pb				ug/L	1212.712
L>	169 Tm-1				ug/L.	1541729.238
Γ	50 Cr				ug/L	-43.784
	53 Cr				ug/L	16273.054
	61 Ni				ug/L.	1414.774
حا	72 Ge			1229013.819	ug/L	1184928.862
Γ	108 Cd				ug/L	3.963
	114 Cd				ug/L	148.458
L>	115 ln				ug/L	1459062.274
٢	208 207.977				ug/L	638.032
1	207 Pb				ug/L	250.672
	206 Pb				ug/L	324.008
L>	169 Tm				ug/L	1541729.238

#### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
İ	Cr	52	
	Ni	60	
	As	75	
>	Ge-1	72	103.720
Γ	Cd	111	
L>	In-1	115	
Γ	Pb	208	
L>	Tm-1	169	
Γ	Cr	50	
1	Cr	53	
1	Ni	61	
<b>L&gt;</b>	Ge	72	103.720

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Sample ID: CCV 16

ſ	Cd	108
1	Cd	114
L>	<b>In</b>	115
ſ	207.977	208
{	Pb	207
	Pb	206
L>	Tm	169

Report Date/Time: Monday, December 06, 2010 10:19:05

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Sample ID: CCV 16

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 16 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 21:00:05 Method File: E:\elandata\Method\000-CleanHarbor.mth Dataset File: E:\elandata\Dataset\101203b2\CCB 16.089

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 Con	c. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
Γ	44 Ca	9.588944	3.215	5615.477	ug/L	3832.488
j	52 Cr				ug/L	18784.691
1	60 Ni				ug/L	215.904
1	75 As			12302.767	ug/L	0.000
<u> </u>	72 Ge-1			1232303.635	ug/L	1184928.862
٢	111 Cd				ug/L.	65.381
L>	115 In-1				ug/L	1459062.274
Γ	208 Pb				ug/L	1212.712
حا	169 Tm-1				ug/L	1541729.238
Γ	50 Cr				ug/L	-43.784
	53 Cr				ug/L	16273.054
1	61 Ni				ug/L	1414.774
L>	72 Ge			1232303.635	ug/L	1184928.862
Γ	108 Cd				ug/L	3.963
	114 Cd				ug/L	148.458
L>	115 ln				ug/L	1459062.274
Γ	208 207.977				ug/L	638.032
	207 Pb				ug/L	250.672
	206 Pb				ug/L	324.008
>	169 Tm				ug/L	1541729.238

#### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
٢	Ca	44	
	Cr	52	
1	Ni	60	
	As	75	
[>	Ge-1	72	103.998
Γ	Cd	111	
ح.ا	in-1	115	
٢	Pb	208	
[>	Tm-1	169	
ſ	Cr	50	
]	Cr	53	
	Ni	61	
<u>_</u> >	Ge	72	103.998

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Sample ID: CCB 16

Cd	108
Cd	114
In	115
207.977	208
Pb	207
Pb	206
Tm	169
	Cd In 207.977 Pb Pb

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Sample ID: CCB 16

SOP No. SAC-MT-0001 Analyst: SHargrave

#### Sample ID: BLK RECAL

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 21:00:05

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\CCB 16.089

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
Γ	44 Ca		5615.477	ug/L	
1	55 Mn		1845.935	ug/L	
1	75 As		12302.767	ug/L	
L>	72 Ge-1		1232303.635	ug/L	

	Analyte	Mass	Int Std % Recovery
٢	Ca	44	
	Mn	55	
Ì	As	75	
ĺ>	Ge-1	72	

SOP No. SAC-MT-0001 Analyst: SHargrave

# Sample ID: STD1 RECAL

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 20:57:27

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\CCV 16.088

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
Γ	44 Ca	5100.000000	2.247	891482.265	ug/L	5615.477
	55 Mn	100.000000	2.178	946425.978	ug/L	1845.935
1	75 As	100.000000	2.373	144579.351	ug/L	12302.767
L>	72 Ge-1			1229013.819	ug/L	1232303.635

	Anaiyte	Mass	Int Std % Recovery
Γ	Ca	44	
1	Mn	55	
	As	75	
i_	Ge-1	72	

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 17 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 21:02:44

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\CCV 17.090

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
Γ	44 Ca	5076.995687	2.554	890819.383	ug/Ł	5615.477
1	55 Mn	99.710328	2.641	947215.524	ug/L	1845.935
	75 As	99.487893	2.904	144439.169	ug/L	12302.767
>	72 Ge-1			1233714.285	ug/L	1232303.635

#### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
1	Mn	55	
ĺ	As	75	
L>	Ge-1	72	100.114

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Sample ID: CCV 17

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 17 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 21:05:23

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\CCB 17.091

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
Γ	44 Ca	-0.796651	100.667	5592.123	ug/L	5615.477
	55 Mn	-0.006271	70.784	1823.928	ug/L	1845.935
1	75 As	-0.700236	57.069	11608.303	ug/L	12302.767
1>	72 Ge-1			1258532.224	ug/L	1232303.635

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
	Mn	55	
ĺ	As	75	
1>	Ge-1	72	102.128

SOP No. SAC-MT-0001 Analyst: SHargrave Sample ID: MAK04

Sample Description: G0K270427-5

Batch ID: 336286

Sample Date/Time: Friday, December 03, 2010 21:07:56

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\MAK04.092

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 46 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
Γ	44 Ca	682.517029	0.830	124531.690	ug/L	5615.477
ĺ	55 Mn	138.828245	1,119	1317159.040	ug/L	1845.935
1	75 As	0.601171	16.555	13101.106	ug/L	12302.767
<b>L</b> >	72 Ge-1			1232414.697	ug/L	1232303.635

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
ĺ	Mn	55	
1	As	75	
İ>	Ge-1	72	100.009

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MAK04P5

Sample Description: G0K270427-5 5X

Batch ID: 336286

Sample Date/Time: Friday, December 03, 2010 21:10:28

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\MAK04P5.093

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 47 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
Γ	44 Ca	136.461549	4.541	30511.640	ug/L	5615.477
1	55 Mn	27.547761	4.279	272831.677	ug/L	1845.935
	75 As	-0.743197	70.425	11742.327	ug/L	12302.767
[>	72 Ge-1			1280348.823	ug/L	1232303.635

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
ĺ	Mn	55	
	As	75	
L>	Ge-1	72	103.899

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MAK04Z

Sample Description: G0K270427-5 PS

Batch ID: 336286

Sample Date/Time: Friday, December 03, 2010 21:13:00

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\MAK04Z.094

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
Γ	44 Ca	1674.464269	0.905	287309.996	ug/L	5615.477
	55 Mn	327.226564	0.863	2997328.034	ug/L	1845.935
ĺ	75 As	189.534359	1.452	254919.903	ug/L	12302.767
Ĺ>	72 Ge-1			1190772.209	ug/L	1232303.635

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
	Mn	55	
	As	75	
>	Ge-1	72	96.630

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MAK07

Sample Description: G0K270427-6

Batch ID: 336286

Sample Date/Time: Friday, December 03, 2010 21:15:32

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\MAK07.095

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
ſ	44 Ca	853.870668	1.059	148310.371	ug/L	5615.477
1	55 Mn	1002.494739	0.800	9126258.579	ug/L	1845.935
	75 As	1.109393	5.669	13233.713	ug/L	12302.767
>	72 Ge-1			1183903.600	ug/L	1232303.635

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
1	Mn	55	
1	As	75	
L>	Ge-1	72	96.072

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MAK08

Sample Description: G0K270427-7

Batch ID: 336286

Sample Date/Time: Friday, December 03, 2010 21:18:05

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\MAK08.096

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
Γ	44 Ca	6378.455132	1.933	1103197.391	ug/L	5615.477
	55 Mn	138.165249	1.832	1294794.333	ug/L	1845.935
	75 As	0.552649	40.551	12876.227	ug/L	12302.767
L>	72 Ge-1			1217464.887	ug/L	1232303.635

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
	Mn	55	
	As	75	
1	Ge-1	72	98.796

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MAK09

Sample Description: G0K270427-8

Batch ID: 336286

Sample Date/Time: Friday, December 03, 2010 21:20:38

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\MAK09.097

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
Γ	44 Ca	3826.085447	4.171	693123.923	ug/L	5615.477
	55 Mn	1634.859711	4.053	15973002.419	ug/L	1845.935
	75 As	0.756655	79.475	13715.093	ug/L	12302.767
<u></u> [>	72 Ge-1			1271877.905	ug/L	1232303.635

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
	Mn	55	
	As	75	
ĺ>	Ge-1	72	103.211

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 18 Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 21:23:16

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\CCV 18.098

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
Γ	44 Ca	5163.940077	1.859	892819.185	ug/L	5615.477
}	55 Mn	101.877733	1.678	953741.236	ug/L	1845.935
	75 As	101.093366	2.089	144443.584	ug/L	12302.767
>	72 Ge-1			1215594.794	ug/L	1232303.635

	Analyte	Mass	Int Std % Recovery
Γ	Ca	44	
	Mn	55	
	As	75	
Ĺ>	Ge-1	72	98.644

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 18

Sample Description:

Batch ID:

Sample Date/Time: Friday, December 03, 2010 21:25:55

Method File: E:\elandata\Method\0336286.mth

Dataset File: E:\elandata\Dataset\101203b2\CCB 18.099

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
Γ	44 Ca	0.154690	385.034	5739.921	ug/L	5615.477
1	55 Mn	0.007383	12.448	1949.299	ug/L	1845.935
1	75 As	-0.458472	115.402	11892.294	ug/L	12302.767
<u></u>  >	72 Ge-1			1253820.313	ug/L	1232303.635

	Analyte	Mass	Int Std % Recovery
٢	Ca	44	
	Mn	55	
1	As	75	
1	Ge-1	72	101.746

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 12/07/10 10:11:43

File ID:	101203B2A	
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							.,,	
#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	_Q
1	Blank				1.0	12/03/10 15:23		
2	Standard1				1.0	12/03/10 15:27		i d
3	ICV				1.0	12/03/10 15:31		╗
4	ICB				1.0	12/03/10 15:36		$\neg \Box$
5	LLSTD1				1.0	12/03/10 15:46		$\exists \Box$
6	LLSTD2				1.0	12/03/10 15:50		
7	ICSA				1.0	12/03/10 15:56		╗
8	ICSAB				1.0	12/03/10 16:00		
9	Rinse				1.0	12/03/10 16:08		╗
10	CCV 1				1.0	12/03/10 16:16		
11	CCB 1				1.0	12/03/10 16:20		
14	CCV 2				1.0	12/03/10 16:25		
15	CCB 2			1	1.0	12/03/10 16:29		٦ <sub>□</sub>
16	MAPE7B	G0L010000	0335253	2A	1.0	12/03/10 16:33		
17	MAPEVB	G0L010000	0335251	2A	1.0	12/03/10 16:38		70
18	MAPEVC	G0L010000	0335251	2A	1.0	12/03/10 16:42		<b>~</b>
19	MAPE7L	G0L010000	0335253	2A	1.0	12/03/10 16:46		
20	MAA80	G0K190601-3	0335251	2A	1.0	12/03/10 16:50		
21	MAA80P5	G0K190601	0335251	1 1	5.0	12/03/10 16:54		
22	MAA80Z	G0K190601-3	0335251		1.0	12/03/10 16:58		
23	MAA81	G0K190601-4	0335251	2A	1.0	12/03/10 17:03		
24	MAKDV	G0K240587-1	0335251	2A	1.0	12/03/10 17:07		
25	MAKD2	G0K240587-2	0335251	2A	1.0	12/03/10 17:11		
26	CCV 3				1.0	12/03/10 17:15		
27	ССВ 3				1.0	12/03/10 17:20		
28	CCV 4				1.0	12/03/10 17:24		
29	CCB 4				1.0	12/03/10 17:27		
30	CCV 5				1.0	12/03/10 17:31		
31	CCB 5				1.0	12/03/10 17:34		
32	MAL4HB	G0K290000	0333404	2A	1.0	12/03/10 17:38		
33	MAL4HC	G0K290000	0333404	2A	1.0	12/03/10 17:41		
34	MAPE7L	G0L010000	0335253	2A	1.0	12/03/10 17:45		
35	MAGQR	G0K230520-1	0333404	2A	1.0	12/03/10 17:48		
36	MAGQRP5	G0K230520	0333404		5.0	12/03/10 17:51		
37	MAGQRZ	G0K230520-1	0333404		1.0	12/03/10 17:55		
38	MAGQW	G0K230520-2	0333404	2A	1.0	12/03/10 17:58		
39	CCV 6				1.0	12/03/10 18:02		╗
40	CCB 6				1.0	12/03/10 18:05		
41	MAGQX	G0K230520-3	0333404	2A	1.0	12/03/10 18:09		
42	MAGQ0	G0K230520-4	0333404	2A	1.0	12/03/10 18:12		
43	MAGQ1	G0K230520-5	0333404	2A	1.0	12/03/10 18:16		
44	MAGQ2	G0K230520-6	0333404	2A	1.0	12/03/10 18:19		
45	MAGQ3	G0K230520-7	0333404	2A	1.0	12/03/10 18:22		
46	CCV 7		1	-	1.0	12/03/10 18:26		
47	CCB 7		<del>                                     </del>		1.0	12/03/10 18:29		
48	CCV 8		1		1.0	12/03/10 18:33		
70		<u> </u>		الحسا	1.0		<u></u>	

Method: 6020 (SOP: SAC-MT-001)

Instrument: M02

Reported: 12/07/10 10:11:43

File ID:

101203B2A

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
49	CCB 8	Ţ		$\Box$	1.0	12/03/10 18:36		
50	ICSA				1.0	12/03/10 18:40		
51	ICSAB		<del></del>	+	1.0	12/03/10 18:43		
52	CCV 9		<del>                                     </del>	† †	1.0	12/03/10 18:50		
53	CCB 9	1			1.0	12/03/10 18:54		
54	CCV 10				1.0	12/03/10 18:57		
55	CCB 10			1 1	1.0	12/03/10 19:01		
58	CCV 11		+		1.0	12/03/10 19:05		
59	CCB 11				1.0	12/03/10 19:08		
60	MARDNB	G0L020000	0336282		1.0	12/03/10 19:12		
61	MARDNC	G0L020000	0336282		1.0	12/03/10 19:15		
62	MARD8L	G0L020000	0336286	2A	1.0	12/03/10 19:19		$\neg \Box$
63	MAQPV	G0L020440-1	0336282	2A	1.0	12/03/10 19:22		$\neg \Box$
64	MAQPVP5	G0L020440	0336282		5.0	12/03/10 19:25		
65	MAQPVX	G0L020440-1	0336282	2A	1.0	12/03/10 19:29		
66	MAQPVZ	G0L020440-1	0336282		1.0	12/03/10 19:32		
67	MAQP0	G0L020440-2	0336282	2A	1.0	12/03/10 19:36		
68	MAQP3	G0L020440-3	0336282	2A	1.0	12/03/10 19:39		
69	CCV 12				1.0	12/03/10 19:43		
70	CCB 12				1.0	12/03/10 19:46		
71	MAQP4	G0L020440-4	0336282	2A	1.0	12/03/10 19:50		
72	MAQP6	G0L020440-5	0336282	2A	1.0	12/03/10 19:53		
73	MANX4	G0L010474-1	0336282	1 1	1.0	12/03/10 19:57		
74	MANX9	G0L010474-2	0336282		1.0	12/03/10 20:00		
75	MANOF	G0L010474-3	0336282		1.0	12/03/10 20:04		
76	MAN0P	G0L010474-4	0336282		1.0	12/03/10 20:07		
77	MAN0Q	G0L010474-5	0336282		1.0	12/03/10 20:11		
78	CCV 13				1.0	12/03/10 20:14		
79	CCB 13				1.0	12/03/10 20:18		
80	CCV 14				1.0	12/03/10 20:22		
81	CCB 14				1.0	12/03/10 20:25		
82	MAFD3	G0K220523-1	0335253	2A	1.0	12/03/10 20:28		
83	MAFD3P5	G0K220523	0335253		5.0	12/03/10 20:31		
84	MAFD3Z ·	G0K220523-1	0335253		1.0	12/03/10 20:35		
85	MAFD5	G0K220523-2	0335253	2A	1.0	12/03/10 20:38		
86	MAFD6	G0K220523-3	0335253	2A	1.0	12/03/10 20:41		
87	MAFD7	G0K220523-4	0335253	2A	1.0	12/03/10 20:44		_ ㅁ
88	MAFD8	G0K220523-5	0335253	2A	1.0	12/03/10 20:47		
89	CCV 15				1.0	12/03/10 20:50		
90	CCB 15				1.0	12/03/10 20:54		
91	CCV 16				1.0	12/03/10 20:57		
92	CCB 16				1.0	12/03/10 21:00		
95	CCV 17			]	1.0	12/03/10 21:02		_ ㅁ
96	CCB 17				1.0	12/03/10 21:05		
97	MAK04	G0K270427-5	0336286	2A	1.0	12/03/10 21:07		
98	MAK04P5	G0K270427	0336286		5.0	12/03/10 21:10		

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 12/07/10 10:11:43

File ID: 101203B2A

1 110 1	D. 101200					Fula	iivst. Hargiaves	
#_	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
99	MAK04Z	G0K270427-5	0336286	T	1.0	12/03/10 21:13		
100	MAK07	G0K270427-6	0336286	2A	1.0	12/03/10 21:15		
101	MAK08	G0K270427-7	0336286	2A	1.0	12/03/10 21:18		
102	MAK09	G0K270427-8	0336286	2A	1.0	12/03/10 21:20		
103	CCV 18				1.0	12/03/10 21:23		
104	CCB 18	****			1.0	12/03/10 21:25		
105	CCV 19				1.0	12/03/10 21:28		
106	CCB 19				1.0	12/03/10 21:32		
109	CCV 20				1.0	12/03/10 21:36		
110	CCB 20				1.0	12/03/10 21:39		
111	MAHGVB	G0K230000	0327486	EC	1.0	12/03/10 21:43		
112	MAHGVC	G0K230000	0327486	EC	1.0	12/03/10 21:47		
113	MAHGVL	G0K230000	0327486	EC	1.0	12/03/10 21:50		
114	CCV 21				1.0	12/03/10 21:54		
115	CCB 21				1.0	12/03/10 21:58		
116	L9612	G0K170514-1	0327486	EC	1.0	12/03/10 22:01		
117	L9635	G0K170514-3	0327486	EC	1.0	12/03/10 22:05		
118	L9636	G0K170514-4	0327486	EC	1.0	12/03/10 22:09		
119	L9637	G0K170514-5	0327486	EC	1.0	12/03/10 22:12		
120	L9638	G0K170514-6	0327486	EC	1.0	12/03/10 22:16		
121	L9639	G0K170514-7	0327486	EC	1.0	12/03/10 22:20		
122	CCV 22				1.0	12/03/10 22:23		
123	CCB 22				1.0	12/03/10 22:27		
126	CCV 23				1.0	12/03/10 22:31		
127	CCB 23				1.0	12/03/10 22:34		
128	L9612	G0K170514-1	0327486	EC	1.0	12/03/10 22:38		
129	L9635	G0K170514-3	0327486	EC	1.0	12/03/10 22:42		
130	L9636	G0K170514-4	0327486	EC	1.0	12/03/10 22:45		
131	L9637	G0K170514-5	0327486	EC	1.0	12/03/10 22:49		
132	L9638	G0K170514-6	0327486	EC	1.0	12/03/10 22:53		
133	L9639	G0K170514-7	0327486	EC	1.0	12/03/10 22:56		
134	CCV 24				1.0	12/03/10 23:00		
135	CCB 24				1.0	12/03/10 23:04		
136	CCV 25				1.0	12/03/10 23:08		
137	CCB 25				1.0	12/03/10 23:11		
138	L9612	G0K170514-1	0327486	EC	1.0	12/03/10 23:15		
139	L9635	G0K170514-3	0327486	EC	1.0	12/03/10 23:19		
140	L9636	G0K170514-4	0327486	EC	1.0	12/03/10 23:22		
141	L9637	G0K170514-5	0327486	EC	1.0	12/03/10 23:26		
142	L9638	G0K170514-6	0327486	EC	1.0	12/03/10 23:29		
143	L9639	G0K170514-7	0327486	EC	1.0	12/03/10 23:33		
144	CCV 26				1.0	12/03/10 23:37		
145	CCB 26				1.0	12/03/10 23:41		
146	CCV 27				1.0	12/03/10 23:44		
147	CCB 27				1.0	12/03/10 23:48		
148	L9634	G0K170514-2	0327486	EC	1.0	12/03/10 23:52		
		·				<del></del>	<del></del>	

Т	$^{L}$ A	Ł	-\/	Ve	st	S	ac

# **RUN SUMMARY**

1	· · · ·	
Method: 6020 (SOP: SAC-MT-001)	Instrument: M02	Reported: 12/07/10 10:11:43
<u></u>		·

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
149	L9634P5	G0K170514	0327486		5.0	12/03/10 23:55		
150	L9634X	G0K170514-2	0327486	EC	1.0	12/03/10 23:59		
151	L9634Z	G0K170514-2	0327486		1.0	12/04/10 00:02		
152	CCV 28				1.0	12/04/10 00:06		
153	CCB 28				1.0	12/04/10 00:10		

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 12/07/10 10:11:43

File ID: 101203B2A		Analyst: hargraves					
			Germanium	Indium	Lithium-6	Thulium	
#	Sample ID	Analyzed Date					Q
1	Blank	12/03/10 15:23	100.0	100.0	100.0	100.0	] Z
2	Standard1	12/03/10 15:27	99.4	97.7	111.5	97.6	-
3	ICV	12/03/10 15:31	96.6	96.4	100.3	95.6	l⊵
4	ICB	12/03/10 15:36	95.1	96.4	98.5	95.0	4
5	LLSTD1	12/03/10 15:46	95.3	96.2	101.0	94.8	Ī☑
6	LLSTD2	12/03/10 15:50	95.2	95.7	102.6	94.8	Ø
7	ICSA	12/03/10 15:56	73.8	71.6	84.1	71.7	ĺ⊵
8	ICSAB	12/03/10 16:00	71.3	69.3	84.4	69.0	₽
9	Rinse	12/03/10 16:08	89.1	88.88	114.8	86.0	v
10	CCV 1	12/03/10 16:16	87.3	86.5	108.0	85.9	๔
11	CCB 1	12/03/10 16:20	88.3	88.5	110.7	87.2	Ø
14	CCV 2	12/03/10 16:25	98.4	97.2	98.1	98.4	V
15	CCB 2	12/03/10 16:29	99.7	100.0	101.9	100.9	V
16	MAPE7B	12/03/10 16:33	97.6	100.4	79.0	102.6	₽
17	MAPEVB	12/03/10 16:38	97.4	99.8	80.0	101.7	IZ
18	MAPEVC	12/03/10 16:42	93.0	97.8	77.0	98.8	V
19	MAPE7L	12/03/10 16:46	90.1	96.6	76.5	97.3	V
20	MAA80	12/03/10 16:50	92.2	97.6	76.4	98.6	
21	MAA80P5	12/03/10 16:54	98.6	101.3	104.6	100.8	ł
22	MAA80Z	12/03/10 16:58	89.0	94.1	76.5	95.3	V
23	MAA81	12/03/10 17:03	90.5	96.8	76.7	97.8	ı
24	MAKDV	12/03/10 17:07	93.3	98.6	81.5	99.6	1
25	MAKD2	12/03/10 17:11	94.3	99.2	83.5	100.9	☑
26	CCV 3	12/03/10 17:15	96.3	97.6	105.0	99.3	☑
27	CCB 3	12/03/10 17:20	98.8	100.5	104.0	102.2	v
28	CCV 4	12/03/10 17:24	96.1	97.6	0.0	100.1	V
29	CCB 4	12/03/10 17:27	98.5	101.5	0.0	104.4	V
30	CCV 5	12/03/10 17:31	97.0	98.4	0.0	101.4	abla
31	CCB 5	12/03/10 17:34	98.2	101.0	0.0	102.9	$\square$
32	MAL4HB	12/03/10 17:38	97.0	102.5	0.0	106.0	abla
33	MAL4HC	12/03/10 17:41	91.5	98.3	0.0	100.3	☑
34	MAPE7L	12/03/10 17:45	90.1	98.2	0.0	100.0	⊻
35	MAGQR	12/03/10 17:48	92.7	98.5	0.0	101.1	$\nabla$
36	MAGQRP5	12/03/10 17:51	96.0	101.2	0.0	101.7	
37	MAGQRZ	12/03/10 17:55	90.5	96.9	0.0	98.8	☑
38	MAGQW	12/03/10 17:58	91.8	98.0	0.0	99.9	☑
39	CCV 6	12/03/10 18:02	97.1	99.1	0.0	100.5	abla
40	CCB 6	12/03/10 18:05	97.9	100.4	0.0	102.2	
41	MAGQX	12/03/10 18:09	95.7	101.1	0.0	103.8	☑
42	MAGQ0	12/03/10 18:12	96.4	101.0	0.0	103.3	Ø
43	MAGQ1	12/03/10 18:16	98.0	102.2	0.0	104.8	☑
44	MAGQ2	12/03/10 18:19	99.3	103.0	0.0	105.5	
45	MAGQ3	12/03/10 18:22	100.9	104.5	0.0	108.3	
46	CCV 7	12/03/10 18:26	100.4	99.8	0.0	102.6	
47	CCB 7	12/03/10 18:29	101.6	103.1	0.0	105.5	
48	CCV 8	12/03/10 18:33	100.4	100.6	0.0	103.2	

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 12/07/10 10:11:43

File ID:	101203B2A	Analyst: hargrayes

			Germanium	Indium	Lithium-6	Thulium	
#	Sample ID	Analyzed Date					Q
49	CCB 8	12/03/10 18:36	101.4	103.0	0.0	105.7	Ø
50	ICSA	12/03/10 18:40	79.7	78.6	0.0	83.4	Ø
51	ICSAB	12/03/10 18:43	78.4	77.6	0.0	81.7	
52	CCV 9	12/03/10 18:50	96.7	97.3	0.0	97.8	Ø
53	CCB 9	12/03/10 18:54	98.5	99.6	0.0	101.0	Ø
54	CCV 10	12/03/10 18:57	97.1	97.8	103.9	101.1	Ø
55	CCB 10	12/03/10 19:01	99.6	100.8	106.3	103.8	团
58	CCV 11	12/03/10 19:05	97.1	96.4	98.1	97.9	Ø
59	CCB 11	12/03/10 19:08	100.1	100.6	100.4	100,4	Ø
60	MARDNB	12/03/10 19:12	99.0	101.5	82.6	102.8	Ø
61	MARDNC	12/03/10 19:15	94.6	99.0	81.9	99.4	◪
62	MARD8L	12/03/10 19:19	92.4	97.2	81.8	97.5	☑
63	MAQPV	12/03/10 19:22	93.3	97.5	81.2	97.0	Ø
64	MAQPVP5	12/03/10 19:25	97.4	99.2	102.6	98.2	
65	MAQPVX	12/03/10 19:29	96.1	98.3	81.6	98.5	]₫
66	MAQPVZ	12/03/10 19:32	93.0	96.2	81.0	96.7	◪
67	MAQP0	12/03/10 19:36	93.4	96.2	80.7	96.7	Ø
68	MAQP3	12/03/10 19:39	94.2	96.7	82.2	96.9	Ø
69	CCV 12	12/03/10 19:43	96.5	97.4	100.5	97.2	4
70	CCB 12	12/03/10 19:46	99.3	101.0	103.2	100.3	☑
71	MAQP4	12/03/10 19:50	96.0	98.8	80.6	99.5	◩
72	MAQP6	12/03/10 19:53	99.6	103.0	86.2	103.2	Ø
73	MANX4	12/03/10 19:57	96.8	99.5	81.9	99.4	
74	MANX9	12/03/10 20:00	93.7	95.9	77.5	96.7	☑
75	MANOF	12/03/10 20:04	93.6	97.4	76.1	96.6	Ø
76	MAN0P	12/03/10 20:07	92.7	95.9	75.9	,	Ø
77	MANOQ	12/03/10 20:11	98.2	101.7	80.9	101.5	Ø
78	CCV 13	12/03/10 20:14	97.5	97.5	95.6		Ø
79	CCB 13	12/03/10 20:18	101.2	103.6	101.9	102.1	Ø
80	CCV 14	12/03/10 20:22	96.0	99.1	0.0		
81	CCB 14	12/03/10 20:25	99.1	101.6	0.0		<u> </u>
82	MAFD3	12/03/10 20:28	97.2	102.0	0.0		Ø
83	MAFD3P5	12/03/10 20:31	100.7	103.9	0.0	104.0	
	MAFD3Z	12/03/10 20:35	93.9	99.7	0.0	99.9	
85	MAFD5	12/03/10 20:38	95.7	100.9	0.0	101.2	
	MAFD6	12/03/10 20:41	97.5	102.5	0.0	102.8	
87	MAFD7	12/03/10 20:44	98.5	102.1	0.0	103.6	
88	MAFD8	12/03/10 20:47	97.6	101.2	0.0	102.3	ľ
89	CCV 15	12/03/10 20:50	98.9	100.9	0.0	101.7	
90	CCB 15	12/03/10 20:54	100.5	103.0	0.0	102.6	
91	CCV 16	12/03/10 20:57	103.7	0.0	0.0	0.0	
92	CCB 16	12/03/10 21:00	104.0	0.0	0.0	0.0	
95	CCV 17	12/03/10 21:02	100.1	. 0.0	0.0	0.0	
96	CCB 17	12/03/10 21:05	102.1	0.0	0.0	0.0	
97	MAK04	12/03/10 21:07	100.0	0.0	0.0	0.0	
98	MAK04P5	12/03/10 21:10	103.9	0.0	0.0	0.0	1

# INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 12/07/10 10:11:43

File ID: 101203B2A		Analyst: hargraves					
			Germanium	Indium	Lithium-6	Thulium	
#	Sample ID	Analyzed Date					
99	MAK04Z	12/03/10 21:13	96.6	0.0	0.0	0.0	
100	MAK07	12/03/10 21:15	96.1	0.0	0.0	0.0	
101	MAK08	12/03/10 21:18	98.8	0.0	0.0	0.0	
102	MAK09	12/03/10 21:20	103.2	0.0	0.0	0.0	
103	CCV 18	12/03/10 21:23	98.6	0.0	0.0	0.0	
104	CCB 18	12/03/10 21:25	101.7	0.0	0.0	0.0	
105	CCV 19	12/03/10 21:28	96.1	0.0	0.0	0.0	
106	CCB 19	12/03/10 21:32	97.5	0.0	0.0	0.0	
109	CCV 20	12/03/10 21:36	99.1	98.4	98.6	100.1 ☑	
110	CCB 20	12/03/10 21:39	98.9	99.7	97.5	99.6	
111	MAHGVB	12/03/10 21:43	100.0	101.1	80.6	104.1 ☑	
112	MAHGVC	12/03/10 21:47	97.1	99.0	80.9	100.8 ₺	
113	MAHGVL	12/03/10 21:50	96.6	99.0	80.5	100.3	
114	CCV 21	12/03/10 21:54	96.8	96.4	97.7	97.8	
115	CCB 21	12/03/10 21:58	99.8	99.8	97.9	100.7 ₺	
116	L9612	12/03/10 22:01	81.7	83.2	76.1	81.8 ☑	
117	L9635	12/03/10 22:05	76.2	81.8	74.4	81.3	
118	L9636	12/03/10 22:09	71.5	75.0	69.1	76.0 ₺	
119	L9637	12/03/10 22:12	73.1	75.7	66.4	76.9	
120	L9638	12/03/10 22:16	67.8	· 71.0	63.7	74.8	
121	L9639	12/03/10 22:20	70.7	75.0	64.0	75.9 ₹	
122	CCV 22	12/03/10 22:23	77.3	81.1	73.9	82.4	
123	CCB 22	12/03/10 22:27	77.5	82.3	67.1	82.5	
126	CCV 23	12/03/10 22:31	102.1	100.4	109.4	102.5	
127	CCB 23	12/03/10 22:34	101.9	101.2	100.5	101.2 ☑	
128	L9612	12/03/10 22:38	92.8	92.9	97.7	93.9	
129	L9635	12/03/10 22:42	90.8	94.8	98.8	95.7 ☑	
130	L9636	12/03/10 22:45	86.7	87.7	94.0	89.9	
131	L9637	12/03/10 22:49	90.3	89.8	93.4	92.2	
132	L9638	12/03/10 22:53	84.9	84.0	91.9	88.4	
133	L9639	12/03/10 22:56	88.6	88.9	91.7	90.5	
	CCV 24	12/03/10 23:00	95.6	95.1	103.0	97.0	
135	CCB 24	12/03/10 23:04	96.9	97.7	94.0	98.9	
136	CCV 25	12/03/10 23:08	98.4	99.4	105.2	101.2	
137	CCB 25	12/03/10 23:11	98.0	100.6	98.3	101.3	
138	L9612	12/03/10 23:15	87.2	89.2	92.4	90.7	
139	L9635	12/03/10 23:19	86.2	91.0	95.1	92.5	
140	L9636	12/03/10 23:22	83.8	86.0	90.7	88.1	
141	L9637	12/03/10 23:26	87.0	87.7	89.4	89.8	
142	L9638	12/03/10 23:29	82.6	83.7	87.5	87.0	
143	L9639	12/03/10 23:33	86.4	88.4	87.2	89.1	
144	CCV 26	12/03/10 23:37	94.8	95.1	98.0	96.9	
145	CCB 26	12/03/10 23:41	94.0	96.1	90.0	97.1	
146	CCV 27	12/03/10 23:44	95.9	96.7	99.1	98.7	
147	CCB 27	12/03/10 23:48	94.3	97.3	92.1	98.5	
148	L9634	12/03/10 23:52	88.0	90.5	88.9	91.6	

# INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001)	3	M02 (M02)	Reported: 12/07/10 10:11:43

File I	D: 101203	B2A	Analyst: hargraves						
	0	A 1 15 1	Germanium	Indium	Lithium-6	Thulium			
#	Sample ID	Analyzed Date				Q			
149	L9634P5	12/03/10 23:55	89.7	93.3	90.6	93.7			
150	L9634X	12/03/10 23:59	85.6	87.9	86.9	88.8			
151	L9634Z	12/04/10 00:02	83.3	86.1	84.7	87.5			
152	CCV 28	12/04/10 00:06	92.6	93.8	96.3	95.2 ☑			
153	CCB 28	12/04/10 00:10	92.2	95.6	86.3	96.5 ☑			

# CALIBRATION CHECK SUMMARY

Method: 6020 (SOP: SAC-MT-001)	,	M02 ·	Reported: 12/07/10 10:12:11
( CO		(4102	Reported. 12/01/10 10:12:11

Method: 6020	Instrument: M02	Batch: 101203B2A		
Sample ID	Туре	File - Sequence	Analyzed Date	Q
ICV	ICV	101203B2A, 3	12/03/2010 15:31:55	
ICB	ICB	101203B2A, 4	12/03/2010 15:36:13	
ICSA	ICSA	101203B2A, 7	12/03/2010 15:56:27	
ICSAB	ICSAB	101203B2A, 8	12/03/2010 16:00:42	
CCV 1	ccv	101203B2A, 10	12/03/2010 16:16:38	
CCB 1	CCB	101203B2A, 11	12/03/2010 16:20:56	
CCV 2	CCV	101203B2A, 14	12/03/2010 16:25:14	
CCB 2	ССВ	101203B2A, 15	12/03/2010 16:29:31	
CCV 3	ccv	101203B2A, 26	12/03/2010 17:15:50	
CCB 3	CCB	101203B2A, 27	12/03/2010 17:20:07	
CCV 4	CCV	101203B2A, 28	12/03/2010 17:24:26	
CCB 4	ССВ	101203B2A, 29	12/03/2010 17:27:55	
CCV 5	ccv	101203B2A, 30	12/03/2010 17:31:25	
CCB 5	ССВ	101203B2A, 31	12/03/2010 17:34:54	
CCV 6	CCV	101203B2A, 39	12/03/2010 18:02:16	
CCB 6	ССВ	101203B2A, 40	12/03/2010 18:05:46	
CCV 7	CCV	101203B2A, 46	12/03/2010 18:26:22	
CCB 7	ССВ	·	12/03/2010 18:29:51	
CCV 8	CCV	•	12/03/2010 18:33:21	
CCB 8	CCB		12/03/2010 18:36:51	
ICSA	ICSA	101203B2A, 50	12/03/2010 18:40:20	
ICSAB	ICSAB	101203B2A, 51	12/03/2010 18:43:46	
CCV 9	CCV	101203B2A, 52	12/03/2010 18:50:54	
CCB 9	CCB	101203B2A, 53	12/03/2010 18:54:24	
CCV 10	CCV	101203B2A, 54	12/03/2010 18:57:53	
CCB 10	ССВ	•	12/03/2010 19:01:27	
CCV 11	CCV		12/03/2010 19:05:01	
CCB 11	ССВ	101203B2A, 59	12/03/2010 19:08:35	
CCV 12	ccv	101203B2A, 69	12/03/2010 19:43:23	
CCB 12	CCB	101203B2A, 70	12/03/2010 19:46:56	
CCV 13	CCV		12/03/2010 20:14:57	
CCB 13	ССВ	•	12/03/2010 20:18:33	
CCV 14	CCV	101203B2A, 80	12/03/2010 20:22:09	
CCB 14	CCB	101203B2A, 81	12/03/2010 20:25:27	
CCV 15	CCV	101203B2A, 89	12/03/2010 20:50:53	
CCB 15	ССВ	101203B2A, 90	12/03/2010 20:54:10	
CCV 16	ccv	101203B2A, 91	12/03/2010 20:57:27	
CCB 16	CCB	101203B2A, 92	12/03/2010 21:00:05	
CCV 17	ccv	101203B2A, 95	12/03/2010 21:02:44	
CCB 17	CCB	101203B2A, 96	12/03/2010 21:05:23	
CCV 18	CCA	101203B2A, 90	12/03/2010 21:03:25	
		101203B2A, 103		
CCB 18	CCB	101203B2A, 104 101203B2A, 105	12/03/2010 21:25:55	
CCV 19	CCV		12/03/2010 21:28:34	
CCB 19	CCB	101203B2A, 106	12/03/2010 21:32:19	
CCV 20	CCV	101203B2A, 109	12/03/2010 21:36:03	
CCB 20	ССВ	101203B2A, 110	12/03/2010 21:39:48	

CCV 27

CCB 27

CCV 28

**CCB 28** 

Method: 6020 (SOP: SAC-MT-001)

CCV

CCB

CCV

CCB

# **CALIBRATION CHECK SUMMARY**

Reported: 12/07/10 10:12:11

101203B2A, 146 12/03/2010 23:44:46 🔲

101203B2A, 147 12/03/2010 23:48:30 🔲

101203B2A, 152 12/04/2010 00:06:40 🔲

101203B2A, 153 12/04/2010 00:10:24 🔲

		•	•	
Method: 6020	Instrument: M02	Batch: 101203B2A		
Sample ID	Туре	File - Sequence	Analyzed Date	Q
CCV 21	ccv	101203B2A, 114	12/03/2010 21:54:27	
CCB 21	CCB	101203B2A, 115	12/03/2010 21:58:12	
CCV 22	ccv	101203B2A, 122	12/03/2010 22:23:44	
CCB 22	ССВ	101203B2A, 123	12/03/2010 22:27:29	
CCV 23	ccv	101203B2A, 126	12/03/2010 22:31:14	
CCB 23	CCB	101203B2A, 127	12/03/2010 22:34:58	
CCV 24	ccv	101203B2A, 134	12/03/2010 23:00:31	
CCB 24	CCB	101203B2A, 135	12/03/2010 23:04:15	
CCV 25	CCV	101203B2A, 136	12/03/2010 23:08:00	
CCB 25	CCB	101203B2A, 137	12/03/2010 23:11:44	
CCV 26	CCV	101203B2A, 144	12/03/2010 23:37:17	
CCB 26	CCB	101203B2A, 145	12/03/2010 23:41:01	

M02

#### **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11 Department: 120 (Metals) Source: MetEdit Sample: ICV (ICV) Mult: 1.00 Dilf: 1.00 1.000 Divs: Instrument: ICPMS M02 Channel 262 File: 101203B2A #3 Method 6020\_ Acquired: 12/03/2010 15:31:55 M02 Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN Analyte Name M/S Area Found True %R Q 7440-41-7 Beryllium 9 20615 80.465 80.000 101 7440-42-8 Boron 11 266515 813.38 800.00 102 7429-90-5 Aluminum 27 3165654 763,02 800.00 95.4 7440-70-2 Calcium 44 148041 816.67 800.00 102 7440-20-2 Scandium 45 7440-62-2 Vanadium 51 79.021 518115 80.000 98.8 7440-47-3 Chromium 52 483898 80.027 80.000 100 7439-89-6 Iron 54 448363 817.66 800.00 102 7439-89-6 Iron 57 173404 817.33 00.008 102 7439-96-5 Manganese 55 802857 80.967 80.000 101 7440-48-4 Cobalt 59 638018 81.409 80.000 102 7440-02-0 Nickel 60 133231 81.136 80.000 101 7440-50-8 Copper 65 135898 81.811 80.000 102 7440-66-6 Zinc 68 47309 82.681 80.000 103 7440-38-2 Arsenic 75 126241 81.281 80.000 102 7782-49-2 Selenium 82 13738 83.564 80.000 104 7440-22-4 Silver 107 301683 40.246 40.000 101 7440-43-9 Cadmium 111 131447 81.889 80.000 102 7440-36-0 Antimony 121 214337 39.124 40.000 97.8 7440-39-3 Barium 80.080 135 146754 80.000 100 7440-28-0 Thallium 205 42.559 942072 40.000 106 7439-92-1 Lead 208 2547603 81.782 000.08 102 CASN ISTD Name M/S Area Amount Q LITHIUM6 Lithium-6 6 937454  $\square$ 7440-56-4 Germanium 72 1300595  $\square$ 7440-74-6 Indium 1577825 ☑ 115 7440-30-4 Thulium 169 1629082  $\sqrt{\phantom{a}}$ 

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# **BLANK REPORT**

Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 10:12:11			
Department: 120 (Metals)				Sou	rce: MetEdit
Sample: ICB	Mult: 1.00	Dilf:	1.00	Divs:	1.000
Instrument: ICPMS M02	Channel 262				
File: 101203B2A #4	Method 6020_				
Acquired: 12/03/2010 15:36:13	M02				
Calibrated: 12/03/2010 15:23:15			Į	Units: ug/L	

CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9	6	0.00285	1.0	0.078	0.0	
7440-42-8	Boron	11	2834	6.6967	50.0	6.3	0.0	
7429-90-5	Aluminum	27	145595	2.6880	50.0	2.1	0.0	
7440-70-2	Calcium	44	4698	0.60594	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	-5937	-0.01114	10.0	3.1	0.0	
7440-47-3	Chromium	52	11764	0.04747	2.0	0.92	0.0	
7439-89-6	Iron	54	57183	-0.08422	50.0	17.0	0.0	
7439-89-6	Iron	57	4879	2.1527	50.0	17.0	0.0	
7439-96-5	Manganese	55	2907	0.02107	1.0	0.083	0.0	
7440-48-4	Cobait	59	224	0.00331	1.0	0.057	0.0	
7440-02-0	Nickel	60	234	-0.00738	2.0	0.098	0.0	
7440-50-8	Copper	65	119	0.00734				
7440-66-6	Zinc	68	3121	0.02539	5.0	1.0	0.0	
7440-38-2	Arsenic	75	11961	-0.14182	2.0	0.50	0.0	
7782-49-2	Selenium	82	1156	0.39164	2.0	1.7	0.0	
7440-22-4	Silver	107	98	-0.00017	1.0	0.030	0.0	
7440-43-9	Cadmium	111	52	0.00057	1.0	0.074	0.0	
7440-36-0	Antimony	121	1167	0.17755	2.0	0.036	0.0	
7440-39-3	Barium	135	172	0.00516	1.0	0.96	0.0	
7440-28-0	Thallium	205	7267	0.25461	1.0	0.34	0.0	
7439-92-1	Lead	208	1102	0.00100	1.0	0.066	0.0	
0404	IOTO Mana	140						_
CASN	ISTD Name	M/S	Агеа	Amount				Q
LITHIUM6		6	920644					<u> </u>
	Germanium	72	1280848					亙
7440-74-6		115	1576846					Ø
7440-30-4	Thulium	169	1619445					$\Box$

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# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals) Source: MetEdit

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

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 7 Method 6020\_

Acquired: 12/03/2010 15:56:27 M02

Calibrated: 12/03/2010 15:23:15 Units: ug/L

						,	
CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	7 Beryllium	9	13	0.03861		*	<u> </u>
7440-42-	Boron .	11	1111	1.9296		*	$\overline{\mathbf{Q}}$
7429-90-	5 Aluminum	27	01310810	99317	100000	99.3	$\square$
7440-70-2	2 Calcium	44	12837998	95674	100000	95.7	
7440-20-2	2 Scandium	45				*	
7440-62-2	2 Vanadium	51	-4695	-0.02871		*	
7440-47-3	3 Chromium	52	26807	3.9691		*	
7439-89-6	3 Iron	54	34607015	94773	100000	94.8	$\square$
7439-89-6	3 Iron	57	14806292	93753	100000	93.8	₽
7439-96-	5 Manganese	55	49709	6.3057		*	
7440-48-4	4 Cobalt	59	10313	1.6970		*	
7440-02-0	Nickel	60	2582	1.9104		*	$\square$
7440-50-8	3 Copper	65	-821	-0.71248		*	
7440-66-6	3 Zinc	68	2243	-0.41069		*	$\square$
7440-38-2	2 Arsenic	75	9337	-0.08818		*	☑
7782-49-2	2 Selenium	82	1085	2.0307		*	$\square$
7440-22-4	Silver	107	903	0.14911		*	Ø
7440-43-9	Cadmium	111	1064	0.86109		*	$\square$
7440-36-0	Antimony	121	978	0.20483		*	☑
7440-39-3	Barium	135	3868	2.7571		*	
7440-28-0	) Thailium	205	4813	0.21443		*	$\square$
7439-92-1	Lead	208	13181	0.53004		*	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM	Lithium-6	6	785276	•			☑
7440-56-4	Germanium	72	993747				
7440-74-6	Indium	115	1171414				$\square$
7440-30-4	1 Thulium	169	1221353				$\square$

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TestAmerica, Inc

# **CALIBRATION REPORT**

 Method: 6020 (SOP: SAC-MT-001)
 M02
 Reported: 12/07/10 10:12:11

 Department: 120 (Metals)
 Source: MetEdit

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

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 8 Method 6020\_
Acquired: 12/03/2010 16:00:42 M02

Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN_	Analyte Name	M/S_	Area	Found	True	%R	Q
7440-41-7	Beryllium	9	21128	98.099	100.00	98.1	Ø
7440-42-8	Boron	11	126113	456.85	500.00	91.4	$ \mathbf{Z}$
7429-90-5	Aluminum	27	90386365	99142	100100	99.0	abla
7440-70-2	Calcium	44	12301868	94959	100100	94.9	$\square$
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	505120	104.14	100.00	104	₹
7440-47-3	Chromium	52	456454	102.88	100.00	103	abla
7439-89-6	Iron	54	33051218	93747	100100	93.7	$\square$
7439-89-6	Iron	57	14103875	92499	100100	92,4	
7439-96-5	Manganese	5 <b>5</b>	750677	102.70	100.00	103	$\checkmark$
7440-48-4	Cobalt	59	562007	97.214	100.00	97.2	
7440-02-0	Nickel	60	114092	94.209	100.00	94.2	$\square$
7440-50-8	Соррег	65	108081	88.205	100.00	88.2	✓
7440-66-6	Zinc	68	38918	92.883	100.00	92.9	V
7440-38-2	Arsenic	75	116362	103.76	100.00	104	
7782-49-2	Selenium	82	13057	109.78	100.00	110	$\square$
7440-22-4	Silver	107	248223	46.107	50.000	92.2	$\square$
7440-43-9	Cadmium	111	110213	95.603	100.00	95.6	
7440-36-0	Antimony	121	192052	48.817	50.000	97.6	V
7440-39-3	Barium	135	136843	103.99	100.00	104	$\overline{\mathbf{v}}$
7440-28-0	Thallium	205	844884	52.932	50.000	106	☑
7439-92-1	Lead	208	2412793	107.38	100.00	107	abla
CASN	ISTD Name	M/S	Area	Amount			Q
		6	788098	Amount	<del></del>		<u>~</u>
LITHIUM6		=					
7440-55-4	Germanium	72 115	959471 1133276				
7440-74-6		169	1175161				
1440-30-4	manum	109	11/5/01				ш

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# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 10:12:11

Department: 120 (Metais)

Sample: CCV1 (CCV)

Mult: 1.00

Dilf: 1.00

Divs: 1.000

Instrument: ICPMS M02 Channel 262

File: 101203B2A # 10 Method 6020\_ Acquired: 12/03/2010 16:16:38 M02

Calibrated: 12/03/2010 15:23:15 Units: ug/L

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CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryllium	9	27011	97.971	100.00	98.0	
7440-42-8	Boron	11	166501	471.31	500.00	94.3	
7429-90-5	Aluminum	27	19302985	5344.7	5100.0	105	
7440-70-2	Calcium	44	836646	5244.4	5100.0	103	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	596164	100.33	100.00	100	
7440-47-3	Chromium	52	547315	100.61	100.00	101	
7439-89-6	Iron	54	2224809	5034.3	5100.0	98.7	
7439-89-6	Iron	57	952546	5077.0	5100.0	99.5	
7439-96-5	Manganese	55	886335	98.932	100.00	98.9	
7440-48-4	Cobalt	59	715393	100.97	100.00	101	
7440-02-0	Nickei	60	149466	100.72	100.00	101	
7440-50-8	Copper	65	152038	101.26	100.00	101	
7440-66-6	Zinc	68	51347	100.44	100.00	100	
7440-38-2	Arsenic	75	141242	102.68	100.00	103	
7782-49-2	Selenium	82	15344	104.97	100.00	105	
7440-22-4	Silver	107	343300	51.077	50.000	102	
7440-43-9	Cadmium	111	146889	102.05	100.00	102	
7440-36-0	Antimony	121	248077	50.510	50.000	101	
7440-39-3	Barium	135	166829	101.55	100.00	102	
7440-28-0	Thallium	205	1029976	51.804	50.000	104	
7439-92-1	Lead	208	2866630	102.42	100.00	102	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6		6	1008930			·	<u></u>
	Germanium		1175874				Ø
7440-74-6	- •	115	1415030				$\square$
7440-30-4	Thulium	169	1463922				$\mathbf{Z}$

	Reviewed by:	Date:
IDB Reports	TestAmerica, Inc.	Version: 6.02,068

# **BLANK REPORT**

Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 10:12:11			
Department: 120 (Metals)	•		Source: MetEdit		
Sample: CCB 1	Muit: 1.00	Dilf:	1.00	Divs:	1.000
Instrument: ICPMS M02	Channel 262				
File: 101203B2A #11	Method 6020_				
Acquired: 12/03/2010 16:20:56	M02				
Calibrated: 12/03/2010 15:23:15			1	Units: ug/L	

							3	
CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9	3	-0.01036	1.0	0.078	0.0	
7440-42-8	Boron	11	2106	3.7192	50.0	6.3	0.0	
7429-90-5	Aluminum	27	121122	-1.1826	50.0	2.1	0.0	
7440-70-2	Calcium	44	4031	-1.4532	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	-10101	-0.76739	10.0	3.1	0.0	
7440-47-3	Chromium	52	18978	1.5408	2.0	0.92	0.0	
7439-89-6	Iron	54	64055	25.041	50.0	17.0	0.0	
7439-89-6	Iron	57	7860	19.780	50.0	17.0	0.0	
7439-96-5	Manganese	55	2405	-0.01149	1.0	0.083	0.0	
7440-48-4	Cobalt	59	198	0.00200	1.0	0.057	0.0	
7440-02-0	Nickel	60	212	-0.01050	2.0	0.098	0.0	
7440-50-8	Copper	65	111	0.00821				
7440-66-6	Zinc	68	3035	0.30680	5.0	1.0	0.0	
7440-38-2	Arsenic	75	11323	0.02884	2.0	0.50	0.0	
7782-49-2	Selenium	82	1161	1.0324	2.0	1.7	0.0	
7440-22-4	Silver	107	95	0.00065	1.0	0.030	0.0	
7440-43-9	Cadmium	111	44	-0.00218	1.0	0.074	0.0	
7440-36-0	Antimony	121	128	-0.01028	2.0	0.036	0.0	
7440-39-3	Barium	135 .	149	-0.00015	1.0	0.96	0.0	
7440-28-0	Thallium	205	15021	0.67038	1.0	0.34	0.0	
7439-92-1	Lead	208	988	0.00020	1.0	0.066	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6	Lithium-6	6	1034155					<u> </u>
7440-56-4	Germanium	72	1189137					$\square$
7440-74-6	Indium	115	1447436					$\overline{\mathbf{Q}}$
7440-30-4	Thulium	169	1485664					Ø

	Reviewed by:	Date:
IDB Reports	TestAmerica, Inc.	Version, 6.02.068

IDB Reports

# **CALIBRATION REPORT**

Version: 6.02,068

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals)

Sample: CCV 2 (CCV)

Mult: 1.00

Dilf: 1.00

Divs: 1.000

Instrument: ICPMS M02 Channel 262
File: 101203B2A #14 Method 6020\_

Acquired: 12/03/2010 16:25:14 M02
Calibrated: 12/03/2010 15:23:15 Units: ug/L

				TV-112		
CASN Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7 Beryllium	9	26738	98.408	100.00	98.4	
7440-42-8 Boron	11	167114	498.86	500.00	99.8	
7429-90-5 Aluminum	27	19207127	5100.4	5100.0	100	
7440-70-2 Calcium	44	831234	5092.7	5100.0	99.9	
7440-20-2 Scandium	45				•	•
7440-62-2 Vanadium	51	588154	99.174	100.00	99.2	
7440-47-3 Chromium	52	539256	98.993	100.00	99.0	
7439-89-6 Iron	54	2190909	5046.3	5100.0	98.9	
7439-89-6 Iron	57	941068	5064.0	5100.0	99.3	
7439-96-5 Manganese	55	874992	99.218	100.00	99.2	
7440-48-4 Cobalt	59	707415	99.389	100.00	99.4	
7440-02-0 Nickel	60	148590	99.922	100.00	99.9	
7440-50-8 Copper	65	151195	99.953	100.00	100	
7440-66-6 Zinc	68	50814	99.438	100.00	99.4	
7440-38-2 Arsenic	75	139527	99.227	100.00	99.2	
7782-49-2 Selenium	82	15247	99.870	100.00	99.9	
7440-22-4 Silver	107	338489	49.586	50.000	99.2	
7440-43-9 Cadmium	111	144909	99.233	100.00	99.2	
7440-36-0 Antimony	121	245021	49.671	50.000	99.3	
7440-39-3 Barium	135	164991	99.468	100.00	99.5	
7440-28-0 Thallium	205	1024454	49,799	50.000	99.6	
7439-92-1 Lead	208	2841230	99.254	100.00	99.3	
CASN ISTD Name	M/S	Area	Amount			Q
LITHIUM6 Lithium-6	6	1014781		VTV-1	•	<u> </u>
7440-56-4 Germanium	72	1169931				V
7440-74-6 Indium	115	1406701				
7440-30-4 Thullum	169	1461814				$\square$

Reviewed by:	Date:
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TestAmenca, Inc.

