SDG # 8304608

Close Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

Tronox LLC, Henderson

SDG: 8304608
Lot #s: D9F250221, D9F260277, D9F270153, and D9F270154

Frank Hagar

Northgate Environmental Management, Inc.
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TestAmerica Laboratories, Inc.

For: **Michael P. Phillips**
Project Manager

July 21, 2009

Case Narrative
SDG 8304608

The samples presented in this report were submitted to TestAmerica by Northgate Environmental Management, Inc. from the Tronox/Henderson site. The samples were received according to documented sample acceptance procedures.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameters listed on the methods summary page in accordance with the methods indicated.

The results apply only to the samples included in this report and meet all requirements of NELAC. All data have been reviewed for compliance with the laboratory QA/QC plan and have been found to be compliant with laboratory protocols, with the exception of any items noted below.

Sample Receiving

Three samples were received under chain of custody at temperatures of 3.0°C and 2.8°C on June 25, 2009, and were logged under lot D9F250221. Most of the volume for sample D9F250221-003 (EB062309-SO) arrived at Columbia out of temperature and per client request on June 24, 2009 all analyses of the sample were cancelled. Three samples were received under chain of custody at a temperature of 5.8°C on June 26, 2009, and were logged under lot D9F260277. One sample was received under chain of custody at a temperature of 5.4°C on June 27, 2009, and was logged under lot D9F270153. Five samples were received under chain of custody at a temperature of 2.3°C on June 27, 2009, and were logged under lot D9F270154. Two nitric acid preserved poly volumes were received labeled "M-1309AB", while no volume was received labeled "M-13ABDISS". The field filtered information on the bottle labels was used to determine which of the volumes actually belonged with sample D9F270154-003 (M-13ABDISS) and the client was informed via email on June 29, 2009. These lots are reported here under SDG 8304608.

GC Semivolatiles / Organophosphorus Pesticides – SW846 Method 8141A

The method required MS/MSD was performed for QC batch 9177142 using sample D9F250221-001 (M-125B) and all results were in control.

Total and Dissolved Arsenic and Selenium – SW846 Method 6020/Collision Cell

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. All of the samples analyzed for Total Arsenic and Selenium and Dissolved Arsenic and Selenium were diluted by a factor of 10X due to the sample matrix. The reporting limits have been adjusted relative to the dilutions required.

The method required MS/MSD was performed for Total Metals QC batch 9177105 using sample D9F250221-001 (M-125B) and all results were in control.

The method required MS/MSD was performed for Dissolved Metals QC batch 9177109 using sample D9F250221-002 (M-125BDISS) and all results were in control.

The method required MS/MSD was performed for Total Metals QC batch 9180262 using sample D9F260277-001 (M-22AB) and exhibited a MSD recovery for Arsenic below the lower control limit. Method precision and accuracy have been verified by the acceptable LCS analysis data; therefore, corrective action was deemed unnecessary.

The method required MS/MSD was performed for Dissolved Metals QC batch 9180268 using sample D9F270154-003 (M-13ABDISS) and exhibited MS and MSD recoveries for Arsenic above the upper control limit. Method precision and accuracy have been verified by the acceptable LCS analysis data; therefore, corrective action was deemed unnecessary.

Quality Control Definitions of Terms

Term	Definition
Batch	A set of up to 20 field samples plus associated laboratory QC samples that are similar in composition (matrix) and that are processed within the same time period with the same reagent and standard lots.
Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD)	A volume of reagent water for aqueous samples or a contaminant-free solid matrix (Ottawa sand) for soil and sediment samples which is spiked with known amounts of representative target analytes and required surrogates. A LCS is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. An LCSD is a second Laboratory Control Sample.
Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A field sample fortified with known quantities of target analytes that are also added to the LCS. Matrix spike duplicate is a second matrix spike sample. MS/MSDs are carried throughout the entire analytical process and are used to determine sample matrix effect on accuracy of the measurement system. The accuracy and precision estimated using MS/MSD is only representative of the precision of the sample that was spiked.
Method Blank	A sample composed of all the reagents (in the same quantities) in reagent water carried through the entire analytical process. The method blank is used to monitor the level of contamination introduced during sample preparation steps.
Surrogate	Organic constituents not expected to be detected in environmental media and are added to every sample and QC at a known concentration. Surrogates are used to determine the efficiency of the sample preparation and the analytical process.
Sample Duplicate	A second aliquot of an environmental sample, taken from the same sample container when possible, that is processed independently with the first sample aliquot. The results are used to assess the effect of the sample matrix on the precision of the analytical process. The precision estimated using this sample is not necessarily representative of the precision for other samples in the batch.
Method Detection Limit "MDL"	The method detection limit is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.
Reporting Limit "RL"	The TestAmerica reporting limit is normally the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the MDL. Some projects require RLs that are less than the quantitation limit to achieve particular maximum contaminant levels (MCLs) or relevant and appropriate requirements (ARARs), but RLs cannot be less than the statistically determined MDL.

Quality Control Definitions of Qualifiers

Qualifier	Definition
*	Surrogate or Relative Percent Difference (RPD) is outside control limits.
a	Spiked analyte recovery is outside control limits.
B	Organics: Method blank contamination. The associated method blank contains the target analyte at a reportable level. Inorganics: Estimated result. Result is less than the RL
COL	More than 40% difference between the primary and confirmation detector results. The lower of the two results is reported.
DIL	The concentration is estimated or not reported due to dilution.
E	Estimated result. Result concentration exceeds the calibration range.
G	Inorganics: Elevated reporting limit. The reporting limit is elevated due to matrix interference.
J	Organics: Estimated result. Result is less than RL Inorganics: Method blank contamination. The associated method blank contains the target analyte at a reportable level.
L	Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present
N	Spiked analyte recovery is outside stated control limits.
NC	The recovery and/or RPD were not calculated.
ND	The analyte was not detected at the MDL concentration and with a measurable degree of confidence can be said not to be present at or above the RL concentration.
p	Relative percent difference (RPD) is outside stated control limits.
Q	Elevated reporting limit. The reporting limit is elevated due to high analyte levels.
V	General Chemistry: Elevated reporting limit due to limited sample volume.
Wa	Post digestion spike recovery fell between 40-85% due to matrix interference.
Wb	Post digestion spike recovery fell between 115-150% due to matrix interference.
I	Percent recovery is estimated since the results exceeded the calibration range.
T1	A tentatively identified compound that did not generate a spectral match of 80% or greater. Typically called "unknown"
T2	A tentatively identified compound with a spectral match of 80% or better
T3	A tentatively identified compound that was calibrated for by the lab, but not on the client target analyte list.
IC	Diluted due to high inorganic chloride.

EXECUTIVE SUMMARY - Detection Highlights

8304608 : D9F250221

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-125B 06/23/09 10:14 001				
Arsenic	62	50	ug/L	SW846 6020
M-125BDISS 06/23/09 10:14 002				
Arsenic - DISSOLVED	57	50	ug/L	SW846 6020

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

8304608 : D9F260277

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-22AB 06/24/09 09:06 001				
Arsenic	100	50	ug/L	SW846 6020
M-17AB 06/24/09 12:35 002				
Arsenic	85	50	ug/L	SW846 6020
M-17ABDISS 06/24/09 12:35 003				
Arsenic - DISSOLVED	87	50	ug/L	SW846 6020
Selenium - DISSOLVED	7.5 B	50	ug/L	SW846 6020

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EXECUTIVE SUMMARY - Detection Highlights

8304608 : D9F270153

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-64B 06/26/09 12:35 001				
Arsenic	120	50	ug/L	SW846 6020

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

8304608 : D9F270154

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-75B 06/25/09 08:47 001				
Arsenic	140	50	ug/L	SW846 6020
M-13AB 06/25/09 12:15 002				
Arsenic	120	50	ug/L	SW846 6020
M-13ABDISS 06/25/09 12:15 003				
Arsenic - DISSOLVED	110	50	ug/L	SW846 6020
M-13009AB 06/25/09 12:15 004				
Arsenic	120	50	ug/L	SW846 6020
M-13009ABDISS 06/25/09 12:15 005				
Arsenic - DISSOLVED	120	50	ug/L	SW846 6020

METHODS SUMMARY

8304608

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
ICP-MS (6020)	SW846 6020	SW846 3005A
ICP-MS (6020)	SW846 6020	SW846 3020A
Organophosphorous Compounds by GC	SW846 8141A	SW846 3510

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

8304608

ANALYTICAL METHOD	ANALYST	ANALYST ID
SW846 6020	Thomas Lill	006929
SW846 8141A	Teresa L. Williams	002510

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

8304608 : D9F250221

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LFLLR	001	M-125B	06/23/09	10:14
LFLL4	002	M-125BDISS	06/23/09	10:14

NOTE(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.

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SAMPLE SUMMARY

8304608 : D9F260277

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LFP1G	001	M-22AB	06/24/09	09:06
LFP1K	002	M-17AB	06/24/09	12:35
LFP1L	003	M-17ABDISS	06/24/09	12:35

NOTE(S):

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SAMPLE SUMMARY

8304608 : D9F270153

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LFQ02	001	M-64B	06/26/09	12:35

NOTE(S):

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- 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.

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SAMPLE SUMMARY

8304608 : D9F270154

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LFQ1Q	001	M-75B	06/25/09	08:47
LFQ10	002	M-13AB	06/25/09	12:15
LFQ11	003	M-13ABDISS	06/25/09	12:15
LFQ12	004	M-13009AB	06/25/09	12:15
LFQ13	005	M-13009ABDISS	06/25/09	12:15

NOTE(S):

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- 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.

QC DATA ASSOCIATION SUMMARY

D9F250221

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 6020		9177105	9177055
	WATER	SW846 8141A		9177142	9177087
002	WATER	SW846 6020		9177109	9177059

QC DATA ASSOCIATION SUMMARY

D9F260277

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	SW846 6020		9180262	9180156
002	WG	SW846 6020		9180262	9180156
003	WG	SW846 6020		9180268	9180159

QC DATA ASSOCIATION SUMMARY

D9F270153

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	SW846 6020		9180262	9180156

QC DATA ASSOCIATION SUMMARY

D9F270154

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	SW846 6020		9180262	9180156
002	WG	SW846 6020		9180262	9180156
003	WG	SW846 6020		9180268	9180159
004	WG	SW846 6020		9180262	9180156
005	WG	SW846 6020		9180268	9180159

TestAmerica

Semivolatile GC

CLP-Like Forms

Lot ID: D9F2501221

Client: Northgate/Tronox

Method: SW846 8141A

Associated Samples: 001

Batch: 9177142

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THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-125B
Lot/SDG Number:	8304608	**Lab Sample ID:**	D9F250221-001
Matrix:	WATER	**Lab WorkOrder:**	LFLLR1AA
% Moisture:	N/A	**Date/Time Collected:**	06/23/09 10:14
Basis:	Wet	**Date/Time Received:**	06/25/09 08:30
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/26/09 12:00
QC Batch ID:	9177142	**Date/Time Analyzed:**	07/01/09 02:15
Sample Aliquot:	1037 mL	**Instrument ID:**	D2
Dilution Factor:	1		

CAS No.	Analyte	Conc.	MDL	RL	Q
86-50-0	Azinphos-methyl	0.17	0.17	2.5	U
35400-43-2	Bolstar	0.31	0.31	1.0	U
2921-88-2	Chlorpyrifos	0.36	0.36	1.0	U
56-72-4	Coumaphos	0.14	0.14	1.0	U
298-03-3	Demeton-O	0.14	0.14	1.0	U
126-75-0	Demeton-S	0.069	0.069	1.0	U
333-41-5	Diazinon	0.15	0.15	1.0	U
62-73-7	Dichlorvos	0.16	0.16	1.0	U
60-51-5	Dimethoate	0.45	0.45	1.5	U
298-04-4	Disulfoton	0.32	0.32	1.0	U
2104-64-5	EPN	0.15	0.15	1.2	U
13194-48-4	Ethoprop	0.18	0.18	0.50	U
56-38-2	Ethyl parathion	0.14	0.14	1.0	U
52-85-7	Famphur	0.18	0.18	1.0	U
115-90-2	Fensulfothion	0.54	0.54	2.5	U
55-38-9	Fenthion	0.15	0.15	2.5	U
121-75-5	Malathion	0.13	0.13	1.2	U
150-50-5	Merphos	0.17	0.17	5.0	U
298-00-0	Methyl parathion	0.14	0.14	4.0	U
7786-34-7	Mevinphos	0.46	0.46	6.2	U
300-76-5	Naled	0.25	0.25	1.0	U
298-02-2	Phorate	0.15	0.15	1.2	U
299-84-3	Ronnel	0.12	0.12	10	U
3689-24-5	Sulfotepp	0.17	0.17	1.5	U
961-11-5	Tetrachlorvinphos (Stirophos)	0.12	0.12	3.5	U

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THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-125B
Lot/SDG Number:	8304608	**Lab Sample ID:**	D9F250221-001
Matrix:	WATER	**Lab WorkOrder:**	LFLLR1AA
% Moisture:	N/A	**Date/Time Collected:**	06/23/09 10:14
Basis:	Wet	**Date/Time Received:**	06/25/09 08:30
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/26/09 12:00
QC Batch ID:	9177142	**Date/Time Analyzed:**	07/01/09 02:15
Sample Aliquot:	1037 mL	**Instrument ID:**	D2
Dilution Factor:	1		

CAS No.	Analyte	Conc.	MDL	RL	Q
297-97-2	Thionazin	0.31	0.31	1.0	U
34643-46-4	Tokuthion	0.12	0.12	1.6	U
327-98-0	Trichloronate	0.24	0.24	1.0	U

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
115-86-6	Triphenyl phosphate	77	60	154	
24934-91-6	Chlormefos	59	49	171	

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THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	8304608	**Lab Sample ID:**	D9F260000-142B
Matrix:	WATER	**Lab WorkOrder:**	LFM2P1AA
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/26/09 12:00
QC Batch ID:	9177142	**Date/Time Analyzed:**	07/01/09 01:20
Sample Aliquot:	1000 mL	**Instrument ID:**	D2
Dilution Factor:	1		

CAS No.	Analyte	Conc.	MDL	RL	Q
62-73-7	Dichlorvos	0.16	0.16	1.0	U
297-97-2	Thionazin	0.31	0.31	1.0	U
60-51-5	Dimethoate	0.45	0.45	1.5	U
298-04-4	Disulfoton	0.32	0.32	1.0	U
2104-64-5	EPN	0.15	0.15	1.2	U
13194-48-4	Ethoprop	0.18	0.18	0.50	U
52-85-7	Famphur	0.18	0.18	1.0	U
115-90-2	Fensulfothion	0.54	0.54	2.5	U
55-38-9	Fenthion	0.15	0.15	2.5	U
121-75-5	Malathion	0.13	0.13	1.2	U
150-50-5	Merphos	0.17	0.17	5.0	U
298-00-0	Methyl parathion	0.14	0.14	4.0	U
86-50-0	Azinphos-methyl	0.17	0.17	2.5	U
7786-34-7	Mevinphos	0.46	0.46	6.2	U
300-76-5	Naled	0.25	0.25	1.0	U
56-38-2	Ethyl parathion	0.14	0.14	1.0	U
298-02-2	Phorate	0.15	0.15	1.2	U
299-84-3	Ronnel	0.12	0.12	10	U
3689-24-5	Sulfotepp	0.17	0.17	1.5	U
34643-46-4	Tokuthion	0.12	0.12	1.6	U
327-98-0	Trichloronate	0.24	0.24	1.0	U
35400-43-2	Bolstar	0.31	0.31	1.0	U
961-11-5	Tetrachlorvinphos (Stirophos)	0.12	0.12	3.5	U
2921-88-2	Chlorpyrifos	0.36	0.36	1.0	U
56-72-4	Coumaphos	0.14	0.14	1.0	U
298-03-3	Demeton-O	0.14	0.14	1.0	U
126-75-0	Demeton-S	0.069	0.069	1.0	U
333-41-5	Diazinon	0.15	0.15	1.0	U

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	8304608	**Lab Sample ID:**	D9F260000-142B
Matrix:	WATER	**Lab WorkOrder:**	LFM2P1AA
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/26/09 12:00
QC Batch ID:	9177142	**Date/Time Analyzed:**	07/01/09 01:20
Sample Aliquot:	1000 mL	**Instrument ID:**	D2
Dilution Factor:	1		

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
115-86-6	Triphenyl phosphate	120	60	154	
24934-91-6	Chlormefos	91	49	171	

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THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Surrogate Recovery Summary

Lab Name: TESTAMERICA DENVER **Extraction** I09P29H
Lot/SDG Number: 8304608 **QC Batch ID:** 9177142

Client ID	Work Order	SRG1	SRG2	SRG3	SRG4	SRG5	SRG6	SRG7	SRG8	TOT OUT
M-125B	LFLLR1AA	59	77							0
M-125BMS MS	LFLLR1AE	78	81							0
M-125BMSD MSD	LFLLR1AF	85	83							0
INTRA-LAB BLANK	LFM2P1AA	91	120							0
CHECK SAMPLE	LFM2P1AC	70	78							0

Surrogate Number	Surrogate Name	Lower Control Limit	Upper Control Limit
SRG 1	Chlormefos	49	171
SRG 2	Triphenyl phosphate	60	154

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	8304608	**Lab Sample ID:**	D9F260000-142C
Matrix:	WATER	**Lab WorkOrder:**	LFM2P1AC
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/26/09 12:00
QC Batch ID:	9177142	**Date/Time Analyzed:**	07/01/09 01:47
Sample Aliquot:	1000 mL	**Instrument ID:**	D2
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Dichlorvos	4.00	2.70	68		40 - 193
Thionazin	4.00	3.11	78		39 - 180
Dimethoate	4.00	2.79	70		33 - 139
Disulfoton	4.00	2.22	56		44 - 139
Ethoprop	4.00	3.44	86		43 - 165
Famphur	8.00	7.01	88		51 - 131
Fensulfothion	4.00	2.82	70		46 - 115
Fenthion	4.00	3.02	76		63 - 128
Malathion	4.00	2.66	66		53 - 137
Methyl parathion	4.00	3.31	83		55 - 131
Azinphos-methyl	4.00	3.07	77		42 - 125
Mevinphos	4.00	2.24	56		39 - 175
Ethyl parathion	4.00	3.36	84		47 - 142
Phorate	4.00	3.17	79		46 - 142
Ronnel	4.00	3.05	76		43 - 115
Sulfotepp	4.00	2.95	74		29 - 166
Trichloronate	4.00	3.06	76		60 - 115
Chlorpyrifos	4.00	3.33	83		60 - 120
Coumaphos	4.00	3.23	81		61 - 115
Diazinon	4.00	3.75	94		47 - 149

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
115-86-6	Triphenyl phosphate	78	60	154	
24934-91-6	Chlormefos	70	49	171	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-125BMS
Lot/SDG Number:	8304608	**MS Lab Sample ID:**	D9F250221-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LFLLR1AE
% Moisture:	N/A	**Date/Time Collected:**	06/23/09 10:14
Basis:	Wet	**Date/Time Received:**	06/25/09 08:30
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/26/09 12:00
QC Batch ID:	9177142	**Date/Time Analyzed:**	07/01/09 02:42
MS Sample Aliquot:	1035 mL	**Instrument ID:**	D2
MS Dilution Factor:	1		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Azinphos-methyl	3.86	0.17	U	3.09		80		42 - 125
Chlorpyrifos	3.86	0.36	U	3.35		87		60 - 120
Coumaphos	3.86	0.14	U	3.23		84		61 - 115
Diazinon	3.86	0.15	U	3.40		88		47 - 149
Dichlorvos	3.86	0.16	U	2.87		74		40 - 193
Dimethoate	3.86	0.45	U	2.82		73		33 - 139
Disulfoton	3.86	0.32	U	2.56		66		44 - 139
Ethoprop	3.86	0.18	U	3.58		93		43 - 165
Ethyl parathion	3.86	0.14	U	3.34		86		47 - 142
Famphur	7.73	0.18	U	7.04		91		51 - 131
Fensulfothion	3.86	0.54	U	2.87		74		46 - 115
Fenthion	3.86	0.15	U	3.07		80		63 - 128
Malathion	3.86	0.13	U	2.73		71		53 - 137
Methyl parathion	3.86	0.14	U	3.29		85		55 - 131
Mevinphos	3.86	0.46	U	2.46		64		39 - 175
Phorate	3.86	0.15	U	3.17		82		46 - 142
Ronnel	3.86	0.12	U	3.00		78		43 - 115
Sulfotepp	3.86	0.17	U	2.97		77		29 - 166
Thionazin	3.86	0.31	U	3.13		81		39 - 180
Trichloronate	3.86	0.24	U	3.21		83		60 - 115

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
24934-91-6	Chlormefos	78	49	171	
115-86-6	Triphenyl phosphate	81	60	154	

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THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-125BMSD
Lot/SDG Number:	8304608	**MSD Lab Sample ID:**	D9F250221-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LFLLR1AF
% Moisture:	N/A	**Date/Time Collected:**	06/23/09 10:14
Basis:	Wet	**Date/Time Received:**	06/25/09 08:30
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/26/09 12:00
QC Batch ID:	9177142	**Date/Time Analyzed:**	07/01/09 03:09
MSD Sample Aliquot:	1018 mL	**Instrument ID:**	D2
MSD Dilution Factor:	1		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Azinphos-methyl	3.93	0.17	U	3.35		85		7.8		42 - 125	36
Chlorpyrifos	3.93	0.36	U	3.54		90		5.5		60 - 120	34
Coumaphos	3.93	0.14	U	3.45		88		6.3		61 - 115	43
Diazinon	3.93	0.15	U	3.74		95		9.6		47 - 149	40
Dichlorvos	3.93	0.16	U	2.92		74		1.8		40 - 193	49
Dimethoate	3.93	0.45	U	2.90		74		2.7		33 - 139	50
Disulfoton	3.93	0.32	U	2.58		66		0.85		44 - 139	40
Ethoprop	3.93	0.18	U	3.69		94		3.2		43 - 165	36
Ethyl parathion	3.93	0.14	U	3.72		95		11		47 - 142	40
Famphur	7.86	0.18	U	7.46		95		5.7		51 - 131	88
Fensulfothion	3.93	0.54	U	3.21		82		11		46 - 115	62
Fenthion	3.93	0.15	U	3.31		84		7.4		63 - 128	41
Malathion	3.93	0.13	U	2.99		76		9.0		53 - 137	28
Methyl parathion	3.93	0.14	U	3.52		90		6.8		55 - 131	30
Mevinphos	3.93	0.46	U	2.85		73		15		39 - 175	40
Phorate	3.93	0.15	U	3.17		81		0.090		46 - 142	40
Ronnel	3.93	0.12	U	3.21		82		6.8		43 - 115	39
Sulfotepp	3.93	0.17	U	3.11		79		4.4		29 - 166	40
Thionazin	3.93	0.31	U	3.42		87		8.6		39 - 180	40
Trichloronate	3.93	0.24	U	3.35		85		4.4		60 - 115	38

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
24934-91-6	Chlormefos	85	49	171	
115-86-6	Triphenyl phosphate	83	60	154	

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THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Method Blank Summary

Lab Name:	TESTAMERICA DENVER	**Lab File ID:**	021F2101.
Lot/SDG Number:	8304608	**Lab Sample ID:**	D9F260000-142B
Matrix:	WATER	**Lab Work Order:**	LFM2P1AA
Analysis Method:	8141A	**Date/Time Extracted:**	06/26/09 12:00
Extraction Method:	I09P29H	**Date/Time Analyzed:**	07/01/09 01:20
QC Batch ID:	9177142	**Instrument ID:**	D2

Client ID	Sample Work Order #	Lab File ID	Date Analyzed	Time Analyzed
M-125B	LFLLR1AA	021F2101.	07/01/09	02:15
M-125BMS MS	LFLLR1AE S	022F2201.	07/01/09	02:42
M-125BMSD MSD	LFLLR1AF D	023F2301.	07/01/09	03:09
CHECK SAMPLE	LFM2P1AC C	020F2001.	07/01/09	01:47

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Last Edit : 30-Jun-2009 12:45 GC_D2.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\005F0501.D
Level 6: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\003F0301.D

SEE CALIBRATION HISTORY

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
1 o,o,o-TEPT	3.11591	2.63737	2.67945	2.89676	2.71623	2.90430					
	2.77446						AVRG		2.81778		5.91149
2 Dichlorvos	2.01706	1.62225	1.58545	1.76366	1.71981	1.74982					
	1.79032						AVRG		1.74977		7.99554
3 Mevinphos	1.01774	0.91295	0.90158	1.01760	0.95159	0.98250					
	0.94429						AVRG		0.96118		4.85992
5 Thionazin	2.12707	1.94606	1.94866	2.08214	1.96051	2.00095					
	1.93224						AVRG		1.99966		3.79706

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TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Last Edit : 30-Jun-2009 12:45 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	5.0000 Level 7											
6 Demeton-O	9836	17553	30145	62341	96004	113108						1/x
	165003						WLINR	-0.01288	1.85831		0.99594	
7 Ethoprop	1.93480	1.70823	1.62324	1.73203	1.74110	1.78272						
	1.74432						AVRG		1.75235		5.38512	
8 Naled	1992	6103	15042	36940	67594	90892						
	121152						WLINR	0.09632	0.47378		0.98961	<- 1/x r=0.995
10 Sulfotepp	34658	70885	131347	259970	393078	486417						1/x
	609341						WLINR	-0.03469	2.43674		0.99856	
11 Phorate	2.02801	1.82946	1.73796	1.82370	1.76374	1.79146						
	1.72902						AVRG		1.81476		5.60901	
12 Dimethoate	1.89561	1.76866	2.07434	2.25696	2.23554	2.30994						
	2.21598						AVRG		2.10815		9.72697	
13 Demeton-S	1.49306	1.46224	1.49173	1.58543	1.55216	1.58919						
	1.52702						AVRG		1.52869		3.21407	

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
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Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Last Edit : 30-Jun-2009 12:45 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	5.0000 Level 7											
14 Simazine	4819	16248	29382	64611	115426	147784						1/x²
	190219						WLINR	0.03988	0.73140		0.99336	
15 Atrazine	0.70185	0.76532	0.75073	0.84628	0.85434	0.90844						
	0.89508						AVRG		0.81743		9.61085	
16 propazine	0.73887	0.70136	0.69239	0.78178	0.75651	0.81417						
	0.79462						AVRG		0.75424		6.13423	
17 Disulfoton	15404	33208	61920	127893	193050	247845						1/x
	290419						WLINR	-0.01928	1.20917		0.99576	
18 Diazinon	2.20234	1.83553	1.83772	2.01856	1.98676	1.84115						
	1.92388						AVRG		1.94942		6.88114	
19 Methyl Parathion	1.22644	1.10389	1.13741	1.32395	1.30344	1.29686						
	1.26213						AVRG		1.23630		6.92144	
20 Ronnel	1.42863	1.23369	1.21320	1.29342	1.24446	1.34650						
	1.18584						AVRG		1.27796		6.65504	

TestAmerica

INITIAL CALIBRATION DATA

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Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Last Edit : 30-Jun-2009 12:45 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
21 Malathion	15443	30581	57103	119836	186013	228260					
	283462						WLINR	-0.02066	1.14436		0.99783
22 Fenthion	1.46442	1.18458	1.16481	1.29096	1.25584	1.25506					
	1.18151						AVRG		1.25674		8.19381
23 Parathion	1.42438	1.25387	1.23322	1.38998	1.36308	1.38514					
	1.31279						AVRG		1.33749		5.43501
24 Chlorpyrifos	1.85614	1.56747	1.47379	1.62915	1.61527	1.62330					
	1.56216						AVRG		1.61818		7.28314
25 Trichloronate	1.44751	1.42551	1.34762	1.48171	1.46256	1.52450					
	1.43428						AVRG		1.44624		3.78186
26 Anilazine	1493	2095	5311	12790	19893	29375					
	+++++						QUAD	0.02107	9.16488	-8.66056	0.99476
27 Merphos-A (Merphos)	1.24844	1.15527	1.15966	1.23989	1.21263	1.24409					
	1.18648						AVRG		1.20664		3.30523

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INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Last Edit : 30-Jun-2009 12:45 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
28 Tetrachlorvinphos (Stirophos)	0.76814	0.74606	0.73464	0.83451	0.85233	0.85150					
	0.82648						AVRG		0.80195		6.32809
29 Tokuthion	1.50295	1.28283	1.29501	1.44234	1.39452	1.40891					
	1.37817						AVRG		1.38639		5.62055
30 Merphos-B (Merphos Oxone)	3884	7933	11676	34113	50056	65974					
	79809						WLINR	0.01044	0.32634		0.98820
31 Carbophenothion-methyl	14924	30542	55023	105577	167145	206137					
	266724						WLINR	-0.03349	1.03813		0.99979
32 Fensulfothion	8319	23000	51304	104440	185778	229856					
	295978						WLINR	0.04728	1.18751		0.99821
33 Bolstar / Famphur	1.54988	1.27794	1.32328	1.33835	1.27633	1.28540					
	1.23307						AVRG		1.32632		7.86825
34 Carbophenothion	1.57916	1.19992	1.27687	1.32336	1.26122	1.41398					
	1.25966						AVRG		1.33059		9.63398

NTC
<- See Merphos

1/x

1/x

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Last Edit : 30-Jun-2009 12:45 GC_D2.i

	Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
		5.0000 Level 7											
	36 Phosmet	1.22087	1.01385	1.11032	1.20586	1.12340	1.16129						
		1.13672						AVRG		1.13890		6.04111	
	37 EPN	9525	23196	48705	111165	171283	220388						1/x^2
		294020						WLINR	0.02456	1.11450		0.99317	
	38 Azinphos-methyl	1.19565	1.13516	1.16767	1.28235	1.23551	1.26700						
		1.21185						AVRG		1.21360		4.33999	
	40 Azinphos-ethyl	23154	43578	74071	134607	209971	253982						1/x^2
		318459						WLINR	-0.07409	1.26388		0.99928	
	41 Coumaphos	1.00140	0.89806	0.92250	1.01947	1.01017	1.01013						
		0.99015						AVRG		0.97884		4.92558	
S	42 Merphos	1.61523	1.45962	1.38820	1.59026	1.52873	1.58626						
		1.49925						AVRG		1.52393		5.34513	
M	43 Total Demeton	1.94415	1.66775	1.60440	1.71838	1.66174	1.66727						
		1.68503						AVRG		1.70696		6.44185	

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Last Edit : 30-Jun-2009 12:45 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
$ 4 Chlormefos	2.28223	2.03679	2.00000	2.26084	2.35620	2.24671					
	2.15521						AVRG		2.19114		6.04132
$ 35 Triphenyl phosphate	1.09980	0.99217	0.96977	1.05450	0.99627	1.00900					
	0.95665						AVRG		1.01117		4.94580

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Last Edit : 30-Jun-2009 12:45 GC_D2.i

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Wt Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Report Date: 30-Jun-2009 12:45

Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Start Cal Date: 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
26-JUN-2009 21:13	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
26-JUN-2009 20:45	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
26-JUN-2009 20:18	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
26-JUN-2009 19:50	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
26-JUN-2009 19:23	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
26-JUN-2009 18:55	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
26-JUN-2009 18:28	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\003F0301.D

Continuing Calibration

Mode: GLOBAL LEVEL 4

26-JUN-2009 21:40	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\010F1001.D
26-JUN-2009 19:50	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\006F0601.D
26-JUN-2009 19:23	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\005F0501.D

Report Date : 30-Jun-2009 12:58 Page 1

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\005F0501.D SEE CALIBRATION HISTORY
Level 6: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\003F0301.D

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
1 o,o,o-TEPT	2.92648	2.44243	2.35582	2.65851	2.57132	2.61478					
	2.53900						AVRG		2.58691		7.02274
2 Dichlorvos	1.96421	1.82228	1.84036	2.17503	2.12732	2.04712					
	2.16332						AVRG		2.01995		7.32345
4 Mevinphos	1.44354	1.24995	1.21811	1.44363	1.32123	1.40873					
	1.43954						AVRG		1.36067		7.12634
5 Demeton-O	1.19821	1.29971	1.18493	1.34261	1.38930	1.37760					
	1.28370						AVRG		1.29658		6.26552

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
6 Thionazin	2.15838	1.84195	1.93751	1.98059	2.08762	2.20076					
	2.03673						AVRG		2.03479		6.19054
7 Ethoprop	1.70034	1.41105	1.44674	1.51565	1.56615	1.54046					
	1.46268						AVRG		1.52044		6.33190
8 Phorate	1.89356	1.60276	1.58391	1.69691	1.82591	1.99241					
	1.74661						AVRG		1.76315		8.53946
9 Naled	94.00000	1666	10859	28010	46004	58330					
	78857						WLINR	0.13436	0.49080		0.99248
10 Sulfotepp	2.79835	2.53605	2.59328	2.75080	2.67397	2.68532					
	2.57687						AVRG		2.65923		3.59851
12 Simazine	0.36415	0.34683	0.35351	0.38559	0.39087	0.41510					
	0.41001						AVRG		0.38086		7.05346
13 Diazinon	12067	15923	49407	98649	155648	181790					
	228810						WLINR	0.01456	1.44446		0.99190

1/x

1/x

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	5.0000 Level 7											
14 Atrazine	5427	1231	21316	49088	85997	98759						
	128612						LINR	0.11621	0.83396		0.99221	
15 Propazine	4880	8102	20907	43235	72628	85745						1/x
	110050						WLINR	0.02910	0.68050		0.99492	
16 Disulfoton	1.39584	1.32983	1.36835	1.41433	1.46581	1.46415						
	1.37843						AVRG		1.40239		3.56764	
17 Demeton-S	667	15766	33785	70921	121463	157195						1/x
	175573						WLINR	0.05954	1.76807		0.99272	
18 Dimethoate	1.93513	1.88284	1.72920	1.81890	1.98388	1.88204						
	1.92489						AVRG		1.87955		4.46888	
19 Ronnel	1.49381	1.09752	1.14631	1.23377	1.29336	1.31702						
	1.27410						AVRG		1.26513		10.15653	
20 Merphos-A (Merphos)	0.73714	0.72841	0.76463	0.71117	0.75339	0.75359						
	0.62474						AVRG		0.72472		6.56840	

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
21 Chlorpyrifos	1.28253	1.15885	1.24944	1.20702	1.32365	1.38773					
	1.37311						AVRG		1.28319		6.60140
22 Fenthion	1.20874	1.15890	1.17283	1.16181	1.25398	1.18816					
	1.18668						AVRG		1.19016		2.76871
23 Trichloronate	6944	26053	49357	106326	170976	208762					
	296442						WLINR	0.05263	1.73863		0.99738
24 Anilazine	1634	2256	3581	6899	11039	13112					
	19108						LINR	-0.00058	0.10979		0.99085
25 Methyl Parathion	1.21391	1.12059	1.22102	1.33829	1.35198	1.32937					
	1.41908						AVRG		1.28489		8.00353
26 Malathion	1.23986	1.19694	1.15056	1.17724	1.17540	1.20726					
	1.27856						AVRG		1.20369		3.60449
27 Tokuthion	1.50291	1.31056	1.35261	1.35076	1.45106	1.48916					
	1.40826						AVRG		1.40933		5.28420

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	5.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
28 Parathion	1.27111	1.15628	1.24872	1.23420	1.30817	1.35972	1.28450	AVRG		1.26610		5.02432	
29 Merphos-B (Merphos Oxone)	3793	6271	15065	23458	40683	62127	65080	WLINR	-0.05169	0.21659		0.96366	<-NTC, see merphos
30 Tetrachlorvinphos (stirophos)	0.86036	0.73114	0.73243	0.80291	0.86664	0.87311	0.86651	AVRG		0.81902		7.82425	
31 Carbophenothion methyl	1.16513	1.02032	1.04699	1.17159	1.27808	1.26831	1.26700	AVRG		1.17392		9.08251	
32 Bolstar	1.33280	1.22387	1.19075	1.20601	1.27262	1.22830	1.20152	AVRG		1.23655		4.05030	
33 Carbophenothion	1.18442	1.13595	1.15332	1.18001	1.34689	1.22912	1.28180	AVRG		1.21593		6.21486	
35 Fensulfothion	0.88346	0.80409	0.88036	0.97346	0.94597	1.00424	0.92148	AVRG		0.91615		7.30438	

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

	Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	5.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	37 Phosmet / EPN	19707	35826	68186	146012	207459	263604	330448	WLINR	-0.04262	1.00518		0.99785
	38 Famphur	1.45536	1.20800	1.18770	1.39816	1.20947	1.39569	1.32805	AVRG		1.31178		8.35158
	39 Azinphos-methyl	1.25589	1.08970	1.07858	1.30240	1.20427	1.27709	1.19199	AVRG		1.19999		7.33978
	40 Azinphos-ethyl	1.14013	1.11628	1.12015	1.18786	1.16269	1.14594	1.12699	AVRG		1.14286		2.23350
	41 Coumaphos	0.78930	0.81655	0.85887	0.90448	0.89897	0.94628	0.93653	AVRG		0.87871		6.77030
S	42 Merphos	1.56460	1.43887	1.64263	1.66880	1.73437	1.91569	1.70275	AVRG		1.66682		8.85773
M	43 Total Demeton	3533	23328	47171	100663	168375	213468	244812	WLINR	0.06780	1.63923		0.99469

1/x

1/x

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
$ 3 Chlormefos	2.19506	1.83698	1.78322	2.03418	2.29040	2.05386					
	2.04016						AVRG		2.03341		8.83890
$ 34 Triphenyl phosphate	1.10969	0.86972	0.91132	1.07710	1.01080	0.99885					
	1.00703						AVRG		0.99779		8.47904

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

Report Date: 30-Jun-2009 12:58

Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Start Cal Date: 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
26-JUN-2009 21:13	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
26-JUN-2009 20:45	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
26-JUN-2009 20:18	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
26-JUN-2009 19:50	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
26-JUN-2009 19:23	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
26-JUN-2009 18:55	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
26-JUN-2009 18:28	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\003F0301.D

Continuing Calibration

Cal Level Mode: GLOBAL LEVEL 4

26-JUN-2009 21:40	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\010F1001.D
26-JUN-2009 19:50	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\006F0601.D
26-JUN-2009 19:23	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\005F0501.D

Table of Contents

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B/010F1001.D
Report Date: 06/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 010F1001.D
Analysis Type: NONE

Injection Date: 26-JUN-2009 21:40
Lab Sample ID: OPP SS GSV0633
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.0000	2.0577	2.9	15.0	
2	Dichlorvos	2.0000	1.9061	4.7	15.0	
3	Mevinphos	2.0000	1.6977	15.1	15.0	<- ok
4	Chlormefos	2.0000	1.7808	11.0	15.0	
5	Thionazin	2.0000	1.9740	1.3	15.0	
6	Demeton-O	0.6500	1.8707	187.8	15.0	<- ok, see total demeton
7	Ethoprop	2.0000	2.0536	2.7	15.0	
8	Naled	2.0000	1.1983	40.1	15.0	<-
9	Sulfotepp	2.0000	1.7932	10.3	15.0	
10	Phorate	2.0000	2.0180	0.9	15.0	
11	Dimethoate	2.0000	2.0859	4.3	15.0	
12	Demeton-S	1.3600	0.2313	83.0	15.0	<- ok, see total demeton
13	Simazine	2.0000	2.6218	31.1	15.0	<-
14	Atrazine	2.0000	1.9566	2.2	15.0	
15	propazine	2.0000	1.9127	4.4	15.0	
17	Disulfoton	2.0000	1.5890	20.6	15.0	<-
16	Diazinon	2.0000	2.1583	7.9	15.0	
18	Methyl Parathion	2.0000	2.0404	2.0	15.0	
19	Ronnel	2.0000	2.1513	7.6	15.0	
20	Malathion	2.0000	1.6248	18.8	15.0	<-
21	Fenthion	2.0000	1.8840	5.8	15.0	
22	Parathion	2.0000	1.9436	2.8	15.0	
23	Chlorpyrifos	2.0000	1.9720	1.4	15.0	
24	Trichloronate	2.0000	1.8619	6.9	15.0	
25	Anilazine	2.0000	1.0151	49.2	15.0	<-
148	Merphos-A (Merphos)	2.0000	0.4078	79.6	999.0	
26	Tetrachlorvinphos (Stirophos)	2.0000	2.0880	4.4	15.0	
28	Tokuthion	2.0000	2.0254	1.3	15.0	
149	Merphos-B (Merphos Oxone)	2.0000	6.6232	231.2	999.0	
29	Carbophenothion-methyl	2.0000	1.3536	32.3	15.0	<-
29	Fensulfothion	2.0000	1.9235	3.8	15.0	
30	Bolstar / Famphur	4.0000	4.0636	1.6	15.0	
32	Carbophenothion	2.0000	1.8639	6.8	15.0	
31	Triphenyl phosphate	2.0000	1.7170	14.2	15.0	
34	Phosmet	2.0000	1.6471	17.6	15.0	<-
32	EPN	2.0000	1.7931	10.3	15.0	
33	Azinphos-methyl	2.0000	1.9226	3.9	15.0	
35	Azinphos-ethyl	2.0000	1.8331	8.3	15.0	
36	Coumaphos	2.0000	2.0063	0.3	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B/010F1001.D
Report Date: 06/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 010F1001.D
Analysis Type: NONE

Injection Date: 26-JUN-2009 21:40
Lab Sample ID: OPP SS GSV0633
Method File: \\DenSvr03\Public\chem\GCS\GC_D2

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 Merphos	2.0000	1.7215	13.9	15.0
40 Total Demeton	2.0000	2.1021	5.1	15.0

Average %D = 23.4

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B/010F1001.D
Report Date: 06/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 010F1001.D
Analysis Type: NONE

Injection Date: 26-JUN-2009 21:40
Lab Sample ID: OPP SS GSV0633
Method File: \\DenSvr03\Public\chem\GCS\GC_D2

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.0000	2.0069	0.3	15.0	
2	Dichlorvos	2.0000	1.7707	11.5	15.0	
3	Chlormefos	2.0000	1.6957	15.2	15.0	<- ok
4	Mevinphos	2.0000	1.8364	8.2	15.0	
5	Demeton-O	0.6500	2.0472	215.0	15.0	<- ok, see total demeton
6	Thionazin	2.0000	1.8758	6.2	15.0	
7	Ethoprop	2.0000	1.8962	5.2	15.0	
8	Phorate	2.0000	1.9509	2.5	15.0	
10	Naled	2.0000	1.0486	47.6	15.0	<-
146	Sulfotepp	2.0000	1.7143	14.3	15.0	
10	Simazine	2.0000	3.6013	80.1	15.0	<-
12	Diazinon	2.0000	2.0803	4.0	15.0	
150	Atrazine	2.0000	1.9693	1.5	15.0	
13	Propazine	2.0000	1.8742	6.3	15.0	
14	Disulfoton	2.0000	1.6970	15.1	15.0	<- ok
15	Demeton-S	1.3600	0.2011	85.2	15.0	<- ok, see total demeton
16	Dimethoate	2.0000	1.8701	6.5	15.0	
17	Ronnel	2.0000	2.0112	0.6	15.0	
148	Merphos-A (Merphos)	2.0000	0.5348	73.3	999.0	
18	Chlorpyrifos	2.0000	2.1084	5.4	15.0	
19	Fenthion	2.0000	2.0634	3.2	15.0	
20	Trichloronate	2.0000	1.8617	6.9	15.0	
21	Anilazine	2.0000	1.2425	37.9	15.0	<-
23	Methyl Parathion	2.0000	2.0228	1.1	15.0	
24	Malathion	2.0000	1.5362	23.2	15.0	<-
25	Tokuthion	2.0000	1.8925	5.4	15.0	
26	Parathion	2.0000	2.1337	6.7	15.0	
149	Merphos-B (Merphos Oxone)	2.0000	5.0080	150.4	999.0	
27	Tetrachlorvinphos (stirophos)	2.0000	2.0814	4.1	15.0	
28	Carbophenothion methyl	2.0000	1.2466	37.7	15.0	<-
28	Bolstar	2.0000	2.0778	3.9	15.0	
30	Carbophenothion	2.0000	1.7496	12.5	15.0	
29	Triphenyl phosphate	2.0000	1.7275	13.6	15.0	
30	Fensulfothion	2.0000	2.0824	4.1	15.0	
35	Phosmet / EPN	4.0000	3.4695	13.3	15.0	
33	Famphur	2.0000	1.7579	12.1	15.0	
34	Azinphos-methyl	2.0000	1.8108	9.5	15.0	
35	Azinphos-ethyl	2.0000	1.7982	10.1	15.0	
36	Coumaphos	2.0000	1.9588	2.1	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B/010F1001.D
Report Date: 06/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 010F1001.D
Analysis Type: NONE

Injection Date: 26-JUN-2009 21:40
Lab Sample ID: OPP SS GSV0633
Method File: \\DenSvr03\Public\chem\GCS\GC_D2

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
22 Merphos	2.0000	1.6146	19.3	15.0	<-
40 Total Demeton	2.0000	2.2483	12.4	15.0	

Average %D = 24.2

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B/016F1601.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i Injection Date: 30-JUN-2009 23:58
Lab File ID: 016F1601.D Lab Sample ID: OPP L5 GSV0635
Analysis Type: NONE Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\06

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
1	o,o,o-TEPT	3.0000	2.7723	7.6	15.0
2	Dichlorvos	3.0000	2.6730	10.9	15.0
3	Mevinphos	3.0000	2.8232	5.9	15.0
4	Chlormefos	3.0000	3.1451	4.8	15.0
5	Thionazin	3.0000	2.9579	1.4	15.0
6	Demeton-O	0.9750	0.9032	7.4	15.0
7	Ethoprop	3.0000	3.0852	2.8	15.0
8	Naled	3.0000	2.5947	13.5	15.0
9	Sulfotepp	3.0000	3.1503	5.0	15.0
10	Phorate	3.0000	2.9700	1.0	15.0
11	Dimethoate	3.0000	2.9654	1.2	15.0
12	Demeton-S	2.0400	2.1190	3.9	15.0
13	Simazine	3.0000	2.9385	2.1	15.0
14	Atrazine	3.0000	3.2208	7.4	15.0
15	propazine	3.0000	3.1414	4.7	15.0
17	Disulfoton	3.0000	3.0303	1.0	15.0
16	Diazinon	3.0000	3.0626	2.1	15.0
18	Methyl Parathion	3.0000	3.1469	4.9	15.0
19	Ronnel	3.0000	2.6769	10.8	15.0
20	Malathion	3.0000	3.0648	2.2	15.0
21	Fenthion	3.0000	3.0279	0.9	15.0
22	Parathion	3.0000	3.1691	5.6	15.0
23	Chlorpyrifos	3.0000	3.0843	2.8	15.0
24	Trichloronate	3.0000	3.1824	6.1	15.0
25	Anilazine	3.0000	2.6149	12.8	15.0
148	Merphos-A (Merphos)	3.0000	3.1037	3.5	999.0
26	Tetrachlorvinphos (Stirophos)	3.0000	2.5874	13.8	15.0
28	Tokuthion	3.0000	3.2174	7.2	15.0
149	Merphos-B (Merphos Oxone)	3.0000	3.8489	28.3	999.0
29	Carbophenothion-methyl	3.0000	3.0763	2.5	15.0
29	Fensulfothion	3.0000	2.9388	2.0	15.0
30	Bolstar / Famphur	6.0000	5.9973	0.0	15.0
32	Carbophenothion	3.0000	3.0314	1.0	15.0
31	Triphenyl phosphate	3.0000	3.1662	5.5	15.0
34	Phosmet	3.0000	2.8691	4.4	15.0
32	EPN	3.0000	3.2340	7.8	15.0
33	Azinphos-methyl	3.0000	2.7279	9.1	15.0
35	Azinphos-ethyl	3.0000	2.9005	3.3	15.0
36	Coumaphos	3.0000	3.1738	5.8	15.0

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Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B/016F1601.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 016F1601.D
Analysis Type: NONE

Injection Date: 30-JUN-2009 23:58
Lab Sample ID: OPP L5 GSV0635
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\06

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 Merphos	3.0000	3.2773	9.2	15.0
40 Total Demeton	3.0000	3.0223	0.7	15.0

Average %D = 5.68

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B/016F1601.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 016F1601.D
Analysis Type: NONE

Injection Date: 30-JUN-2009 23:58
Lab Sample ID: OPP L5 GSV0635
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\06

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	3.0000	2.6368	12.1	15.0	
2	Dichlorvos	3.0000	2.6533	11.6	15.0	
3	Chlormefos	3.0000	2.7861	7.1	15.0	
4	Mevinphos	3.0000	2.9664	1.1	15.0	
5	Demeton-O	0.9750	0.9882	1.4	15.0	
6	Thionazin	3.0000	2.9204	2.7	15.0	
7	Ethoprop	3.0000	2.7651	7.8	15.0	
8	Phorate	3.0000	3.1758	5.9	15.0	
10	Naled	3.0000	2.7153	9.5	15.0	
146	Sulfotepp	3.0000	2.9573	1.4	15.0	
10	Simazine	3.0000	2.8191	6.0	15.0	
12	Diazinon	3.0000	2.9603	1.3	15.0	
150	Atrazine	3.0000	3.1422	4.7	15.0	
13	Propazine	3.0000	3.1299	4.3	15.0	
14	Disulfoton	3.0000	3.0092	0.3	15.0	
15	Demeton-S	2.0400	2.0058	1.7	15.0	
16	Dimethoate	3.0000	2.9403	2.0	15.0	
17	Ronnel	3.0000	2.6683	11.1	15.0	
148	Merphos-A (Merphos)	3.0000	3.0026	0.1	999.0	
18	Chlorpyrifos	3.0000	2.9514	1.6	15.0	
19	Fenthion	3.0000	2.9426	1.9	15.0	
20	Trichloronate	3.0000	2.8904	3.7	15.0	
21	Anilazine	3.0000	2.0686	31.0	15.0	<-
23	Methyl Parathion	3.0000	3.0026	0.1	15.0	
24	Malathion	3.0000	3.0056	0.2	15.0	
25	Tokuthion	3.0000	2.9507	1.6	15.0	
26	Parathion	3.0000	3.0408	1.4	15.0	
149	Merphos-B (Merphos Oxone)	3.0000	3.0460	1.5	999.0	
27	Tetrachlorvinphos (stirophos)	3.0000	2.6185	12.7	15.0	
28	Carbophenothion methyl	3.0000	3.0418	1.4	15.0	
28	Bolstar	3.0000	3.1319	4.4	15.0	
30	Carbophenothion	3.0000	3.4194	14.0	15.0	
29	Triphenyl phosphate	3.0000	3.1849	6.2	15.0	
30	Fensulfothion	3.0000	2.7512	8.3	15.0	
35	Phosmet / EPN	6.0000	5.6974	5.0	15.0	
33	Famphur	3.0000	2.7294	9.0	15.0	
34	Azinphos-methyl	3.0000	2.5817	13.9	15.0	
35	Azinphos-ethyl	3.0000	2.8420	5.3	15.0	
36	Coumaphos	3.0000	3.0500	1.7	15.0	

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Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B/016F1601.D
eport Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

nstrument ID: GC_D2.i Injection Date: 30-JUN-2009 23:58
ab File ID: 016F1601.D Lab Sample ID: OPP L5 GSV0635
nalysis Type: NONE Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\06

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
22 Merphos	3.0000	2.9883	0.4	15.0
40 Total Demeton	3.0000	2.9940	0.2	15.0

Average %D = 5.31

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B/024F2401.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i Injection Date: 01-JUL-2009 03:37
Lab File ID: 024F2401.D Lab Sample ID: OPP L5 GSV0635
Analysis Type: NONE Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\06

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	3.0000	2.8238	5.9	15.0	
2	Dichlorvos	3.0000	2.6647	11.2	15.0	
3	Mevinphos	3.0000	2.6783	10.7	15.0	
4	Chlormefos	3.0000	3.0124	0.4	15.0	
5	Thionazin	3.0000	2.9851	0.5	15.0	
6	Demeton-O	0.9750	0.9365	3.9	15.0	
7	Ethoprop	3.0000	3.2757	9.2	15.0	
8	Naled	3.0000	2.6708	11.0	15.0	
9	Sulfotepp	3.0000	3.2408	8.0	15.0	
10	Phorate	3.0000	3.1880	6.3	15.0	
11	Dimethoate	3.0000	3.1315	4.4	15.0	
12	Demeton-S	2.0400	2.2708	11.3	15.0	
13	Simazine	3.0000	3.4613	15.4	15.0	<-
14	Atrazine	3.0000	3.4039	13.5	15.0	
15	propazine	3.0000	3.2361	7.9	15.0	
17	Disulfoton	3.0000	2.9931	0.2	15.0	
16	Diazinon	3.0000	3.1975	6.6	15.0	
18	Methyl Parathion	3.0000	3.1575	5.3	15.0	
19	Ronnel	3.0000	3.0628	2.1	15.0	
20	Malathion	3.0000	3.1102	3.7	15.0	
21	Fenthion	3.0000	3.1014	3.4	15.0	
22	Parathion	3.0000	3.1602	5.3	15.0	
23	Chlorpyrifos	3.0000	3.1772	5.9	15.0	
24	Trichloronate	3.0000	3.2378	7.9	15.0	
25	Anilazine	3.0000	2.4443	18.5	15.0	<-
148	Merphos-A (Merphos)	3.0000	3.2869	9.6	999.0	
26	Tetrachlorvinphos (Stirophos)	3.0000	2.6841	10.5	15.0	
28	Tokuthion	3.0000	3.2593	8.6	15.0	
149	Merphos-B (Merphos Oxone)	3.0000	3.6071	20.2	999.0	
29	Carbophenothion-methyl	3.0000	3.0811	2.7	15.0	
29	Fensulfothion	3.0000	2.8678	4.4	15.0	
30	Bolstar / Famphur	6.0000	6.0135	0.2	15.0	
32	Carbophenothion	3.0000	3.0327	1.1	15.0	
31	Triphenyl phosphate	3.0000	3.2408	8.0	15.0	
34	Phosmet	3.0000	2.8477	5.1	15.0	
32	EPN	3.0000	3.1699	5.7	15.0	
33	Azinphos-methyl	3.0000	2.7448	8.5	15.0	
35	Azinphos-ethyl	3.0000	2.9955	0.1	15.0	
36	Coumaphos	3.0000	2.9444	1.9	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B/024F2401.D
eport Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

nstrument ID: GC_D2.i Injection Date: 01-JUL-2009 03:37
ab File ID: 024F2401.D Lab Sample ID: OPP L5 GSV0635
nalysis Type: NONE Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\06

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 Merphos	3.0000	3.3705	12.4	15.0
40 Total Demeton	3.0000	3.2073	6.9	15.0

Average %D = 6.94

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Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B/024F2401.D
eport Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

nstrument ID: GC_D2.i
ab File ID: 024F2401.D
nalysis Type: NONE

Injection Date: 01-JUL-2009 03:37
Lab Sample ID: OPP L5 GSV0635
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\06

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
1	o,o,o-TEPT	3.0000	2.9074	3.1	15.0
2	Dichlorvos	3.0000	2.9194	2.7	15.0
3	Chlormefos	3.0000	3.2045	6.8	15.0
4	Mevinphos	3.0000	3.1521	5.1	15.0
5	Demeton-O	0.9750	1.0170	4.3	15.0
6	Thionazin	3.0000	3.0797	2.7	15.0
7	Ethoprop	3.0000	2.9643	1.2	15.0
8	Phorate	3.0000	3.2740	9.1	15.0
10	Naled	3.0000	2.7022	9.9	15.0
146	Sulfotepp	3.0000	3.0983	3.3	15.0
10	Simazine	3.0000	3.0104	0.3	15.0
12	Diazinon	3.0000	3.0986	3.3	15.0
150	Atrazine	3.0000	2.8489	5.0	15.0
13	Propazine	3.0000	2.9660	1.1	15.0
14	Disulfoton	3.0000	3.2392	8.0	15.0
15	Demeton-S	2.0400	2.2807	11.8	15.0
16	Dimethoate	3.0000	2.6773	10.8	15.0
17	Ronnel	3.0000	2.8706	4.3	15.0
148	Merphos-A (Merphos)	3.0000	3.0536	1.8	999.0
18	Chlorpyrifos	3.0000	3.2230	7.4	15.0
19	Fenthion	3.0000	3.0566	1.9	15.0
20	Trichloronate	3.0000	3.0477	1.6	15.0
21	Anilazine	3.0000	2.7239	9.2	15.0
23	Methyl Parathion	3.0000	2.9473	1.8	15.0
24	Malathion	3.0000	3.1918	6.4	15.0
25	Tokuthion	3.0000	3.1879	6.3	15.0
26	Parathion	3.0000	3.2449	8.2	15.0
149	Merphos-B (Merphos Oxone)	3.0000	3.4902	16.3	999.0
27	Tetrachlorvinphos (stirophos)	3.0000	2.7179	9.4	15.0
28	Carbophenothion methyl	3.0000	3.1041	3.5	15.0
28	Bolstar	3.0000	3.2995	10.0	15.0
30	Carbophenothion	3.0000	3.4309	14.4	15.0
29	Triphenyl phosphate	3.0000	3.1604	5.3	15.0
30	Fensulfothion	3.0000	2.7651	7.8	15.0
35	Phosmet / EPN	6.0000	5.8050	3.2	15.0
33	Famphur	3.0000	2.9974	0.1	15.0
34	Azinphos-methyl	3.0000	2.8003	6.7	15.0
35	Azinphos-ethyl	3.0000	2.8809	4.0	15.0
36	Coumaphos	3.0000	3.0953	3.2	15.0

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B/024F2401.D
eport Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

nstrument ID: GC_D2.i
ab File ID: 024F2401.D
nalysis Type: NONE

Injection Date: 01-JUL-2009 03:37
Lab Sample ID: OPP L5 GSV0635
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\06

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
22 Merphos	3.0000	3.3606	12.0	15.0
40 Total Demeton	3.0000	3.2977	9.9	15.0

Average %D = 5.93

EM\1\SEQUENCE\062609.S

Sequence Table (Front Injector):

Quantification Part:

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	Vial 1	PRIMER				
2	Vial 2	HEXANE				
3	Vial 3	OPP L7 GSV0634				
4	Vial 4	OPP L6 GSV0637				
5	Vial 5	OPP L5 GSV0635				
6	Vial 6	OPP L4 GSV0638				
7	Vial 7	OPP L3 GSV0639				
8	Vial 8	OPP L2 GSV0640				
9	Vial 9	OPP L1 GSV0641				
10	Vial 10	OPP SS GSV0633				
11	Vial 11	GSV075309 SPK				
12	Vial 12	LE2931AA,MB				
13	Vial 13	LE2931AC,LCS				
14	Vial 14	LE2931AD,LCSD				
15	Vial 15	LEQA91AC,222-15				10
16	Vial 16	LEQA91AC,222-15				3
17	Vial 17	LEQCQ1AC,222-18				2
18	Vial 18	LERD61AD,377-1				
19	Vial 19	LERD81AH,377-3				
20	Vial 20	LERN71AF,115-1				
21	Vial 21	LERPQ1AF,115-2				
22	Vial 22	LERPX1AF,115-3				
23	Vial 23	LE1F91AJ,138-1				
24	Vial 24	OPP L5 GSV0635				
25	Vial 25	LE29M1AA,MB				
26	Vial 26	LE29M1AC,LCS				
27	Vial 27	LE29M1AD,LCSD				
28	Vial 28	LEQA91AA,222-15				10
29	Vial 29	LEQA91AA,222-15				3
30	Vial 30	LEQCQ1AA,222-18				2
31	Vial 31	LFARC1AA,MB				
32	Vial 32	LFARC1AC,LCS				
33	Vial 33	LFARC1AD,LCSD				
34	Vial 34	LEKL02AA,185-1				
35	Vial 35	LE29L1AA,MB				
36	Vial 36	LE29L1AC,LCS				
37	Vial 37	LE29L1AD,LCSD				
38	Vial 38	LERCV1AA,370-1				
39	Vial 39	LEWJG1AA,143-1				
40	Vial 40	OPP L5 GSV0635				
41	Vial 41	LE5PX1AA,MB				
42	Vial 42	LE5PX1AC,LCS				
43	Vial 43	LE5PX1AD,LCSD				
44	Vial 44	LE39F1AA,179-1				
45	Vial 45	LE3PF1AA,179-2				
46	Vial 46	LE39L1AA,179-3				
47	Vial 47	LFARL1AA,MB				
48	Vial 48	LFARL1AC,LCS				
49	Vial 49	LFARL1AD,LCSD				
50	Vial 50	LEKLE2AE,180-2				
51	Vial 51	LEKLF2AE,180-3				
52	Vial 52	LEKLL2AE,180-4				
53	Vial 53	LEKLQ2AE,180-5				
54	Vial 54	LENR72AD,322-1				
55	Vial 55	LEPG32AJ,161-1				
56	Vial 56	OPP L5 GSV0635				
57	Vial 57	LFD4N1AA,MB				
58	Vial 58	LFD4N1AC,LCS				

RR

EM\1\SEQUENCE\062609.S

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
59	Vial 59	LFD4N1AD,LCSD				
60	Vial 60	LE3041AJ,158-1				
61	Vial 61	LFD4W1AA,MB				
62	Vial 62	LFD4W1AC,LCS				
63	Vial 63	LFD4W1AD,LCSD				
64	Vial 64	LE7EE1AA,266-2				
65	Vial 65	LE9Q61AA,216-2				
66	Vial 66	LE9RA1AA,216-3				
67	Vial 67	LFC4Q1AD,199-2				
68	Vial 68	OPP L5 GSV0635				
69	Vial 69	LFAN01AA,MB				
70	Vial 70	LFAN01AC,LCS				
71	Vial 71	LFAN01AD,LCSD				
72	Vial 72	LE4291AA,273-1				
73	Vial 73	LE4291AD,273-1S				
74	Vial 74	LE4291AE,273-1D				
75	Vial 75	LE9PJ1AA,215-1				
76	Vial 76	OPP L5 GSV0635				
77	Vial 77	OPP L1 GSV0641				
78	Vial 100	HEXANE/ACETONE				

Sequence Table (Back Injector):

No entries - empty table!

EM\1\SEQUENCE\063009.S

Sequence Table (Front Injector):

Quantification Part:

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	Vial 1	PRIMER				
2	Vial 2	HEXANE				
3	Vial 3	OPP L5 GSV0635				
4	Vial 4	LE2931AA,MB				
5	Vial 5	LE2931AC,LCS				
6	Vial 6	LE2931AD,LCSD				
7	Vial 7	LEQA91AC,222-15				
8	Vial 8	LEQA92AC,222-15				
9	Vial 9	LEQCQ1AC,222-18				
10	Vial 10	LERD61AD,377-1				
11	Vial 11	LERD81AH,377-3				
12	Vial 12	LERN71AF,115-1				
13	Vial 13	LERPQ1AF,115-2				
14	Vial 14	LERPX1AF,115-3				
15	Vial 15	LE1F91AJ,138-1				
16	Vial 16	OPP L5 GSV0635				
17	Vial 17	LERCV1AA,370-1				
18	Vial 18	LEWJG1AA,143-1				
19	Vial 19	LFM2P1AA,MB				
20	Vial 20	LFM2P1AC,LCS				
21	Vial 21	LFLLR1AA,221-1				
22	Vial 22	LFLLR1AE,221-1S				
23	Vial 23	LFLLR1AF,221-1D				
24	Vial 24	OPP L5 GSV0635				
25	Vial 25	LFHPJ1AA,MB				
26	Vial 26	LFHPJ1AC,LCS				
27	Vial 27	LFC4G1AA,197-1				
28	Vial 28	LFC4G1AD,197-1S				
29	Vial 29	LFC4G1AE,197-1D				
30	Vial 30	LFC4M1AA,198-1				
31	Vial 31	LFAN01AA,MB				
32	Vial 32	LFAN01AC,LCS				
33	Vial 33	LFAN01AD,LCSD				
34	Vial 34	LE4291AA,273-1				
35	Vial 35	LE4291AD,273-1S				
36	Vial 36	LE4291AE,273-1D				
37	Vial 37	LE9PJ1AA,215-1				
38	Vial 38	OPP L5 GSV0635				
39	Vial 39	OPP L1 GSV0641				
40	Vial 100	HEXANE/ACETONE				

Sequence Table (Back Injector):

No entries - empty table!