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Method: 6020 (SOP: SAC-MT-00	1)	M02			Reported: 12/07/10 10:12:11				
Department: 120 (Metals)	-						Source	e: Met	:Edil
Sample: CCB 2		Mu	lt: 1.00	Dilf:	1.00	) [	)ivs:	1.000	)
Instrument: ICPMS M02		Chann	el 262						
File: 101203B2A # 15		Method	6020_						
Acquired: 12/03/2010 16:29:31		Mo	02						
Calibrated: 12/03/2010 15:23:15						Units	: ug/L		
CASN Analyte Name	M/S	Area	Amount	,=	RL	MDL	%RSD	,	Q

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CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9	7	0.01397	1.0	0.078	0.0	
7440-42-8	Boron	11	2228	0.23504	50.0	6.3	0.0	
7429-90-5	Aluminum	27	121655	0.23398	50.0	2.1	0.0	
7440-70-2	Calcium	44	4046	0.15813	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	-10982	-0.14856	10.0	3.1	0.0	
7440-47-3	Chromium	52	19404	0.09043	2.0	0.92	0.0	
7439-89-6	Iron	54	64003	0.31433	50.0	17.0	0.0	
7439-89-6	Iron	57	7909	0.38328	50.0	17.0	0.0	
7439-96-5	Manganese	55	2496	0.01099	1.0	0.083	0.0	
7440-48-4	Cobalt	59	212	0.00197	1.0	0.057	0.0	
7440-02-0	Nickel	60	201	-0.00691	2.0	0.098	0.0	
7440-50-8	Copper	65	117	0.00394				
7440-66-6	Zinc	68	3030	0.00856	5.0	1.0	0.0	
7440-38-2	Arsenic	75	11257	-0.02502	2.0	0.50	0.0	
7782-49-2	Selenium	82	1140	-0.12688	2.0	1.7	0.0	
7440-22-4	Silver	107	101	0.00085	1.0	0.030	0.0	
7440-43-9	Cadmium	111	47	0.00178	1.0	0.074	0.0	
7440-36-0	Antimony	121	145	0.00336	2.0	0.036	0.0	
7440-39-3	Barium	135	156	0.00410	1.0	0.96	0.0	
7440-28-0	Thallium	205	16056	0.04302	1.0	0.34	0.0	
7439-92-1	Lead	208	1028	0.00104	1.0	0.066	0.0	
0.4.04.1	IOTO N.							_
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6		6	1054187					Q
	Germanium	72	1185681					Ø
7440-74-6	* * * =	115	1447859					Q
7440-30-4	1 nullum	169	1499480					$\square$

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# **CALIBRATION REPORT**

Department: 120 (Metals)  Source: MetEdit	Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 10:12:11
	Department: 120 (Metals)		Source: MetEdit

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

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 26 Method 6020\_
Acquired: 12/03/2010 17:15:50 M02

Calibrated: 12/03/2010 15:23:15 Units: ug/L

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CASN Analy	rte Name M/S	S Area	a Found	True	%R	Q
7440-41-7 Beryll	ium	9 2715	1 93.427	100.00	93.4	
7440-42-8 Boron	1 <sup>-</sup>	1 16188	9 451.21	500.00	90.2	
7429-90-5 Alumi	num 21	7 1842659	5 4996.9	5100.0	98.0	
7440-70-2 Calcit	ım 44	4 807330	0 5051.5	5100.0	99.0	
7440-20-2 Scand	dium 45	5			*	
7440-62-2 Vanad	dium 5°	1 57347	7 98.763	100.00	98.8	
7440-47-3 Chron	nium 5	2 529201	7 99.226	100.00	99.2	
7439-89-6 Iron	54	4 2198048	8 5174.2	5100.0	101	
7439-89-6 Iron	57	7 929033	3 5105.9	5100.0	100	
7439-96-5 Manga	anese 55	863926	6 100.05	100.00	100	
7440-48-4 Cobal	t 59	697048	8 100.02	100.00	100	
7440-02-0 Nicke	! 60	14618	1 100.39	100.00	100	
7440-50-8 Coppe	er 6:	5 148762	2 100.44	100.00	100	
7440-66-6 Zinc	68	3 5010 <sup>-</sup>	1 100.18	100.00	100	
7440-38-2 Arsen	ic 75	5 135124	4 98.050	100.00	98.0	
7782-49-2 Selen	ium 82	2 15014	4 100.48	100.00	100	
7440-22-4 Silver	107	7 332889	9 48.563	50.000	97.1	
7440-43-9 Cadm	ium 111	143183	3 97.645	100.00	97.6	
7440-36-0 Antim	ony 12°	243400	0 49.137	50.000	98.3	
7440-39-3 Bariur	n 138	161357	7 96.874	100.00	96.9	
7440-28-0 Thallic	um 205	993967	7 47.863	50.000	95.7	
7439-92-1 Lead	208	3 2775867	7 96.126	100.00	96.1	
CASN ISTD	Name M/S	S Area	a Amount			Q
LITHIUM6 Lithium	m-6	1085406	5			<u> </u>
7440-56-4 Germa	anium 72	1145497	7			$\square$
7440-74-6 Indiun	n 118	141250	5			$\square$
7440-30-4 Thuliu	ım 169	1474597	7			$\square$

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	*	Reviewed by:	Date:	1, 1
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Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals) Source: MetEdit

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

Instrument: ICPMS M02 Channel 262 File: 101203B2A #27 Method 6020 M02

Acquired: 12/03/2010 17:20:07 Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9	4	0.00070	1.0	0.078	0.0	
7440-42-8	Boron	11	3088	2.5692	50.0	6.3	0.0	
7429-90-5	Aluminum	27	119371	-0.07522	50.0	2.1	0.0	
7440-70-2	Calcium	44	4183	1.2305	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	-9928	0.00796	10.0	3.1	0.0	
7440-47-3	Chromium	52	19959	0.22924	2.0	0.92	0.0	
7439-89-6	Iron	54	64978	4.0144	50.0	17.0	0.0	
7439-89-6	iron	57	7623	-0.76482	50.0	17.0	0.0	
7439-96-5	Manganese	55	2361	-0.00161	1.0	0.083	0.0	
7440-48-4	Cobalt	59	228	0.00454	1.0	0.057	0.0	
7440-02-0	Nickel	60	227	0.01134	2.0	0.098	0.0	
7440-50-8	Copper	65	121	0.00733				
7440-66-6	Zinc	68	3061	0.12983	5.0	1.0	0.0	
7440-38-2	Arsenic	75	10874	-0.24033	2.0	0.50	0.0	
7782-49-2	Selenium	82	1132	-0.11019	2.0	1.7	0.0	
7440-22-4	Silver	107	107	0.00159	1.0	0.030	0.0	
7440-43-9	Cadmium	111	50	0.00395	1.0	0.074	0.0	
7440-36-0	Antimony	121	215	0.01683	2.0	0.036	0.0	
7440-39-3	Barium	135	165	0.00914	1.0	0.96	0.0	
7440-28-0	Thallium	205	17200	0.08785	1.0	0.34	0.0	
7439-92-1	Lead	208	1136	0.00425	1.0	0.066	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6	Lithium-6	6	1075596		<del></del>			$\overline{\square}$
7440-56-4	Germanium	72	1174711					$\mathbf{Z}$
7440-74-6	Indium	115	1454130					
7440-30-4	Thulium	169	1518270					

	Reviewed by:	Date:
IDB Reports	TestAmerica, Inc.	Version: 6.02.068

IDB Reports

# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11 Department: 120 (Metals) Source: MetEdit

Sample: CCV4 (CCV) Mult: 1.00 Dilf: 1.00 1.000 Divs:

Instrument: ICPMS M02 Channel 262 File: 101203B2A # 28 Method 6020\_

Acquired: 12/03/2010 17:24:26 M02 Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryllium	9			100.00	0.00	
7440-42-8	Boron	11	-		500.00	0.00	
7429-90-5	Aluminum	27	19517243	5309.4	5100.0	104	
7440-70-2	Calcium	44	831353	5217.2	5100.0	102	
7440-20-2	Scandium	45				*	
7440- <del>6</del> 2-2	Vanadium	51	327653	57.289	100.00	57.3	
7440-47-3	Chromium	52	533726	100.39	100.00	100	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	Iron	57			5100.0	0.00	
7439-96-5	Manganese	55	866305	100.61	100.00	101	
7440-48-4	Cobalt	59	695255	100.04	100.00	100	
7440-02-0	Nickel	60	145908	100.49	100.00	100	
7440-50-8	Copper	65	148809	100.75	100.00	101	
7440-66-6	Zinc	68			100.00	0.00	
7440-38-2	Arsenic	75	136513	99.449	100.00	99.4	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	144123	98.258	100.00	98.3	
7440-36-0	Antimony	121			50.000	0.00	
7440-39-3	Barium	135			100.00	0.00	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	2825988	97.074	100.00	97.1	
CASN	ISTD Name	M/S	Агеа	Amount			Q
LITHIUM6	Lithium-6	6					<u>_</u>
7440-56-4	Germanium	72	1142316		•		v
7440-74-6	Indium	115	1413064				$\square$
7440-30-4	Thulium	169	1486586				$\square$

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TestAmerica, Inc.

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals) Source: MetEdit

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

Instrument: ICPMS M02 Channel 262 File: 101203B2A #29 Method 6020\_

Acquired: 12/03/2010 17:27:55 M02 Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN Analyte Name	M/S	Area	Amount	RL	MDL	%R\$D	Q
7440-41-7 Beryllium	9	71100	7 11110471	1.0	0.078	0.0	
7440-42-8 Boron	11			50.0	6.3	0.0	
7429-90-5 Aluminum	27	124545	1.4105	50.0	2.1	0.0	
7440-70-2 Calcium	44	3777	-1.1818	50.0	15.0	0.0	
7440-20-2 Scandium	45	0		50.5		0.0	
7440-62-2 Vanadium	51	1356	1.8720	10.0	3.1	0.0	
7440-47-3 Chromium	52	19566	0.16728	2.0	0.92	0.0	
7439-89-6 Iron	54			50.0	17.0	0.0	
7439-89-6 Iron	57			50.0	17.0	0.0	
7439-96-5 Manganese	55	2298	-0.00798	1.0	0.083	0.0	
7440-48-4 Cobalt	59	235	0.00557	1.0	0.057	0.0	
7440-02-0 Nickel	60	202	-0.00482	2.0	0.098	0.0	
7440-50-8 Copper	65	119	0.00613				
7440-66-6 Zinc	68			5.0	1.0	0.0	
7440-38-2 Arsenic	75	11375	0.17545	2.0	0.50	0.0	
7782-49-2 Selenium	82			2.0	1.7	0.0	
7440-22-4 Silver	107			1.0	0.030	0.0	
7440-43-9 Cadmium	111	58	0.00860	1.0	0.074	0.0	
7440-36-0 Antimony	121			2.0	0.036	0.0	
7440-39-3 Barium	135			1.0	0.96	0.0	
7440-28-0 Thallium	205			1.0	0.34	0.0	
7439-92-1 Lead	208	1120	0.00289	1.0	0.066	0.0	
CASN ISTD Name	M/S	Агеа	Amount				Q
LITHIUM6 Lithium-6	6						<b>V</b>
7440-56-4 Germanium	72	1170916					$\square$
7440-74-6 Indium	115	1469511					$\square$
7440-30-4 Thulium	169	1551140					

	Reviewed by:	Date:	1
IDB Reports	TestAmerica, Inc.		Version; 6,02.068

# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals)

Sample: CCV 5 (CCV)

Mult: 1.00

Dilf: 1.00

Divs: 1.000

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 30 Method 6020\_

Acquired: 12/03/2010 17:31:25 M02
Calibrated: 12/03/2010 15:23:15 Units: ug/L

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CASN	Analyte Name	M/S_	Area	Found	True	%R	Q
7440-41-7	Beryllium	9			100.00	0.00	***************************************
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27	19424360	5235.5	5100.0	103	
7440-70-2	Calcium	44	831582	5170.8	5100.0	101	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	330012	57.178	100.00	57.2	
7440-47-3	Chromium	52	536373	99.956	100.00	100	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	fron	57			5100.0	0.00	
7439-96-5	Manganese	55	871507	100.29	100.00	100	
7440-48-4	Cobalt	59	699153	99.686	100.00	99.7	
7440-02-0	Nickel	60	146794	100.17	100.00	100	
7440-50-8	Copper	65	149882	100.55	100.00	101	
7440-66-6	Zinc	68			100.00	0.00	
7440-38-2	Arsenic	75	136624	98.550	100.00	98.5	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	144790	97.906	100.00	97.9	
7440-36-0	Antimony	121			50.000	0.00	
7440-39-3	Barium	135			100.00	0.00	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	2849838	96.627	100.00	96.6	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6	~ .				Ø
7440-56-4	Germanium	72	1152927				☑
7440-74-6	Indium	115	1424602				<u> </u>
7440-30-4	Thulium	169	1506141				✓

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# **BLANK REPORT**

Reported: 12/07/10 10:12:11 Method: 6020 (SOP: SAC-MT-001) M02 Department: 120 (Metals) Source: MetEdit Sample: CCB 5 Mult: 1.00 Dilf: 1.00 Divs: 1.000 Instrument: ICPMS M02 Channel 262 File: 101203B2A #31 Method 6020 Acquired: 12/03/2010 17:34:54 M02

Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9	•		1.0	0.078	0.0	
7440-42-8	Boron	11			50.0	6.3	0.0	
7429-90-5	Aluminum	27	125288	1.7144	50.0	2.1	0.0	
7440-70-2	Calcium	44	3858	-0.60832	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	1674	1.9258	10.0	3.1	0.0	
7440-47-3	Chromium	52	20099	0.28039	2.0	0.92	0.0	
7439-89-6	Iron	54			50.0	17.0	0.0	
7439-89-6	Iron	57			50.0	17.0	0.0	
7439-96-5	Manganese	55	2333	-0.00307	1.0	0.083	0.0	
7440-48-4	Cobalt	59	211	0.00230	1.0	0.057	0.0	
7440-02-0		60	209	0.00035	2.0	0.098	0.0	
7440-50-8	Copper	65	119	0.00610				
7440-66-6	Zinc	68			5.0	1.0	0.0	
7440-38-2	Arsenic	75	10895	-0.16947	2.0	0.50	0.0	
7782-49-2	Selenium	82			2.0	1.7	0.0	
7440-22-4	Silver	107			1.0	0.030	0.0	
7440-43-9	Cadmium	111	50	0.00355	1.0	0.074	0.0	
7440-36-0	Antimony	121			2.0	0.036	0.0	
7440-39-3	Barium	135			1.0	0.96	0.0	
7440-28-0	Thallium	205			1.0	0.34	0.0	
7439-92-1	Lead	208	1061	0.00150	1.0	0.066	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6	Lithium-6	6			· · · · · · · · · · · · · · · · · · ·			Ø
7440-56-4	Germanium	72	1167172					Ø
7440-74-6	Indium	115	1461290					$\square$
7440-30-4	Thulium	169	1528298					

Reviewed by:	Date
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# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 10:12:11			
Department: 120 (Metals)				Sou	rce: MetEd
Sample: CCV 6 (CCV)	Mult: 1.00	Dilf:	1.00	Divs:	1.000
Instrument: ICPMS M02	Channel 262				- 1
File: 101203B2A #39	Method 6020_				
Acquired: 12/03/2010 18:02:16	M02				
Calibrated: 12/03/2010 15:23:15				Units: ug/L	

CASN	Analyte Name	M/S	Area	Found	True	%R	Q_
7440-41-7	Beryllium	9			100.00	0.00	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27	19744232	5314.0	5100.0	104	
7440-70-2	Calcium	44	831369	5161.5	5100.0	101	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	328475	56.835	100.00	56.8	
7440-47-3	Chromium	52	538228	100.15	. 100.00	100	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	Iron	57			5100.0	0.00	
7439-96-5	Manganese	55	871419	100.12	100.00	100	
7440-48-4	Cobalt	59	693467	98.717	100.00	98.7	
7440-02-0	Nickel	60	145330	99.018	100.00	99.0	
7440-50-8	Copper	65	148606	99.536	100.00	99.5	
7440-66-6	Zinc	68	•		100.00	0.00	
7440-38-2	Arsenic	75	136439	98.233	100.00	98.2	
7782 <del>-49-</del> 2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	143995	96.735	100.00	96.7	
7440-36-0	Antimony	121			50.000	0.00	
7440-39-3	Barium	135			100.00	0.00	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	2777991	94.985	100.00	95.0	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6				<u></u>	Ø
7440-56-4	Germanium	72	1154771				abla
7440-74-6	Indium	115	1434060				$\square$
7440-30-4	Thulium	169	1493687				$\square$

Reviewed by:	Date:

 Method: 6020 (SOP: SAC-MT-001)
 M02
 Reported: 12/07/10 10:12:11

 Department: 120 (Metals)
 Source: MetEdit

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

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 40 Method 6020\_

Acquired: 12/03/2010 18:05:46 M02
Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9			1.0	0.078	0.0	
7440-42-8	Boron	11			50.0	6.3	0.0	
7429-90-5	Aluminum	27	123940	1.4494	50.0	2.1	0.0	
7440-70-2	Calcium	44	4094	0.91202	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	1093	1.8310	10.0	3.1	0.0	
7440-47-3	Chromium	52	20756	0.41706	2.0	0.92	0.0	
7439-89-6	Iron	54			50.0	17.0	0.0	
7439-89-6	Iron	57			50.0	17.0	0.0	
7439-96-5	Manganese	55	2343	-0.00120	1.0	0.083	0.0	
7440-48-4	Cobalt	59	222	0.00398	1.0	0.057	0.0	
7440-02-0	Nickel	60	215	0.00471	2.0	0.098	0.0	
7440-50-8	Copper	65	127	0.01176				
7440-66-6	Zinc	68			5.0	1.0	0.0	
7440-38-2	Arsenic	75	10997	-0.06675	2.0	0.50	0.0	
7782-49-2	Selenium	82			2.0	1.7	0.0	
7440-22-4	Silver	107			1.0	0.030	0.0	
7440-43-9	Cadmium	111	48	0.00229	1.0	0.074	0.0	
7440-36-0	Antimony	121			2.0	0.036	0.0	
7440-39-3	Barium	135			1.0	0.96	0.0	
7440-28-0	Thailium	205			1.0	0.34	0.0	
7439-92-1	Lead	208	1142	0.00442	1.0	0.066	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6	Lithium-6	6				*******	<del></del> -	Ø
7440-56-4	Germanium	72	1163877					$\square$
7440-74-6	Indium	115	1453468					
7440-30-4	Thulium	169	1518863					$\square$

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Calibrated: 12/03/2010 15:23:15

# **CALIBRATION REPORT**

Ŭnits: ug/L

Method: 6020 (SOP: SAC-MT-001)	od: 6020 (SOP: SAC-MT-001) M02		Reporte	ed: 12/07/10	7/10 10:12:11	
Department: 120 (Metals)				Sou	rce: MetEdi	
Sample: CCV 7 (CCV)	Mult: 1.00	Dilf:	1.00	Divs:	1.000	
Instrument: ICPMS M02	Channel 262					
File: 101203B2A # 46	Method 6020_					
Acquired: 12/03/2010 18:26:22	M02					

CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryilium	9		****	100.00	0.00	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27	20659229	5379.0	5100.0	105	
7440-70-2	Calcium	44	873791	5247.9	5100.0	103	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	344919	57.703	100.00	57.7	
7440-47-3	Chromium	52	564075	101.58	100.00	102	
7439-89-6	fron	54			5100.0	0.00	
7439-89-6	iron	57			5100.0	0.00	
7439-96-5	Manganese	55	912402	101.41	100.00	101	
7440-48-4	Cobalt	59	734462	101.14	100.00	101	
7440-02-0	Nickel	60	154590	101.89	100.00	102	
7440-50-8	Copper	65	157607	102.12	100.00	102	
7440-66-6	Zinc	68			100.00	0.00	
7440-38-2	Arsenic	75	142744	99.525	100.00	99.5	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	148579	99.127	100.00	99.1	
7440-36-0	Antimony	121			50.000	0.00	
7440-39-3	Barium	135			100.00	0.00	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	2871031	96.165	100.00	96.2	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6				-	$\overline{\mathbf{Z}}$
7440-56-4	Germanium	72	1193589				
7440-74-6	Indium	115	1443831				v
7440-30-4	Thulium	169	1524522				$\square$

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 Method: 6020 (SOP: SAC-MT-001)
 M02
 Reported: 12/07/10 10:12:11

 Department: 120 (Metals)
 Source: MetEdit

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

 Instrument: ICPMS M02
 Channel 262

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 47 Method 6020\_
Acquired: 12/03/2010 18:29:51 M02

Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9			1.0	0.078	0.0	
7440-42-8	Boron	11			50.0	6.3	0.0	
7429-90-5	Aluminum	27	126157	0.80802	50.0	2.1	0.0	
7440-70-2	Calcium	44	4187	0.54639	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	1509	1.8900	10.0	3.1	0.0	
7440-47-3	Chromium	52	20223	0.17421	2.0	0.92	0.0	
7439-89-6	Iron	54			50.0	17.0	0.0	
7439-89-6	Iron	57			50.0	17.0	0.0	
7439-96-5	Manganese	55	2430	-0.00139	1.0	0.083	0.0	
7440-48-4	Cobalt	59	263	0.00838	1.0	0.057	0.0	
7440-02-0	Nickel	60	223	0.00483	2.0	0.098	0.0	
7440-50-8	Copper	65	132	0.01190				
7440-66-6	Zinc	68			5.0	1.0	0.0	
7440-38-2	Arsenic	75	11429	-0.05420	2.0	0.50	0.0	
7782-49-2	Selenium	82			2.0	1.7	0.0	
7440-22-4	Silver	107			1.0	0.030	0.0	
7440-43-9	Cadmium	111	59	0.00861	1.0	0.074	0.0	
7440-36-0	Antimony	121			2.0	0.036	0.0	
7440-39-3	Barium	135			1.0	0.96	0.0	
7440-28-0	Thallium	205			1.0	0.34	0.0	
7439-92-1	Lead	208	1185	0.00462	1.0	0.066	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6	Lithium-6	6						$\overline{\varnothing}$
7440-56-4	Germanium	72	1207912					$\square$
7440-74-6	Indium	115	1491802					Ø
7440-30-4	Thulium	169	1567846					Ø

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IDB Reports

# **CALIBRATION REPORT**

Version: 6.02.068

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals)

Source: MetEdit

Sample: CCV 8 (CCV)

Mult: 1.00

Dilf: 1.00

Divs: 1.000

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 48 Method 6020\_

Acquired: 12/03/2010 18:33:21 M02
Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryllium	9		<u> </u>	100.00	0.00	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27	20368044	5300.8	5100.0	104	
7440-70-2	Calcium	44	865848	5198.2	5100.0	102	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	342712	57.327	100.00	57.3	
7440-47-3	Chromium	52	559161	100.63	100.00	101	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	Iron	57			5100.0	0.00	
7439-96-5	Manganese	55	908181	100.91	100.00	101	
7440-48-4	Cobalt	59	728768	100.32	100.00	100	
7440-02-0	Nickel	60	153090	100.87	100.00	101	
7440-50-8	Copper	65	156211	101.18	100.00	101	
7440-66-6	Zinc	68			100.00	0.00	
7440-38-2	Arsenic	75	142176	99.052	100.00	99.1	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	149021	98.587	100.00	98.6	
7440-36-0	Antimony	121			50.000	0.00	
7440-39-3	Barium	135			100.00	0.00	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	2878315	95.858	100.00	95.9	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6					<u> </u>
7440-56-4	Germanium	72	1194036				<u> </u>
7440-74-6	Indium	115	1456057				☑
7440-30-4	Thulium	169	1533284				図

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TestAmenca, Inc.

Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 10:12:11			
Department: 120 (Metals)	11 // 400	D.116	4.00		rce: MetEd
Sample: CCB 8	Mult: 1.00	Dilf:	1.00	Divs:	1.000
Instrument: ICPMS M02	Channel 262				
File: 101203B2A # 49	<b>-</b>	Method 6020_			
Acquired: 12/03/2010 18:36:51 Calibrated: 12/03/2010 15:23:15	M02		Units: ug/L		

CASN	Analyte Name	M/S	Area	Amount	RL	MDL_	%RSD	Q
7440-41-7	Beryllium	9			1.0	0.078	0.0	
7440-42-8	-	11			50.0	6.3	0.0	
7429-90-5	Aluminum	27	126295	0.91603	50.0	2.1	0.0	
7440-70-2	Calcium	44	4259	1.0327	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	1858	1.9473	10.0	3.1	0.0	
7440-47-3	Chromium	52	20489	0.23110	2.0	0.92	0.0	
7439-89-6	fro <b>n</b>	54			50.0	17.0	0.0	
7439-89-6	Iron`	57			50.0	17.0	0.0	
7439-96-5	Manganese	55	2450	0.00138	1.0	0.083	0.0	
7440-48-4	Cobalt	59	257	0.00764	1.0	0.057	0.0	
7440-02-0	Nickel	60	233	0.01194	2.0	0.098	0.0	
7440-50-8	Copper	65	120	0.00462				
7440-66-6	Zinc	68			5.0	1.0	0.0	
7440-38-2	Arsenic	75	10988	-0.36649	2.0	0.50	0.0	
7782-49-2	Selenium	82			2.0	1.7	0.0	
7440-22-4	Silver	107			1.0	0.030	0.0	
7440-43-9	Cadmium	111	62	0.01066	1.0	0.074	0.0	
7440-36-0	Antimony	121			2.0	0.036	0.0	
7440-39-3	Barium	135			1.0	0.96	0.0	
7440-28-0	Thallium	205			1.0	0.34	0.0	
7439-92-1	Lead	208	1222	0.00579	1.0	0.066	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6		6		3			<del></del>	<u> </u>
	Germanium	72	1205343					<b>4</b>
7440-74-6		115	1491181					<b>A</b>
7440-30-4		169	1570126					図

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**	Reviewed by:		Date:
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# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals) Source: MetEdit

Sample: ICSA Mult: 1.00 Dilf: 1.00 1.000 Divs: Instrument: ICPMS M02 Channel 262

File: 101203B2A #50 Method 6020\_ Acquired: 12/03/2010 18:40:20 M02

Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryllium	. 9				*	<u> </u>
7440-42-8	Boron	11				*	$\square$
7429-90-5	Aluminum	27	02043512	99635	100000	99.6	$\square$
7440-70-2	Calcium	44	12752209	96920	100000	96.9	$\square$
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	3368	2.3372		*	$\square$
7440-47-3	Chromium	52	25918	2.5353		*	
7439-89-6	Iron	54			100000	0.00	
7439-89-6	iron	57			100000	0.00	
7439-96-5	Manganese	55	48477	6.5376		*	
7440-48-4	Cobalt	59	10103	1.7258		*	
7440-02-0	Nickel .	60	2967	2.3265		*	
7440-50-8	Copper	65	-402	-0.40127		*	
7440-66-6	Zinç	68				*	$\square$
7440-38-2	Arsenic	75	9343	0.30588		•	$\square$
7782-49-2	Selenium	82				*	
7440-22-4	Silver	107				*	
7440-43-9	Cadmium	111	1211	0.99751	•	*	$\square$
7440-36-0	Antimony	121				*	☑
7440-39-3	Barium	135				*	$\square$
7440-28-0	Thallium	205				*	$\square$
7439-92-1	Lead	208	12572	0.48458		*	$\square$
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6		6	7.1.54				<u> </u>
	Germanium	72	947387				Ø
7440-74-6		115	1137023				Ø
7440-30-4		169	1238488				囡
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	Reviewed I	py:	Date:	
IDB Reports		erica, Inc.	- <u>-</u> -	Version: 6 02 068

# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11 Department: 120 (Metals) Source: MetEdit

Sample: ICSAB Mult: 1.00 1.00 1.000 Dilf: Divs: Instrument: ICPMS M02 Channel 262

File: 101203B2A #51 Method 6020\_ Acquired: 12/03/2010 18:43:46 M02

Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryllium	9			100.00	0.00	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27	95452982	99086	100100	99.0	$\square$
7440-70-2	Calcium	44	12443176	96146	100100	96.0	$\overline{\checkmark}$
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	275573	59.014	100.00	59.0	
7440-47-3	Chromium	52	447113	103.19	100.00	103	
7439-89-6	Iron	54			100100	0.00	
7439-89-6	lron	57			100100	0.00	
7439-96-5	Manganese	55	742614	105.74	100.00	106	✓
7440-48-4	Cobalt	59	548825	96.803	100.00	96.8	abla
7440-02-0	Nickel	60	111566	94.180	100.00	94.2	$\overline{\checkmark}$
7440-50-8	Copper	65	106470	88.355	100.00	88.4	V
7440-66-6	Zinc	68			100.00	0.00	
7440-38-2	Arsenic	75	110673	98.781	100.00	98.8	$\overline{\mathbf{v}}$
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	108373	92.922	100.00	92.9	$\square$
7440-36-0	Antimony	121			50.000	0.00	
7440-39-3	Barium	135			100.00	0.00	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	2318673	97.510	100.00	97.5	$\square$
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6	r-nm.				$\overline{\mathbf{Z}}$
	Germanium	72	931910				Ø
7440-74-6		115	1123570				<b>I</b>
7440-30-4	Thulium	169	1214345				oxdarpi

	Reviewed by: Date:	
IDB Reports	TestAmenca, Inc.	Version; 6.02.068

Calibrated: 12/03/2010 15:23:15

# **CALIBRATION REPORT**

 Method: 6020 (SOP: SAC-MT-001)
 M02
 Reported: 12/07/10 10:12:11

 Department: 120 (Metals)
 Source: MetEdit

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

 Instrument: ICPMS M02
 Channel 262

 File: 404203D20 # 52
 Alathor 4 6020

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 52 Method 6020\_
Acquired: 12/03/2010 18:50:54 M02

Units: ug/L

CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryllium	9			100.00	0.00	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27	18803624	5082.4	5100.0	99.7	
7440-70-2	Calcium	44	822467	5129.1	5100.0	101	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	328655	57.115	100.00	57.1	
7440-47-3	Chromium	52	534656	99.933	100.00	99.9	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	Iron	57			5100.0	0.00	
7439-96-5	Manganese	55	876444	101.16	100.00	101	
7440-48-4	Cobalt	59	692436	99.020	100.00	99.0	
7440-02-0	Nickel	60	144869	99.155	100.00	99.2	
7440-50-8	Copper	65	147543	99.277	100.00	99.3	
7440-66-6	Zinc	68			100.00	0.00	
7440-38-2	Arsenic	75	136828	99.028	100.00	99.0	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	144577	98.857	100.00	98.9	
7440-36-0	Antimony	121			50.000	0.00	
7440-39-3	Barium	135			100.00	0.00	
7440-28-0	Thallium	205			50.000	0.00	
7439- <del>9</del> 2-1	Lead	208	2707747	95.170	100.00	95.2	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6					<u> </u>
7440-56-4	Germanium	72	1149406				
7440-74-6	Indium	115	1408844				$\square$
7440-30-4	Thulium	169	1452916				$\square$

	Reviewed by:	Date:
IDB Reports	TestAmerica, Inc.	Version: 6.02,068

**BLANK REPORT** 

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals)

Source: MetEdit

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

Instrument: ICPMS M02 Channel 262

File: 101203B2A # 53 Method 6020\_ Acquired: 12/03/2010 18:54:24 M02

Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9			1.0	0.078	0.0	
7440-42-8	Boron	11			50.0	6.3	0.0	
7429-90-5	Aluminum	27	123752	1.1987	50.0	2.1	0.0	
7440-70-2	Calcium	44	3659	-1.9065	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	59	1.6575	10.0	3.1	0.0	
7440-47-3	Chromium	52	17962	-0.13768	2.0	0.92	0.0	
7439-89-6	Iron	54			50.0	17.0	0.0	
7439-89-6	Iron	57			50.0	17.0	0.0	
7439-96-5	Manganese	55	2434	0.00749	1.0	0.083	0.0	
7440-48-4	Cobalt	59	278	0.01162	1.0	0.057	0.0	
7440-02-0	Nickel	60	209	0.00015	2.0	0.098	0.0	
7440-50-8	Copper	65	123	0.00878				
7440-66-6	Zinc	68			5.0	1.0	0.0	
7440-38-2	Arsenic	75	11247	0.07454	2.0	0.50	0.0	
7782-49-2	Selenium	82			2.0	1.7	0.0	
7440-22-4	Silver	107			1.0	0.030	0.0	
7440-43-9	Cadmium	111	61	0.01113	1.0	0.074	0.0	
7440-36-0	Antimony	121			2.0	0.036	0.0	
7440-39-3	Barium	135			1.0	0.96	0.0	
7440-28-0	Thallium	205			1.0	0.34	0.0	
7439-92-1	Lead	208	1150	0.00519	1.0	0.066	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6		6						<u>~</u>
	Germanium	72	1170890					Ø
7440-74-6		115	1442098					◩
7440-30-4		169	1500176					abla

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# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11 Department: 120 (Metals) Source: MetEdit

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

Instrument: ICPMS M02 Channel 262 File: 101203B2A #54 Method 6020\_\_ Acquired: 12/03/2010 18:57:53 M02

Calibrated: 12/03/2010 15:23:15 Units: ug/L

CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryllium	9	26837	93.306	100.00	93.3	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27			5100.0	0.00	
7440-70-2	Calcium	44	816188	5064.7	5100.0	99.3	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	329956	57.063	100.00	57.1	
7440-47-3	Chromium	52	538442	100.16	100.00	100	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	Iron	57			5100.0	0.00	
7439-96-5	Manganese	55	876286	100.65	100.00	101	
7440-48-4	Cobalt	59			100.00	0.00	
7440-02-0	Nickel	60	146132	99.528	100.00	99.5	
7440-50-8	Copper	65	148407	99.369	100.00	99.4	
7440-66-6	Zinc	68	50233	99.573	100.00	99.6	
7440-38-2	Arsenic	75			100.00	0.00	
7782-49-2	Selenium	82			100.00	0.00	
7440-22 <del>-4</del>	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	142798	97.198	100.00	97.2	
7440-36-0	Antimony	121	242641	48.891	50.000	97.8	
7440-39-3	Barium	135	160884	96.407	100.00	96.4	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	· 2778659	94.472	100.00	94.5	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6	1074268				<u> </u>
7440-56- <del>4</del>	Germanium	72	1155045				$\mathbf{\nabla}$
7440-74-6	Indium	115	1415176				$\square$
7440-30-4	Thulium	169	1501918				M

	Reviewed by:	Date:
IDB Reports	TestAmenca, Inc.	Version; 6.02 068

# **BLANK REPORT**

Method: 6020 (SOP: SAC-MT-001)	. M02		Report	Reported: 12/07/10 10:12:1 Source: MetE		
Department: 120 (Metals)				Sou	rce: MetEdit	
Sample: CCB 10	Mult: 1.0	0 Dilf:	1.00	Divs:	1.000	

Instrument: ICPMS	M02	Channel 262		
File: 101203B2A # 55	5	Method 6020_	,	
Acquired: 12/03/2010	19:01:27	M02		
Calibrated: 12/03/201	0 18:57:53			Units: ug/L

<del></del> _					<del></del>			
CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9	6	0.00837	1.0	0.078	0.0	
7440-42-8	Boron	11			50.0	6.3	0.0	
7429-90-5	Aluminum	27			50.0	2.1	0.0	
7440-70-2	Calcium	44	3832	-1.1193	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	22	1.6511	10.0	3.1	0.0	
7440-47-3	Chromium	52	18785	-0.02371	2.0	0.92	0.0	
7439-89-6	Iron	54			50.0	17.0	0.0	
7439-89-6	fron	57			50.0	17.0	0.0	
7439-96-5	Manganese	55	2434	0.00422	1.0	0.083	0.0	
7440-48-4	Cobalt	59			1.0	0.057	0.0	
7440-02-0	Nickel	60	216	0.00289	2.0	0.098	0.0	
7440-50-8	Copper	65	129	0.01193				
7440-66-6	Zinc	68	2957	-0.13693	5.0	1.0	0.0	
7440-38-2	Arsenic	75			2.0	0.50	0.0	
7782-49-2	Selenium	82			2.0	1.7	0.0	
7440-22-4	Silver	107			1.0	0.030	0.0	
7440-43-9	Cadmium	111	65	0.01380	1.0	0.074	0.0	
7440-36-0	Antimony	121	163	0.00653	2.0	0.036	0.0	
7440-39-3	Barium	135	177	0.01555	1.0	0.96	0.0	
7440-28-0	Thaliium	205			1.0	0.34	0.0	
7439-92-1	Lead	208	1213	0.00620	1.0	0.066	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6	Lithium-6	6	1099244					<u> </u>
7440-56-4	Germanium	72	1184929					$\square$
7440-74-6	Indium	115	1459062					$\square$
7440-30-4	Thulium	169	1541729					abla

ID8 Reports		 		Date:	Version; 6.02 068
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### CALIBRATION REPORT

Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 10:12:11			
Department: 120 (Metals)		, , , , , , , , , , , , , , , , , , ,		Sou	rce: MetEd
Sample: CCV 11 (CCV)	Mult: 1.00	Diff:	1.00	Divs:	1.000
Instrument: ICPMS M02	Channel 262				
File: 101203B2A # 58	Method 6020_				
Acquired: 12/03/2010 19:05:01	M02				
Calibrated: 12/03/2010 19:01:27				Units: ug/L	

CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryllium	9	27129	100.76	100.00	101	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27			5100.0	0.00	
7440-70-2	Calcium	44	822442	5157.4	5100.0	101	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	330582	100.54	100.00	101	
7440-47-3	Chromium	52	538295	100.33	100.00	100	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	Iron	57			5100.0	0.00	
7439-96-5	Manganese	55	876114	100.33	100.00	100	
7440-48-4	Cobalt	59			100.00	0.00	
7440-02-0	Nickel	60	146464	100.58	100.00	101	
7440-50-8	Copper	65	148717	100.56	100.00	101	
7440-66-6	Zinc	68	50005	99.893	100.00	99.9	
7440-38-2	Arsenic	75			100.00	0.00	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	142627	100.47	100.00	100	
7440-36-0	Antimony	121	244322	50.648	50.000	101	
7440-39-3	Barium	135	16123 <del>1</del>	100.82	100.00	101	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	2800704	100.28	100.00	100	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6	1077999				$\square$
7440-56-4	Germanium	72	1151082				$\overline{\mathbf{Q}}$
7440-74-6	Indium	115	1406945				$\square$
7440-30-4	Thulium	169	1509728				$\square$

	Reviewed by:	Date:
IDB Reports	 TestAmerica, Inc.	Version: 6.02,068

IDB Reports

Version: 6.02.068

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals) Source: MetEdit

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

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 59 Method 6020\_

Acquired: 12/03/2010 19:08:35 M02
Calibrated: 12/03/2010 19:01:27 Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9	11	0.01696	1.0	0.078	0.0	
7440-42-8	Boron	11			50.0	6.3	0.0	
7429-90-5	Aluminum	27			50.0	2.1	0.0	
7440-70-2	Calcium	44	3847	0.07436	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	813	0.23324	10.0	3.1	0.0	
7440-47-3	Chromium	52	18960	0.03096	2.0	0.92	0.0	
7439-89-6	Iron	54			50.0	17.0	0.0	
7439-89-6	iron	57			50.0	17.0	0.0	
7439-96-5	Manganese	55	2430	-0.00060	1.0	0.083	0.0	
7440-48-4	Cobalt	59			1.0	0.057	0.0	
7440-02-0	Nickel	60	218	0.00125	2.0	0.098	0.0	
7440-50-8	Copper	65	120	-0.00636				
7440-66-6	Zinc	68	2961	0.00245	5.0	1.0	0.0	
7440-38-2	Arsenic	75			2.0	0.50	0.0	
7782-49-2	Selenium	82			2.0	1.7	0.0	
7440-22 <del>-4</del>	Silver	107			1.0	0.030	0.0	
7440-43-9	Cadmium	111	54	-0.00818	1.0	0.074	0.0	
7440-36-0	Antimony	121	153	-0.00217	2.0	0.036	0.0	
7440-39-3	Barium	135	168	-0.00577	1.0	0.96	0.0	
7440-28-0	Thallium	205			1.0	0.34	0.0	
7439-92-1	Lead	208	1200	~0.00061	1.0	0.066	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6		6	1104177	7 0110 0110				<u> </u>
	Germanium	72	1185637					Ø
7440-74-6		115	1467295					[ <u>7</u> ]
7440-30-4		169	1548243					☑

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TestAmerica, Inc.

# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001)	M02	,	Reported: 12/07/10 10:12:1		
Department: 120 (Metals)				Sou	rce: MetEdit
Sample: CCV 12 (CCV)	Mult: 1.00	Dilf:	1.00	Divs:	1.000
Instrument: ICPMS M02	Channel 262				

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 69 Method 6020\_
Acquired: 12/03/2010 19:43:23 M02
Calibrated: 12/03/2010 19:01:27 Units: ug/L

CASN	Analyte Name	M/S_	Area	Found	True	%R	Q
7440-41-7	Beryllium	9	27545	99.864	100.00	99.9	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27			5100.0	0.00	
7440-70-2	Calcium	44	820073	5177.6	5100.0	102	
7440-20-2	Scandium	45				*	
7440-62 <b>-</b> 2	Vanadium	51	330528	101.21	100.00	101	
7440-47-3	Chromium	52	540647	101.50	100.00	101	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	Iron	57			5100.0	0.00	
7439-96-5	Manganese	55	874120	100.79	100.00	101	
7440-48-4	Cobalt	59			100.00	0.00	
7440-02-0	Nickel	60	145688	100.73	100.00	101	
7440-50-8	Copper	65	148294	100.96	100.00	101	
7440-66-6	Zinc	68	50299	101.24	100.00	101	
7440-38-2	Arsenic	75			100.00	0.00	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	142309	99.278	100.00	99.3	
7440-36-0	Antimony	121	242743	49.831	50.000	99.7	
7440-39-3	Barium	135	159998	99.071	100.00	99.1	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	2770610	99.957	100.00	100	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6	1104219			***************************************	Ø
7440-56-4	Germanium	72	1143237				$\overline{\mathbf{Z}}$
7440-74-6	Indium	115	1420582				<u></u>
7440-30-4	Thulium	169	1498191				$\overline{\mathbf{A}}$

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		Reviewed by:	*	Date:	, 5 T

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals) Source: MetEdit

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

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 70 Method 6020\_

Acquired: 12/03/2010 19:46:56 M02
Calibrated: 12/03/2010 19:01:27 Units: ug/L

CASN	Analida Mausa	M/S	۸ ۷۵۵	Amount	RL	MDL	%RSD	^
~	Analyte Name		Area					Q
7440-41-7	Beryllium	9	10	0.01232	1.0	0.078	0.0	
7440-42-8	Boron	11			50.0	6.3	0.0	
7429-90-5	Aluminum	27			50.0	2.1	0.0	
7440-70-2	Calcium	44	3942	0.84952	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	1655	0.48580	10.0	3.1	0.0	
7440-47-3	Chromium	52	21013	0.44649	2.0	0.92	0.0	
7439-89-6	Iron	54			50.0	17.0	0.0	
7439-89-6	Iron	57			50.0	17.0	0.0	
7439-96-5	Manganese	55	2388	-0.00314	1.0	0.083	0.0	
7440-48-4	Cobalt	59			1.0	0.057	0.0	
7440-02-0	Nickel	60	233	0.01221	2.0	0.098	0.0	
7440-50-8	Copper	65	137	0.00560				
7440-66-6	Zinc	68	3052	0.24110	5.0	1.0	0.0	
7440-38-2	Arsenic	75		•	2.0	0.50	0.0	
7782-49-2	Selenium	82			2.0	1.7	0.0	
7440-22-4	Silver	107			1.0	0.030	0.0	
7440-43-9	Cadmium	111	61	-0.00330	1.0	0.074	0.0	
7440-36-0	Antimony	121	194	0.00590	2.0	0.036	0.0	
7440-39-3	Barium	135	175	-0.00248	1.0	0.96	0.0	
7440-28-0	Thallium	205			1.0	0.34	0.0	
7439-92-1	Lead	208	1239	0.00080	1.0	0.066	0.0	
0.401	IOTO M	11/0	A	A				_
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6		6	1134768					Ø
	Germanium	72	1176256					Q
7440-74-6		115	1473729					◩
7440-30-4	Thulium	169	1546563					abla

	 ~	Reviewed by:	S	Date:	- ***
IDB Reports	 	TestAmerica, Inc	<u> </u>		Version: 6.02,068

# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 10:12:11			
Department: 120 (Metals)				Sou	rce: MetEdit
Sample: CCV 13 (CCV)	Mult: 1.00	Dilf:	1.00	Divs:	1.000
Instrument: ICPMS M02	Channel 262				
File: 101203B2A #78	Method 6020_				
Acquired: 12/03/2010 20:14:57	M02				
Calibrated: 12/03/2010 19:01:27			Units: ug/L		

CASN	Analyte Name	M/S_	Area	Found	True	%R	Q
7440-41-7	Beryllium	9	26718	101.78	100.00	102	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27			5100.0	0.00	
7440-70-2	Calcium	44	816752	5104.3	5100.0	100	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	330745	100.26	100.00	100	
7440-47-3	Chromium	52	540540	100.43	100.00	100	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	Iron	57			5100.0	0.00	
7439-96-5	Manganese	55	882833	100.77	100.00	101	
7440-48-4	Cobalt	59			100.00	0.00	
7440-02-0	Nickel	60	146175	100.05	100.00	100	
7440-50-8	Copper	65	149504	100.76	100.00	101	
7440-66-6	Zinc	68	50216	99.985	100.00	100	
7440-38-2	Arsenic	75			100.00	0.00	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	144760	100.88	100.00	101	
7440-36-0	Antimony	121	247699	50.790	50.000	102	
7440-39-3	Barium	135	161582	99.941	100.00	99.9	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	2796662	99.907	100.00	99.9	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6	1050971				$\overline{\mathbf{Q}}$
7440-56-4	Germanium	72	1155110				<b>5</b>
7440-74-6	Indium	115	1422814				$\square$
7440-30-4	Thulium	169	1513333				☑

	Reviewed by:	Date:	
IDB Reports	 TestAmerica, Inc.		Version; 6.02,068

#### BLANK REPORT

TAL West Sac		DL	AINK R	EPURI	
Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 10:12:11			
Department: 120 (Metals)			· · · · ·	Sou	rce: MetEdi
Sample: CCB 13	Mult: 1.00	Dilf:	1.00	Divs:	1.000
Instrument: ICPMS M02	Channel 262				
File: 101203B2A #79	Method 6020_				
Acquired: 12/03/2010 20:18:33	M02				
Calibrated: 12/03/2010 19:01:27				Units: ug/L	

CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9	7	0.00316	1.0	0.078	0.0	
7440-42-8	Boron	11			50.0	6.3	0.0	
7429-90-5	Aluminum	27			50.0	2.1	0.0	
7440-70 <i>-</i> 2	Calcium	44	3620	-1.5732	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	-604	-0.18289	10.0	3.1	0.0	
7440-47-3	Chromium	52	19240	0.04086	2.0	0.92	0.0	
7439-89-6	Iron	54			50.0	17.0	0.0	
7439-89-6	iron	57			50.0	17.0	0.0	
7439-96-5	Manganese	55	1610	-0.09414	1.0	0.083	0.0	
7440-48-4	Cobalt	59			1.0	0.057	0.0	
7440-02-0	Nickel	60	144	-0.04899	2.0	0.098	0.0	
7440-50-8	Copper	65	128	-0.00212				
7440-66-6	Zinc	68	2624	-0.75337	5.0	1.0	0.0	
7440-38-2	Arsenic	75			2.0	0.50	0.0	
7782-49-2	Selenium	82			2.0	1.7	0.0	
7440-22-4	Silver	107			1.0	0.030	0.0	
7440-43-9	Cadmium	111	45	-0.01512	1.0	0.074	0.0	
7440-36-0	Antimony	121	182	0.00262	2.0	0.036	0.0	
7440-39-3	Barium	135	155	-0.01628	1.0	0.96	0.0	
7440-28-0	Thallium	205			1.0	0.34	0.0	
7439-92 <b>-</b> 1	Lead	208	974	-0.00910	1.0	0.066	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6	Lithium-6	6	1119709					$\overline{\square}$
7440-56-4	Germanium	72	1199649					
7440-74-6	Indium	115	1510988					$\square$
7440-30 <del>-4</del>	Thulium	169	1574715					$ \mathbf{V} $

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Reviewed by:	Date:

# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 10:12:11

Department: 120 (Metals) Source: MetEdit Sample: CCV 14 (CCV) Mult: 1.00 Dilf: 1.00 Divs: 1.000

Instrument: ICPMS M02 Channel 262 File: 101203B2A #80 Method 6020\_ Acquired: 12/03/2010 20:22:09 M02

CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryllium	9			. 100.00	0.00	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27			5100.0	0.00	
7440-70-2	Calcium	44	853299	5414.1	5100.0	106	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	336859	103.64	100.00	104	
7440-47-3	Chromium	52	548794	103.59	100.00	104	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	Iron	57			5100.0	0.00	
7439-96-5	Manganese	55			100.00	0.00	
7440-48-4	Cobalt	59			100.00	0.00	
7440-02-0	Nickel	60	146439	101.73	100.00	102	
7440-50-8	Copper	65			100.00	0.00	
7440-66-6	Zinc	68			100.00	0.00	
7440-38-2	Arsenic	75			100.00	0.00	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	146232	100.25	100.00	100	
7440-36-0	Antimony	121			50.000	0.00	
7440-39-3	Barium	135			100.00	0.00	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	2857623	99.797	100.00	99.8	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6					Ø
7440-56-4	Germanium	72	1137840				$\square$
7440-74-6	Indium	115	1445646				$\square$
7440-30-4	Thulium	169	1547724				abla

İ	Reviewed by:	Date:
IDB Reports	TestAmerica, Inc.	Version: 6 02 068

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals)

Source: MetEdit

Sample: CCB 14

Mult: 1.00

Dilf: 1.00

Divs: 1.000

Instrument: ICPMS M02 Channel 262

File: 101203B2A #81 Method 6020\_ Acquired: 12/03/2010 20:25:27 M02

CASN Ana	alyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7 Ber	yllium	9			1.0	0.078	0.0	-
7440-42-8 Bor	on	11			50.0	6.3	0.0	
7429-90-5 Alui	minum	27			50.0	2.1	0.0	
7440-70-2 Cale	cium	44	3494	-1.8803	50.0	15.0	0.0	
7440-20-2 Sca	ındium	45						
7440-62-2 Van	nadium	51	455	0.12878	10.0	3.1	0.0	
7440-47-3 Chr	omium	52	20372	0.33165	2.0	0.92	0.0	
7439-89-6 Iron	1	54			50.0	17.0	0.0	
7439-89-6 Iron	)	57			50.0	17.0	0.0	
7439-96-5 Mar	nganese	55			1.0	0.083	0.0	
7440-48-4 Cob	palt	59			1.0	0.057	0.0	
7440-02-0 Nick	kel	60	145	-0.04632	2.0	0.098	0.0	
7440-50-8 Cop	pper	65						
7440-66-6 Zino	<b>c</b>	68			5.0	1.0	0.0	
7440-38-2 Arse	enic	75			2.0	0.50	0.0	
7782-49-2 Sele	enium	82			2.0	1.7	0.0	
7440-22-4 Silve	er	107			1.0	0.030	0.0	
7440-43-9 Cad	lmium	111	48	-0.01219	1.0	0.074	0.0	
7440-36-0 Anti	imony	121			2.0	0.036	0.0	
7440-39-3 Bari	ium	135			1.0	0.96	0.0	
7440-28-0 Tha	llium	205			1.0	0.34	0.0	
7439-92-1 Lea	d	208	1001	-0.00800	1.0	0.066	0.0	
CASN IST	D Name	M/S	Area	Amount				Q
LITHIUM6 Lith	ium-6	6						
7440-56-4 Ger	manium	72	1174414					abla
7440-74-6 Indi	um	115	1481881					Ø
7440-30-4 Thu	lium	169	1567730					☑

	\$ <sup>2</sup>	> <u>-</u>	Reviewed by:	Date:
IDB Reports			TestAmerica, Inc.	Version <sup>-</sup> 6.02.068

# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 10:12:11
Department: 120 (Metals)		Source: MetEdit

 Sample:
 CCV 15 (CCV)
 Mult:
 1.00
 Diff:
 1.00
 Divs:
 1.000

 Instrument:
 ICPMS M02
 Channel 262

File: 101203B2A #89 Method 6020\_ Acquired: 12/03/2010 20:50:53 M02

CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryllium	9			100.00	0.00	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27			5100.0	0.00	
7440-70-2	Calcium	44	876020	5397.6	5100.0	106	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51	342213	102.24	100.00	102	
7440-47-3	Chromium	52	560568	102.72	100.00	103	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	Iron	57			5100.0	0.00	
7439-96-5	Manganese	55			100.00	0.00	
7440-48-4	Cobalt	59			100.00	0.00	
7440-02-0	Nickel	60	149060	100.56	100.00	101	
7440-50-8	Соррег	65			100.00	0.00	
7440-66-6	Zinc	68			100.00	0.00	
7440-38-2	Arsenic	75			100.00	0.00	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111	145620	97.992	100.00	98.0	
7440-36-0	Antimony	121			50.000	0.00	
7440-39-3	Barium	135			100.00	0.00	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208	2831730	97.629	100.00	97.6	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6					Ø
7440-56-4	Germanium	72	1171787				Z
7440-74-6	Indium	115	1472717				$\checkmark$
7440-30-4	Thulium	169	1567736				$\checkmark$

(3)	Reviewed by:	Date:
IDB Reports	TestAmerica, Inc	Version: 6.02.068

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals)

Source: MetEdit

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

Instrument: ICPMS M02 Channel 262

File: 101203B2A # 90 Method 6020\_ Acquired: 12/03/2010 20:54:10 M02

CASN	Analyte Name	M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7	Beryllium	9			1.0	0.078	0.0	
7440-42-8	Boron	11			50.0	6.3	0.0	
7429-90-5	Aluminum	27			50.0	2.1	0.0	
7440-70-2	Calcium	44	3834	-0.09852	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2	Vanadium	51	1138	0.32974	10.0	3.1	0.0	
7440-47-3	Chromium	52	22387	0.65626	2.0	0.92	0.0	
7439-89-6	Iron	54			50.0	17.0	0.0	
7439-89-6	Iron	57			50.0	17.0	0.0	
7439-96-5	Manganese	55			1.0	0.083	0.0	
7440-48 <b>-4</b>	Cobalt	59			1.0	0.057	0.0	
7440-02-0	Nickel	60	142	-0.05009	2.0	0.098	0.0	
7440-50-8	Copper	65						
7440-66-6	Zinc	68			5.0	1.0	0.0	
7440-38-2	Arsenic	75			2.0	0.50	0.0	
7782-49-2	· ·	82			2.0	1.7	0.0	
7440-22-4		107			1.0	0.030	0.0	
7440-43-9	Cadmium	111	52	-0.01036	1.0	0.074	0.0	
7440-36-0	Antimony	121			2.0	0.036	0.0	
7440-39-3	Barium	135			1.0	0.96	0.0	
7440-28-0	Thallium	205			1.0	0.34	0.0	
7439-92-1	Lead	208	1020	-0.00767	1.0	0.066	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
LITHIUM6	Lithium-6	6		•				$\overline{\mathbf{Q}}$
7440-56-4	Germanium	72	1190416					$\square$
7440-74-6	Indium	115	1503028					☑
7440-30-4	Thulium	169	1581467					$\checkmark$

IDB Reports	~			TestAmerica, Inc.	<del></del>	<del></del>	Version: 6.02.068
-		13		Reviewed by:		Date:	
			***************************************			· · ·	