TestAmerica

Total Metals

CLP-Like Forms

Lot ID: D9F250221

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 001

Total Metals
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9F250221

Lab Code: _____ Case No.: _____ SAS No.: _____

SOW No.: _____

Sample ID.	Lab Sample No.
M-125B	D9F250221-001
M-125BMS MS	D9F250221-001S
M-125BMSD MSD	D9F250221-001SD

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

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

Signature: Yongming Ding Name: Yongming Ding

Date: 7/7/2009 Title: Analyst V

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-125B
Lot/SDG Number:	D9F250221	**Lab Sample ID:**	D9F250221-001
Matrix:	WATER	**Lab WorkOrder:**	LFLLR
% Moisture:	N/A	**Date/Time Collected:**	06/23/09 10:14
Basis:	Wet	**Date/Time Received:**	06/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/29/09 06:00
QC Batch ID:	9177105	**Date/Time Analyzed:**	07/02/09 04:08
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**62**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

Total Metals

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic	40.0	39.3	98.2	50.0	50.1	100.2	50.0	100.0	M
Selenium	40.0	40.1	100.2	50.0	49.2	98.4	48.3	96.6	M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Total Metals
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F250221

AA CRDL Standard Source: _____

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				1.00	0.960	96.0		
Selenium				2.00			2.094	104.7

Comments:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F250221	**Lab Sample ID:**	D9F260000-105B
Matrix:	WATER	**Lab WorkOrder:**	LFM05
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/29/09 06:00
QC Batch ID:	9177105	**Date/Time Analyzed:**	07/02/09 04:01
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	0.21	0.21	5.0	U
7782-49-2	Selenium	0.70	0.70	5.0	U

Total Metals

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	0.210	U	0.210	U	0.210	U			0.21	U	M
Selenium	0.700	U	0.700	U	0.700	U			0.70	U	M

Comments:

Total Metals

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

ICP ID Number: Agilent 7500 ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic	0.0	100.0	0.12	103.10	103.1			
Selenium	0.0	100.0	-0.42	108.50	108.5			

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-125BMS
Lot/SDG Number:	D9F250221	**MS Lab Sample ID:**	D9F250221-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LFLLR
% Moisture:	N/A	**Date/Time Collected:**	06/23/09 10:14
Basis:	Wet	**Date/Time Received:**	06/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/29/09 06:00
QC Batch ID:	9177105	**Date/Time Analyzed:**	07/02/09 04:18
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	62		100		97		85 - 117
Selenium	40.0	7.0	U	39.8		90		77 - 122

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-125BMSD
Lot/SDG Number:	D9F250221	**MSD Lab Sample ID:**	D9F250221-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LFLLR
% Moisture:	N/A	**Date/Time Collected:**	06/23/09 10:14
Basis:	Wet	**Date/Time Received:**	06/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/29/09 06:00
QC Batch ID:	9177105	**Date/Time Analyzed:**	07/02/09 04:21
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	62		102		101		1.6		85 - 117	20
Selenium	40.0	7.0	U	48.2		111		19		77 - 122	20

Total Metals
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

M-125B PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Arsenic	75 - 125	202.800		6.184		200.00	98.3		M
Selenium	75 - 125	192.800		0.700	U	200.00	96.4		M

Comments: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F250221	**Lab Sample ID:**	D9F260000-105C
Matrix:	WATER	**Lab WorkOrder:**	LFM05
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/29/09 06:00
QC Batch ID:	9177105	**Date/Time Analyzed:**	07/02/09 04:04
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	39.8	100		85 - 117
Selenium	40.0	38.3	96		77 - 122

Total Metals

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

M-125B SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	6.184		5.900	B	4.6		M
Selenium	0.070	U	3.500	U			M

Comments: _____

Total Metals

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

ICP ID Number: Agilent 7500 Date: 4/23/2009

Flame AA ID Number: _____

Furnace AA ID Number:

Analyte	Isotope	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Arsenic	75		5.000	0.2100	M
Selenium	78		5.000	0.7000	M

Comments: _____

Total Metals
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

ICP ID Number: Agilent 7500 Date: 4/7/2009

Analyte	Integ. Time (Sec.)	Concentration ug/L	M
Arsenic	0.001	3600	M
Selenium	0.001	3600	M

Comments: _____

Total Metals

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-125B	6/29/2009	50.0	50.0
M-125BMS MS	6/29/2009	50.0	50.0
M-125BMSD MSD	6/29/2009	50.0	50.0
MB9177105	6/29/2009	50.0	50.0
Check Sample	6/29/2009	50.0	50.0

Comments:

Total Metals
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F250221

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/1/2009 End Date: 7/2/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL BLANK	1.00	20:59				X														X						
100 PPB	1.00	21:02				X														X						
ICV	1.00	21:06				X														X						
ZZZZZZ	1.00	21:09																								
ICB	1.00	21:12				X														X						
RL STD	1.00	21:16				X																				
ZZZZZZ	1.00	21:19																								
ALTSE	1.00	21:23																		X						
ZZZZZZ	1.00	21:26																								
ZZZZZZ	1.00	21:29																								
ZZZZZZ	1.00	21:33																								
LR	1.00	21:36				X														X						
ICSA	1.00	22:50				X														X						
ICSAB	1.00	22:54				X														X						
CAL BLANK	1.00	03:10				X														X						
100 PPB	1.00	03:13				X														X						
CCV	1.00	03:51				X														X						
CCB	1.00	03:54				X														X						
ZZZZZZ	1.00	03:57																								
MB9177105	1.00	04:01				X														X						
Check Sample	1.00	04:04				X														X						
M-125B	10.00	04:08				X														X						
M-125B SER	50.00	04:11				X														X						
M-125B PDS	1.00	04:14				X														X						
M-125BMS MS	10.00	04:18				X														X						
M-125BMSD MSD	10.00	04:21				X														X						
CCV	1.00	04:25				X														X						
CCB	1.00	04:28				X														X						

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

TestAmerica

Dissolved Metals

CLP-Like Forms

Lot ID: D9F250221

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 002

TestAmerica

DISSOLVED Metals

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9F250221

Lab Code: _____ Case No.: _____ SAS No.: _____

SOW No.: _____

Sample ID.	Lab Sample No.
M-125BDISS	D9F250221-002
M-125BMSDDISS MSD	D9F250221-002SD
M-125BMSDISS MS	D9F250221-002S

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

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

Signature: Yongming Ding Name: Yongming Ding

Date: 7/7/2009 Title: Analyst V

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-125BDISS
Lot/SDG Number:	D9F250221	**Lab Sample ID:**	D9F250221-002
Matrix:	WATER	**Lab WorkOrder:**	LFLL4
% Moisture:	N/A	**Date/Time Collected:**	06/23/09 10:14
Basis:	Wet	**Date/Time Received:**	06/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/29/09 06:00
QC Batch ID:	9177109	**Date/Time Analyzed:**	07/02/09 03:34
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**57**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

DISSOLVED Metals

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	40.0	39.3	98.2	50.0	50.4	100.8	50.1	100.2	M
Selenium	40.0	40.1	100.2	50.0	49.6	99.2	49.2	98.4	M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

DISSOLVED Metals
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F250221

AA CRDL Standard Source: _____

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				1.00	0.960	96.0		
Selenium				2.00			2.094	104.7

Comments:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F250221	**Lab Sample ID:**	D9F260000-109B
Matrix:	WATER	**Lab WorkOrder:**	LFM1C
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/29/09 06:00
QC Batch ID:	9177109	**Date/Time Analyzed:**	07/02/09 03:27
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	0.21	0.21	5.0	U
7782-49-2	Selenium	0.70	0.70	5.0	U

TestAmerica

DISSOLVED Metals

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	0.210	U	0.210	U	0.210	U			0.21	U	M
Selenium	0.700	U	0.700	U	0.700	U			0.70	U	M

Comments:

DISSOLVED Metals

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

ICP ID Number: Agilent 7500 ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic	0.0	100.0	0.12	103.10	103.1			
Selenium	0.0	100.0	-0.42	108.50	108.5			

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-125BMSDISS
Lot/SDG Number:	D9F250221	**MS Lab Sample ID:**	D9F250221-002S
Matrix:	WATER	**MS Lab WorkOrder:**	LFLL4
% Moisture:	N/A	**Date/Time Collected:**	06/23/09 10:14
Basis:	Wet	**Date/Time Received:**	06/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/29/09 06:00
QC Batch ID:	9177109	**Date/Time Analyzed:**	07/02/09 03:44
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	57		99.3		106		85 - 117
Selenium	40.0	7.0	U	42.1		99		77 - 122

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-125BMSDDISS
Lot/SDG Number:	D9F250221	**MSD Lab Sample ID:**	D9F250221-002D
Matrix:	WATER	**MSD Lab WorkOrder:**	LFLL4
% Moisture:	N/A	**Date/Time Collected:**	06/23/09 10:14
Basis:	Wet	**Date/Time Received:**	06/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/29/09 06:00
QC Batch ID:	9177109	**Date/Time Analyzed:**	07/02/09 03:47
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	57		99.5		106		0.17		85 - 117	20
Selenium	40.0	7.0	U	48.7		116		15		77 - 122	20

DISSOLVED Metals
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

M-125BDISS PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Arsenic	75 - 125	203.400		5.690		200.00	98.9		M
Selenium	75 - 125	194.600		0.700	U	200.00	97.3		M

Comments: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F250221	**Lab Sample ID:**	D9F260000-109C
Matrix:	WATER	**Lab WorkOrder:**	LFM1C
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/29/09 06:00
QC Batch ID:	9177109	**Date/Time Analyzed:**	07/02/09 03:30
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	40.9	102		85 - 117
Selenium	40.0	39.5	99		77 - 122

DISSOLVED Metals

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

M-125BDISS SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	5.690		5.570	B	2.1		M
Selenium	0.070	U	3.500	U			M

Comments: _____

DISSOLVED Metals

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

ICP ID Number: Agilent 7500 Date: 4/23/2009

Flame AA ID Number: _____

Furnace AA ID Number:

Analyte	Isotope	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Arsenic	75		5.000	0.2100	M
Selenium	78		5.000	0.7000	M

Comments: _____

DISSOLVED Metals
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

ICP ID Number: Agilent 7500 Date: 4/7/2009

Analyte	Integ. Time (Sec.)	Concentration ug/L	M
Arsenic	0.001	3600	M
Selenium	0.001	3600	M

Comments: _____

DISSOLVED Metals

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F250221

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-125BDISS	6/29/2009	50.0	50.0
M-125BMSDISS MS	6/29/2009	50.0	50.0
M-125BMSDDISS MSD	6/29/2009	50.0	50.0
MB9177109	6/29/2009	50.0	50.0
Check Sample	6/29/2009	50.0	50.0

Comments:

DISSOLVED Metals
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F250221

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/1/2009 End Date: 7/2/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL BLANK	1.00	20:59				X															X						
100 PPB	1.00	21:02				X															X						
ICV	1.00	21:06				X															X						
ZZZZZZ	1.00	21:09																									
ICB	1.00	21:12				X															X						
RL STD	1.00	21:16				X																					
ZZZZZZ	1.00	21:19																									
ALTSE	1.00	21:23																			X						
ZZZZZZ	1.00	21:26																									
ZZZZZZ	1.00	21:29																									
ZZZZZZ	1.00	21:33																									
LR	1.00	21:36				X															X						
ICSA	1.00	22:50				X															X						
ICSAB	1.00	22:54				X															X						
CAL BLANK	1.00	03:10				X															X						
100 PPB	1.00	03:13				X															X						
CCV	1.00	03:17				X															X						
CCB	1.00	03:20				X															X						
ZZZZZZ	1.00	03:24																									
MB9177109	1.00	03:27				X															X						
Check Sample	1.00	03:30				X															X						
M-125BDISS	10.00	03:34				X															X						
M-125BDISS SER	50.00	03:37				X															X						
M-125BDISS PDS	1.00	03:41				X															X						
M-125BMSDISS MS	10.00	03:44				X															X						
M-125BMSDDISS MSD	10.00	03:47				X															X						
CCV	1.00	03:51				X															X						
CCB	1.00	03:54				X															X						

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

TestAmerica

Total Metals

CLP-Like Forms

Lot ID: D9F260277

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 001 and 002

TestAmerica

Total Metals
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9F260277

Lab Code: _____ Case No.: _____ SAS No.: _____

SOW No.: _____

Sample ID.	Lab Sample No.
M-17AB	D9F260277-002
M-22AB	D9F260277-001
M-22AB MS	D9F260277-001S
M-22AB MSD	D9F260277-001SD

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

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

Signature: Yongming Ding Name: Yongming Ding

Date: 7/8/2009 Title: Analyst V

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-22AB
Lot/SDG Number:	D9F260277	**Lab Sample ID:**	D9F260277-001
Matrix:	WATER	**Lab WorkOrder:**	LFP1G
% Moisture:	N/A	**Date/Time Collected:**	06/24/09 09:06
Basis:	Wet	**Date/Time Received:**	06/26/09 09:15
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:07
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**100**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-17AB
Lot/SDG Number:	D9F260277	**Lab Sample ID:**	D9F260277-002
Matrix:	WATER	**Lab WorkOrder:**	LFP1K
% Moisture:	N/A	**Date/Time Collected:**	06/24/09 12:35
Basis:	Wet	**Date/Time Received:**	06/26/09 09:15
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:34
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**85**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

Total Metals
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic	40.0	39.9	99.8	50.0	50.4	100.8	50.9	101.8	M
Selenium	40.0	38.3	95.8	50.0	51.9	103.8	51.0	102.0	M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Total Metals

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				50.0	47.6	95.2	49.6	99.2	M
Selenium				50.0	50.1	100.2	53.2	106.4	M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Total Metals
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F260277

AA CRDL Standard Source: _____

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				1.00	1.000	100.0		
Selenium				2.00			1.865	93.2

Comments:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F260277	**Lab Sample ID:**	D9F290000-262B
Matrix:	WATER	**Lab WorkOrder:**	LFRV2
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:00
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	0.21	0.21	5.0	U
7782-49-2	Selenium	0.70	0.70	5.0	U

Total Metals

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	0.210	U	0.210	U	0.210	U	0.210	U	0.21	U	M
Selenium	0.700	U	0.700	U	0.700	U	0.700	U	0.70	U	M

Comments:

Total Metals

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			0.210	U							M
Selenium			-0.720	B							M

Comments:

Total Metals
-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

ICP ID Number: Agilent 7500 ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic	0.0	100.0	0.16	99.21	99.2			
Selenium	0.0	100.0	-0.35	109.50	109.5			

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-22AB
Lot/SDG Number:	D9F260277	**MS Lab Sample ID:**	D9F260277-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LFP1G
% Moisture:	N/A	**Date/Time Collected:**	06/24/09 09:06
Basis:	Wet	**Date/Time Received:**	06/26/09 09:15
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:17
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	100		135		88		85 - 117
Selenium	40.0	7.0	U	44.0		106		77 - 122

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-22AB
Lot/SDG Number:	D9F260277	**MSD Lab Sample ID:**	D9F260277-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LFP1G
% Moisture:	N/A	**Date/Time Collected:**	06/24/09 09:06
Basis:	Wet	**Date/Time Received:**	06/26/09 09:15
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:31
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	100		131		78	N	2.9		85 - 117	20
Selenium	40.0	7.0	U	41.6		100		5.7		77 - 122	20

Total Metals
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.: M-22AB PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Arsenic	75 - 125	202.700		9.998		200.00	96.4		M
Selenium	75 - 125	203.000		0.700	U	200.00	101.5		M

Comments: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F260277	**Lab Sample ID:**	D9F290000-262C
Matrix:	WATER	**Lab WorkOrder:**	LFRV2
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:04
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	41.3	103		85 - 117
Selenium	40.0	41.5	104		77 - 122

Total Metals

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

M-22AB SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	9.998		9.750	B	2.5		M
Selenium	0.070	U	3.500	U			M

Comments: _____

Total Metals

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

ICP ID Number: Agilent 7500 Date: 4/23/2009

Flame AA ID Number: _____

Furnace AA ID Number:

Analyte	Isotope	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Arsenic	75		5.000	0.2100	M
Selenium	78		5.000	0.7000	M

Comments: _____

Total Metals
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

ICP ID Number: Agilent 7500 Date: 4/7/2009

Analyte	Integ. Time (Sec.)	Concentration ug/L	M
Arsenic	0.001	3600	M
Selenium	0.001	3600	M

Comments: _____

Total Metals

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-22AB	6/30/2009	50.0	50.0
M-22AB MS	6/30/2009	50.0	50.0
M-22AB MSD	6/30/2009	50.0	50.0
M-17AB	6/30/2009	50.0	50.0
MB9180262	6/30/2009	50.0	50.0
Check Sample	6/30/2009	50.0	50.0

Comments:

Total Metals
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F260277

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/2/2009 End Date: 7/3/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL BLANK	1.00	17:31				X															X						
100 PPB	1.00	17:34				X															X						
ICV	1.00	17:37				X															X						
ZZZZZZ	1.00	17:41																									
ICB	1.00	17:44				X															X						
RL STD	1.00	17:47				X															X						
ZZZZZZ	1.00	17:51																									
ZZZZZZ	1.00	17:54																									
ALTSE	1.00	17:58				X															X						
ZZZZZZ	1.00	18:01																									
ZZZZZZ	1.00	18:04																									
ZZZZZZ	1.00	18:08																									
LR	1.00	18:11				X															X						
CAL BLANK	1.00	02:42				X															X						
100 PPB	1.00	02:46				X															X						
CCV	1.00	02:49				X															X						
CCB	1.00	02:53				X															X						
ZZZZZZ	1.00	02:56																									
ICSA	1.00	02:59				X															X						
ICSAB	1.00	03:03				X															X						
CCV	1.00	03:50				X															X						
CCB	1.00	03:54				X															X						
ZZZZZZ	1.00	03:57																									
MB9180262	1.00	04:00				X															X						
Check Sample	1.00	04:04				X															X						
M-22AB	10.00	04:07				X															X						
M-22AB SER	50.00	04:11				X															X						
M-22AB PDS	1.00	04:14				X															X						
M-22AB MS	10.00	04:17				X															X						
CCV	1.00	04:21				X															X						
CCB	1.00	04:24				X															X						
ZZZZZZ	1.00	04:27																									
M-22AB MSD	10.00	04:31				X															X						

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Total Metals
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F260277

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/2/2009 End Date: 7/3/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
M-17AB	10.00	04:34				X															X						
ZZZZZZ	1.00	04:38																									
ZZZZZZ	1.00	04:41																									
ZZZZZZ	1.00	04:44																									
ZZZZZZ	1.00	04:48																									
CCV	1.00	04:51				X															X						
CCB	1.00	04:55				X															X						

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

TestAmerica

Dissolved Metals

CLP-Like Forms

Lot ID: D9F260277

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 003

TestAmerica

Dissolved Metals
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9F260277

Lab Code: _____ Case No.: _____ SAS No.: _____

SOW No.: _____

Sample ID.	Lab Sample No.
M-17ABDISS	D9F260277-003

Were ICP interelement corrections applied?	Yes/No	YES
Were ICP background corrections applied?	Yes/No	YES
If yes-were raw data generated before application of background corrections?	Yes/No	NO

Comments:

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

Signature: Yongming Ding Name: Yongming Ding

Date: 7/8/09 Title: Analyst V

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-17ABDISS
Lot/SDG Number:	D9F260277	**Lab Sample ID:**	D9F260277-003
Matrix:	WATER	**Lab WorkOrder:**	LFP1L
% Moisture:	N/A	**Date/Time Collected:**	06/24/09 12:35
Basis:	Wet	**Date/Time Received:**	06/26/09 09:15
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180268	**Date/Time Analyzed:**	07/03/09 03:26
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**87**	2.1	50	
7782-49-2	Selenium	**7.5**	7.0	50	B

Dissolved Metals
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic	40.0	39.9	99.8	50.0	50.4	100.8	48.5	97.0	M
Selenium	40.0	38.3	95.8	50.0	51.9	103.8	51.8	103.6	M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Dissolved Metals

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				50.0	50.9	101.8			M
Selenium				50.0	51.0	102.0			M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Dissolved Metals
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F260277

AA CRDL Standard Source: _____

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				1.00	1.000	100.0		
Selenium				2.00			1.865	93.2

Comments:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F260277	**Lab Sample ID:**	D9F290000-268B
Matrix:	WATER	**Lab WorkOrder:**	LFRWW
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180268	**Date/Time Analyzed:**	07/03/09 03:20
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	0.21	0.21	5.0	U
7782-49-2	Selenium	0.70	0.70	5.0	U

Dissolved Metals

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C		M
Arsenic	0.210	U	0.210	U	0.210	U	0.210	U	0.21	U		M
Selenium	0.700	U	0.700	U	-0.733	B	0.700	U	0.70	U		M

Comments:

Dissolved Metals

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

ICP ID Number: Agilent 7500 ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic	0.0	100.0	0.16	99.21	99.2			
Selenium	0.0	100.0	-0.35	109.50	109.5			

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	LAB MS/MSD
Lot/SDG Number:	D9F260277	**MS Lab Sample ID:**	D9F270154-003S
Matrix:	WATER	**MS Lab WorkOrder:**	LFQ11
% Moisture:	N/A	**Date/Time Collected:**	06/25/09 12:15
Basis:	Wet	**Date/Time Received:**	06/27/09 08:25
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180268	**Date/Time Analyzed:**	07/03/09 03:40
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	110		161		123	N	85 - 117
Selenium	40.0	7.0	U	37.2		93		77 - 122

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	LAB MS/MSD
Lot/SDG Number:	D9F260277	**MSD Lab Sample ID:**	D9F270154-003D
Matrix:	WATER	**MSD Lab WorkOrder:**	LFQ11
% Moisture:	N/A	**Date/Time Collected:**	06/25/09 12:15
Basis:	Wet	**Date/Time Received:**	06/27/09 08:25
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180268	**Date/Time Analyzed:**	07/03/09 03:43
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	110		165		132	N	2.4		85 - 117	20
Selenium	40.0	7.0	U	45.2		113		19		77 - 122	20

Dissolved Metals
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

INTRA-LAB QC PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Arsenic	75 - 125	204.300		11.220		200.00	96.5		M
Selenium	75 - 125	199.900		0.700	U	200.00	100.0		M

Comments: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F260277	**Lab Sample ID:**	D9F290000-268C
Matrix:	WATER	**Lab WorkOrder:**	LFRWW
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180268	**Date/Time Analyzed:**	07/03/09 03:23
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	42.6	107		85 - 117
Selenium	40.0	43.3	108		77 - 122

Dissolved Metals

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

INTRA-LAB QC SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	11.220		12.445	B	10.9		M
Selenium	0.070	U	3.500	U			M

Comments: _____

Dissolved Metals

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

ICP ID Number: Agilent 7500 Date: 4/23/2009

Flame AA ID Number: _____

Furnace AA ID Number:

Analyte	Isotope	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Arsenic	75		5.000	0.2100	M
Selenium	78		5.000	0.7000	M

Comments: _____

Form X - IN

Dissolved Metals
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

ICP ID Number: Agilent 7500 Date: 4/7/2009

Analyte	Integ. Time (Sec.)	Concentration ug/L	M
Arsenic	0.001	3600	M
Selenium	0.001	3600	M

Comments: _____

Dissolved Metals

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F260277

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-17ABDISS	6/30/2009	50.0	50.0
INTRA-LAB QC	6/30/2009	50.0	50.0
LAB MS	6/30/2009	50.0	50.0
LAB MSD	6/30/2009	50.0	50.0
MB9180268	6/30/2009	50.0	50.0
Check Sample	6/30/2009	50.0	50.0

Comments:

Dissolved Metals
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F260277

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/2/2009 End Date: 7/3/2009

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL BLANK	1.00	17:31				X															X						
100 PPB	1.00	17:34				X															X						
ICV	1.00	17:37				X															X						
ZZZZZZ	1.00	17:41																									
ICB	1.00	17:44				X															X						
RL STD	1.00	17:47				X																					
ZZZZZZ	1.00	17:51																									
ZZZZZZ	1.00	17:54																									
ALTSE	1.00	17:58																			X						
ZZZZZZ	1.00	18:01																									
ZZZZZZ	1.00	18:04																									
ZZZZZZ	1.00	18:08																									
LR	1.00	18:11				X															X						
CAL BLANK	1.00	02:42				X															X						
100 PPB	1.00	02:46				X															X						
CCV	1.00	02:49				X															X						
CCB	1.00	02:53				X															X						
ZZZZZZ	1.00	02:56																									
ICSA	1.00	02:59				X															X						
ICSAB	1.00	03:03				X															X						
WASH	1.00	03:06				X															X						
CCV	1.00	03:10				X															X						
CCB	1.00	03:13				X															X						
ZZZZZZ	1.00	03:16																									
MB9180268	1.00	03:20				X															X						
Check Sample	1.00	03:23				X															X						
M-17ABDISS	10.00	03:26				X															X						
INTRA-LAB QC	10.00	03:30				X															X						
INTRA-LAB QC SER	50.00	03:33				X															X						
INTRA-LAB QC PDS	1.00	03:37				X															X						
LAB MS	10.00	03:40				X															X						
LAB MSD	10.00	03:43				X															X						
ZZZZZZ	1.00	03:47																									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Dissolved Metals

-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F260277

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/2/2009 End Date: 7/3/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV	1.00	03:50				X															X						
CCB	1.00	03:54				X															X						

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

TestAmerica

Total Metals

CLP-Like Forms

Lot ID: D9F270153

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 001

TestAmerica

Total Metals

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc.

SDG No.: D9F270153

Lab Code: _____ Case No.: _____

SAS No.: _____

SOW No.: _____

Sample ID.	Lab Sample No.
M-64B	D9F270153-001

Were ICP interelement corrections applied?	Yes/No	YES
Were ICP background corrections applied?	Yes/No	YES
If yes-were raw data generated before application of background corrections?	Yes/No	NO

Comments:

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

Signature: Yongming Ding

Name: Yongming Ding

Date: 7/9/2009

Title: Analyst V

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-64B
Lot/SDG Number:	D9F270153	**Lab Sample ID:**	D9F270153-001
Matrix:	WATER	**Lab WorkOrder:**	LFQ02
% Moisture:	N/A	**Date/Time Collected:**	06/26/09 12:35
Basis:	Wet	**Date/Time Received:**	06/27/09 08:25
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:38
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**120**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

Total Metals

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270153

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic	40.0	39.9	99.8	50.0	50.4	100.8	50.9	101.8	M
Selenium	40.0	38.3	95.8	50.0	51.9	103.8	51.0	102.0	M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Total Metals
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270153

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				50.0	47.6	95.2	49.6	99.2	M
Selenium				50.0	50.1	100.2	53.2	106.4	M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Total Metals
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F270153

AA CRDL Standard Source: _____

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				1.00	1.000	100.0		
Selenium				2.00			1.865	93.2

Comments:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F270153	**Lab Sample ID:**	D9F290000-262B
Matrix:	WATER	**Lab WorkOrder:**	LFRV2
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:00
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	0.21	0.21	5.0	U
7782-49-2	Selenium	0.70	0.70	5.0	U

TestAmerica

Total Metals

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270153

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	0.210	U	0.210	U	0.210	U	0.210	U	0.21	U	M
Selenium	0.700	U	0.700	U	0.700	U	0.700	U	0.70	U	M

Comments:

Total Metals

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270153

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			0.210	U							M
Selenium			-0.720	B							M

Comments:

Total Metals
-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270153

ICP ID Number: Agilent 7500 ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic	0.0	100.0	0.16	99.21	99.2			
Selenium	0.0	100.0	-0.35	109.50	109.5			

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	LAB MS/MSD
Lot/SDG Number:	D9F270153	**MS Lab Sample ID:**	D9F260277-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LFP1G
% Moisture:	N/A	**Date/Time Collected:**	06/24/09 09:06
Basis:	Wet	**Date/Time Received:**	06/26/09 09:15
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:17
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	100		135		88		85 - 117
Selenium	40.0	7.0	U	44.0		106		77 - 122

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	LAB MS/MSD
Lot/SDG Number:	D9F270153	**MSD Lab Sample ID:**	D9F260277-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LFP1G
% Moisture:	N/A	**Date/Time Collected:**	06/24/09 09:06
Basis:	Wet	**Date/Time Received:**	06/26/09 09:15
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:31
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	100		131		78	N	2.9		85 - 117	20
Selenium	40.0	7.0	U	41.6		100		5.7		77 - 122	20

TestAmerica

Total Metals
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.: INTRA-LAB QC PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270153

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Arsenic	75 - 125	202.700		9.998		200.00	96.4		M
Selenium	75 - 125	203.000		0.700	U	200.00	101.5		M

Comments: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F270153	**Lab Sample ID:**	D9F290000-262C
Matrix:	WATER	**Lab WorkOrder:**	LFRV2
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:04
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	41.3	103		85 - 117
Selenium	40.0	41.5	104		77 - 122

Total Metals

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

INTRA-LAB QC SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270153

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	9.998		9.750	B	2.5		M
Selenium	0.700	U	3.500	U			M

Comments: _____

Total Metals

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270153

ICP ID Number: Agilent 7500 Date: 4/23/2009

Flame AA ID Number: _____

Furnace AA ID Number:

Analyte	Isotope	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Arsenic	75		5.000	0.2100	M
Selenium	78		5.000	0.7000	M

Comments: _____

Total Metals
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270153

ICP ID Number: Agilent 7500 Date: 4/7/2009

Analyte	Integ. Time (Sec.)	Concentration ug/L	M
Arsenic	0.001	3600	M
Selenium	0.001	3600	M

Comments: _____

Total Metals

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270153

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
INTRA-LAB QC	6/30/2009	50.0	50.0
LAB MS	6/30/2009	50.0	50.0
LAB MSD	6/30/2009	50.0	50.0
M-64B	6/30/2009	50.0	50.0
MB9180262	6/30/2009	50.0	50.0
Check Sample	6/30/2009	50.0	50.0

Comments:

Total Metals
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F270153

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/2/2009 End Date: 7/3/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL BLANK	1.00	17:31				X														X						
100 PPB	1.00	17:34				X														X						
ICV	1.00	17:37				X														X						
ZZZZZZ	1.00	17:41																								
ICB	1.00	17:44				X														X						
RL STD	1.00	17:47				X																				
ZZZZZZ	1.00	17:51																								
ZZZZZZ	1.00	17:54																								
ALTSE	1.00	17:58																		X						
ZZZZZZ	1.00	18:01																								
ZZZZZZ	1.00	18:04																								
ZZZZZZ	1.00	18:08																								
LR	1.00	18:11				X														X						
CAL BLANK	1.00	02:42				X														X						
100 PPB	1.00	02:46				X														X						
CCV	1.00	02:49				X														X						
CCB	1.00	02:53				X														X						
ICSA	1.00	02:59				X														X						
ICSAB	1.00	03:03				X														X						
CCV	1.00	03:50				X														X						
CCB	1.00	03:54				X														X						
ZZZZZZ	1.00	03:57																								
MB9180262	1.00	04:00				X														X						
Check Sample	1.00	04:04				X														X						
INTRA-LAB QC	10.00	04:07				X														X						
INTRA-LAB QC SER	50.00	04:11				X														X						
INTRA-LAB QC PDS	1.00	04:14				X														X						
LAB MS	10.00	04:17				X														X						
CCV	1.00	04:21				X														X						
CCB	1.00	04:24				X														X						
ZZZZZZ	1.00	04:27																								
LAB MSD	10.00	04:31				X														X						
ZZZZZZ	1.00	04:34																								

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Total Metals
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F270153

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/2/2009 End Date: 7/3/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
M-64B	10.00	04:38				X															X						
ZZZZZZ	1.00	04:41																									
ZZZZZZ	1.00	04:44																									
ZZZZZZ	1.00	04:48																									
CCV	1.00	04:51				X															X						
CCB	1.00	04:55				X															X						

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

TestAmerica

Total Metals

CLP-Like Forms

Lot ID: D9F270154

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 001, 002 and 004

TestAmerica

Total Metals
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9F270154

Lab Code: Case No.: SAS No.:

SOW No.:

Sample ID.	Lab Sample No.
M-13009AB	D9F270154-004
M-13AB	D9F270154-002
M-75B	D9F270154-001

Were ICP interelement corrections applied?	Yes/No	YES
Were ICP background corrections applied?	Yes/No	YES
If yes-were raw data generated before application of background corrections?	Yes/No	NO

Comments:

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

Signature: Yongming Ding Name: Yongming Ding

Date: 7/9/2009 Title: Analyst V

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-75B
Lot/SDG Number:	D9F270154	**Lab Sample ID:**	D9F270154-001
Matrix:	WATER	**Lab WorkOrder:**	LFQ1Q
% Moisture:	N/A	**Date/Time Collected:**	06/25/09 08:47
Basis:	Wet	**Date/Time Received:**	06/27/09 08:25
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:41
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**140**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-13AB
Lot/SDG Number:	D9F270154	**Lab Sample ID:**	D9F270154-002
Matrix:	WATER	**Lab WorkOrder:**	LFQ10
% Moisture:	N/A	**Date/Time Collected:**	06/25/09 12:15
Basis:	Wet	**Date/Time Received:**	06/27/09 08:25
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:44
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**120**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-13009AB
Lot/SDG Number:	D9F270154	**Lab Sample ID:**	D9F270154-004
Matrix:	WATER	**Lab WorkOrder:**	LFQ12
% Moisture:	N/A	**Date/Time Collected:**	06/25/09 12:15
Basis:	Wet	**Date/Time Received:**	06/27/09 08:25
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:48
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**120**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

Total Metals
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic	40.0	39.9	99.8	50.0	50.4	100.8	50.9	101.8	M
Selenium	40.0	38.3	95.8	50.0	51.9	103.8	51.0	102.0	M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Total Metals
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				50.0	47.6	95.2	49.6	99.2	M
Selenium				50.0	50.1	100.2	53.2	106.4	M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Total Metals
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F270154

AA CRDL Standard Source: _____

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				1.00	1.000	100.0		
Selenium				2.00			1.865	93.2

Comments:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F270154	**Lab Sample ID:**	D9F290000-262B
Matrix:	WATER	**Lab WorkOrder:**	LFRV2
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:00
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	0.21	0.21	5.0	U
7782-49-2	Selenium	0.70	0.70	5.0	U

Total Metals

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	0.210	U	0.210	U	0.210	U	0.210	U	0.21	U	M
Selenium	0.700	U	0.700	U	0.700	U	0.700	U	0.70	U	M

Comments:

Total Metals

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic			0.210	U							M
Selenium			-0.720	B							M

Comments:

Total Metals

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

ICP ID Number: Agilent 7500 ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic	0.0	100.0	0.16	99.21	99.2			
Selenium	0.0	100.0	-0.35	109.50	109.5			

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	LAB MS/MSD
Lot/SDG Number:	D9F270154	**MS Lab Sample ID:**	D9F260277-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LFP1G
% Moisture:	N/A	**Date/Time Collected:**	06/24/09 09:06
Basis:	Wet	**Date/Time Received:**	06/26/09 09:15
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:17
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	100		135		88		85 - 117
Selenium	40.0	7.0	U	44.0		106		77 - 122

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	LAB MS/MSD
Lot/SDG Number:	D9F270154	**MSD Lab Sample ID:**	D9F260277-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LFP1G
% Moisture:	N/A	**Date/Time Collected:**	06/24/09 09:06
Basis:	Wet	**Date/Time Received:**	06/26/09 09:15
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:31
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	100		131		78	N	2.9		85 - 117	20
Selenium	40.0	7.0	U	41.6		100		5.7		77 - 122	20

Total Metals
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.: INTRA-LAB QC PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Arsenic	75 - 125	202.700		9.998		200.00	96.4		M
Selenium	75 - 125	203.000		0.700	U	200.00	101.5		M

Comments: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F270154	**Lab Sample ID:**	D9F290000-262C
Matrix:	WATER	**Lab WorkOrder:**	LFRV2
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180262	**Date/Time Analyzed:**	07/03/09 04:04
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	41.3	103		85 - 117
Selenium	40.0	41.5	104		77 - 122

Total Metals

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

INTRA-LAB QC SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	9.998		9.750	B	2.5		M
Selenium	0.070	U	3.500	U			M

Comments: _____

Total Metals

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

ICP ID Number: Agilent 7500 Date: 4/23/2009

Flame AA ID Number: _____

Furnace AA ID Number:

Analyte	Isotope	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Arsenic	75		5.000	0.2100	M
Selenium	78		5.000	0.7000	M

Comments: _____

Form X - IN

Total Metals
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

ICP ID Number: Agilent 7500 Date: 4/7/2009

Analyte	Integ. Time (Sec.)	Concentration ug/L	M
Arsenic	0.001	3600	M
Selenium	0.001	3600	M

Comments: _____

Form XII - IN

Total Metals

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
INTRA-LAB QC	6/30/2009	50.0	50.0
LAB MS	6/30/2009	50.0	50.0
LAB MSD	6/30/2009	50.0	50.0
M-75B	6/30/2009	50.0	50.0
M-13AB	6/30/2009	50.0	50.0
M-13009AB	6/30/2009	50.0	50.0
MB9180262	6/30/2009	50.0	50.0
Check Sample	6/30/2009	50.0	50.0

Comments:

Total Metals
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F270154

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/2/2009 End Date: 7/3/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL BLANK	1.00	17:31				X															X						
100 PPB	1.00	17:34				X															X						
ICV	1.00	17:37				X															X						
ZZZZZZ	1.00	17:41																									
ICB	1.00	17:44				X															X						
RL STD	1.00	17:47				X																					
ZZZZZZ	1.00	17:51																									
ZZZZZZ	1.00	17:54																									
ALTSE	1.00	17:58																			X						
ZZZZZZ	1.00	18:01																									
ZZZZZZ	1.00	18:04																									
ZZZZZZ	1.00	18:08																									
LR	1.00	18:11				X															X						
CAL BLANK	1.00	02:42				X															X						
100 PPB	1.00	02:46				X															X						
CCV	1.00	02:49				X															X						
CCB	1.00	02:53				X															X						
ICSA	1.00	02:59				X															X						
ICSAB	1.00	03:03				X															X						
CCV	1.00	03:50				X															X						
CCB	1.00	03:54				X															X						
ZZZZZZ	1.00	03:57																									
MB9180262	1.00	04:00				X															X						
Check Sample	1.00	04:04				X															X						
INTRA-LAB QC	10.00	04:07				X															X						
INTRA-LAB QC SER	50.00	04:11				X															X						
INTRA-LAB QC PDS	1.00	04:14				X															X						
LAB MS	10.00	04:17				X															X						
CCV	1.00	04:21				X															X						
CCB	1.00	04:24				X															X						
ZZZZZZ	1.00	04:27																									
LAB MSD	10.00	04:31				X															X						
ZZZZZZ	1.00	04:34																									

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Total Metals
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F270154

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/2/2009 End Date: 7/3/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	04:38																										
M-75B	10.00	04:41				X															X							
M-13AB	10.00	04:44				X															X							
M-13009AB	10.00	04:48				X															X							
CCV	1.00	04:51				X															X							
CCB	1.00	04:55				X															X							

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

TestAmerica

Dissolved Metals

CLP-Like Forms

Lot ID: D9F270154

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 003 and 005

Dissolved Metals
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9F270154

Lab Code: Case No.: SAS No.:

SOW No.:

Sample ID.	Lab Sample No.
M-13009ABDISS	D9F270154-005
M-13ABDISS	D9F270154-003
M-13ABDISS MS	D9F270154-003S
M-13ABDISS MSD	D9F270154-003SD

Were ICP interelement corrections applied?	Yes/No	YES
Were ICP background corrections applied?	Yes/No	YES
If yes-were raw data generated before application of background corrections?	Yes/No	NO

Comments:

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

Signature: Yongming Ding Name: Yongming Ding

Date: 7/9/2009 Title: Analyst V

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-13ABDISS
Lot/SDG Number:	D9F270154	**Lab Sample ID:**	D9F270154-003
Matrix:	WATER	**Lab WorkOrder:**	LFQ11
% Moisture:	N/A	**Date/Time Collected:**	06/25/09 12:15
Basis:	Wet	**Date/Time Received:**	06/27/09 08:25
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180268	**Date/Time Analyzed:**	07/03/09 03:30
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**110**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

testAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-13009ABDISS
Lot/SDG Number:	D9F270154	**Lab Sample ID:**	D9F270154-005
Matrix:	WATER	**Lab WorkOrder:**	LFQ13
% Moisture:	N/A	**Date/Time Collected:**	06/25/09 12:15
Basis:	Wet	**Date/Time Received:**	06/27/09 08:25
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180268	**Date/Time Analyzed:**	07/03/09 03:47
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**120**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

Dissolved Metals

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic	40.0	39.9	99.8	50.0	50.4	100.8	48.5	97.0	M
Selenium	40.0	38.3	95.8	50.0	51.9	103.8	51.8	103.6	M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Dissolved Metals
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				50.0	50.9	101.8			M
Selenium				50.0	51.0	102.0			M

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

Dissolved Metals
-2B-
CRDL STANDARD FOR AA AND ICP

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F270154

AA CRDL Standard Source: _____

ICP CRDL Standard Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Arsenic				1.00	1.000	100.0		
Selenium				2.00			1.865	93.2

Comments:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F270154	**Lab Sample ID:**	D9F290000-268B
Matrix:	WATER	**Lab WorkOrder:**	LFRWW
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180268	**Date/Time Analyzed:**	07/03/09 03:20
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	0.21	0.21	5.0	U
7782-49-2	Selenium	0.70	0.70	5.0	U

Dissolved Metals

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Arsenic	0.210	U	0.210	U	0.210	U	0.210	U	0.21	U	M
Selenium	0.700	U	0.700	U	-0.733	B	0.700	U	0.70	U	M

Comments:

Dissolved Metals

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

ICP ID Number: Agilent 7500 ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic	0.0	100.0	0.16	99.21	99.2			
Selenium	0.0	100.0	-0.35	109.50	109.5			

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-13ABDISS
Lot/SDG Number:	D9F270154	**MS Lab Sample ID:**	D9F270154-003S
Matrix:	WATER	**MS Lab WorkOrder:**	LFQ11
% Moisture:	N/A	**Date/Time Collected:**	06/25/09 12:15
Basis:	Wet	**Date/Time Received:**	06/27/09 08:25
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180268	**Date/Time Analyzed:**	07/03/09 03:40
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	110		161		123	N	85 - 117
Selenium	40.0	7.0	U	37.2		93		77 - 122

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-13ABDISS
Lot/SDG Number:	D9F270154	**MSD Lab Sample ID:**	D9F270154-003D
Matrix:	WATER	**MSD Lab WorkOrder:**	LFQ11
% Moisture:	N/A	**Date/Time Collected:**	06/25/09 12:15
Basis:	Wet	**Date/Time Received:**	06/27/09 08:25
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180268	**Date/Time Analyzed:**	07/03/09 03:43
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	110		165		132	N	2.4		85 - 117	20
Selenium	40.0	7.0	U	45.2		113		19		77 - 122	20

Dissolved Metals
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

M-13ABDISS PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Arsenic	75 - 125	204.300		11.220		200.00	96.5		M
Selenium	75 - 125	199.900		0.700	U	200.00	100.0		M

Comments: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9F270154	**Lab Sample ID:**	D9F290000-268C
Matrix:	WATER	**Lab WorkOrder:**	LFRWW
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	06/30/09 06:00
QC Batch ID:	9180268	**Date/Time Analyzed:**	07/03/09 03:23
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	42.6	107		85 - 117
Selenium	40.0	43.3	108		77 - 122

Dissolved Metals

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

M-13ABDISS SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	11.220		12.445	B	10.9		M
Selenium	0.070	U	3.500	U			M

Comments: _____

Dissolved Metals

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

ICP ID Number: Agilent 7500 Date: 4/23/2009

Flame AA ID Number: _____

Furnace AA ID Number:

Analyte	Isotope	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Arsenic	75		5.000	0.2100	M
Selenium	78		5.000	0.7000	M

Comments: _____

Dissolved Metals
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

ICP ID Number: Agilent 7500 Date: 4/7/2009

Analyte	Integ. Time (Sec.)	Concentration ug/L	M
Arsenic	0.001	3600	M
Selenium	0.001	3600	M

Comments: _____

Dissolved Metals

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9F270154

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-13ABDISS	6/30/2009	50.0	50.0
M-13ABDISS MS	6/30/2009	50.0	50.0
M-13ABDISS MSD	6/30/2009	50.0	50.0
M-13009ABDISS	6/30/2009	50.0	50.0
MB9180268	6/30/2009	50.0	50.0
Check Sample	6/30/2009	50.0	50.0

Comments:

Dissolved Metals
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9F270154

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/2/2009 End Date: 7/3/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL BLANK	1.00	17:31				X															X						
100 PPB	1.00	17:34				X															X						
ICV	1.00	17:37				X															X						
ZZZZZZ	1.00	17:41																									
ICB	1.00	17:44				X															X						
RL STD	1.00	17:47				X																					
ZZZZZZ	1.00	17:51																									
ZZZZZZ	1.00	17:54																									
ALTSE	1.00	17:58																			X						
ZZZZZZ	1.00	18:01																									
ZZZZZZ	1.00	18:04																									
ZZZZZZ	1.00	18:08																									
LR	1.00	18:11				X															X						
CAL BLANK	1.00	02:42				X															X						
100 PPB	1.00	02:46				X															X						
CCV	1.00	02:49				X															X						
CCB	1.00	02:53				X															X						
ICSA	1.00	02:59				X															X						
ICSAB	1.00	03:03				X															X						
CCV	1.00	03:10				X															X						
CCB	1.00	03:13				X															X						
ZZZZZZ	1.00	03:16																									
MB9180268	1.00	03:20				X															X						
Check Sample	1.00	03:23				X															X						
ZZZZZZ	1.00	03:26																									
M-13ABDISS	10.00	03:30				X															X						
M-13ABDISS SER	50.00	03:33				X															X						
M-13ABDISS PDS	1.00	03:37				X															X						
M-13ABDISS MS	10.00	03:40				X															X						
M-13ABDISS MSD	10.00	03:43				X															X						
M-13009ABDISS	10.00	03:47				X															X						
CCV	1.00	03:50				X															X						
CCB	1.00	03:54				X															X						

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

3.0°C
[illegible]
6.25.09
[illegible]

northgate environmental management, inc.

1100 Quail Street, Suite 102, Newport Beach, CA 92660
(949) 260-9293

CHAIN-OF-CUSTODY / Analytical Request Document

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

COC No. 2027.001.00117
Page: 1 of 1
Cooler # 1 of 2

Required Ship to Lab:		Required Project Information:		Required Invoice Information:	
Lab Name:	TestAmerica	Site ID #:	TRONOX LLC. HENDERSON	Send Invoice to:	Susan Crowley, Tronox LLC
Address:	4955 Yarrow Street	Project #	2027.001	Address:	PO Box 55
	Arvada, CO 80002	Site Address	560 W. Lake Mead Drive	City/State	Henderson, NV 89009 — Phone #: (949)260-9293
Lab PM:	Michael P. Phillips	City	Henderson — State NV	Reimbursement project? X	Non-reimbursement project? — Mark one
Phone/Fax:	303-736-0157	Site PM Name	Derrick Willis	Send EDD to	Frank Hagar Northgate Environmental Management, Inc frank.hagar@ngem.com
Lab PM email	michael.phillips@testamericainc.com	Phone/Fax:	949-375-7004	CC Hardcopy report to	PDF Electronic Version Only
Applicable Lab Quote #:		Site PM Email:	derrick.willis@ngem.com	CC Hardcopy report to	see additional comments below

TAT: Standard 30 day	X	Rush		Mark One
If Rush, Date due				
QC level Required: Standard		Special	EPA Stage 4	Mark one
NJ Reduced Deliverable Package?				
MA MCP Cert?		CT RCP Cert?		Mark One
Lab Project ID (lab use)				

Valid Matrix Codes: MATRIX — DRINKING WATER WP, GROUND WATER WG, WASTE WATER WW, FREE PRODUCT LF, SOIL SO, OIL OIL, SW, AA, AE, GS; MATRIX — WATER W, SURFACE WATER WS, WATER QC WQ, SLUDGE SL, WH, OT, TA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	EPA 6020/Collision Cell	EPA 8141A OPP Pest	Comments/Lab Sample I.D.
1	M-125B	WG	G	6/23/2009	10:14	1	N			X						X		500 ml Plastic
2	M-125BDISS	WG	G	6/23/2009	10:14	1	Y			X						X		500 ml Plastic
3	M-125BMS	WG	G	6/23/2009	10:14	1	N			X						X		500 ml Plastic
4	M-125BMSDISS	WG	G	6/23/2009	10:14	1	Y			X						X		500 ml Plastic
5	M-125BMSD	WG	G	6/23/2009	10:14	1	N			X						X		500 ml Plastic
6	M-125BMSDDISS	WG	G	6/23/2009	10:14	1	Y			X						X		500 ml Plastic
7	M-125B	WG	G	6/23/2009	10:14	2	N	X									X	2- 1l amber glass
8	M-125BMS	WG	G	6/23/2009	10:14	2	N	X									X	2- 1l amber glass
9	M-125BMSD	WG	G	6/23/2009	10:14	2	N	X									X	2- 1l amber glass
10	DRB 6/23/09																	
11																		
12																		

Additional Comments/Special Instructions:
As Se only by collison cell
All PDF reports and EDDs will be uploaded to:
Northgate Environmental Management, Inc.
TP site address provided to labs
lotifications provided to:
indy.arnold@ngem.com
rank.hagar@ngem.com

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[illegible]	6/23	14:50	[illegible]	6/23	1450
[illegible]	6/23	1600	[illegible]	6/23	1600
[illegible]	6/24	1020	[illegible]	6/24/09	1020
[illegible]	6/24/09	16:00	[illegible]	6/25/09	0830

Sample Receipt Conditions			
Temp in °C	Samples on Ice?	Sample intact?	Trip Blank?
	Y / N	Y / N	Y / N
	Y / N	Y / N	Y / N
	Y / N	Y / N	Y / N
	Y / N	Y / N	Y / N

SHIPPING METHOD: (mark as appropriate): UPS, COURIER (circled), FEDEX, US MAIL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Dana Brown
SIGNATURE of SAMPLER: [illegible]
DATE Signed: 6/23/09
Time: 14:50

30°C

201

northgate
environmental management, inc.

1100 Quail Street, Suite 102, Newport Beach, CA 92660
(949) 260-9293

CHAIN-OF-CUSTODY / Analytical Request Document

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COC No. 2027.001.00133
Page: 1 of 1
Cooler # 1 of 1

Required Ship to Lab:

Lab Name:	TestAmerica
Address:	4955 Yarrow Street
	Arvada, CO 80002
Lab PM:	Michael P. Phillips
Phone/Fax:	303-736-0157
Lab PM email	michael.phillips@testamericainc.com
Applicable Lab Quote #:	

Required Project Information:

Site ID #:	TRONOX LLC. HENDERSON
Project #	2027.001
Site Address	560 W. Lake Mead Drive
City	Henderson
State	NV
Site PM Name	Derrick Willis
Phone/Fax:	949-375-7004
Site PM Email:	derrick.willis@ngem.com

Required Invoice Information:

Send Invoice to:	Susan Crowley, Tronox LLC
Address:	PO Box 55
City/State	Henderson, NV 89009
Phone #:	(949)260-9293
Reimbursement project?	X
Non-reimbursement project?	Mark one
Send EDD to	Frank Hagar Northgate Environmental Management, Inc frank.hagar@ngem.com
CC Hardcopy report to	PDF Electronic Version Only
CC Hardcopy report to	see additional comments below

TAT: Standard 30 day	X	Rush	Mark One
If Rush, Date due			
QC level Required: Standard		Special	EPA Stage 4 / Mark one
NJ Reduced Deliverable Package?			
MA MCP Cert?		CT RCP Cert?	Mark One
Lab Project ID (lab use)			

Valid Matrix Codes

MATRIX		MATRIX	
DRINKING WATER	WP	WATER	W
GROUND WATER	WG	SURFACE WATER	WS
WASTE WATER	WW	WATER QC	WQ
FREE PRODUCT	LF	SLUDGE	SL
SOIL	SO	OIL RINSEATE	WH
OIL	SW	OTHER	OT
WIPE	AA	ANIMAL TISSUE	TA
AMBIENT AIR	AE		
SVE AIR	GS		
SOIL GAS			

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analyses: EPA 6020/Collision Cell	Comments/Lab Sample I.D.
1	EB062309-SO	W	G	6/23/2009	11:00	1	N			X						X	500 ml Plastic
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

Additional Comments/Special Instructions:

As Se only by collison cell
All PDF reports and EDDs will be uploaded to:
rthgate Environmental Management, Inc.
P site address provided to labs
tifications provided to:
dy.arnold@ngem.com
nk.hagar@ngem.com

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
GES	6/23	1500		6/23/09	1506
	6/24	1020		6/24/09	1020
Fedex via Fedex	6/24	09 16 00		6/25/09	0830

SHIPPING METHOD (mark as appropriate): UPS COURIER (FEDEX) US MAIL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: PB 6-23-09 Victoria Hansen Phil Brinkerhoff

SIGNATURE of SAMPLER:

DATE Signed: 6/23/2009 Time: 1500

Sample Receipt Conditions

	Temp in °C	Samples on Ice?	Sample intact?	Trip Blank?
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

Table of Contents

TestAmerica

Phillips, Michael

From: frank.hagar@ngem.com
Sent: Wednesday, June 24, 2009 11:17 AM
To: Phillips, Michael
Cc: 'Cindy Arnold'; derrick.willis@ngem.com; Dana.Brown@ngem.com; 'Vivian Willis'
Subject: CANCEL EB062309-SO
Importance: High

As most of this sample arrived at Columbia over temperature and it is an equipment blank, please cancel all analyses of EB062309-SO.

Frank Hagar, C.Hg., C.E.G.
Hydrogeologist

Northgate Environmental Management, Inc.
1100 Quail Street, Suite 102, Newport Beach, CA 92660
main (949) 260-9293; cell (949) 689-9987;
fax (949) 315-3365
http://www.ngem.com/

Table of Contents

TestAmerica Denver

Sample Receiving Checklist

Lot #: D9F250221 Date/Time Received: 6/25/09 0830

Company Name & Sampling Site: Northgate - TRONOX

PM to Complete This Section: *Yes* *No* *Yes* *No*
Residual chlorine check required: ❑ ☒ Quarantined : ❑ ☒

Quote #: 83046

Special Instructions: field filtered? → see field filtered section of COC + check against bottle labels

MS/MSD

Time Zone:
• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

Unpacking Checks:

Cooler #(s): _____ _____ _____ _____ _____ _____ _____ _____

Temperatures (°C): 3.0 2.8 _____ _____ _____ _____ _____ _____

N/A	*Yes*	*No*		*Initials*
❑	☒	❑	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	JM
–	☒	❑	2. Coolers scanned for radiation. Is the reading ≤ to background levels? Yes: ✓ No: ____	
	☒	❑	3. Chain of custody present? If no, document on CUR.	
	❑	☒	4. Bottles broken and/or are leaking? If yes, document on CUR.	
	❑	☒	5. Multiphasic samples obvious? If yes, document on CUR.	
	☒	❑	6. Proper container & preservatives used? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR.	
❑	☒	❑	7. pH of all samples checked and meet requirements? If no, document on CUR.	
	☒	❑	8. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR, and contact PM before proceeding.	
	☒	❑	9. Did chain of custody agree with labels ID and samples received? If no, document on CUR.	
☒	❑	❑	10. Were VOA samples without headspace? If no, document on CUR.	
☒	❑	❑	11. Were VOA vials preserved? Preservative ❑HCl ❑4±2°C ❑Sodium Thiosulfate ❑ Ascorbic Acid	
	❑	☒	12. Did samples require preservation with sodium thiosulfate?	
☒	❑	❑	13. If yes to #11, did the samples contain residual chlorine? If yes, document on CUR.	
❑	❑	☒	14. Sediment present in dissolved/filtered bottles? If yes, document on CUR.	
☒	❑	❑	15. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.	
☒	☒		16. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	☒		17. Are analyses with short holding times requested?	
	☒		18. Was a quick Turn Around (TAT) requested?	

TestAmerica Denver

Sample Receiving Checklist

Lot # D9F250221

Login Checks:

N/A	Yes	No		Initials
	☑	☐	19. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR, and contact PM before proceeding.	
☐	☑	☐	20. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.	
	☑	☐	21. Did the chain of custody includes "received by" and "relinquished" by signatures, dates, and times?	
☐	☑	☐	22. Were special log in instructions read and followed?	
☑	☐	☐	23. Were AFCEE metals logged for refrigerated storage?	
	☑	☐	24. Were tests logged checked against the COC? Which samples were confirmed? 1	
☑	☐	☐	25. Was a Rush form completed for quick TAT?	
☑	☐	☐	26. Was a Short Hold form completed for any short holds?	
	☐	☑	27. Were special archiving instructions indicated in the General Comments? If so, what were they?	

Labeling and Storage Checks:

				Initials
☑	☐	☐	28. Was the subcontract COC signed and sent with samples to bottle prep?	
	☑	☐	29. Were sample labels double-checked by a second person?	
☑	☑	☐	30. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?	
	☑	☐	31. Did the sample ID, Date, and Time from label match what was logged?	
☑	☐	☐	32. Were stickers for special archiving instructions affixed to each box? See #27	
☑	☐	☐	33. Were AFCEE metals stored refrigerated?	

Document any problems or discrepancies and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

northgate
environmental management, inc.
1100 Quail Street, Suite 102, Newport Beach, CA 92660
(949) 260-9293

CHAIN-OF-CUSTODY / Analytical Request Document

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

COC No. 2027.001.00123
Page: 1 of 1
Cooler # 1 of 1

5.8°C / 6-26-09

Required Ship to Lab:

Lab Name:	TestAmerica
Address:	4955 Yarrow Street
	Arvada, CO 80002
Lab PM:	Michael P. Phillips
Phone/Fax:	303-736-0157
Lab PM email	michael.phillips@testamericainc.com
Applicable Lab Quote #:	

Required Project Information:

Site ID #:	TRONOX LLC. HENDERSON
Project #	2027.001
Site Address	560 W. Lake Mead Drive
City	Henderson
State	NV
Site PM Name	Derrick Willis
Phone/Fax:	949-375-7004
Site PM Email:	derrick.willis@ngem.com

Required Invoice Information:

Send Invoice to:	Susan Crowley, Tronox LLC
Address:	PO Box 55
City/State	Henderson, NV 89009
Phone #:	(949)260-9293
Reimbursement project?	X
Non-reimbursement project?	
Send EDD to	Frank Hagar Northgate Environmental Management, Inc frank.hagar@ngem.com
CC Hardcopy report to	PDF Electronic Version Only
CC Hardcopy report to	see additional comments below

TAT: Standard 30 day	X	Rush	Mark One
If Rush, Date due			
QC level Required: Standard		Special	EPA Stage 4 (Mark one)
NJ Reduced Deliverable Package?			
MA MCP Cert?		CT RCP Cert?	Mark One
Lab Project ID (lab use)			

Valid Matrix Codes: DRINKING WATER DW; GROUND WATER WG; WASTE WATER WW; FREE PRODUCT LF; SOIL SO; OIL SW; WIPE AA; AMBIENT AIR AE; SVE AIR GS; SOIL GAS; WATER W; SURFACE WATER WS; WATER QC WQ; SLUDGE SL; OIL RINSEATE WH; OTHER OT; ANIMAL TISSUE TA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	EPA 6020/Collision Cell	EPA 8141A OPP Pest	Comments/Lab Sample I.D.
1	M-22AB	WG	G	6/24/2009	09:06	1	N			X						X		500 ml Plastic
2	M-17AB	WG	G	6/24/2009	12:35	1	N			X						X		500 ml Plastic
3	M-17ABDISS	WG	G	6/24/2009	12:35	1	Y			X						X		500 ml Plastic
4																		
5																		
6																		
7																		
8																		
9	DRB																	
10	6-24-09																	
11																		
12																		

Additional Comments/Special Instructions:
As Se only by collison cell
All PDF reports and EDDs will be uploaded to:
...rthgate Environmental Management, Inc.
...P site address provided to labs
...tifications provided to:
...dy.arnold@ngem.com
...nk.hagar@ngem.com

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature]	6/24	14:35	[signature]	6/24	14:35
[signature]	6/24	1600	R. Cardle	6/24	1600
R. Cardle	6/25	1600	[signature]	6/25/09	1300
[signature]	6/25/09	1300 / 1341	[signature]	6/26/09	1341

Sample Receipt Conditions			
Temp in 0C	Samples on Ice?	Sample intact?	Trip Blank?
	Y / N	Y / N	Y / N
	Y / N	Y / N	Y / N
	Y / N	Y / N	Y / N
	Y / N	Y / N	Y / N

SHIPPING METHOD: (mark as appropriate): UPS COURIER (FEDEX circled) US MAIL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Dana Brown
SIGNATURE of SAMPLER: [signature]
DATE Signed: 6/24/09 Time: 14:35

relinquished by [signature] TA-LV 6/25/09 10:00 via Fedex

TestAmerica Denver

Sample Receiving Checklist

Lot #: DAF260277 Date/Time Received: 6.26.09 0915

Company Name & Sampling Site: Northgate - TRONOX

PM to Complete This Section: *Yes* *No* *Yes* *No*
Residual chlorine check required: ❑ ☒ Quarantined : ❑ ☒

Quote #: 83046

Special Instructions:

Time Zone:
• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

Unpacking Checks:

Cooler #(s): 1

Temperatures (°C): 5.8

N/A	*Yes*	*No*		*Initials*
❑	☒	❑	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	
=	☒	❑	2. Coolers scanned for radiation. Is the reading ≤ to background levels? Yes: ___ No:___	
	☒	❑	3. Chain of custody present? If no, document on CUR.	
	❑	☒	4. Bottles broken and/or are leaking? If yes, document on CUR.	
	❑	☒	5. Multiphasic samples obvious? If yes, document on CUR.	
	☒	❑	6. Proper container & preservatives used? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR.	
❑	☒	❑	7. pH of all samples checked and meet requirements? If no, document on CUR.	
	☒	❑	8. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR, and contact PM before proceeding	
	☒	❑	9. Did chain of custody agree with labels ID and samples received? If no, document on CUR.	
❑	❑	❑	10. Were VOA samples without headspace? If no, document on CUR.	
❑	❑	❑	11. Were VOA vials preserved? Preservative ❑HCl ❑4±2°C ❑Sodium Thiosulfate ❑ Ascorbic Acid	
	❑	☒	12. Did samples require preservation with sodium thiosulfate?	
❑	❑	❑	13. If yes to #11, did the samples contain residual chlorine? If yes, document on CUR.	
❑	❑	❑	14. Sediment present in dissolved/filtered bottles? If yes, document on CUR. ?	
❑	❑	❑	15. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.	
	❑	☒	16. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.	
	❑	☒	17. Are analyses with short holding times requested?	
	❑	☒	18. Was a quick Turn Around (TAT) requested?	

TestAmerica Denver

Sample Receiving Checklist

Lot # D9F260277

Login Checks:

N/A	Yes	No		Initials
	☑	☐	19. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR, and contact PM before proceeding.	AT
☑	☐	☐	20. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.	
	☑	☐	21. Did the chain of custody includes "received by" and "relinquished" by signatures, dates, and times?	
☐	☑	☐	22. Were special log in instructions read and followed?	
☑	☐	☐	23. Were AFCEE metals logged for refrigerated storage?	
	☑	☐	24. Were tests logged checked against the COC? Which samples were confirmed? _____	
☐	☐	☐	25. Was a Rush form completed for quick TAT?	
☐	☐	☐	26. Was a Short Hold form completed for any short holds?	
	☐	☑	27. Were special archiving instructions indicated in the General Comments? If so, what were they?	

_____

Labeling and Storage Checks:

Initials AT

☑	☐	☐	28. Was the subcontract COC signed and sent with samples to bottle prep?
	☑	☐	29. Were sample labels double-checked by a second person?
☐	☑	☐	30. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?
	☑	☐	31. Did the sample ID, Date, and Time from label match what was logged?
☑	☐	☐	32. Were stickers for special archiving instructions affixed to each box? See #27
☑	☐	☐	33. Were AFCEE metals stored refrigerated?

Document any problems or discrepancies and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

5,14
AB
IR1
6/27/9

208

northgate
environmental management, inc.

1100 Quail Street, Suite 102, Newport Beach, CA 92660
(949) 260-9293

CHAIN-OF-CUSTODY / Analytical Request Document

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

COC No. 2027.001.00155
Page: 1 of 1
Cooler # 1 of 1

Required Ship to Lab:

Lab Name:	TestAmerica
Address:	4955 Yarrow Street
	Arvada, CO 80002
Lab PM:	Michael P. Phillips
Phone/Fax:	303-736-0157
Lab PM email	michael.phillips@testamericainc.com
Applicable Lab Quote #:	

Required Project Information:

Site ID #:	TRONOX LLC. HENDERSON
Project #	2027.001
Site Address	560 W. Lake Mead Drive
City	Henderson
State	NV
Site PM Name	Derrick Willis
Phone/Fax:	949-375-7004
Site PM Email:	derrick.willis@ngem.com

Required Invoice Information:

Send Invoice to:	Susan Crowley, Tronox LLC
Address:	PO Box 55
City/State	Henderson, NV 89009
Phone #:	(949)260-9293
Reimbursement project?	X
Non-reimbursement project?	Mark one
Send EDD to	Frank Hagar Northgate Environmental Management, Inc frank.hagar@ngem.com
CC Hardcopy report to	PDF Electronic Version Only
CC Hardcopy report to	see additional comments below

TAT: Standard 30 day	X	Rush	Mark One
If Rush, Date due			
QC level Required: Standard		Special	EPA Stage 4 / Mark one
NJ Reduced Deliverable Package?			
MA MCP Cert?		CT RCP Cert?	Mark One
Lab Project ID (lab use)			

Valid Matrix Codes

MATRIX		MATRIX	
DRINKING WATER	WP	WATER	W
GROUND WATER	WG	SURFACE WATER	WS
WASTE WATER	WW	WATER QC	WQ
FREE PRODUCT	LF	SLUDGE	SL
SOIL	SO	OIL RINSEATE	WH
OIL	SW	OTHER	OT
WIPE	AA	ANIMAL TISSUE	TA
AMBIENT AIR	AE		
SVE AIR	GS		
SOIL GAS			

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analyses: EPA 6020/Collision Cell	EPA 8141A OPP Pest	Comments/Lab Sample I.D.
1	M-64B	WG	G	6/26/2009	12:35	1	N			X						X		500 ml Plastic
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Additional Comments/Special Instructions:

As Se only by collison cell
All PDF reports and EDDs will be uploaded to:
Northgate Environmental Management, Inc.
FTP site address provided to labs
Notifications provided to:
cindy.arnold@ngem.com
frank.hagar@ngem.com

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
NGEM	6/26	14.14		6/26	1414
GES	6/26	1600		6/27	0825

Sample Receipt Conditions

	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SHIPPING METHOD: (mark as appropriate) UPS COURIER FEDEX US MAIL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dana Brown

SIGNATURE of SAMPLER:

DATE Signed 6/26/09 Time: 14:14

Temp in OC | Samples on Ice? | Sample intact? | Temp Blank?

TestAmerica

Table of Contents

TestAmerica Denver

Sample Receiving Checklist

Lot #: D9F270153 Date/Time Received: 6/27/9 0825

Company Name & Sampling Site: Northgate - Tronox

PM to Complete This Section: *Yes* *No* *Yes* *No*

Residual chlorine check required: ❑ ☒ Quarantined : ❑ ☒

Quote #: 83046

Special Instructions:

Time Zone:

• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

Unpacking Checks:

Cooler #(s): 1

Temperatures (°C): 5.4

N/A *Yes* *No* *Initials*

1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.
2. Coolers scanned for radiation. Is the reading ≤ to background levels? Yes: ✓ No:
3. Chain of custody present? If no, document on CUR.
4. Bottles broken and/or are leaking? If yes, document on CUR.
5. Multiphasic samples obvious? If yes, document on CUR.
6. Proper container & preservatives used? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR.
7. pH of all samples checked and meet requirements? If no, document on CUR.
8. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR, and contact PM before proceeding.
9. Did chain of custody agree with labels ID and samples received? If no, document on CUR.
10. Were VOA samples without headspace? If no, document on CUR.
11. Were VOA vials preserved? Preservative ❑HCl ❑4±2°C ❑Sodium Thiosulfate ❑ Ascorbic Acid
12. Did samples require preservation with sodium thiosulfate?
13. If yes to #11, did the samples contain residual chlorine? If yes, document on CUR.
14. Sediment present in dissolved/filtered bottles? If yes, document on CUR.
15. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.
16. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.
17. Are analyses with short holding times requested?
18. Was a quick Turn Around (TAT) requested?

TestAmerica Denver

Sample Receiving Checklist

Lot # D9F270153

Login Checks:

Initials

N/A	Yes	No		
☑	☐	☐	19. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003)	If no, document on CUR, and contact PM before proceeding.
☑	☐	☐	20. Is sufficient volume provided for client requested MS, MSD or matrix duplicates?	If no, document on CUR, and contact PM before proceeding.
	☑	☐	21. Did the chain of custody includes "received by" and "relinquished" by signatures, dates, and times?	
☐	☑	☐	22. Were special log in instructions read and followed?	
☑	☐	☐	23. Were AFCEE metals logged for refrigerated storage?	
	☑	☐	24. Were tests logged checked against the COC? Which samples were confirmed? All	
☑	☐	☐	25. Was a Rush form completed for quick TAT?	
☑	☐	☐	26. Was a Short Hold form completed for any short holds?	
	☐	☑	27. Were special archiving instructions indicated in the General Comments? If so, what were they?	

Labeling and Storage Checks:

Initials

☑	☐	☐	28. Was the subcontract COC signed and sent with samples to bottle prep?
	☑	☐	29. Were sample labels double-checked by a second person?
☑	☐	☐	30. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?
	☑	☐	31. Did the sample ID, Date, and Time from label match what was logged?
☑	☐	☐	32. Were stickers for special archiving instructions affixed to each box? See #27
☑	☐	☐	33. Were AFCEE metals stored refrigerated?

Document any problems or discrepancies and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

2.31R1
Sm 6/27/09

CHAIN-OF-CUSTODY / Analytical Request Document

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

COC No. 2027.001.00141
Page: 1 of 1
Cooler # 1 of 1

northgate
environmental management, inc.
1100 Quail Street, Suite 102, Newport Beach, CA 92660
(949) 260-9293

Required Ship to Lab:

Lab Name:	TestAmerica
Address:	4955 Yarrow Street
	Arvada, CO 80002
Lab PM:	Michael P. Phillips
Phone/Fax:	303-736-0157
Lab PM email	michael.phillips@testamericainc.com
Applicable Lab Quote #:	

Required Project Information:

Site ID #:	TRONOX LLC. HENDERSON
Project #	2027.001
Site Address	560 W. Lake Mead Drive
City	Henderson
State	NV
Site PM Name	Derrick Willis
Phone/Fax:	949-375-7004
Site PM Email:	derrick.willis@ngem.com

Required Invoice Information:

Send invoice to:	Susan Crowley, Tronox LLC
Address:	PO Box 55
City/State	Henderson, NV 89009
Phone #:	(949)260-9293
Reimbursement project?	X
Non-reimbursement project?	Mark one
Send EDD to	Frank Hagar Northgate Environmental Management, Inc frank.hagar@ngem.com
CC Hardcopy report to	PDF Electronic Version Only
CC Hardcopy report to	see additional comments below

TAT: Standard 30 day	X	Rush	Mark One
If Rush, Date due			
QC level Required: Standard		Special	EPA Stage 4 / Mark one
NJ Reduced Deliverable Package?			
MA MCP Cert?		CT RCP Cert?	Mark One
Lab Project ID (lab use)			

Valid Matrix Codes: DRINKING WATER WP; GROUND WATER WG; WASTE WATER WW; FREE PRODUCT LF; SOIL SO; OIL SW; WIPE AA; AMBIENT AIR AE; SVE AIR GS; SOIL GAS; WATER W; SURFACE WATER WS; WATER QC WQ; SLUDGE SL; OIL RINSEATE WH; OTHER OT; ANIMAL TISSUE TA

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analyses: EPA 6020/Collision Cell	EPA 8141A OPP Pest	Comments/Lab Sample I.D.
1	M-75B	WG	G	6/25/2009	8:47	1	N			X						X		500 ml Plastic
2	M-13AB	WG	G	6/25/2009	12:15	1	N			X						X		500 ml Plastic
3	M-13ABDISS	WG	G	6/25/2009	12:15	1	Y			X						X		500 ml Plastic
4	M-13009AB	WG	G	6/25/2009	12:15	1	N			X						X		500 ml Plastic
5	M-13009ABDISS	WG	G	6/25/2009	12:15	1	Y			X						X		500 ml Plastic
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Additional Comments/Special Instructions:

As Se only by collison cell
All PDF reports and EDDs will be uploaded to:
Northgate Environmental Management, Inc.
FTP site address provided to labs
Notifications provided to:
cindy.arnold@ngem.com
frank.hagar@ngem.com

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	6/25	1635		6/25	1645
	6/26	1257		6/26	1250
	6/26	1600		6/27	0825

SHIPPING METHOD: (mark as appropriate) UPS COURIER FEDEX US MAIL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Darren Qualls
SIGNATURE of SAMPLER:
DATE Signed
Time:

Sample Receipt Conditions

	Temp in OC	Samples on Ice?	Sample intact?	Trip Blank?
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

Table of Contents

TestAmerica Denver

Sample Receiving Checklist

Lot #: D9F270154 Date/Time Received: 6/27/9 0825

Company Name & Sampling Site: Northgate Ironox

PM to Complete This Section: *Yes* *No* *Yes* *No*
Residual chlorine check required: ☐ ☐ Quarantined : ☐ ☐

Quote #: 830460

Special Instructions:

Time Zone:
• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

Unpacking Checks:

Cooler #(s): 1

Temperatures (°C): 2.3

Initials

N/A *Yes* *No*

☐ ☑ ☐ 1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.

☐ ☑ ☐ 2. Coolers scanned for radiation. Is the reading ≤ to background levels? Yes: ✓ No: ____

☐ ☑ ☐ 3. Chain of custody present? If no, document on CUR.

☐ ☐ ☑ 4. Bottles broken and/or are leaking? If yes, document on CUR.

☐ ☐ ☑ 5. Multiphasic samples obvious? If yes, document on CUR.

☐ ☑ ☐ 6. Proper container & preservatives used? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR.

☐ ☑ ☐ 7. pH of all samples checked and meet requirements? If no, document on CUR.

☐ ☑ ☐ 8. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR, and contact PM before proceeding.

☐ ☑ ☐ 9. Did chain of custody agree with labels ID and samples received? If no, document on CUR.

☑ ☐ ☐ 10. Were VOA samples without headspace? If no, document on CUR.