# **CALIBRATION REPORT**

 Method: 6020 (SOP: SAC-MT-001)
 M02
 Reported: 12/07/10 10:12:11

 Department: 120 (Metals)
 Source: MetEdit

 Sample: CCV 16 (CCV)
 Mult: 1.00 Diff: 1.00 Divs: 1.000

 Instrument:
 ICPMS M02
 Channel 262

 File:
 101203B2A
 # 91
 Method 6020\_

Acquired: 12/03/2010 20:57:27 M02

CASN	Analyta Nama	M/S	Area		T	0/ 17	
	Analyte Name		Alea	Found	True	%R	Q
7440-41-7	•	9			100.00	0.00	
7440-42-8		11			500.00	0.00	
	Aluminum	27			5100.0	0.00	
7440-70-2		44	891482	5237.5	5100.0	103	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51			100.00	0.00	
7440-47-3	Chromium	52			100.00	0.00	
7439-89-6	lron	54			5100.0	0.00	
7439-89-6		57			5100.0	0.00	
7439-96-5	Manganese	55	946426	101.54	100.00	102	
7440-48-4	Cobalt	59			100.00	0.00	
7440-02-0		60			100.00	0.00	
7440-50-8	Copper	65			100.00	0.00	
7440-66-6	Zinc	68			100.00	0.00	
7440-38-2	Arsenic	75			100.00	0.00	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111			100.00	0.00	
7440-36-0	Antimony	121			50.000	0.00	
7440-39-3	Barium	135			100.00	0.00	
7440-28-0	Thallium	205			50.000	0.00	
7439-92-1	Lead	208			100.00	0.00	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6				<del></del>	Ø
	Germanium	72	1229014				Ø
7440-74-6		115					
7440-30-4	Thulium	169					

	Reviewed by:		Date:	· · · · · · · · · · · · · · · · · · ·	
IDB Reports	 TestAmerica, Inc.	<del>_</del>		Version, 6,0	

Units: ug/L

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 10:12:11

Department: 120 (Metals)

Source: MetEdit

Sample: CCB 16

Mult: 1.00

Dilf: 1.00

Divs: 1.000

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 92 Method 6020\_

Acquired: 12/03/2010 21:00:05 M02 Calibrated: 12/03/2010 20:57:27

						·g	
CASN Analyte Na	ame M/S	Area	Amount	RL	MDL	%RSD	Q
7440-41-7 Beryllium	9			1.0	0.078	0.0	
7440-42-8 Boron	11			50.0	6.3	0.0	
7429-90-5 Aluminum	27			50.0	2.1	0.0	
7440-70-2 Calcium	44	5615	9.5889	50.0	15.0	0.0	
7440-20-2 Scandium	45						
7440-62-2 Vanadium	51			10.0	3.1	0.0	
7440-47-3 Chromium	52			2.0	0.92	0.0	
7439-89-6 Iron	54			50.0	17.0	0.0	
7439-89-6 Iron	57			50.0	17.0	0.0	
7439-96-5 Manganese	e 55	1846	-0.07349	1.0	0.083	0.0	
7440-48-4 Cobalt	59			1.0	0.057	0.0	
7440-02-0 Nickel	60			2.0	0.098	0.0	
7440-50-8 Copper	65						
7440-66-6 Zinc	68			5.0	1.0	0.0	
7440-38-2 Arsenic	75			2.0	0.50	0.0	
7782-49-2 Selenium	82			2.0	1.7	0.0	
7440-22-4 Silver	107			1.0	0.030	0.0	
7440-43-9 Cadmium	111			1.0	0.074	Q.O	
7440-36-0 Antimony	121			2.0	0.036	0.0	
7440-39-3 Barium	135			1.0	0.96	0.0	
7440-28-0 Thallium	205			1.0	0.34	0.0	
7439-92-1 Lead	208			1.0	0.066	0.0	
CASN ISTD Nam	ne M/S	Area	Amount				_ Q
LITHIUM6 Lithium-6	6						$   \overline{\mathbf{V}} $
7440-56-4 Germanium	n 72	1232304					$\square$
7440-74-6 Indium	115						
7440-30-4 Thulium	169						

	Reviewed by:	Date:
IDB Reports	TestAmerica, Inc.	Version; 6,02.068

# TALIMOSES

	est Sac		· · · · · · · · · · · · · · · · · · ·			LIBRAT	ION	/EPC	ノベー
Method: 6	6020 (SOP: SAC-MT-001)	)	М	02		Reported	d: 12/07/	10 10:1	2:11
Departmen	t: 120 (Metals)						Şc	ource: M	etEdit
Sample: C	CCV 17 (CCV)		Mult	: 1.00	Dilf:	1.00	Divs:	1.0	00
Instrumen	t: ICPMS M02	•	Channe	1 262				****	
File: 1012	03B2A #95		Method (	3020					
Acquired:	12/03/2010 21:02:44		MO	2					
•	i: 12/03/2010 21:00:05					ι	Jnits: ug/	L	ĺ
CASN	Analyte Name	M/S	Area	Found		Tr	ue	%R	 Q
7440-41-7	Beryllium	9			··-	100.	00	0.00	
7440-42-8	•	11				500.	00	0.00	
7429-90-5	Aluminum	27				5100	0.0	0.00	
7440-70-2	Calcium	44	890819	5077.0		5100	0.0	99.5	
7440-20-2	Scandium	45						*	
7440-62-2	Vanadium	51				100.	00	0.00	
7440-47-3	Chromium	52				100.	00	0.00	
7439-89-6	Iron	54				5100	0.0	0.00	
7439-89-6	Iron	57				5100	0.0	0.00	
7439-96-5	Manganese	55	947216	99.710		100.	00	99.7	
7440-48-4	Cobalt	59				100.	00	0.00	
7440-02-0	Nickel	60				100.	00	0.00	
7440-50-8	Copper	65				100.	00	0.00	
7440-66-6	Zinc	68				100.	00	0.00	
7440-38-2	Arsenic	75	144439	99.488		100.	00	99.5	
7782-49-2	Selenium	82				100.	00	0.00	
7440-22-4	Silver	107				50.0	00	0.00	
7440-43-9	Cadmium	111				100.	00	0.00	
7440-36-0	Antimony	121				50.0	00	0.00	
7440-39-3	Barium	135				100.	00	0.00	
7440-28-0	Thallium	205				50.0	00	0.00	
7439-92-1	Lead	208				100.	00	0.00	

ISTD Name	M/S_	Area	Amount	Q
Lithium-6	6	~		<u> </u>
Germanium	72	1233714		☑
Indium	115			ď
Thulium	169			$\square$
	Lithium-6 Germanium Indium	Lithium-6         6           Germanium         72           Indium         115	Lithium-6         6           Germanium         72         1233714           Indium         115	Lithium-6 6 Germanium 72 1233714 Indium 115

Reviewed by: Date: Method: 6020 (SOP: SAC-MT-001)

# **BLANK REPORT**

Reported: 12/07/10 10:12:11

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<u> </u>	 	<del></del>	
D		_	
Department: 120 (Metals)		Source	· MotEdit

M02

Department: 120 (Metals) Source: MetEdit Sample: CCB 17 Mult: 1.00 Dilf: 1.00 1.000 Divs:

Instrument: ICPMS M02 Channel 262 File: 101203B2A #96 Method 6020\_

M02 Acquired: 12/03/2010 21:05:23

Units: ug/L Calibrated: 12/03/2010 21:00:05

····		~						
CASN Ana	lyte Name	M/S	Area	Amount	ŘL	MDL	%RSD	Q
7440-41-7 Bery	/llium	9	•	•	1.0	0.078	0.0	
7440-42-8 Boro	on .	11			50.0	6.3	0.0	
7429-90-5 Alun	ninum	27			50.0	2.1	0.0	
7440-70-2 Calc	ium	44	5592	-0.79665	50.0	15.0	0.0	
7440-20-2 Scar	ndium	45						
7440-62-2 Van:	adium	51			10.0	3.1	0.0	
7440-47-3 Chro	omium	52			2.0	0.92	`0.0	
7439-89-6 Iron		54			50.0	17.0	0.0	
7439-89-6 Iron		57			50.0	17.0	0.0	
7439-96-5 Man	ganese	55	1824	-0.00627	1.0	0.083	0.0	
7440-48-4 Cob	alt	59			1.0	0.057	0.0	
7440-02-0 Nick	el	60			2.0	0.098	0.0	
7440-50-8 Cop	per	65						
7440-66-6 Zinc		68		•	5.0	1.0	0.0	
7440-38-2 Arse	enic	75	11608	-0.70024	2.0	0.50	0.0	
7782-49-2 Sele	nium	82			2.0	1.7	0.0	
7440-22-4 Silve	er	107			1.0	0.030	0.0	
7440-43-9 Cadi	mium	111			1.0	0.074	0.0	
7440-36-0 Antir	mony	121			2.0	0.036	0.0	
7440-39-3 Barit	um	135			1.0	0.96	0.0	
7440-28-0 Thal	lium	205			1.0	0.34	0.0	
7439-92-1 Lead	i	208			1.0	0.066	0.0	
CASN IST	O Name	M/S	Area	Amount				Q
LITHIUM6 Lithin	um-6	6	•					<u> </u>
7440-56-4 Gern	nanium	72	1258532					$\square$
7440-74-6 India	ım	115						<b>I</b>
7440-30-4 Thul	ium	169						$\square$

	· · · · · · · · · · · · · · · · · · ·	Reviewed by:	Date:	
IDB Reports	 	TestAmerica, Inc.	<del></del>	Version: 6.02 068

# **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001)	M02 Repo		Reporte	rted: 12/07/10 10:12:11		
Department: 120 (Metals)		,		Sou	rce: MetEdi	
Sample: CCV 18 (CCV)	Mult: 1.00	Dilf:	1.00	Divs:	1.000	
Instrument: ICPMS M02	Channel 262					
File: 101203B2A # 103	Method 6020_					
Acquired: 12/03/2010 21:23:16	M02					
Calibrated: 12/03/2010 21:00:05			(	Units: ug/L		

CASN	Analyte Name	M/S	Area	Found	True	%R	Q
7440-41-7	Beryllium -	9			100.00	0.00	
7440-42-8	Boron	11			500.00	0.00	
7429-90-5	Aluminum	27			5100.0	0.00	
7440-70-2	Calcium	44	892819	5163.9	5100.0	101	
7440-20-2	Scandium	45				*	
7440-62-2	Vanadium	51			100.00	0.00	
7440-47-3	Chromium	52			100.00	0.00	
7439-89-6	Iron	54			5100.0	0.00	
7439-89-6	Iron	57			5100.0	0.00	
7439-96-5	Manganese	55	953741	101.88	100.00	102	
7440-48-4	Cobalt	59			100.00	0.00	
7440-02-0	Nickel	60			100.00	0.00	
7440-50-8	Copper	65			100.00	0.00	
7440-66-6	Zinc	68			100.00	0.00	
7440-38-2	Arsenic	75	144444	101.09	100.00	101	
7782-49-2	Selenium	82			100.00	0.00	
7440-22-4	Silver	107			50.000	0.00	
7440-43-9	Cadmium	111			100.00	0.00	
7440-36-0	Antimony	121			50.000	0.00	
7440-39-3	Barium	135			100.00	0.00	
7440-28-0	Thailium	205			50.000	0.00	
7439-92-1	Lead	208			100.00	0.00	
CASN	ISTD Name	M/S	Area	Amount			Q
LITHIUM6	Lithium-6	6				'	Ø
7440-56-4	Germanium	72	1215595				☑
7440-74-6	Indium	115					Ø
7440-30-4	Thulium	169					区

	Reviewed by:	Date:	, .
IDB Reports	TestAmerica, Inc.		Version: 6.02.068

Method: 6020 (SOP: SAC-MT-001)	M02		Reporte	ed: 12/07/10	10:12:11
Department: 120 (Metals) Sample: CCB 18	Mult: 1.00	Dilf:	1.00	Sou Divs:	rce: MetEdit
Instrument: ICPMS M02	Channel 262				
File: 101203B2A # 104 Acquired: 12/03/2010 21:25:55	Method 6020_ M02				
Calibrated: 12/03/2010 21:00:05			Į	Units: ug/L	

CASN A	Analyte Name	M/S	Area	Amount	ŔL	MDL	%RSD	Q
7440-41-7 E	Bervilium	9			1.0	0.078	0.0	
7440-42-8 E	-	11			50.0	6.3	0.0	
7429-90-5	Aluminum	27			50.0	2.1	0.0	
7440-70-2	Calcium	44	5740	0.15469	50.0	15.0	0.0	
7440-20-2	Scandium	45						
7440-62-2 \	Vanadium	51			10.0	3.1	0.0	
7440-47-3	Chromium	52			2.0	0.92	0.0	
7439-89-6 1	ron	54			50.0	17.0	0.0	
7439-89-6 1	ron	57			50.0	17.0	0.0	
7439-96-5 M	Manganese	55	1949	0.00738	1.0	0.083	0.0	
7440-48-4	-	59			1.0	0.057	0.0	
7440-02-0 N	Nickel	60			2.0	0.098	0.0	
7440-50-8	Copper	65						
7440-66-6 2	Zinc	68			5.0	1.0	0.0	
7440-38-2 A	Arsenic	75	11892	-0.45847	2.0	0.50	0.0	
7782-49-2 8	Selenium	82			2.0	1.7	0.0	
7440-22-4 8	Silver	107			1.0	0.030	0.0	
7440-43-9	Cadmium	111			1.0	0.074	0.0	
7440-36-0 A	Antimony	121			2.0	0.036	0.0	
7440-39-3 E	3arium	135			1.0	0.96	0.0	
7440-28-0 1	Thallium	205			1.0	0.34	0.0	
7439-92-1 L	_ead	208			1.0	0.066	0.0	
CASN I	STD Name	M/S	Area	Amount				Q
LITHIUM6 L		6						<u>Q</u> <u></u> <u> </u>
7440-56-4	Germanium	72	1253820					$\overline{\mathbf{V}}$
7440-74-6 I	ndium	115						<u> </u>
7440-30-4 1	Thulium	169						$\mathbf{\nabla}$

	. ,	Reviewed by:	Date:	
IDB Reports		TestAmerica, Inc.	 	Version; 6.02.068

# SERIAL DILUTION

17 12 11001 000	<del></del>		OEIGINE DIEGITOR
Method: 6020 (SOP: SAC-MT-001)	hod: 6020 (SOP: SAC-MT-001) M02		Reported: 12/07/10 11:15:19
Department: 120 (Metals)			Source: MetEdi
Sample: MAK04P5	Serial Dilution:	5.00	Sample Dilution: 1.00
Instrument: ICPMS M02	Channel 262		
File: 101203B2A # 98	Method 6020_		
Acquired: 12/03/2010 21:10:28	M02		Matrix: AIR
Calibrated: 12/03/2010 21:00:05			Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7		9			0	704111		*	<u> </u>
7440-41-7	•	11			=				
	Aluminum	27			0			-	
			20642	600.04	0	0.0007			
7440-70-2		44	30512	682.31	682.52	0.0307		-	
7440-20-2		45			0			-	
7440-62-2		51			0				
	Chromium	52			0			*	
7439-89-6		54			0				
7439-89-6		57			0			. *	
	Manganese	55	272832	137.74	138.83	0.785	0.14	0.8	$\square$
7440-48-4	<b></b>	59			0			*	
7440-02-0		60			0			*	
7440-50-8	• •	65			0			*	
7440-66-6		68			0			*	
7440-38-2	Arsenic	75	11742	-3.7160	0.60117	718	0.41	NC	$\square$
7782-49-2	Selenium	82			0			*	
7440-22- <del>4</del>	Silver	107			0			*	
7440-43-9	Cadmium	111			0			*	
7440-36-0	Antimony	121			0			*	
7440-39-3	Barium	135			0			*	
7440-28-0	Thallium	205			0			*	
7439-92-1	Lead	208			0			*	
CASN	ISTD Name	M/S	Area	Amount					Q
LITHIUM6	Lithium-6	6							Ø
7440-56-4	Germanium	72	1280349						
7440-74-6	Indium	115		`					$   \overline{\mathbf{Z}} $
7440-30-4	Thulium	169							Ø

<sup>\*</sup> Analyte not requested for this batch, no MDL NC : Serial dilution concentration < 100 X MDL E : Difference greater than Limit (10%)

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	 Reviewed by:	·	Date:	٠.

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 11:15:25

Department: 120 (Metals)

Source: MetEdit

Sample: MAK04Z Spike Dilution: 1.00 Sample Dilution: 1.00

Instrument: ICPMS M02 Channel 262
File: 101203B2A # 99 Method 6020\_

Acquired: 12/03/2010 21:13:00 M02 Matrix: AIR Calibrated: 12/03/2010 21:00:05 Units: ug/L

	<del></del>	·	<del></del>	<del></del>		<del></del>	<del></del> -		
CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9			0	0.00	200		
7440-42-8	Boron	11			0	0.00	1000		
7429-90-5	Aluminum	27			0	0.00	1000		
7440-70-2	Calcium	44	287310	1674.5	682.52	99.2	1000		$\checkmark$
7440-20-2	Scandium	45			0	0.00	200		
7440-62-2	Vanadium	51			0	0.00	200		
7440-47-3	Chromium	52			O	0.00	200		
7439-89-6	Iron	54			D	0.00	1000		
7439-89-6	Iron	57			0	0.00	1000		
7439-96-5	Manganese	55	2997328	327.23	138.83	94.2	200		
7440-48-4	Cobalt	59			0	0.00	200		
7440-02-0	Nickel	60			0	0.00	200		
7440-50-8	Copper	65			0	0.00	200		
7440-66-6	Zinc	68			0	0.00	200		
7440-38-2	Arsenic	75	254920	189.53	0.60117	94.5	200		$\checkmark$
7782-49-2	Selenium	82			0	0.00	200		
7440-22-4	Silver	107			0	0.00	50.0		
7440-43-9	Cadmium	111			0	0.00	200		
7440-36-0	Antimony	121			0	0.00	200		
7440-39-3	Barium	135			0	0.00	200		
7440-28-0	Thallium	205			0	0.00	50.0		
7439-92-1	Lead	208			0	0.00	200		
CASN	ISTD Name	M/S	Area	Amount					Q
LITHIUM6	Lithium-6	6							V
7440-56-4	Germanium	72	1190772						
7440-74-6	Indium	115							abla
7440-30-4	Thulium	169							V

	Review	ed by:	. Date	∌:
IDB Reports	Te	stAmenca, Inc.		Version: 6.02 068



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

File Number    File Number   Batch Numbers   Date   Analyst	Instrument ID (	(Circle one): M01 (M02)	Met	hod 60:	20				
Lot Numbers  GOK 190601, GOK 240587, GOK 270 427, GOK 300 434, GOL 020446  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: WTZ DATA ENTERED BY: 54/			SOP SA	AC-MT-	0001				
Lot Numbers  GOK 190601, GOK 240587, GOK 270 427, GOK 300 434, GOL 020446  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: WITL DATA ENTERED BY: 5%	File Number		Date		Analys	t			
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: WTL DATA ENTERED BY: 54	10120712	336286,	12-07-10	54					
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: WTJ DATA ENTERED BY: 54	GOK	YES	NO	NA					
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: WTZ DATA ENTERED BY: 5%	}i	Copy of analysis protocol used included?							
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:  WTZ  DATA ENTERED BY: 3%	<u> </u>		?						
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: WTZ DATA ENTERED BY: 5%	<u> </u>								
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: WTZ DATA ENTERED BY: 5%	4. 10 samples or less a	nalyzed between calibration checks?				<u></u>			
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: 5%	5. All parameters withi	n linear range?							
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: WTL DATA ENTERED BY:	6. LCS/LCSD within lim	its?							
> 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: WTZ DATA ENTERED BY: 5%	7. Prep blank value < I	reporting limit or all samples >20x bl	ank?		! 				
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:			· · · · ·	/					
11. Each batch checked for presence of internal standard in samples?  12. Anomalies entered using Clouseau?  COMMENTS:  REVIEWED BY: WTZ DATA ENTERED BY: 5%	9. Appropriate dilution	factors applied to data?		/					
12. Anomalies entered using Clouseau?  COMMENTS:  REVIEWED BY: WTZ DATA ENTERED BY: 5%	10. Matrix spike and spil	ke dup within customer defined limit	s?			/			
COMMENTS:  REVIEWED BY:  MTZ  DATA ENTERED BY: 5%	11. Each batch checked	for presence of internal standard in	samples?	_/					
REVIEWED BY: WTZ DATA ENTERED BY: 524	12. Anomalies entered ι	using Clouseau?				/			
	COMMENTS:								
					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\101207a2\

Report Date/Time: Tuesday, December 07, 2010 14:13:29

# The Dataset

		ine Dai	aset	
Batch ID	Sample ID	Date and Time	Read Type	Description
	TUNE SHARGRAV	E 06:49:13 Tue 07-Dec-10	Sample	
	AUTOLENS SHARE	GF06:53:04 Tue 07-Dec-10	Sample	
	DAILY SHARGRAV	E 07:34:13 Tue 07-Dec-10	Sample	
	Rinse 2X	09:12:39 Tue 07-Dec-10	Sample	
	Blank	09:15:34 Tue 07-Dec-10	Blank	
	Standard 1	09:18:24 Tue 07-Dec-10	Standard #1	
	ICV	09:20:59 Tue 07-Dec-10	Sample	
	ICV	09:25:16 Tue 07-Dec-10	Sample	
	ICB	10:24:20 Tue 07-Dec-10	Sample	
	LLSTD1	10:26:59 Tue 07-Dec-10	Sample	LLSTD@10X -00 out At
	LLSTD2	10:29:38 Tue 07-Dec-10	Sample	LLSTD@5X
	ICSA	10:32:16 Tue 07-Dec-10	Sample	
	ICSAB	10:34:53 Tue 07-Dec-10	Sample	
	Rinse	11:11:19 Tue 07-Dec-10	Sample	
336286	MARD8B	11:17:36 Tue 07-Dec-10	Sample	G0L020000-286 BLK 7
336286	MARD8C	11:20:11 Tue 07-Dec-10	Sample	GOLO20000-286 LCS 4 don't as
336286	MARD8L	11:22:45 Tue 07-Dec-10	Sample	G0L020000-286 LCSD
	CCV1	11:25:24 Tue 07-Dec-10	Sample	•
	CCV 1 > Recal	11:50:24 Tue 07-Dec-10	Sample > 2	7 IS
	CCV 2	12:03:37 Tue 07-Dec-10	Sample	
	CCB 2	12:06:16 Tue 07-Dec-10	Sample	
	LLSTD1	12:08:56 Tue 07-Dec-10	Sample	LLSTD@10X
335251	MAPEVB	12:23:45 Tue 07-Dec-10	Sample	G0L010000-251 BLK )
335251/53	MAPEVC	12:26:21 Tue 07-Dec-10	Sample	G0L010000-251 LCS
335253/51	MAPE7L	12:28:56 Tue 07-Dec-10	Sample	G0L010000-251 LCSD
335251	MAA80	12:31:29 Tue 07-Dec-10	Sample	G0K190601-3
335251	MAA80P5	12:34:01 Tue 07-Dec-10	Sample	G0K190601-35X 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
335251	MAA80Z	12:36:33 Tue 07-Dec-10	Sample	G0K190601-3 PS
335251	MAA81	12:39:06 Tue 07-Dec-10	Sample	G0K190601-4
335251	MAKDV	12:41:39 Tue 07-Dec-10	Sample	G0K240587-1
335251	MAKD2	12:44:12 Tue 07-Dec-10	Sample	G0K240587-2
	CCV 3	12:46:51 Tue 07-Dec-10	Sample	
	CCB 3	12:49:31 Tue 07-Dec-10	Sample	
	CCV 4	12:55:08 Tue 07-Dec-10	Sample	
	CCB 4	12:57:47 Tue 07-Dec-10	Sample	
336286	MARD8B	13:00:24 Tue 07-Dec-10	Sample	G0L020000-286 BLK )
336286	MARD8C	13:02:59 Tue 07-Dec-10	Sample	GOLO20000-286 LCS   report As
336286	MARD8L	13:05:33 Tue 07-Dec-10	Sample	G0L020000-286 LCSD .
340010	MAWLKB	13:08:09 Tue 07-Dec-10	Sample	G0L060000-10 BLK )
340010	MAWLKC	13:10:44 Tue 07-Dec-10	Sample	G0L060000-10 LCS
340010	MAWLKL	13:13:20 Tue 07-Dec-10	Sample	GOLO60000-10 LCSD } ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
340010	MAML1	13:15:54 Tue 07-Dec-10	Sample	G0K300434-2
340010	MAML1P5	13:18:28 Tue 07-Dec-10	Sample	G0K300434-2 5X
340010	MAML1Z	13:21:03 Tue 07-Dec-10	Sample	G0K300434-2 PS
340010	MAML6	13:23:37 Tue 07-Dec-10	Sample	G0K300434-3
0.00.0	CCV 5	13:26:17 Tue 07-Dec-10	Sample	
	CCB 5	13:28:56 Tue 07-Dec-10	Sample	
		.5.25.55 1.55 07 550 10	Jun 1910	

341211 341211 341211 341211 341211 341211 341211 341211 341211	MA0J7B MA0J7C MA0J7L MAQQ1 MAQQ1P5 MAQQ1Z MAQQ4 MAQRA MAQRA MAQRH CCV 6	13:39:35 Tue 07-Dec-10 13:42:11 Tue 07-Dec-10 13:44:47 Tue 07-Dec-10 13:47:22 Tue 07-Dec-10 13:49:58 Tue 07-Dec-10 13:52:33 Tue 07-Dec-10 13:55:09 Tue 07-Dec-10 14:00:19 Tue 07-Dec-10	Sample Sample Sample Sample Sample Sample Sample Sample Sample	G0L070000-211 BLK G0L070000-211 LCS G0L070000-211 LCSD G0L020446-3 G0L020446-3 5X G0L020446-3 PS G0L020446-4 G0L020446-7 G0L020446-10	rprt	As, Ma	
	CCB 6	14:05:37 Tue 07-Dec-10	Sample				

MAML1

42 MAML1P5

43 MAML1Z

MAML6

CCV 5

MA0J7B

MA0J7C

46 CCB 5

41

44

45

47

G0K300434-2

G0K300434-2

G0K300434-3

G0L070000

G0L070000

G0K300434

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 12/07/10 14:26:16

File II	D: 101207	7A2			Analyst: hargraves					
#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	_ <u>Q</u>		
1	Rinse 2X		]	$\top$	2.0	12/07/10 09:12				
2	Blank	•		1	1.0	12/07/10 09:15				
3	Standard1			1	1.0	12/07/10 09:18				
4	ICV				1.0	12/07/10 09:20				
5	ICV			1	1.0	12/07/10 09:25				
6	ICB				1.0	12/07/10 10:24				
7	LLSTD1			<u> </u>	1.0	12/07/10 10:26				
8	LLSTD2			1	1.0	12/07/10 10:29		╗		
9	ICSA				1.0	12/07/10 10:32		╗		
10	ICSAB				1.0	12/07/10 10:34		$\exists \Box$		
11	Rinse	}			1.0	12/07/10 11:11				
12	MARD8B	G0L020000	0336286	2A	1.0	12/07/10 11:17				
13	MARD8C	G0L020000	0336286	2A	1.0	12/07/10 11:20		70		
14	MARD8L	G0L020000	0336286	2A	1.0	12/07/10 11:22				
15	CCV 1		<u> </u>	<u> </u>	1.0	12/07/10 11:25				
16	CCB 1				1.0	12/07/10 11:50				
19	CCV 2				1.0	12/07/10 12:03				
20	CCB 2				1.0	12/07/10 12:06				
21	LLSTD1				1.0	12/07/10 12:08				
22	MAPEVB	G0L010000	0335251	2A	1.0	12/07/10 12:23				
23	MAPEVC	G0L010000	0335251	2A	1.0	12/07/10 12:26				
24	MAPE7L	G0L010000	0335253	2A	1.0	12/07/10 12:28				
25	MAA80	G0K190601-3	0335251	2A	1.0	12/07/10 12:31				
26	MAA80P5	G0K190601	0335251		5.0	12/07/10 12:34		$\exists \Box$		
27	MAA80Z	G0K190601-3	0335251		1.0	12/07/10 12:36				
28	MAA81	G0K190601-4	0335251	2A	1.0	12/07/10 12:39		٦a		
29	MAKDV	G0K240587-1	0335251	2A	1.0	12/07/10 12:41				
30	MAKD2	G0K240587-2	0335251	2A	1.0	12/07/10 12:44				
31	CCV 3				1.0	12/07/10 12:46				
32	CCB 3				1.0	12/07/10 12:49				
33	CCV 4				1.0	12/07/10 12:55				
34	CCB 4		<u> </u>		1.0	12/07/10 12:57				
35	MARD8B	G0L020000	0336286	2A	1.0	12/07/10 13:00				
36	MARD8C	G0L020000	0336286	2A	1.0	12/07/10 13:02				
37	MARD8L	G0L020000	0336286	2A	1.0	12/07/10 13:05				
38	MAWLKB	G0L060000	0340010	2A	1.0	12/07/10 13:08				
39	MAWLKC	G0L060000	0340010	2A	1.0	12/07/10 13:10				
40	MAWLKL	G0L060000	0340010	2A	1.0	12/07/10 13:13				

1.0

5.0

1.0

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1.0

12/07/10 13:15

12/07/10 13:18

12/07/10 13:26

12/07/10 13:28

12/07/10 13:39

1.0 12/07/10 13:21

1.0 12/07/10 13:23

1.0 12/07/10 13:42

2A

2A

2A

2A

0340010

0340010

0340010

0340010

0341211

0341211

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# **RUN SUMMARY**

Me	thod: 6020 (S0	OP: SAC-MT-001	)	Instrument: M02			Reported: 12/07/10 14:26:16			
File I	File ID: 101207A2					Analys	Analyst: hargraves			
#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q		
49	MA0J7L	G0L070000	0341211	2A	1.0	12/07/10 13:44				
50	MAQQ1	G0L020446-3	0341211	2A	1.0	12/07/10 13:47				
51	MAQQ1P5	G0L020446	0341211		5.0	12/07/10 13:49	<del></del>			
52	MAQQ1Z	G0L020446-3	0341211		1.0	12/07/10 13:52				
53	MAQQ4	G0L020446-4	0341211	2A	1.0	12/07/10 13:55		$\Box\Box$		
54	MAQRA	G0L020446-7	0341211	2A	1.0	12/07/10 13:57				
55	MAQRH	G0L020446-10	0341211	2A	1.0	12/07/10 14:00				
56	CCV 6			7	1.0	12/07/10 14:02				
57	CCB 6				1.0	12/07/10 14:05				

# TAL West Sac

# INTERNAL STANDARD SUMMARY

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 12/07/10 14:26:16

File ID: 101207A2

# Analyst: hargraves

### Germanium

			Germanium	
#	Sample ID	Analyzed Date		Q
1	Rinse 2X	12/07/10 09:12	95.6	
2	Blank	12/07/10 09:15	100.0	团
3	Standard1	12/07/10 09:18	99.6	Ø
4	ICV	12/07/10 09:20	99.1	Ø
5	ICV	12/07/10 09:25	99.9	Ø
6	ICB	12/07/10 10:24	103.4	abla
7	LLSTD1	12/07/10 10:26	105.9	$\square$
8	LLSTD2	12/07/10 10:29	106.7	_
9	ICSA	12/07/10 10:32	91.2	$\checkmark$
10	ICSAB	12/07/10 10:34	97.1	
11	Rinse	12/07/10 11:11	126.2	V
12	MARD8B	12/07/10 11:17	122.5	Ø
13	MARD8C	12/07/10 11:20	114.4	Ø
14	MARD8L	12/07/10 11:22	103.9	abla
15	CCV 1	12/07/10 11:25	119.3	
16	CCB 1	12/07/10 11:50	133.6	
19	CCV 2	12/07/10 12:03	102.5	abla
20	CCB 2	12/07/10 12:06	100.8	
21	LLSTD1	12/07/10 12:08	103.8	
22	MAPEVB	12/07/10 12:23	94.3	abla
23	MAPEVC	12/07/10 12:26	87.2	$   \sqrt{} $
24	MAPE7L	12/07/10 12:28		$\checkmark$
25	MAA80	12/07/10 12:31	79.5	Ø
26	MAA80P5	12/07/10 12:34	96.1	
27	MAA80Z	12/07/10 12:36	82.6	Ø
28	MAA81	12/07/10 12:39	80.7	$\nabla$
29	MAKDV	12/07/10 12:41		V
30	MAKD2	12/07/10 12:44	86.8	
31	CCA 3	12/07/10 12:46	94.8 [	
32	CCB 3	12/07/10 12:49	99.0	
33	CCV 4	12/07/10 12:55	96.7	
34	CCB 4	12/07/10 12:57	103.2	
35	MARD8B	12/07/10 13:00	97.4	
36	MARD8C	12/07/10 13:02	86.2	
	MARD8L	12/07/10 13:05	81.1	
38	MAWLKB	12/07/10 13:08	79.0	
39	MAWLKC	12/07/10 13:10	80.8	
40	MAWLKL	12/07/10 13:13	79.6	
41	MAML1	12/07/10 13:15	80.0	
42	MAML1P5	12/07/10 13:18	90.0	
43	MAML1Z	12/07/10 13:21	77.6	
	MAML6	12/07/10 13:23	78.6	
45	CCV 5	12/07/10 13:26	91.9	
46	CCB 5	12/07/10 13:28	95.0	
47	MA0J7B	12/07/10 13:39	91.8	
48	MA0J7C	12/07/10 13:42	82.1 <sub>]</sub> E	✓

# TAL West Sac

# INTERNAL STANDARD SUMMARY

ĺ				-			 ··· <del>=</del>		
ļ	Method: 60	020 (SOP	: SAC-M	T-001)	-	M02 (M02)	Reported:	12/07/10	14:26:16
(							 		

File ID: 101207A2

### Analyst: hargraves

### Germanium

#	Sample ID	Analyzed Date	Q
49	MA0J7L	12/07/10 13:44	80.6 ☑
50	MAQQ1	12/07/10 13:47	79.0 🗹
51	MAQQ1P5	12/07/10 13:49	86.1
52	MAQQ1Z	12/07/10 13:52	79.3 ☑
53	MAQQ4	12/07/10 13:55	77.4 🗹
54	MAQRA	12/07/10 13:57	80.6
55	MAQRH	12/07/10 14:00	85.8
56	CCV 6	12/07/10 14:02	93.4
57	CCB 6	12/07/10 14:05	97.2 🗹

### TAL-W.Sacramento Elan 6000 ICPMS M02

#### **Quantitative Method Report**

File Name:

0006020-SH.mth

File Path:

E:\eiandata\Method\0006020-SH.mth

### **Timing Parameters**

Sweeps/Reading: Readings/Replicate: 50

Number of Replicates:

1 3

Tuning File:

default.tun

Optimization File: QC Enabled:

default.dac

Yes

Settling Time:

Normal

Analyte	Mass	Scan Mode	MCA Channels	<b>Dwell Time</b>	Integration Time
Al	26.982	Peak Hopping	1	14.0 ms	700 ms
Ca	43.956	Peak Hopping	1	14.0 ms	700 ms
Mn	54.938	Peak Hopping	j 1	14.0 ms	700 ms
As	74.922	Peak Hopping	, 1	20.0 ms	1000 ms
Ge-1	71.922	Peak Hopping	1	14.0 ms	700 ms

### Signal Processing

Detector Mode:

Dual

Measurement Units:

Counts

AutoLens: Spectral Peak Processing: On

Signal Profile Processing:

Average

Blank Subtraction:

Average

After Internal Standard

Baseline Readings:

0

Smoothing:

Yes, Factor 5

# **Equations**

Analyte

Mass

Corrections

As

74.922

-3.1278 \* Se 77 + 1.0177 \* Se 78

### **Calibration Information**

Analyte Mass	Curve Type	Sample Units	Std Units	Std 1	Std 2	Std 3	Std 4
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			
Mn 54.938	Linear Thru Zero	ug/L	ug/L	100			
As 74.922	Linear Thru Zero	ug/L	ug/L	100			
Ge-1 71.922	Linear Thru Zero	ug/L	ug/L				

Report Date/Time:

Tuesday, December 07, 2010 14:09:40

Page 1

# 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: 4075-25B

Internal standard: 4075-22C

Blank, CCBs: <u>3185-42D</u>

Standard 1, CCVs: <u>4075-21E</u>

ICV: 4075-20D

ICSA: <u>4075-27B</u>

ICSAB: <u>4075-27C</u>

File Number: <u>101207A2</u>

# **Instrument Tuning Report**

File Name:

default.tun

# Sample Information

Sample Date/Time: Tuesday, December 07, 2010 06:49:13

Sample ID: TUNE SHARGRAVE

Analyte	Exact Mass	Meas. Mass	Mass DAC	Meas. Pk. Width	Res. DAC	Custom Res.
Li	7.016	7.027	1580	0.738	2040	
Be	9.012	9.029	2080	0.700	2035	
Mg	23.985	23.979	5728	0.726	2003	
Co	58.933	58.878	14249	0.724	1958	
In	114.904	114.829	27899	0.733	1937	
Ce	139.905	139.929	33978	0.729	1985	
TI	204.975	204.979	49692	0.727	2189	
Pb	207.977	207.979	50425	0.723	2210	
U	238.050	238.028	57638	0.740	2360	

Report Date/Time: Tuesday, December 07, 2010 06:51:07

Page 1

# Elan 6000 Instrument Optomization Report

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

Sample Information

Sample Date/Time: Tuesday, December 07, 2010 07:34:13

Sample ID: DAILY 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:

06:53:04 Tue 07-Dec-10

Sample Filename: Dataset Pathname: **AUTOLENS SHARGRAVE.003** 

Lens Voltage Start:

e:\elandata\Dataset\101207a2\

5.50 Lens Voltage End: 10.00 Lens Voltage Step: 0.25

Slope:

0.02126968

6.53696030 Intercept:

Analyte Mass Optimum Voltage Maximum Intensity # Points Ве 9.010 6.8 3281.1 19 86613.6 Co 58.935 7.8 19 114.903 9.0 328775.0 19 ln

#### **Dual Detector Calibration**

Date:

08:01:56 Tue 07-Dec-10

Sample Filename:

DAILY SHARGRAVE.1097

Dataset Pathname: dual detector calibration\

37 Points Acquired: Lens Vol Start: -3.00 Lens Vol End:

15.00

Lens Vol Step:

0.50

Analyte	Mass	Gain	N(max)
Li	6.015	10129.15	1235998078.193
Li	7.016	9449.89	1324842000.392
Be	9.012	8857.80	1413399228.860
В	11.009	9146.06	1368852249.810

Report Date/Time: Tuesday, December 07, 2010 08:08:10

Page 1

Na	22.990	9118.55	1372981536.992
Mg	23.985	8534.23	1466986957.713
Mg	24.986	8369.25	1495905758.665
Αĺ	26.982	7911.93	1582369824.835
Si	27.977	8973.22	1395219571.285
Р	30.994	7287.08	1718055165.115
K	38.964	7100.33	1763243847.627
Ca	42.959		
Ca	43.956	6971.61	1795798956.472
Sc	44.956	7080.85	1768093466.146
٧	50.944	6876.33	1820682362.555
Cr	51.941	6628.40	1888781365.139
Fe	53.940	6525.67	1918515148.090
Mn	54.938	6554.76	1910002204.770
Fe	56.935	6424.60	1948697279.431
Co	58.933	6269.19	1997004380.979
Ni	59.933	6081.55	2058620450.330
Cu	62.930	5973.72	2095780633.374
Cu	64.928	5888.17	2126231105.985
Zn	67.925	5952.75	2103161748.568
Ge	71.922	6127.47	2043191900.987
As	74.922	6124.98	2044023708.276
Se	77.917	6122.66	2044797442.453
Br	78.918		
Se	81.917	6050.71	2069114669.712
Sr	87.906		
Мо	96.906	6128.33	2042906515.828
Ag	106.905	5534.60	2262061270.648
Ag	108.905	5536.88	2261130679.220
Cd	110.904	5626.11	2225268192.020
Cd	113.904	5627.50	2224719836.750
ln	114.904	5658.70	2212451551.812
Sn	117.902	5649.45	2216076556.491
Sb	120.904	5651.19	2215394633.559
Ва	134.906	5526.61	2265330490.437
Ho	164.930		
Tm	168.934	5351.68	2339377359.067
TI	204.975	5104.08	2452862601.143
₽b	207.977	5100.71	2454483234.194
U	238.050	5062.74	2472892833.787

# **Daily Performance Report**

Sample ID: DAILY SHARGRAVE

Sample Date/Time: Tuesday, December 07, 2010 07:34:13

Sample Description:

Sample File:

Method File: E:\elandata\Method\000daily.rnth

Dataset File: e:\elandata\dataset\101207a2\DAILY SHARGRAVE.006

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: e:\elandata\Optimize\default.dac

Number of Replicates: 5 Dual Detector Mode: Dual

# **Summary**

	Analyte	MassNe	t Intens. Mean	Net Intens. RSD
	Mg	24	39582.557	0.225
	Rh	103	227757.567	0.697
	Pb	208	271660.442	0.525
[>	Ba	138	316167.621	0.392
L	Ba++	69	0.014	2.345
[>	Ce	140	407072.164	0.396
	CeO	156	0.033	4.799
	Bkgd	220	2.286	34.233
	Li	7	13654.536	2.149
	Be	9	3772.211	2.677
	Co	59	98556.798	0.485
	in	115	356144.422	0.429
	TI	205	411132.717	1.234

SOP No. SAC-MT-0001 Analyst: SHargrave

# Sample ID: Rinse 2X Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 09:12:39

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\Rinse 2X.007

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
Γ	27 AI		378104.740	ug/L	0.000
1	44 Ca		3039.059	ug/L	0.000
	55 Mn		6805.315	ug/L	0.000
	75 As		5300.785	ug/L	0.000
L>	72 Ge-1		755369.417	ug/L	0.000

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
	Ca	44	
	Mn	55	
1	As	75	
>	Ge-1	72	

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: Blank Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 09:15:34

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\Blank.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
Γ	27 AI		91619.527	ug/L	
	44 Ca		3216.147	ug/L	
	55 Mn		2860.643	ug/L	
1	75 As		5747.158	ug/L	
_>	72 Ge-1		790209.635	ug/L	

### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
ľ	Ca	44	
	Mn	55	
1	As	75	
>	Ge-1	72	

Report Date/Time: Tuesday, December 07, 2010 09:16:01

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Sample ID: Blank

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: Standard 1 Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 09:18:24

Method File: E:\elandata\Method\0006020-SH.mth

Dataset File: e:\elandata\dataset\101207a2\Standard 1.009

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
Γ	27 AI	5100.000000	1.545	14503124.094	ug/L	91619.527
ļ	44 Ca	5100.000000	1.114	655965.802	ug/L	3216.147
1	55 Mn	100.000000	0.927	704528.576	ug/L	2860.643
1	75 As	100.000000	0.939	96528.759	ug/L	5747.158
>	72 Ge-1			787378.408	ug/L	790209.635

	Analyte	Mass	Int Std % Recovery
	Al	27	
1	Ca	44	
	Mn	55	
1	As	75	
>	Ge-1	72	

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: ICV Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 09:25:16

Method File: E:\elandata\Method\0006020-SH.mth Dataset File: e:\elandata\dataset\101207a2\ICV .011

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
Γ	27 Ai	743.588271	0.760	2197458.404	ug/L	91619.527
	44 Ca	761.281671	0.856	100857.325	ug/L	3216.147
1	55 Mn	77.635827	1.570	548743.825	ug/L	2860.643
ļ	75 As	81.596677	0.174	79997.895	ug/L	5747.158
L>	72 Ge-1			789143.453	ug/L	790209.635

	Analyte	Mass	Int Std % Recovery
٢	Al	27	
	Ca	44	
	Mn	55	
-	As	75	
1>	Ge-1	72	99.865

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: ICB
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 10:24:20

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\ICB,012

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
Γ	27 Al	-4.317916	10.910	82056.718	ug/L	91619.527
1	44 Ca	9.068673	2.906	4530.947	ug/L	3216.147
	55 Mn	-0.011123	73.964	2876.317	ug/L	2860.643
1	75 As	0.410560	66.541	6334.551	ug/L	5747.158
Ļ>	72 Ge-1			817166.369	ug/L	790209.635

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
	Ca	44	
	Mn	55	
	As	75	
L>	Ge-1	72	103.411

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: LLSTD1

Sample Description: LLSTD@10X

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 10:26:59

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\LLSTD1.013

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
Γ	27 AI	17.091767	5.323	148354.452	ug/L	91619.527
	44 Ca	52.030498	3.923	10481.959	ug/L	3216.147
	55 Mn	0.715607	3.326	8365.495	ug/L	2860.643
ļ	75 As	1.106023	1.564	7155.287	ug/L	5747.158
L>	72 Ge-1			837042.468	ug/L	790209.635

### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Αl	27	
	Ca	44	
[	Mn	55	
	As	75	
>	Ge-1	72	105.927

Report Date/Time: Tuesday, December 07, 2010 10:27:25

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Sample ID: LLSTD1

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: LLSTD2

Sample Description: LLSTD@5X

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 10:29:38

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\LLSTD2.014

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
Γ	27 Al	66.838139	0.888	300021.708	ug/L	91619.527
{	44 Ca	99.835983	2.159	17112.980	ug/L	3216.147
1	55 Mn	1.705385	2.700	15863.749	ug/L	2860.643
1	75 As	2.237674	8.661	8307.267	ug/L	5747.158
<u> </u>	72 Ge-1			843216.075	ug/L	790209.635

### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
ſ	Al	27	
	Ca	44	
	Mn	55	
	As	75	
Ļ>	Ge-1	72	106.708

Report Date/Time: Tuesday, December 07, 2010 10:30:03

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SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: ICSA
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 10:32:16

Method File: E:\eiandata\Method\0006020-SH.mth Dataset File: e:\eiandata\dataset\101207a2\ICSA .015

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 Analy	te Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
Γ	27 AI	97070.591213	4.249	250931943.094	ug/L	91619.527
1	44 Ca	101021.709241	3.318	11829049.317	ug/L	3216.147
1	55 Mn	6.220860	3.749	42529.990	ug/L.	2860.643
	75 As	1.129956	58.484	6176.103	ug/L	5747.158
L>	72 Ge-1			720572.478	ug/L	790209.635

### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
	Ca	44	
	Mn	55	
	As	75	
>	Ge-1	72	91.188

Report Date/Time: Tuesday, December 07, 2010 10:32:41

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SOP No. SAC-MT-0001 Analyst: SHargrave

# Sample ID: ICSAB Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 10:34:53

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\ICSAB.016

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 Analyt	e Conc. Mean	Conc. RSD	Meas. Intens. Mean	Sample Unit	Blank Intensity
Γ	27 Al	92107.819166	0.457	253685266.589	ug/L	91619.527
i	44 Ca	98661.893241	0.553	12306507.364	ug/L	3216.147
	55 Mn	100.843584	1.172	692172.885	ug/L	2860.643
1	75 As	105.260552	1.795	98693.864	ug/L	5747.158
L>	72 Ge-1			767178.960	ug/L	790209.635

### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
	Ca	44	
]	Mn	55	
]	As	75	
<u> </u> >	Ge-1	72	97.085

Report Date/Time: Tuesday, December 07, 2010 10:35:18

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Sample ID: ICSAB

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: Rinse

Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 11:11:19

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\Rinse.017

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
Γ	27 AI	71.514890	1.236	371606.938	ug/L	91619.527
-	44 Ca	7.342333	15.114	5250.167	ug/L	3216.147
	55 Mn	0.454851	3.967	7653.936	ug/L	2860.643
]	75 As	0.511864	22.020	7842.901	ug/L	5747.158
L>	72 Ge-1			997449.908	ug/L	790209.635

### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	·
}	Ca	44	
1	Mn	55	
	As	75	
1>	Ge-1	72	126.226

Report Date/Time: Tuesday, December 07, 2010 11:11:46

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Sample ID: Rinse

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MARD8B

Sample Description: G0L020000-286 BLK

Batch ID: 336286

Sample Date/Time: Tuesday, December 07, 2010 11:17:36

Method File: E:\elandata\Method\0006020-SH.mth

Dataset File: e:\elandata\dataset\101207a2\MARD8B.018

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 100 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
Γ	27 AI	-24.567215	0.566	26882.704	ug/L	91619.527
	44 Ca	190.055925	2.965	33829.384	ug/L	3216.147
	55 Mn	-0.012615	67.446	3393.571	ug/L	2860.643
I	75 As	1.390648	5.953	8590.648	ug/L	5747.158
L>	72 Ge-1			967882.665	ug/L	790209.635

# Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
1	Ca	44	
	Mn	55	
	As	75	
[>	Ge-1	72	122.484

Report Date/Time: Tuesday, December 07, 2010 11:18:03

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Sample ID: MARD8B

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MARD8C

Sample Description: G0L020000-286 LCS

Batch ID: 336286

Sample Date/Time: Tuesday, December 07, 2010 11:20:11

Method File: E:\elandata\Method\0006020-SH.mth

Dataset File: e:\elandata\dataset\101207a2\MARD8C.019

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 86 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
Γ	27 Al	803.970332	1.435	2711679.148	ug/L	91619.527
-	44 Ca	1005.777932	1.782	151384.609	ug/L	3216.147
	55 Mn	178.656276	2.761	1441454.789	ug/L	2860.643
1	75 As	183.788282	1.809	198059.339	ug/L	5747.158
>	72 Ge-1			903751.385	ug/L	790209.635

### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
	Ca	44	
	Mn	55	
	As	75	
.>	Ge-1	72	114.369

Report Date/Time: Tuesday, December 07, 2010 11:20:37

Page 1

Sample ID: MARD8C

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MARD8L

Sample Description: G0L020000-286 LCSD

Batch ID: 336286

Sample Date/Time: Tuesday, December 07, 2010 11:22:45

Method File: E:\elandata\Method\0006020-SH.mth

Dataset File: e:\elandata\dataset\101207a2\MARD8L.020

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 87 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
Γ	27 AI	819.309454	2.328	2508958.618	ug/L	91619.527
	44 Ca	1005.629929	1.870	137539.916	ug/L	3216.147
1	55 Mn	182.871238	1.956	1340841.602	ug/L	2860.643
	75 As	187.705790	1.723	183676.615	ug/L	5747.158
<u> </u> >	72 Ge-1			821051.065	ug/L	790209.635

### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
ŀ	Ca	44	
	Mn	55	
-	As	75	
1>	Ge-1	72	103.903

Report Date/Time: Tuesday, December 07, 2010 11:23:11

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Sample ID: MARD8L

SOP No. SAC-MT-0001 Analyst: SHargrave Sample ID: CCV 1

Sample ID: CCV 1
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 11:25:24

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 1.021

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
Γ	27 AI	4704.520412	0.952	16030226.356	ug/L	91619.527
1	44 Ca	4894.713792	1.889	754014.074	ug/L	3216.147
	55 Mn	97.820745	1.895	825341.729	ug/L	2860.643
1	75 As	101.283227	2.860	116971.805	ug/L	5747.158
[>	72 Ge-1			943099.344	ug/L	790209.635

### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Ai	27	
	Ca	44	
l	Mn	55	
1	As	75	
1>	Ge-1	72	119.348

Report Date/Time: Tuesday, December 07, 2010 11:25:50

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SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 1
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 11:50:24

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 1.025

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
٢	27 Al	-29.747050	0.051	9698.052	ug/L	91619.527
1	44 Ca	-0.348102	144.847	4237.078	ug/L	3216.147
1	55 Mn	-0.278783	1.724	1199.113	ug/L	2860.643
1	75 As	0.713673	50.514	8548.720	ug/L	5747.158
L>	72 Ge-1			1055614.610	ug/L	790209.635

### Internal Standard Recoveries

	Analyte	Mass	int Std % Recovery
٢	Al	27	
1	Ca	44	
-	Mn	55	
1	As	75	
L>	Ge-1	72	133.587

Report Date/Time: Tuesday, December 07, 2010 11:50:50

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Sample ID: CCB 1

SOP No. SAC-MT-0001 Analyst: SHargrave

### Sample ID: BLK RECAL

Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 11:50:24

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 1.025

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
Γ	27 Al		9698.052	ug/L	
1	44 Ca		4237.078	ug/L	
	55 Mn		1199.113	ug/L	
(	75 As		8548.720	ug/L	
<u> </u>	72 Ge-1		1055614.610	ug/L	

	Analyte	Mass	Int Std % Recovery
٢	Al	27	
1	Ca	44	
1	Mn	55	
İ	As	75	
Į>	Ge-1	72	

SOP No. SAC-MT-0001 Analyst: SHargrave

### Sample ID: STD1 RECAL

Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 11:25:24

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 1.021

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
Γ	27 AI	5100.000000	0.946	16030226.356	ug/L	9698.052
	44 Ca	5100.000000	1.889	754014.074	ug/L	4237.078
	55 Mn	100.000000	1.890	825341.729	ug/L	1199.113
{	75 As	100.000000	2.880	116971.805	ug/L	8548.720
L>	72 Ge-1			943099.344	ug/L	1055614.610

### **Internal Standard Recoveries**

	Analyte	Mass	int Std % Recovery
Γ	Al	27	
1	Ca	44	
1	Mn	55	
	As	75	
ĺ>	Ge-1	72	

Report Date/Time: Tuesday, December 07, 2010 12:21:49

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Sample ID: STD1 RECAL

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 2
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:03:37

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 2.026

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
Γ	27 AI	5073.274368	1.561	18282350.692	ug/L	9698.052
-	44 Ca	5042.541562	2.834	854598.565	ug/L	4237.078
	55 Mn	97.044717	2.854	918128.007	ug/L	1199.113
	75 As	98.848480	2.433	132670.491	ug/L	8548.720
<b>\</b> >	72 Ge-1			1081582.543	ug/L	1055614.610

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	·
1	Ca	44	
1	Mn	55	
-	As	75	
>	Ge-1	72	102.460

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 2
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:06:16

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 2.027

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
Γ	27 Al	4.491008	1.942	25689.767	ug/L	9698.052
1	44 Ca	3.731183	19.687	4891.549	ug/L	4237.078
1	55 Mn	0.048524	10,375	1660.550	ug/L	1199.113
Ì	75 As	-0.051471	507.244	8549.255	ug/L	8548.720
>	72 Ge-1			1063915.140	ug/L	1055614.610

### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
-	Ca	44	
	Mn	55	
	As	75	
>	Ge-1	72	100.786

Report Date/Time: Tuesday, December 07, 2010 12:21:57

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Sample ID: CCB 2

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: LLSTD1

Sample Description: LLSTD@10X

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:08:56

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\LLSTD1.028

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
ſ	27 Al	50.195283	1.026	193274.699	ug/L	9698.052
	44 Ca	52.996870	1.288	13456.548	ug/L	4237.078
į	55 Mn	1.054725	1.337	11346.776	ug/L	1199.113
	75 As	0.488712	44.280	9493.869	ug/L	8548.720
<u></u> [>	72 Ge-1			1095550.560	ug/L	1055614.610

	Analyte	Mass	Int Std % Recovery
٢	Al	27	
	Ca	44	
	Mn	55	
1	As	75	
[>	Ge-1	72	103.783

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 3
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:46:51

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 3.038

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
Γ	27 AI	4973.962003	0.360	16599974.270	ug/L	9698.052
1	44 Ca	5032.375064	0.442	790139.601	ug/L	4237.078
ĺ	55 Mn	98.698521	0.025	865037.932	ug/L	1199.113
1	75 As	101.410857	0.718	125857.110	ug/L	8548.720
ا_>	72 Ge-1			1001215,977	ug/L	1055614.610

### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
F	Al	27	
	Ca	44	
	Mn	55	
	As	75	
Ĺ>	Ge-1	72	94.847

Report Date/Time: Tuesday, December 07, 2010 12:47:17

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Sample ID: CCV 3

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 3
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:49:31

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 3.039

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
Γ	27 Al	5.332247	1.164	28157.830	ug/L	9698.052
l	44 Ca	4.915177	17.786	4994.293	ug/L	4237.078
ł	55 Mn	0.044176	6.731	1590.199	ug/L	1199.113
	75 As	0.080988	605.092	8556.678	ug/L	8548.720
>	72 Ge-1			1044768.752	ug/L	1055614.610