☑ ☐ ☐ 11. Were VOA vials preserved? Preservative ☐HCl ☐4±2°C ☐Sodium Thiosulfate ☐ Ascorbic Acid

☐ ☑ ☐ 12. Did samples require preservation with sodium thiosulfate?

☑ ☐ ☐ 13. If yes to #11, did the samples contain residual chlorine? If yes, document on CUR.

☑ ☐ ☐ 14. Sediment present in dissolved/filtered bottles? If yes, document on CUR.

☑ ☐ ☐ 15. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.

☐ ☑ ☐ 16. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.

☐ ☐ ☑ 17. Are analyses with short holding times requested?

☐ ☐ ☑ 18. Was a quick Turn Around (TAT) requested?

TestAmerica Denver

Sample Receiving Checklist

Lot # 9F270154

Login Checks:

Initials

N/A	Yes	No		
	☑	☐	19.	Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DV-QA-0003) If no, document on CUR, and contact PM before proceeding.
☑	☐	☐	20.	Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.
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☑	☐	☐	25.	Was a Rush form completed for quick TAT?
☑	☐	☐	26.	Was a Short Hold form completed for any short holds?
	☐	☑	27.	Were special archiving instructions indicated in the General Comments? If so, what were they?

Labeling and Storage Checks:

Initials

☒	☐	☐	28.	Was the subcontract COC signed and sent with samples to bottle prep?
	☒	☐	29.	Were sample labels double-checked by a second person?
☒	☐	☐	30.	Were sample bottles and COC double checked for dissolved/filtered metals by a second person?
	☒	☐	31.	Did the sample ID, Date, and Time from label match what was logged?
☐	☐	☐	32.	Were stickers for special archiving instructions affixed to each box? See #27
☐	☐	☐	33.	Were AFCEE metals stored refrigerated?

Document any problems or discrepancies and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).

Semivolatile GC

Supporting Documentation

Sample Sequence, Chromatograms

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9F250221

Client: Northgate

Method: 8141

Associated Samples: 1

Batch #(s): 9177142

I certify that, to the best of my knowledge, the attached package represents a complete and accurate copy of the original data.

Signature/Date: 7/7/09

GC SEMIVOLATILE ORGANIC EXTRACTION LOG SHEETS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 6/29/09
Time: 15:01:27

LEV 1	LEV 2		LEV 1	LEV 2	
Y	Y	Blank	Y	Y	Weights/Volumes
Y	Y	Check	Y	Y	Spike & Surrogate Worksheet
Y	Y	MS/MSD	Y	Y	Vial contains correct volume
			Y	Y	Labels, greenbars, worksheets
					computer batch: correct & all match
			_	_	Anomalies to Extraction Method

_ Expanded Deliverable
_ COC Completed
_ Bench Sheet Copied
_ Package Submitted to AnalyticalGroup
_ Bench Sheet Copied per COC

Extractionist: 008726 Dane Q. Oberhill

Concentrationist: 002074 Cheyana Cokley

Reviewer/Date: FLEISCHK / 6/29/09

QC BATCH: 9177142

PREP DATE: 6/26/09 12:00
COMP DATE: 6/29/09 13:55

Compounds, Organophosphorus (8141A)
LIQ/LIQ, SEP FUNNEL (PAH,P/P,TPH,Dioxin) - Nominal

EXTR EXPR	ANL DUE	LOT#,MSRUN#/ WORK ORDER	TEST FLGS	EXT	MTH	MATRIX	INIT/FIN WT/VOL	INIT	PH"S ADJ1	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
6/30/09	7/07/09	D9F250221-001 **LFLLR-1-AA**	DR	09	P2	WATER	**1037mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0675 6-4-09
COMMENTS:															
6/30/09	7/07/09	D9F250221-001 **LFLLR-1-AES**	DR	09	P2	WATER	**1035mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0682 6-4-09 1ML GSV0675 6-4-09
COMMENTS:															
6/30/09	7/07/09	D9F250221-001 **LFLLR-1-AF**D	DR	09	P2	WATER	**1018mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0682 6-4-09 1ML GSV0675 6-4-09
COMMENTS:															
6/30/09	0/00/00	D9F260000-142 **LFM2P-1-AA**B		09	P2	WATER	**1000mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0675 6-4-09
COMMENTS:															
6/30/09	0/00/00	D9F260000-142 **LFM2P-1-AC**C		09	P2	WATER	**1000mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0682 6-4-09 1ML GSV0675 6-4-09
COMMENTS:															

DV-OP-0006/7 BAL:M27995 MECL2:H10J07 H2O:ELGA+NACL:G47616 NA2SO4:G45627
S/S:DO-E W:SS TURBOVAP A:40C PIP:CON-6 HEX:H11E04

R = RUSH C = CLP
E = EPA 600 D = EXP.DEL)
M = CLIENT REQ MS/MSD

NUMBER OF WORK ORDERS IN BATCH: 5

GC SEMIVOLATILE INSTRUMENT LOG SHEETS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

EM\1\SEQUENCE\063009.S

Sequence Table (Front Injector):

Quantification Part:

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	Vial 1	PRIMER				
2	Vial 2	HEXANE				
3	Vial 3	OPP L5 GSV0635				
4	Vial 4	LE2931AA,MB				
5	Vial 5	LE2931AC,LCS				
6	Vial 6	LE2931AD,LCSD				
7	Vial 7	LEQA91AC,222-15				10
8	Vial 8	LEQA92AC,222-15				3
9	Vial 9	LEQCQ1AC,222-18				2
10	Vial 10	LERD61AD,377-1				
11	Vial 11	LERD81AH,377-3				
12	Vial 12	LERN71AF,115-1				
13	Vial 13	LERPQ1AF,115-2				
14	Vial 14	LERPX1AF,115-3				
15	Vial 15	LE1F91AJ,138-1				
16	Vial 16	OPP L5 GSV0635				
17	Vial 17	LERCV1AA,370-1				
18	Vial 18	LEWJG1AA,143-1				
19	Vial 19	LFM2P1AA,MB				
20	Vial 20	LFM2P1AC,LCS				
21	Vial 21	LFLLR1AA,221-1				
22	Vial 22	LFLLR1AE,221-1S				
23	Vial 23	LFLLR1AF,221-1D				
24	Vial 24	OPP L5 GSV0635				
25	Vial 25	LFHPJ1AA,MB				
26	Vial 26	LFHPJ1AC,LCS				
27	Vial 27	LFC4G1AA,197-1				
28	Vial 28	LFC4G1AD,197-1S				
29	Vial 29	LFC4G1AE,197-1D				
30	Vial 30	LFC4M1AA,198-1				
31	Vial 31	LFAN01AA,MB				
32	Vial 32	LFAN01AC,LCS				
33	Vial 33	LFAN01AD,LCSD				
34	Vial 34	LE4291AA,273-1				
35	Vial 35	LE4291AD,273-1S				
36	Vial 36	LE4291AE,273-1D				
37	Vial 37	LE9PJ1AA,215-1				
38	Vial 38	OPP L5 GSV0635				
39	Vial 39	OPP L1 GSV0641				
40	Vial 100	HEXANE/ACETONE				

Sequence Table (Back Injector):

No entries - empty table!

GC SEMIVOLATILE
CONTINUING CALIBRATION DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B/016F1601.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i Injection Date: 30-JUN-2009 23:58
Lab File ID: 016F1601.D Lab Sample ID: OPP L5 GSV0635
Analysis Type: NONE Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
1	o,o,o-TEPT	3.0000	2.7723	7.6	15.0
2	Dichlorvos	3.0000	2.6730	10.9	15.0
3	Mevinphos	3.0000	2.8232	5.9	15.0
4	Chlormefos	3.0000	3.1451	4.8	15.0
5	Thionazin	3.0000	2.9579	1.4	15.0
6	Demeton-O	0.9750	0.9032	7.4	15.0
7	Ethoprop	3.0000	3.0852	2.8	15.0
8	Naled	3.0000	2.5947	13.5	15.0
9	Sulfotepp	3.0000	3.1503	5.0	15.0
10	Phorate	3.0000	2.9700	1.0	15.0
11	Dimethoate	3.0000	2.9654	1.2	15.0
12	Demeton-S	2.0400	2.1190	3.9	15.0
13	Simazine	3.0000	2.9385	2.1	15.0
14	Atrazine	3.0000	3.2208	7.4	15.0
15	propazine	3.0000	3.1414	4.7	15.0
17	Disulfoton	3.0000	3.0303	1.0	15.0
16	Diazinon	3.0000	3.0626	2.1	15.0
18	Methyl Parathion	3.0000	3.1469	4.9	15.0
19	Ronnel	3.0000	2.6769	10.8	15.0
20	Malathion	3.0000	3.0648	2.2	15.0
21	Fenthion	3.0000	3.0279	0.9	15.0
22	Parathion	3.0000	3.1691	5.6	15.0
23	Chlorpyrifos	3.0000	3.0843	2.8	15.0
24	Trichloronate	3.0000	3.1824	6.1	15.0
25	Anilazine	3.0000	2.6149	12.8	15.0
148	Merphos-A (Merphos)	3.0000	3.1037	3.5	999.0
26	Tetrachlorvinphos (Stirophos)	3.0000	2.5874	13.8	15.0
28	Tokuthion	3.0000	3.2174	7.2	15.0
149	Merphos-B (Merphos Oxone)	3.0000	3.8489	28.3	999.0
29	Carbophenothion-methyl	3.0000	3.0763	2.5	15.0
29	Fensulfothion	3.0000	2.9388	2.0	15.0
30	Bolstar / Famphur	6.0000	5.9973	0.0	15.0
32	Carbophenothion	3.0000	3.0314	1.0	15.0
31	Triphenyl phosphate	3.0000	3.1662	5.5	15.0
34	Phosmet	3.0000	2.8691	4.4	15.0
32	EPN	3.0000	3.2340	7.8	15.0
33	Azinphos-methyl	3.0000	2.7279	9.1	15.0
35	Azinphos-ethyl	3.0000	2.9005	3.3	15.0
36	Coumaphos	3.0000	3.1738	5.8	15.0

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B/016F1601.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 016F1601.D
Analysis Type: NONE

Injection Date: 30-JUN-2009 23:58
Lab Sample ID: OPP L5 GSV0635
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 Merphos	3.0000	3.2773	9.2	15.0
40 Total Demeton	3.0000	3.0223	0.7	15.0

Average %D = 5.68

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\016F1601.D
Lab Smp Id: OPP L5 GSV0635 Client Smp ID: OPP L5 GSV0635
Inj Date : 30-JUN-2009 23:58
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L5 GSV0635
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Meth Date : 01-Jul-2009 08:30 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	1 o,o,o-TEPT	3.250	3.254	(0.182)	277172	3.00000	2.772
	2 Dichlorvos	4.067	4.074	(0.228)	165954	3.00000	2.673
	3 Mevinphos	5.730	5.739	(0.321)	96282	3.00000	2.823
$	4 Chlormefos	5.830	5.836	(0.327)	244519	3.00000	3.145
	5 Thionazin	7.502	7.507	(0.420)	209867	3.00000	2.958
	6 Demeton-O	7.642	7.649	(0.428)	61255	0.97500	0.9032
	7 Ethoprop	7.840	7.852	(0.439)	191824	3.00000	3.085
	8 Naled	8.052	8.057	(0.451)	40380	3.00000	2.595
*	9 Tributylphosphate	8.095	8.135	(1.000)	131201	2.00000	
	10 Sulfotepp	8.435	8.442	(0.473)	278367	3.00000	3.150
	11 Phorate	8.527	8.532	(0.478)	191242	3.00000	2.970
	12 Dimethoate	8.652	8.659	(0.485)	221815	3.00000	2.965
	13 Demeton-S	8.832	8.846	(0.495)	114936	2.04000	2.119
	14 Simazine	8.915	8.924	(0.500)	74187	3.00000	2.938
	15 Atrazine	9.085	9.094	(0.509)	93415	3.00000	3.221
	16 propazine	9.230	9.241	(0.517)	84068	3.00000	3.141
	17 Disulfoton	9.863	9.869	(0.553)	131662	3.00000	3.030
	18 Diazinon	9.895	9.902	(0.555)	211833	3.00000	3.062
	19 Methyl Parathion	10.713	10.717	(0.600)	138041	3.00000	3.147
	20 Ronnel	11.237	11.241	(0.630)	121380	3.00000	2.677
	21 Malathion	11.795	11.804	(0.661)	126120	3.00000	3.065
	22 Fenthion	11.928	11.932	(0.668)	135019	3.00000	3.028
	23 Parathion	12.015	12.019	(0.673)	150395	3.00000	3.169
	24 Chlorpyrifos	12.065	12.067	(0.676)	177089	3.00000	3.084
	25 Trichloronate	12.492	12.496	(0.700)	163307	3.00000	3.182
	26 Anilazine	12.813	12.817	(0.718)	11821	3.00000	2.615
	27 Merphos-A (Merphos)	13.195	13.199	(0.739)	132881	3.00000	3.104
	28 Tetrachlorvinphos (Stirophos)	13.813	13.824	(0.774)	73622	3.00000	2.587
	29 Tokuthion	14.445	14.449	(0.810)	158268	3.00000	3.217
	30 Merphos-B (Merphos Oxone)	14.642	14.651	(0.821)	44325	3.00000	3.849
	31 Carbophenothion-methyl	15.233	15.239	(0.854)	115782	3.00000	3.076
	32 Fensulfothion	15.358	15.361	(0.861)	119843	3.00000	2.939
	33 Bolstar / Famphur	16.048	16.053	(0.899)	282234	6.00000	5.997

		Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34	Carbophenothion	16.193	16.197	(0.908)	143115	3.00000	3.031
$	35	Triphenyl phosphate	16.708	16.712	(0.936)	113596	3.00000	3.166(A)
	36	Phosmet	16.962	16.963	(0.951)	115942	3.00000	2.869
	37	EPN	17.148	17.151	(0.961)	125943	3.00000	3.234
	38	Azinphos-methyl	17.477	17.480	(0.979)	117466	3.00000	2.728
*	39	TOCP	17.843	17.846	(1.000)	70963	2.00000	
	40	Azinphos-ethyl	17.923	17.926	(1.004)	136719	3.00000	2.900
	41	Coumaphos	18.363	18.366	(1.029)	110230	3.00000	3.174
S	42	Merphos				177206	3.00000	3.277
M	43	Total Demeton				176191	3.00000	3.022

QC Flag Legend

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

TestAmerica

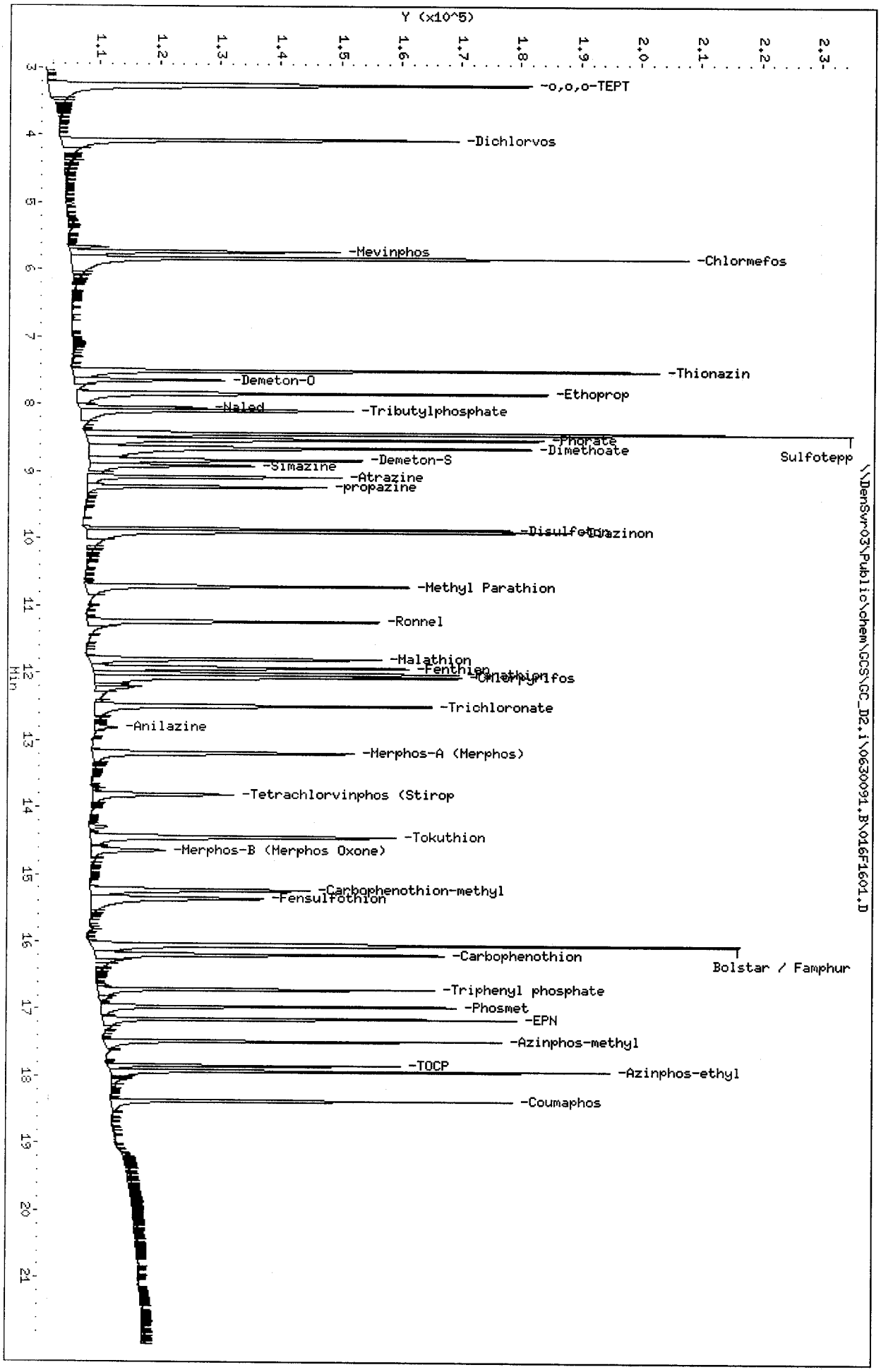
INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 016F1601.D
Lab Smp Id: OPP L5 GSV0635
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Calibration Date: 01-JUL-2009
Calibration Time: 03:37
Client Smp ID: OPP L5 GSV0635
Level:
Sample Type:
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	143482	71741	286964	131201	-8.56
39 TOCP	70419	35210	140838	70963	0.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.10	7.60	8.60	8.10	-0.02
39 TOCP	17.84	17.34	18.34	17.84	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: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\016F1601.D
Date : 30-JUN-2009 23:58
Client ID: OPP L5 GSV0635
Sample Info: OPP L5 GSV0635
Column phase: RTx-1MS
Instrument: GC_D2.i
Operator: MPK/TLM
Column diameter: 0.32

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B/016F1601.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 016F1601.D
Analysis Type: NONE

Injection Date: 30-JUN-2009 23:58
Lab Sample ID: OPP L5 GSV0635
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	3.0000	2.6368	12.1	15.0	
2	Dichlorvos	3.0000	2.6533	11.6	15.0	
3	Chlormefos	3.0000	2.7861	7.1	15.0	
4	Mevinphos	3.0000	2.9664	1.1	15.0	
5	Demeton-O	0.9750	0.9882	1.4	15.0	
6	Thionazin	3.0000	2.9204	2.7	15.0	
7	Ethoprop	3.0000	2.7651	7.8	15.0	
8	Phorate	3.0000	3.1758	5.9	15.0	
10	Naled	3.0000	2.7153	9.5	15.0	
146	Sulfotepp	3.0000	2.9573	1.4	15.0	
10	Simazine	3.0000	2.8191	6.0	15.0	
12	Diazinon	3.0000	2.9603	1.3	15.0	
150	Atrazine	3.0000	3.1422	4.7	15.0	
13	Propazine	3.0000	3.1299	4.3	15.0	
14	Disulfoton	3.0000	3.0092	0.3	15.0	
15	Demeton-S	2.0400	2.0058	1.7	15.0	
16	Dimethoate	3.0000	2.9403	2.0	15.0	
17	Ronnel	3.0000	2.6683	11.1	15.0	
148	Merphos-A (Merphos)	3.0000	3.0026	0.1	999.0	
18	Chlorpyrifos	3.0000	2.9514	1.6	15.0	
19	Fenthion	3.0000	2.9426	1.9	15.0	
20	Trichloronate	3.0000	2.8904	3.7	15.0	
21	Anilazine	3.0000	2.0686	31.0	15.0	<-
23	Methyl Parathion	3.0000	3.0026	0.1	15.0	
24	Malathion	3.0000	3.0056	0.2	15.0	
25	Tokuthion	3.0000	2.9507	1.6	15.0	
26	Parathion	3.0000	3.0408	1.4	15.0	
149	Merphos-B (Merphos Oxone)	3.0000	3.0460	1.5	999.0	
27	Tetrachlorvinphos (stirophos)	3.0000	2.6185	12.7	15.0	
28	Carbophenothion methyl	3.0000	3.0418	1.4	15.0	
28	Bolstar	3.0000	3.1319	4.4	15.0	
30	Carbophenothion	3.0000	3.4194	14.0	15.0	
29	Triphenyl phosphate	3.0000	3.1849	6.2	15.0	
30	Fensulfothion	3.0000	2.7512	8.3	15.0	
35	Phosmet / EPN	6.0000	5.6974	5.0	15.0	
33	Famphur	3.0000	2.7294	9.0	15.0	
34	Azinphos-methyl	3.0000	2.5817	13.9	15.0	
35	Azinphos-ethyl	3.0000	2.8420	5.3	15.0	
36	Coumaphos	3.0000	3.0500	1.7	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B/016F1601.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 016F1601.D
Analysis Type: NONE

Injection Date: 30-JUN-2009 23:58
Lab Sample ID: OPP L5 GSV0635
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
22 Merphos	3.0000	2.9883	0.4	15.0
40 Total Demeton	3.0000	2.9940	0.2	15.0

Average %D = 5.31

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\016F1601.D
Lab Smp Id: OPP L5 GSV0635 Client Smp ID: OPP L5 GSV0635
Inj Date : 30-JUN-2009 23:58
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L5 GSV0635
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Meth Date : 01-Jul-2009 08:34 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	4.724	4.731	(0.251)	234259	3.00000	2.637
	2 Dichlorvos	6.540	6.546	(0.348)	184066	3.00000	2.653
$	3 Chlormefos	7.379	7.384	(0.392)	194568	3.00000	2.786
	4 Mevinphos	9.230	9.234	(0.491)	138619	3.00000	2.966
	5 Demeton-O	9.729	9.734	(0.517)	44004	0.97500	0.9882
	6 Thionazin	9.980	9.984	(0.530)	204082	3.00000	2.920
	7 Ethoprop	10.494	10.499	(0.558)	144385	3.00000	2.765
	8 Phorate	10.534	10.539	(0.560)	192303	3.00000	3.176
	9 Naled	10.935	10.939	(0.581)	41239	3.00000	2.715
	10 Sulfotepp	11.014	11.017	(0.585)	270086	3.00000	2.957(A)
*	11 Tributylphosphate	11.107	11.116	(1.000)	119701	2.00000	
	12 Simazine	11.395	11.399	(0.606)	36875	3.00000	2.819(A)
	13 Diazinon	11.537	11.541	(0.613)	145412	3.00000	2.960
	14 Atrazine	11.579	11.584	(0.615)	83340	3.00000	3.142(A)
	15 Propazine	11.742	11.747	(0.624)	71788	3.00000	3.130
	16 Disulfoton	12.045	12.049	(0.640)	144934	3.00000	3.009
	17 Demeton-S	12.120	12.124	(0.644)	114566	2.04000	2.006
	18 Dimethoate	13.277	13.282	(0.706)	189800	3.00000	2.940
	19 Ronnel	13.584	13.587	(0.722)	115936	3.00000	2.668
	20 Merphos-A (Merphos)	13.685	13.689	(1.232)	130240	3.00000	3.003(A)
	21 Chlorpyrifos	14.405	14.409	(0.766)	130064	3.00000	2.951
	22 Fenthion	14.657	14.662	(0.779)	120277	3.00000	2.943
	23 Trichloronate	14.705	14.711	(0.782)	166305	3.00000	2.890
	24 Anilazine	15.207	15.216	(0.808)	7804	3.00000	2.068
	25 Methyl Parathion	15.515	15.519	(0.825)	132497	3.00000	3.002(A)
	26 Malathion	15.722	15.724	(0.836)	124249	3.00000	3.006
	27 Tokuthion	16.344	16.344	(0.869)	142819	3.00000	2.951
	28 Parathion	16.490	16.494	(0.877)	132223	3.00000	3.041(M)
	29 Merphos-B (Merphos Oxone)	16.514	16.517	(1.487)	40826	3.00000	3.046(AM)
	30 Tetrachlorvinphos (stirophos)	16.974	16.977	(0.902)	73652	3.00000	2.618
	31 Carbophenothion methyl	17.079	17.082	(0.908)	122634	3.00000	3.042
	32 Bolstar	17.439	17.440	(0.927)	133004	3.00000	3.132
	33 Carbophenothion	17.520	17.524	(0.931)	142792	3.00000	3.419(A)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34 Triphenyl phosphate	18.277	18.281	(0.971)	109137	3.00000	3.185
	35 Fensulfothion	18.557	18.559	(0.986)	86564	3.00000	2.751
*	36 TOCP	18.814	18.816	(1.000)	68687	2.00000	
	37 Phosmet / EPN	18.907	18.909	(1.005)	199625	6.00000	5.697(A)
	38 Famphur	19.010	19.011	(1.010)	122962	3.00000	2.729
	39 Azinphos-methyl	19.145	19.147	(1.018)	106398	3.00000	2.582
	40 Azinphos-ethyl	19.365	19.366	(1.029)	111549	3.00000	2.842
	41 Coumaphos	20.347	20.347	(1.081)	92042	3.00000	3.050
S	42 Merphos				171066	3.00000	2.988(A)
M	43 Total Demeton				158570	3.00000	2.994

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

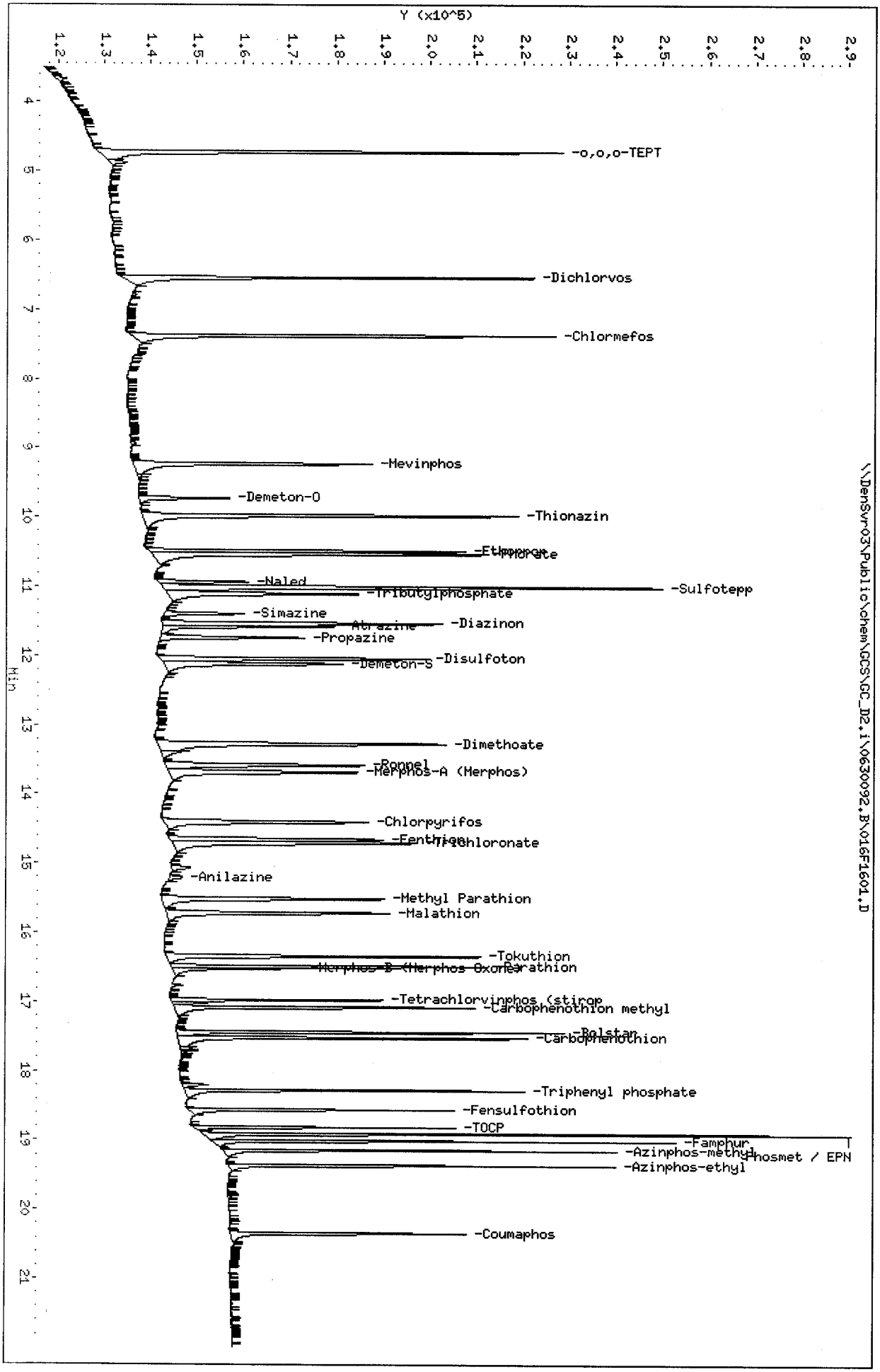
Instrument ID: GC_D2.i
Lab File ID: 016F1601.D
Lab Smp Id: OPP L5 GSV0635
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

Calibration Date: 01-JUL-2009
Calibration Time: 03:37
Client Smp ID: OPP L5 GSV0635
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	122787	61394	245574	119701	-2.51
36 TOCP	65573	32787	131146	68687	4.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.11	10.61	11.61	11.11	0.00
36 TOCP	18.81	18.31	19.31	18.81	0.00

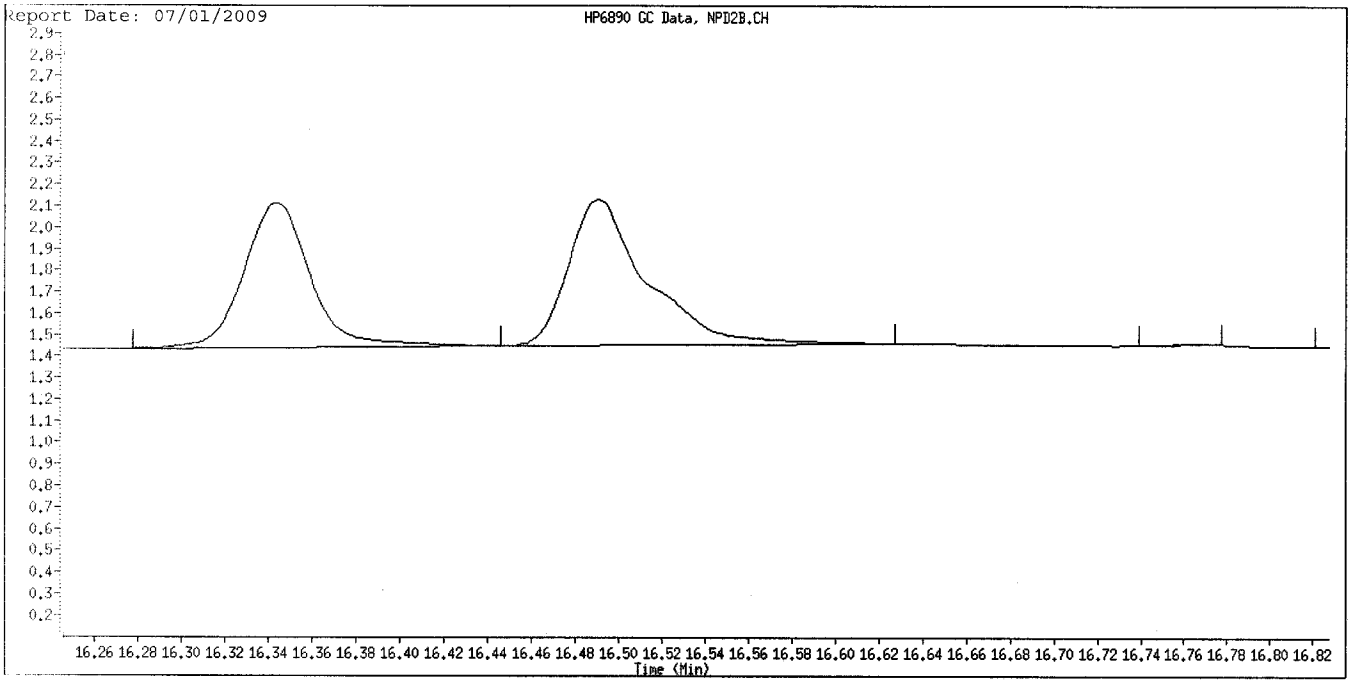
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



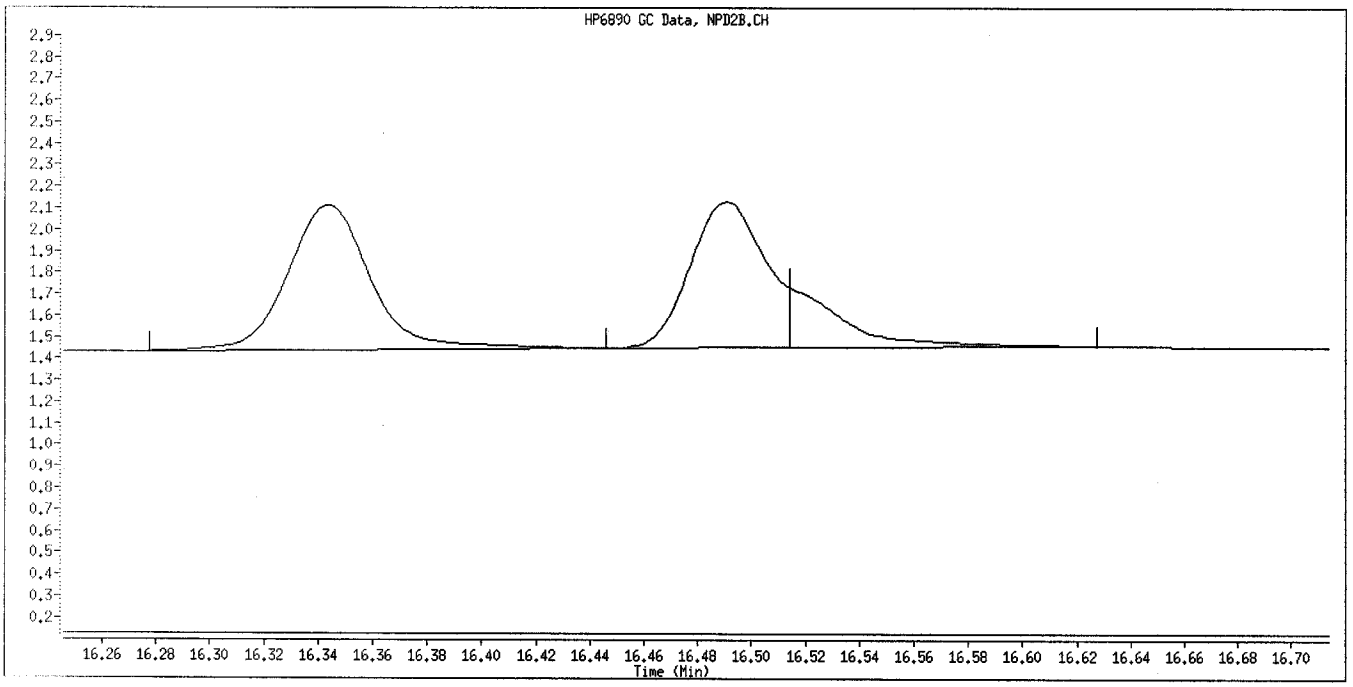
Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\016F1601.D
Date : 30-JUN-2009 23:58
Client ID: OPP L5 GSV0635
Sample Info: OPP L5 GSV0635
Column phase: RTx-OPPest

Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32

Data File Name: 016F1601.D
Inj. Date and Time: 30-JUN-2009 23:58
Instrument ID: GC_D2.i
Client ID: OPP L5 GSV0635
Compound Name: Parathion
CAS #:



Original Integration

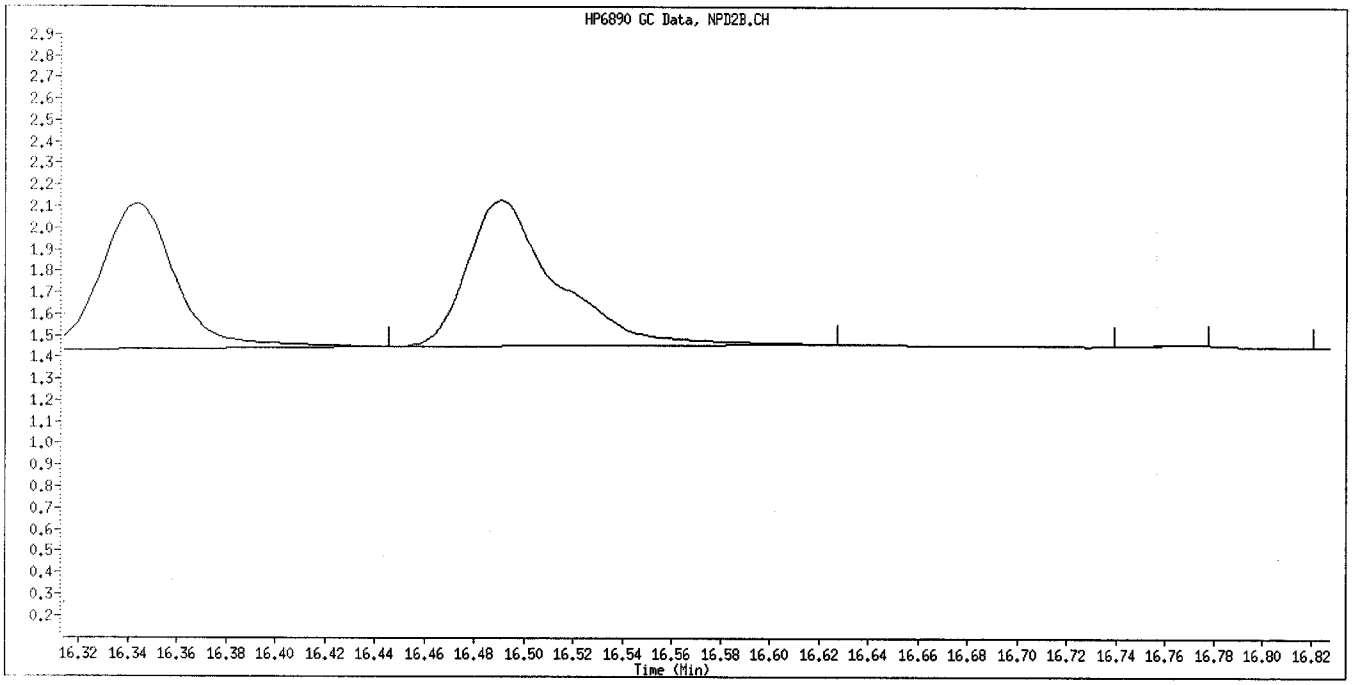


Manual Integration

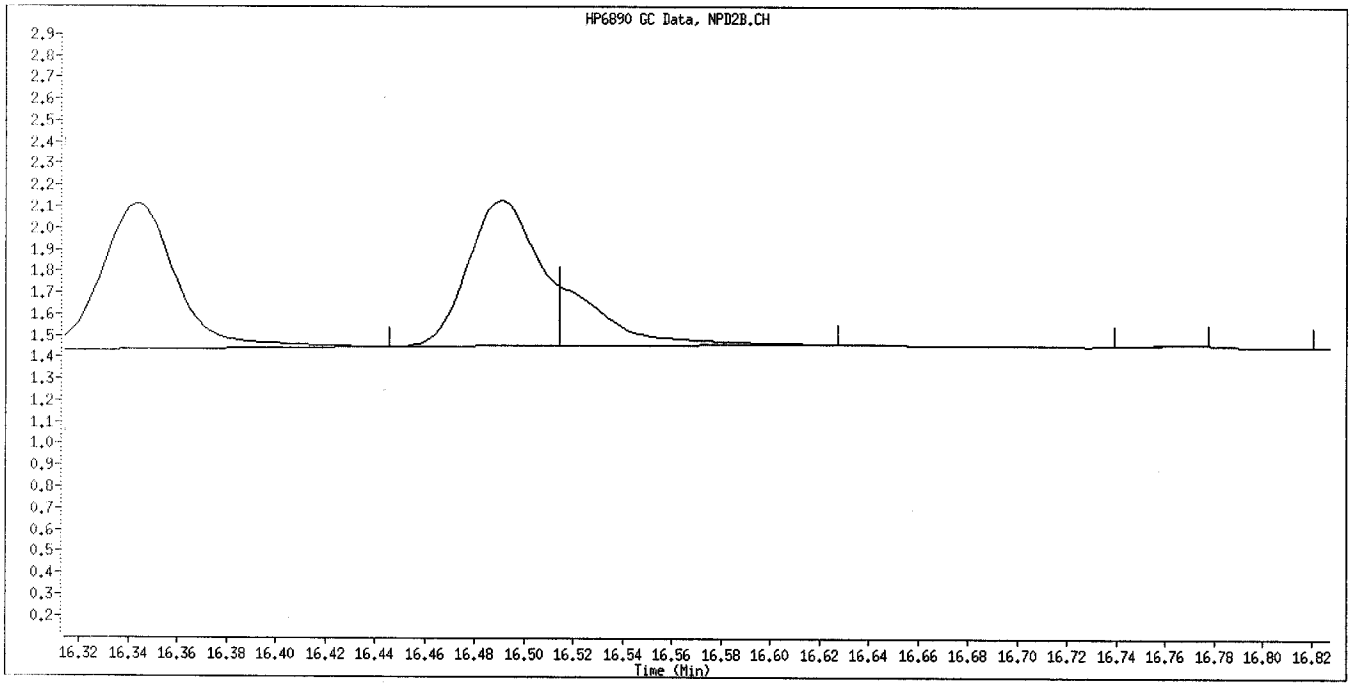
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

IF 7/2/09

Data File Name: 016F1601.D
Inj. Date and Time: 30-JUN-2009 23:58
Instrument ID: GC_D2.i
Client ID: OPP L5 GSV0635
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 07/01/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

7/2/10

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B/024F2401.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 024F2401.D
Analysis Type: NONE

Injection Date: 01-JUL-2009 03:37
Lab Sample ID: OPP L5 GSV0635
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	3.0000	2.8238	5.9	15.0	
2	Dichlorvos	3.0000	2.6647	11.2	15.0	
3	Mevinphos	3.0000	2.6783	10.7	15.0	
4	Chlormefos	3.0000	3.0124	0.4	15.0	
5	Thionazin	3.0000	2.9851	0.5	15.0	
6	Demeton-O	0.9750	0.9365	3.9	15.0	
7	Ethoprop	3.0000	3.2757	9.2	15.0	
8	Naled	3.0000	2.6708	11.0	15.0	
9	Sulfotepp	3.0000	3.2408	8.0	15.0	
10	Phorate	3.0000	3.1880	6.3	15.0	
11	Dimethoate	3.0000	3.1315	4.4	15.0	
12	Demeton-S	2.0400	2.2708	11.3	15.0	
13	Simazine	3.0000	3.4613	15.4	15.0	<-
14	Atrazine	3.0000	3.4039	13.5	15.0	
15	propazine	3.0000	3.2361	7.9	15.0	
17	Disulfoton	3.0000	2.9931	0.2	15.0	
16	Diazinon	3.0000	3.1975	6.6	15.0	
18	Methyl Parathion	3.0000	3.1575	5.3	15.0	
19	Ronnel	3.0000	3.0628	2.1	15.0	
20	Malathion	3.0000	3.1102	3.7	15.0	
21	Fenthion	3.0000	3.1014	3.4	15.0	
22	Parathion	3.0000	3.1602	5.3	15.0	
23	Chlorpyrifos	3.0000	3.1772	5.9	15.0	
24	Trichloronate	3.0000	3.2378	7.9	15.0	
25	Anilazine	3.0000	2.4443	18.5	15.0	<-
148	Merphos-A (Merphos)	3.0000	3.2869	9.6	999.0	
26	Tetrachlorvinphos (Stirophos)	3.0000	2.6841	10.5	15.0	
28	Tokuthion	3.0000	3.2593	8.6	15.0	
149	Merphos-B (Merphos Oxone)	3.0000	3.6071	20.2	999.0	
29	Carbophenothion-methyl	3.0000	3.0811	2.7	15.0	
29	Fensulfothion	3.0000	2.8678	4.4	15.0	
30	Bolstar / Famphur	6.0000	6.0135	0.2	15.0	
32	Carbophenothion	3.0000	3.0327	1.1	15.0	
31	Triphenyl phosphate	3.0000	3.2408	8.0	15.0	
34	Phosmet	3.0000	2.8477	5.1	15.0	
32	EPN	3.0000	3.1699	5.7	15.0	
33	Azinphos-methyl	3.0000	2.7448	8.5	15.0	
35	Azinphos-ethyl	3.0000	2.9955	0.1	15.0	
36	Coumaphos	3.0000	2.9444	1.9	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B/024F2401.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 024F2401.D
Analysis Type: NONE

Injection Date: 01-JUL-2009 03:37
Lab Sample ID: OPP L5 GSV0635
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 Merphos	3.0000	3.3705	12.4	15.0
40 Total Demeton	3.0000	3.2073	6.9	15.0

Average %D = 6.94

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\024F2401.D
Lab Smp Id: OPP L5 GSV0635 Client Smp ID: OPP L5 GSV0635
Inj Date : 01-JUL-2009 03:37
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L5 GSV0635
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Meth Date : 01-Jul-2009 08:29 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 24 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	3.251	3.254	(0.182)	280156	3.00000	2.824
	2 Dichlorvos	4.068	4.074	(0.228)	164165	3.00000	2.665
	3 Mevinphos	5.733	5.739	(0.321)	90640	3.00000	2.678
$	4 Chlormefos	5.831	5.836	(0.327)	232400	3.00000	3.012
	5 Thionazin	7.503	7.507	(0.421)	210175	3.00000	2.985
	6 Demeton-O	7.643	7.649	(0.428)	62962	0.97500	0.9365
	7 Ethoprop	7.841	7.852	(0.439)	202108	3.00000	3.276
	8 Naled	8.051	8.057	(0.451)	41340	3.00000	2.671
*	9 Tributylphosphate	8.096	8.135	(1.000)	143482	2.00000	
	10 Sulfotepp	8.436	8.442	(0.473)	284003	3.00000	3.241
	11 Phorate	8.528	8.532	(0.478)	203704	3.00000	3.188
	12 Dimethoate	8.651	8.659	(0.485)	232442	3.00000	3.132
	13 Demeton-S	8.831	8.846	(0.495)	122223	2.04000	2.271
	14 Simazine	8.916	8.924	(0.500)	87084	3.00000	3.461
	15 Atrazine	9.085	9.094	(0.509)	97969	3.00000	3.404
	16 propazine	9.231	9.241	(0.517)	85940	3.00000	3.236
	17 Disulfoton	9.865	9.869	(0.553)	129070	3.00000	2.993
	18 Diazinon	9.896	9.902	(0.555)	219468	3.00000	3.197
	19 Methyl Parathion	10.713	10.717	(0.600)	137447	3.00000	3.158
	20 Ronnel	11.236	11.241	(0.630)	137816	3.00000	3.063
	21 Malathion	11.796	11.804	(0.661)	126982	3.00000	3.110
	22 Fenthion	11.928	11.932	(0.668)	137234	3.00000	3.101
	23 Parathion	12.016	12.019	(0.673)	148823	3.00000	3.160
	24 Chlorpyrifos	12.065	12.067	(0.676)	181021	3.00000	3.177
	25 Trichloronate	12.491	12.496	(0.700)	164874	3.00000	3.238
	26 Anilazine	12.815	12.817	(0.718)	10791	3.00000	2.444
	27 Merphos-A (Merphos)	13.193	13.199	(0.739)	139645	3.00000	3.287
	28 Tetrachlorvinphos (Stirophos)	13.813	13.824	(0.774)	75789	3.00000	2.684
	29 Tokuthion	14.445	14.449	(0.810)	159099	3.00000	3.259
	30 Merphos-B (Merphos Oxone)	14.643	14.651	(0.821)	41206	3.00000	3.607
	31 Carbophenothion-methyl	15.233	15.239	(0.854)	115068	3.00000	3.081
	32 Fensulfothion	15.358	15.361	(0.861)	115955	3.00000	2.868
	33 Bolstar / Famphur	16.050	16.053	(0.899)	280827	6.00000	6.014

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	16.193	16.197	(0.908)	142081	3.00000	3.033
$	35 Triphenyl phosphate	16.708	16.712	(0.936)	115380	3.00000	3.241(A)
	36 Phosmet	16.961	16.963	(0.951)	114194	3.00000	2.848
	37 EPN	17.148	17.151	(0.961)	122463	3.00000	3.170
	38 Azinphos-methyl	17.478	17.480	(0.980)	117285	3.00000	2.745
*	39 TOCP	17.843	17.846	(1.000)	70419	2.00000	
	40 Azinphos-ethyl	17.923	17.926	(1.004)	139898	3.00000	2.996
	41 Coumaphos	18.365	18.366	(1.029)	101476	3.00000	2.944
S	42 Merphos				180851	3.00000	3.370
M	43 Total Demeton				185185	3.00000	3.207

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

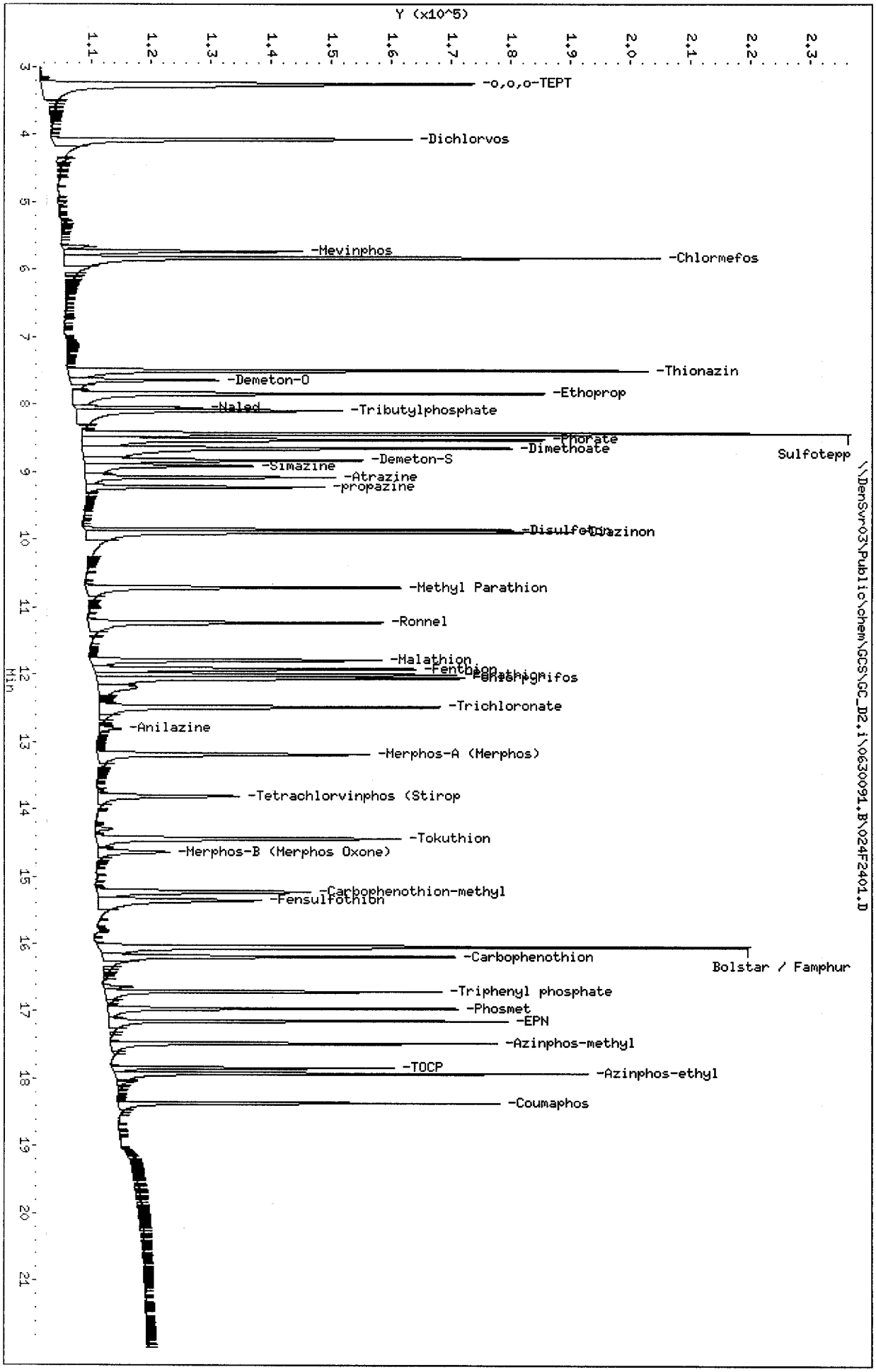
Instrument ID: GC_D2.i
Lab File ID: 024F2401.D
Lab Smp Id: OPP L5 GSV0635
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: OPP L5 GSV0635
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	131201	65601	262402	143482	9.36
39 TOCP	70963	35482	141926	70419	-0.77

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.10	7.60	8.60	8.10	0.02
39 TOCP	17.84	17.34	18.34	17.84	-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: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\024F2401.D
Date : 01-JUL-2009 03:37
Client ID: OPP L5 GSV0635
Sample Info: OPP L5 GSV0635
Column phase: RTx-1MS

Instrument: GC_D2.i
Operator: HPK/TLW
Column diameter: 0.32

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B/024F2401.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 024F2401.D
Analysis Type: NONE

Injection Date: 01-JUL-2009 03:37
Lab Sample ID: OPP L5 GSV0635
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
1	o,o,o-TEPT	3.0000	2.9074	3.1	15.0
2	Dichlorvos	3.0000	2.9194	2.7	15.0
3	Chlormefos	3.0000	3.2045	6.8	15.0
4	Mevinphos	3.0000	3.1521	5.1	15.0
5	Demeton-O	0.9750	1.0170	4.3	15.0
6	Thionazin	3.0000	3.0797	2.7	15.0
7	Ethoprop	3.0000	2.9643	1.2	15.0
8	Phorate	3.0000	3.2740	9.1	15.0
10	Naled	3.0000	2.7022	9.9	15.0
146	Sulfotepp	3.0000	3.0983	3.3	15.0
10	Simazine	3.0000	3.0104	0.3	15.0
12	Diazinon	3.0000	3.0986	3.3	15.0
150	Atrazine	3.0000	2.8489	5.0	15.0
13	Propazine	3.0000	2.9660	1.1	15.0
14	Disulfoton	3.0000	3.2392	8.0	15.0
15	Demeton-S	2.0400	2.2807	11.8	15.0
16	Dimethoate	3.0000	2.6773	10.8	15.0
17	Ronnel	3.0000	2.8706	4.3	15.0
148	Merphos-A (Merphos)	3.0000	3.0536	1.8	999.0
18	Chlorpyrifos	3.0000	3.2230	7.4	15.0
19	Fenthion	3.0000	3.0566	1.9	15.0
20	Trichloronate	3.0000	3.0477	1.6	15.0
21	Anilazine	3.0000	2.7239	9.2	15.0
23	Methyl Parathion	3.0000	2.9473	1.8	15.0
24	Malathion	3.0000	3.1918	6.4	15.0
25	Tokuthion	3.0000	3.1879	6.3	15.0
26	Parathion	3.0000	3.2449	8.2	15.0
149	Merphos-B (Merphos Oxone)	3.0000	3.4902	16.3	999.0
27	Tetrachlorvinphos (stirophos)	3.0000	2.7179	9.4	15.0
28	Carbophenothion methyl	3.0000	3.1041	3.5	15.0
28	Bolstar	3.0000	3.2995	10.0	15.0
30	Carbophenothion	3.0000	3.4309	14.4	15.0
29	Triphenyl phosphate	3.0000	3.1604	5.3	15.0
30	Fensulfothion	3.0000	2.7651	7.8	15.0
35	Phosmet / EPN	6.0000	5.8050	3.2	15.0
33	Famphur	3.0000	2.9974	0.1	15.0
34	Azinphos-methyl	3.0000	2.8003	6.7	15.0
35	Azinphos-ethyl	3.0000	2.8809	4.0	15.0
36	Coumaphos	3.0000	3.0953	3.2	15.0

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B/024F2401.D
Report Date: 07/01/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Injection Date: 01-JUL-2009 03:37
Lab File ID: 024F2401.D
Lab Sample ID: OPP L5 GSV0635
Analysis Type: NONE
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
22 Merphos	3.0000	3.3606	12.0	15.0
40 Total Demeton	3.0000	3.2977	9.9	15.0

Average %D = 5.93

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\024F2401.D
Lab Smp Id: OPP L5 GSV0635 Client Smp ID: OPP L5 GSV0635
Inj Date : 01-JUL-2009 03:37
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L5 GSV0635
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Meth Date : 01-Jul-2009 09:38 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 24 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	o,o,o-TEPT	4.725	4.731	(0.251)	246594	3.00000	2.907
2	Dichlorvos	6.542	6.546	(0.348)	193343	3.00000	2.919
$ 3	Chlormefos	7.380	7.384	(0.392)	213639	3.00000	3.204
4	Mevinphos	9.230	9.234	(0.491)	140621	3.00000	3.152
5	Demeton-O	9.732	9.734	(0.517)	43233	0.97500	1.017
6	Thionazin	9.980	9.984	(0.530)	205459	3.00000	3.080
7	Ethoprop	10.495	10.499	(0.558)	147770	3.00000	2.964
8	Phorate	10.533	10.539	(0.560)	189264	3.00000	3.274
9	Naled	10.935	10.939	(0.581)	39158	3.00000	2.702
10	Sulfotepp	11.013	11.017	(0.585)	270128	3.00000	3.098(A)
* 11	Tributylphosphate	11.107	11.116	(1.000)	122787	2.00000	
12	Simazine	11.395	11.399	(0.606)	37591	3.00000	3.010(A)
13	Diazinon	11.537	11.541	(0.613)	145368	3.00000	3.099
14	Atrazine	11.578	11.584	(0.615)	71541	3.00000	2.849(A)
15	Propazine	11.742	11.747	(0.624)	64875	3.00000	2.966
16	Disulfoton	12.045	12.049	(0.640)	148939	3.00000	3.239
17	Demeton-S	12.120	12.124	(0.644)	125308	2.04000	2.281
18	Dimethoate	13.278	13.282	(0.706)	164985	3.00000	2.677
19	Ronnel	13.583	13.587	(0.722)	119069	3.00000	2.870
20	Merphos-A (Merphos)	13.685	13.689	(1.232)	135866	3.00000	3.054(A)
21	Chlorpyrifos	14.405	14.409	(0.766)	135597	3.00000	3.223
22	Fenthion	14.658	14.662	(0.779)	119271	3.00000	3.056
23	Trichloronate	14.703	14.711	(0.782)	167728	3.00000	3.048
24	Anilazine	15.212	15.216	(0.809)	9809	3.00000	2.724
25	Methyl Parathion	15.515	15.519	(0.825)	124160	3.00000	2.947(A)
26	Malathion	15.722	15.724	(0.836)	125963	3.00000	3.192
27	Tokuthion	16.343	16.344	(0.869)	147305	3.00000	3.188
28	Parathion	16.490	16.494	(0.877)	134701	3.00000	3.245(M)
29	Merphos-B (Merphos Oxone)	16.513	16.517	(1.487)	47785	3.00000	3.490(AM)
30	Tetrachlorvinphos (stirophos)	16.973	16.977	(0.902)	72983	3.00000	2.718
31	Carbophenothion methyl	17.078	17.082	(0.908)	119473	3.00000	3.104
32	Bolstar	17.438	17.440	(0.927)	133769	3.00000	3.299
33	Carbophenothion	17.520	17.524	(0.931)	136777	3.00000	3.431(A)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34 Triphenyl phosphate	18.278	18.281	(0.972)	103390	3.00000	3.160
	35 Fensulfothion	18.557	18.559	(0.986)	83057	3.00000	2.765
*	36 TOCP	18.813	18.816	(1.000)	65573	2.00000	
	37 Phosmet / EPN	18.907	18.909	(1.005)	194121	6.00000	5.805(A)
	38 Famphur	19.007	19.011	(1.010)	128912	3.00000	2.997
	39 Azinphos-methyl	19.143	19.147	(1.018)	110175	3.00000	2.800
	40 Azinphos-ethyl	19.362	19.366	(1.029)	107950	3.00000	2.881
	41 Coumaphos	20.343	20.347	(1.081)	89174	3.00000	3.095
S	42 Merphos				183651	3.00000	3.360(A)
M	43 Total Demeton				168541	3.00000	3.298

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

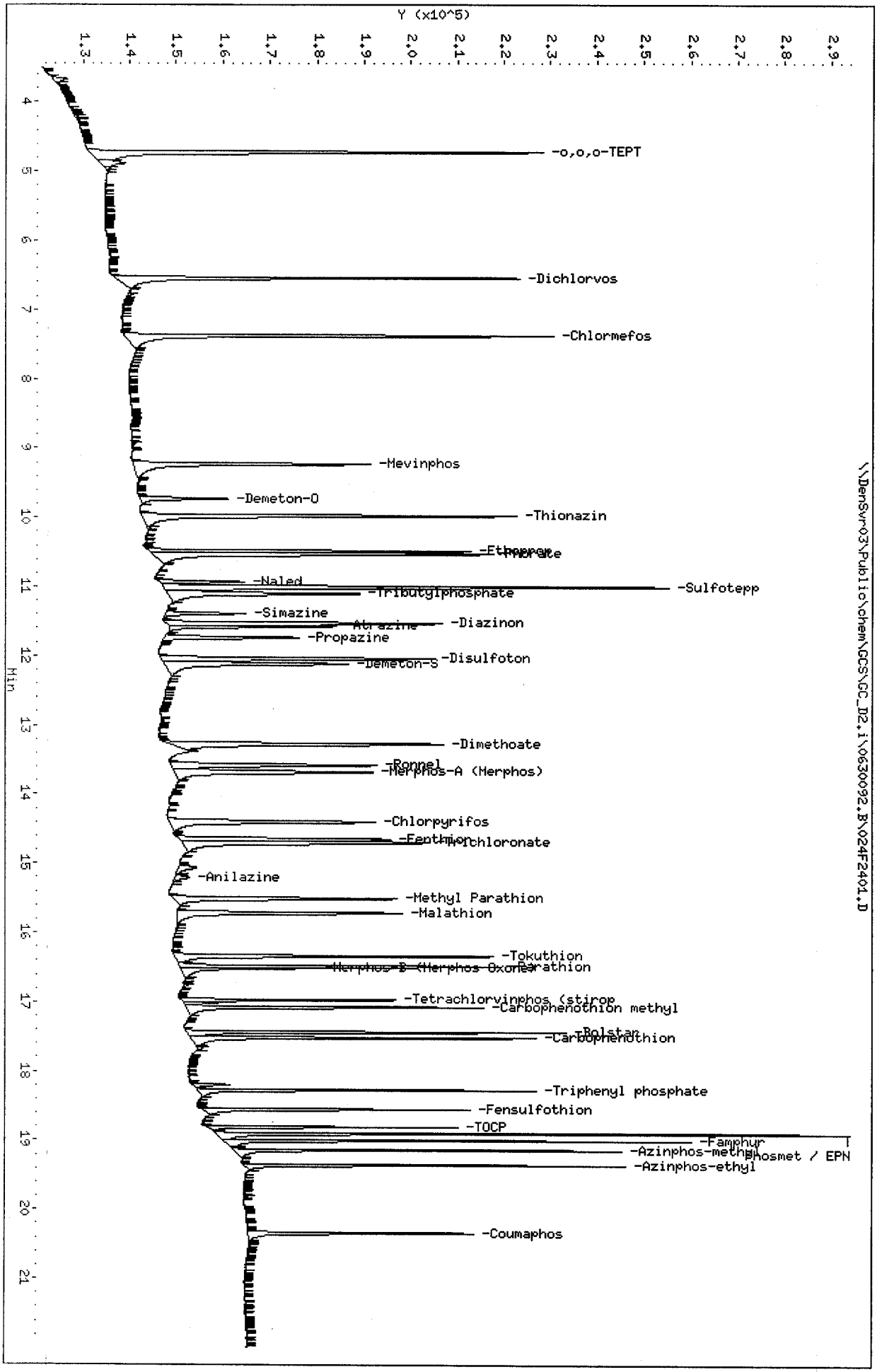
Instrument ID: GC_D2.i
Lab File ID: 024F2401.D
Lab Smp Id: OPP L5 GSV0635
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: OPP L5 GSV0635
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	119701	59851	239402	122787	2.58
36 TOCP	68687	34344	137374	65573	-4.53

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.11	10.61	11.61	11.11	-0.00
36 TOCP	18.81	18.31	19.31	18.81	-0.00

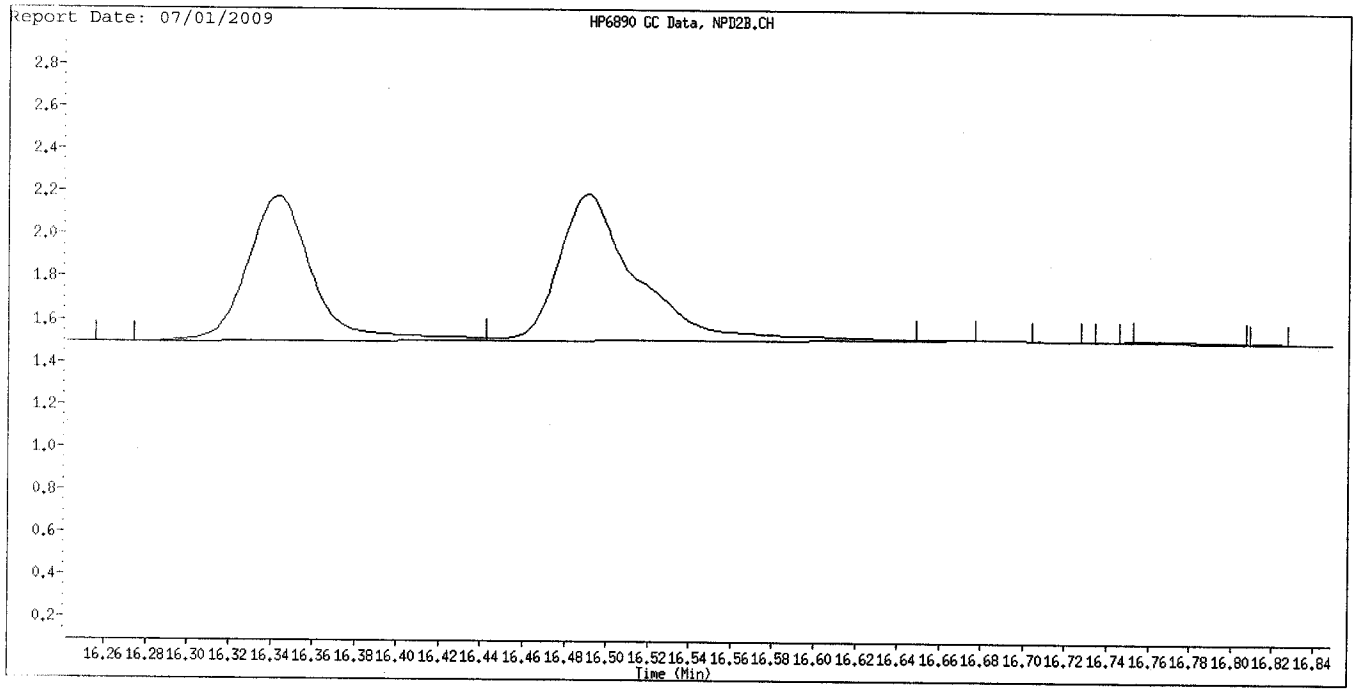
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



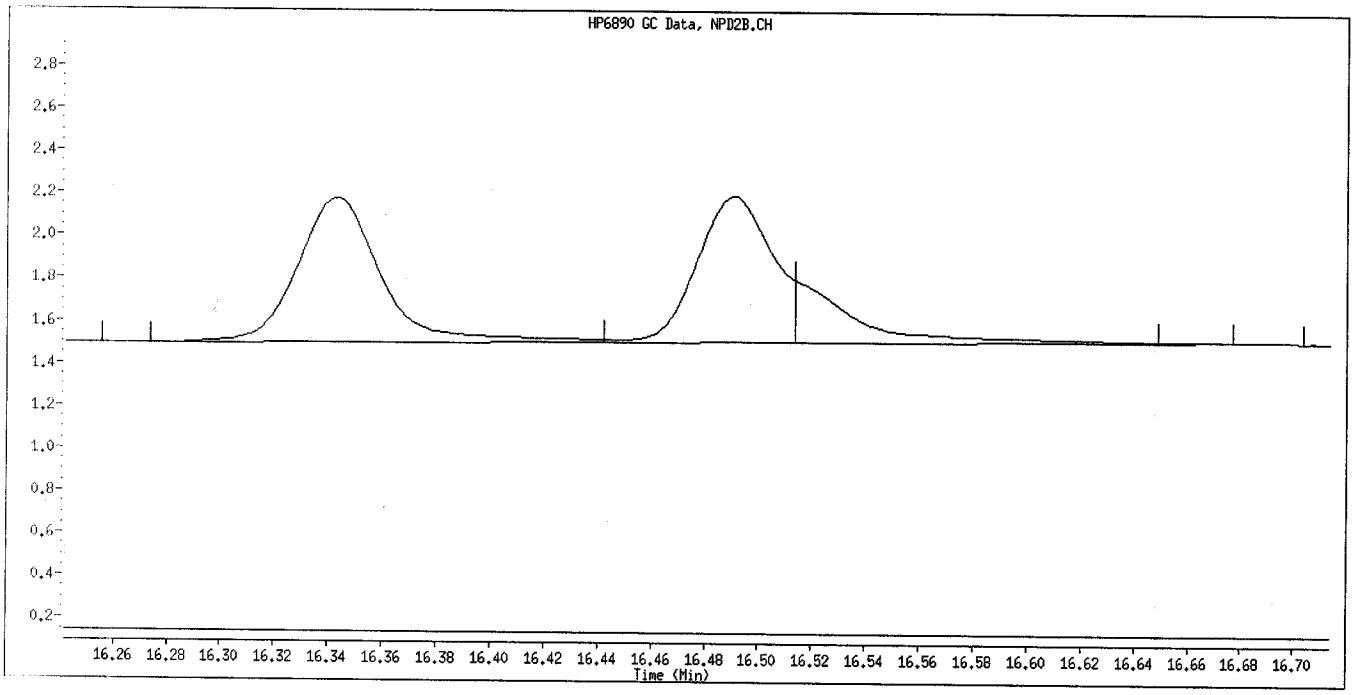
Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\024F2401.D
Date : 01-JUL-2009 03:37
Client ID: OPP L5 GSV0635
Sample Info: OPP L5 GSV0635
Column phase: RTx-OPPest

Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32

Data File Name: 024F2401.D
Inj. Date and Time: 01-JUL-2009 03:37
Instrument ID: GC_D2.i
Client ID: OPP L5 GSV0635
Compound Name: Parathion
CAS #:



Original Integration

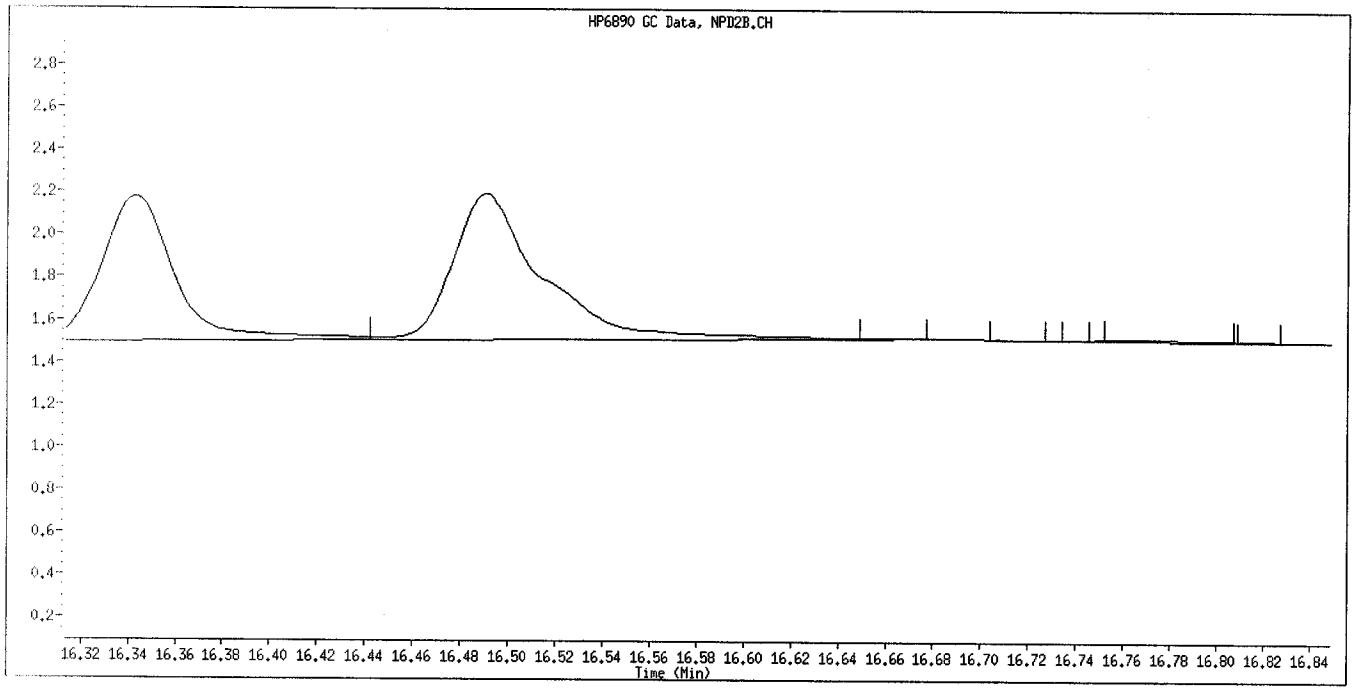


Manual Integration

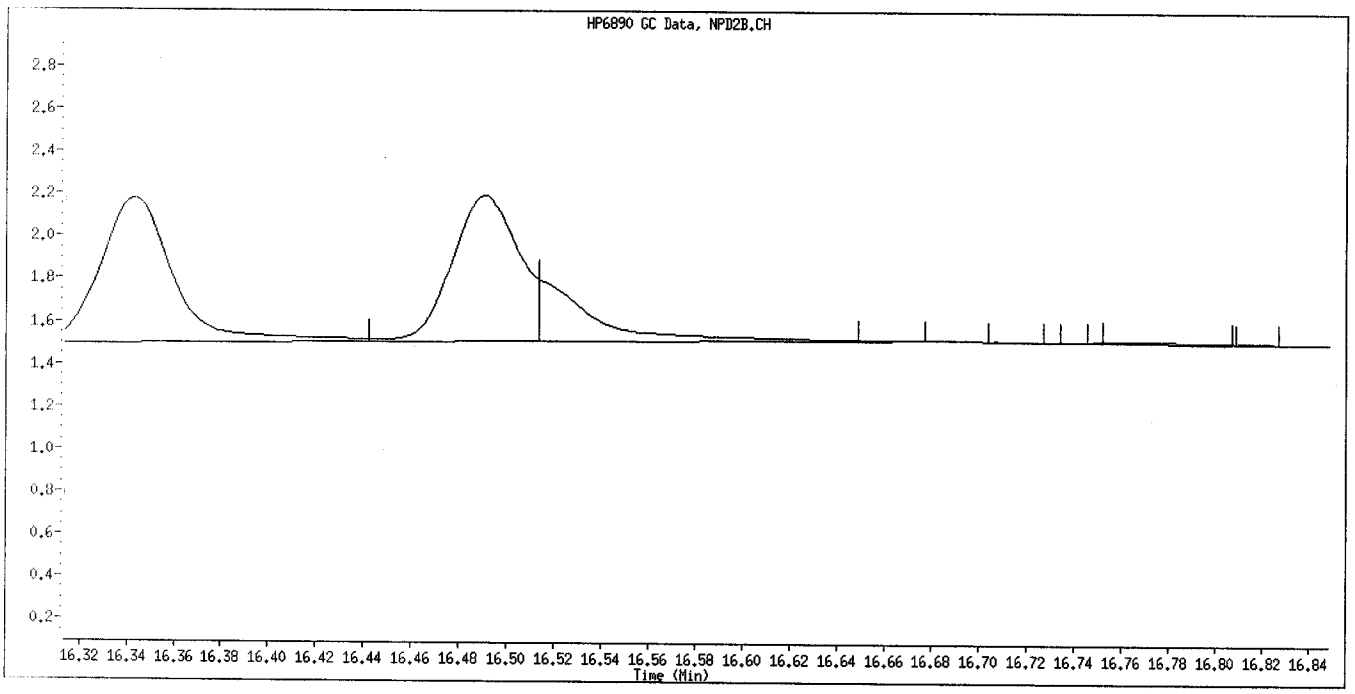
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

1K 7/2/09

Data File Name: 024F2401.D
Inj. Date and Time: 01-JUL-2009 03:37
Instrument ID: GC_D2.i
Client ID: OPP L5 GSV0635
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 07/01/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

LF 7/2/09

GC SEMIVOLATILE SAMPLE DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\019F1901.D
Lab Smp Id: LFM2P1AA Client Smp ID: BLANK
Inj Date : 01-JUL-2009 01:20
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFM2P1AA,MB
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Meth Date : 01-Jul-2009 08:28 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 19 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1000.000	Volume of Sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
1	o,o,o-TEPT	Compound Not Detected.					
2	Dichlorvos	Compound Not Detected.					
3	Mevinphos	Compound Not Detected.					
$ 4	Chlormefos	5.832	5.836	(0.327)	80471	0.90870	1.817
5	Thionazin	Compound Not Detected.					
6	Demeton-O	Compound Not Detected.					
7	Ethoprop	Compound Not Detected.					
8	Naled	8.010	8.057	(0.449)	84	0.19704	0.3941 RJ
* 9	Tributylphosphate	8.098	8.135	(1.000)	110604	2.00000	
10	Sulfotepp	Compound Not Detected.					
11	Phorate	Compound Not Detected.					
12	Dimethoate	Compound Not Detected.					
13	Demeton-S	Compound Not Detected.					
14	Simazine	Compound Not Detected.					
15	Atrazine	Compound Not Detected.					
16	propazine	Compound Not Detected.					
17	Disulfoton	Compound Not Detected.					
18	Diazinon	Compound Not Detected.					
19	Methyl Parathion	Compound Not Detected.					
20	Ronnel	Compound Not Detected.					
21	Malathion	Compound Not Detected.					
22	Fenthion	Compound Not Detected.					

		Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23	Parathion	Compound Not Detected.					
	24	Chlorpyrifos	12.055	12.067	(0.676)	81	0.00124	0.002477(a)
	25	Trichloronate	Compound Not Detected.					
	26	Anilazine	Compound Not Detected.					
	27	Merphos-A (Merphos)	13.202	13.199	(0.740)	89	0.00183	0.003650
	28	Tetrachlorvinphos (Stirophos)	13.820	13.824	(0.775)	157	0.00484	0.009688
	29	Tokuthion	Compound Not Detected.					
	30	Merphos-B (Merphos Oxone)	14.642	14.651	(0.821)	67	0.02597	0.05193
	31	Carbophenothion-methyl	Compound Not Detected.					
	32	Fensulfothion	Compound Not Detected.					
	33	Bolstar / Famphur	Compound Not Detected.					
	34	Carbophenothion	Compound Not Detected.					
$	35	Triphenyl phosphate	16.710	16.712	(0.937)	48864	1.19569	2.391
	36	Phosmet	Compound Not Detected.					
	37	EPN	Compound Not Detected.					
	38	Azinphos-methyl	Compound Not Detected.					
*	39	TOCP	17.842	17.846	(1.000)	80831	2.00000	
	40	Azinphos-ethyl	Compound Not Detected.					
	41	Coumaphos	Compound Not Detected.					
S	42	Merphos				156	0.00253	0.005066
M	43	Total Demeton	Compound Not Detected.					

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 019F1901.D
Lab Smp Id: LFM2P1AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: BLANK
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	131201	65601	262402	110604	-15.70
39 TOCP	70963	35482	141926	80831	13.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.10	7.60	8.60	8.10	0.04
39 TOCP	17.84	17.34	18.34	17.84	-0.01

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.

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9F260000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFM2P1AA Client Smp ID: BLANK
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: BLANK
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	2.000	1.817	90.87	48-114
$ 35 Triphenyl phosphat	2.000	2.391	119.57	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\019F1901.D

Date : 01-JUL-2009 01:20

Client ID: BLANK

Instrument: GC_D2.i

Sample Info: LFM2P1AA,MB

Operator: MPK/TLW

Column phase: RTx-1MS

Column diameter: 0.32

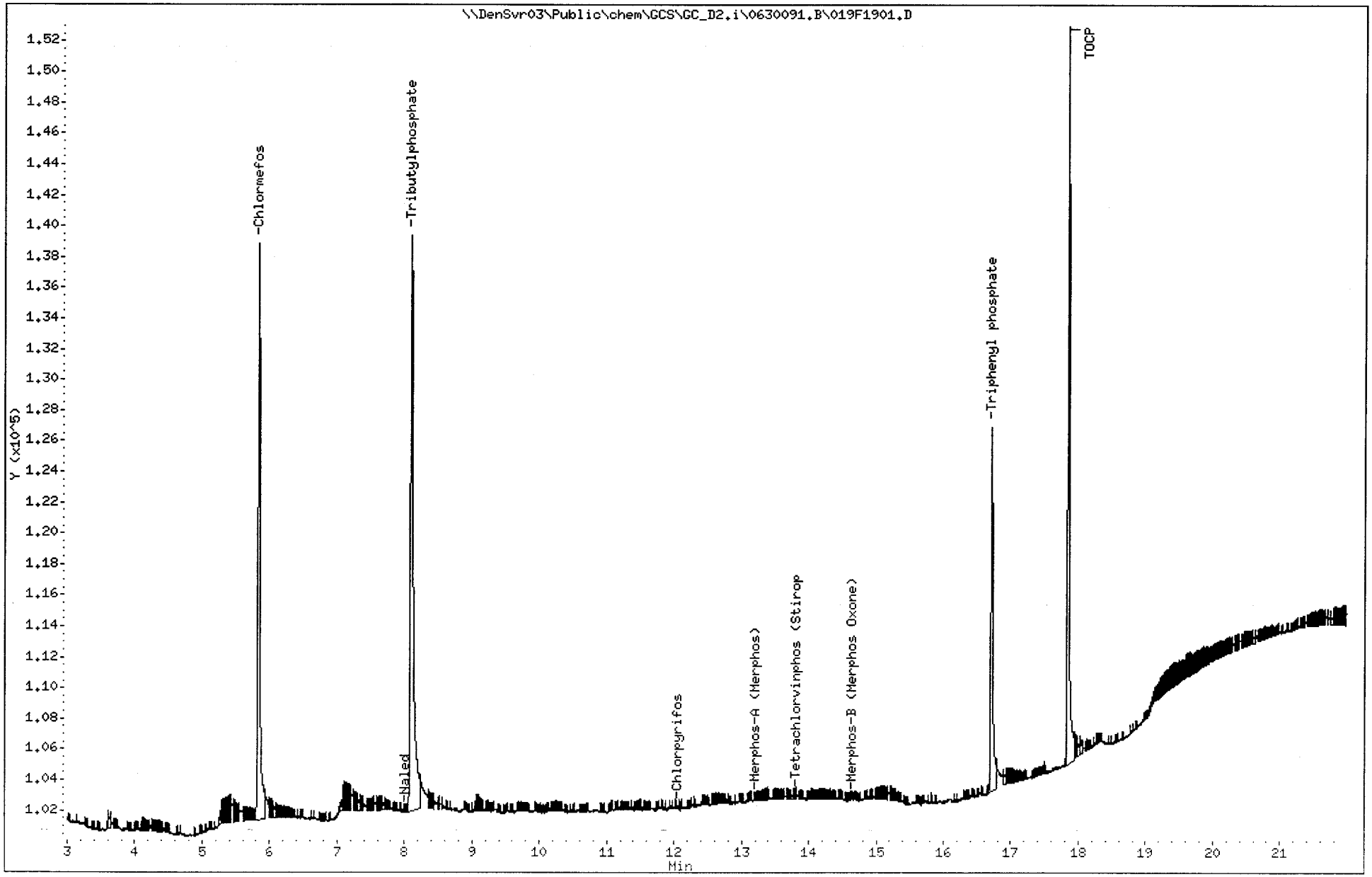


Table of Contents

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\019F1901.D
Lab Smp Id: LFM2P1AA Client Smp ID: BLANK
Inj Date : 01-JUL-2009 01:20
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFM2P1AA,MB
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Meth Date : 01-Jul-2009 08:31 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 19 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1000.000	Volume of Sample Extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
1	o,o,o-TEPT	Compound Not Detected.					
2	Dichlorvos	Compound Not Detected.					
$ 3	Chlormefos	7.380	7.384	(0.392)	75921	1.02017	2.040
4	Mevinphos	Compound Not Detected.					
5	Demeton-O	Compound Not Detected.					
6	Thionazin	Compound Not Detected.					
7	Ethoprop	Compound Not Detected.					
8	Phorate	Compound Not Detected.					
9	Naled	10.915	10.939	(0.580)	71	0.27268	0.5454
10	Sulfotepp	11.009	11.017	(0.585)	61	6e-004	0.001254(aA)
* 11	Tributylphosphate	11.109	11.116	(1.000)	110308	2.00000	
12	Simazine	11.409	11.399	(0.606)	88	0.00631	0.01263(aA)
13	Diazinon	Compound Not Detected.					
14	Atrazine	11.617	11.584	(0.617)	175	0.23814	0.4763(aA)
15	Propazine	Compound Not Detected.					
16	Disulfoton	Compound Not Detected.					
17	Demeton-S	12.122	12.124	(0.644)	90	0.12048	0.2410
18	Dimethoate	Compound Not Detected.					
19	Ronnel	Compound Not Detected.					
20	Merphos-A (Merphos)	13.682	13.689	(1.232)	65	0.00163	0.003252(aA)
21	Chlorpyrifos	Compound Not Detected.					
22	Fenthion	Compound Not Detected.					

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Trichloronate	14.679	14.711	(0.780)	50	0.10604	0.2121
	24 Anilazine	Compound Not Detected.					
	25 Methyl Parathion	Compound Not Detected.					
	26 Malathion	15.739	15.724	(0.837)	102	0.00232	0.004631(a)
	27 Tokuthion	Compound Not Detected.					
	28 Parathion	16.455	16.494	(0.875)	114	0.00246	0.004920(a)
	29 Merphos-B (Merphos Oxone)	Compound Not Detected.					
	30 Tetrachlorvinphos (stirophos)	Compound Not Detected.					
	31 Carbophenothion methyl	Compound Not Detected.					
	32 Bolstar	Compound Not Detected.					
	33 Carbophenothion	Compound Not Detected.					
$	34 Triphenyl phosphate	18.279	18.281	(0.972)	49969	1.36836	2.737
	35 Fensulfothion	Compound Not Detected.					
*	36 TOCP	18.814	18.816	(1.000)	73197	2.00000	
	37 Phosmet / EPN	Compound Not Detected.					
	38 Famphur	Compound Not Detected.					
	39 Azinphos-methyl	Compound Not Detected.					
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	Compound Not Detected.					
S	42 Merphos	Compound Not Detected.					
M	43 Total Demeton				90	0.12048	0.2410

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 019F1901.D
Lab Smp Id: LFM2P1AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: BLANK
Level: LOW
Sample Type: WATER
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	119701	59851	239402	110308	-7.85
36 TOCP	68687	34344	137374	73197	6.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.11	10.61	11.61	11.11	0.02
36 TOCP	18.81	18.31	19.31	18.81	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.

TestAmerica

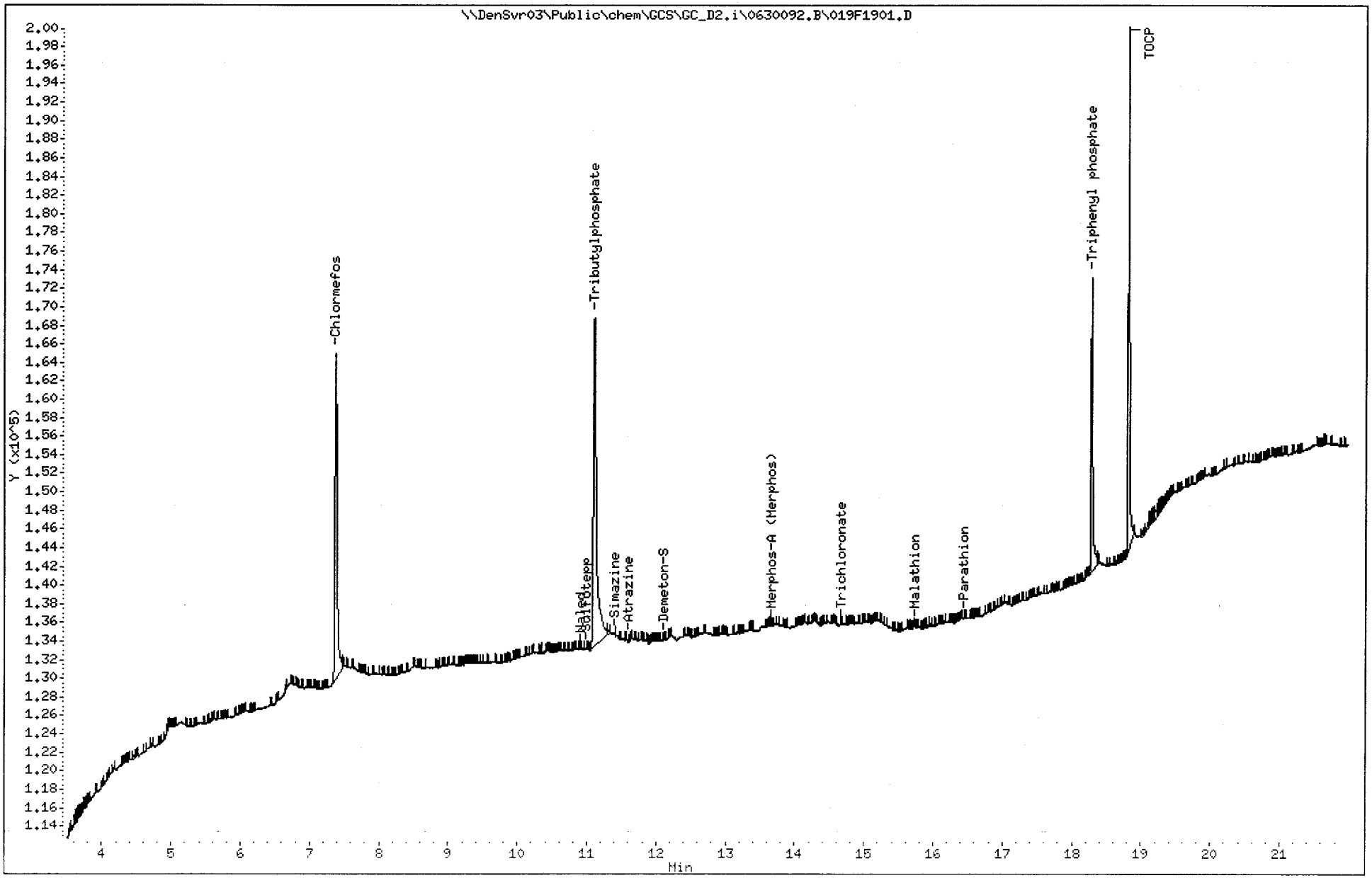
RECOVERY REPORT

Client Name:
Client SDG: D9F260000
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: LFM2P1AA
Client Smp ID: BLANK
Level: LOW
Operator: MPK/TLW
Data Type: GC DATA
SampleType: BLANK
SpikeList File: fullDFCwater.spk
Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	2.000	2.040	102.02	48-114
$ 34 Triphenyl phosphat	2.000	2.737	136.84	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\019F1901.D
Date : 01-JUL-2009 01:20
Client ID: BLANK
Sample Info: LFM2P1AA,MB

Instrument: GC_D2.i
Operator: MPK/TLW
Column phase: RTx-OPPest
Column diameter: 0.32



TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\020F2001.D
Lab Smp Id: LFM2P1AC Client Smp ID: LCS
Inj Date : 01-JUL-2009 01:47
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFM2P1AC,LCS
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Meth Date : 01-Jul-2009 08:28 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 20 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1000.000	Volume of Sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
1	o,o,o-TEPT	3.278	3.254	(0.184)	156721	1.34254	2.685
2	Dichlorvos	4.083	4.074	(0.229)	98052	1.35264	2.705
3	Mevinphos	5.739	5.739	(0.322)	44677	1.12198	2.244
$ 4	Chlormefos	5.834	5.836	(0.327)	63522	0.69978	1.400
5	Thionazin	7.504	7.507	(0.421)	128633	1.55275	3.106
6	Demeton-O	7.644	7.649	(0.428)	99397	1.26533	2.531
7	Ethoprop	7.844	7.852	(0.440)	124695	1.71765	3.435
8	Naled	8.054	8.057	(0.451)	11330	0.76989	1.540
* 9	Tributylphosphate	8.096	8.135	(1.000)	132496	2.00000	
10	Sulfotepp	8.436	8.442	(0.473)	155957	1.47553	2.951
11	Phorate	8.528	8.532	(0.478)	119137	1.58465	3.169
12	Dimethoate	8.654	8.659	(0.485)	121957	1.39641	2.793
13	Demeton-S	8.838	8.846	(0.495)	13009	0.20541	0.4108(R)
14	Simazine	8.914	8.924	(0.500)	39061	1.36887	2.738
15	Atrazine	9.083	9.094	(0.509)	50606	1.49436	2.989
16	propazine	9.229	9.241	(0.517)	48530	1.55312	3.106
17	Disulfoton	9.864	9.869	(0.553)	57526	1.10982	2.220
18	Diazinon	9.898	9.902	(0.555)	151432	1.87507	3.750
19	Methyl Parathion	10.713	10.717	(0.600)	84724	1.65420	3.308
20	Ronnel	11.238	11.241	(0.630)	80641	1.52316	3.046
21	Malathion	11.796	11.804	(0.661)	64954	1.32877	2.658(R)
22	Fenthion	11.928	11.932	(0.668)	78692	1.51144	3.023

		Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23	Parathion	12.016	12.019	(0.673)	92965	1.67778	3.356
	24	Chlorpyrifos	12.064	12.067	(0.676)	111618	1.66499	3.330
	25	Trichloronate	12.493	12.496	(0.700)	91647	1.52962	3.059
	26	Anilazine	12.814	12.817	(0.718)	8650	1.76696	3.534
	27	Merphos-A (Merphos)	13.189	13.199	(0.739)	60	0.00120	0.002400
	28	Tetrachlorvinphos (Stirophos)	13.814	13.824	(0.774)	50657	1.52475	3.049
	29	Tokuthion	14.446	14.449	(0.810)	104242	1.81495	3.630
	30	Merphos-B (Merphos Oxone)	14.641	14.651	(0.821)	102164	7.57764	15.16(A)
	31	Carbophenothion-methyl	Compound Not Detected.					
	32	Fensulfothion	15.359	15.361	(0.861)	64595	1.40757	2.815
	33	Bolstar / Famphur	16.048	16.053	(0.899)	192688	3.50681	7.014
	34	Carbophenothion	16.193	16.197	(0.908)	90176	1.63588	3.272
$	35	Triphenyl phosphate	16.708	16.712	(0.936)	32628	0.77889	1.558
	36	Phosmet	16.961	16.963	(0.951)	61283	1.29885	2.598
	37	EPN	17.148	17.151	(0.961)	75380	1.68174	3.363
	38	Azinphos-methyl	17.478	17.480	(0.980)	77284	1.53717	3.074
*	39	TOCP	17.843	17.846	(1.000)	82856	2.00000	
	40	Azinphos-ethyl	Compound Not Detected.					
	41	Coumaphos	18.363	18.366	(1.029)	65512	1.61553	3.231
S	42	Merphos				102224	1.61917	3.238
M	43	Total Demeton				112406	1.47075	2.941

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 020F2001.D
Lab Smp Id: LFM2P1AC
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: LCS
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	131201	65601	262402	132496	0.99
39 TOCP	70963	35482	141926	82856	16.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.10	7.60	8.60	8.10	0.02
39 TOCP	17.84	17.34	18.34	17.84	-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.

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9F260000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFM2P1AC Client Smp ID: LCS
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: LCS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

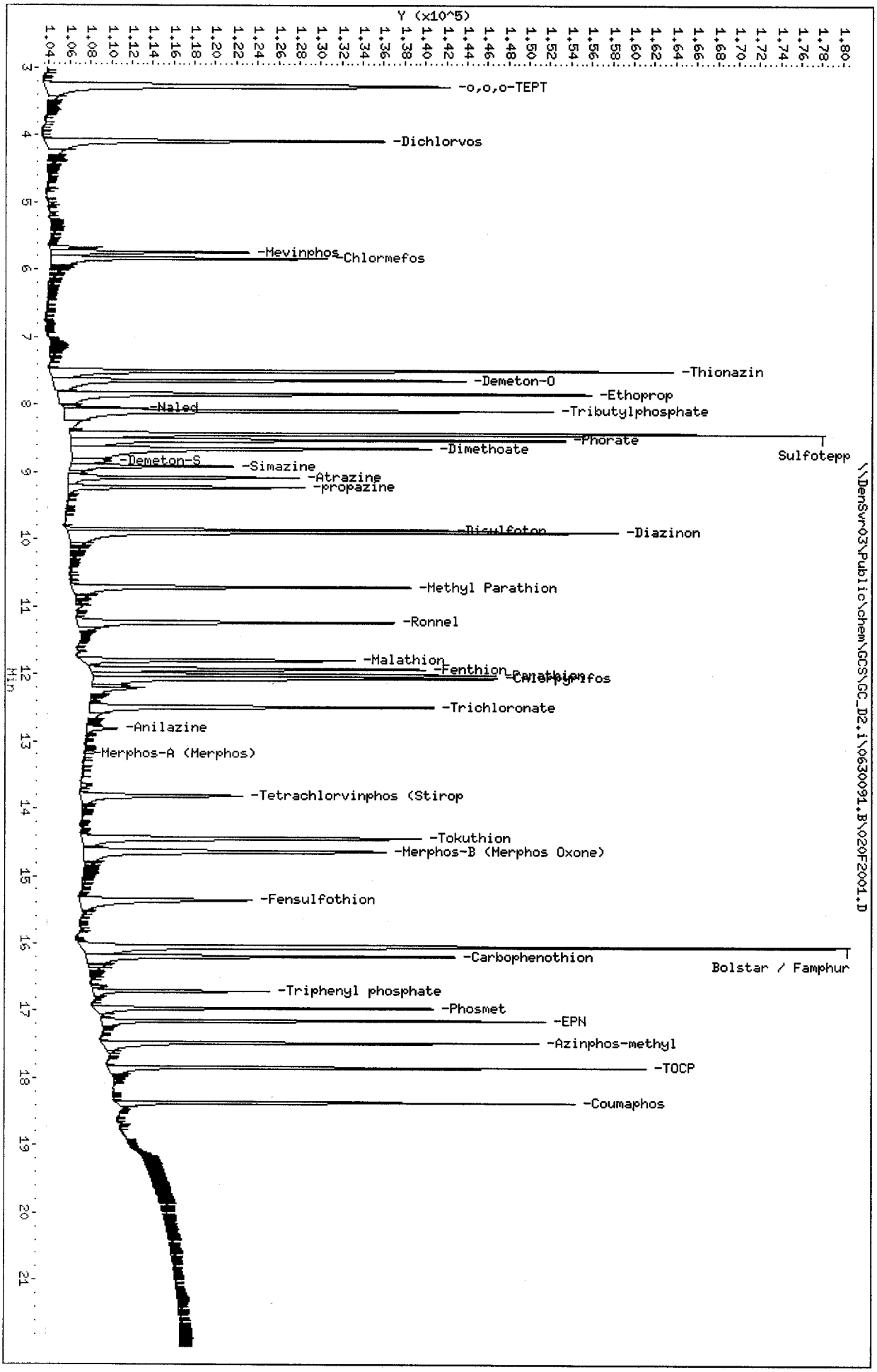
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	4.000	2.685	67.13	36-119
	2	Dichlorvos	4.000	2.705	67.63	50-120
	3	Mevinphos	4.000	2.244	56.10	35-108
$	4	Chlormefos	2.000	1.400	69.98	48-114
	5	Thionazin	4.000	3.106	77.64	65-116
	6	Demeton-O	2.792	2.531	90.64	36-119
	7	Ethoprop	4.000	3.435	85.88	65-108
	8	Naled	4.000	1.540	38.49	36-119
	10	Sulfotepp	4.000	2.951	73.78	69-103
	11	Phorate	4.000	3.169	79.23	62-104
	12	Dimethoate	4.000	2.793	69.82	28-115
	13	Demeton-S	1.208	0.4108	34.01*	36-119
	14	Simazine	4.000	2.738	68.44	47-109
	15	Atrazine	4.000	2.989	74.72	36-119
	16	propazine	4.000	3.106	77.66	36-119
	18	Diazinon	4.000	3.750	93.75	36-119
	17	Disulfoton	4.000	2.220	55.49	36-119
	19	Methyl Parathion	4.000	3.308	82.71	68-119
	20	Ronnel	4.000	3.046	76.16	62-115
	21	Malathion	4.000	2.658	66.44*	67-115
	22	Fenthion	4.000	3.023	75.57	36-119
	23	Parathion	4.000	3.356	83.89	36-119
	24	Chlorpyrifos	4.000	3.330	83.25	36-119
	25	Trichloronate	4.000	3.059	76.48	36-119
	26	Anilazine	4.000	3.534	88.35	47-115
S	42	Merphos	4.000	3.238	80.96	36-119
	28	Tetrachlorvinphos	4.000	3.049	76.24	36-119
	29	Tokuthion	4.000	3.630	90.75	36-119
	31	Carbophenothion-m	4.000	0.0000	*	36-119
	32	Fensulfothion	4.000	2.815	70.38	61-115
	33	Bolstar / Famphur	8.000	7.014	87.67	36-119
	34	Carbophenothion	4.000	3.272	81.79	36-119
$	35	Triphenyl phosphat	2.000	1.558	77.89	50-150
	36	Phosmet	4.000	2.598	64.94	36-119
	37	EPN	4.000	3.363	84.09	36-119
	38	Azinphos-methyl	4.000	3.074	76.86	55-115
	40	Azinphos-ethyl	4.000	0.0000	*	36-119
	41	Coumaphos	4.000	3.231	80.78	62-115
M	43	Total Demeton	4.000	2.941	73.54	47-115

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9F260000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFM2P1AC Client Smp ID: LCS
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: LCS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	2.000	1.400	69.98	48-114
$ 35 Triphenyl phosphat	2.000	1.558	77.89	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\020F2001.D
Date : 01-JUL-2009 01:47
Client ID: LCS
Sample Info: LFM2P1AC,LCS
Column phase: RTx-1MS

Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\020F2001.D
Lab Smp Id: LFM2P1AC Client Smp ID: LCS
Inj Date : 01-JUL-2009 01:47
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFM2P1AC,LCS
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Meth Date : 01-Jul-2009 08:31 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 20 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1000.000	Volume of Sample Extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	1 o,o,o-TEPT	4.731	4.731	(0.252)	138731	1.41512	2.830
	2 Dichlorvos	6.545	6.546	(0.348)	94942	1.24028	2.480
$	3 Chlormefos	7.381	7.384	(0.392)	46709	0.60614	1.212
	4 Mevinphos	9.230	9.234	(0.491)	62468	1.21145	2.423
	5 Demeton-O	9.731	9.734	(0.517)	73531	1.49648	2.993
	6 Thionazin	9.981	9.984	(0.531)	114583	1.48594	2.972
	7 Ethoprop	10.495	10.499	(0.558)	88034	1.52786	3.056
	8 Phorate	10.533	10.539	(0.560)	111213	1.66443	3.329
	9 Naled	10.936	10.939	(0.581)	12372	0.93390	1.868
	10 Sulfotepp	11.013	11.017	(0.585)	145618	1.44497	2.890(A)
*	11 Tributylphosphate	11.106	11.116	(1.000)	122350	2.00000	
	12 Simazine	11.395	11.399	(0.606)	23242	1.61029	3.220(A)
	13 Diazinon	11.538	11.541	(0.613)	96515	1.79226	3.584
	14 Atrazine	11.576	11.584	(0.615)	37831	1.42944	2.859(A)
	15 Propazine	11.741	11.747	(0.624)	39921	1.60623	3.212
	16 Disulfoton	12.045	12.049	(0.640)	72418	1.36263	2.725
	17 Demeton-S	12.113	12.124	(0.644)	1232	0.13747	0.2749(R)
	18 Dimethoate	13.278	13.282	(0.706)	93692	1.31537	2.631
	19 Ronnel	13.585	13.587	(0.722)	73252	1.52787	3.056
	20 Merphos-A (Merphos)	13.715	13.689	(1.235)	121	0.00273	0.005458(aA)
	21 Chlorpyrifos	14.406	14.409	(0.766)	80697	1.65946	3.319
	22 Fenthion	14.658	14.662	(0.779)	76159	1.68856	3.377

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Trichloronate	14.705	14.711	(0.782)	98101	1.59417	3.188
	24 Anilazine	Compound Not Detected.					
	25 Methyl Parathion	15.515	15.519	(0.825)	79250	1.62755	3.255
	26 Malathion	15.721	15.724	(0.836)	66494	1.45770	2.915
	27 Tokuthion	16.343	16.344	(0.869)	87643	1.64099	3.282
	28 Parathion	16.491	16.494	(0.877)	73600	1.53395	3.068
	29 Merphos-B (Merphos Oxone)	16.516	16.517	(1.487)	91397	6.79455	13.59(A)
	30 Tetrachlorvinphos (stirophos)	16.973	16.977	(0.902)	50330	1.62157	3.243
	31 Carbophenothion methyl	Compound Not Detected.					
	32 Bolstar	17.438	17.440	(0.927)	90061	1.92187	3.844
	33 Carbophenothion	17.521	17.524	(0.931)	76340	1.65670	3.313(A)
$	34 Triphenyl phosphate	18.278	18.281	(0.972)	29132	0.77043	1.541
	35 Fensulfothion	18.558	18.559	(0.986)	60480	1.74199	3.484
*	36 TOCP	18.813	18.816	(1.000)	75793	2.00000	
	37 Phosmet / EPN	18.906	18.909	(1.005)	123266	3.15071	6.301
	38 Famphur	19.008	19.011	(1.010)	84089	1.69153	3.383
	39 Azinphos-methyl	19.143	19.147	(1.018)	75041	1.65015	3.300
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	20.343	20.347	(1.081)	55704	1.67279	3.346
S	42 Merphos				91518	1.44884	2.898
M	43 Total Demeton				74763	1.63396	3.268

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 020F2001.D
Lab Smp Id: LFM2P1AC
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: LCS
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	119701	59851	239402	122350	2.21
36 TOCP	68687	34344	137374	75793	10.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.11	10.61	11.61	11.11	-0.00
36 TOCP	18.81	18.31	19.31	18.81	-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.

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9F260000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFM2P1AC Client Smp ID: LCS
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: LCS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

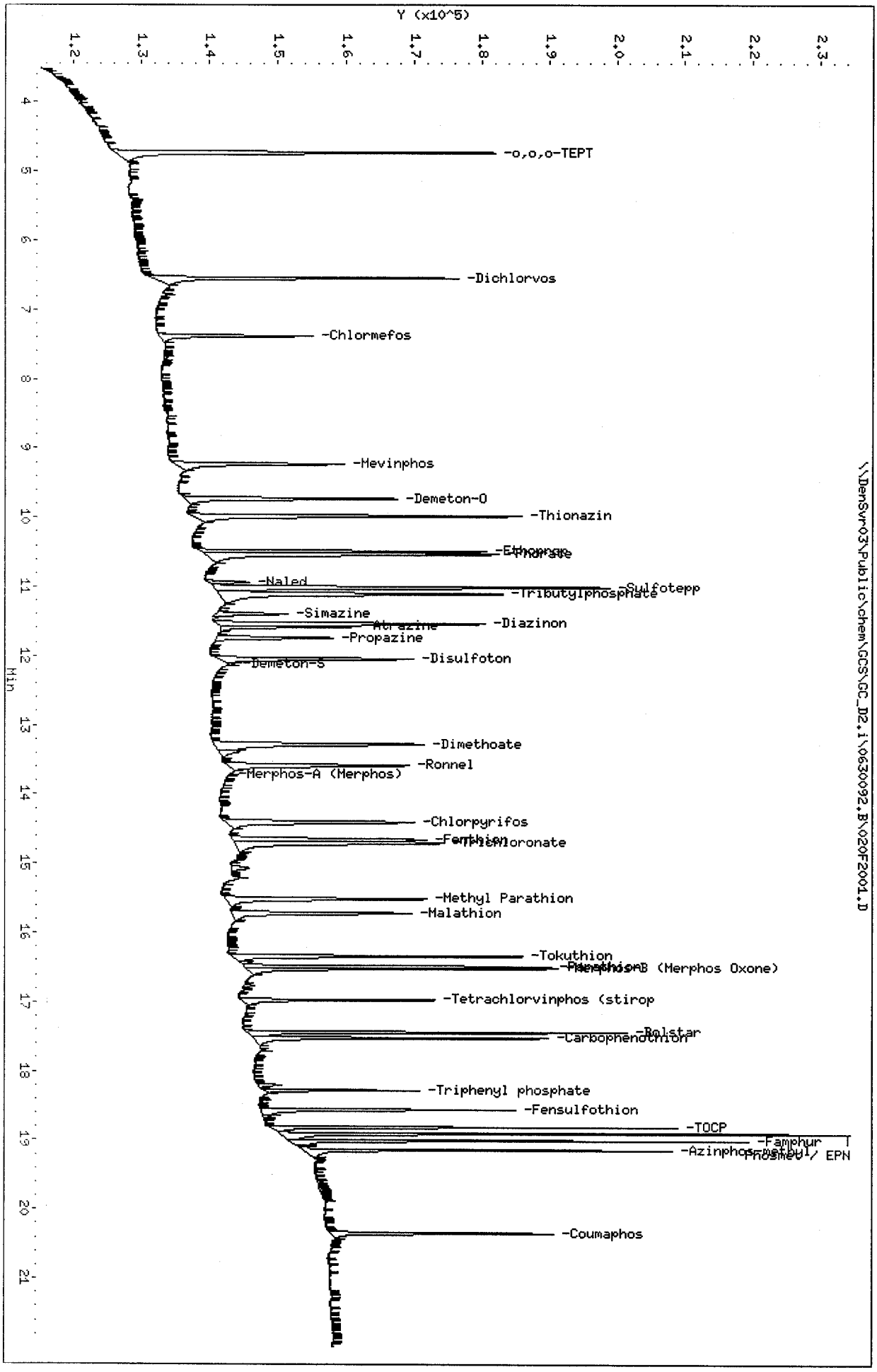
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	4.000	2.830	70.76	36-119
	2	Dichlorvos	4.000	2.480	62.01	50-120
$	3	Chlormefos	2.000	1.212	60.61	58-114
	4	Mevinphos	4.000	2.423	60.57	35-108
	5	Demeton-O	2.800	2.993	106.89	36-119
	6	Thionazin	4.000	2.972	74.30	65-116
	7	Ethoprop	4.000	3.056	76.39	36-119
	8	Phorate	4.000	3.329	83.22	36-119
	9	Naled	4.000	1.868	46.70	36-119
	10	Sulfotepp	4.000	2.890	72.25	36-119
	12	Simazine	4.000	3.220	80.51	36-119
	13	Diazinon	4.000	3.584	89.61	36-119
	14	Atrazine	4.000	2.859	71.47	36-119
	15	Propazine	4.000	3.212	80.31	36-119
	16	Disulfoton	4.000	2.725	68.13	61-103
	17	Demeton-S	1.200	0.2749	22.91*	36-119
	18	Dimethoate	4.000	2.631	65.77	28-82
	19	Ronnel	4.000	3.056	76.39	62-99
	21	Chlorpyrifos	4.000	3.319	82.97	66-101
	22	Fenthion	4.000	3.377	84.43	36-119
	23	Trichloronate	4.000	3.188	79.71	36-119
	24	Anilazine	4.000	0.0000	*	36-119
	25	Methyl Parathion	4.000	3.255	81.38	36-119
	26	Malathion	4.000	2.915	72.89	36-119
	27	Tokuthion	4.000	3.282	82.05	36-119
	28	Parathion	4.000	3.068	76.70	36-119
	30	Tetrachlorvinphos	4.000	3.243	81.08	36-119
	31	Carbophenothion m	4.000	0.0000	*	36-119
	32	Bolstar	4.000	3.844	96.09	36-119
	33	Carbophenothion	4.000	3.313	82.83	36-119
$	34	Triphenyl phosphat	2.000	1.541	77.04	36-119
	35	Fensulfothion	4.000	3.484	87.10	20-105
	37	Phosmet / EPN	8.000	6.301	78.77	36-119
	38	Famphur	4.000	3.383	84.58	61-108
	39	Azinphos-methyl	4.000	3.300	82.51	55-103
	40	Azinphos-ethyl	4.000	0.0000	*	36-119
	41	Coumaphos	4.000	3.346	83.64	36-119
S	42	Merphos	4.000	2.898	72.44	36-119
M	43	Total Demeton	4.000	3.268	81.70	47-100

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9F260000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFM2P1AC Client Smp ID: LCS
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: LCS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	2.000	1.212	60.61	48-114
$ 34 Triphenyl phosphat	2.000	1.541	77.04	50-150


Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\020F2001.D
Date : 01-JUL-2009 01:47
Client ID: LCS
Sample Info: LFM2P1AC,LCS
Column phase: RTx-OPPest
Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\020F2001.D
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Chlormefos
-Mevinphos
-Demeton-O
-Thionazin
-Naled
-Tributylphosphate
-Simazine
-Diazinon
-Propazine
-Disulfoton
-Demeton-S
-Dimethoate
-Ronnel
-Merphos-A (Merphos)
-Chlorpyrifos
-Methyl Parathion
-Malathion
-Tokuthion
-Tetrachlorvinphos (stirop
-Carbophenothion
-Triphenyl phosphate
-Fensulfothion
-TOCP
-Famphur
-Coumaphos
Page 6

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\021F2101.D
Lab Smp Id: LFLLR1AA Client Smp ID: M-125B
Inj Date : 01-JUL-2009 02:15
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFLLR1AA,221-1
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Meth Date : 01-Jul-2009 08:28 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1037.000	Volume of Sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	1 o,o,o-TEPT	Compound Not Detected.					
	2 Dichlorvos	Compound Not Detected.					
	3 Mevinphos	Compound Not Detected.					
$	4 Chlormefos	5.832	5.836	(0.327)	54674	0.59488	1.147
	5 Thionazin	Compound Not Detected.					
	6 Demeton-O	Compound Not Detected.					
	7 Ethoprop	Compound Not Detected.					
	8 Naled	Compound Not Detected.					
*	9 Tributylphosphate	8.099	8.135	(1.000)	127599	2.00000	
	10 Sulfotepp	Compound Not Detected.					
	11 Phorate	Compound Not Detected.					
	12 Dimethoate	Compound Not Detected.					
	13 Demeton-S	Compound Not Detected.					
	14 Simazine	Compound Not Detected.					
	15 Atrazine	Compound Not Detected.					
	16 propazine	Compound Not Detected.					
	17 Disulfoton	Compound Not Detected.					
	18 Diazinon	Compound Not Detected.					
	19 Methyl Parathion	Compound Not Detected.					
	20 Ronnel	Compound Not Detected.					
	21 Malathion	Compound Not Detected.					
	22 Fenthion	Compound Not Detected.					

		Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23	Parathion	Compound Not Detected.					
	24	Chlorpyrifos	12.069	12.067	(0.676)	80	0.00118	0.002273(a)
	25	Trichloronate	Compound Not Detected.					
	26	Anilazine	Compound Not Detected.					
	27	Merphos-A (Merphos)	13.194	13.199	(0.739)	76	0.00150	0.002896
	28	Tetrachlorvinphos (Stirophos)	13.822	13.824	(0.775)	164	0.00488	0.009403
	29	Tokuthion	Compound Not Detected.					
	30	Merphos-B (Merphos Oxone)	14.641	14.651	(0.821)	154	0.03214	0.06198
	31	Carbophenothion-methyl	Compound Not Detected.					
	32	Fensulfothion	Compound Not Detected.					
	33	Bolstar / Famphur	Compound Not Detected.					
	34	Carbophenothion	Compound Not Detected.					
$	35	Triphenyl phosphate	16.711	16.712	(0.937)	32561	0.76771	1.481
	36	Phosmet	Compound Not Detected.					
	37	EPN	Compound Not Detected.					
	38	Azinphos-methyl	Compound Not Detected.					
*	39	TOCP	17.842	17.846	(1.000)	83890	2.00000	
	40	Azinphos-ethyl	Compound Not Detected.					
	41	Coumaphos	Compound Not Detected.					
S	42	Merphos				230	0.00360	0.006940
M	43	Total Demeton	Compound Not Detected.					

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 021F2101.D
Lab Smp Id: LFLLR1AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: M-125B
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	131201	65601	262402	127599	-2.75
39 TOCP	70963	35482	141926	83890	18.22

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.10	7.60	8.60	8.10	0.05
39 TOCP	17.84	17.34	18.34	17.84	-0.01

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.

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-JUN-2009 00:00 Client SDG: D9F2502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFLLR1AA Client Smp ID: M-125B
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: SAMPLE
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

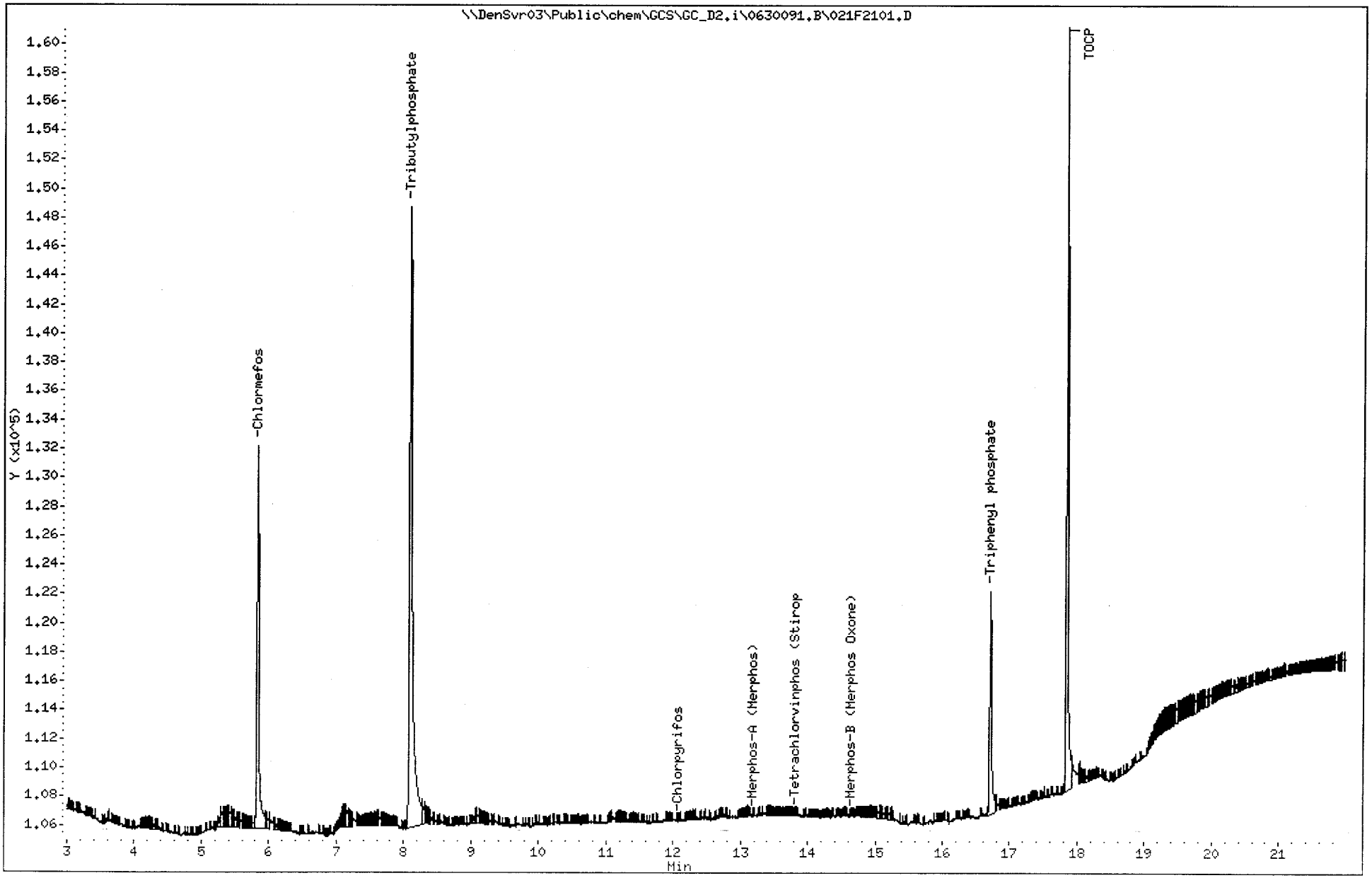
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	1.929	1.147	59.49	48-114
$ 35 Triphenyl phosphat	1.929	1.481	76.77	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\021F2101.D
Date : 01-JUL-2009 02:15
Client ID: M-125B
Sample Info: LFLLR1AA,221-1

Instrument: GC_D2.i

Operator: MPK/TLW
Column diameter: 0.32

Column phase: RTx-1MS



TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\021F2101.D
Lab Smp Id: LFLLR1AA Client Smp ID: M-125B
Inj Date : 01-JUL-2009 02:15
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFLLR1AA,221-1
Misc Info :
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Meth Date : 01-Jul-2009 08:31 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1037.000	Volume of Sample Extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
1	o,o,o-TEPT	Compound Not Detected.					
2	Dichlorvos	Compound Not Detected.					
$ 3	Chlormefos	7.379	7.384	(0.392)	51987	0.68786	1.327
4	Mevinphos	Compound Not Detected.					
5	Demeton-O	Compound Not Detected.					
6	Thionazin	Compound Not Detected.					
7	Ethoprop	Compound Not Detected.					
8	Phorate	Compound Not Detected.					
9	Naled	10.976	10.939	(0.583)	54	0.27169	0.5240
10	Sulfotepp	Compound Not Detected.					
* 11	Tributylphosphate	11.108	11.116	(1.000)	104080	2.00000	
12	Simazine	11.373	11.399	(0.604)	103	0.00728	0.01403(aA)
13	Diazinon	Compound Not Detected.					
14	Atrazine	Compound Not Detected.					
15	Propazine	Compound Not Detected.					
16	Disulfoton	Compound Not Detected.					
17	Demeton-S	12.118	12.124	(0.644)	71	0.12017	0.2318
18	Dimethoate	Compound Not Detected.					
19	Ronnel	Compound Not Detected.					
20	Merphos-A (Merphos)	13.663	13.689	(1.230)	65	0.00172	0.003324(aA)
21	Chlorpyrifos	Compound Not Detected.					
22	Fenthion	Compound Not Detected.					

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Trichloronate	14.719	14.711	(0.782)	52	0.10606	0.2046
	24 Anilazine	Compound Not Detected.					
	25 Methyl Parathion	Compound Not Detected.					
	26 Malathion	15.753	15.724	(0.837)	73	0.00163	0.003147(a)
	27 Tokuthion	Compound Not Detected.					
	28 Parathion	16.494	16.494	(0.877)	57	0.00121	0.002336(a)
	29 Merphos-B (Merphos Oxone)	Compound Not Detected.					
	30 Tetrachlorvinphos (stirophos)	Compound Not Detected.					
	31 Carbophenothion methyl	Compound Not Detected.					
	32 Bolstar	Compound Not Detected.					
	33 Carbophenothion	Compound Not Detected.					
$	34 Triphenyl phosphate	18.279	18.281	(0.972)	32068	0.86470	1.668
	35 Fensulfothion	Compound Not Detected.					
*	36 TOCP	18.814	18.816	(1.000)	74336	2.00000	
	37 Phosmet / EPN	Compound Not Detected.					
	38 Famphur	Compound Not Detected.					
	39 Azinphos-methyl	Compound Not Detected.					
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	Compound Not Detected.					
S	42 Merphos	Compound Not Detected.					
M	43 Total Demeton				71	0.12017	0.2318

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 021F2101.D
Lab Smp Id: LFLLR1AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: M-125B
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	119701	59851	239402	104080	-13.05
36 TOCP	68687	34344	137374	74336	8.22

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.11	10.61	11.61	11.11	0.01
36 TOCP	18.81	18.31	19.31	18.81	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.

TestAmerica

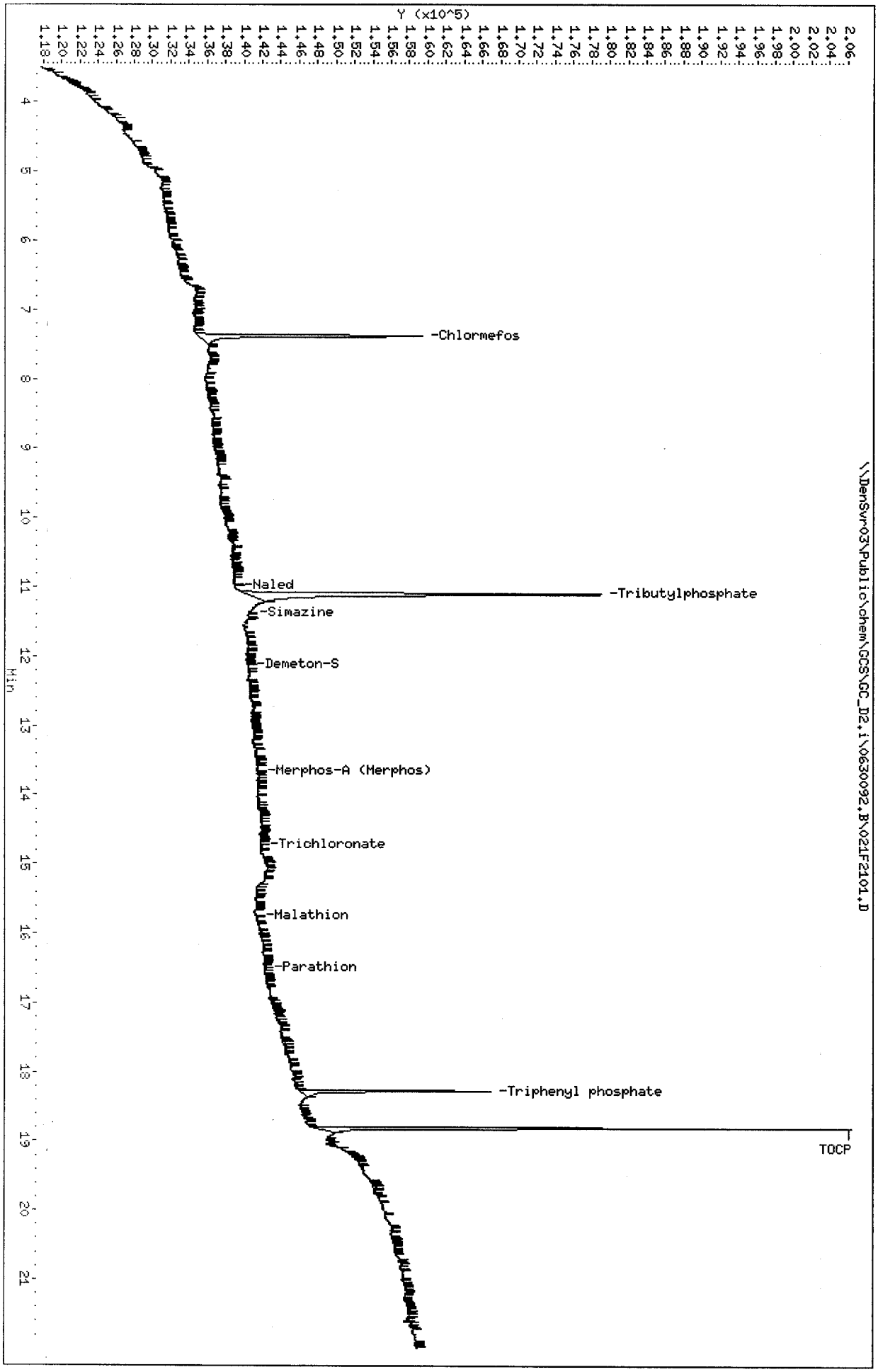
RECOVERY REPORT

Client Name: Northgate Environmen25-JUN-2009 00:00 Client SDG: D9F2502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFLLR1AA Client Smp ID: M-125B
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: SAMPLE
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	1.929	1.327	68.79	48-114
$ 34 Triphenyl phosphat	1.929	1.668	86.47	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\021F2101.D
Date : 01-JUL-2009 02:15
Client ID: M-125B
Sample Info: LFLLR1AA,221-1
Column phase: RTx-OPPest

Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32



TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\022F2201.D
Lab Smp Id: LFLLR1AE Client Smp ID: M-125BMS
Inj Date : 01-JUL-2009 02:42
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFLLR1AE,221-1S
Misc Info : IS - GSV0633-09
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Meth Date : 01-Jul-2009 08:28 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 22 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1035.000	Volume of Sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	1 o,o,o-TEPT	3.254	3.254	(0.182)	177021	1.54331	2.982
	2 Dichlorvos	4.072	4.074	(0.228)	105950	1.48750	2.874
	3 Mevinphos	5.735	5.739	(0.321)	49820	1.27332	2.460
$	4 Chlormefos	5.832	5.836	(0.327)	69528	0.77952	1.506
	5 Thionazin	7.504	7.507	(0.421)	132028	1.62198	3.134
	6 Demeton-O	7.644	7.649	(0.428)	112723	1.46438	2.830
	7 Ethoprop	7.842	7.852	(0.440)	132012	1.85067	3.576
	8 Naled	8.052	8.057	(0.451)	12740	0.85323	1.649
*	9 Tributylphosphate	8.095	8.135	(1.000)	141676	2.00000	
	10 Sulfotepp	8.435	8.442	(0.473)	159383	1.53745	2.971
	11 Phorate	8.529	8.532	(0.478)	121061	1.63878	3.167
	12 Dimethoate	8.654	8.659	(0.485)	125198	1.45892	2.819
	13 Demeton-S	8.834	8.846	(0.495)	12454	0.20014	0.3867(R)
	14 Simazine	8.915	8.924	(0.500)	45458	1.60658	3.104
	15 Atrazine	9.084	9.094	(0.509)	53510	1.60812	3.107
	16 propazine	9.230	9.241	(0.517)	50798	1.65452	3.197
	17 Disulfoton	9.864	9.869	(0.553)	66988	1.32241	2.555
	18 Diazinon	9.897	9.902	(0.555)	139686	1.76029	3.402
	19 Methyl Parathion	10.712	10.717	(0.600)	85610	1.70112	3.287
	20 Ronnel	11.237	11.241	(0.630)	80642	1.55017	2.996
	21 Malathion	11.797	11.804	(0.661)	67844	1.41509	2.734
	22 Fenthion	11.929	11.932	(0.669)	81388	1.59093	3.074

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	23 Parathion	12.014	12.019	(0.673)	94101	1.72838	3.340
	24 Chlorpyrifos	12.064	12.067	(0.676)	114331	1.73569	3.354
	25 Trichloronate	12.492	12.496	(0.700)	97837	1.66187	3.211
	26 Anilazine	12.814	12.817	(0.718)	8486	1.76454	3.410
	27 Merphos-A (Merphos)	13.217	13.199	(0.741)	131	0.00267	0.005154
	28 Tetrachlorvinphos (Stirophos)	13.815	13.824	(0.774)	50837	1.55729	3.009
	29 Tokuthion	14.444	14.449	(0.810)	105838	1.87539	3.624
	30 Merphos-B (Merphos Oxone)	14.642	14.651	(0.821)	100210	7.56449	14.62(A)
	31 Carbophenothion-methyl	Compound Not Detected.					
	32 Fensulfothion	15.357	15.361	(0.861)	67148	1.48365	2.867
	33 Bolstar / Famphur	16.047	16.053	(0.899)	196835	3.64578	7.045
	34 Carbophenothion	16.192	16.197	(0.908)	94050	1.73640	3.355
$	35 Triphenyl phosphate	16.707	16.712	(0.936)	33530	0.81461	1.574
	36 Phosmet	16.960	16.963	(0.951)	63662	1.37319	2.654
	37 EPN	17.147	17.151	(0.961)	76455	1.73438	3.351
	38 Azinphos-methyl	17.477	17.480	(0.980)	79079	1.60075	3.093
*	39 TOCP	17.842	17.846	(1.000)	81413	2.00000	
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	18.364	18.366	(1.029)	66696	1.67388	3.234
S	42 Merphos				100341	1.61752	3.126
M	43 Total Demeton				125177	1.66452	3.216

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 022F2201.D
Lab Smp Id: LFLLR1AE
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: M-125BMS
Level: LOW
Sample Type: WATER
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	131201	65601	262402	141676	7.98
39 TOCP	70963	35482	141926	81413	14.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.10	7.60	8.60	8.10	0.01
39 TOCP	17.84	17.34	18.34	17.84	-0.01

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.