# **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
1	Ca	44	
	Mn	55	
	As	75	
<b> </b> >	Ge-1	72	98.973

Report Date/Time: Tuesday, December 07, 2010 12:49:58

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Sample ID: CCB 3

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 4
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:55:08

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 4.041

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
Γ	27 AI	5079.885051	0.820	17282350.653	ug/L	9698.052
1	44 Ca	5068.248774	0.360	811193.077	ug/L	4237.078
	55 Mn	99.129489	0.557	885693.990	ug/L	1199.113
1	75 As	101.122438	0.560	127965.915	ug/L	8548.720
Ĺ>	72 Ge-1			1020660.828	ug/L	1055614.610

### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
ļ	Ca	44	
	Mn	55	
	As	75	
<u></u>  >	Ge-1	72	96.689

Report Date/Time: Tuesday, December 07, 2010 12:55:33

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Sample ID: CCV 4

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCB 4
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 12:57:47

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 4.042

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
Γ	27 Al	5.359257	4.783	29449.997	ug/L	9698.052
1	44 Ca	3.894593	15.595	5033.990	ug/L	4237.078
	55 Mn	0.047765	24.296	1690.558	ug/L	1199.113
	75 As	-0.296235	173.161	8439.853	ug/L	8548.720
ĺ>	72 Ge-1			1089732.021	ug/L	1055614.610

#### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Ai	27	
1	Ca	44	
1	Mn	55	
	As	75	
<u> </u> >	Ge-1	72	103.232

Report Date/Time: Tuesday, December 07, 2010 12:58:14

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SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MARD8B

Sample Description: G0L020000-286 BLK

Batch ID: 336286

Sample Date/Time: Tuesday, December 07, 2010 13:00:24

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\MARD8B.043

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 100 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
Γ	27 Al	6.084591	0.633	30294.942	ug/L	9698.052
	44 Ca	200.627877	0.252	36320.697	ug/L	4237.078
1	55 Mn	0.258716	2.901	3493.959	ug/L	1199.113
1	75 As	0.788424	38.435	9266.748	ug/L	8548.720
L>	72 Ge-1			1028457.639	ug/L	1055614.610

#### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
1	Ca	44	
1	Mn	55	
1	As	75	
_>	Ge-1	72	97.427

Report Date/Time: Tuesday, December 07, 2010 13:00:51

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Sample ID: MARD8B

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MARD8C

Sample Description: G0L020000-286 LCS

Batch ID: 336286

Sample Date/Time: Tuesday, December 07, 2010 13:02:59

Method File: E:\elandata\Method\0006020-SH.mth

Dataset File: e:\eiandata\dataset\101207a2\MARD8C.044

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 86 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
Γ	27 Al	914.558575	1.946	2780001.261	ug/L	9698.052
1	44 Ca	1059.925365	2.296	154093.241	ug/L	4237.078
1	55 Mn	186.391969	1.362	1483390.280	ug/L	1199.113
	75 As	186.207977	1.648	203827.094	ug/L	8548.720
<u> </u> >	72 Ge-1			909761.498	ug/L	1055614.610

#### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
٢	Al	27	
	Ca	44	
1	Mn	55	
	As	75	
_>	Ge-1	72	86.183

Report Date/Time: Tuesday, December 07, 2010 13:03:25

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Sample ID: MARD8C

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: MARD8L

Sample Description: G0L020000-286 LCSD

Batch ID: 336286

Sample Date/Time: Tuesday, December 07, 2010 13:05:33

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\MARD8L.045

Tuning File: e:\elandata\Tuning\default.tun

Optimization File: E:\elandata\Optimize\default.dac

Autosampler Position: 87 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
Γ	27 AI	890.932033	0.758	2547660.746	ug/L	9698.052
	44 Ca	1018.515361	0.466	139420.253	ug/L	4237.078
1	55 Mn	180.709414	1.393	1352740.918	ug/L	1199.113
1	75 As	180.423950	2.109	185961.351	ug/L	8548.720
1>	72 Ge-1			855767.754	ug/L	1055614.610

#### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
	Ca	44	
	Mn	55	
	As	75	
>	Ge-1	72	81.068

SOP No. SAC-MT-0001 Analyst: SHargrave

Sample ID: CCV 5
Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 13:26:17

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCV 5.053

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
Γ	27 Al	5026.028379	0.533	16256534.086	ug/L	9698.052
	44 Ca	5028.073322	0.481	765124.403	ug/L	4237.078
	55 Mn	98.019486	0.224	832600.681	ug/L	1199.113
ļ	75 As	99.424763	1.224	119746.827	ug/L	8548.720
1>	72 Ge-1			970352.462	ug/L	1055614.610

#### **Internal Standard Recoveries**

	Analyte	Mass	Int Std % Recovery
ſ	Al	27	
	Ca	44	
	Mn	55	
	As	75	
<u></u>  >	Ge-1	72	91.923

Report Date/Time: Tuesday, December 07, 2010 13:26:43

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Sample ID: CCV 5

SOP No. SAC-MT-0001 Analyst: SHargrave

#### Sample ID: CCB 5

Sample Description:

Batch ID:

Sample Date/Time: Tuesday, December 07, 2010 13:28:56

Method File: E:\elandata\Method\0006020-SH.mth
Dataset File: e:\elandata\dataset\101207a2\CCB 5.054

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
Γ	27 Al	5.007182	3.738	25941.101	ug/L	9698.052
1	44 Ca	6.003347	9.073	4964.936	ug/L	4237.078
	55 Mn	0.057063	11.714	1640.212	ug/L	1199.113
	75 As	-0.270393	85.379	7805.398	ug/L	8548.720
<u> </u>	72 Ge-1			1003171.648	ug/L	1055614.610

#### Internal Standard Recoveries

	Analyte	Mass	Int Std % Recovery
Γ	Al	27	
1	Ca	44	
	Mn	55	,
	As	75	
[>	Ge-1	72	95.032

Report Date/Time: Tuesday, December 07, 2010 13:29:23

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Sample ID: CCB 5

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 12/07/10 14:26:16

File I	D: 10120	7A2	Analyst: hargraves							
#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q		
1	Rinse 2X		T		2.0	12/07/10 09:12				
2	Blank				1.0	12/07/10 09:15		_][		
3	Standard1				1.0	12/07/10 09:18		_  ⊏		
4	ICV				1.0	12/07/10 09:20		<sup>_</sup> 1⊏		
5	ICV				1.0	12/07/10 09:25		╗╚		
6	ICB				1.0	12/07/10 10:24		_ _		
7	LLSTD1				1.0	12/07/10 10:26				
8	LLSTD2				1.0	12/07/10 10:29		_}∟		
9	ICSA	<u> </u>			1.0	12/07/10 10:32		_][		
10	ICSAB	<u> </u>			1.0	12/07/10 10:34				
11	Rinse	<u></u>			1.0	12/07/10 11:11		╗		
12	MARD8B	G0L020000	0336286	2A	1.0	12/07/10 11:17				
13	MARD8C	G0L020000	0336286	2A	1.0	12/07/10 11:20				
14	MARD8L	G0L020000	0336286	2A	1.0	12/07/10 11:22		□]⊏		
15	CCV 1				1.0	12/07/10 11:25				
16	CCB 1				1.0	12/07/10 11:50				
19	CCV 2				1.0	12/07/10 12:03				
20	CCB 2				1.0	12/07/10 12:06				
21	LLSTD1				1.0	12/07/10 12:08				
22	MAPEVB	G0L010000	0335251	2A	1.0	12/07/10 12:23		_] [_		
23	MAPEVC	G0L010000	0335251	2A	1.0	12/07/10 12:26				
24	MAPE7L	G0L010000	0335253	2A	1.0	12/07/10 12:28		□□		
25	MAA80	G0K190601-3	0335251	2A	1.0	12/07/10 12:31				
26	MAA80P5	G0K190601	0335251		5.0	12/07/10 12:34				
27	MAA80Z	G0K190601-3	0335251		1.0	12/07/10 12:36		╗□		
28	MAA81	G0K190601-4	0335251	2A	1.0	12/07/10 12:39		□□		
29	MAKDV	G0K240587-1	0335251	2A	1.0	12/07/10 12:41		□		
30	MAKD2	G0K240587-2	0335251	2A	1.0	12/07/10 12:44				
31	CCV 3				1.0	12/07/10 12:46				
32	CCB 3				1.0	12/07/10 12:49				
33	CCV 4				1.0	12/07/10 12:55				
34	CCB 4				1.0	12/07/10 12:57				
35	MARD8B	G0L020000	0336286	2A	1.0	12/07/10 13:00		ַם		
36	MARD8C	G0L020000	0336286	2A	1.0	12/07/10 13:02		ַם		
	MARD8L	G0L020000	0336286	2A	1.0	12/07/10 13:05		_ □		
	MAWLKB	G0L060000	0340010	2A	1.0	12/07/10 13:08				
	MAWLKC	G0L060000	0340010	2A	1.0	12/07/10 13:10		_ □		
	MAWLKL	G0L060000	0340010	2A	1.0	12/07/10 13:13		ם∟		
41	MAML1	G0K300434-2	0340010	2A	1.0	12/07/10 13:15				
	MAML1P5	G0K300434	0340010	$\coprod$	5.0	12/07/10 13:18				
	MAML1Z	G0K300434-2	0340010	$\bot$	1.0	12/07/10 13:21				
44	MAML6	G0K300434-3	0340010	2A	1.0	12/07/10 13:23				
45	CCV 5				1.0	12/07/10 13:26		ୣ୲□		
46	CCB 5				1.0	12/07/10 13:28				
47	MA0J7B	G0L070000	0341211	2A	1.0	12/07/10 13:39				
48	MA0J7C	G0L070000	0341211	2A	1.0	12/07/10 13:42				

Method: 6020 (SOP: SAC-MT-001) Instrument: M02 Reported: 12/07/10 14:26:16

File ID: 101207A2
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#### Analyst: hargraves

#	Sample ID	Lot No.	Batch	- 11-9	DF	Analyzed Date	Comment	Q
49	MA0J7L	G0L070000	0341211	2A	1.0	12/07/10 13:44		
50	MAQQ1	G0L020446-3	0341211	2A	1.0	12/07/10 13:47		
51	MAQQ1P5	G0L020446	0341211		5.0	12/07/10 13:49		
52	MAQQ1Z	G0L020446-3	0341211		1.0	12/07/10 13:52		
53	MAQQ4	G0L020446-4	0341211	2A	1.0	12/07/10 13:55		
54	MAQRA	G0L020446-7	0341211	2A	1.0	12/07/10 13:57		
55	MAQRH	G0L020446-10	0341211	2A	1.0	12/07/10 14:00		
56	CCV 6	<u> </u>			1.0	12/07/10 14:02	·	
57	CCB 6				1.0	12/07/10 14:05		

Method: 6020 (SOP: SAC-MT-001) M02 (M02) Reported: 12/07/10 14:26:16

File ID: 101207A2

#### Analyst: hargraves

#### Germanium

			Germanium
#	Sample ID	Analyzed Date	(
1	Rinse 2X	12/07/10 09:12	95.6
2	Blank	12/07/10 09:15	100.0
3	Standard1	12/07/10 09:18	99.6
4	ICV	12/07/10 09:20	99.1
5	ICV	12/07/10 09:25	99.9
6	ICB	12/07/10 10:24	103.4
7	LLSTD1	12/07/10 10:26	105.9
8	LLSTD2	12/07/10 10:29	106.7
9	ICSA	12/07/10 10:32	91.2
10	ICSAB	12/07/10 10:34	97.1
11	Rinse	12/07/10 11:11	126.2
12	MARD8B	12/07/10 11:17	122.5
13	MARD8C	12/07/10 11:20	114.4
14	MARD8L	12/07/10 11:22	103.9
15	CCV 1	12/07/10 11:25	119.3
16	CCB 1	12/07/10 11:50	133.6
19	CCV 2	12/07/10 12:03	102.5
20	CCB 2	12/07/10 12:06	100.8
21	LLSTD1	12/07/10 12:08	103.8
22	MAPEVB	12/07/10 12:23	94.3
23	MAPEVC	12/07/10 12:26	87.2
24	MAPE7L	12/07/10 12:28	81.7
25	MAA80	12/07/10 12:31	79.5
26	MAA80P5	12/07/10 12:34	96.1
27	MAA80Z	12/07/10 12:36	82.6
28	MAA81	12/07/10 12:39	80.7
29	MAKDV	12/07/10 12:41	85.3
30	MAKD2	12/07/10 12:44	86.8
31	CCV 3	12/07/10 12:46	94.8
32	CCB 3	12/07/10 12:49	99.0
33	CCV 4	12/07/10 12:55	96.7
34	CCB 4	12/07/10 12:57	103.2
35	MARD8B	12/07/10 13:00	97.4
36	MARD8C	12/07/10 13:02	86.2
37	ļ	12/07/10 13:05	81.1
38	MAWLKB	12/07/10 13:08	79.0
39	MAWLKC	12/07/10 13:10	80.8
	MAWLKL	12/07/10 13:13	79.6
	MAML1	12/07/10 13:15	80.0
42	MAML1P5	12/07/10 13:18	90.0
43	MAML1Z	12/07/10 13:21	77.6
44		12/07/10 13:23	78.6
45	CCV 5	12/07/10 13:26	91.9
46	CCB 5	12/07/10 13:28	95.0
47	MA0J7B	12/07/10 13:39	91.8
48	MA0J7C	12/07/10 13:42	82.1

#### INTERNAL STANDARD SUMMARY

(	• •	· ·	- / -	
ł	Method: 6020 (SOP: SAC-MT-001)	M02 (M02)	Reported: 12/07	7/10 14:26:16
l	•		*	

File ID: 101207A2

#### Analyst: hargraves

#### Germanium

#	Sample ID	Analyzed Date	Q
49	MA0J7L	12/07/10 13:44	80.6
50	MAQQ1	12/07/10 13:47	79.0 ☑
51	MAQQ1P5	12/07/10 13:49	86.1
52	MAQQ1Z	12/07/10 13:52	79.3 ☑
53	MAQQ4	12/07/10 13:55	77.4 🗹
54	MAQRA	12/07/10 13:57	80.6
55	MAQRH	12/07/10 14:00	85.8 ☑
56	CCV 6	12/07/10 14:02	93.4
57	CCB 6	12/07/10 14:05	97.2

#### CALIBRATION CHECK SUMMARY

Method: 6020 (SOP: SAC-MT-001)	M02	Reported: 12/07/10 14:26:55

Method: 6020	Instrument: M02	Batch: 101207A2		
Sample ID	Туре	File - Sequence	Analyzed Date	Q
ICV	ICV	101207A2, 4	12/07/2010 09:20:59	
ICV	ICV	101207A2, 5	12/07/2010 09:25:16	
ICB	ICB	101207A2, 6	12/07/2010 10:24:20	
ICSA	ICSA	101207A2, 9	12/07/2010 10:32:16	
ICSAB	ICSAB	101207A2, 10	12/07/2010 10:34:53	
CCV 1	ccv	101207A2, 15	12/07/2010 11:25:24	
CCB 1	CCB	101207A2, 16	12/07/2010 11:50:24	
CCV 2	ccv	101207A2, 19	12/07/2010 12:03:37	
CCB 2	ССВ	101207A2, 20	12/07/2010 12:06:16	
CCV 3	CCV	101207A2, 31	12/07/2010 12:46:51	
CCB 3	CCB	101207A2, 32	12/07/2010 12:49:31	
CCV 4	ccv	101207A2, 33	12/07/2010 12:55:08	
CCB 4	CCB	101207A2, 34	12/07/2010 12:57:47	
CCV 5	ccv	101207A2, 45	12/07/2010 13:26:17	
CCB 5	CCB	101207A2, 46	12/07/2010 13:28:56	
CCV 6	ccv	101207A2, 56	12/07/2010 14:02:57	
CCB 6	CCB	101207A2, 57	12/07/2010 14:05:37	

#### **CALIBRATION REPORT**

7712 77031 040					(LIDIOI	110111	<u> </u>	/1 (
Method: 6020 (SOP: SAC-MT-001)	) `	i	M02		Reporte	ed: 12/07/	10 14:2	6:55
Department: 120 (Metals)	<del>;                                    </del>					Sc	ource: M	 etEdi
Sample: ICV (ICV)			ilt: 1.00	Dilf:	1.00	Divs:	1.00	)0
Instrument: ICPMS M02		Chanr	nel 262				-	
File: 101207A2 #4		Method	1 6020_					
Acquired: 12/07/2010 09:20:59	M	02						
Calibrated: 12/07/2010 09:15:34					ŧ	Units: ug/	L	
CASN Analyte Name	M/S	Area	Found		Т	rue	%R	Q
7429-90-5 Aluminum	27	2727202	938.26		800	.00	117	
7439-96-5 Manganese	55	564887	80.568		80.6	000	101	
7440-38-2 Arsenic	75	79894	82.186		80.0	000	103	
CASN ISTD Name	M/S	Area	Amount					Q
7440-56-4 Germanium	72	783241						[7]

Reviewed by: Date:

#### **CALIBRATION REPORT**

	O/ILIDIA (TION TEL OTT)							
Method: 6020 (SOP: SAC-MT-001)			M02	Reported: 12/07/10 14:26:55				
Department: 120 (Metals)					,	S	ource: M	etEdit
Sample: ICV (ICV)	Mι	ilt: 1.00	Dilf:	1.00	Divs:	1.00	00	
Instrument: ICPMS M02		Chann	nel 262					
File: 101207A2 # 5		Method	6020_					
Acquired: 12/07/2010 09:25:16	M	02						
Calibrated: 12/07/2010 09:15:34					ı	Units: ug/	L.	
CASN Analyte Name	M/S	Area	Found		Т	rue	%R	Q
7429-90-5 Aluminum	27	2197458	743.59		800	.00	92.9	
7439-96-5 Manganese	55	548744	77.636		80.6	000	97.0	
7440-38-2 Arsenic	75	79998	81.597		80.0	000	102	
CASN ISTD Name	M/S	Area_	Amount					Q
7440-56-4 Germanium	72	789143	**-					囨

Reviewed by: Date:

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#### **BLANK REPORT**

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Method: 6	6020 (SOP: SAC-MT-001)	i	M02	Reported: 12/07/10 14:26:5					
Departmen	t: 120 (Metals)						Source	: MetEdi	
Sample: I	СВ		Mι	ılt: <b>1.00</b>	Dilf:	1.00	) [	ivs:	1.000
Instrumen	t: ICPMS M02		Chanr	nel 262			,		
File: 1012	07A2 #6		Method	1 6020_					
Acquired:	12/07/2010 10:24:20		М	02					
Calibrated	d: 12/07/2010 09:15:34						Units	: ug/L	
CASN	Analyte Name	M/S	Area	Amount		RL	MDL	%RSD	Q
7429-90-5	Aluminum	27	82057	-4.3179		50.0	2.1	0.0	
7439-96-5	Manganese	55	2876	-0.01112		1.0	0.083	0.0	
7440-38-2	Arsenic	75	6335	0.41056		2.0	0.50	0.0	
CASN	ISTD Name	M/S	Area	Amount					Q
7440-56-4	Germanium	72	817166						Ø

Reviewed by: Date: TestAmerica, Inc.

7440-56-4 Germanium

IDB Reports

#### **CALIBRATION REPORT**

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Version: 6 02.068

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 14:26:55 Department: 120 (Metals) Source: MetEdit Sample: ICSA Mult: 1.00 Dilf: 1.00 Divs: 1.000 Instrument: ICPMS M02 Channel 262 File: 101207A2 # 9 Method 6020 Acquired: 12/07/2010 10:32:16 M02 Calibrated: 12/07/2010 10:26:59 Units: ug/L M/S CASN Analyte Name Area Found True %R 7429-90-5 Aluminum 27 50931943 97071 100000 97.1 abla7439-96-5 Manganese 55 42530 6.2209 7440-38-2 Arsenic 75 6176 1.1300  $\square$ CASN ISTD Name M/S Q Area **Amount** 

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72

Reviewed by: Date:

TestAmerica, Inc.

#### **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001)		M02			Reported: 12/07/10 14:26:55				
Department: 120 (Metals)						So	ource: M	etEdit	
Sample: ICSAB		Mu	ılt: 1.00	Dilf:	1.00	Divs:	1.0	00	
Instrument: ICPMS M02		Chann	iel 262					)	
File: 101207A2 # 10		Method	6020_						
Acquired: 12/07/2010 10:34:53		M	02						
Calibrated: 12/07/2010 10:26:59					ı	Units: ug/	L	j	
CASN Analyte Name	M/S	Area	Found		Т	rue	%R	Q	
7429-90-5 Aluminum	27	53685267	92108		100	100	92.0	$\nabla$	
7439-96-5 Manganese	55	692173	100.84		100	00.0	101	abla	
7440-38-2 Arsenic	75	98694	105.26		100	.00	105	$\square$	
CASN ISTD Name	M/S	Area	Amount					Q	
7440-56-4 Germanium	72	767179						$\overline{\mathbf{V}}$	

7440-56-4 Germanium

#### **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001)		· .	M02 ·	Reported: 12/07/10 14:2					
Department: 120 (Metals)						Sc	ource: M	etEdi	
Sample: CCV1 (CCV) Mult: 1.00 Dilf: 1.						Divs:	1.0	00	
Instrument: ICPMS M02		Chanr	nel 262			<del></del>			
File: 101207A2 # 15		Method	6020_						
Acquired: 12/07/2010 11:25:24		М	02						
Calibrated: 12/07/2010 10:26:59					ţ	Jnits: ug/	L		
CASN Analyte Name	M/S	Area	Found		Tı	ue	%R	Q	
7429-90-5 Aluminum	27	16030226	4704.5		510	0.0	92.2		
7439-96-5 Manganese	55	825342	97.821		100	.00	97.8		
7440-38-2 Arsenic	75	116972	101.28		100	.00	101		
CASN ISTD Name	M/S	Area	Amount					Q	

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Reviewed by: Date:

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TAL VVESI GAC				DEMI		FURI		
Method: 6020 (SOP: SAC-MT-001	)		M02 Reported: 12/07/10 14:2					
Department: 120 (Metals)							Source	: MetEdit
Sample: CCB1		Mı	ult: 1.00	Dilf:	1.0	0 [	ivs:	1.000
Instrument: ICPMS M02		Chan	nel 262					
File: 101207A2 # 16		Metho	d 6020_					
Acquired: 12/07/2010 11:50:24		M	102					
Calibrated: 12/07/2010 11:25:24						Units	: ug/L	
CASN Analyte Name	M/S	Area	Amount	••••	RL	MDL	%RSD	Q
7429-90-5 Aluminum	27	9698	-29.747		50.0	2.1	0.0	
7439-96-5 Manganese	55	1199	-0.27878		1.0	0.083	0.0	
7440-38-2 Arsenic	75	8549	0.71367		2.0	0.50	0.0	i
CASN ISTD Name	M/S	Area	Amount					Q
7440-56-4 Germanium	72	1055615						

7440-56-4 Germanium

#### **CALIBRATION REPORT**

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Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 14:26:55 Department: 120 (Metals) Source: MetEdit Sample: CCV 2 (CCV) Muit: 1.00 Dilf: 1.00 1.000 Divs: Instrument: ICPMS M02 Channel 262 File: 101207A2 # 19 Method 6020\_ Acquired: 12/07/2010 12:03:37 M02 Calibrated: 12/07/2010 11:50:24 Units: ug/L CASN Analyte Name M/S Area Found True %R Q 7429-90-5 Aluminum 27 18282351 5073.3 5100.0 99.5 7439-96-5 Manganese 55 918128 97.045 100.00 97.0 7440-38-2 Arsenic 75 132670 98.848 100.00 98.8 CASN ISTD Name M/S Area Amount Q

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Reviewed by: Date:

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#### **BLANK REPORT**

						<del></del>		
Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12							2/07/10 1	4:26:55
Department: 120 (Metals)							Source	: MetEdi
Sample: CCB 2		Mı	ult: 1.00	Dilf:	1.00	) [	)ivs:	1.000
Instrument: ICPMS M02		Chan	nel 262					
File: 101207A2 # 20		Method	d 6020_					
Acquired: 12/07/2010 12:06:16		M	02					
Calibrated: 12/07/2010 11:50:24	_					Units	: ug/L	
CASN Analyte Name	M/S	Area	Amount		RL	MDL	%RSD	Q
7429-90-5 Aluminum	27	25690	4.4910		50.0	2.1	0.0	
7439-96-5 Manganese	55	1661	0.04852		1.0	0.083	0.0	
7440-38-2 Arsenic	75	8549	-0.05147		2.0	0.50	0.0	
CASN ISTD Name	M/S	Area	Amount				3	Q
7440-56-4 Germanium	72	1063915						<b>1</b>

7440-56-4 Germanium

#### **CALIBRATION REPORT**

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Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 14:26:55 Department: 120 (Metals) Source: MetEdit Sample: CCV 3 (CCV) Mult: 1.00 Dilf: 1.00 Divs: 1.000 Instrument: ICPMS M02 Channel 262 File: 101207A2 # 31 Method 6020 Acquired: 12/07/2010 12:46:51 M02 Calibrated: 12/07/2010 11:50:24 Units: ug/L CASN Analyte Name M/S Area Found True %R Q 7429-90-5 Aluminum 27 16599974 4974.0 5100.0 97.5 7439-96-5 Manganese 55 865038 98.699 100.00 98.7 7440-38-2 Arsenic 75 125857 101.41 100.00 101 M/S CASN ISTD Name Area Amount Q

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Reviewed by: Date:

**BLANK REPORT** 

Method: 6020 (SOP: SAC-MT-001) M02 Reported: 12/07/10 14:26:55 Department: 120 (Metals) Source: MetEdit Sample: CCB 3 Mult: 1.00 Dilf: 1.00 1.000 Divs:

Instrument: ICPMS M02 Channel 262 File: 101207A2 # 32 Method 6020\_ Acquired: 12/07/2010 12:49:31 M02

Calibrated: 12/07/2010 11:50:24 Units: ug/L

CASN_	Analyte Name	M/S_	Area	Amount	RL	MDL	%RSD	Q
7429-90-5	Aluminum	27	28158	5.3322	50.0	2.1	0.0	
7439-96-5	Manganese	55	1590	0.04418	1.0	0.083	0.0	
7440-38-2	Arsenic	75	8557	0.08099	2.0	0.50	0.0	
CASN	ISTD Name	M/S	Area	Amount				Q
7440-56-4	Germanium	72	1044769					$\overline{\mathbf{X}}$

Date: Reviewed by: TestAmerica, Inc.