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-JUN-2009 00:00 Client SDG: D9F2502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFLLR1AE Client Smp ID: M-125BMS
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: MS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

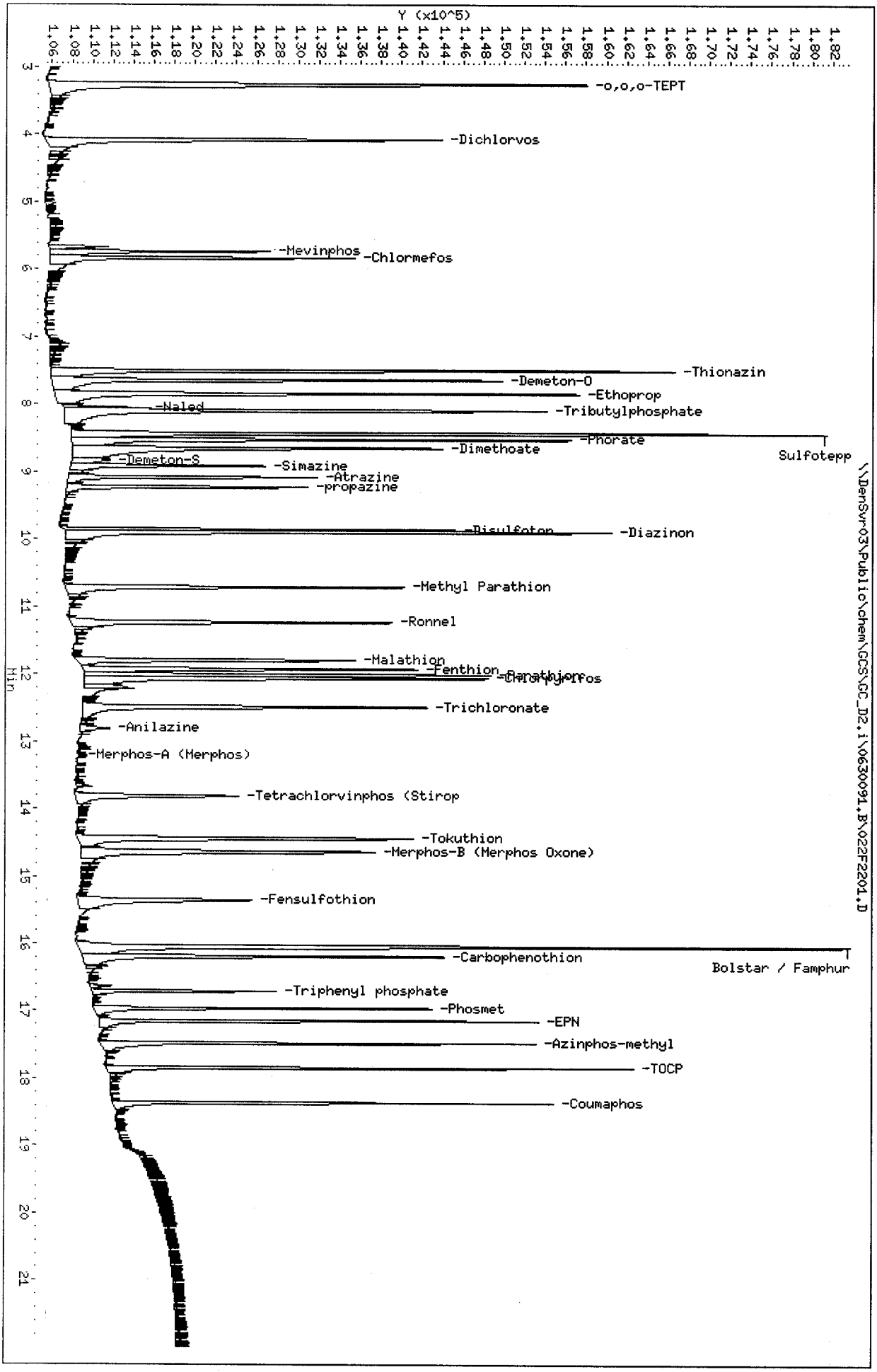
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	3.865	2.982	77.17	36-119
	2	Dichlorvos	3.865	2.874	74.38	50-120
	3	Mevinphos	3.865	2.460	63.67	35-108
$	4	Chlormefos	1.932	1.506	77.95	48-114
	5	Thionazin	3.865	3.134	81.10	65-116
	6	Demeton-O	2.698	2.830	104.90	36-119
	7	Ethoprop	3.865	3.576	92.53	65-108
	8	Naled	3.865	1.649	42.66	36-119
	10	Sulfotepp	3.865	2.971	76.87	69-103
	11	Phorate	3.865	3.167	81.94	62-104
	12	Dimethoate	3.865	2.819	72.95	28-115
	13	Demeton-S	1.167	0.3867	33.14*	36-119
	14	Simazine	3.865	3.104	80.33	47-109
	15	Atrazine	3.865	3.107	80.41	36-119
	16	propazine	3.865	3.197	82.73	36-119
	18	Diazinon	3.865	3.402	88.01	36-119
	17	Disulfoton	3.865	2.555	66.12	36-119
	19	Methyl Parathion	3.865	3.287	85.06	68-119
	20	Ronnel	3.865	2.996	77.51	62-115
	21	Malathion	3.865	2.734	70.75	67-115
	22	Fenthion	3.865	3.074	79.55	36-119
	23	Parathion	3.865	3.340	86.42	36-119
	24	Chlorpyrifos	3.865	3.354	86.78	36-119
	25	Trichloronate	3.865	3.211	83.09	36-119
	26	Anilazine	3.865	3.410	88.23	47-115
S	42	Merphos	3.865	3.126	80.88	36-119
	28	Tetrachlorvinphos	3.865	3.009	77.86	36-119
	29	Tokuthion	3.865	3.624	93.77	36-119
	31	Carbophenothion-m	3.865	0.0000	*	36-119
	32	Fensulfothion	3.865	2.867	74.18	61-115
	33	Bolstar / Famphur	7.729	7.045	91.14	36-119
	34	Carbophenothion	3.865	3.355	86.82	36-119
$	35	Triphenyl phosphat	1.932	1.574	81.46	50-150
	36	Phosmet	3.865	2.654	68.66	36-119
	37	EPN	3.865	3.351	86.72	36-119
	38	Azinphos-methyl	3.865	3.093	80.04	55-115
	40	Azinphos-ethyl	3.865	0.0000	*	36-119
	41	Coumaphos	3.865	3.234	83.69	62-115
M	43	Total Demeton	3.865	3.216	83.23	47-115

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-JUN-2009 00:00 Client SDG: D9F2502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFLLR1AE Client Smp ID: M-125BMS
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: MS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	1.929	1.506	77.95	48-114
$ 35 Triphenyl phosphat	1.929	1.574	81.46	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\022F2201.D
Date : 01-JUL-2009 02:42
Client ID: M-125BMS
Sample Info: LFLLRIAE,221-1S
Column phase: RTx-1MS
Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\022F2201.D
Lab Smp Id: LFLLR1AE Client Smp ID: M-125BMS
Inj Date : 01-JUL-2009 02:42
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFLLR1AE,221-1S
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Meth Date : 01-Jul-2009 08:31 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 22 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1035.000	Volume of Sample Extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	1 o,o,o-TEPT	4.726	4.731	(0.251)	153520	1.55276	3.000
	2 Dichlorvos	6.542	6.546	(0.348)	109062	1.41271	2.730
$	3 Chlormefos	7.379	7.384	(0.392)	51620	0.66422	1.284
	4 Mevinphos	9.231	9.234	(0.491)	69328	1.33314	2.576
	5 Demeton-O	9.731	9.734	(0.517)	81797	1.65066	3.190
	6 Thionazin	9.981	9.984	(0.531)	123688	1.59048	3.073
	7 Ethoprop	10.494	10.499	(0.558)	88952	1.53076	2.958
	8 Phorate	10.534	10.539	(0.560)	113912	1.69044	3.266
	9 Naled	10.936	10.939	(0.581)	14041	1.01727	1.966
	10 Sulfotepp	11.012	11.017	(0.585)	148232	1.45850	2.818(A)
*	11 Tributylphosphate	11.107	11.116	(1.000)	124227	2.00000	
	12 Simazine	11.396	11.399	(0.606)	30083	2.06667	3.994(A)
	13 Diazinon	11.537	11.541	(0.613)	94466	1.74027	3.363
	14 Atrazine	11.576	11.584	(0.615)	44301	1.62234	3.135(A)
	15 Propazine	11.741	11.747	(0.624)	40161	1.60239	3.096
	16 Disulfoton	12.046	12.049	(0.640)	81266	1.51621	2.930
	17 Demeton-S	12.116	12.124	(0.644)	4881	0.19132	0.3697(R)
	18 Dimethoate	13.277	13.282	(0.706)	86890	1.20958	2.337
	19 Ronnel	13.582	13.587	(0.722)	73770	1.52569	2.948
	20 Merphos-A (Merphos)	13.737	13.689	(1.237)	60	0.00133	0.002576(aA)
	21 Chlorpyrifos	14.406	14.409	(0.766)	83678	1.70624	3.297
	22 Fenthion	14.657	14.662	(0.779)	76728	1.68682	3.260

		Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23	Trichloronate	14.704	14.711	(0.782)	97450	1.57181	3.037
	24	Anilazine	15.211	15.216	(0.809)	5818	1.38539	2.677
	25	Methyl Parathion	15.516	15.519	(0.825)	79300	1.61483	3.120
	26	Malathion	15.719	15.724	(0.836)	66137	1.43764	2.778
	27	Tokuthion	16.342	16.344	(0.869)	90676	1.68345	3.253
	28	Parathion	16.491	16.494	(0.877)	80134	1.65603	3.200
	29	Merphos-B (Merphos Oxone)	16.517	16.517	(1.487)	99297	7.27755	14.06(A)
	30	Tetrachlorvinphos (stirophos)	16.974	16.977	(0.902)	52043	1.66261	3.213
	31	Carbophenothion methyl	Compound Not Detected.					
	32	Bolstar	17.437	17.440	(0.927)	91552	1.93721	3.743
	33	Carbophenothion	17.519	17.524	(0.931)	80859	1.73996	3.362(A)
$	34	Triphenyl phosphate	18.277	18.281	(0.972)	36846	0.96621	1.867
	35	Fensulfothion	18.557	18.559	(0.986)	59940	1.71187	3.308
*	36	TOCP	18.812	18.816	(1.000)	76438	2.00000	
	37	Phosmet / EPN	18.906	18.909	(1.005)	125146	3.17234	6.130
	38	Famphur	19.007	19.011	(1.010)	86614	1.72762	3.338
	39	Azinphos-methyl	19.142	19.147	(1.018)	75062	1.63668	3.163
	40	Azinphos-ethyl	Compound Not Detected.					
	41	Coumaphos	20.342	20.347	(1.081)	57169	1.70230	3.289
S	42	Merphos				99357	1.55967	3.014
M	43	Total Demeton				86678	1.84198	3.559

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 022F2201.D
Lab Smp Id: LFLLR1AE
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: M-125BMS
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	119701	59851	239402	124227	3.78
36 TOCP	68687	34344	137374	76438	11.28

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.11	10.61	11.61	11.11	0.01
36 TOCP	18.81	18.31	19.31	18.81	-0.01

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.

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-JUN-2009 00:00 Client SDG: D9F2502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFLLR1AE Client Smp ID: M-125BMS
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: MS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

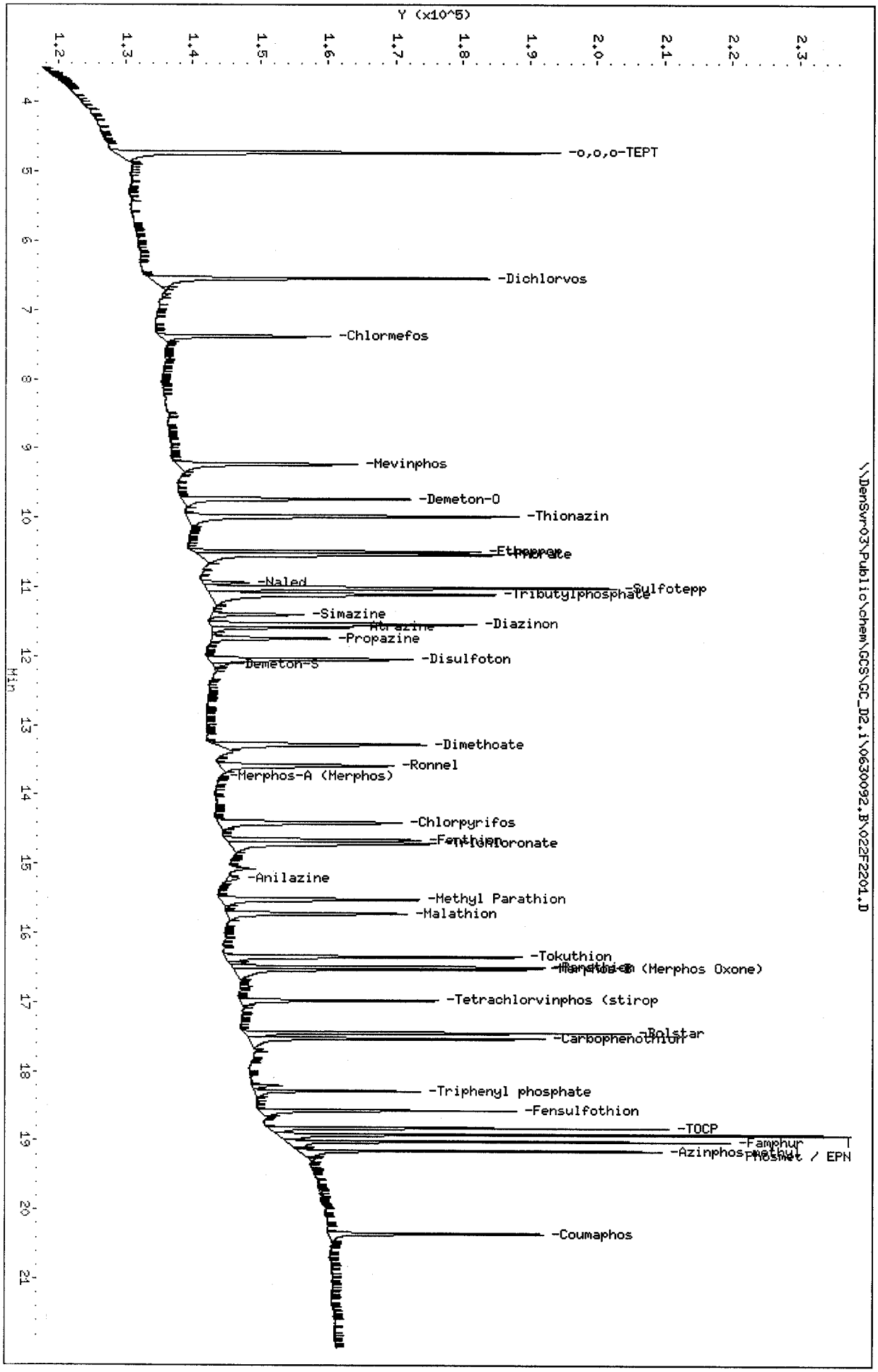
		SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	3.865	3.000	77.64	36-119
	2	Dichlorvos	3.865	2.730	70.64	50-120
$	3	Chlormefos	1.932	1.284	66.42	58-114
	4	Mevinphos	3.865	2.576	66.66	35-108
	5	Demeton-O	2.705	3.190	117.90	36-119
	6	Thionazin	3.865	3.073	79.52	65-116
	7	Ethoprop	3.865	2.958	76.54	36-119
	8	Phorate	3.865	3.266	84.52	36-119
	9	Naled	3.865	1.966	50.86	36-119
	10	Sulfotepp	3.865	2.818	72.92	36-119
	12	Simazine	3.865	3.994	103.33	36-119
	13	Diazinon	3.865	3.363	87.01	36-119
	14	Atrazine	3.865	3.135	81.12	36-119
	15	Propazine	3.865	3.096	80.12	36-119
	16	Disulfoton	3.865	2.930	75.81	61-103
	17	Demeton-S	1.159	0.3697	31.89*	36-119
	18	Dimethoate	3.865	2.337	60.48	28-82
	19	Ronnel	3.865	2.948	76.28	62-99
	21	Chlorpyrifos	3.865	3.297	85.31	66-101
	22	Fenthion	3.865	3.260	84.34	36-119
	23	Trichloronate	3.865	3.037	78.59	36-119
	24	Anilazine	3.865	2.677	69.27	36-119
	25	Methyl Parathion	3.865	3.120	80.74	36-119
	26	Malathion	3.865	2.778	71.88	36-119
	27	Tokuthion	3.865	3.253	84.17	36-119
	28	Parathion	3.865	3.200	82.80	36-119
	30	Tetrachlorvinphos	3.865	3.213	83.13	36-119
	31	Carbophenothion m	3.865	0.0000	*	36-119
	32	Bolstar	3.865	3.743	96.86	36-119
	33	Carbophenothion	3.865	3.362	87.00	36-119
$	34	Triphenyl phosphat	1.932	1.867	96.62	36-119
	35	Fensulfothion	3.865	3.308	85.59	20-105
	37	Phosmet / EPN	7.729	6.130	79.31	36-119
	38	Famphur	3.865	3.338	86.38	61-108
	39	Azinphos-methyl	3.865	3.163	81.83	55-103
	40	Azinphos-ethyl	3.865	0.0000	*	36-119
	41	Coumaphos	3.865	3.289	85.11	36-119
S	42	Merphos	3.865	3.014	77.98	36-119
M	43	Total Demeton	3.865	3.559	92.10	47-100

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-JUN-2009 00:00 Client SDG: D9F2502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFLLR1AE Client Smp ID: M-125BMS
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: MS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	1.929	1.284	66.42	48-114
$ 34 Triphenyl phosphat	1.929	1.867	96.62	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\0630092,B\022F2201,D
Date : 01-JUL-2009 02:42
Client ID: M-125BMS
Sample Info: LFLLR1AE,221-1S
Column phase: RTx-OPPest

Instrument: GC_D2,i
Operator: HPK/TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\023F2301.D
Lab Smp Id: LFLLR1AF Client Smp ID: M-125BMSD
Inj Date : 01-JUL-2009 03:09
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFLLR1AF,221-1D
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Meth Date : 01-Jul-2009 08:28 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 23 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1018.000	Volume of Sample extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	1 o,o,o-TEPT	3.255	3.254	(0.182)	174356	1.51228	2.971
	2 Dichlorvos	4.072	4.074	(0.228)	106605	1.48901	2.925
	3 Mevinphos	5.735	5.739	(0.321)	57105	1.45202	2.853
$	4 Chlormefos	5.830	5.836	(0.327)	75858	0.84612	1.662
	5 Thionazin	7.503	7.507	(0.421)	142279	1.73895	3.416
	6 Demeton-O	7.643	7.649	(0.428)	116334	1.50423	2.955
	7 Ethoprop	7.842	7.852	(0.439)	134761	1.87951	3.692
	8 Naled	8.053	8.057	(0.451)	13497	0.88889	1.746
*	9 Tributylphosphate	8.095	8.135	(1.000)	127672	2.00000	
	10 Sulfotepp	8.437	8.442	(0.473)	164567	1.58120	3.106
	11 Phorate	8.528	8.532	(0.478)	119809	1.61351	3.170
	12 Dimethoate	8.653	8.659	(0.485)	127185	1.47447	2.897
	13 Demeton-S	8.830	8.846	(0.495)	5600	0.08953	0.1759(R)
	14 Simazine	8.915	8.924	(0.500)	44835	1.57793	3.100
	15 Atrazine	9.083	9.094	(0.509)	53694	1.60537	3.154
	16 propazine	9.230	9.241	(0.517)	51712	1.67565	3.292
	17 Disulfoton	9.867	9.869	(0.553)	66803	1.31168	2.577
	18 Diazinon	9.897	9.902	(0.555)	152022	1.90591	3.744
	19 Methyl Parathion	10.713	10.717	(0.600)	90630	1.79163	3.520
	20 Ronnel	11.237	11.241	(0.630)	85339	1.63204	3.206
	21 Malathion	11.797	11.804	(0.661)	73277	1.52365	2.993
	22 Fenthion	11.927	11.932	(0.668)	86612	1.68436	3.309

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	12.015	12.019	(0.673)	103547	1.89212	3.717
	24 Chlorpyrifos	12.065	12.067	(0.676)	119465	1.80433	3.545
	25 Trichloronate	12.492	12.496	(0.700)	101032	1.70734	3.354
	26 Anilazine	12.813	12.817	(0.718)	9155	1.87599	3.686
	27 Merphos-A (Merphos)	13.185	13.199	(0.739)	201	0.00407	0.007998
	28 Tetrachlorvinphos (Stirophos)	13.815	13.824	(0.774)	54419	1.65846	3.258
	29 Tokuthion	14.445	14.449	(0.810)	109265	1.92618	3.784
	30 Merphos-B (Merphos Oxone)	14.643	14.651	(0.821)	105917	7.95318	15.62(A)
	31 Carbophenothion-methyl	Compound Not Detected.					
	32 Fensulfothion	15.358	15.361	(0.861)	74819	1.63440	3.211
	33 Bolstar / Famphur	16.048	16.053	(0.899)	206027	3.79644	7.459
	34 Carbophenothion	16.193	16.197	(0.908)	98789	1.81453	3.565
$	35 Triphenyl phosphate	16.708	16.712	(0.936)	34179	0.82611	1.623
	36 Phosmet	16.962	16.963	(0.951)	67749	1.45385	2.856
	37 EPN	17.148	17.151	(0.961)	85097	1.91524	3.763
	38 Azinphos-methyl	17.477	17.480	(0.979)	84574	1.70319	3.346
*	39 TOCP	17.843	17.846	(1.000)	81833	2.00000	
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	18.363	18.366	(1.029)	70253	1.75410	3.446
S	42 Merphos				106118	1.70186	3.344
M	43 Total Demeton				121934	1.59376	3.131

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 023F2301.D
Lab Smp Id: LFLLR1AF
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: M-125BMSD
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	131201	65601	262402	127672	-2.69
39 TOCP	70963	35482	141926	81833	15.32

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.10	7.60	8.60	8.10	0.00
39 TOCP	17.84	17.34	18.34	17.84	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.

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-JUN-2009 00:00 Client SDG: D9F2502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFLLR1AF Client Smp ID: M-125BMSD
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: MSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

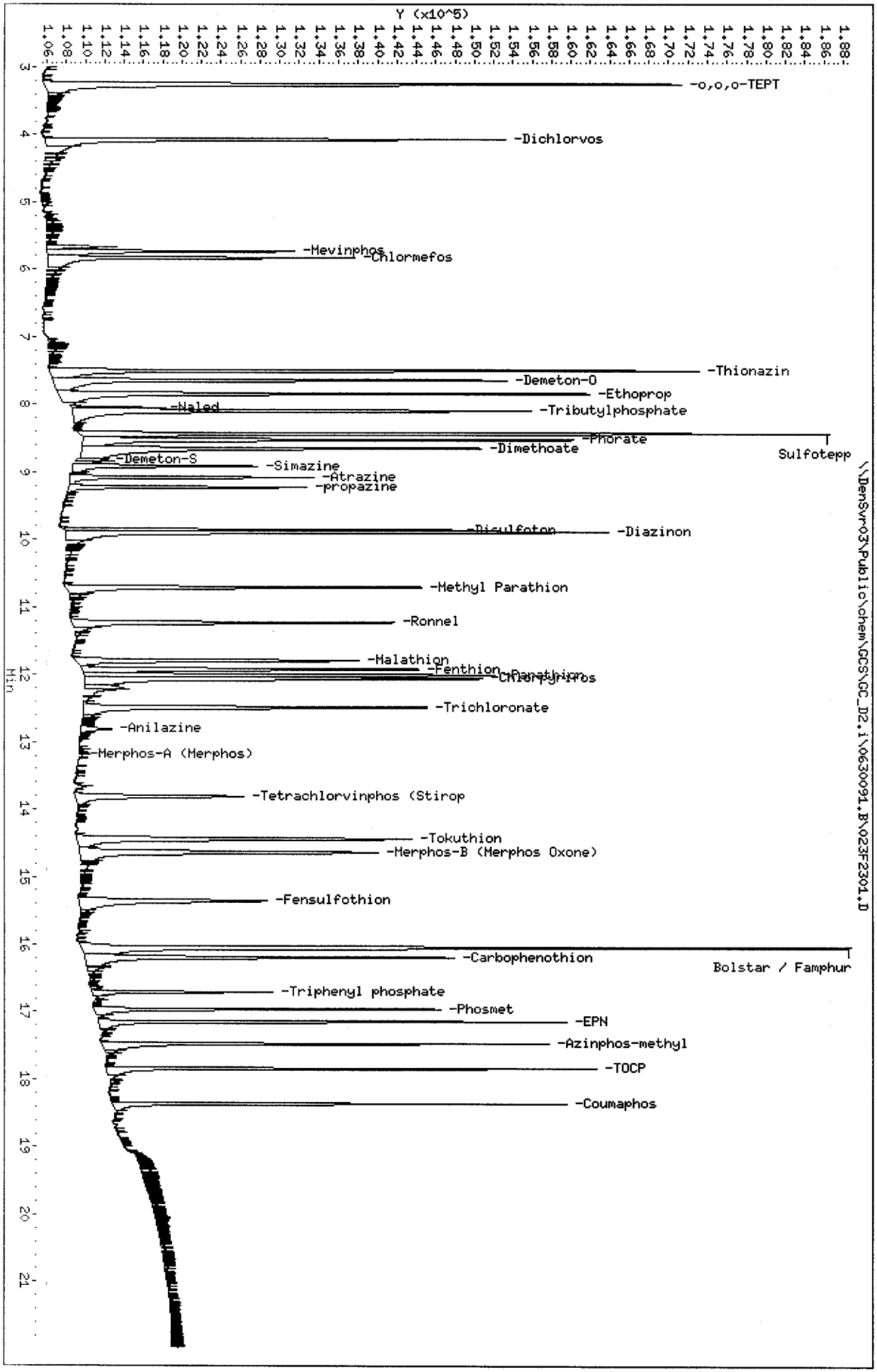
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	3.929	2.971	75.61	36-119
	2	Dichlorvos	3.929	2.925	74.45	50-120
	3	Mevinphos	3.929	2.853	72.60	35-108
$	4	Chlormefos	1.965	1.662	84.61	48-114
	5	Thionazin	3.929	3.416	86.95	65-116
	6	Demeton-O	2.743	2.955	107.75	36-119
	7	Ethoprop	3.929	3.692	93.98	65-108
	8	Naled	3.929	1.746	44.44	36-119
	10	Sulfotepp	3.929	3.106	79.06	69-103
	11	Phorate	3.929	3.170	80.68	62-104
	12	Dimethoate	3.929	2.897	73.72	28-115
	13	Demeton-S	1.187	0.1759	14.82*	36-119
	14	Simazine	3.929	3.100	78.90	47-109
	15	Atrazine	3.929	3.154	80.27	36-119
	16	propazine	3.929	3.292	83.78	36-119
	18	Diazinon	3.929	3.744	95.30	36-119
	17	Disulfoton	3.929	2.577	65.58	36-119
	19	Methyl Parathion	3.929	3.520	89.58	68-119
	20	Ronnel	3.929	3.206	81.60	62-115
	21	Malathion	3.929	2.993	76.18	67-115
	22	Fenthion	3.929	3.309	84.22	36-119
	23	Parathion	3.929	3.717	94.61	36-119
	24	Chlorpyrifos	3.929	3.545	90.22	36-119
	25	Trichloronate	3.929	3.354	85.37	36-119
	26	Anilazine	3.929	3.686	93.80	47-115
S	42	Merphos	3.929	3.344	85.09	36-119
	28	Tetrachlorvinphos	3.929	3.258	82.92	36-119
	29	Tokuthion	3.929	3.784	96.31	36-119
	31	Carbophenothion-m	3.929	0.0000	*	36-119
	32	Fensulfothion	3.929	3.211	81.72	61-115
	33	Bolstar / Famphur	7.858	7.459	94.91	36-119
	34	Carbophenothion	3.929	3.565	90.73	36-119
$	35	Triphenyl phosphat	1.965	1.623	82.61	50-150
	36	Phosmet	3.929	2.856	72.69	36-119
	37	EPN	3.929	3.763	95.76	36-119
	38	Azinphos-methyl	3.929	3.346	85.16	55-115
	40	Azinphos-ethyl	3.929	0.0000	*	36-119
	41	Coumaphos	3.929	3.446	87.71	62-115
M	43	Total Demeton	3.929	3.131	79.69	47-115

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-JUN-2009 00:00 Client SDG: D9F2502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFLLR1AF Client Smp ID: M-125BMSD
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: MSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\8141A-1.m
Misc Info: IS - GSV0633-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	1.929	1.662	84.61	48-114
$ 35 Triphenyl phosphat	1.929	1.623	82.61	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630091.B\023F2301.D
Date : 01-JUL-2009 03:09
Client ID: M-125BMSD
Sample Info: LFLLR1AF,221-1D
Column phase: RTx-1MS

Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\023F2301.D
Lab Smp Id: LFLLR1AF Client Smp ID: M-125BMSD
Inj Date : 01-JUL-2009 03:09
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFLLR1AF,221-1D
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Meth Date : 01-Jul-2009 08:31 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 23 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

Concentration Formula: Amt * DF * Vf / Vs * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1018.000	Volume of Sample Extracted (mL)
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	1 o,o,o-TEPT	4.724	4.731	(0.251)	155699	1.69320	3.326
	2 Dichlorvos	6.542	6.546	(0.348)	108096	1.50547	2.958
$	3 Chlormefos	7.379	7.384	(0.392)	52489	0.72618	1.427
	4 Mevinphos	9.230	9.234	(0.491)	83420	1.72472	3.388
	5 Demeton-O	9.730	9.734	(0.517)	86472	1.87620	3.686(R)
	6 Thionazin	9.980	9.984	(0.530)	130501	1.80425	3.545
	7 Ethoprop	10.494	10.499	(0.558)	97393	1.80203	3.540
	8 Phorate	10.534	10.539	(0.560)	115138	1.83710	3.609
	9 Naled	10.935	10.939	(0.581)	18375	1.32196	2.597
	10 Sulfotepp	11.012	11.017	(0.585)	158182	1.67342	3.288(A)
*	11 Tributylphosphate	11.107	11.116	(1.000)	118219	2.00000	
	12 Simazine	11.395	11.399	(0.606)	28685	2.11879	4.163(A)
	13 Diazinon	11.537	11.541	(0.613)	106222	2.09787	4.122
	14 Atrazine	11.577	11.584	(0.615)	45105	1.75396	3.446(A)
	15 Propazine	11.742	11.747	(0.624)	42073	1.79753	3.531
	16 Disulfoton	12.045	12.049	(0.640)	80215	1.60912	3.161
	17 Demeton-S	12.112	12.124	(0.644)	509	0.12718	0.2499(R)
	18 Dimethoate	13.277	13.282	(0.706)	111900	1.67486	3.290(R)
	19 Ronnel	13.584	13.587	(0.722)	90877	2.02080	3.970(R)
	20 Merphos-A (Merphos)	Compound Not Detected.					
	21 Chlorpyrifos	14.405	14.409	(0.766)	89119	1.95381	3.838
	22 Fenthion	14.657	14.662	(0.779)	80375	1.89985	3.732

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Trichloronate	14.705	14.711	(0.782)	99884	1.72145	3.382
	24 Anilazine	Compound Not Detected.					
	25 Methyl Parathion	15.514	15.519	(0.825)	89416	1.95773	3.846
	26 Malathion	15.720	15.724	(0.836)	69759	1.63038	3.203
	27 Tokuthion	16.342	16.344	(0.869)	92779	1.85199	3.638
	28 Parathion	16.490	16.494	(0.877)	89043	1.97849	3.887
	29 Merphos-B (Merphos Oxone)	16.515	16.517	(1.487)	99470	7.66617	15.06(A)
	30 Tetrachlorvinphos (stirophos)	16.972	16.977	(0.902)	55428	1.90388	3.740
	31 Carbophenothion methyl	Compound Not Detected.					
	32 Bolstar	17.437	17.440	(0.927)	93617	2.12983	4.184
	33 Carbophenothion	17.520	17.524	(0.931)	75379	1.74399	3.426(A)
$	34 Triphenyl phosphate	18.279	18.281	(0.972)	33320	0.93944	1.846
	35 Fensulfothion	18.557	18.559	(0.986)	65144	2.00037	3.930
*	36 TOCP	18.814	18.816	(1.000)	71093	2.00000	
	37 Phosmet / EPN	18.905	18.909	(1.005)	126173	3.44600	6.770
	38 Famphur	19.005	19.011	(1.010)	81472	1.74724	3.433
	39 Azinphos-methyl	19.142	19.147	(1.017)	69498	1.62929	3.201
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	20.342	20.347	(1.081)	58502	1.87296	3.680
S	42 Merphos				99470	1.67883	3.298
M	43 Total Demeton				86981	2.00338	3.936(R)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 023F2301.D
Lab Smp Id: LFLLR1AF
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

Calibration Date: 30-JUN-2009
Calibration Time: 23:58
Client Smp ID: M-125BMSD
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	119701	59851	239402	118219	-1.24
36 TOCP	68687	34344	137374	71093	3.50

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.11	10.61	11.61	11.11	0.00
36 TOCP	18.81	18.31	19.31	18.81	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.

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-JUN-2009 00:00 Client SDG: D9F2502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFLLR1AF Client Smp ID: M-125BMSD
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: MSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

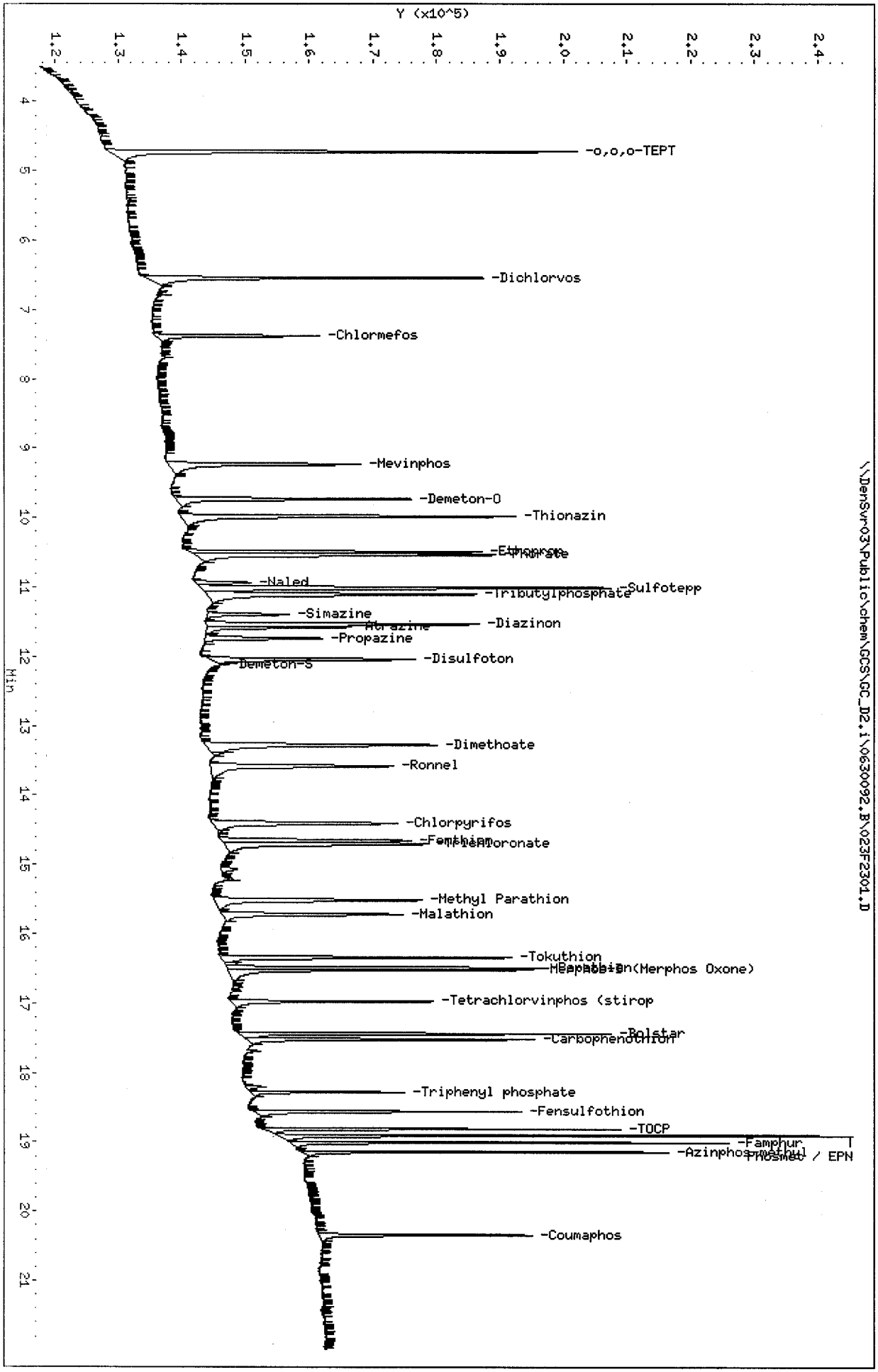
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	3.929	3.326	84.66	36-119
	2	Dichlorvos	3.929	2.958	75.27	50-120
$	3	Chlormefos	1.965	1.427	72.62	58-114
	4	Mevinphos	3.929	3.388	86.24	35-108
	5	Demeton-O	2.750	3.686	134.01*	36-119
	6	Thionazin	3.929	3.545	90.21	65-116
	7	Ethoprop	3.929	3.540	90.10	36-119
	8	Phorate	3.929	3.609	91.85	36-119
	9	Naled	3.929	2.597	66.10	36-119
	10	Sulfotepp	3.929	3.288	83.67	36-119
	12	Simazine	3.929	4.163	105.94	36-119
	13	Diazinon	3.929	4.122	104.89	36-119
	14	Atrazine	3.929	3.446	87.70	36-119
	15	Propazine	3.929	3.531	89.88	36-119
	16	Disulfoton	3.929	3.161	80.46	61-103
	17	Demeton-S	1.179	0.2499	21.20*	36-119
	18	Dimethoate	3.929	3.290	83.74*	28-82
	19	Ronnel	3.929	3.970	101.04*	62-99
	21	Chlorpyrifos	3.929	3.838	97.69	66-101
	22	Fenthion	3.929	3.732	94.99	36-119
	23	Trichloronate	3.929	3.382	86.07	36-119
	24	Anilazine	3.929	0.0000	*	36-119
	25	Methyl Parathion	3.929	3.846	97.89	36-119
	26	Malathion	3.929	3.203	81.52	36-119
	27	Tokuthion	3.929	3.638	92.60	36-119
	28	Parathion	3.929	3.887	98.92	36-119
	30	Tetrachlorvinphos	3.929	3.740	95.19	36-119
	31	Carbophenothion m	3.929	0.0000	*	36-119
	32	Bolstar	3.929	4.184	106.49	36-119
	33	Carbophenothion	3.929	3.426	87.20	36-119
$	34	Triphenyl phosphat	1.965	1.846	93.94	36-119
	35	Fensulfothion	3.929	3.930	100.02	20-105
	37	Phosmet / EPN	7.858	6.770	86.15	36-119
	38	Famphur	3.929	3.433	87.36	61-108
	39	Azinphos-methyl	3.929	3.201	81.46	55-103
	40	Azinphos-ethyl	3.929	0.0000	*	36-119
	41	Coumaphos	3.929	3.680	93.65	36-119
S	42	Merphos	3.929	3.298	83.94	36-119
M	43	Total Demeton	3.929	3.936	100.17*	47-100

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-JUN-2009 00:00 Client SDG: D9F2502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFLLR1AF Client Smp ID: M-125BMSD
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: MSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0630092.B\8141A-2.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	1.929	1.427	72.62	48-114
$ 34 Triphenyl phosphat	1.929	1.846	93.94	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\0630092.B\023F2301.D
Date : 01-JUL-2009 03:09
Client ID: M-125BMSD
Sample Info: LFLLR1AF,221-1D
Column phase: RTx-OPPest

Instrument: GC_D2,i
Operator: MPK/TLW
Column diameter: 0.32

\\DenSvr03\Public\chem\GCS\GC_D2,i\0630092.B\023F2301.D

GC SEMIVOLATILE
INITIAL CALIBRATION DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

GC and HPLC ICAL Review Checklist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

608 8081 8082 8151 (8141)
TPH/DRO Other SV 6014
8310 8330 Other HPLC

601 602 8021 BTEX
TPH/GRO Other Volatile GC

Calibration Date: 062609
Instrument ID: D2

Review Items	--- Level 1 --- Yes	No	N/A	Level 2	Comments
Initial Calibration					
1. Are correct data files used?	✓			✓	
2. Is there a sufficient number of calibration points used?	✓			✓	
3. Are reasons for removal of points documented?	✓			✓	Better linearity
4. Is linearity acceptable, 8000 Series: linear least-squares regression with $r \geq 0.990$, (DOD projects require $r \geq 0.995$) quadratic fit COD $r^2 > 0.990$, or average response factors with RSD ≤ 20%? 600 Series: < 10% RSD or linear regression	✓			✓	
5. Are the correct RT windows applied to the ICAL integration?	✓			✓	
6. Are DDT & Endrin breakdown < 15%?			✓	NA	
7. Is each manual integration completely documented, signed and appropriate?	✓			✓	
8. Is traceability of standards properly documented?	✓			✓	
9. Was second level hand calculation performed? (document analyte checked)	-----	-----	-----	✓	
10. Was second-source ICV performed & recovery 85-115%? 6/30/09	X	✓		✓	Primary Include %R Naled -40.1%, Simazine +31.1%, Disulfoton -20.6% Malathion -18.8%, Anilazine -49.2%, Carbophenothion-methyl -32.3%, Phosmet -17.6% Secondary Include %R Naled -47.6%, Simazine +80.1%, Anilazine -39.9%, Malathion -23.2%, Carbophenothion-methyl -37.7%, Merphos -19.3%

1st Level Reviewer: [signature] Date: 6/30/09
2nd Level Reviewer: [signature] Date: 6/30/09

M\1\SEQUENCE\062609.S

Sequence Table (Front Injector):

Quantification Part:

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	Vial 1	PRIMER				
2	Vial 2	HEXANE				
3	Vial 3	OPP L7 GSV0634				
4	Vial 4	OPP L6 GSV0637				
5	Vial 5	OPP L5 GSV0635				
6	Vial 6	OPP L4 GSV0638				
7	Vial 7	OPP L3 GSV0639				
8	Vial 8	OPP L2 GSV0640				
9	Vial 9	OPP L1 GSV0641				
10	Vial 10	OPP SS GSV0633				
11	Vial 11	GSV075309 SPK				
12	Vial 12	LE2931AA,MB				
13	Vial 13	LE2931AC,LCS				
14	Vial 14	LE2931AD,LCSD				
15	Vial 15	LEQA91AC,222-15				10
16	Vial 16	LEQA91AC,222-15				3
17	Vial 17	LEQCQ1AC,222-18				2
18	Vial 18	LERD61AD,377-1				
19	Vial 19	LERD81AH,377-3				
20	Vial 20	LERN71AF,115-1				
21	Vial 21	LERPQ1AF,115-2				
22	Vial 22	LERPX1AF,115-3				
23	Vial 23	LE1F91AJ,138-1				
24	Vial 24	OPP L5 GSV0635				
25	Vial 25	LE29M1AA,MB				
26	Vial 26	LE29M1AC,LCS				
27	Vial 27	LE29M1AD,LCSD				
28	Vial 28	LEQA91AA,222-15				10
29	Vial 29	LEQA91AA,222-15				3
30	Vial 30	LEQCQ1AA,222-18				2
31	Vial 31	LFARC1AA,MB				
32	Vial 32	LFARC1AC,LCS				
33	Vial 33	LFARC1AD,LCSD				
34	Vial 34	LEKL02AA,185-1				
35	Vial 35	LE29L1AA,MB				
36	Vial 36	LE29L1AC,LCS				
37	Vial 37	LE29L1AD,LCSD				
38	Vial 38	LERCV1AA,370-1				
39	Vial 39	LEWJG1AA,143-1				
40	Vial 40	OPP L5 GSV0635				
41	Vial 41	LE5PX1AA,MB				
42	Vial 42	LE5PX1AC,LCS				
43	Vial 43	LE5PX1AD,LCSD				
44	Vial 44	LE39F1AA,179-1				
45	Vial 45	LE3PF1AA,179-2				
46	Vial 46	LE39L1AA,179-3				
47	Vial 47	LFARL1AA,MB				
48	Vial 48	LFARL1AC,LCS				
49	Vial 49	LFARL1AD,LCSD				
50	Vial 50	LEKLE2AE,180-2				
51	Vial 51	LEKLF2AE,180-3				
52	Vial 52	LEKLL2AE,180-4				
53	Vial 53	LEKLQ2AE,180-5				
54	Vial 54	LENR72AD,322-1				
55	Vial 55	LEPG32AJ,161-1				
56	Vial 56	OPP L5 GSV0635				
57	Vial 57	LFD4N1AA,MB				
58	Vial 58	LFD4N1AC,LCS				

9168144

9168147

9170431

9168145

RR

9168553

9170430

9173102

D2 6/26/2009 11:59:30 AM MPK/TLW

\1\SEQUENCE\062609.S

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
59	Vial 59	LFD4N1AD,LCSD				
60	Vial 60	LE3041AJ,158-1				
61	Vial 61	LFD4W1AA,MB				
62	Vial 62	LFD4W1AC,LCS				
63	Vial 63	LFD4W1AD,LCSD				
64	Vial 64	LE7EE1AA,266-2				
65	Vial 65	LE9Q61AA,216-2				
66	Vial 66	LE9RA1AA,216-3				
67	Vial 67	LFC4Q1AD,199-2				
68	Vial 68	OPP L5 GSV0635				
69	Vial 69	LFAN01AA,MB				
70	Vial 70	LFAN01AC,LCS				
71	Vial 71	LFAN01AD,LCSD				
72	Vial 72	LE4291AA,273-1				
73	Vial 73	LE4291AD,273-1S				
74	Vial 74	LE4291AE,273-1D				
75	Vial 75	LE9PJ1AA,215-1				
76	Vial 76	OPP L5 GSV0635				
77	Vial 77	OPP L1 GSV0641				
78	Vial 100	HEXANE/ACETONE				

Sequence Table (Back Injector):

No entries - empty table!

Report Date : 30-Jun-2009 12:45 Page 1

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Last Edit : 30-Jun-2009 12:45 GC_D2.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\005F0501.D
Level 6: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\003F0301.D

SEE CALIBRATION HISTORY

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
1 o,o,o-TEPT	3.11591	2.63737	2.67945	2.89676	2.71623	2.90430					
	2.77446						AVRG		2.81778		5.91149
2 Dichlorvos	2.01706	1.62225	1.58545	1.76366	1.71981	1.74982					
	1.79032						AVRG		1.74977		7.99554
3 Mevinphos	1.01774	0.91295	0.90158	1.01760	0.95159	0.98250					
	0.94429						AVRG		0.96118		4.85992
5 Thionazin	2.12707	1.94606	1.94866	2.08214	1.96051	2.00095					
	1.93224						AVRG		1.99966		3.79706

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Last Edit : 30-Jun-2009 12:45 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	5.0000 Level 7											
6 Demeton-O	9836	17553	30145	62341	96004	113108						1/x
	165003						WLINR	-0.01288	1.85831		0.99594	
7 Ethoprop	1.93480	1.70823	1.62324	1.73203	1.74110	1.78272						
	1.74432						AVRG		1.75235		5.38512	
8 Naled	1992	6103	15042	36940	67594	90892						
	121152						WLINR	0.09632	0.47378		0.98961	<- 1/x r=0.995
10 Sulfotepp	34658	70885	131347	259970	393078	486417						1/x
	609341						WLINR	-0.03469	2.43674		0.99856	
11 Phorate	2.02801	1.82946	1.73796	1.82370	1.76374	1.79146						
	1.72902						AVRG		1.81476		5.60901	
12 Dimethoate	1.89561	1.76866	2.07434	2.25696	2.23554	2.30994						
	2.21598						AVRG		2.10815		9.72697	
13 Demeton-S	1.49306	1.46224	1.49173	1.58543	1.55216	1.58919						
	1.52702						AVRG		1.52869		3.21407	

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TestAmerica

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Last Edit : 30-Jun-2009 12:45 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	5.0000 Level 7											
14 Simazine	4819	16248	29382	64611	115426	147784						1/x^2
	190219						WLINR	0.03988	0.73140		0.99336	
15 Atrazine	0.70185	0.76532	0.75073	0.84628	0.85434	0.90844						
	0.89508						AVRG		0.81743		9.61085	
16 propazine	0.73887	0.70136	0.69239	0.78178	0.75651	0.81417						
	0.79462						AVRG		0.75424		6.13423	
17 Disulfoton	15404	33208	61920	127893	193050	247845						1/x
	290419						WLINR	-0.01928	1.20917		0.99576	
18 Diazinon	2.20234	1.83553	1.83772	2.01856	1.98676	1.84115						
	1.92388						AVRG		1.94942		6.88114	
19 Methyl Parathion	1.22644	1.10389	1.13741	1.32395	1.30344	1.29686						
	1.26213						AVRG		1.23630		6.92144	
20 Ronnel	1.42863	1.23369	1.21320	1.29342	1.24446	1.34650						
	1.18584						AVRG		1.27796		6.65504	

TestAmerica

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Last Edit : 30-Jun-2009 12:45 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
21 Malathion	15443	30581	57103	119836	186013	228260					
	283462						WLINR	-0.02066	1.14436		0.99783
22 Fenthion	1.46442	1.18458	1.16481	1.29096	1.25584	1.25506					
	1.18151						AVRG		1.25674		8.19381
23 Parathion	1.42438	1.25387	1.23322	1.38998	1.36308	1.38514					
	1.31279						AVRG		1.33749		5.43501
24 Chlorpyrifos	1.85614	1.56747	1.47379	1.62915	1.61527	1.62330					
	1.56216						AVRG		1.61818		7.28314
25 Trichloronate	1.44751	1.42551	1.34762	1.48171	1.46256	1.52450					
	1.43428						AVRG		1.44624		3.78186
26 Anilazine	1493	2095	5311	12790	19893	29375					
	+++++						QUAD	0.02107	9.16488	-8.66056	0.99476
27 Merphos-A (Merphos)	1.24844	1.15527	1.15966	1.23989	1.21263	1.24409					
	1.18648						AVRG		1.20664		3.30523

1/x

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INITIAL CALIBRATION DATA

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Last Edit : 30-Jun-2009 12:45 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	5.0000 Level 7											
28 Tetrachlorvinphos (Stirophos)	0.76814	0.74606	0.73464	0.83451	0.85233	0.85150						
	0.82648						AVRG		0.80195		6.32809	
29 Tokuthion	1.50295	1.28283	1.29501	1.44234	1.39452	1.40891						
	1.37817						AVRG		1.38639		5.62055	
30 Merphos-B (Merphos Oxone)	3884	7933	11676	34113	50056	65974						NTC
	79809						WLINR	0.01044	0.32634		0.98820	<-See Merphos
31 Carbophenothion-methyl	14924	30542	55023	105577	167145	206137						
	266724						WLINR	-0.03349	1.03813		0.99979	1/x
32 Fensulfothion	8319	23000	51304	104440	185778	229856						
	295978						WLINR	0.04728	1.18751		0.99821	1/x
33 Bolstar / Famphur	1.54988	1.27794	1.32328	1.33835	1.27633	1.28540						
	1.23307						AVRG		1.32632		7.86825	
34 Carbophenothion	1.57916	1.19992	1.27687	1.32336	1.26122	1.41398						
	1.25966						AVRG		1.33059		9.63398	

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Last Edit : 30-Jun-2009 12:45 GC_D2.i

	Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
		5.0000 Level 7											
	36 Phosmet	1.22087	1.01385	1.11032	1.20586	1.12340	1.16129						
		1.13672						AVRG		1.13890		6.04111	
	37 EPN	9525	23196	48705	111165	171283	220388						$1/x^2$
		294020						WLINR	0.02456	1.11450		0.99317	
	38 Azinphos-methyl	1.19565	1.13516	1.16767	1.28235	1.23551	1.26700						
		1.21185						AVRG		1.21360		4.33999	
	40 Azinphos-ethyl	23154	43578	74071	134607	209971	253982						$1/x^2$
		318459						WLINR	-0.07409	1.26388		0.99928	
	41 Coumaphos	1.00140	0.89806	0.92250	1.01947	1.01017	1.01013						
		0.99015						AVRG		0.97884		4.92558	
S	42 Merphos	1.61523	1.45962	1.38820	1.59026	1.52873	1.58626						
		1.49925						AVRG		1.52393		5.34513	
M	43 Total Demeton	1.94415	1.66775	1.60440	1.71838	1.66174	1.66727						
		1.68503						AVRG		1.70696		6.44185	

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Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Last Edit : 30-Jun-2009 12:45 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	5.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
$ 4 Chlormefos	2.28223	2.03679	2.00000	2.26084	2.35620	2.24671						
	2.15521							AVRG		2.19114		6.04132
$ 35 Triphenyl phosphate	1.09980	0.99217	0.96977	1.05450	0.99627	1.00900						
	0.95665							AVRG		1.01117		4.94580

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INITIAL CALIBRATION DATA

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Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Last Edit : 30-Jun-2009 12:45 GC_D2.i

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Wt Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

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Report Date: 30-Jun-2009 12:45

Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Start Cal Date: 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
26-JUN-2009 21:13	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
26-JUN-2009 20:45	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
26-JUN-2009 20:18	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
26-JUN-2009 19:50	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
26-JUN-2009 19:23	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
26-JUN-2009 18:55	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
26-JUN-2009 18:28	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\003F0301.D

Continuing Calibration

Cal Level Mode: GLOBAL LEVEL 4

26-JUN-2009 21:40	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\010F1001.D
26-JUN-2009 19:50	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\006F0601.D
26-JUN-2009 19:23	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\005F0501.D

Report Date : 30-Jun-2009 12:58 Page 1

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\005F0501.D SEE CALIBRATION HISTORY
Level 6: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\003F0301.D

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	5.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
1 o,o,o-TEPT	2.92648	2.44243	2.35582	2.65851	2.57132	2.61478						
	2.53900							AVRG		2.58691		7.02274
2 Dichlorvos	1.96421	1.82228	1.84036	2.17503	2.12732	2.04712						
	2.16332							AVRG		2.01995		7.32345
4 Mevinphos	1.44354	1.24995	1.21811	1.44363	1.32123	1.40873						
	1.43954							AVRG		1.36067		7.12634
5 Demeton-O	1.19821	1.29971	1.18493	1.34261	1.38930	1.37760						
	1.28370							AVRG		1.29658		6.26552

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TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	5.0000 Level 7											
6 Thionazin	2.15838	1.84195	1.93751	1.98059	2.08762	2.20076						
	2.03673						AVRG		2.03479		6.19054	
7 Ethoprop	1.70034	1.41105	1.44674	1.51565	1.56615	1.54046						
	1.46268						AVRG		1.52044		6.33190	
8 Phorate	1.89356	1.60276	1.58391	1.69691	1.82591	1.99241						
	1.74661						AVRG		1.76315		8.53946	
9 Naled	94.00000	1666	10859	28010	46004	58330						1/x
	78857						WLINR	0.13436	0.49080		0.99248	
10 Sulfotepp	2.79835	2.53605	2.59328	2.75080	2.67397	2.68532						
	2.57687						AVRG		2.65923		3.59851	
12 Simazine	0.36415	0.34683	0.35351	0.38559	0.39087	0.41510						
	0.41001						AVRG		0.38086		7.05346	
13 Diazinon	12067	15923	49407	98649	155648	181790						1/x
	228810						WLINR	0.01456	1.44446		0.99190	

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TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
14 Atrazine	5427	1231	21316	49088	85997	98759					
	128612						LINR	0.11621	0.83396		0.99221
15 Propazine	4880	8102	20907	43235	72628	85745					
	110050						WLINR	0.02910	0.68050		0.99492
16 Disulfoton	1.39584	1.32983	1.36835	1.41433	1.46581	1.46415					
	1.37843						AVRG		1.40239		3.56764
17 Demeton-S	667	15766	33785	70921	121463	157195					
	175573						WLINR	0.05954	1.76807		0.99272
18 Dimethoate	1.93513	1.88284	1.72920	1.81890	1.98388	1.88204					
	1.92489						AVRG		1.87955		4.46888
19 Ronnel	1.49381	1.09752	1.14631	1.23377	1.29336	1.31702					
	1.27410						AVRG		1.26513		10.15653
20 Merphos-A (Merphos)	0.73714	0.72841	0.76463	0.71117	0.75339	0.75359					
	0.62474						AVRG		0.72472		6.56840

1/x

1/x

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TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
21 Chlorpyrifos	1.28253	1.15885	1.24944	1.20702	1.32365	1.38773					
	1.37311						AVRG		1.28319		6.60140
22 Fenthion	1.20874	1.15890	1.17283	1.16181	1.25398	1.18816					
	1.18668						AVRG		1.19016		2.76871
23 Trichloronate	6944	26053	49357	106326	170976	208762					
	296442						WLINR	0.05263	1.73863		0.99738
24 Anilazine	1634	2256	3581	6899	11039	13112					
	19108						LINR	-0.00058	0.10979		0.99085
25 Methyl Parathion	1.21391	1.12059	1.22102	1.33829	1.35198	1.32937					
	1.41908						AVRG		1.28489		8.00353
26 Malathion	1.23986	1.19694	1.15056	1.17724	1.17540	1.20726					
	1.27856						AVRG		1.20369		3.60449
27 Tokuthion	1.50291	1.31056	1.35261	1.35076	1.45106	1.48916					
	1.40826						AVRG		1.40933		5.28420

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TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	5.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
28 Parathion	1.27111	1.15628	1.24872	1.23420	1.30817	1.35972							
	1.28450							AVRG		1.26610		5.02432	
29 Merphos-B (Merphos Oxone)	3793	6271	15065	23458	40683	62127							
	65080							WLINR	-0.05169	0.21659		0.96366	<-NTC, see merphos
30 Tetrachlorvinphos (stirophos)	0.86036	0.73114	0.73243	0.80291	0.86664	0.87311							
	0.86651							AVRG		0.81902		7.82425	
31 Carbophenothion methyl	1.16513	1.02032	1.04699	1.17159	1.27808	1.26831							
	1.26700							AVRG		1.17392		9.08251	
32 Bolstar	1.33280	1.22387	1.19075	1.20601	1.27262	1.22830							
	1.20152							AVRG		1.23655		4.05030	
33 Carbophenothion	1.18442	1.13595	1.15332	1.18001	1.34689	1.22912							
	1.28180							AVRG		1.21593		6.21486	
35 Fensulfothion	0.88346	0.80409	0.88036	0.97346	0.94597	1.00424							
	0.92148							AVRG		0.91615		7.30438	

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

	Compound	0.2000000 Level 1 / 5.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	37 Phosmet / EPN	19707	35826	68186	146012	207459	263604					
		330448						WLINR	-0.04262	1.00518		0.99785
	38 Famphur	1.45536	1.20800	1.18770	1.39816	1.20947	1.39569					
		1.32805						AVRG		1.31178		8.35158
	39 Azinphos-methyl	1.25589	1.08970	1.07858	1.30240	1.20427	1.27709					
		1.19199						AVRG		1.19999		7.33978
	40 Azinphos-ethyl	1.14013	1.11628	1.12015	1.18786	1.16269	1.14594					
		1.12699						AVRG		1.14286		2.23350
	41 Coumaphos	0.78930	0.81655	0.85887	0.90448	0.89897	0.94628					
		0.93653						AVRG		0.87871		6.77030
S	42 Merphos	1.56460	1.43887	1.64263	1.66880	1.73437	1.91569					
		1.70275						AVRG		1.66682		8.85773
M	43 Total Demeton	3533	23328	47171	100663	168375	213468					
		244812						WLINR	0.06780	1.63923		0.99469

1/x

1/x

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TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
$ 3 Chlormefos	2.19506	1.83698	1.78322	2.03418	2.29040	2.05386					
	2.04016						AVRG		2.03341		8.83890
$ 34 Triphenyl phosphate	1.10969	0.86972	0.91132	1.07710	1.01080	0.99885					
	1.00703						AVRG		0.99779		8.47904

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Last Edit : 30-Jun-2009 12:58 GC_D2.i

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response

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Report Date: 30-Jun-2009 12:58

Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Start Cal Date: 26-JUN-2009 18:28
End Cal Date : 26-JUN-2009 21:13
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
26-JUN-2009 21:13	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
26-JUN-2009 20:45	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
26-JUN-2009 20:18	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
26-JUN-2009 19:50	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
26-JUN-2009 19:23	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
26-JUN-2009 18:55	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
26-JUN-2009 18:28	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\003F0301.D

Continuing Calibration

Cal Level Mode: GLOBAL LEVEL 4

26-JUN-2009 21:40	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\010F1001.D
26-JUN-2009 19:50	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\006F0601.D
26-JUN-2009 19:23	8141A	\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\005F0501.D

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Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B/010F1001.D
Report Date: 06/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 010F1001.D
Analysis Type: NONE

Injection Date: 26-JUN-2009 21:40
Lab Sample ID: OPP SS GSV0633
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.0000	2.0577	2.9	15.0	
2	Dichlorvos	2.0000	1.9061	4.7	15.0	
3	Mevinphos	2.0000	1.6977	15.1	15.0	<- ok
4	Chlormefos	2.0000	1.7808	11.0	15.0	
5	Thionazin	2.0000	1.9740	1.3	15.0	
6	Demeton-O	0.6500	1.8707	187.8	15.0	<- ok, see total demeton
7	Ethoprop	2.0000	2.0536	2.7	15.0	
8	Naled	2.0000	1.1983	40.1	15.0	<-
9	Sulfotepp	2.0000	1.7932	10.3	15.0	
10	Phorate	2.0000	2.0180	0.9	15.0	
11	Dimethoate	2.0000	2.0859	4.3	15.0	
12	Demeton-S	1.3600	0.2313	83.0	15.0	<- ok, see total demeton
13	Simazine	2.0000	2.6218	31.1	15.0	<-
14	Atrazine	2.0000	1.9566	2.2	15.0	
15	propazine	2.0000	1.9127	4.4	15.0	
17	Disulfoton	2.0000	1.5890	20.6	15.0	<-
16	Diazinon	2.0000	2.1583	7.9	15.0	
18	Methyl Parathion	2.0000	2.0404	2.0	15.0	
19	Ronnel	2.0000	2.1513	7.6	15.0	
20	Malathion	2.0000	1.6248	18.8	15.0	<-
21	Fenthion	2.0000	1.8840	5.8	15.0	
22	Parathion	2.0000	1.9436	2.8	15.0	
23	Chlorpyrifos	2.0000	1.9720	1.4	15.0	
24	Trichloronate	2.0000	1.8619	6.9	15.0	
25	Anilazine	2.0000	1.0151	49.2	15.0	<-
148	Merphos-A (Merphos)	2.0000	0.4078	79.6	999.0	
26	Tetrachlorvinphos (Stirophos)	2.0000	2.0880	4.4	15.0	
28	Tokuthion	2.0000	2.0254	1.3	15.0	
149	Merphos-B (Merphos Oxone)	2.0000	6.6232	231.2	999.0	
29	Carbophenothion-methyl	2.0000	1.3536	32.3	15.0	<-
29	Fensulfothion	2.0000	1.9235	3.8	15.0	
30	Bolstar / Famphur	4.0000	4.0636	1.6	15.0	
32	Carbophenothion	2.0000	1.8639	6.8	15.0	
31	Triphenyl phosphate	2.0000	1.7170	14.2	15.0	
34	Phosmet	2.0000	1.6471	17.6	15.0	<-
32	EPN	2.0000	1.7931	10.3	15.0	
33	Azinphos-methyl	2.0000	1.9226	3.9	15.0	
35	Azinphos-ethyl	2.0000	1.8331	8.3	15.0	
36	Coumaphos	2.0000	2.0063	0.3	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B/010F1001.D
Report Date: 06/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Injection Date: 26-JUN-2009 21:40
Lab File ID: 010F1001.D
Lab Sample ID: OPP SS GSV0633
Analysis Type: NONE
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 Merphos	2.0000	1.7215	13.9	15.0
40 Total Demeton	2.0000	2.1021	5.1	15.0

Average %D = 23.4

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B/010F1001.D
Report Date: 06/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 010F1001.D
Analysis Type: NONE

Injection Date: 26-JUN-2009 21:40
Lab Sample ID: OPP SS GSV0633
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.0000	2.0069	0.3	15.0	
2	Dichlorvos	2.0000	1.7707	11.5	15.0	
3	Chlormefos	2.0000	1.6957	15.2	15.0	<- ok
4	Mevinphos	2.0000	1.8364	8.2	15.0	
5	Demeton-O	0.6500	2.0472	215.0	15.0	<- ok, see total demeton
6	Thionazin	2.0000	1.8758	6.2	15.0	
7	Ethoprop	2.0000	1.8962	5.2	15.0	
8	Phorate	2.0000	1.9509	2.5	15.0	
10	Naled	2.0000	1.0486	47.6	15.0	<-
146	Sulfotepp	2.0000	1.7143	14.3	15.0	
10	Simazine	2.0000	3.6013	80.1	15.0	<-
12	Diazinon	2.0000	2.0803	4.0	15.0	
150	Atrazine	2.0000	1.9693	1.5	15.0	
13	Propazine	2.0000	1.8742	6.3	15.0	
14	Disulfoton	2.0000	1.6970	15.1	15.0	<- ok
15	Demeton-S	1.3600	0.2011	85.2	15.0	<- ok, see total demeton
16	Dimethoate	2.0000	1.8701	6.5	15.0	
17	Ronnel	2.0000	2.0112	0.6	15.0	
148	Merphos-A (Merphos)	2.0000	0.5348	73.3	999.0	
18	Chlorpyrifos	2.0000	2.1084	5.4	15.0	
19	Fenthion	2.0000	2.0634	3.2	15.0	
20	Trichloronate	2.0000	1.8617	6.9	15.0	
21	Anilazine	2.0000	1.2425	37.9	15.0	<-
23	Methyl Parathion	2.0000	2.0228	1.1	15.0	
24	Malathion	2.0000	1.5362	23.2	15.0	<-
25	Tokuthion	2.0000	1.8925	5.4	15.0	
26	Parathion	2.0000	2.1337	6.7	15.0	
149	Merphos-B (Merphos Oxone)	2.0000	5.0080	150.4	999.0	
27	Tetrachlorvinphos (stirophos)	2.0000	2.0814	4.1	15.0	
28	Carbophenothion methyl	2.0000	1.2466	37.7	15.0	<-
28	Bolstar	2.0000	2.0778	3.9	15.0	
30	Carbophenothion	2.0000	1.7496	12.5	15.0	
29	Triphenyl phosphate	2.0000	1.7275	13.6	15.0	
30	Fensulfothion	2.0000	2.0824	4.1	15.0	
35	Phosmet / EPN	4.0000	3.4695	13.3	15.0	
33	Famphur	2.0000	1.7579	12.1	15.0	
34	Azinphos-methyl	2.0000	1.8108	9.5	15.0	
35	Azinphos-ethyl	2.0000	1.7982	10.1	15.0	
36	Coumaphos	2.0000	1.9588	2.1	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B/010F1001.D
Report Date: 06/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 010F1001.D
Analysis Type: NONE

Injection Date: 26-JUN-2009 21:40
Lab Sample ID: OPP SS GSV0633
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
22 Merphos	2.0000	1.6146	19.3	15.0	<-
40 Total Demeton	2.0000	2.2483	12.4	15.0	

Average %D = 24.2

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\003F0301.D
Lab Smp Id: OPP L7 GSV0634 Client Smp ID: OPP L7 GSV0634
Inj Date : 26-JUN-2009 18:28
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L7 GSV0634
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Meth Date : 30-Jun-2009 12:45 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 20:18 Cal File: 007F0701.D
Als bottle: 3 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	1 o,o,o-TEPT	3.256	3.254	(0.183)	707938	5.00000	4.923
	2 Dichlorvos	4.075	4.074	(0.228)	456822	5.00000	5.116(A)
	3 Mevinphos	5.736	5.739	(0.322)	240948	5.00000	4.912
$	4 Chlormefos	5.835	5.836	(0.327)	549929	5.00000	4.918
	5 Thionazin	7.505	7.507	(0.421)	493034	5.00000	4.831
	6 Demeton-O	7.645	7.649	(0.428)	165003	1.62500	1.714
	7 Ethoprop	7.846	7.852	(0.440)	445084	5.00000	4.977
	8 Naled	8.053	8.057	(0.451)	121152	5.00000	5.203(A)
*	9 Tributylphosphate	8.110	8.135	(1.000)	206876	2.00000	
	10 Sulfotepp	8.440	8.442	(0.473)	609341	5.00000	4.831
	11 Phorate	8.530	8.532	(0.478)	441181	5.00000	4.764
	12 Dimethoate	8.655	8.659	(0.485)	565436	5.00000	5.256(A)
	13 Demeton-S	8.838	8.846	(0.495)	264954	3.40000	3.396
	14 Simazine	8.921	8.924	(0.500)	190219	5.00000	5.176(A)
	15 Atrazine	9.091	9.094	(0.510)	228392	5.00000	5.475(A)
	16 propazine	9.236	9.241	(0.518)	202756	5.00000	5.268(A)
	17 Disulfoton	9.866	9.869	(0.553)	290419	5.00000	4.668
	18 Diazinon	9.900	9.902	(0.555)	490902	5.00000	4.934
	19 Methyl Parathion	10.715	10.717	(0.601)	322048	5.00000	5.104(A)
	20 Ronnel	11.238	11.241	(0.630)	302582	5.00000	4.640
	21 Malathion	11.801	11.804	(0.661)	283462	5.00000	4.812
	22 Fenthion	11.930	11.932	(0.669)	301476	5.00000	4.701
	23 Parathion	12.020	12.019	(0.674)	334974	5.00000	4.908
	24 Chlorpyrifos	12.068	12.067	(0.676)	398604	5.00000	4.827
	25 Trichloronate	12.493	12.496	(0.700)	365975	5.00000	4.959
	26 Anilazine	12.815	12.817	(0.718)	34322	5.00000	4.247
	27 Merphos-A (Merphos)	13.196	13.199	(0.740)	302744	5.00000	4.916
	28 Tetrachlorvinphos (Stirophos)	13.818	13.824	(0.774)	210886	5.00000	5.153(A)
	29 Tokuthion	14.448	14.449	(0.810)	351657	5.00000	4.970
	30 Merphos-B (Merphos Oxone)	14.646	14.651	(0.821)	79809	5.00000	4.813
	31 Carbophenothion-methyl	15.235	15.239	(0.854)	266724	5.00000	4.968
	32 Fensulfothion	15.356	15.361	(0.861)	295978	5.00000	4.978
	33 Bolstar / Famphur	16.053	16.053	(0.900)	629265	10.0000	9.297

		Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34	Carbophenothion	16.196	16.197	(0.908)	321417	5.00000	4.733
$	35	Triphenyl phosphate	16.710	16.712	(0.936)	244102	5.00000	4.730(A)
	36	Phosmet	16.963	16.963	(0.951)	290049	5.00000	4.990
	37	EPN	17.150	17.151	(0.961)	294020	5.00000	5.219(A)
	38	Azinphos-methyl	17.478	17.480	(0.980)	309219	5.00000	4.993
*	39	TOCP	17.843	17.846	(1.000)	102065	2.00000	
	40	Azinphos-ethyl	17.923	17.926	(1.004)	318459	5.00000	4.789
	41	Coumaphos	18.363	18.366	(1.029)	252650	5.00000	5.058(A)
S	42	Merphos				382553	5.00000	4.876
M	43	Total Demeton				429957	5.00000	5.110

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

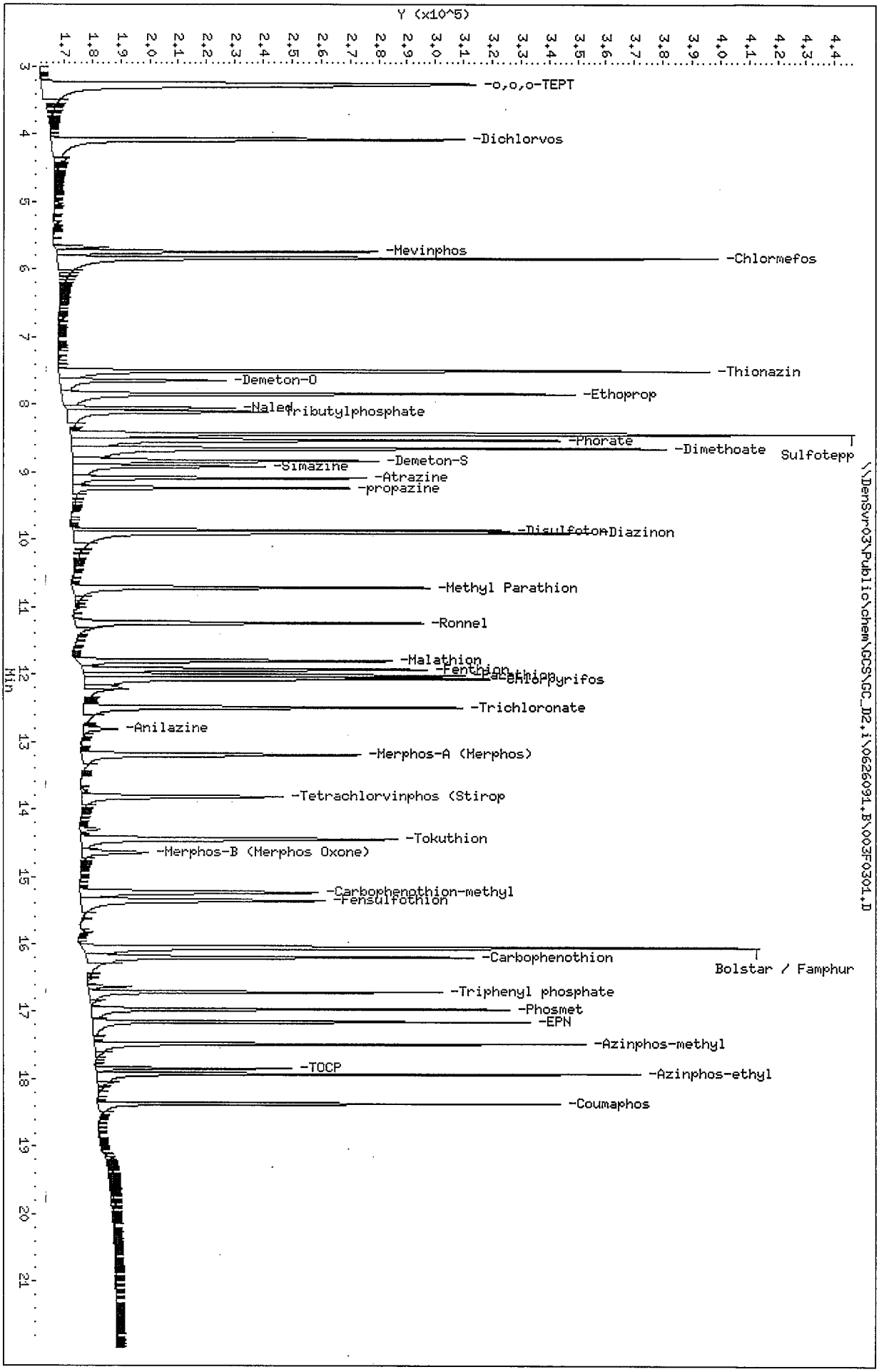
Instrument ID: GC_D2.i
Lab File ID: 003F0301.D
Lab Smp Id: OPP L7 GSV0634
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 21:40
Client Smp ID: OPP L7 GSV0634
Level:
Sample Type:

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	166572	83286	333144	206876	24.20
39 TOCP	99647	49824	199294	102065	2.43

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.11	7.61	8.61	8.11	-0.03
39 TOCP	17.84	17.34	18.34	17.84	0.01

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: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\003F0301.D
Date : 26-JUN-2009 18:28
Client ID: OPP L7 GSV0634
Sample Info: OPP L7 GSV0634
Column phase: RTx-1MS

Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\004F0401.D
Lab Smp Id: OPP L6 GSV0637 Client Smp ID: OPP L6 GSV0637
Inj Date : 26-JUN-2009 18:55
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L6 GSV0637
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Meth Date : 30-Jun-2009 12:45 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 18:28 Cal File: 003F0301.D
Als bottle: 4 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	==========	====	========	========	========	=======	=======
	1 o,o,o-TEPT	3.254	3.254	(0.182)	559984	4.00000	4.123
	2 Dichlorvos	4.074	4.074	(0.228)	337386	4.00000	4.000
	3 Mevinphos	5.736	5.739	(0.321)	189437	4.00000	4.089
$	4 Chlormefos	5.834	5.836	(0.327)	433193	4.00000	4.101
	5 Thionazin	7.504	7.507	(0.421)	385808	4.00000	4.002
	6 Demeton-O	7.646	7.649	(0.429)	113108	1.30000	1.237
	7 Ethoprop	7.848	7.852	(0.440)	343730	4.00000	4.069
	8 Naled	8.054	8.057	(0.451)	90892	4.00000	4.172
*	9 Tributylphosphate	8.111	8.135	(1.000)	190710	2.00000	
	10 Sulfotepp	8.439	8.442	(0.473)	486417	4.00000	4.072
	11 Phorate	8.531	8.532	(0.478)	345415	4.00000	3.949
	12 Dimethoate	8.654	8.659	(0.485)	445385	4.00000	4.383
	13 Demeton-S	8.838	8.846	(0.495)	208362	2.72000	2.828
	14 Simazine	8.919	8.924	(0.500)	147784	4.00000	4.272
	15 Atrazine	9.089	9.094	(0.509)	175159	4.00000	4.445
	16 propazine	9.236	9.241	(0.518)	156982	4.00000	4.318
	17 Disulfoton	9.868	9.869	(0.553)	247845	4.00000	4.214
	18 Diazinon	9.901	9.902	(0.555)	354996	4.00000	3.778
	19 Methyl Parathion	10.714	10.717	(0.601)	250051	4.00000	4.196
	20 Ronnel	11.239	11.241	(0.630)	259621	4.00000	4.214
	21 Malathion	11.799	11.804	(0.661)	228260	4.00000	4.097
	22 Fenthion	11.931	11.932	(0.669)	241990	4.00000	3.995
	23 Parathion	12.018	12.019	(0.674)	267071	4.00000	4.142
	24 Chlorpyrifos	12.066	12.067	(0.676)	312992	4.00000	4.013
	25 Trichloronate	12.493	12.496	(0.700)	293942	4.00000	4.216
	26 Anilazine	12.814	12.817	(0.718)	29375	4.00000	4.019
	27 Merphos-A (Merphos)	13.196	13.199	(0.740)	239875	4.00000	4.124
	28 Tetrachlorvinphos (Stirophos)	13.818	13.824	(0.774)	164180	4.00000	4.247
	29 Tokuthion	14.446	14.449	(0.810)	271654	4.00000	4.065
	30 Merphos-B (Merphos Oxone)	14.648	14.651	(0.821)	65974	4.00000	4.215
	31 Carbophenothion-methyl	15.234	15.239	(0.854)	206137	4.00000	4.052
	32 Fensulfothion	15.358	15.361	(0.861)	229856	4.00000	4.110
	33 Bolstar / Famphur	16.053	16.053	(0.900)	495681	8.00000	7.753

		Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34	Carbophenothion	16.194	16.197	(0.908)	272632	4.00000	4.251
$	35	Triphenyl phosphate	16.711	16.712	(0.937)	194548	4.00000	3.991(A)
	36	Phosmet	16.963	16.963	(0.951)	223910	4.00000	4.079
	37	EPN	17.148	17.151	(0.961)	220388	4.00000	4.152
	38	Azinphos-methyl	17.478	17.480	(0.980)	244293	4.00000	4.176
*	39	TOCP	17.843	17.846	(1.000)	96406	2.00000	
	40	Azinphos-ethyl	17.923	17.926	(1.004)	253982	4.00000	4.021
	41	Coumaphos	18.363	18.366	(1.029)	194765	4.00000	4.128
S	42	Merphos				305849	4.00000	4.161
M	43	Total Demeton				321470	4.00000	4.064

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

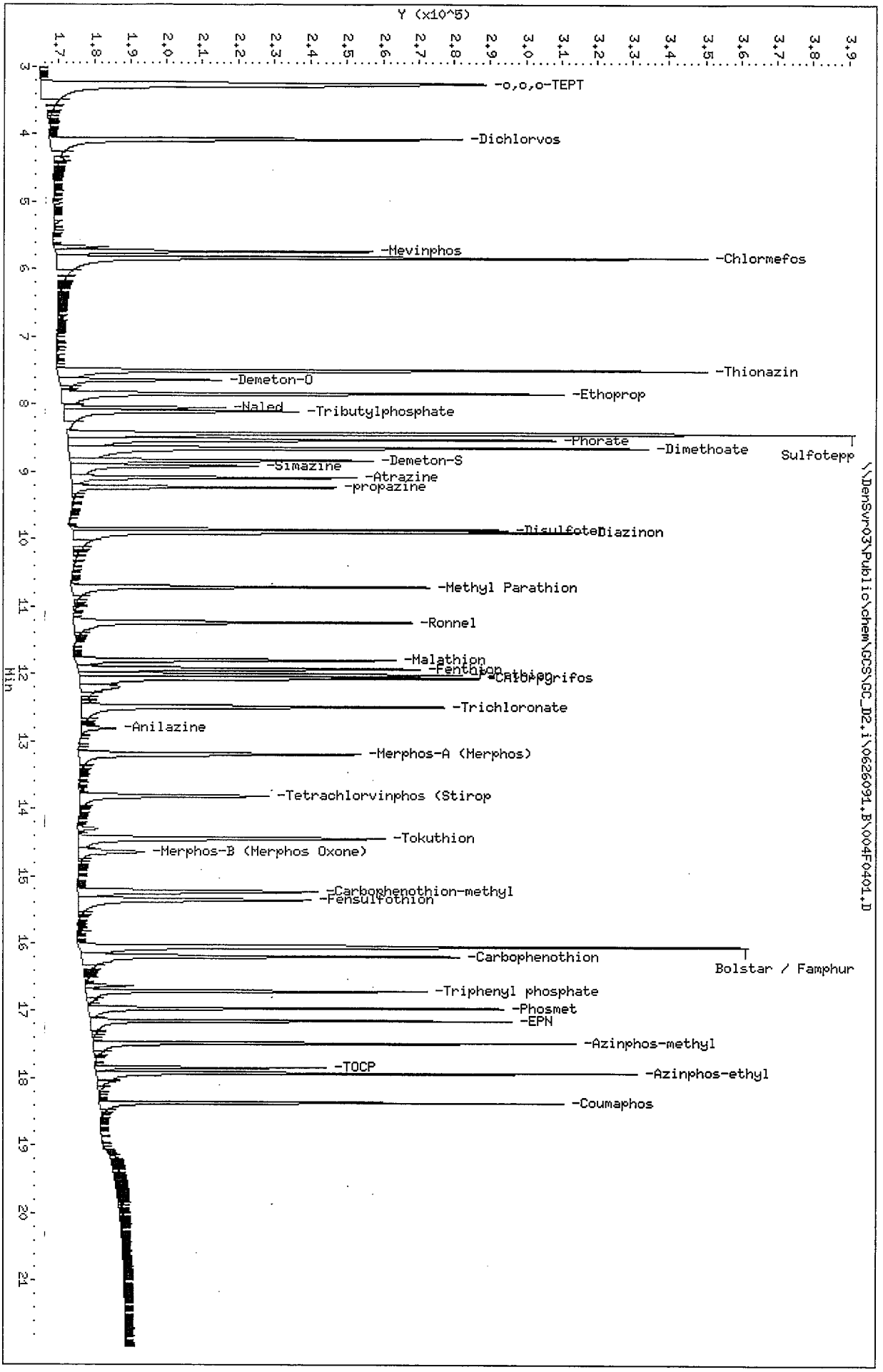
Instrument ID: GC_D2.i
Lab File ID: 004F0401.D
Lab Smp Id: OPP L6 GSV0637
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 21:40
Client Smp ID: OPP L6 GSV0637
Level:
Sample Type:

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	166572	83286	333144	190710	14.49
39 TOCP	99647	49824	199294	96406	-3.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.11	7.61	8.61	8.11	-0.01
39 TOCP	17.84	17.34	18.34	17.84	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: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\004F0401.D
Date : 26-JUN-2009 18:55
Client ID: OPP L6 GSV0637
Sample Info: OPP L6 GSV0637
Column phase: RTx-1MS

Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\005F0501.D
Lab Smp Id: OPP L5 GSV0635 Client Smp ID: OPP L5 GSV0635
Inj Date : 26-JUN-2009 19:23
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L5 GSV0635
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Meth Date : 30-Jun-2009 12:45 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 18:55 Cal File: 004F0401.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	1 o,o,o-TEPT	3.254	3.254	(0.182)	430120	3.00000	2.892
	2 Dichlorvos	4.074	4.074	(0.228)	272336	3.00000	2.949
	3 Mevinphos	5.737	5.739	(0.322)	150686	3.00000	2.970
$	4 Chlormefos	5.834	5.836	(0.327)	373109	3.00000	3.226
	5 Thionazin	7.504	7.507	(0.421)	310451	3.00000	2.941
	6 Demeton-O	7.646	7.649	(0.429)	96004	0.97500	0.9530
	7 Ethoprop	7.847	7.852	(0.440)	275706	3.00000	2.981
	8 Naled	8.054	8.057	(0.451)	67594	3.00000	2.896
*	9 Tributylphosphate	8.111	8.135	(1.000)	190357	2.00000	
	10 Sulfotepp	8.439	8.442	(0.473)	393078	3.00000	2.987
	11 Phorate	8.531	8.532	(0.478)	279291	3.00000	2.916
	12 Dimethoate	8.654	8.659	(0.485)	354003	3.00000	3.181
	13 Demeton-S	8.837	8.846	(0.495)	167136	2.04000	2.071
	14 Simazine	8.919	8.924	(0.500)	115426	3.00000	3.070
	15 Atrazine	9.089	9.094	(0.509)	135287	3.00000	3.135
	16 propazine	9.236	9.241	(0.518)	119795	3.00000	3.009
	17 Disulfoton	9.867	9.869	(0.553)	193050	3.00000	2.986
	18 Diazinon	9.901	9.902	(0.555)	314608	3.00000	3.057
	19 Methyl Parathion	10.714	10.717	(0.600)	206402	3.00000	3.163
	20 Ronnel	11.239	11.241	(0.630)	197062	3.00000	2.921
	21 Malathion	11.799	11.804	(0.661)	186013	3.00000	3.038
	22 Fenthion	11.931	11.932	(0.669)	198864	3.00000	2.998
	23 Parathion	12.017	12.019	(0.674)	215846	3.00000	3.057
	24 Chlorpyrifos	12.066	12.067	(0.676)	255782	3.00000	2.995
	25 Trichloronate	12.494	12.496	(0.700)	231599	3.00000	3.034
	26 Anilazine	12.812	12.817	(0.718)	19893	3.00000	2.881
	27 Merphos-A (Merphos)	13.196	13.199	(0.740)	192022	3.00000	3.015
	28 Tetrachlorvinphos (Stirophos)	13.816	13.824	(0.774)	134968	3.00000	3.188
	29 Tokuthion	14.447	14.449	(0.810)	220825	3.00000	3.018
	30 Merphos-B (Merphos Oxone)	14.647	14.651	(0.821)	50056	3.00000	2.927
	31 Carbophenothion-methyl	15.236	15.239	(0.854)	167145	3.00000	2.983
	32 Fensulfothion	15.356	15.361	(0.861)	185778	3.00000	3.058
	33 Bolstar / Famphur	16.051	16.053	(0.900)	404218	6.00000	5.774

		Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34	Carbophenothion	16.194	16.197	(0.908)	199717	3.00000	2.844
$	35	Triphenyl phosphate	16.711	16.712	(0.937)	157761	3.00000	2.956(A)
	36	Phosmet	16.962	16.963	(0.951)	177892	3.00000	2.959
	37	EPN	17.149	17.151	(0.961)	171283	3.00000	2.961
	38	Azinphos-methyl	17.476	17.480	(0.979)	195645	3.00000	3.054
*	39	TOCP	17.842	17.846	(1.000)	105568	2.00000	
	40	Azinphos-ethyl	17.922	17.926	(1.004)	209971	3.00000	2.999
	41	Coumaphos	18.364	18.366	(1.029)	159962	3.00000	3.096
S	42	Merphos				242078	3.00000	2.978
M	43	Total Demeton				263140	3.00000	3.024

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

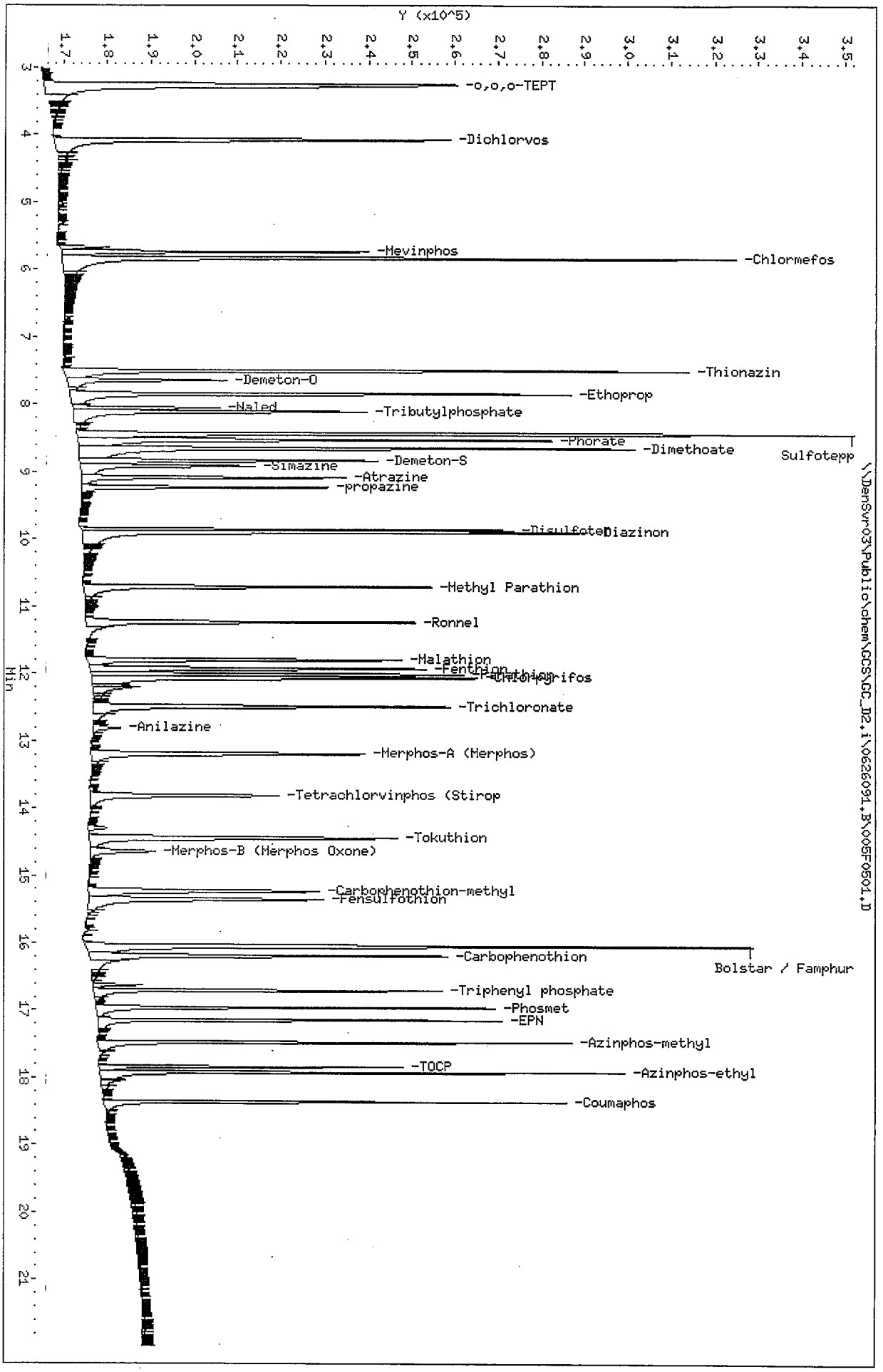
Instrument ID: GC_D2.i
Lab File ID: 005F0501.D
Lab Smp Id: OPP L5 GSV0635
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 21:40
Client Smp ID: OPP L5 GSV0635
Level:
Sample Type:

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	166572	83286	333144	190357	14.28
39 TOCP	99647	49824	199294	105568	5.94

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.11	7.61	8.61	8.11	-0.02
39 TOCP	17.84	17.34	18.34	17.84	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: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\005F0501.D
Date : 26-JUN-2009 19:23
Client ID: OPP L5 GSV0635
Sample Info: OPP L5 GSV0635
Column phase: RTx-1HS
Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\006F0601.D
Lab Smp Id: OPP L4 GSV0638 Client Smp ID: OPP L4 GSV0638
Inj Date : 26-JUN-2009 19:50
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L4 GSV0638
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Meth Date : 30-Jun-2009 12:45 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 19:23 Cal File: 005F0501.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	1 o,o,o-TEPT	3.255	3.254	(0.182)	282037	2.00000	2.056
	2 Dichlorvos	4.075	4.074	(0.228)	171715	2.00000	2.016
	3 Mevinphos	5.737	5.739	(0.322)	99077	2.00000	2.117
$	4 Chlormefos	5.834	5.836	(0.327)	220122	2.00000	2.064
	5 Thionazin	7.504	7.507	(0.421)	202723	2.00000	2.082
	6 Demeton-O	7.647	7.649	(0.429)	62341	0.65000	0.6633
	7 Ethoprop	7.849	7.852	(0.440)	168636	2.00000	1.977
	8 Naled	8.055	8.057	(0.451)	36940	2.00000	1.794
*	9 Tributylphosphate	8.112	8.135	(1.000)	160310	2.00000	
	10 Sulfotepp	8.439	8.442	(0.473)	259970	2.00000	2.122
	11 Phorate	8.530	8.532	(0.478)	177561	2.00000	2.010
	12 Dimethoate	8.655	8.659	(0.485)	219744	2.00000	2.141
	13 Demeton-S	8.840	8.846	(0.495)	104966	1.36000	1.410
	14 Simazine	8.919	8.924	(0.500)	64611	2.00000	1.894
	15 Atrazine	9.089	9.094	(0.509)	82396	2.00000	2.070
	16 propazine	9.235	9.241	(0.518)	76116	2.00000	2.073
	17 Disulfoton	9.867	9.869	(0.553)	127893	2.00000	2.134
	18 Diazinon	9.902	9.902	(0.555)	196533	2.00000	2.071
	19 Methyl Parathion	10.714	10.717	(0.600)	128904	2.00000	2.142
	20 Ronnel	11.239	11.241	(0.630)	125931	2.00000	2.024
	21 Malathion	11.799	11.804	(0.661)	119836	2.00000	2.110
	22 Fenthion	11.930	11.932	(0.669)	125692	2.00000	2.054
	23 Parathion	12.017	12.019	(0.673)	135333	2.00000	2.078
	24 Chlorpyrifos	12.067	12.067	(0.676)	158619	2.00000	2.014
	25 Trichloronate	12.494	12.496	(0.700)	144264	2.00000	2.049
	26 Anilazine	12.815	12.817	(0.718)	12790	2.00000	2.151
	27 Merphos-A (Merphos)	13.197	13.199	(0.740)	120719	2.00000	2.055
	28 Tetrachlorvinphos (Stirophos)	13.817	13.824	(0.774)	81250	2.00000	2.081
	29 Tokuthion	14.447	14.449	(0.810)	140431	2.00000	2.081
	30 Merphos-B (Merphos Oxone)	14.649	14.651	(0.821)	34113	2.00000	2.168
	31 Carbophenothion-methyl	15.235	15.239	(0.854)	105577	2.00000	2.022
	32 Fensulfothion	15.357	15.361	(0.861)	104440	2.00000	1.901
	33 Bolstar / Famphur	16.052	16.053	(0.900)	260611	4.00000	4.036

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	16.195	16.197	(0.908)	128846	2.00000	1.989
$	35 Triphenyl phosphate	16.710	16.712	(0.936)	102669	2.00000	2.086 (A)
	36 Phosmet	16.962	16.963	(0.951)	117406	2.00000	2.118
	37 EPN	17.149	17.151	(0.961)	111165	2.00000	2.098
	38 Azinphos-methyl	17.477	17.480	(0.979)	124853	2.00000	2.113
*	39 TOCP	17.844	17.846	(1.000)	97363	2.00000	
	40 Azinphos-ethyl	17.924	17.926	(1.004)	134607	2.00000	2.040
	41 Coumaphos	18.364	18.366	(1.029)	99259	2.00000	2.083
S	42 Merphos				154832	2.00000	2.068
M	43 Total Demeton				167307	2.00000	2.074

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

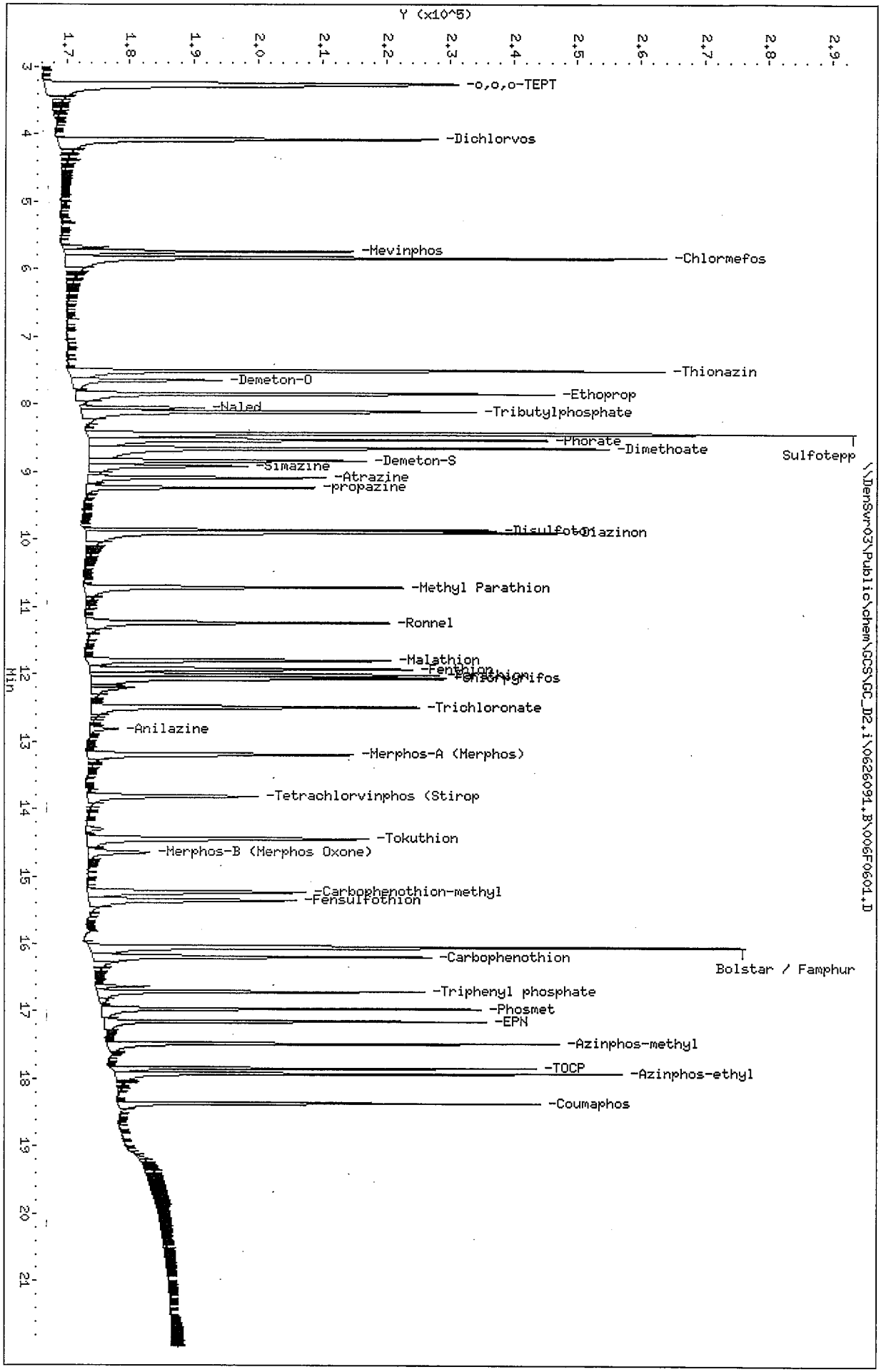
Instrument ID: GC_D2.i
Lab File ID: 006F0601.D
Lab Smp Id: OPP L4 GSV0638
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L4 GSV0638
Level:
Sample Type:

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	160310	80155	320620	160310	0.00
39 TOCP	97363	48682	194726	97363	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.11	7.61	8.61	8.11	0.00
39 TOCP	17.84	17.34	18.34	17.84	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: \\DenSvr03\Public\chem\GCS\GC_D2,i\0626094,B\006F0604,D
Date : 26-JUN-2009 19:50
Client ID: OPP L4 GSV0638
Sample Info: OPP L4 GSV0638
Column phase: RTx-1MS

Instrument: GC_D2,i
Operator: HPK/TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\007F0701.D
Lab Smp Id: OPP L3 GSV0639 Client Smp ID: OPP L3 GSV0639
Inj Date : 26-JUN-2009 20:18
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L3 GSV0639
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Meth Date : 30-Jun-2009 12:45 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 19:50 Cal File: 006F0601.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	3.253	3.254	(0.182)	136897	1.00000	0.9509
	2 Dichlorvos	4.075	4.074	(0.228)	81003	1.00000	0.9061
	3 Mevinphos	5.738	5.739	(0.322)	46063	1.00000	0.9380
$	4 Chlormefos	5.833	5.836	(0.327)	102183	1.00000	0.9128
	5 Thionazin	7.503	7.507	(0.421)	99560	1.00000	0.9745
	6 Demeton-O	7.645	7.649	(0.429)	30145	0.32500	0.2917
	7 Ethoprop	7.850	7.852	(0.440)	82934	1.00000	0.9263
	8 Naled	8.055	8.057	(0.451)	15042	1.00000	0.8141
*	9 Tributylphosphate	8.113	8.135	(1.000)	156624	2.00000	
	10 Sulfotepp	8.438	8.442	(0.473)	131347	1.00000	0.9856
	11 Phorate	8.530	8.532	(0.478)	88795	1.00000	0.9577
	12 Dimethoate	8.657	8.659	(0.485)	105981	1.00000	0.9840
	13 Demeton-S	8.840	8.846	(0.495)	51826	0.68000	0.6636
	14 Simazine	8.918	8.924	(0.500)	29382	1.00000	0.8660
	15 Atrazine	9.088	9.094	(0.509)	38356	1.00000	0.9184
	16 propazine	9.235	9.241	(0.518)	35375	1.00000	0.9180
	17 Disulfoton	9.867	9.869	(0.553)	61920	1.00000	0.9637
	18 Diazinon	9.902	9.902	(0.555)	93892	1.00000	0.9427
	19 Methyl Parathion	10.715	10.717	(0.601)	58112	1.00000	0.9200
	20 Ronnel	11.240	11.241	(0.630)	61984	1.00000	0.9493
	21 Malathion	11.800	11.804	(0.661)	57103	1.00000	0.9353
	22 Fenthion	11.930	11.932	(0.669)	59512	1.00000	0.9268
	23 Parathion	12.017	12.019	(0.674)	63007	1.00000	0.9220
	24 Chlorpyrifos	12.067	12.067	(0.676)	75298	1.00000	0.9108
	25 Trichloronate	12.493	12.496	(0.700)	68852	1.00000	0.9318
	26 Anilazine	12.817	12.817	(0.718)	5311	1.00000	0.9480
	27 Merphos-A (Merphos)	13.198	13.199	(0.740)	59249	1.00000	0.9611
	28 Tetrachlorvinphos (Stirophos)	13.818	13.824	(0.775)	37534	1.00000	0.9161
	29 Tokuthion	14.448	14.449	(0.810)	66164	1.00000	0.9341
	30 Merphos-B (Merphos Oxone)	14.647	14.651	(0.821)	11676	1.00000	0.7212
	31 Carbophenothion-methyl	15.235	15.239	(0.854)	55023	1.00000	0.9704
	32 Fensulfothion	15.360	15.361	(0.861)	51304	1.00000	0.9402
	33 Bolstar / Famphur	16.050	16.053	(0.900)	135217	2.00000	1.995

		Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34	Carbophenothion	16.193	16.197	(0.908)	65237	1.00000	0.9596
$	35	Triphenyl phosphate	16.708	16.712	(0.936)	49547	1.00000	0.9591
	36	Phosmet	16.962	16.963	(0.951)	56728	1.00000	0.9749
	37	EPN	17.148	17.151	(0.961)	48705	1.00000	0.9045
	38	Azinphos-methyl	17.478	17.480	(0.980)	59658	1.00000	0.9622
*	39	TOCP	17.842	17.846	(1.000)	102183	2.00000	
	40	Azinphos-ethyl	17.923	17.926	(1.005)	74071	1.00000	0.9989
	41	Coumaphos	18.363	18.366	(1.029)	47132	1.00000	0.9424
S	42	Merphos				70925	1.00000	0.8976
M	43	Total Demeton				81971	1.00000	0.9553

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

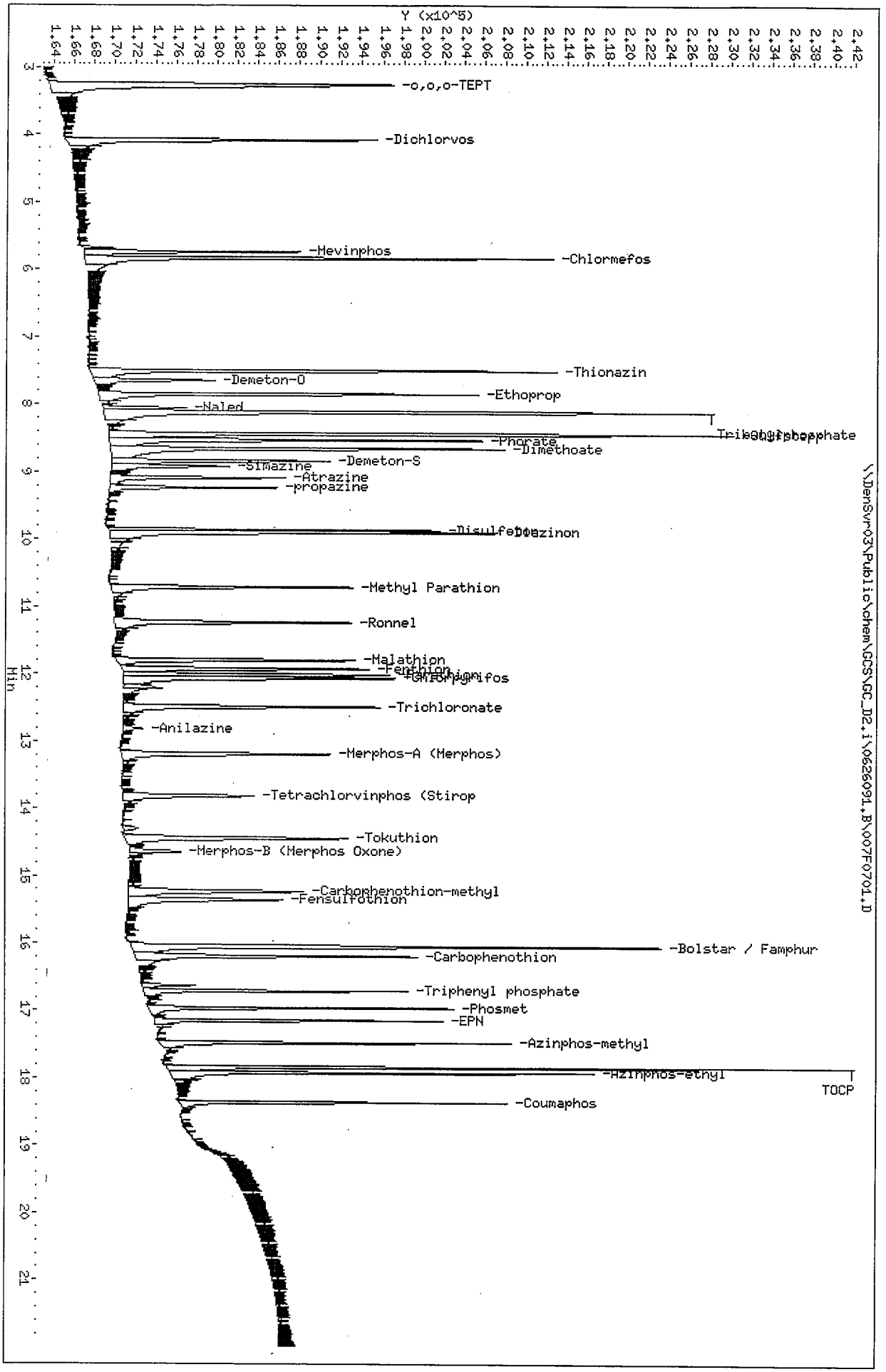
Instrument ID: GC_D2.i
Lab File ID: 007F0701.D
Lab Smp Id: OPP L3 GSV0639
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L3 GSV0639
Level:
Sample Type:

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	160310	80155	320620	156624	-2.30
39 TOCP	97363	48682	194726	102183	4.95

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.11	7.61	8.61	8.11	0.02
39 TOCP	17.84	17.34	18.34	17.84	-0.01

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: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\007F0701.D
Date : 26-JUN-2009 20:18
Client ID: OPP L3 GSV0639
Sample Info: OPP L3 GSV0639
Column phase: RTx-1MS
Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\007F0701.D
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Mevinphos
-Chlormefos
-Thionazin
-Demeton-O
-Ethoprop
-Naled
-Phorate
-Dimethoate
-Simazine
-Demeton-S
-Atrazine
-propazine
-Methyl Parathion
-Ronnel
-Malathion
-Trichloronate
-Anilazine
-Merphos-A (Merphos)
-Tetrachlorvinphos (Stirop
-Tokuthion
-Merphos-B (Merphos Oxone)
-Carbophenothion-methyl
-Fensulfothion
-Bolstar / Famphur
-Carbophenothion
-Triphenyl phosphate
-Phosmet
-EPN
-Azinphos-methyl
-Azinphos-ethyl
TCCP
-Coumaphos

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\008F0801.D
Lab Smp Id: OPP L2 GSV0640 Client Smp ID: OPP L2 GSV0640
Inj Date : 26-JUN-2009 20:45
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L2 GSV0640
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Meth Date : 30-Jun-2009 12:45 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 20:18 Cal File: 007F0701.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	3.255	3.254	(0.182)	68743	0.50000	0.4680
	2 Dichlorvos	4.076	4.074	(0.228)	42284	0.50000	0.4636
	3 Mevinphos	5.738	5.739	(0.322)	23796	0.50000	0.4749
$	4 Chlormefos	5.833	5.836	(0.327)	53089	0.50000	0.4648
	5 Thionazin	7.505	7.507	(0.421)	50724	0.50000	0.4866
	6 Demeton-O	7.646	7.649	(0.429)	17553	0.16250	0.1554
	7 Ethoprop	7.851	7.852	(0.440)	44525	0.50000	0.4874
	8 Naled	8.056	8.057	(0.452)	6103	0.50000	0.4398
*	9 Tributylphosphate	8.113	8.135	(1.000)	165852	2.00000	
	10 Sulfotepp	8.438	8.442	(0.473)	70885	0.50000	0.4886
	11 Phorate	8.530	8.532	(0.478)	47685	0.50000	0.5040
	12 Dimethoate	8.660	8.659	(0.485)	46100	0.50000	0.4195
	13 Demeton-S	8.843	8.846	(0.496)	25917	0.34000	0.3252
	14 Simazine	8.920	8.924	(0.500)	16248	0.50000	0.5059
	15 Atrazine	9.091	9.094	(0.510)	19948	0.50000	0.4681
	16 propazine	9.236	9.241	(0.518)	18281	0.50000	0.4649
	17 Disulfoton	9.866	9.869	(0.553)	33208	0.50000	0.4883
	18 Diazinon	9.903	9.902	(0.555)	47843	0.50000	0.4708
	19 Methyl Parathion	10.715	10.717	(0.601)	28773	0.50000	0.4464
	20 Ronnel	11.240	11.241	(0.630)	32156	0.50000	0.4827
	21 Malathion	11.800	11.804	(0.661)	30581	0.50000	0.4713
	22 Fenthion	11.931	11.932	(0.669)	30876	0.50000	0.4713
	23 Parathion	12.016	12.019	(0.673)	32682	0.50000	0.4687
	24 Chlorpyrifos	12.066	12.067	(0.676)	40856	0.50000	0.4843
	25 Trichloronate	12.493	12.496	(0.700)	37156	0.50000	0.4928
	26 Anilazine	12.820	12.817	(0.718)	2095	0.50000	0.4035 (M)
	27 Merphos-A (Merphos)	13.200	13.199	(0.740)	30112	0.50000	0.4787
	28 Tetrachlorvinphos (Stirophos)	13.818	13.824	(0.774)	19446	0.50000	0.4652
	29 Tokuthion	14.448	14.449	(0.810)	33437	0.50000	0.4626
	30 Merphos-B (Merphos Oxone)	14.651	14.651	(0.821)	7933	0.50000	0.4872 (M)
	31 Carbophenothion-methyl	15.235	15.239	(0.854)	30542	0.50000	0.4974
	32 Fensulfothion	15.360	15.361	(0.861)	23000	0.50000	0.4661
	33 Bolstar / Famphur	16.050	16.053	(0.899)	66619	1.00000	0.9635

		Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34	Carbophenothion	16.193	16.197	(0.908)	31276	0.50000	0.4509
$	35	Triphenyl phosphate	16.710	16.712	(0.936)	25861	0.50000	0.4906
	36	Phosmet	16.961	16.963	(0.951)	26426	0.50000	0.4451
	37	EPN	17.148	17.151	(0.961)	23196	0.50000	0.4484
	38	Azinphos-methyl	17.478	17.480	(0.980)	29588	0.50000	0.4677
*	39	TOCP	17.843	17.846	(1.000)	104260	2.00000	
	40	Azinphos-ethyl	17.923	17.926	(1.004)	43578	0.50000	0.5132
	41	Coumaphos	18.363	18.366	(1.029)	23408	0.50000	0.4587
S	42	Merphos				38045	0.50000	0.4789
M	43	Total Demeton				43470	0.50000	0.4806

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 008F0801.D
Lab Smp Id: OPP L2 GSV0640
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L2 GSV0640
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	160310	80155	320620	165852	3.46
39 TOCP	97363	48682	194726	104260	7.08

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.11	7.61	8.61	8.11	0.01
39 TOCP	17.84	17.34	18.34	17.84	-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.

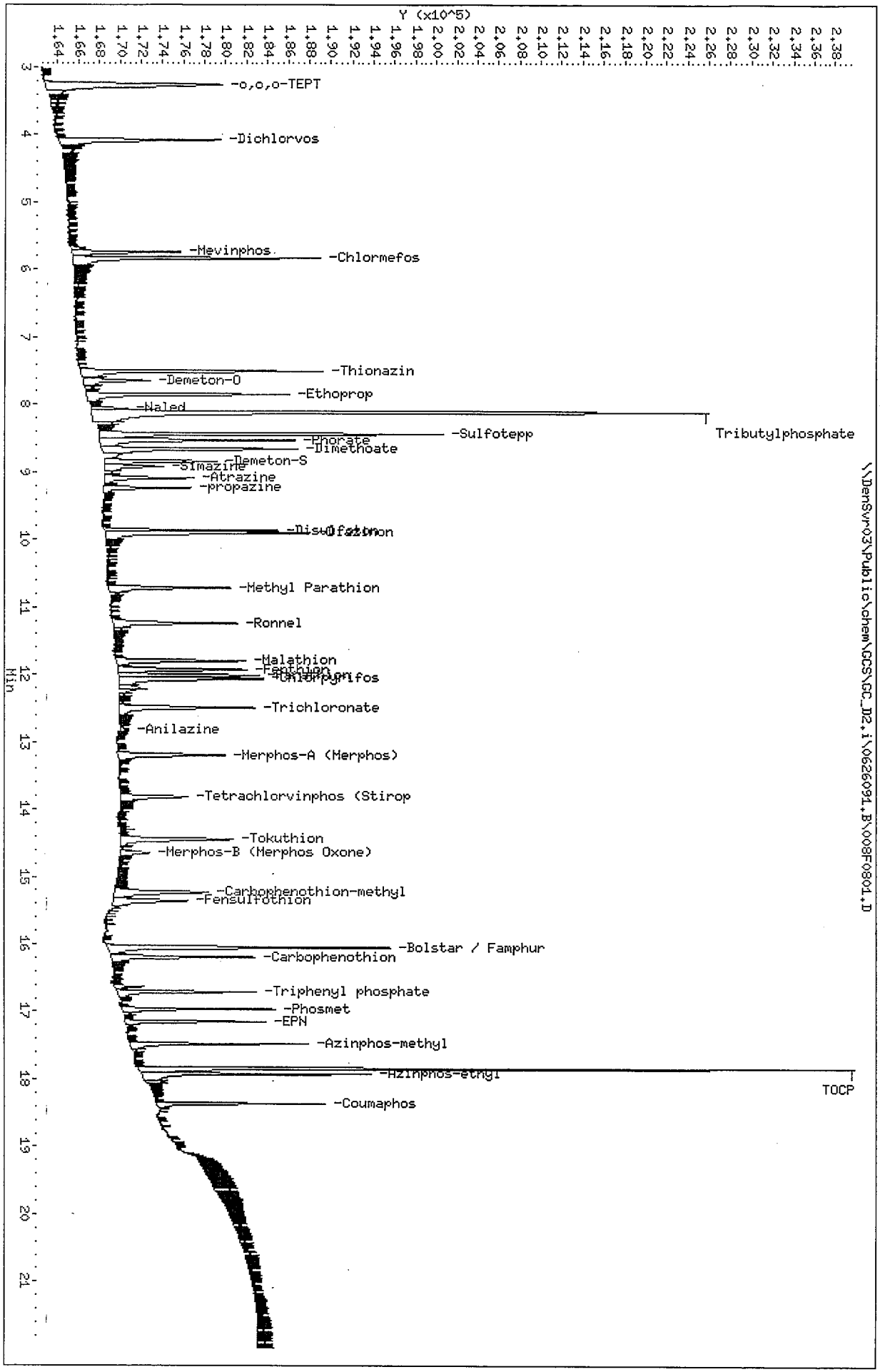
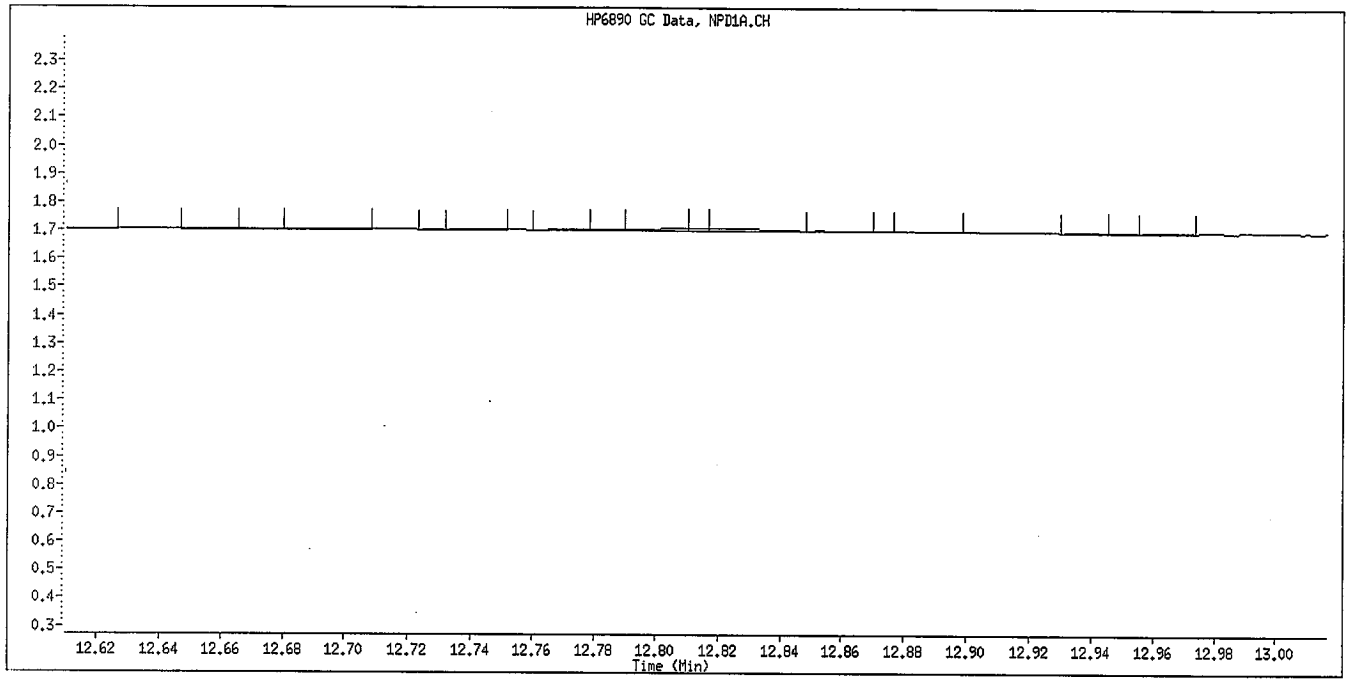
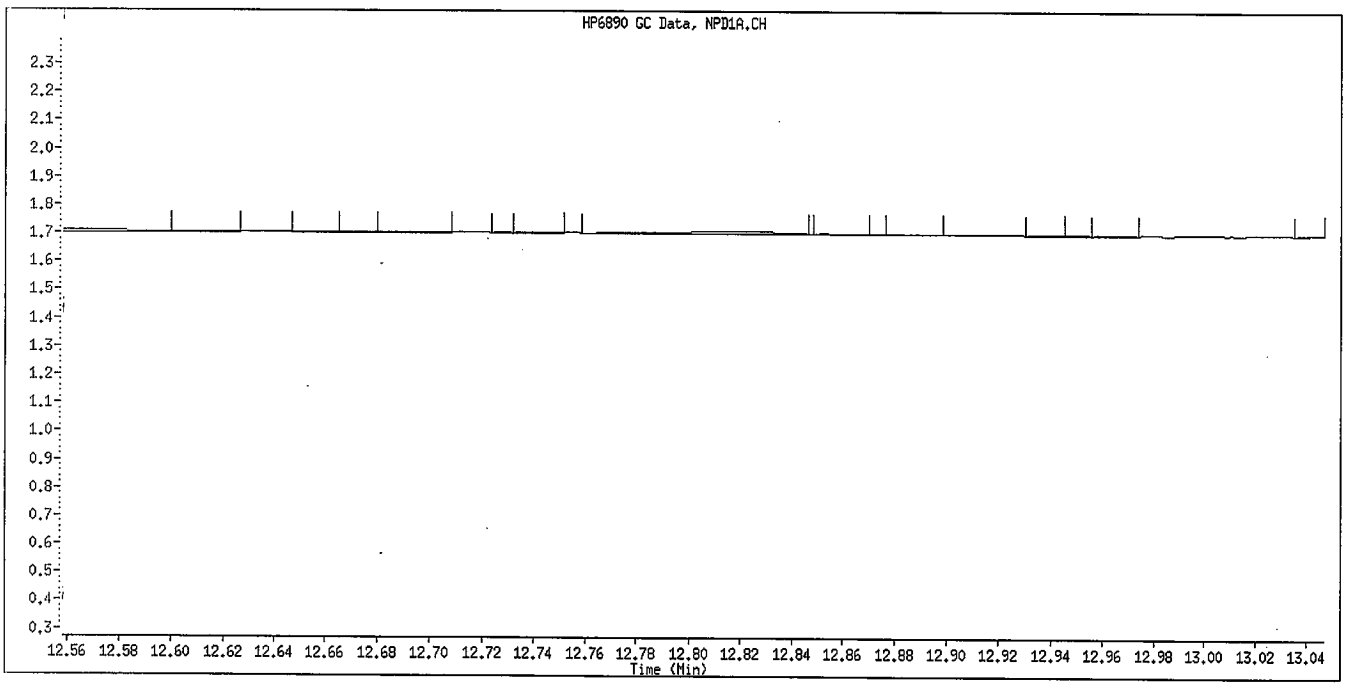

Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\0626091,B\008F0801,D
Date : 26-JUN-2009 20:45
Client ID: OPP L2 GSV0640
Sample Info: OPP L2 GSV0640
Column phase: RTx-1MS
Instrument: GC_D2,i
Operator: MPK/TLW
Column diameter: 0.32
Page 4
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Mevinphos
-Chlormefos
-Thionazin
-Demeton-O
-Ethoprop
-Naled
-Sulfotepp
-Phorate
-Dimethoate
-Demeton-S
-Simazine
-Atrazine
-propazine
-Diazinon
-Methyl Parathion
-Ronnel
-Malathion
-Fenthion
-Chlorpyrifos
-Trichloronate
-Anilazine
-Merphos-A (Merphos)
-Tetrachlorvinphos (Stirop
-Tokuthion
-Merphos-B (Merphos Oxone)
-Carbophenothion-methyl
-Fensulfothion
-Bolstar / Famphur
-Carbophenothion
-Triphenyl phosphate
-Phosmet
-EPN
-Azinphos-methyl
-Azinphos-ethyl
-Coumaphos
Tributylphosphate
TOCP
\\DenSvr03\Public\chem\GCS\GC_D2,i\0626091,B\008F0801,D

Table of Contents

Data File Name: 008F0801.D
Inj. Date and Time: 26-JUN-2009 20:45
Instrument ID: GC_D2.i
Client ID: OPP L2 GSV0640
Compound Name: Anilazine
CAS #:
Report Date: 06/30/2009



Original Integration



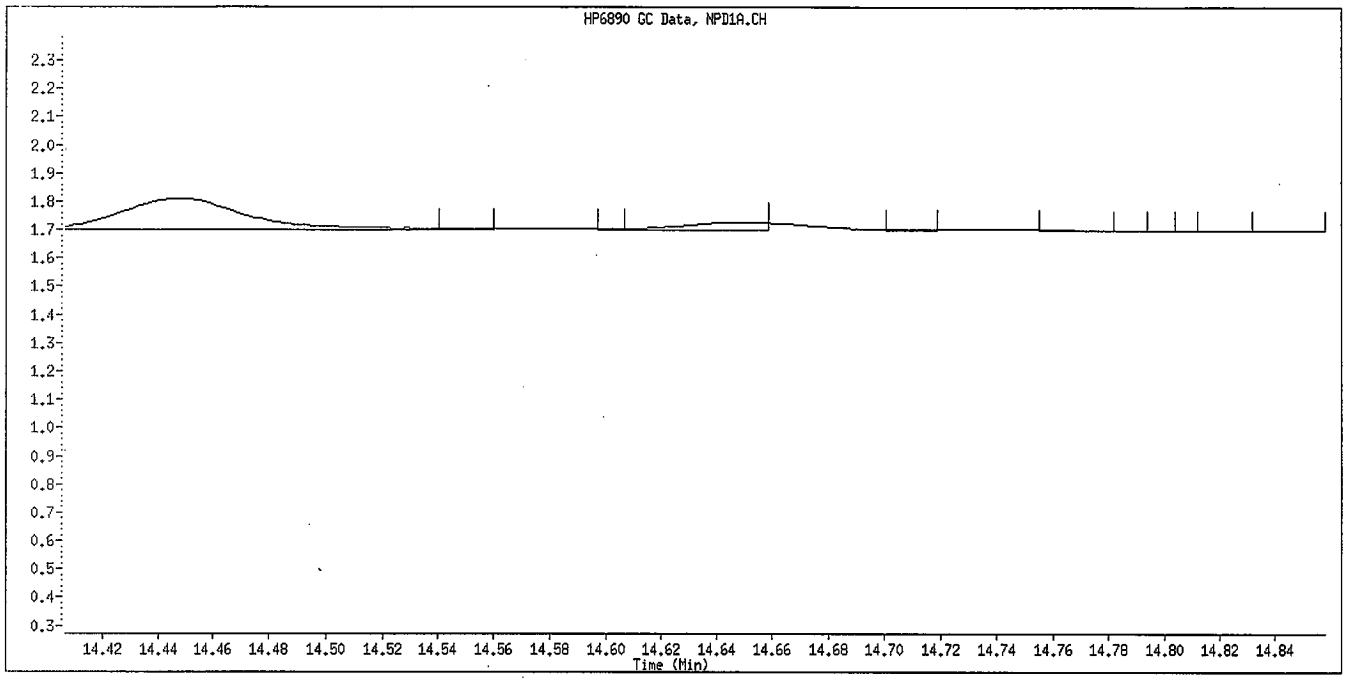
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

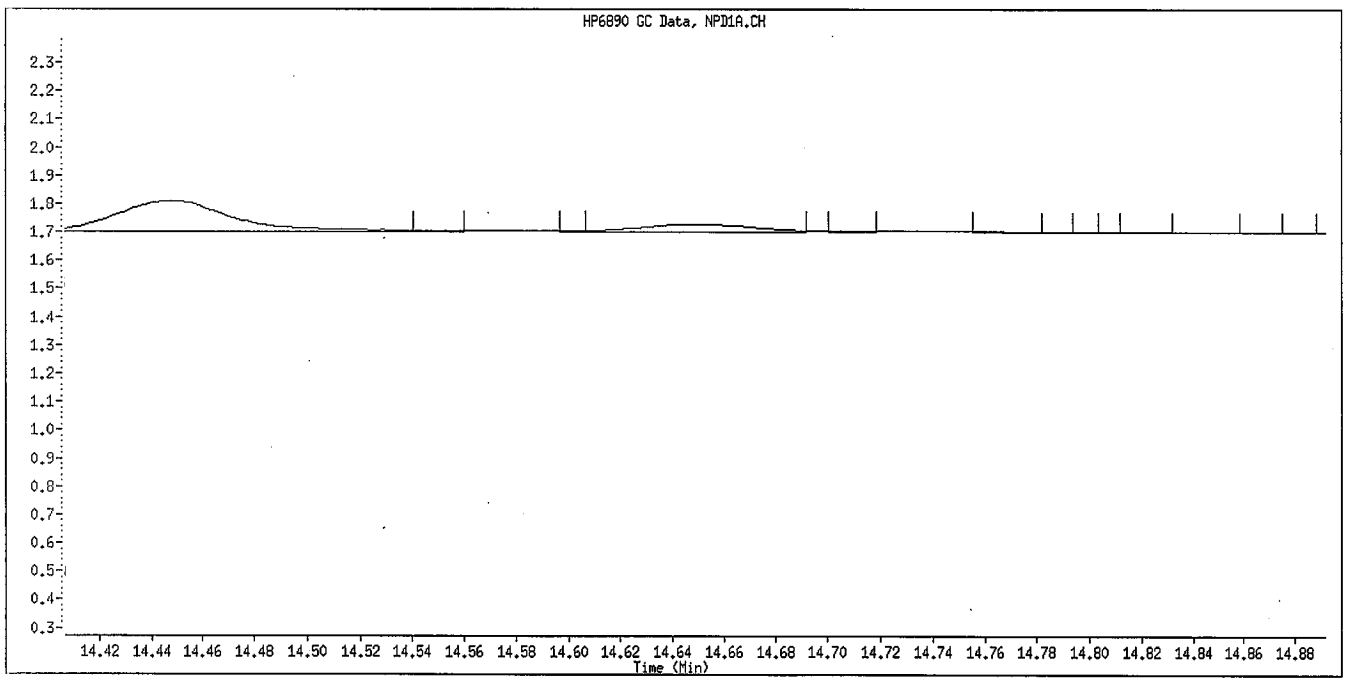
7/30/09

Table of Contents

Data File Name: 008F0801.D
Inj. Date and Time: 26-JUN-2009 20:45
Instrument ID: GC_D2.i
Client ID: OPP L2 GSV0640
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 06/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

JE 6/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\009F0901.D
Lab Smp Id: OPP L1 GSV0641 Client Smp ID: OPP L1 GSV0641
Inj Date : 26-JUN-2009 21:13
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L1 GSV0641
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Meth Date : 30-Jun-2009 12:45 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 20:45 Cal File: 008F0801.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	1 o,o,o-TEPT	3.258	3.254	(0.183)	32995	0.20000	0.2212
	2 Dichlorvos	4.081	4.074	(0.229)	21359	0.20000	0.2306
	3 Mevinphos	5.743	5.739	(0.322)	10777	0.20000	0.2118
$	4 Chlormefos	5.834	5.836	(0.327)	24167	0.20000	0.2083
	5 Thionazin	7.506	7.507	(0.421)	22524	0.20000	0.2127
	6 Demeton-O	7.646	7.649	(0.429)	9836	0.06500	0.07420
	7 Ethoprop	7.854	7.852	(0.440)	20488	0.20000	0.2208
	8 Naled	8.063	8.057	(0.452)	1992	0.20000	0.2720(M)
*	9 Tributylphosphate	8.114	8.135	(1.000)	165799	2.00000	
	10 Sulfotepp	8.439	8.442	(0.473)	34658	0.20000	0.1992
	11 Phorate	8.531	8.532	(0.478)	21475	0.20000	0.2235
	12 Dimethoate	8.664	8.659	(0.486)	20073	0.20000	0.1798
	13 Demeton-S	8.846	8.846	(0.496)	10751	0.13600	0.1328
	14 Simazine	8.926	8.924	(0.500)	4819	0.20000	0.2042(M)
	15 Atrazine	9.093	9.094	(0.510)	7432	0.20000	0.1717
	16 propazine	9.238	9.241	(0.518)	7824	0.20000	0.1959
	17 Disulfoton	9.868	9.869	(0.553)	15404	0.20000	0.2020
	18 Diazinon	9.904	9.902	(0.555)	23321	0.20000	0.2259
	19 Methyl Parathion	10.716	10.717	(0.601)	12987	0.20000	0.1984
	20 Ronnel	11.239	11.241	(0.630)	15128	0.20000	0.2236
	21 Malathion	11.801	11.804	(0.661)	15443	0.20000	0.2136
	22 Fenthion	11.931	11.932	(0.669)	15507	0.20000	0.2330
	23 Parathion	12.019	12.019	(0.674)	15083	0.20000	0.2130
	24 Chlorpyrifos	12.069	12.067	(0.676)	19655	0.20000	0.2294
	25 Trichloronate	12.494	12.496	(0.700)	15328	0.20000	0.2002
	26 Anilazine	12.824	12.817	(0.719)	1493	0.20000	0.2971(M)
	27 Merphos-A (Merphos)	13.199	13.199	(0.740)	13220	0.20000	0.2069
	28 Tetrachlorvinphos (Stirophos)	13.823	13.824	(0.775)	8134	0.20000	0.1916
	29 Tokuthion	14.448	14.449	(0.810)	15915	0.20000	0.2168
	30 Merphos-B (Merphos Oxone)	14.656	14.651	(0.821)	3884	0.20000	0.2457(M)
	31 Carbophenothion-methyl	15.238	15.239	(0.854)	14924	0.20000	0.2045
	32 Fensulfothion	15.364	15.361	(0.861)	8319	0.20000	0.2269
	33 Bolstar / Famphur	16.049	16.053	(0.899)	32824	0.40000	0.4674

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	16.193	16.197	(0.908)	16722	0.20000	0.2374
$	35 Triphenyl phosphate	16.709	16.712	(0.936)	11646	0.20000	0.2175
	36 Phosmet	16.963	16.963	(0.951)	12928	0.20000	0.2144
	37 EPN	17.148	17.151	(0.961)	9525	0.20000	0.2105
	38 Azinphos-methyl	17.478	17.480	(0.980)	12661	0.20000	0.1970
*	39 TOCP	17.843	17.846	(1.000)	105892	2.00000	
	40 Azinphos-ethyl	17.923	17.926	(1.004)	23154	0.20000	0.1978
	41 Coumaphos	18.364	18.366	(1.029)	10604	0.20000	0.2046
S	42 Merphos				17104	0.20000	0.2120
M	43 Total Demeton				20587	0.20000	0.2070

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

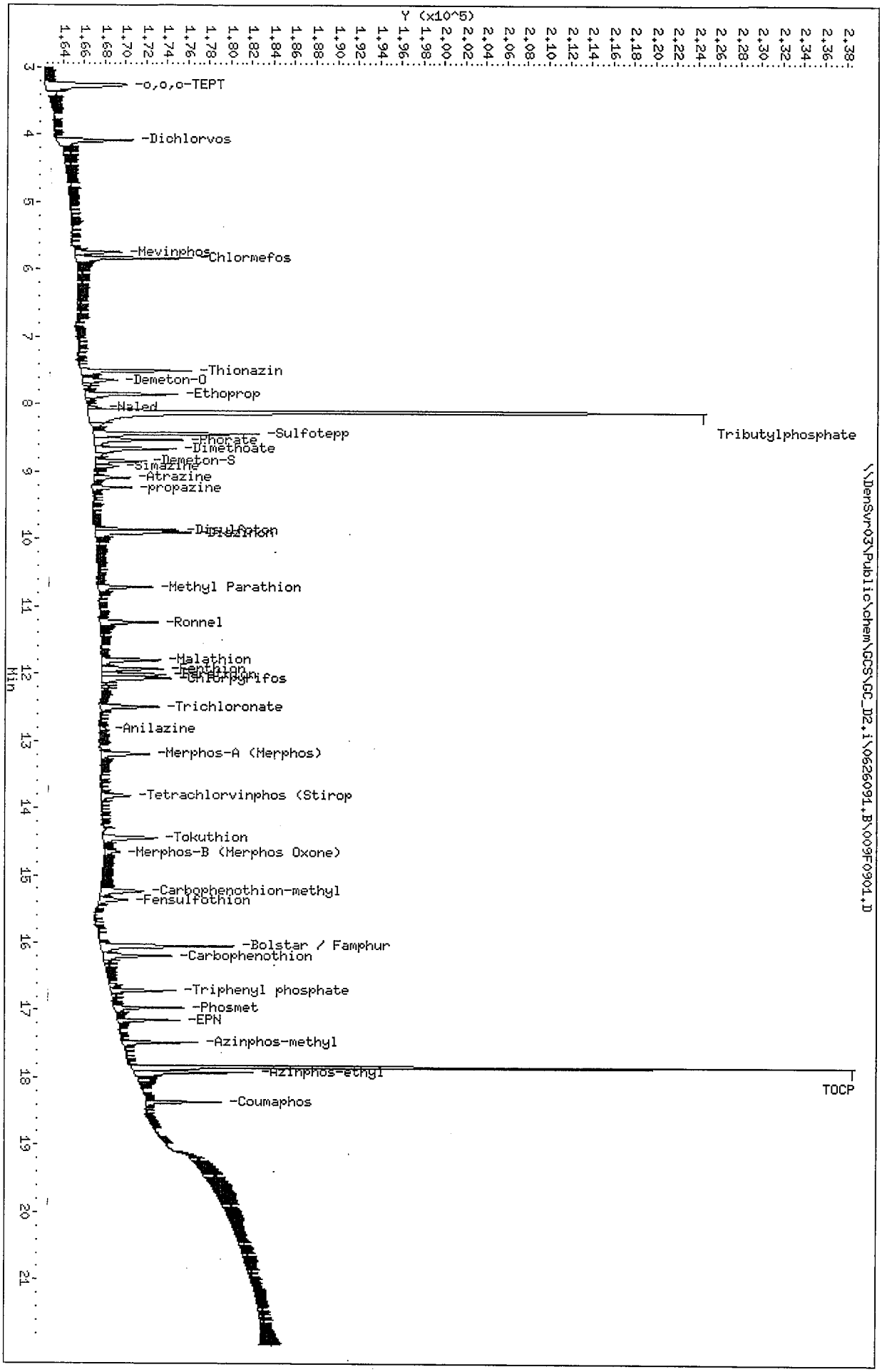
Instrument ID: GC_D2.i
Lab File ID: 009F0901.D
Lab Smp Id: OPP L1 GSV0641
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L1 GSV0641
Level:
Sample Type:

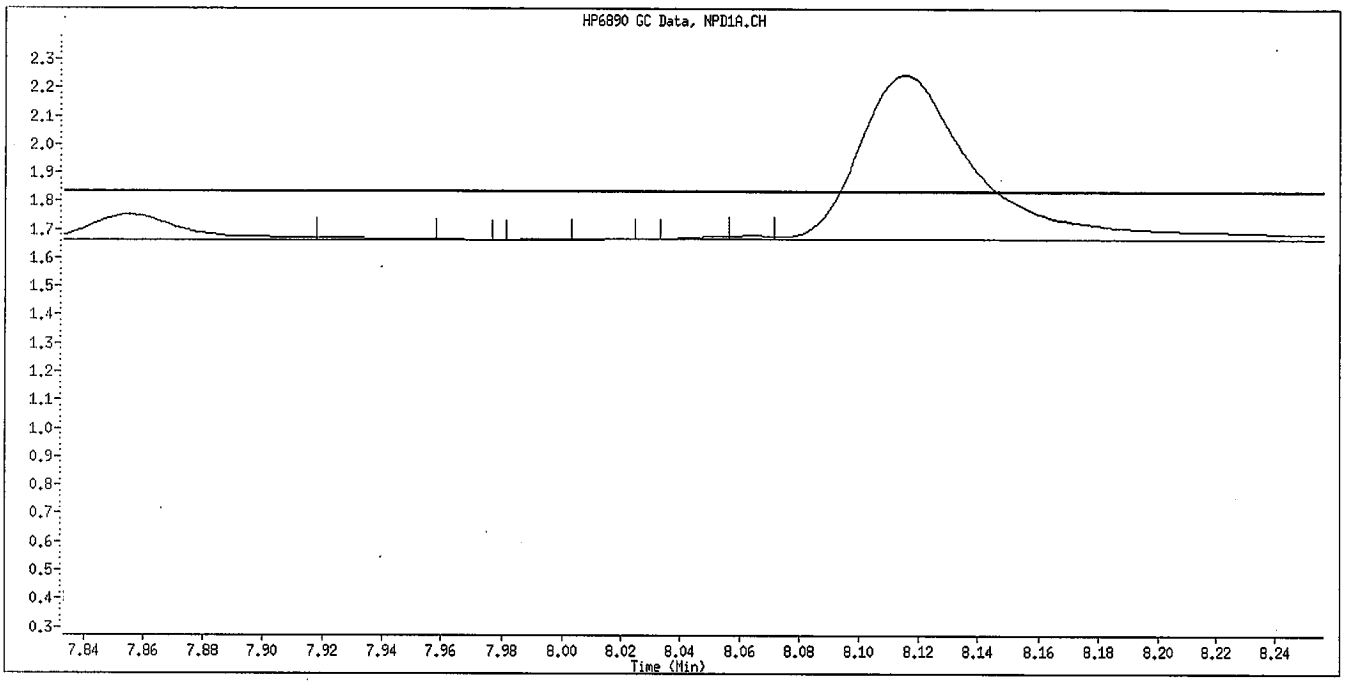
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	160310	80155	320620	165799	3.42
39 TOCP	97363	48682	194726	105892	8.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.11	7.61	8.61	8.11	0.03
39 TOCP	17.84	17.34	18.34	17.84	-0.01