#### **CALIBRATION REPORT**

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Method: 6020 (SOP: SAC-MT-001)			M02	Reported: 12/07/10 14:26:					
Department: 120 (Metals)						So	urce: Me	etEdit	
Sample: CCV 4 (CCV)		Mi	ult: 1.00	Dilf:	1.00	Divs:	1.00	)0	
Instrument: ICPMS M02	,	Chanr	nel 262						
File: 101207A2 #33		Method	1 6020_						
Acquired: 12/07/2010 12:55:08		М	02						
Calibrated: 12/07/2010 11:50:24					į	Jnits: ug/L			
CASN Analyte Name	M/S	Area	Found		Tr	ue	%R	Q	
7429-90-5 Aluminum	27	17282351	5079.9		5100	0.0	99.6		
7439-96-5 Manganese	55	885694	99.129		100.	.00	99.1		
7440-38-2 Arsenic	75	127966	101.12		100.	00	101		
CASN ISTD Name	M/S	Area	Amount					Q	
7440-56-4 Germanium	72	1020661						M	

Reviewed by: Date:

#### **BLANK REPORT**

TAL West Oac				יועדים	11/1/1-1	OICI			
Method: 6020 (SOP: SAC-MT-001)	)	·	M02	Reported: 12/07/10 14:26:5					
Department: 120 (Metals)	<del></del>						Source:	MetEdit	
Sample: CCB 4		Mι	ılt: 1.00	Dilf:	1.0	) <b>0</b>	ivs:	1.000	
Instrument: ICPMS M02			nel 262						
File: 101207A2 # 34		Method	1 6020_						
Acquired: 12/07/2010 12:57:47		M	02						
Calibrated: 12/07/2010 11:50:24						Units	: ug/L		
CASN Analyte Name	M/S	Area	Amount		RL	MDL	%RSD	Q	
7429-90-5 Aluminum	27	29450	5.3593		50.0	2.1	0.0		
7439-96-5 Manganese	55	1691	0.04777		1.0	0.083	0.0		
7440-38-2 Arsenic	75	8440	-0.29624		2.0	0.50	0.0		
CASN ISTD Name	M/S	Area	Amount					Q	
7440-56-4 Germanium	72	1089732	<u> </u>					✓	

#### **CALIBRATION REPORT**

Method: 6020 (SOP: SAC-MT-001)		M02				Reported: 12/07/10 14:26:55				
Department: 120 (Metals)		·		<del></del>		So	ource: M	etEdi		
Sample: CCV 5 (CCV)	-	Mu	ilt: 1.00	Dilf:	1.00	Divs:	1.0	00		
Instrument: ICPMS M02	-	Chann	nel 262							
File: 101207A2 # 45		Method	1 6020_							
Acquired: 12/07/2010 13:26:17		M	02							
Calibrated: 12/07/2010 11:50:24					į	Jnits: ug/	L			
CASN Analyte Name	M/S	Area	Found		Tı	ue	%R	Q		
7429-90-5 Aluminum	27	16256534	5026.0		510	0.0	98.5			
7439-96-5 Manganese	55	832601	98.019		100	.00	98.0			
7440-38-2 Arsenic	75	119747	99.425		100	.00	99.4			
CASN ISTD Name	M/S	Area	Amount					Q		
7440-56-4 Germanium	72	970352				<del></del>	<u></u>	<b>V</b>		

Reviewed by: Date:

#### **BLANK REPORT**

Method: 6020 (SOP: SAC-MT-001) M02	2		Rep	orted: 12	2/07/10	14.26.66			
L.,,	·			,	Reported: 12/07/10 14:26:5				
Department: 120 (Metals)					Source	e: MetEdit			
Sample: CCB 5 Mult:	1.00	Dilf:	1.0	<b>0</b> D	ivs:	1.000			
Instrument: ICPMS M02 Channel 2	_ • • •								
File: 101207A2 #46 Method 60	020_								
Acquired: 12/07/2010 13:28:56 M02									
Calibrated: 12/07/2010 11:50:24				Units	: ug/L				
CASN Analyte Name M/S Area A	Amount		RL	MDL	%RSD	Q			
7429-90-5 Aluminum 27 25941	5.0072		50.0	2.1	0.0	 )			
7439-96-5 Manganese 55 1640 (	0.05706		1.0	0.083	0.0				
7440-38-2 Arsenic 75 7805 -0	0.27039		2.0	0.50	0.0	ł			
CASN ISTD Name M/S Area A	Amount					Q			
7440-56-4 Germanium 72 1003172						Ø			

### Sample Preparation Log

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

Date:	3-Dec-10	Analyst: jz	Matrix: AIR
		<u> </u>	

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

LOTIE	)	Worko	rder	Volume Received	Volume Removed	Initial Prep Volume	Final Prep Volume	Batch	Prep Factor
G0L020000	286	MARD8B	2A	NA	NA	NA	100 mL	336286	1.2
G0L020000	286	MARD8C	2A	NA	NA	NA	100 mL	336286	1.2
G0L020000	286	MARD8L	2A	NA	NA	NA	100 mL	336286	1.2
G0K270427	5	MAK04	2A	9 inches	0.75 inches	0.75 inches	100 mL	336286	1.2
G0K270427	6	MAK07	2A	9 inches	0.75 inches	0.75 inches	100 mL	336286	1.2
G0K270427	7	MAK08	2A	9 inches	0.75 inches	0.75 inches	100 mL	336286	1.2
G0K270427	8	MAK09	2A	9 inches	0.75 inches	0.75 inches	100 mL	336286	1,2

QCS shared with batch 0336282 (MB, LCS, LCSD)



#### West Sacramento

#### Metals Spiking Documentation Form

Lot #(s):	601020440	606010474	GOK270427		
Batch Number:	033428 0336282 <del>03342</del>	و EPA Analytical المراجع Method ID:	607-0	Spiked Date:	12/2/10
	. 1	EPA Prep		Hot Plate	
MS Sample(s):		Method ID:	W5-IP-0010	Microwave ID:	Met 12
Analyst Initial/Date:	12 12/2/10	Witness Initial/Date:	12/02/10 NH	Hot Plate Temp	Initial: 93°C
Correct Folder ID		Digestion Cup Lot #	1008257-0307	Thermometer ID:	BT09
Witness:	NA	Filter Paper Lot #	390427	Fin Vol Cup Lot	1.70505

Check If Used	Bottle Name	Elements	Stock Concentration (mg/L)	Tracking Number	LCS/LCSD Volume Spiked	MS/SD Volume Spiked	Expiration Date
		Ca, Mg	5,000				
		Al, As, Ba, Se, Sn, Tt Fe,Mo,Tı	200				
	ICP Part 1	Sb,Co,Pb,Mn,Ni,V,Zn	50			>	
	5% HNO₃	Cu	25				
		_Cr	20				
		,Be,Cd Ag	5.0	}	1	<u>'</u>	
		K,Na	5,000				
	ICP Part 2	P.S.	1,000				
<b>,</b>	2% HN0 <sub>3</sub>	B,Lı,Sr	100		1		
		D,LI,OI	100	· · · · · · · · · · · · · · · · · · ·			
	200						
	Si H20/FrFIF	Si	1,000		;		12/2/10
		Al,K,Mg,Ca,Na,Fe,P,B	500				
	TACA-1 5% HN0₃	As,Be,Cd,Cr,Co,Cu,Pb, Mn,Ni,Se,U,V,Zn,Ba,Li Sr	100	3189-4-5	20021	NA	8/31/11
/		Ag,TI	25				
	TACA-2 5% HN0 <sub>3</sub>	Mo, Sb, Sn, Tr	100	3184-4-6	200 MI	NA	8/31/11
		The same section of the same s					
	Misc Elements						and the same transport of the same transport
_						12 12/2/10	

Prep Reagents:

Check If Used	Reagent	Supplier	Lot Number	Check If Used	Reagent	Supplier	Lot Number
	70% HNO <sub>3</sub>	Mallinckrodt			30% H <sub>2</sub> O <sub>2</sub>	Mallinckrodt	
	37% HCI	Mallinckrodt			49% HF	Fisher	
	3M HNO₃	In-House	4028-30 -6		1:1 HCl	In-House	JZ 12/2/16

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.



#### West Sacramento

#### Preparation Data Review Checklist

Prep Batch(es) 0336282 0336286	Test: 💪	020		
Prep Date: 12/2/10	Holding Tim	nes: 🔞		ICM: Y 🕅
/ /		5	/30/11	
A. Spike Witness/Batch setup			Spike Witness	Reviewer
1. Holding times checked? NCMs filed as ap	propriate		V	
2. QAS checked for QC instructions (LCS, LCS	SD, MS,MSD, e	etc)	V	
Amount of samples in hood match amount of sheet. Sample IDS match.	f samples on b	ench	~	NA
Worksheets have been checked for required compounds	l spiking		V	
5. Spiking volumes are correctly documented				
6. Std ID numbers on spike labels match numb	ers on bench	sheet	V	NA
7. Expiration dates have been checked			V	
8. Calibration expiration dates on pipettors hav	e been checke	d	V	NA
9. Spiker and spike witness have signed and d			V	
B. Weights and Volumes				
Recorded weights are in anticipated range			NA	Ma
2. Balance upload or raw data for weights is inc	cluded		NA	
3. Weights and volumes have been transcribed	correctly to LI	MS.	NA	
4. Weights are not targeted to meet exact weig	hts.		NA	NA
Each weight or volume measurement is a ur dittos or line downs)	nique record (n	0	NA	
C. Standards and Reagents				
Lot numbers for all reagents, including clean recorded.	up stages, are	)	NA	/
2. Are dates and analysts for cleanups recorde	d?		NA	NA
Are correct IDs used for standards? Are exp day/month/year, when listed?	<del></del>	0	NA	
D. Documentation				
Are all nonconformances documented appropriate the second of the se	opriately?		NA	NA
2. QuantIMs entry correct, including dates and	times.		NA	
Are all fields completed?			NA	
Spike witness: N M				110
2 <sup>nd</sup> Level Reviewer:	Dat	e:	12/6/	<u>'(V)</u>
Comments:				

### AIR, TSP-Total Suspended Particulates

### Raw Data Package



#### **TestAmerica West Sacramento**

#### Air Toxics Laboratory

#### PARTICULATE ANALYSIS

#### LEVEL 1 & 2 REVIEW CHECKLIST

LAB NUMBERS: (60 K 270 427 (5-8) Batch #: 03:	37343		
ANALYSIS: (circle) TSP/PM10 or METHOD 5	•		
DATE: 12/3/10 ANALYST: J2	<u>,</u>	<del></del>	
LEVEL 1 ANALYSIS REVIEW	YES	NO	NA
<ol> <li>Samples are in good condition.</li> <li>Sample filter number matches the folder or petri ID number.</li> <li>Desiccator temperature and % humidity criteria in control.</li> <li>Balance calibration criteria met.</li> <li>Beginning and ending calibration sample bracket weights are in calibration.</li> <li>Samples reached stable weight.</li> <li>Samples exceeded 5 consecutive final weighings.</li> </ol> LEVEL 1 DATA REVIEW			
<ol> <li>Benchsheet is complete.</li> <li>QAS or QAPP consulted and followed for client specifics.</li> <li>Data entered in properly.</li> <li>Copy of spreadsheet or logbook raw data entry attached to data package.</li> <li>Analyst observations, HTV's, Anomalies properly documented and attached to data package.</li> </ol>		-	
Completed By & Date: J2 12	<u>/3   110 </u>		_
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:  Comments: Dessicator 2 B	12/7/10	)	
Comments. Hessicator 2B			

#### TestAmerica Laboratories, Inc. Run Date: 12/03/10 WET CHEM BATCHSHEET

Time: 16:05:48

#### TestAmerica West Sacramen

#### PRODUCTION FIGURES - WET CHEM

	MPLE JMBER QC	RE-RUN MATRIX	RE-RUN OTHER	MISC NUMBER	TOTAL HOURS	EXPANDED DELIVERABLE
METHOD: QC BATCH #: PREP DATE: COMP DATE: USER:	AO Particulates 0337343 11/30/10 12:35 12/02/10 10:31 PHOMSOPT	in Air, S	uspended " INITIALS: PREP ANAL		(APP B) DATA EN INITI DATE	
Work Order	Lab Number			p. Analys		e ID:
MAK04-1-AA	G-0K270427-005	XX S 88	AO 3W	м 12/3/	<u>/b</u> UW-11	232010A
MAK07-1-AA	G-0K270427-006	XX S 88	AO 3W	м 12/3/1	<u>0</u> DW-11	232010A
MAK08-1-AA	G-0K270427-007	XX S 88	ÃO 3W	M 12/3/1	<u>0</u> UW-11	232010B
MAK09-1-AA	G-0K270427-008	XX S 88	AO 3W	м 12/3/	0 DW-11	232010B
		Control	Limits			

PDE115

# TestAmerica Laboratories, Inc. Inorganics Batch Review QC Batch 0337343

Date 12/07/2010 Time 12:55:12

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

Notes:	MAK09-1-AA 0.0650	MAK08-1-AA 0.0620	MAK07-1-AA 0.0139	Work Order
	0.0650	0.0620	0.0139	Result 0.0122 g
	g	g	g	- g Units
	0.0005	0.0005	0.0005	1.DL/Dil 0.0005
	11/30-12/03/10	11/30-12/03/10	11/30-12/03/10	Prep Anal. 11/30-12/03/10
	.00 N	.00 N	.00 N	Total PSRL Solids Flag R/R
	0.0650	0.0620	0.0139	Rounded O Result 0.0122
	0.0005	0.0005	0.0005	Output LDL 0.0005
	1.00	1.00	1.00	Dil. 1.00

TOTAL # PRODUCTION TOTALS
SAMPLE # QC # MATRIX # OTHER #

MISC #

HOURS . 0

TEST

GRAVIMETRIC BALANCE: QA-45

TestAmerica
AIR TOXICS GRAVIMETRIC ANALYSES

WEST SACRAMENTO

	Ţ	7		Τ				Γ		Γ		Г		ļ		Γ		Γ		Γ.		_	<u> </u>		Т		1	
			MAK08 112910jz1010			112910jz1010	MAK09													112910jz1010	MAK04						Lab ID	
%† 5g	W. S	50	tron111010- 75	74	tron111010-	73	tron111010-	72	tron111010-	71	tron111010-	70	tron111010-	69	tron111010-	68	tron111010-	67	tron111010-	66	tron111010-	¥.	50	≨ 0	ž	5g	Filter ID	
5.0001 110110skv1128	110110skv1128	5 0001	4.4545 110110skv1128	110110skv1127	4.5735	110110skv1127	4.5577	110110skv1126	4.5504	110110skv1126	4.5539	110110skv1125	4.5572	110110skv1125	4.5467	110110skv1124	4.5551	110110skv1124	4.5565	110110skv1123	4.5511	110110skv1123	4 9999	110110skv1123	110110skv1123	4.9999	date/time initials	Initial Weight (g)
5.0001 5.0000 110110skv1128 110110skv1923	110110skv1128 110110skv1923		4.4543 110110skv1922	110110skv1127   110110skv1922	4 5730	110110skv1127   110110skv1922	4.5572	10110skv1126 110110skv1921	4.5500	110	4.5539	110110skv1125 110110skv1920	4.5571	110110skv1125   110110skv1920	4.5464	10110skv1124   110110skv1919	4.5546	10110skv1124   110110skv1919	4.5564	10110skv1123   110110skv1919	4.5507	110110skv1123   110110skv1918	4 9998	4.9999 110110skv1123   110110skv1918	110	4.9998	date/time initials	Initial Weight (g)
	113010jz1245	4 0005	4.5166 113010jz1243			113010jz1242	4.6235	120210jz1037	4.5713	120210jz1036	4,6496	120	4.5841	120610jz1045	4.5832	120610jz1042	4.5859	120610jz1040		113010jz1240	4.5630	120610jz1038	$\top$	120210171034	113010jz1238	4.9996	date/time initials	Final Weight (g)
4.9998 120210jz1735	120110jz1100	2 0006	4.5163 120110iz1058			120110jz1057	4.6227	120210jz1733	4.5714	120210jz1732	4.6498									120110jz1056	4.5629		1202 10121120	4.9998	120110jz1054	4.9996	date/time initials	Final Weight (g)
	120210jz1031	2000				120210jz1023	4.6222															•			120210jz1021	4.9996	date/time initials	Final Weight (g)
	1																										date/time initials	Final Weight (g)
																								-			date/time initials	Final Weight (g)
																											date/time initials	Final Weight (g)
-0.0002	-0.0004	2002	0.0620		S		0.0650		0.0214		0.0959		NC		S		Z N	•	NC		0.0122					-0.0002	(g)	Wt of Particulate
			12			-	Ĭ													•	7						Check	Initial Wts Stablity

rev 020303 N:/atg/air/airgrav3k.xls

Reviewed by: 47/05

GRAVIMETRIC BALANCE: QA-45

WEST SACRAMENTO

AIR TOXICS GRAVIMETRIC AN	TestAmerica
CANALYSES	

				4.9998 120210jz1021	4.9995 120110jz1053	4.9997 113010jz1237	4.9999 4.9996 4.9997 102710ecl1702 102810ecl1244 113010jz1237	4.9999 102710ecl1702	¥, og	
					111710jz1814	111710jz1154	102810ecl1244	102710ecl1702	¥.	
-0.0001					4.9995	4.9996	4.9996	4.9999	5g	
	111610jz1750	111110jz1801	111010jz1821	110810jz1835	110510ecl1847	110410ecl1558	102810ecl1244	102710ecl1702	×	
0.0002	4.9998	4.9999	4.9997	4.9999	5.0001	5.0004	4.9996	4.9999	5g	
			111010jz1817	110810jz1833	110510ecl1845	110410ecl1557	102810ecl1243	102710ecl1701	65	
0.0242			4.5692	4.5692	4.5713	4.5719	4.5450	4.5445	tron102810-	
					110510ecl1845	110410ecl1556	102810ecl1241	102710ecl1700	29	
0.0442					4.5930	4.5932	4,5488	4.5488	tron102810-	
					111710jz1808	111710jz1153	102810ecl1241	102710ecl1700	63	111610jz1050
0.0374					4.5753	4.5753	4.5379	4.5376	tron102810-	L94M4
					111710jz1812	111710jz1149	102810ecl1239	102710ecl1700	62	111610jz1050
0.0540					4.6015	4.6019	4.5475	4.5471	tron102810-	L94MP
					111710jz1804	111710jz1146	102810ecl1237	102710ecl1659	61	111610jz1050
0.0433					4.5858	4 5855	4.5425	4.5422	tron102810-	L94M9
							102810ecl1236	102710ecl1659	60	
NC							4.5556	4.5552	tron102810-	
				120210jz1020	120110jz1053	113010jz1237	102810ecl1235	102710ecl1658	59	112910jz1010
0.0139				4.5662	4.5661	4.5670	4.5523	4.5519	tron102810-	MAK07
					111710jz1802	111710jz1143	102810ecl1234	102710ecl1658	58	111610jz1050
0.0453					4.6042	4.6043	4.5589	4.5586	tron102810-	L94M7
					110510ecl1844	110410ecl1555	102810ecl1234	102710ed1657	57	
0.0293					4.5810	4.5813	4.5517	4.5515	tron102810-	
	111610jz1748	111110jz1800	111010jz1820	110810jz1829	110510ecl1843	110410ecl1554	102810ecl1233	102710ecl1657	56	
0.1717	4.7241	4.7240	4.7249	4.7260	4.7286	4.7302	4.5524	4.5524	tron102810-	
				120210jz1017	. 120110jz1051	113010jz1235	102810ecl1227	102710ecl1651	wt	
				4.9997	4.9997	4.9997	4.9998	4 9996	5 <u>g</u>	
(g)		date/time initials	date/time initials	date/time initials	date/time initials	date/time initials	date/time initials	date/time initials	Filter ID	Lab (D
Particulate	Final Weight (g)	Final Weight (g)	Final Weight (g)	Final Weight (g)	Final Weight (g)	Final Weight (g)	Initial Weight (g)	Initial Weight (g)		
10 th Car					,				-	

# lestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## Balance Calibration Check Log TestAmerica West Sacramento

5 10.000 10.0002 45777777777 10.100 10/2/10 824 QA-011 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 0,1995 0,2005 1 0,1995 0,2005 9 0,1995 0,2005 9 0,1995 0,2005	0.7000 0.7000 0.7000 0.1999 0.7000 0.1499
FOS 01/4/01 0010.01 0.0002 4000.01 0.010 1/4/0 502 10.000 10.00001 0.0001 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010.01 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 10.010 1/4/0 0000 1/4/0 0000 10.010 1/4/0 0000 1/4/0	0.1995	
10.000 10.0002 4074 47000 10.000 10/2/10 804 10.000 10.00000 10.00000 10.0000 10.00	0.1995	
10.000 10.0002 40.000 10.000 10/2/10 804 10.000 10/2/10 804 10.000 10.000 10/2/10 804 10.000 10.0100 10/2/10 804 10.000 10.0100 10/2/10 804 10.0100 10.0100 10/2/10 804 10.0100 10.0100 10/2/10 804 10/2/10 804 10/2/10 80	0.1995	
10.000 10.0002 +000000 10.000 10/2/10 804 800 10.000 10/2/10 804 800 10.000 10/2/10 804 800 10.000 10/2/10 804 800 10.000 10/2/10 804 800 10.000 10/2/10 804 800 10.000 10/2/10 804 800 10.000 10/2/10 804 800 10.000 10/2/10 804 800 10.000 10/2/10 804 800 10.000 10/2/10 804 800 10.000 10/2/10 804 800 10.000 10/2/10 800	0,1995	
10.000 10.0002 4079 7000 10.000 10/2/10 804 10.000 10.0000 10.0000 804 10.000 10.000 10/2/10 804 10.000 10.000 10/2/10 804 802 10.000 10.000 10/2/10 804 802 10.000 10.000 10/2/10 804 802 10/2/10 804 802 10/2/10 802 10/2/1	_	0,2000 0.1996
10.000 10.0002 4074 4000  10.000 10.0001 9,9000  10.0 10.0004 9,9000  10.0 10.0004 9,9000  10.0 10.0004 9,9000	6 0,1995 0.2005	0.2000 0.1996
10.000 10.0002 4074 4000 10.000 10.0001 9,9000 10.0 10.0005 9,900 10.0 10.0001 9,9000 10.0 10.0000 9,900	9 0,1995 0.2005	6.7600 0.1999
10.000 10.0002 +0.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.000 10/21/10 8CF 10.000 10.0000 10/21/10 8CF 10.000 10.0000 10/21/10 8CF 10.000 10.0000 10/21/10 8CF 10.000 10.0000 10/21/10 8CF 10.000 10.0000 10/21/10 8CF 10.000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.0000 10.0000 10/21/10 8CF 10.00000 10/21/10 8CF 10.00000 10/21/10 8CF 10.00000 10/21/10 8CF 10.00000 10/21/10 8CF 10.00000 10/21/10 8CF 10.00000 10/21/10 8CF 10.00000 10/21/10 8CF 10.00000 10/21/10 8CF 10.00000 10/21/10 8CF 10.00000 10/21/10 8CF 10.00000 1	8 0.1995 0.7005	0,2000 0,1998
10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.000 10.0000 10.000	1 0.1995 0.2005	0,2000 0,2001
10.000 10.0002 +0.77 10.100 10/2/10 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 10.000 8C% 10.000 10.000 10.000 8C% 10.000 10.000 10.000 10.000 8C% 10.0000 10.0000 10.000 10.000 10.000 10.000 10.000 10.0000 1	0.1095	2, 2009 1, 2000
10.000 10.0002 +0.19.00 10.100 11	2 0.565 0.2w3	0.25 0.202
10.000 10.0002 10.100 10,100 10,100	0.1955 0.2015	0.200
10.000 10.0002 total gas 10.100 10/cy/10 ECA	0,1995 0.2005	0.2000 0.2003
1.201 F.B	0.1995 0	0,2000 0.1996
Working WT OBSERVED Acceptance limits ? DATE INIT. WEIGHT ID  Denomination (9) WEIGHT (9) Lower (9) Upper (9)	Acceptance limits*2  Lower (g) Upper (g)	Working WT OBSERVED OBSERVED WEIGHT (g)
	WEIGHT #1	

outside acceptatice limits, the balance is considered to be out of calibration.

రాషాణ Do not move or use the balance Attach a sign instructing others not to use the balance (see front of togbook). Notify the QA department.

Denomination 0.5000 0.1995 - 0.2005 0.4995 - 0.5005 Range Denomination नशबह 9.9000 - 10.100 19.8000 - 20.200 49.5000 - 50.500 99.0000 - 101.000 Range

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

Calibration range is (+) 10% for 2 mg weight and (+) 0.5% for 1 g weight. The above	1	0,0020	Denomination	
and (+) 0 5% for 1 a waight. The shows		0.0018 - 0.0022	ge	

Calibration range is (±) 10% for z mg weight and (±) 0.5% for 1 g weight. The above tolerances have been modified to meet balance read out capability.

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

5/7/2008 ERS QA-140T4

Balance # ID QA-045

# festAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## Balance Calibration Check Log TestAmerica West Sacramento

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
	0.9900 1 0100	50	49.5000 - 50 500
2	2	100	201
5	4.9500 - 5.0500		

\*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	t and (±) 0.5% for 1 g weight. The above
tolerances have been modified to meet balance read out capability.	nce read out capability.

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

5/7/2008 ERS QA-140T4

Balance # ID QA-045

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## **TestAmerica West Sacramento Air Toxics**

Desiccator Humidity/Temperature Logbook

				1	1					T		T		7	T		
At Lii	18/10	7 10	11/5/10	1/5/10	1/4/10	1/8/10	1/2/10	10/1/10	10/29/10	offeto	ofertion	Priesto	12.7	10 24	ofetho	Date	Desic
Abbreviations: Limits:	507	2	FOX.	423	202	733	433	Sex	325	202	23	203	2	Z	23	Init	Desiccator#
*-	66	2	72	69	68	65	क्ष	S.	65	Si	67	63	53	7	70	H	
T = Tempera RH 33±5%	78	ઝ	W W	22	55	78	78	34	33	75	23	22	22	3	33	RH	4
Temperature (°F) 33± 5%		I	7	1	7	)	١	1	1	١	1	1	,	Ì	(	FN	
(°F)	66	76	72	69	69	66	66	20	E	E.	83	83	న	1	71	Т	
i	29	28	27	22	36	34	32	8	29	27	28	28	26	32	28	RH	2
RH =	1	}	0	)	Le Co	j	)	Ì	١	ĺ	1	١		1	-	FN	
RH = Relative Humidity (%) Temperature 22±5 °C or 7	67	7)	74	70	20/20	66	67	66	67	B.	69	70	70	4	72	Ţ	
ve Hun e 22±	28	74	82	43	422	42	14	40	37	36	35	98	37	36	35	RH	IJ
UH = Relative Humidity (%) Temperature 22±5 °C or 71.6±9°F		(2)				440		(	١	)	١	1	}	ì	1	FN	
r 71.6±	66	76	77	69	89	65	65	65	65	CS	63	63	L	77	71	T	
406	32	31	29	30	25	29	30	29	29	29	K	28	38	ī	37	RH	4
罗	-	ì	1	١	)	1	1	)	(	1	j	1	ì	(-)	}	FN	
FN = Foot Note	67	70	73	8	69	Œ	66	65	B	5	Ø	69	70	7	71	T	
Note	35	ん	23	32	29	62	29	29	29	29	28	28	28	42	38	RH	5
	*	,					1	1	1		1	\	}	0	ţ	FN	
	68	7	73	70	<u> </u>	83	30	89	23	89	70	70	7	じょ	73	Ţ	
	36	<del>1</del> 2	77	37	37	38	35	83	34	34	34	\$	35	3	35	RH	6
	١	1	İ	)	1		1		}	, \	1	)		(	Î	FN	·
	68	4	73	70	70	92	68	66	E	66	8	70	72	4	72	T	
	33	32	32	\$	28	22	32	32	31	31	3	32	<u> </u>	32	3)	RH	7
	١	1			1		}		1		1	Ì	1			FN	
	63	ᆉ	75	72	72	82	8	82	CS	82	70	70	72	73	73	T	Amb
37	H	45	43	49	<i>149</i>	57	8	44	84	B	30	34	43	75	无	RН	ਰ
·	18/1/2								-								
	0,																

Limits: Foot Notes: RH 33±5% 1 = Desiccant Changed

Temperature 22±5 °C or 71.6±9°F 2= Desiccator < 28% Humidity

THE LEADER IN ENVIRONMENTAL TESTING

## TestAmerica West Sacramento **Air Toxics**

Desiccator Humidity/Temperature Logbook

Date Init T RH FT	Desiccator#
	cator#
7 Pen 334 Desi	<b>   </b>
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RH RH Comment of the state of t	
FN T RH FN T RH  - G7 38 - G5 33  - G6 28 - G5 33  - G7 30 - C8 35  - G7 30 - C8 35  - G7 30 - C8 36  RH = Relative Humidity (%)  Temperature 22±5°C or 71.6±9°F  Temperature 22±5°C or 71.6±9°F	3
FN FN Hur.	
T RH  C5 33  C5 33  C7 34  C7 36 9°F  midity	
99f 32 33 RH	4
FN = Foot Note	
T RH  C6 24  C6 31  C8 32  C8 35  C8 35	5
1 1 2	
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1 2 2 2 2 2 1	
32 <b>%</b> 37 <b>%</b> E	7
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#### Requested By: VALMORES

Batch	Lot/Sample ID	Analysis Code	W/O#	Group	Message
0337343	ı				Release Requested
0337343	l .				Successfully Released