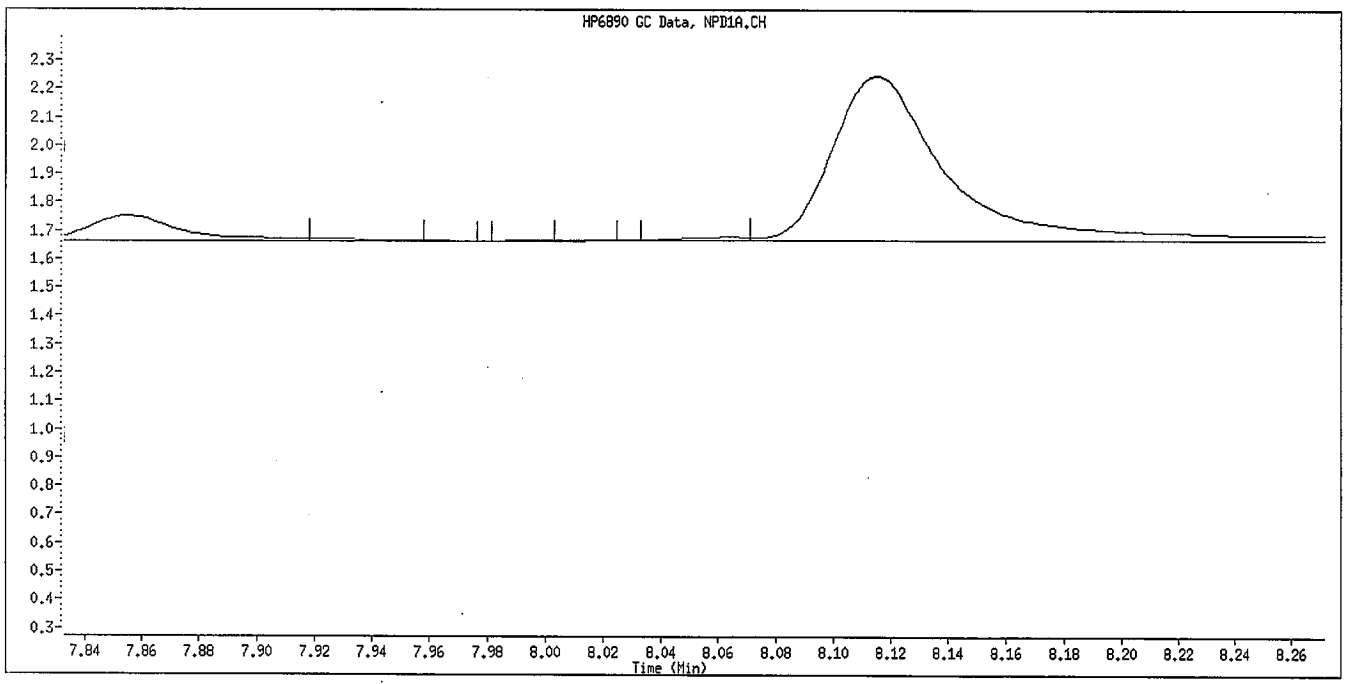
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\0626091,B\009F0901.D
Date : 26-JUN-2009 21:13
Client ID: OPP L1 GSV0641
Sample Info: OPP L1 GSV0641
Column phase: RTx-1MS
Instrument: GC_D2,i
Operator: MPK/TLW
Column diameter: 0.32
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Mevinphos
-Chlormefos
-Thionazin
-Demeton-O
-Ethoprop
-Naled
Tributylphosphate
-Sulfotepp
-Phorate
-Dimethoate
-Demeton-S
-Simazine
-Atrazine
-propazine
-Diazinon
-Methyl Parathion
-Ronnel
-Malathion
-Fenthion
-Chlorpyrifos
-Trichloronate
-Anilazine
-Merphos-A (Merphos)
-Tetrachlorvinphos (Stirop
-Tokuthion
-Merphos-B (Merphos Oxone)
-Carbophenothion-methyl
-Fensulfothion
-Bolstar / Famphur
-Carbophenothion
-Triphenyl phosphate
-Phosmet
-EPN
-Azinphos-methyl
-Azinphos-ethyl
TOCP
-Coumaphos
\\DenSvr03\Public\chem\GCS\GC_D2,i\0626091,B\009F0901.D

Data File Name: 009F0901.D
Inj. Date and Time: 26-JUN-2009 21:13
Instrument ID: GC_D2.i
Client ID: OPP L1 GSV0641
Compound Name: Naled
CAS #:
Report Date: 06/30/2009



Original Integration



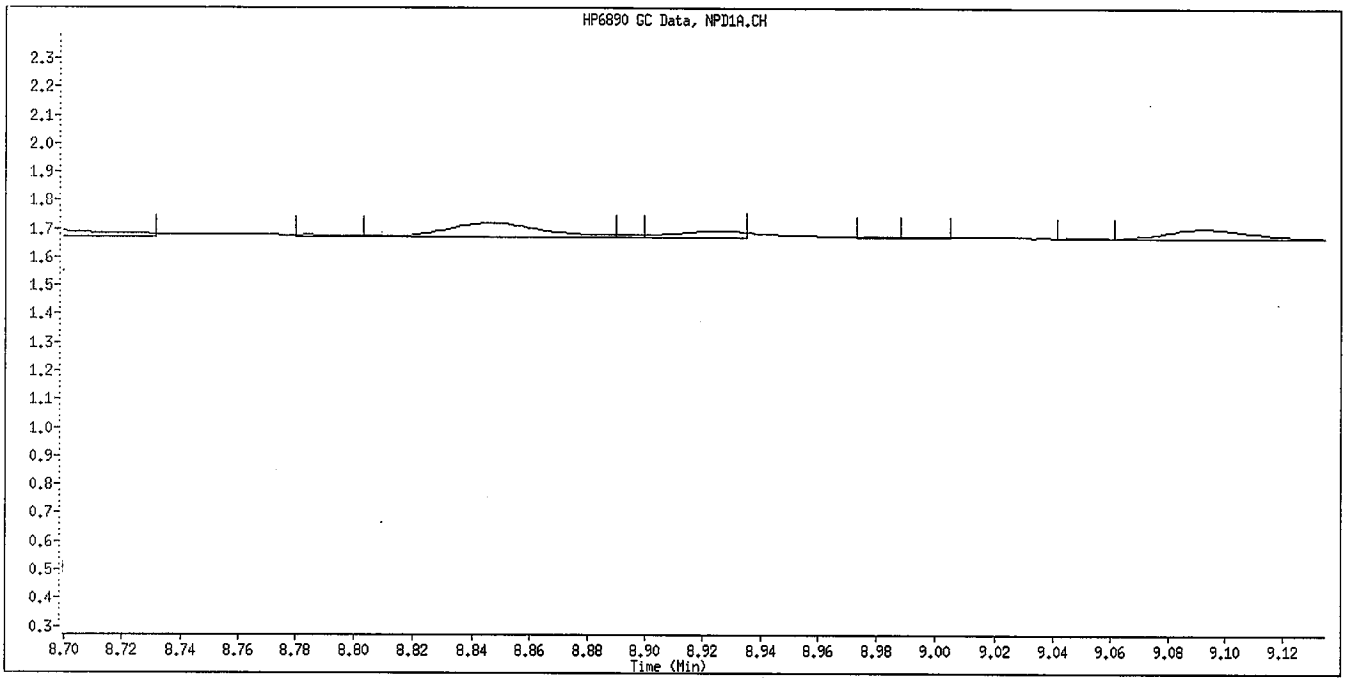
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

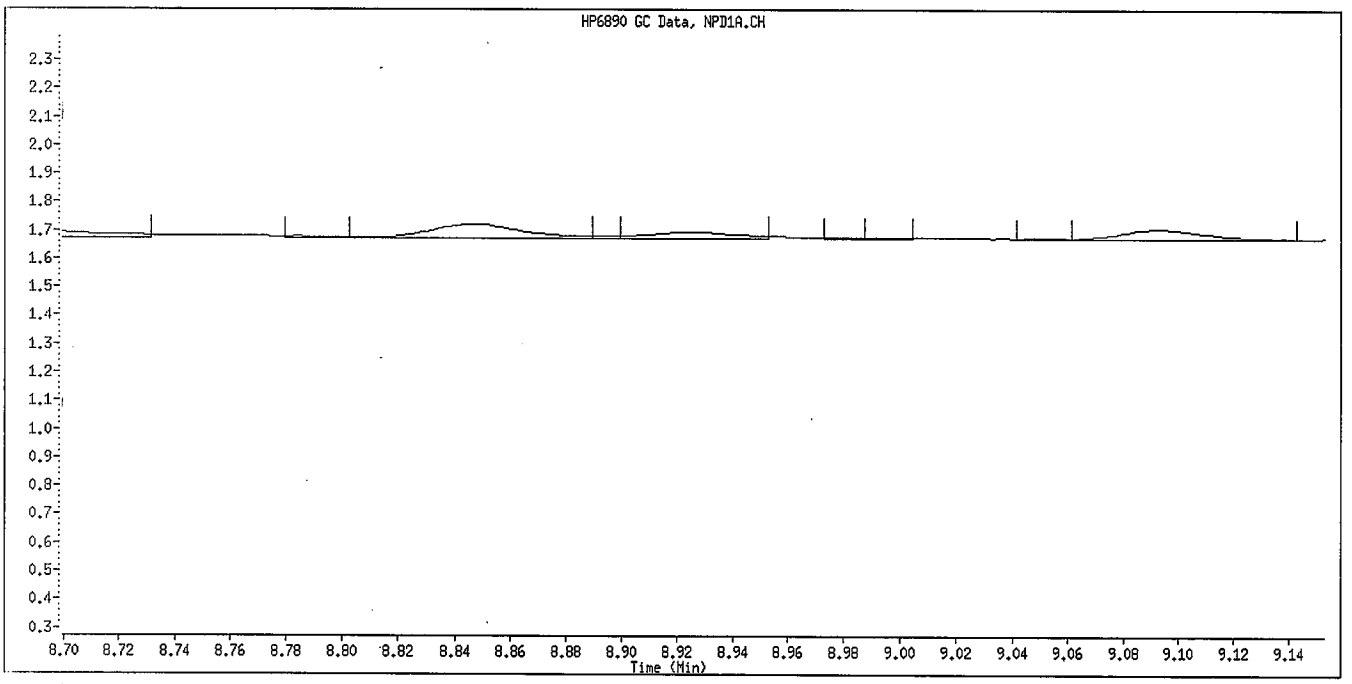
6/30/09

Table of Contents

Data File Name: 009F0901.D
Inj. Date and Time: 26-JUN-2009 21:13
Instrument ID: GC_D2.i
Client ID: OPP L1 GSV0641
Compound Name: Simazine
CAS #:
Report Date: 06/30/2009



Original Integration

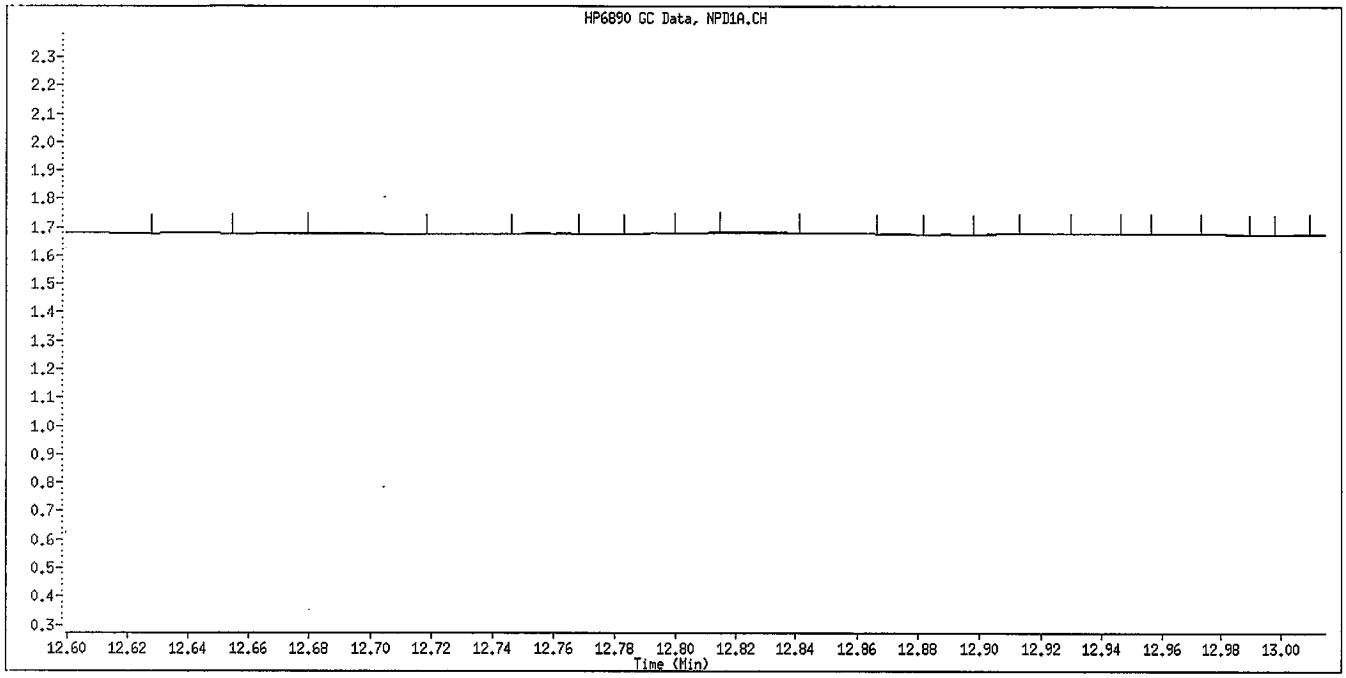


Manual Integration

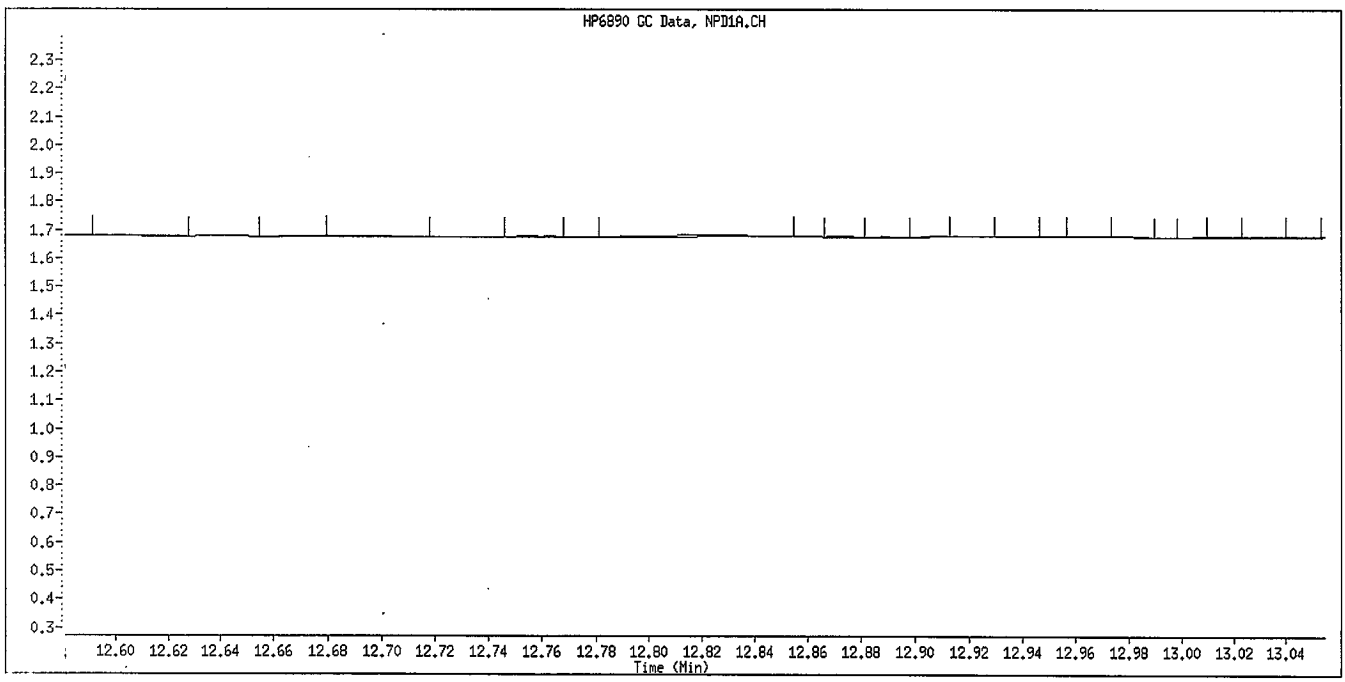
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

Data File Name: 009F0901.D
Inj. Date and Time: 26-JUN-2009 21:13
Instrument ID: GC_D2.i
Client ID: OPP L1 GSV0641
Compound Name: Anilazine
CAS #:
Report Date: 06/30/2009



Original Integration



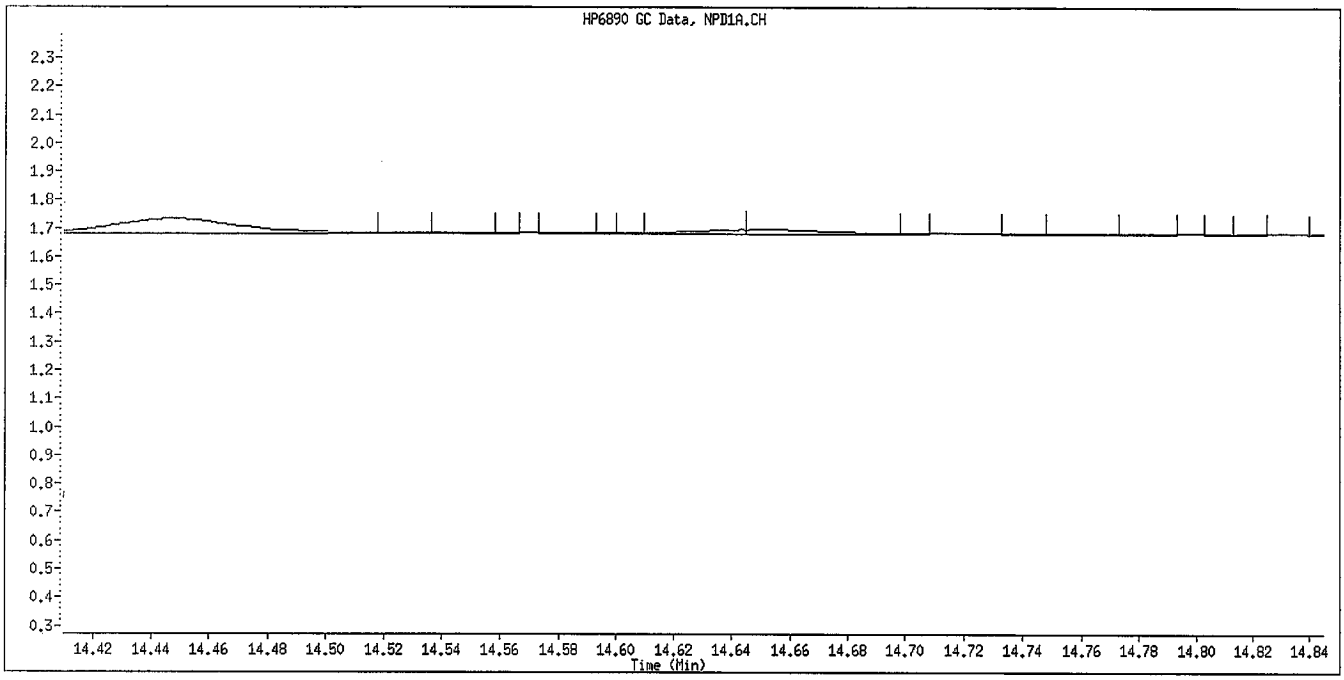
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

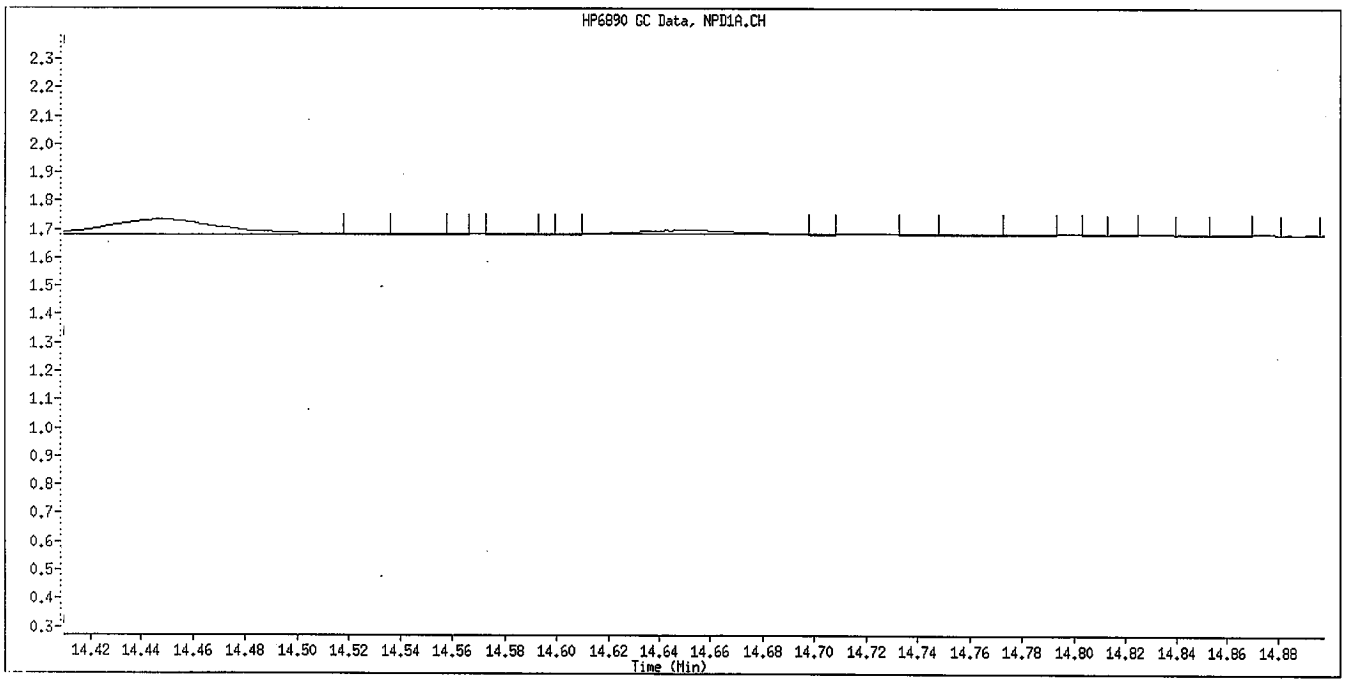
6/30/09

Table of Contents

Data File Name: 009F0901.D
Inj. Date and Time: 26-JUN-2009 21:13
Instrument ID: GC_D2.i
Client ID: OPP L1 GSV0641
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 06/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\010F1001.D
Lab Smp Id: OPP SS GSV0633 Client Smp ID: OPP SS GSV0633
Inj Date : 26-JUN-2009 21:40
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP SS GSV0633
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Meth Date : 30-Jun-2009 12:45 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	3.252	3.254	(0.182)	288886	2.00000	2.058
	2 Dichlorvos	4.074	4.074	(0.228)	166172	2.00000	1.906
	3 Mevinphos	5.737	5.739	(0.322)	81302	2.00000	1.698
$	4 Chlormefos	5.834	5.836	(0.327)	194413	2.00000	1.781
	5 Thionazin	7.504	7.507	(0.421)	196672	2.00000	1.974
	6 Demeton-O	7.645	7.649	(0.429)	175593	0.65000	1.871
	7 Ethoprop	7.849	7.852	(0.440)	179292	2.00000	2.054
	8 Naled	8.054	8.057	(0.451)	23739	2.00000	1.198
*	9 Tributylphosphate	8.112	8.135	(1.000)	166572	2.00000	
	10 Sulfotepp	8.437	8.442	(0.473)	226133	2.00000	1.793
	11 Phorate	8.529	8.532	(0.478)	182466	2.00000	2.018
	12 Dimethoate	8.654	8.659	(0.485)	219089	2.00000	2.086
	13 Demeton-S	8.842	8.846	(0.496)	17618	1.36000	0.2313
	14 Simazine	8.919	8.924	(0.500)	92634	2.00000	2.622
	15 Atrazine	9.089	9.094	(0.509)	79689	2.00000	1.957
	16 propazine	9.235	9.241	(0.518)	71876	2.00000	1.913
	17 Disulfoton	9.865	9.869	(0.553)	98052	2.00000	1.589
	18 Diazinon	9.900	9.902	(0.555)	209627	2.00000	2.158
	19 Methyl Parathion	10.714	10.717	(0.600)	125682	2.00000	2.040
	20 Ronnel	11.237	11.241	(0.630)	136977	2.00000	2.151
	21 Malathion	11.799	11.804	(0.661)	94998	2.00000	1.625
	22 Fenthion	11.929	11.932	(0.669)	117968	2.00000	1.884
	23 Parathion	12.017	12.019	(0.674)	129518	2.00000	1.944
	24 Chlorpyrifos	12.067	12.067	(0.676)	158990	2.00000	1.972
	25 Trichloronate	12.492	12.496	(0.700)	134163	2.00000	1.862
	26 Anilazine	12.817	12.817	(0.718)	5585	2.00000	1.015
	27 Merphos-A (Merphos)	13.195	13.199	(0.740)	24516	2.00000	0.4078
	28 Tetrachlorvinphos (Stirophos)	13.817	13.824	(0.774)	83430	2.00000	2.088
	29 Tokuthion	14.444	14.449	(0.810)	139904	2.00000	2.025
	30 Merphos-B (Merphos Oxone)	14.647	14.651	(0.821)	107349	2.00000	6.623(A)
	31 Carbophenothion-methyl	15.234	15.239	(0.854)	73477	2.00000	1.354
	32 Fensulfothion	15.355	15.361	(0.861)	108213	2.00000	1.924
	33 Bolstar / Famphur	16.047	16.053	(0.899)	268528	4.00000	4.064

		Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34	Carbophenothion	16.194	16.197	(0.908)	123570	2.00000	1.864
$	35	Triphenyl phosphate	16.709	16.712	(0.936)	86501	2.00000	1.717
	36	Phosmet	16.960	16.963	(0.951)	93465	2.00000	1.647
	37	EPN	17.147	17.151	(0.961)	96842	2.00000	1.793
	38	Azinphos-methyl	17.477	17.480	(0.980)	116249	2.00000	1.922
*	39	TOCP	17.842	17.846	(1.000)	99647	2.00000	
	40	Azinphos-ethyl	17.922	17.926	(1.004)	124764	2.00000	1.833
	41	Coumaphos	18.362	18.366	(1.029)	97846	2.00000	2.006
S	42	Merphos				131865	2.00000	1.737
M	43	Total Demeton				193211	2.00000	2.102

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

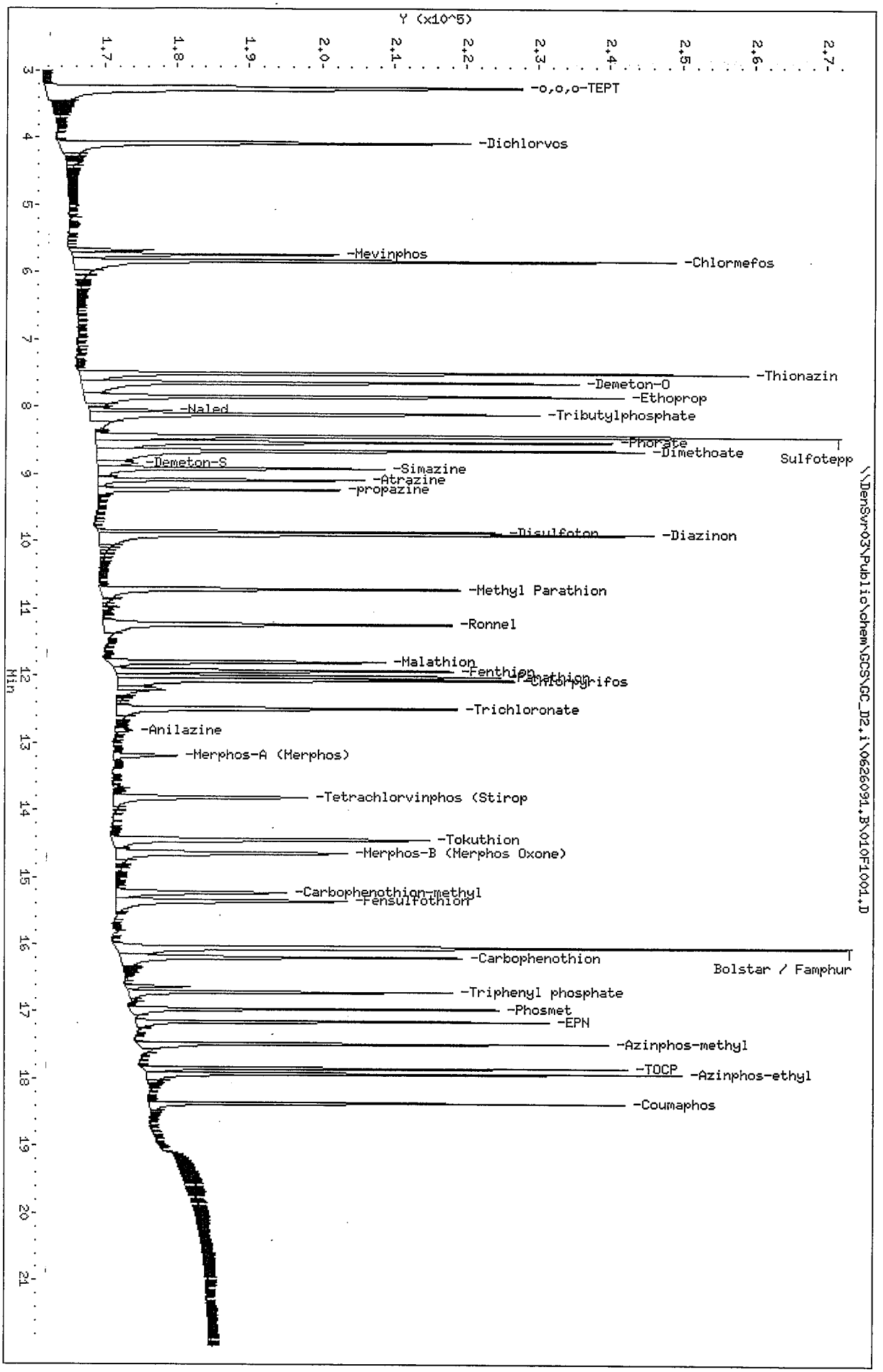
Instrument ID: GC_D2.i
Lab File ID: 010F1001.D
Lab Smp Id: OPP SS GSV0633
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP SS GSV0633
Level:
Sample Type:

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	160310	80155	320620	166572	3.91
39 TOCP	97363	48682	194726	99647	2.35

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.11	7.61	8.61	8.11	0.00
39 TOCP	17.84	17.34	18.34	17.84	-0.01

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: \\DenSvr03\Public\chem\GCS\GC_D2,i\0626091,B\010F1004,D
Date : 26-JUN-2009 21:40
Client ID: OPP SS GSV0633
Sample Info: OPP SS GSV0633
Column phase: RTx-1HS

Instrument: GC_D2,i
Operator: HPK/TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\003F0301.D
Lab Smp Id: OPP L7 GSV0634 Client Smp ID: OPP L7 GSV0634
Inj Date : 26-JUN-2009 18:28
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L7 GSV0634
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Meth Date : 30-Jun-2009 12:58 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 3 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	4.729	4.731	(0.251)	421372	5.00000	4.907
	2 Dichlorvos	6.546	6.546	(0.348)	359024	5.00000	5.355(A)
$	3 Chlormefos	7.383	7.384	(0.392)	338585	5.00000	5.016(A)
	4 Mevinphos	9.233	9.234	(0.491)	238906	5.00000	5.290(A)
	5 Demeton-O	9.733	9.734	(0.517)	69239	1.62500	1.609
	6 Thionazin	9.984	9.984	(0.531)	338015	5.00000	5.005(A)
	7 Ethoprop	10.499	10.499	(0.558)	242747	5.00000	4.810
	8 Phorate	10.538	10.539	(0.560)	289868	5.00000	4.953
	9 Naled	10.939	10.939	(0.581)	78857	5.00000	5.109(A)
	10 Sulfotepp	11.018	11.017	(0.586)	427657	5.00000	4.845(A)
*	11 Tributylphosphate	11.116	11.116	(1.000)	139264	2.00000	
	12 Simazine	11.401	11.399	(0.606)	68046	5.00000	5.383(A)
	13 Diazinon	11.541	11.541	(0.613)	228810	5.00000	4.801
	14 Atrazine	11.584	11.584	(0.616)	128612	5.00000	4.879(A)
	15 Propazine	11.746	11.747	(0.624)	110050	5.00000	4.930
	16 Disulfoton	12.049	12.049	(0.640)	228764	5.00000	4.914
	17 Demeton-S	12.124	12.124	(0.644)	175573	3.40000	3.111
	18 Dimethoate	13.283	13.282	(0.706)	319454	5.00000	5.120(A)
	19 Ronnel	13.588	13.587	(0.722)	211449	5.00000	5.035(A)
	20 Merphos-A (Merphos)	13.689	13.689	(1.231)	217509	5.00000	4.310(A)
	21 Chlorpyrifos	14.411	14.409	(0.766)	227882	5.00000	5.350(A)
	22 Fenthion	14.663	14.662	(0.779)	196942	5.00000	4.985
	23 Trichloronate	14.711	14.711	(0.782)	296442	5.00000	5.242(A)
	24 Anilazine	15.214	15.216	(0.809)	19108	5.00000	5.242(A)
	25 Methyl Parathion	15.521	15.519	(0.825)	235511	5.00000	5.522(A)
	26 Malathion	15.724	15.724	(0.836)	212190	5.00000	5.311(A)
	27 Tokuthion	16.344	16.344	(0.869)	233715	5.00000	4.996
	28 Parathion	16.493	16.494	(0.877)	213175	5.00000	5.073(AM)
	29 Merphos-B (Merphos Oxone)	16.514	16.517	(1.486)	65080	5.00000	4.212(AM)
	30 Tetrachlorvinphos (stirophos)	16.976	16.977	(0.902)	143806	5.00000	5.290(A)
	31 Carbophenothion methyl	17.081	17.082	(0.908)	210272	5.00000	5.396(A)
	32 Bolstar	17.441	17.440	(0.927)	199405	5.00000	4.858
	33 Carbophenothion	17.523	17.524	(0.931)	212727	5.00000	5.271(A)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34 Triphenyl phosphate	18.279	18.281	(0.972)	167127	5.00000	5.046 (A)
	35 Fensulfothion	18.558	18.559	(0.986)	152929	5.00000	5.029 (A)
*	36 TOCP	18.814	18.816	(1.000)	66384	2.00000	
	37 Phosmet / EPN	18.908	18.909	(1.005)	330448	10.0000	9.819 (A)
	38 Famphur	19.011	19.011	(1.010)	220404	5.00000	5.062 (A)
	39 Azinphos-methyl	19.146	19.147	(1.018)	197822	5.00000	4.967
	40 Azinphos-ethyl	19.364	19.366	(1.029)	187035	5.00000	4.930
	41 Coumaphos	20.348	20.347	(1.081)	155426	5.00000	5.329 (A)
S	42 Merphos				282589	5.00000	5.108 (A)
M	43 Total Demeton				244812	5.00000	4.720

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

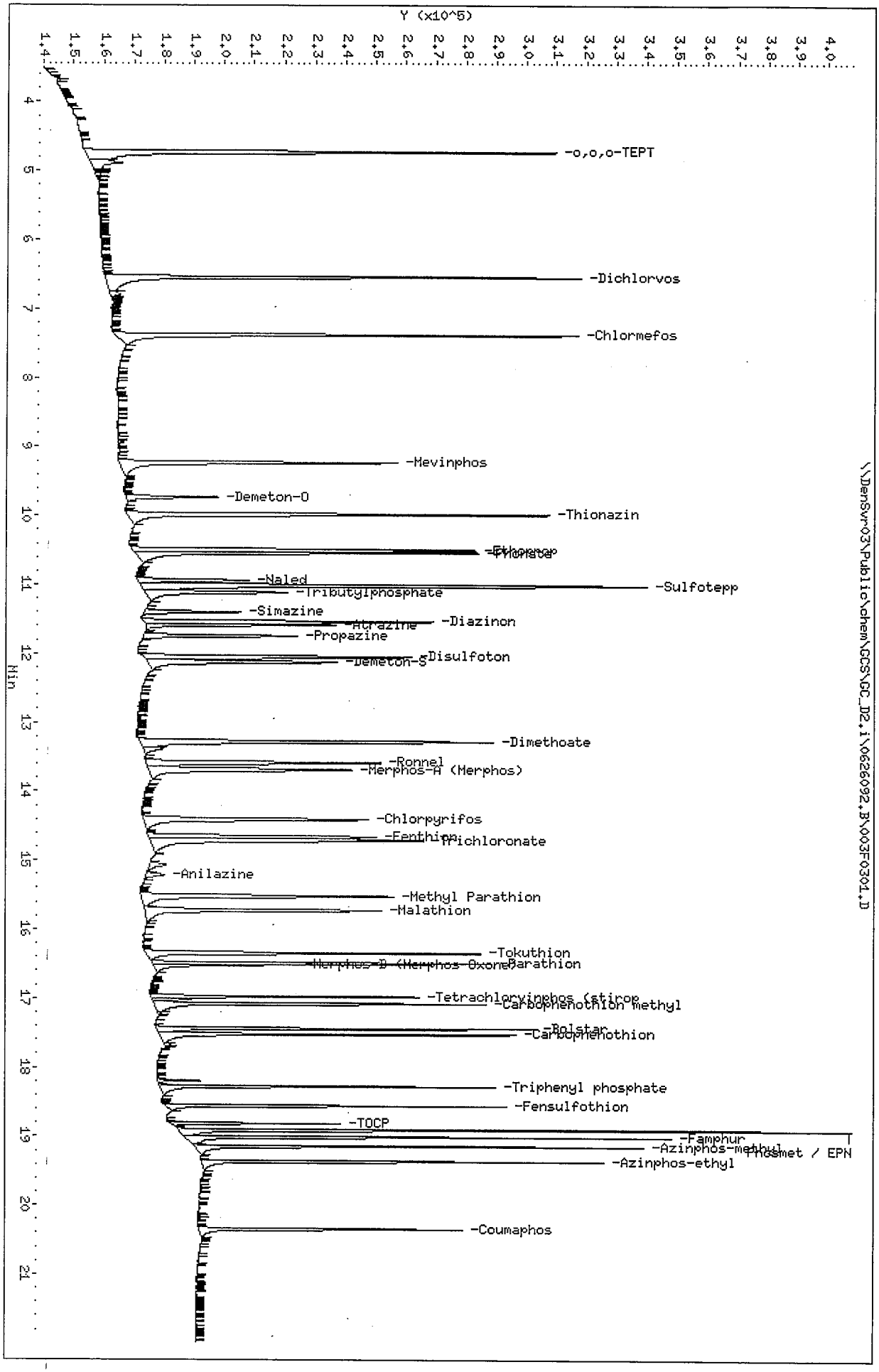
Instrument ID: GC_D2.i
Lab File ID: 003F0301.D
Lab Smp Id: OPP L7 GSV0634
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

Calibration Date: 26-JUN-2009
Calibration Time: 21:40
Client Smp ID: OPP L7 GSV0634
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	123933	61967	247866	139264	12.37
36 TOCP	68831	34416	137662	66384	-3.56

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.12	10.62	11.62	11.12	0.01
36 TOCP	18.82	18.32	19.32	18.81	-0.00

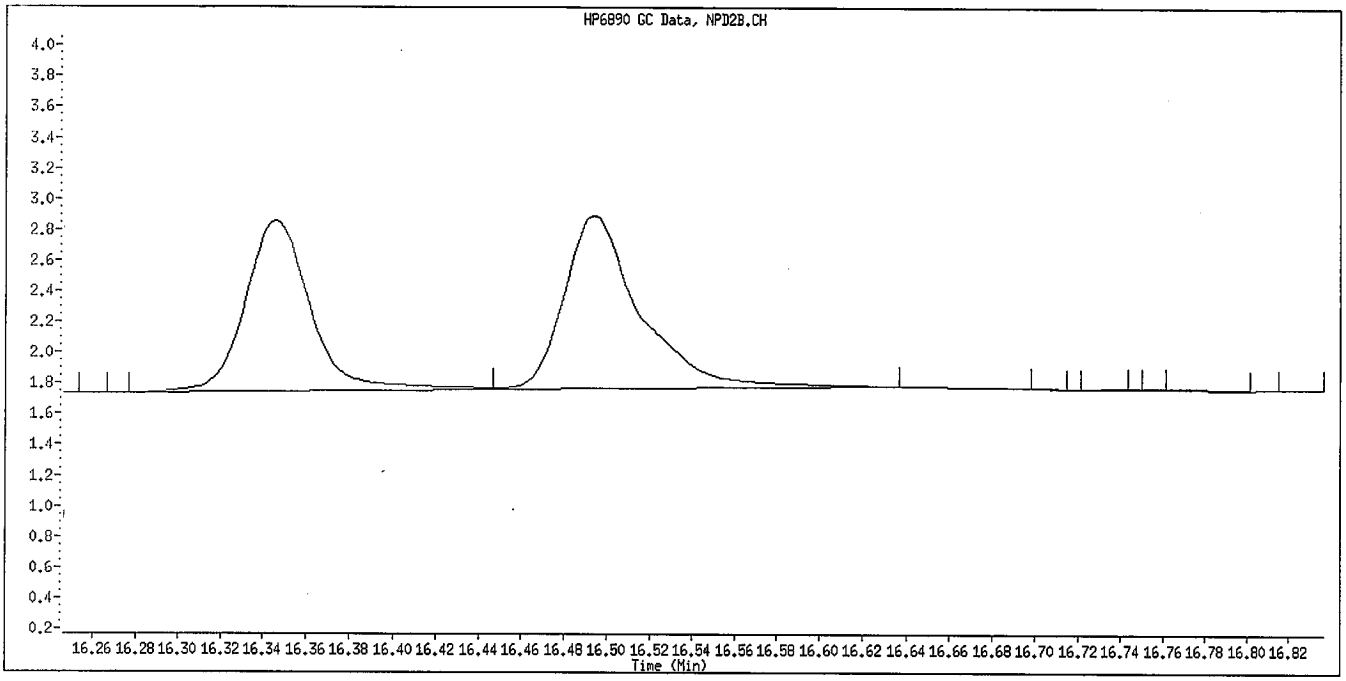
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



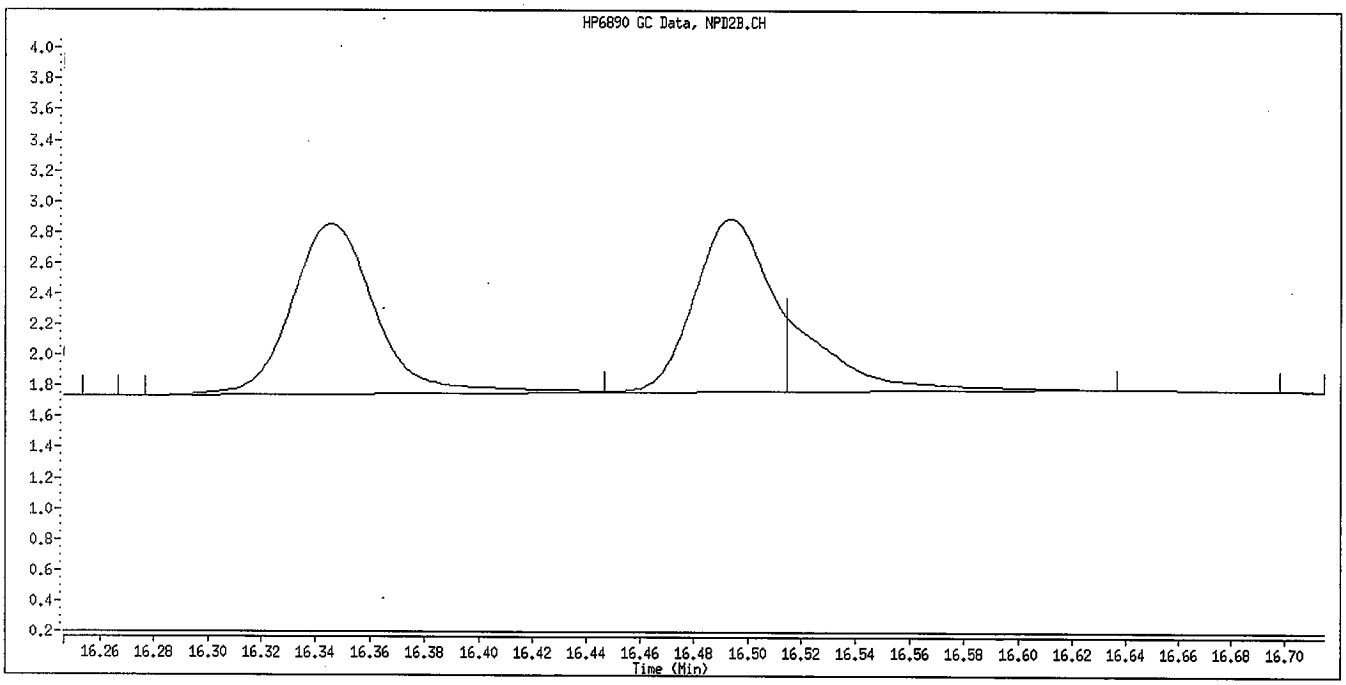
Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\003F0304.D
Date : 26-JUN-2009 18:28
Client ID: OPP L7 GSV0634
Sample Info: OPP L7 GSV0634
Column phase: RTx-OPPest

Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32

Data File Name: 003F0301.D
Inj. Date and Time: 26-JUN-2009 18:28
Instrument ID: GC_D2.i
Client ID: OPP L7 GSV0634
Compound Name: Parathion
CAS #:
Report Date: 06/30/2009



Original Integration



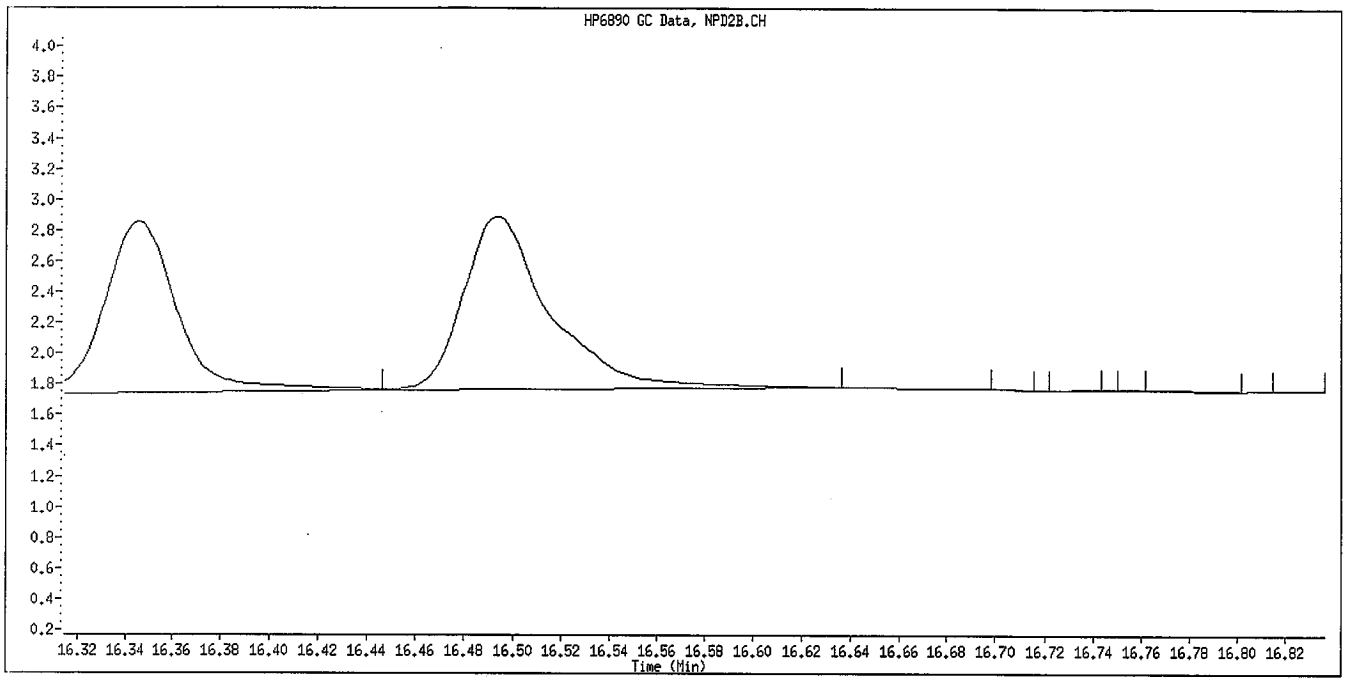
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

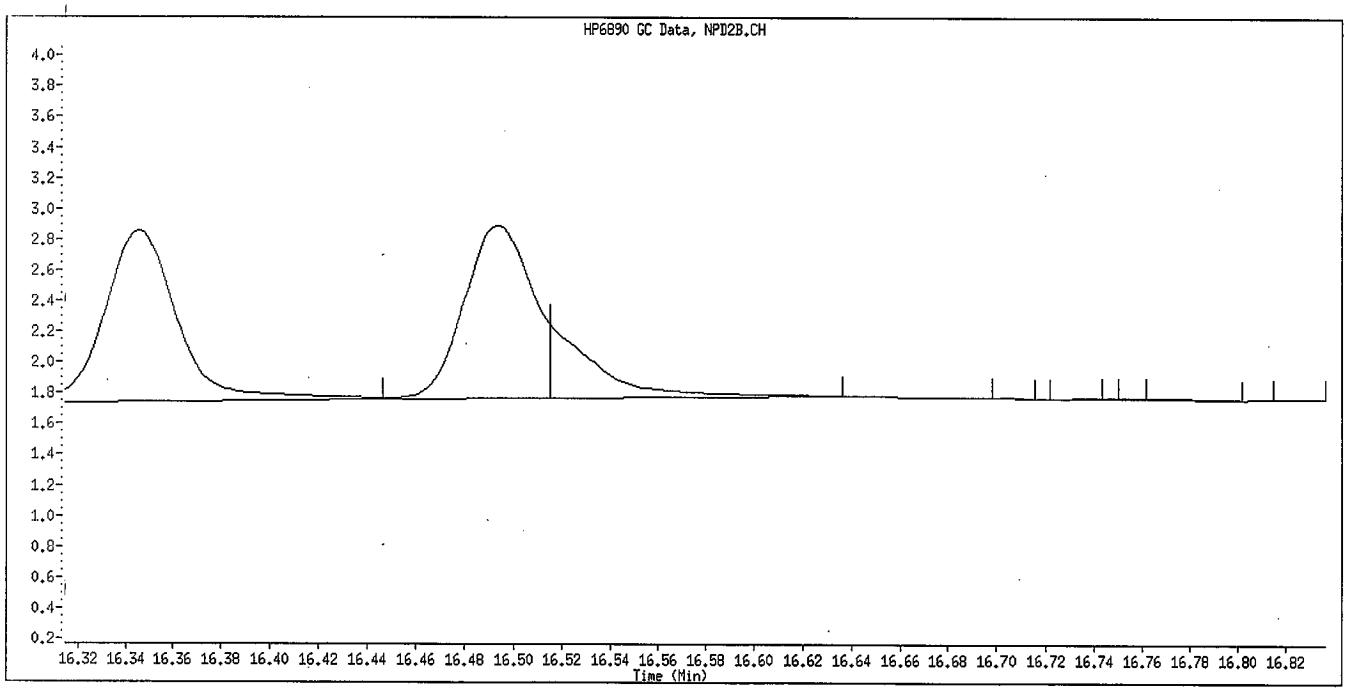
6/30/09

Table of Contents

Data File Name: 003F0301.D
Inj. Date and Time: 26-JUN-2009 18:28
Instrument ID: GC_D2.i
Client ID: OPP L7 GSV0634
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 06/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\004F0401.D
Lab Smp Id: OPP L6 GSV0637 Client Smp ID: OPP L6 GSV0637
Inj Date : 26-JUN-2009 18:55
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L6 GSV0637
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Meth Date : 30-Jun-2009 12:58 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 18:28 Cal File: 003F0301.D
Als bottle: 4 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	1 o,o,o-TEPT	4.729	4.731	(0.251)	328646	4.00000	4.043
	2 Dichlorvos	6.546	6.546	(0.348)	257298	4.00000	4.054
$	3 Chlormefos	7.384	7.384	(0.392)	258146	4.00000	4.040
	4 Mevinphos	9.234	9.234	(0.491)	177060	4.00000	4.141
	5 Demeton-O	9.734	9.734	(0.517)	56273	1.30000	1.381
	6 Thionazin	9.984	9.984	(0.531)	276609	4.00000	4.326
	7 Ethoprop	10.499	10.499	(0.558)	193617	4.00000	4.053
	8 Phorate	10.537	10.539	(0.560)	250422	4.00000	4.520
	9 Naled	10.941	10.939	(0.582)	58330	4.00000	4.051
	10 Sulfotepp	11.017	11.017	(0.586)	337512	4.00000	4.039(A)
*	11 Tributylphosphate	11.116	11.116	(1.000)	118534	2.00000	
	12 Simazine	11.401	11.399	(0.606)	52173	4.00000	4.360(A)
	13 Diazinon	11.541	11.541	(0.613)	181790	4.00000	4.034
	14 Atrazine	11.582	11.584	(0.616)	98759	4.00000	4.001(A)
	15 Propazine	11.746	11.747	(0.624)	85745	4.00000	4.068
	16 Disulfoton	12.049	12.049	(0.640)	184026	4.00000	4.176
	17 Demeton-S	12.124	12.124	(0.644)	157195	2.72000	2.948
	18 Dimethoate	13.282	13.282	(0.706)	236550	4.00000	4.005
	19 Ronnel	13.589	13.587	(0.722)	165534	4.00000	4.164
	20 Merphos-A (Merphos)	13.689	13.689	(1.231)	178652	4.00000	4.159(A)
	21 Chlorpyrifos	14.409	14.409	(0.766)	174421	4.00000	4.326
	22 Fenthion	14.662	14.662	(0.779)	149338	4.00000	3.993
	23 Trichloronate	14.709	14.711	(0.782)	208762	4.00000	3.926
	24 Anilazine	15.216	15.216	(0.809)	13112	4.00000	3.800(M)
	25 Methyl Parathion	15.519	15.519	(0.825)	167086	4.00000	4.138(A)
	26 Malathion	15.724	15.724	(0.836)	151738	4.00000	4.012
	27 Tokuthion	16.346	16.344	(0.869)	187169	4.00000	4.226
	28 Parathion	16.492	16.494	(0.877)	170901	4.00000	4.296(M)
	29 Merphos-B (Merphos Oxone)	16.514	16.517	(1.486)	62127	4.00000	4.736(AM)
	30 Tetrachlorvinphos (stirophos)	16.976	16.977	(0.902)	109740	4.00000	4.264
	31 Carbophenothion methyl	17.081	17.082	(0.908)	159411	4.00000	4.322
	32 Bolstar	17.441	17.440	(0.927)	154382	4.00000	3.973
	33 Carbophenothion	17.522	17.524	(0.931)	154486	4.00000	4.043(A)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34 Triphenyl phosphate	18.279	18.281	(0.972)	125543	4.00000	4.004
	35 Fensulfothion	18.557	18.559	(0.986)	126221	4.00000	4.385
*	36 TOCP	18.814	18.816	(1.000)	62844	2.00000	
	37 Phosmet / EPN	18.907	18.909	(1.005)	263604	8.00000	8.261(A)
	38 Famphur	19.009	19.011	(1.010)	175421	4.00000	4.256
	39 Azinphos-methyl	19.144	19.147	(1.018)	160515	4.00000	4.257
	40 Azinphos-ethyl	19.362	19.366	(1.029)	144031	4.00000	4.011
	41 Coumaphos	20.346	20.347	(1.081)	118936	4.00000	4.308
S	42 Merphos				240779	4.00000	4.597(A)
M	43 Total Demeton				213468	4.00000	4.330

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 004F0401.D
Lab Smp Id: OPP L6 GSV0637
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

Calibration Date: 26-JUN-2009
Calibration Time: 21:40
Client Smp ID: OPP L6 GSV0637
Level:
Sample Type:

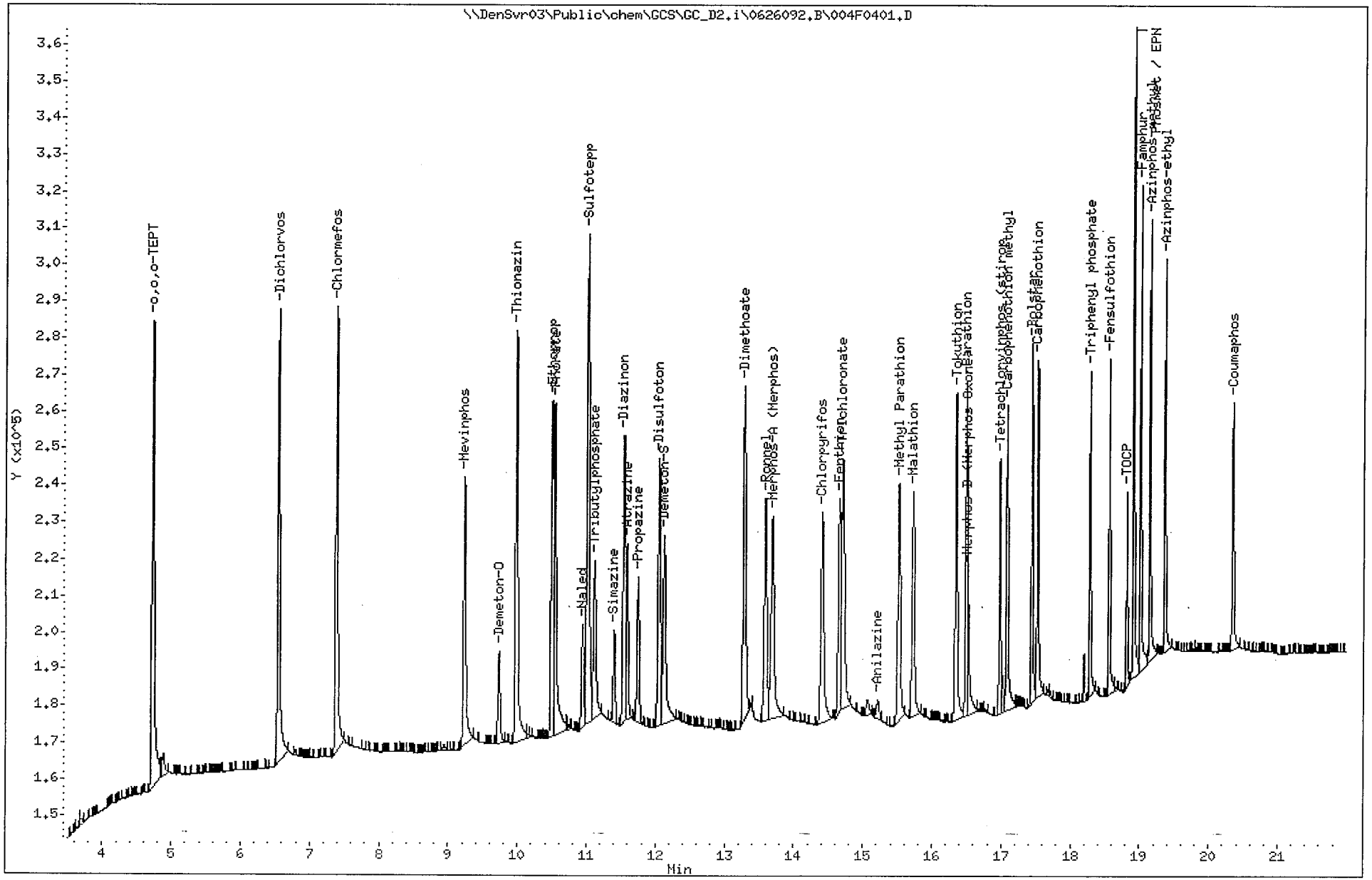
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	123933	61967	247866	118534	-4.36
36 TOCP	68831	34416	137662	62844	-8.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.12	10.62	11.62	11.12	0.01
36 TOCP	18.82	18.32	19.32	18.81	-0.01

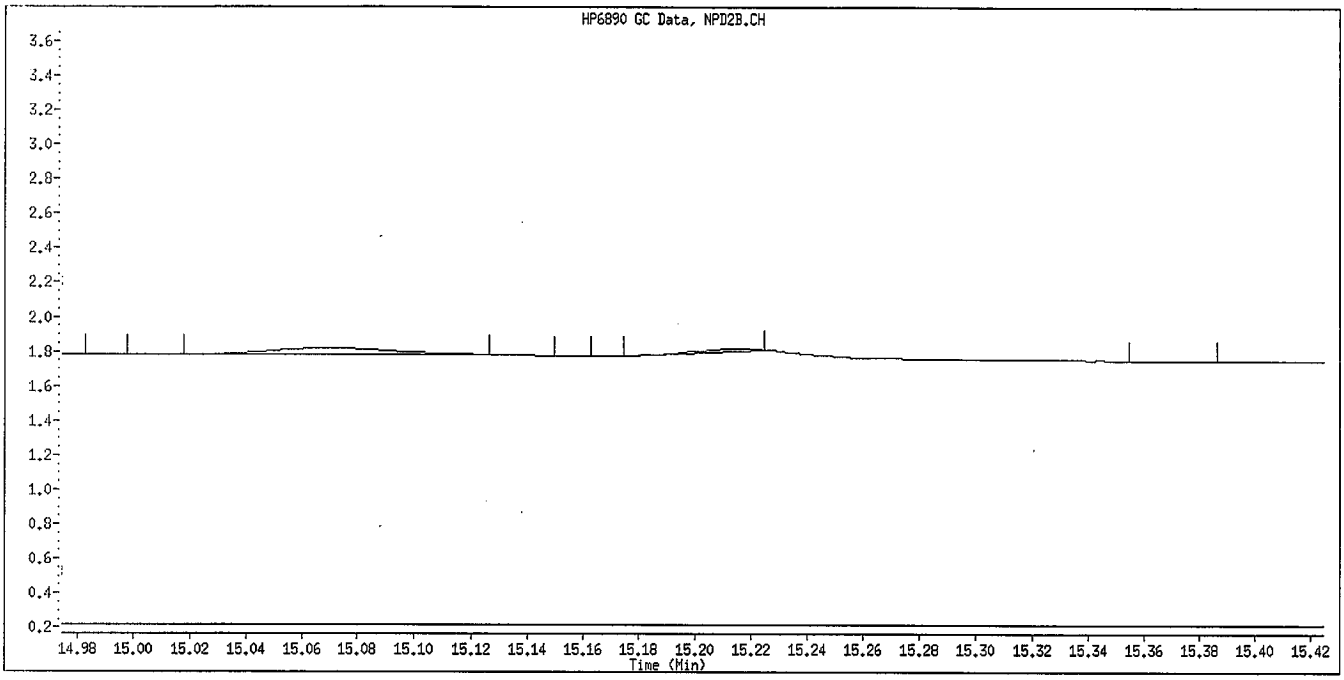
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\004F0401.D
Date : 26-JUN-2009 18:55
Client ID: OPP L6 GSV0637
Sample Info: OPP L6 GSV0637

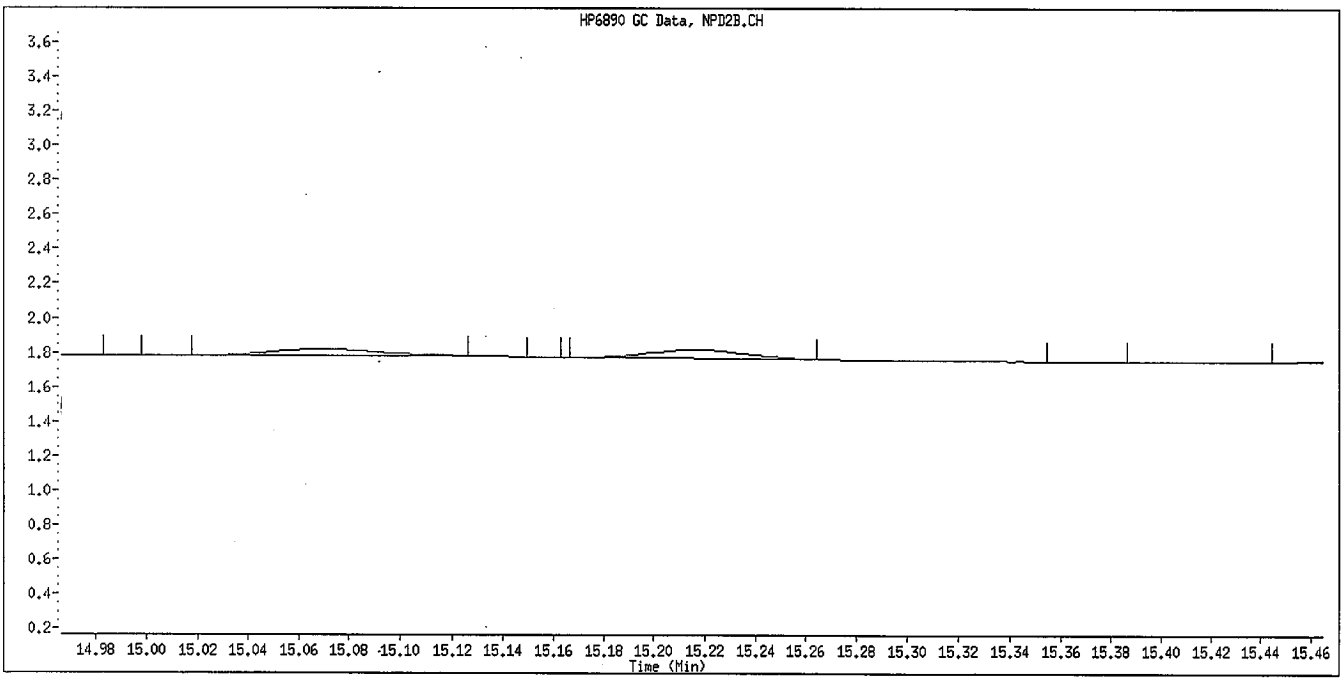
Instrument: GC_D2.i
Operator: MPK/TLW
Column phase: RTx-OPPest
Column diameter: 0.32



Data File Name: 004F0401.D
Inj. Date and Time: 26-JUN-2009 18:55
Instrument ID: GC_D2.i
Client ID: OPP L6 GSV0637
Compound Name: Anilazine
CAS #:
Report Date: 06/30/2009



Original Integration

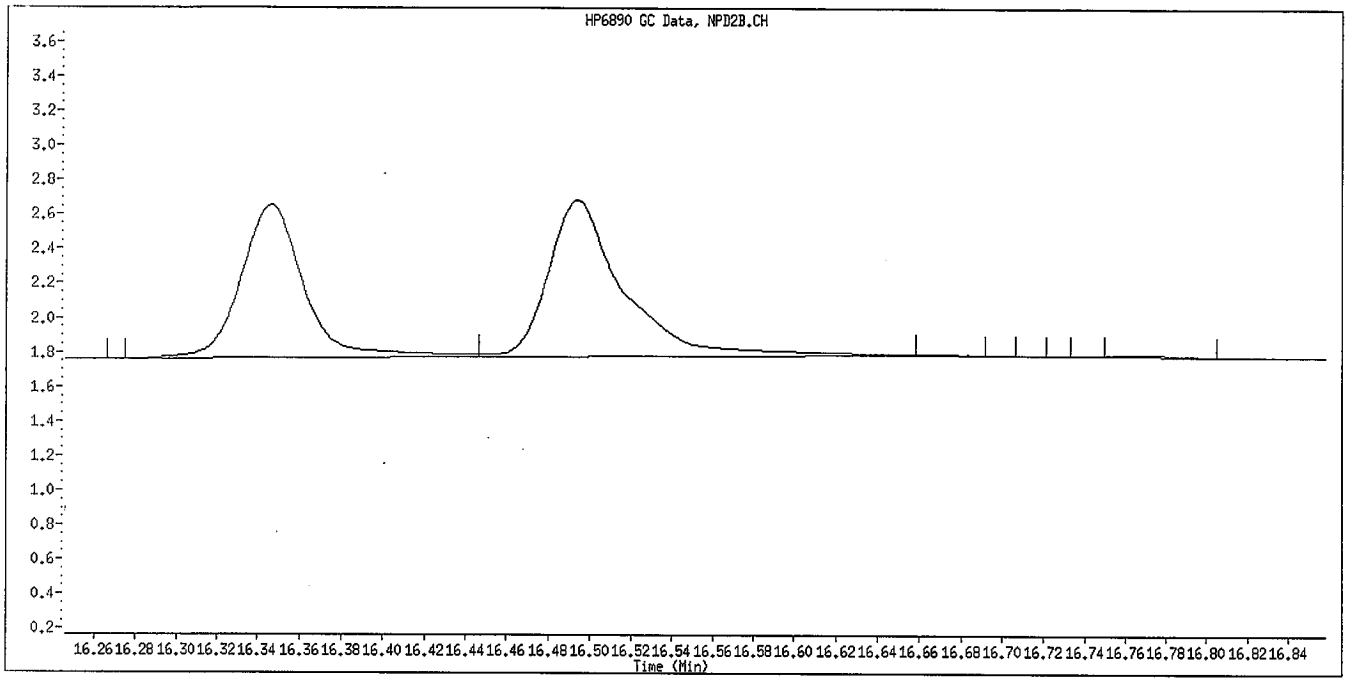


Manual Integration

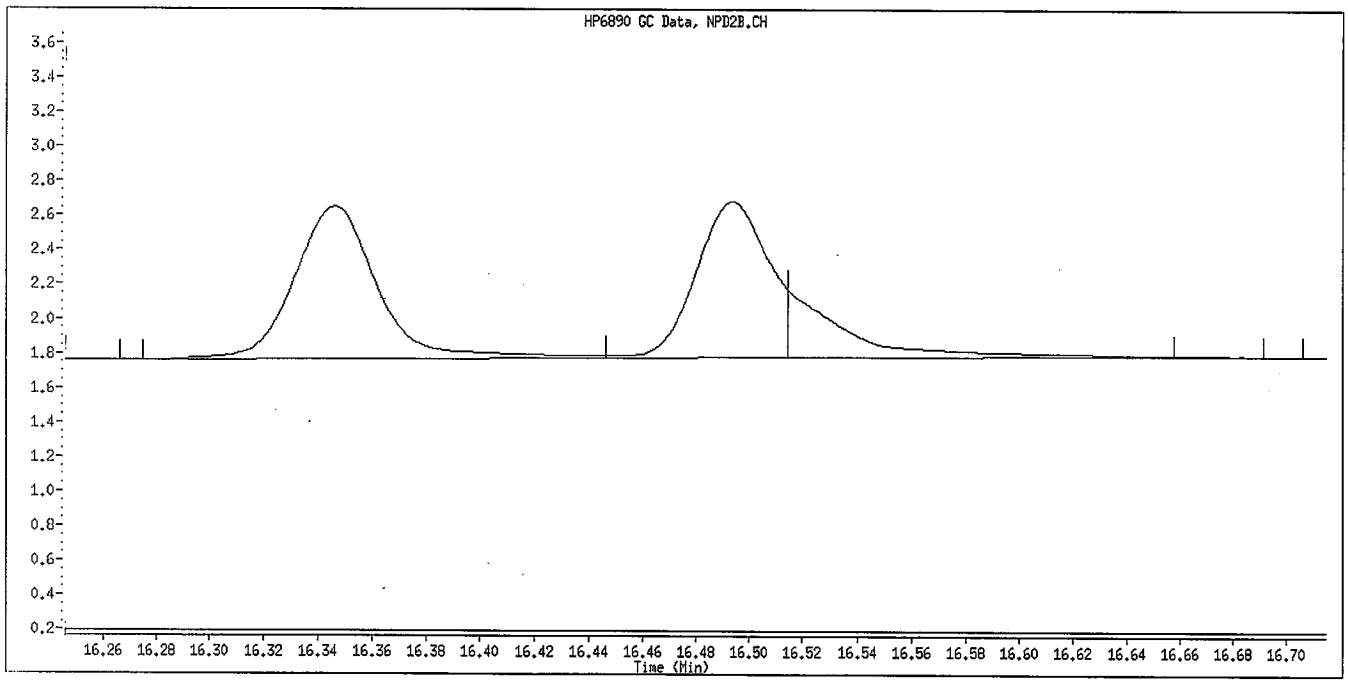
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

Data File Name: 004F0401.D
Inj. Date and Time: 26-JUN-2009 18:55
Instrument ID: GC_D2.i
Client ID: OPP L6 GSV0637
Compound Name: Parathion
CAS #:
Report Date: 06/30/2009



Original Integration

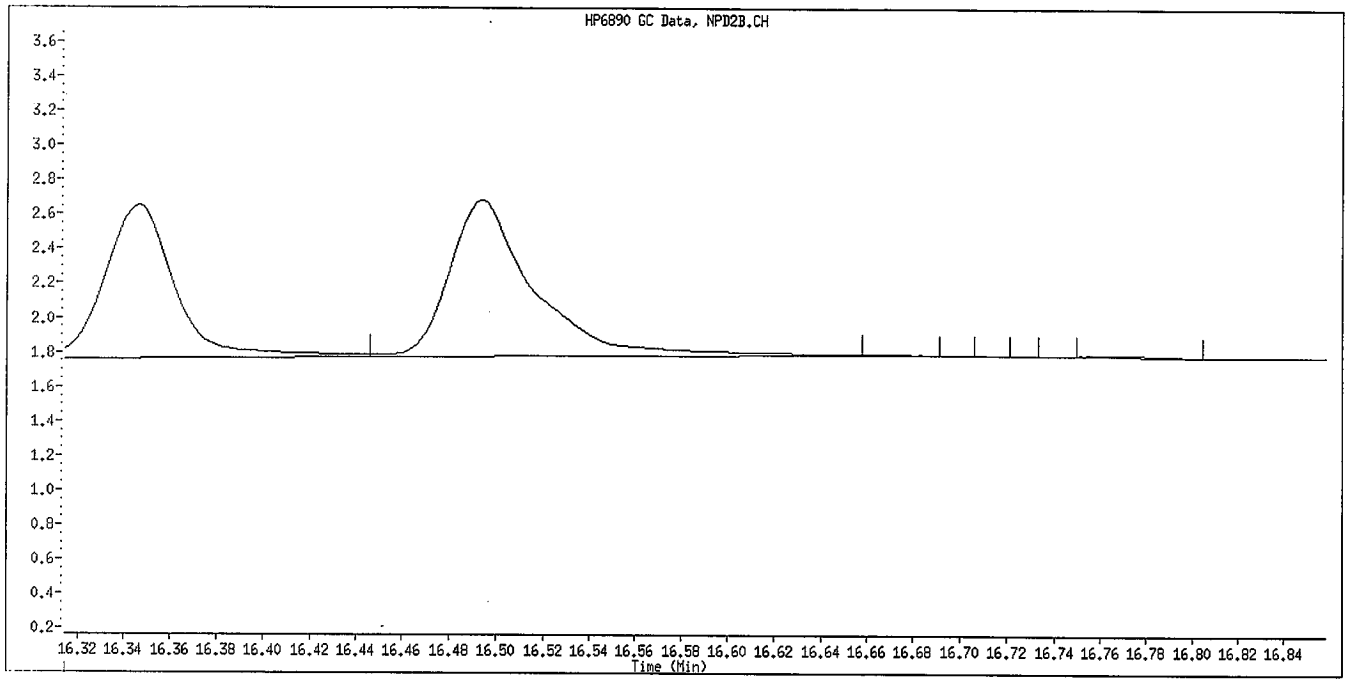


Manual Integration

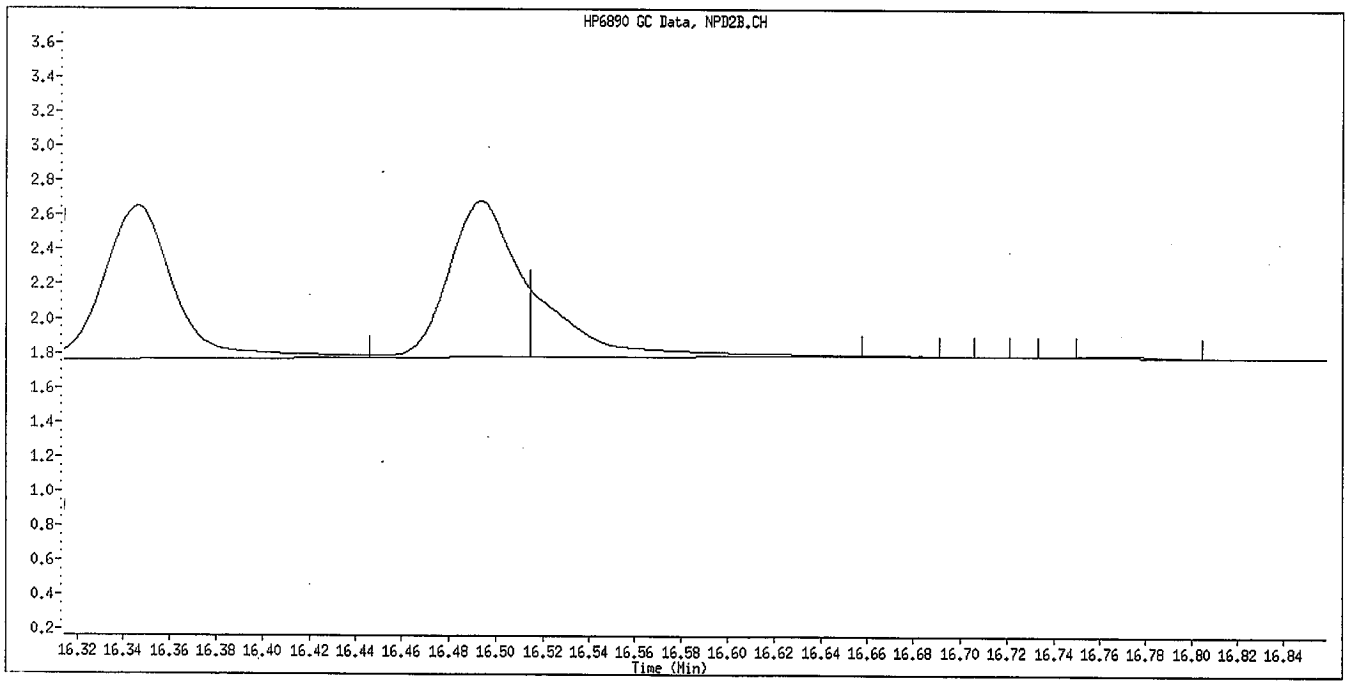
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

Data File Name: 004F0401.D
Inj. Date and Time: 26-JUN-2009 18:55
Instrument ID: GC_D2.i
Client ID: OPP L6 GSV0637
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 06/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\005F0501.D
Lab Smp Id: OPP L5 GSV0635 Client Smp ID: OPP L5 GSV0635
Inj Date : 26-JUN-2009 19:23
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L5 GSV0635
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Meth Date : 30-Jun-2009 12:58 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 18:55 Cal File: 004F0401.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	4.730	4.731	(0.251)	267154	3.00000	2.982
	2 Dichlorvos	6.545	6.546	(0.348)	221023	3.00000	3.159
$	3 Chlormefos	7.384	7.384	(0.392)	237967	3.00000	3.379
	4 Mevinphos	9.234	9.234	(0.491)	137272	3.00000	2.913
	5 Demeton-O	9.734	9.734	(0.517)	46912	0.97500	1.045
	6 Thionazin	9.984	9.984	(0.531)	216898	3.00000	3.078
	7 Ethoprop	10.499	10.499	(0.558)	162719	3.00000	3.090
	8 Phorate	10.539	10.539	(0.560)	189707	3.00000	3.107
	9 Naled	10.939	10.939	(0.581)	46004	3.00000	2.975
	10 Sulfotepp	11.017	11.017	(0.586)	277819	3.00000	3.017(A)
*	11 Tributylphosphate	11.115	11.116	(1.000)	123454	2.00000	
	12 Simazine	11.399	11.399	(0.606)	40610	3.00000	3.079(A)
	13 Diazinon	11.540	11.541	(0.613)	155648	3.00000	3.140
	14 Atrazine	11.584	11.584	(0.616)	85997	3.00000	3.210(A)
	15 Propazine	11.747	11.747	(0.624)	72628	3.00000	3.140
	16 Disulfoton	12.049	12.049	(0.640)	152294	3.00000	3.136
	17 Demeton-S	12.124	12.124	(0.644)	121463	2.04000	2.103
	18 Dimethoate	13.282	13.282	(0.706)	206120	3.00000	3.166
	19 Ronnel	13.587	13.587	(0.722)	134377	3.00000	3.067
	20 Merphos-A (Merphos)	13.689	13.689	(1.232)	139514	3.00000	3.119(A)
	21 Chlorpyrifos	14.409	14.409	(0.766)	137524	3.00000	3.094
	22 Fenthion	14.662	14.662	(0.779)	130285	3.00000	3.161
	23 Trichloronate	14.710	14.711	(0.782)	170976	3.00000	2.945
	24 Anilazine	15.215	15.216	(0.809)	11039	3.00000	2.902
	25 Methyl Parathion	15.519	15.519	(0.825)	140467	3.00000	3.157(A)
	26 Malathion	15.724	15.724	(0.836)	122121	3.00000	2.929
	27 Tokuthion	16.344	16.344	(0.869)	150762	3.00000	3.089
	28 Parathion	16.494	16.494	(0.877)	135916	3.00000	3.100(M)
	29 Merphos-B (Merphos Oxone)	16.514	16.517	(1.486)	40683	3.00000	2.940(AM)
	30 Tetrachlorvinphos (stirophos)	16.977	16.977	(0.902)	90042	3.00000	3.174
	31 Carbophenothion methyl	17.082	17.082	(0.908)	132789	3.00000	3.266
	32 Bolstar	17.440	17.440	(0.927)	132222	3.00000	3.088
	33 Carbophenothion	17.524	17.524	(0.931)	139939	3.00000	3.323(A)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34 Triphenyl phosphate	18.280	18.281	(0.972)	105020	3.00000	3.039
	35 Fensulfothion	18.559	18.559	(0.986)	98284	3.00000	3.098
*	36 TOCP	18.815	18.816	(1.000)	69265	2.00000	
	37 Phosmet / EPN	18.909	18.909	(1.005)	207459	6.00000	5.874(A)
	38 Famphur	19.010	19.011	(1.010)	125661	3.00000	2.766
	39 Azinphos-methyl	19.147	19.147	(1.018)	125121	3.00000	3.011
	40 Azinphos-ethyl	19.365	19.366	(1.029)	120801	3.00000	3.052
	41 Coumaphos	20.347	20.347	(1.081)	93401	3.00000	3.069
S	42 Merphos				180197	3.00000	3.122(A)
M	43 Total Demeton				168375	3.00000	3.147

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

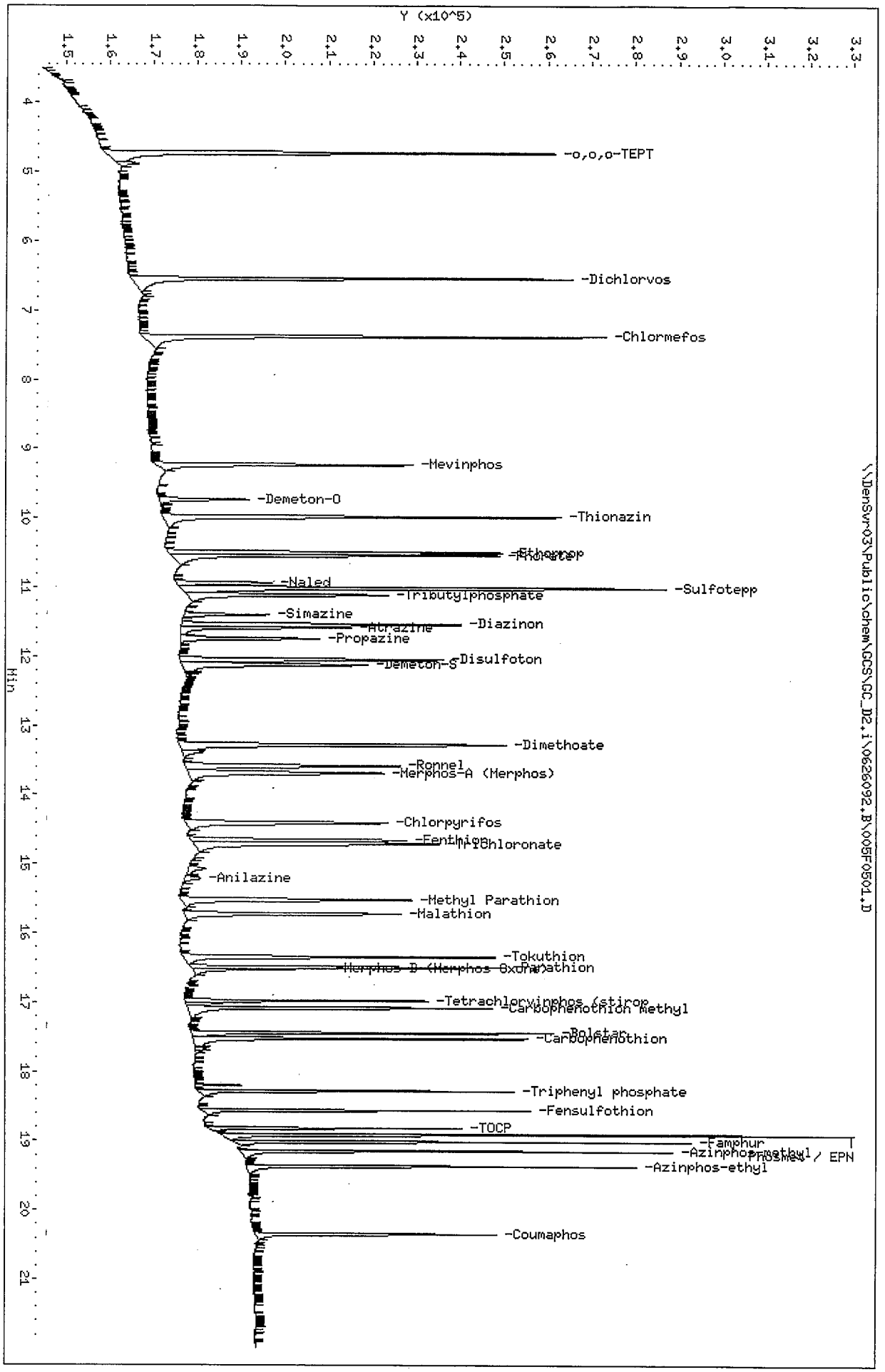
Instrument ID: GC_D2.i
Lab File ID: 005F0501.D
Lab Smp Id: OPP L5 GSV0635
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

Calibration Date: 26-JUN-2009
Calibration Time: 21:40
Client Smp ID: OPP L5 GSV0635
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	123933	61967	247866	123454	-0.39
36 TOCP	68831	34416	137662	69265	0.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.12	10.62	11.62	11.12	0.00
36 TOCP	18.82	18.32	19.32	18.82	0.00

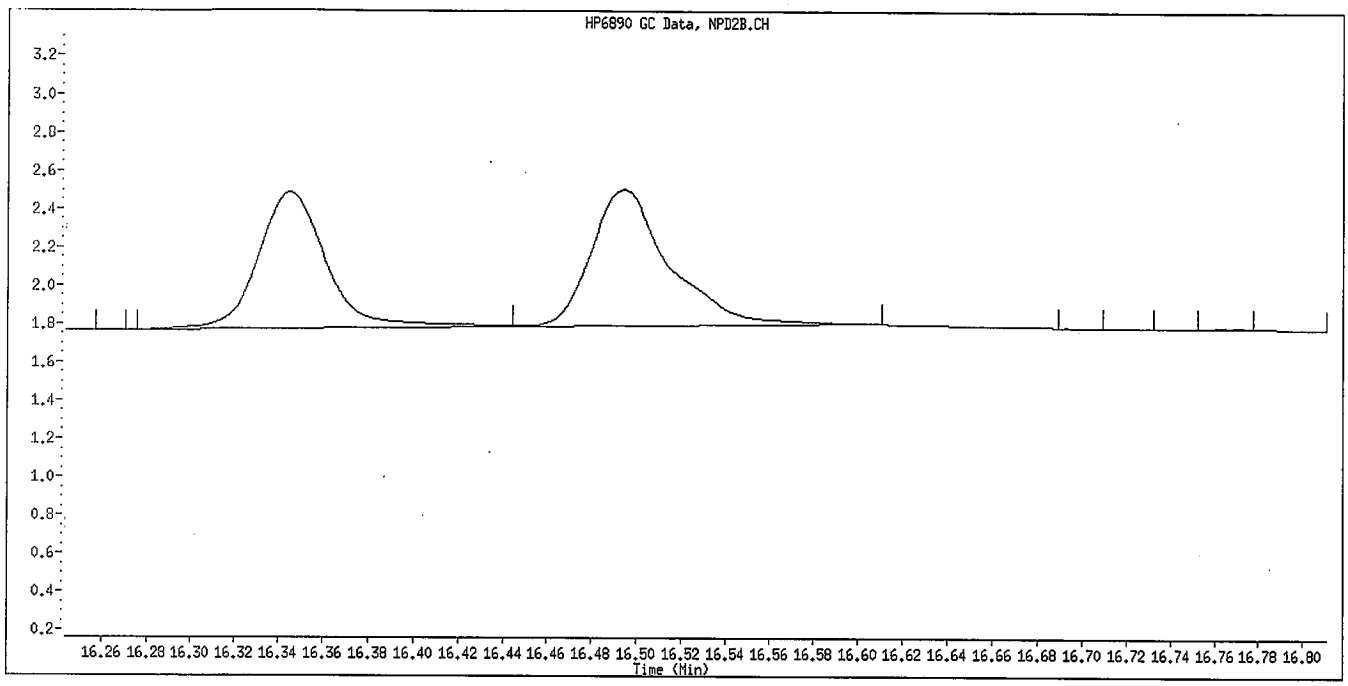
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



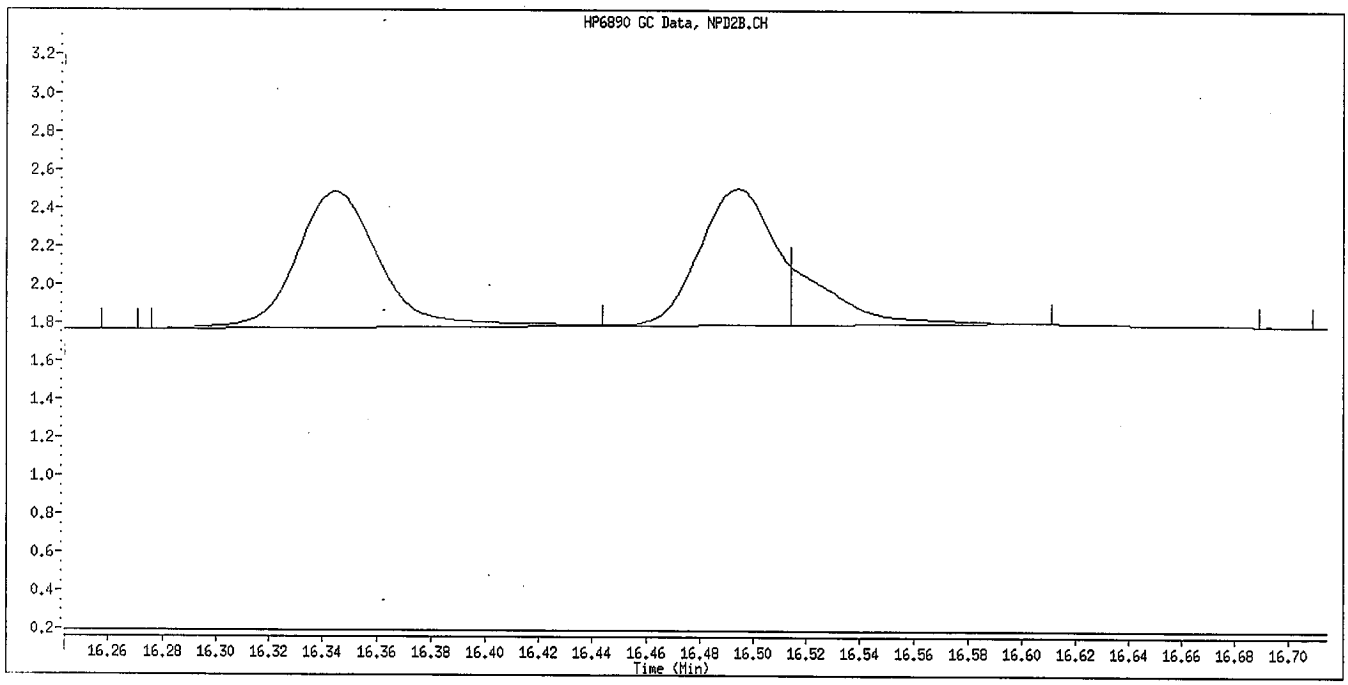
Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\0626092,B\005F0501,D
Date : 26-JUN-2009 19:23
Client ID: OPP L5 GSV0635
Sample Info: OPP L5 GSV0635
Column phase: RTx-OPPest

Instrument: GC_D2,i
Operator: MPK/TLW
Column diameter: 0.32

Data File Name: 005F0501.D
Inj. Date and Time: 26-JUN-2009 19:23
Instrument ID: GC_D2.i
Client ID: OPP L5 GSV0635
Compound Name: Parathion
CAS #:
Report Date: 06/30/2009



Original Integration

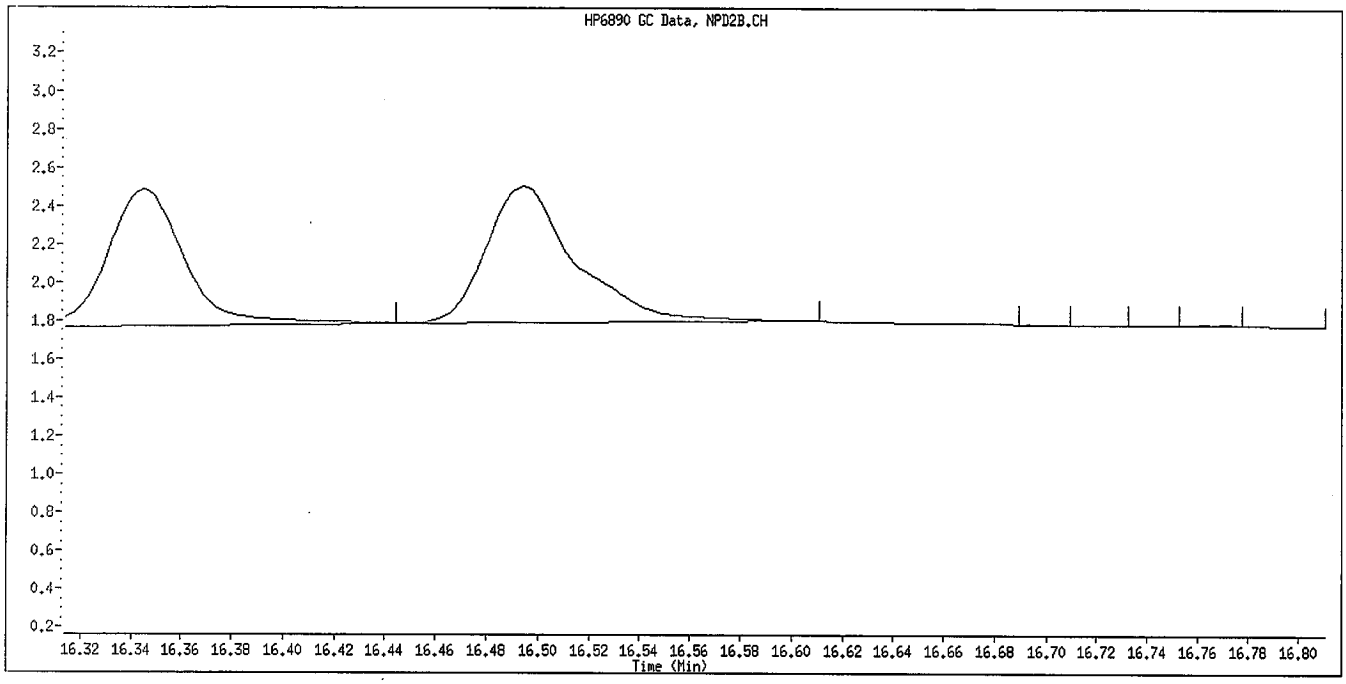


Manual Integration

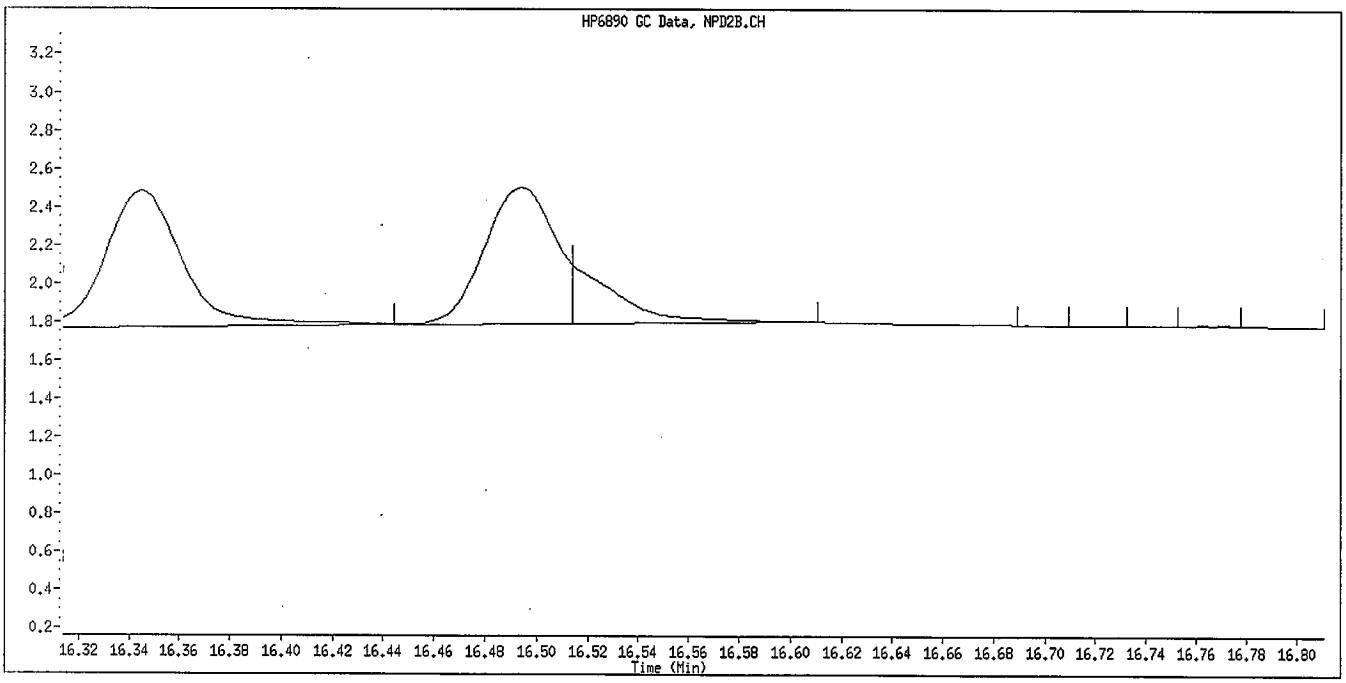
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

Data File Name: 005F0501.D
Inj. Date and Time: 26-JUN-2009 19:23
Instrument ID: GC_D2.i
Client ID: OPP L5 GSV0635
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 06/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\006F0601.D
Lab Smp Id: OPP L4 GSV0638 Client Smp ID: OPP L4 GSV0638
Inj Date : 26-JUN-2009 19:50
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L4 GSV0638
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Meth Date : 30-Jun-2009 12:58 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 19:23 Cal File: 005F0501.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	4.730	4.731	(0.251)	181207	2.00000	2.055
	2 Dichlorvos	6.545	6.546	(0.348)	148252	2.00000	2.154
$	3 Chlormefos	7.383	7.384	(0.392)	138652	2.00000	2.001
	4 Mevinphos	9.233	9.234	(0.491)	98399	2.00000	2.122
	5 Demeton-O	9.733	9.734	(0.517)	29742	0.65000	0.6731
	6 Thionazin	9.983	9.984	(0.531)	134999	2.00000	1.947
	7 Ethoprop	10.498	10.499	(0.558)	103308	2.00000	1.994
	8 Phorate	10.537	10.539	(0.560)	115663	2.00000	1.925
	9 Naled	10.940	10.939	(0.581)	28010	2.00000	1.943
	10 Sulfotepp	11.017	11.017	(0.586)	187497	2.00000	2.069(A)
*	11 Tributylphosphate	11.115	11.116	(1.000)	126959	2.00000	
	12 Simazine	11.398	11.399	(0.606)	26282	2.00000	2.025(A)
	13 Diazinon	11.540	11.541	(0.613)	98649	2.00000	2.033
	14 Atrazine	11.582	11.584	(0.616)	49088	2.00000	1.960(A)
	15 Propazine	11.745	11.747	(0.624)	43235	2.00000	1.922
	16 Disulfoton	12.050	12.049	(0.640)	96402	2.00000	2.017
	17 Demeton-S	12.125	12.124	(0.644)	70921	1.36000	1.296
	18 Dimethoate	13.280	13.282	(0.706)	123978	2.00000	1.935
	19 Ronnel	13.588	13.587	(0.722)	84095	2.00000	1.950
	20 Merphos-A (Merphos)	13.690	13.689	(1.232)	90289	2.00000	1.962(A)
	21 Chlorpyrifos	14.408	14.409	(0.766)	82272	2.00000	1.881
	22 Fenthion	14.660	14.662	(0.779)	79190	2.00000	1.952
	23 Trichloronate	14.708	14.711	(0.782)	106326	2.00000	1.900
	24 Anilazine	15.212	15.216	(0.808)	6899	2.00000	1.843
	25 Methyl Parathion	15.520	15.519	(0.825)	91219	2.00000	2.083(A)
	26 Malathion	15.725	15.724	(0.836)	80242	2.00000	1.956
	27 Tokuthion	16.345	16.344	(0.869)	92069	2.00000	1.917
	28 Parathion	16.493	16.494	(0.877)	84124	2.00000	1.950(M)
	29 Merphos-B (Merphos Oxone)	16.513	16.517	(1.486)	23458	2.00000	1.603(AM)
	30 Tetrachlorvinphos (stirophos)	16.977	16.977	(0.902)	54727	2.00000	1.961
	31 Carbophenothion methyl	17.082	17.082	(0.908)	79857	2.00000	1.996
	32 Bolstar	17.440	17.440	(0.927)	82203	2.00000	1.951
	33 Carbophenothion	17.523	17.524	(0.931)	80431	2.00000	1.941(A)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34 Triphenyl phosphate	18.280	18.281	(0.972)	73416	2.00000	2.159
	35 Fensulfothion	18.558	18.559	(0.986)	66352	2.00000	2.125
*	36 TOCP	18.815	18.816	(1.000)	68161	2.00000	
	37 Phosmet / EPN	18.908	18.909	(1.005)	146012	4.00000	4.177
	38 Famphur	19.012	19.011	(1.010)	95300	2.00000	2.132
	39 Azinphos-methyl	19.147	19.147	(1.018)	88773	2.00000	2.171
	40 Azinphos-ethyl	19.365	19.366	(1.029)	80966	2.00000	2.079
	41 Coumaphos	20.347	20.347	(1.081)	61650	2.00000	2.059
S	42 Merphos				113747	2.00000	2.002(A)
M	43 Total Demeton				100663	2.00000	1.969

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

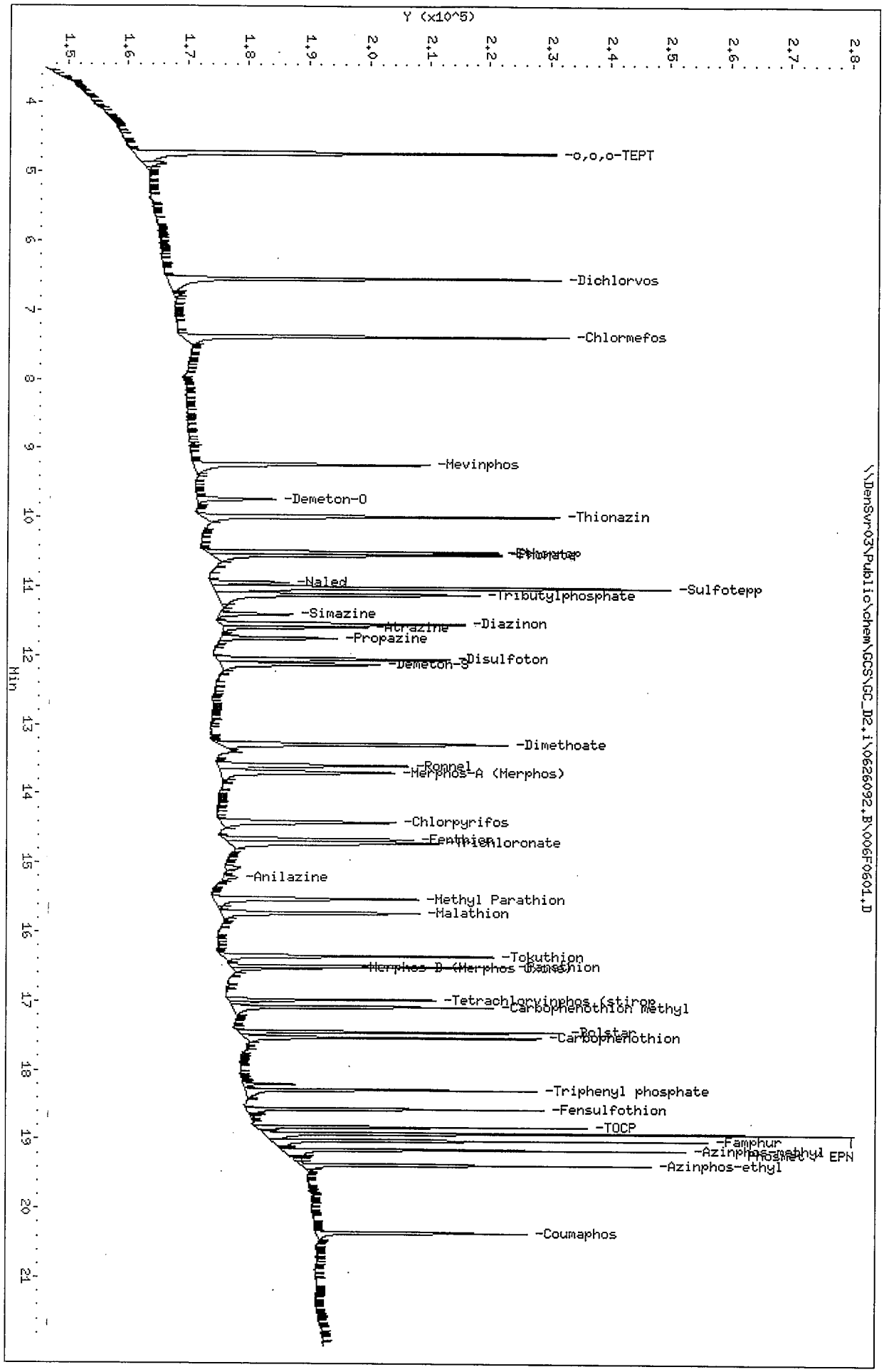
Instrument ID: GC_D2.i
Lab File ID: 006F0601.D
Lab Smp Id: OPP L4 GSV0638
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L4 GSV0638
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	126959	63480	253918	126959	0.00
36 TOCP	68161	34081	136322	68161	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.12	10.62	11.62	11.12	0.00
36 TOCP	18.82	18.32	19.32	18.82	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.



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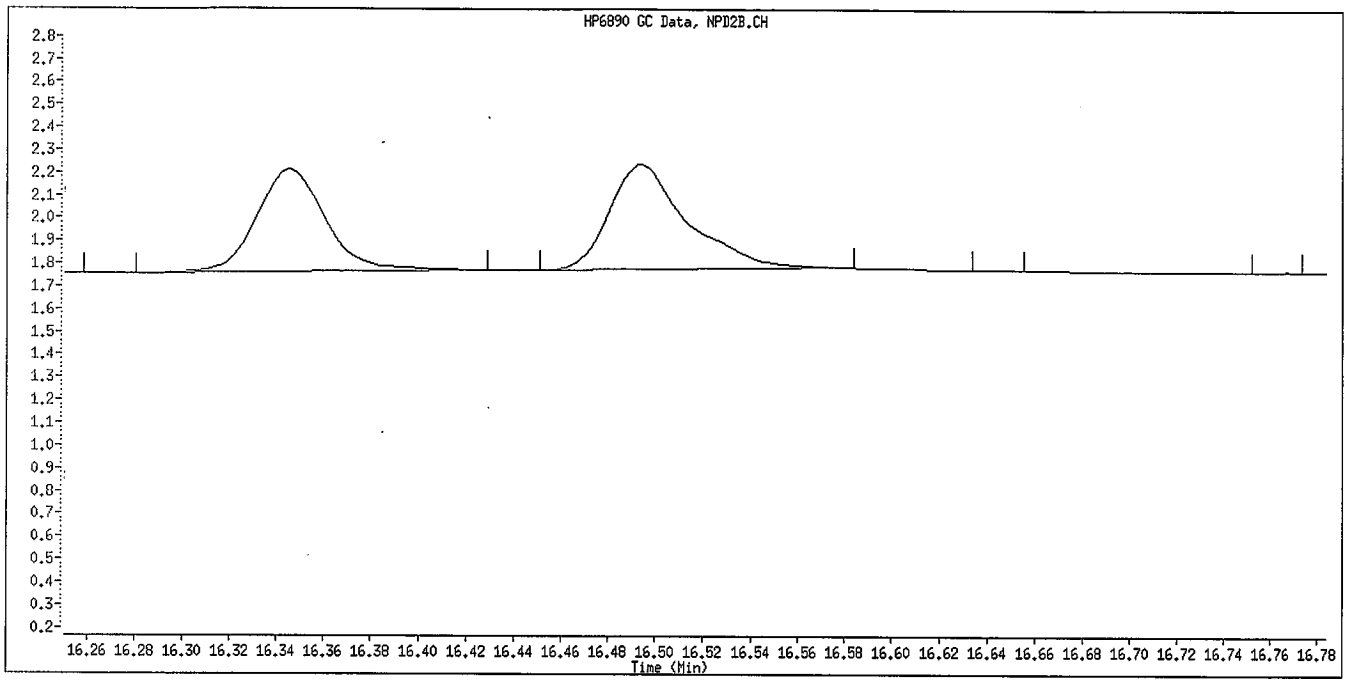
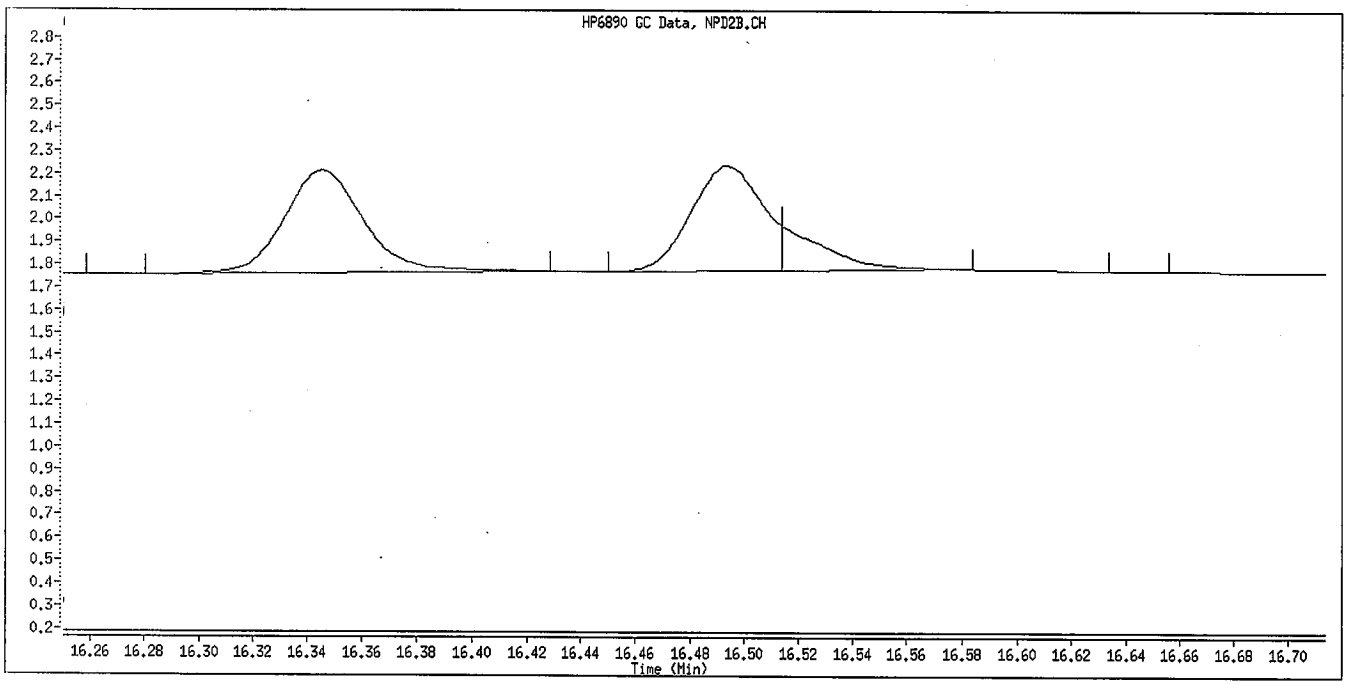
Date : 26-JUN-2009 19:50
Client ID: OPP L4 GSV0638
Sample Info: OPP L4 GSV0638
Column phase: RTx-OPPest

Instrument: GC_D2,i
Operator: MPK/TLW
Column diameter: 0.32

Data File Name: 006F0601.D
Inj. Date and Time: 26-JUN-2009 19:50
Instrument ID: GC_D2.i
Client ID: OPP L4 GSV0638
Compound Name: Parathion
CAS #:
Report Date: 06/30/2009



Original Integration

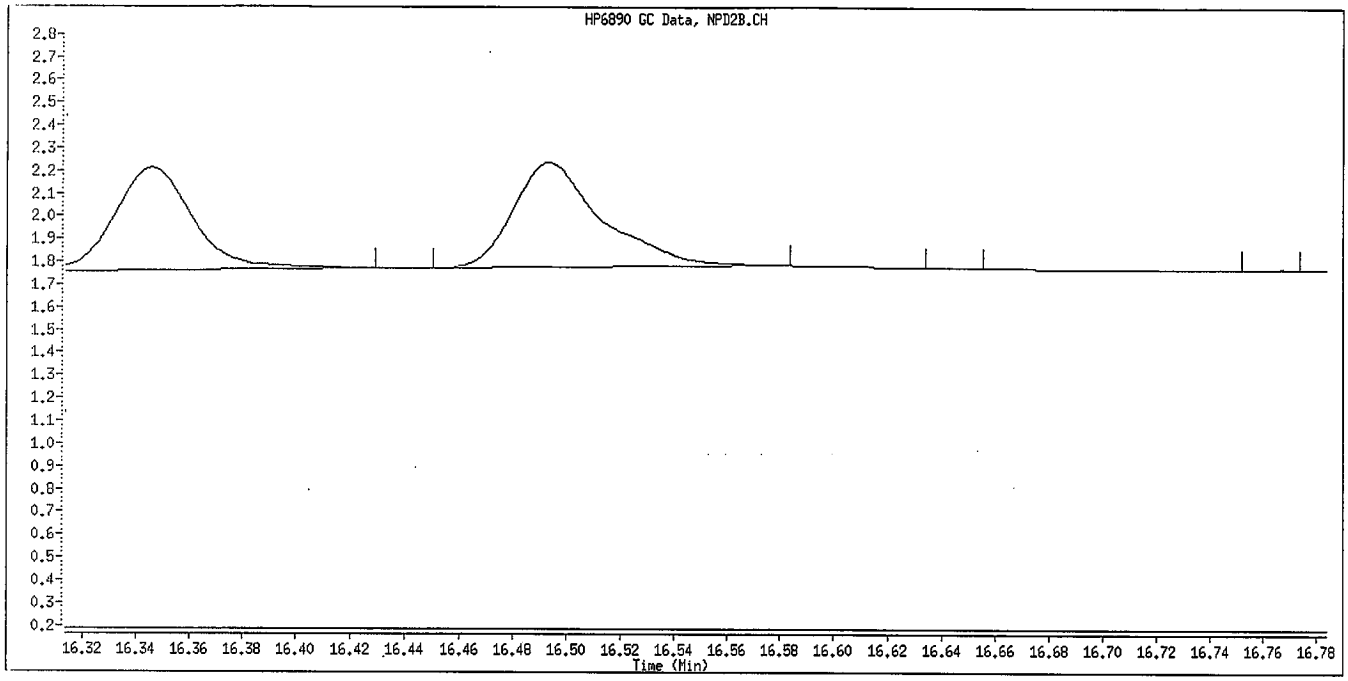


Manual Integration

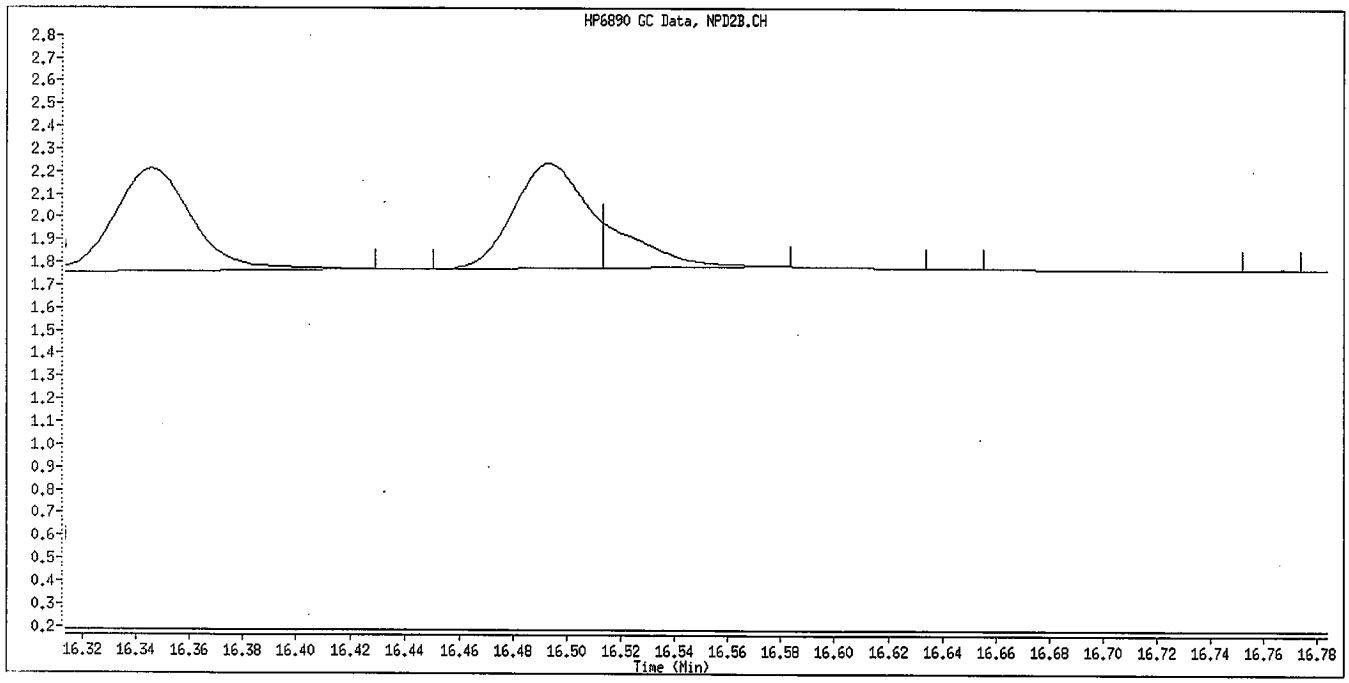
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

Data File Name: 006F0601.D
Inj. Date and Time: 26-JUN-2009 19:50
Instrument ID: GC_D2.i
Client ID: OPP L4 GSV0638
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 06/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\007F0701.D
Lab Smp Id: OPP L3 GSV0639 Client Smp ID: OPP L3 GSV0639
Inj Date : 26-JUN-2009 20:18
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L3 GSV0639
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Meth Date : 30-Jun-2009 12:58 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 19:50 Cal File: 006F0601.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

						AMOUNTS	
	Compounds	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 o,o,o-TEPT	4.728	4.731	(0.251)	81887	1.00000	0.9107
	2 Dichlorvos	6.546	6.546	(0.348)	63970	1.00000	0.9111
$	3 Chlormefos	7.383	7.384	(0.392)	61984	1.00000	0.8770
	4 Mevinphos	9.235	9.234	(0.491)	42341	1.00000	0.8952
	5 Demeton-O	9.733	9.734	(0.517)	13386	0.32500	0.2970
	6 Thionazin	9.985	9.984	(0.531)	67347	1.00000	0.9522
	7 Ethoprop	10.500	10.499	(0.558)	50288	1.00000	0.9515
	8 Phorate	10.536	10.539	(0.560)	55056	1.00000	0.8983
	9 Naled	10.941	10.939	(0.582)	10859	1.00000	0.9052
	10 Sulfotepp	11.016	11.017	(0.586)	90141	1.00000	0.9752(A)
*	11 Tributylphosphate	11.116	11.116	(1.000)	109941	2.00000	
	12 Simazine	11.398	11.399	(0.606)	12288	1.00000	0.9282(A)
	13 Diazinon	11.541	11.541	(0.613)	49407	1.00000	1.013
	14 Atrazine	11.581	11.584	(0.616)	21316	1.00000	0.9678(A)
	15 Propazine	11.746	11.747	(0.624)	20907	1.00000	0.9421
	16 Disulfoton	12.050	12.049	(0.640)	47563	1.00000	0.9757
	17 Demeton-S	12.126	12.124	(0.645)	33785	0.68000	0.6688
	18 Dimethoate	13.283	13.282	(0.706)	60106	1.00000	0.9200
	19 Ronnel	13.588	13.587	(0.722)	39845	1.00000	0.9061
	20 Merphos-A (Merphos)	13.690	13.689	(1.231)	42032	1.00000	1.055(A)
	21 Chlorpyrifos	14.410	14.409	(0.766)	43430	1.00000	0.9737
	22 Fenthion	14.663	14.662	(0.779)	40767	1.00000	0.9854
	23 Trichloronate	14.710	14.711	(0.782)	49357	1.00000	0.9220
	24 Anilazine	15.218	15.216	(0.809)	3581	1.00000	0.9372(M)
	25 Methyl Parathion	15.520	15.519	(0.825)	42442	1.00000	0.9503
	26 Malathion	15.725	15.724	(0.836)	39993	1.00000	0.9559
	27 Tokuthion	16.345	16.344	(0.869)	47016	1.00000	0.9598
	28 Parathion	16.493	16.494	(0.877)	43405	1.00000	0.9863(M)
	29 Merphos-B (Merphos Oxone)	16.515	16.517	(1.486)	15065	1.00000	1.162(AM)
	30 Tetrachlorvinphos (stirophos)	16.976	16.977	(0.902)	25459	1.00000	0.8943
	31 Carbophenothion methyl	17.081	17.082	(0.908)	36393	1.00000	0.8919
	32 Bolstar	17.441	17.440	(0.927)	41390	1.00000	0.9630
	33 Carbophenothion	17.523	17.524	(0.931)	40089	1.00000	0.9485(A)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34 Triphenyl phosphate	18.280	18.281	(0.972)	31677	1.00000	0.9133
	35 Fensulfothion	18.558	18.559	(0.986)	30601	1.00000	0.9609
*	36 TOCP	18.815	18.816	(1.000)	69519	2.00000	
	37 Phosmet / EPN	18.908	18.909	(1.005)	68186	2.00000	1.866
	38 Famphur	19.010	19.011	(1.010)	41284	1.00000	0.9054
	39 Azinphos-methyl	19.145	19.147	(1.018)	37491	1.00000	0.8988
	40 Azinphos-ethyl	19.365	19.366	(1.029)	38936	1.00000	0.9801
	41 Coumaphos	20.345	20.347	(1.081)	29854	1.00000	0.9774
S	42 Merphos				57097	1.00000	0.9855
M	43 Total Demeton				47171	1.00000	0.9658

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

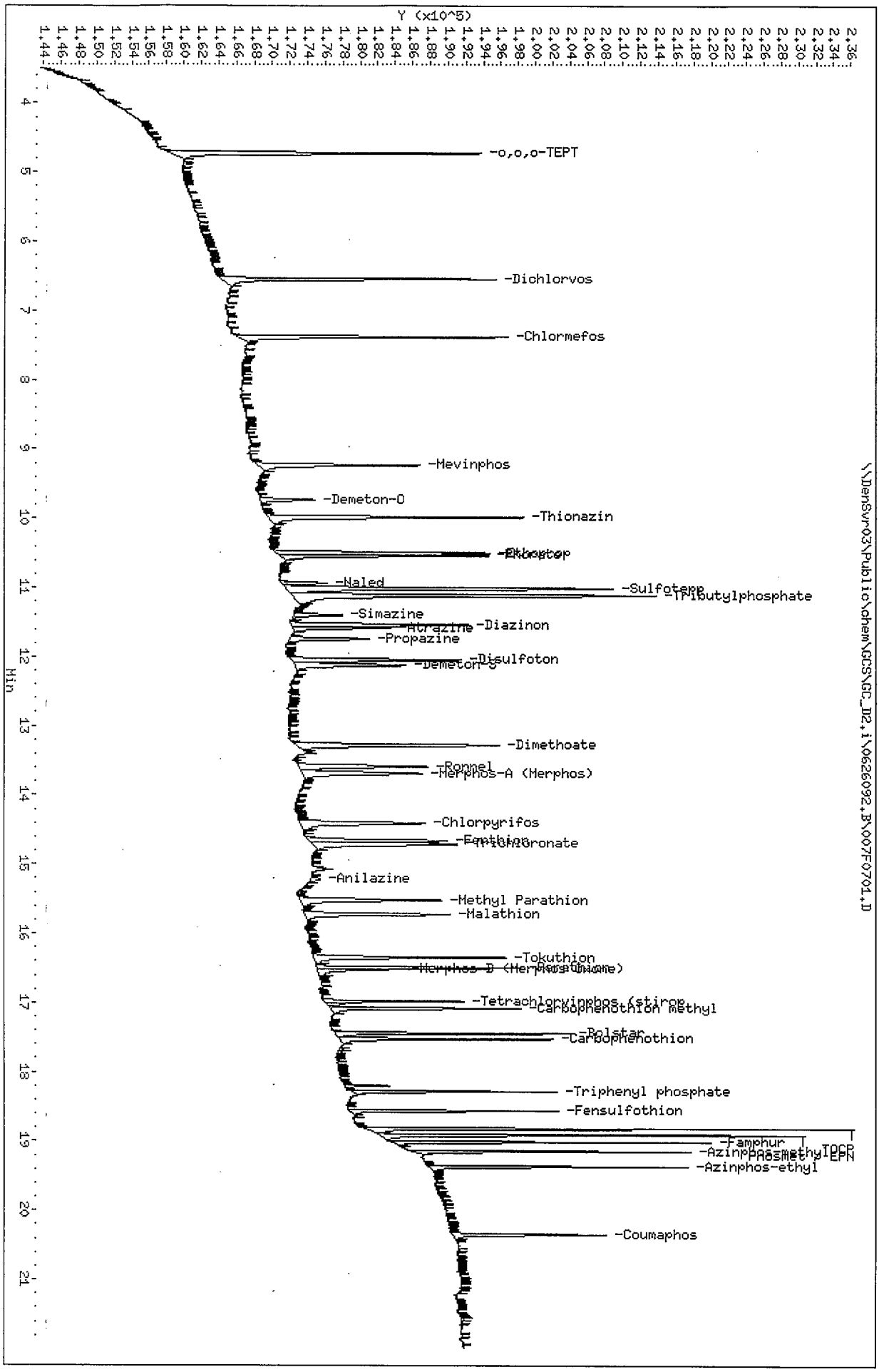
Instrument ID: GC_D2.i
Lab File ID: 007F0701.D
Lab Smp Id: OPP L3 GSV0639
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L3 GSV0639
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	126959	63480	253918	109941	-13.40
36 TOCP	68161	34081	136322	69519	1.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.12	10.62	11.62	11.12	0.01
36 TOCP	18.82	18.32	19.32	18.82	-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.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Date : 26-JUN-2009 20:18
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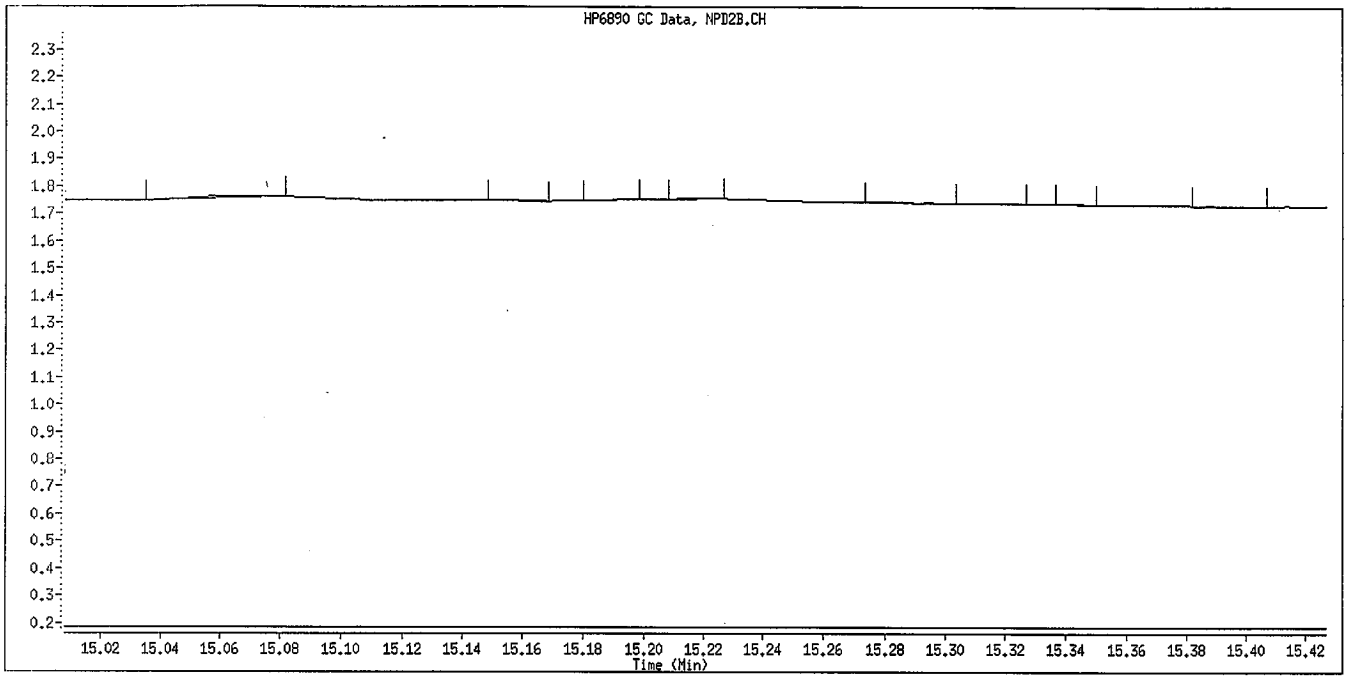
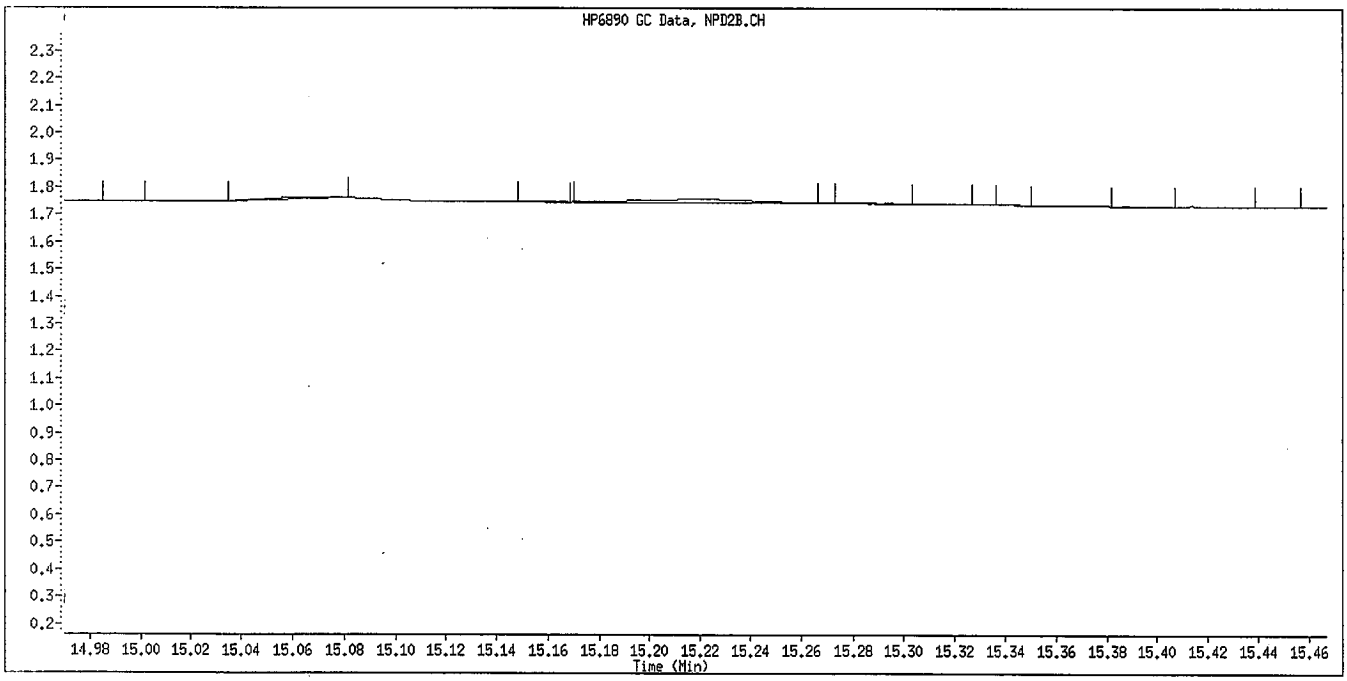
Sample Info: OPP L3 GSV0639
Column phase: RTx-OPPest
Instrument: GC_D2,i
Operator: MPK/TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D2,i\0626092,B\007F0701.D
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Chlormefos
-Mevinphos
-Demeton-O
-Thionazin
-Naled
-Sulfotepp
-Tributylphosphate
-Simazine
-Diazinon
-Propazine
-Dimethoate
-Ronnel
-Merphos-A (Merphos)
-Chlorpyrifos
-Anilazine
-Methyl Parathion
-Malathion
-Tokuthion
-Tetrachlorvinphos (Stirofos)
-Carbophenothion Methyl
-Carbophenothion
-Triphenyl phosphate
-Fensulfothion
-Famphur
-Azinphos-ethyl
-Coumaphos

Table of Contents

Data File Name: 007F0701.D
Inj. Date and Time: 26-JUN-2009 20:18
Instrument ID: GC_D2.i
Client ID: OPP L3 GSV0639
Compound Name: Anilazine
CAS #:
Report Date: 06/30/2009



Original Integration



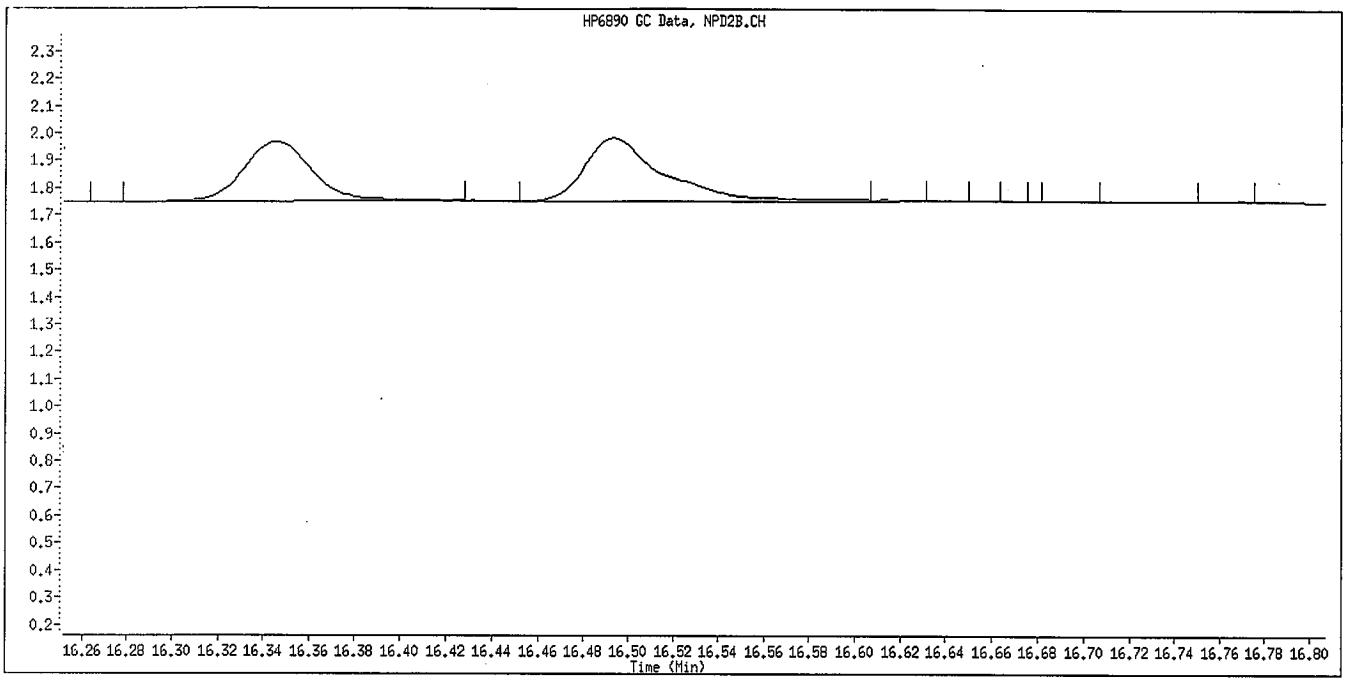
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

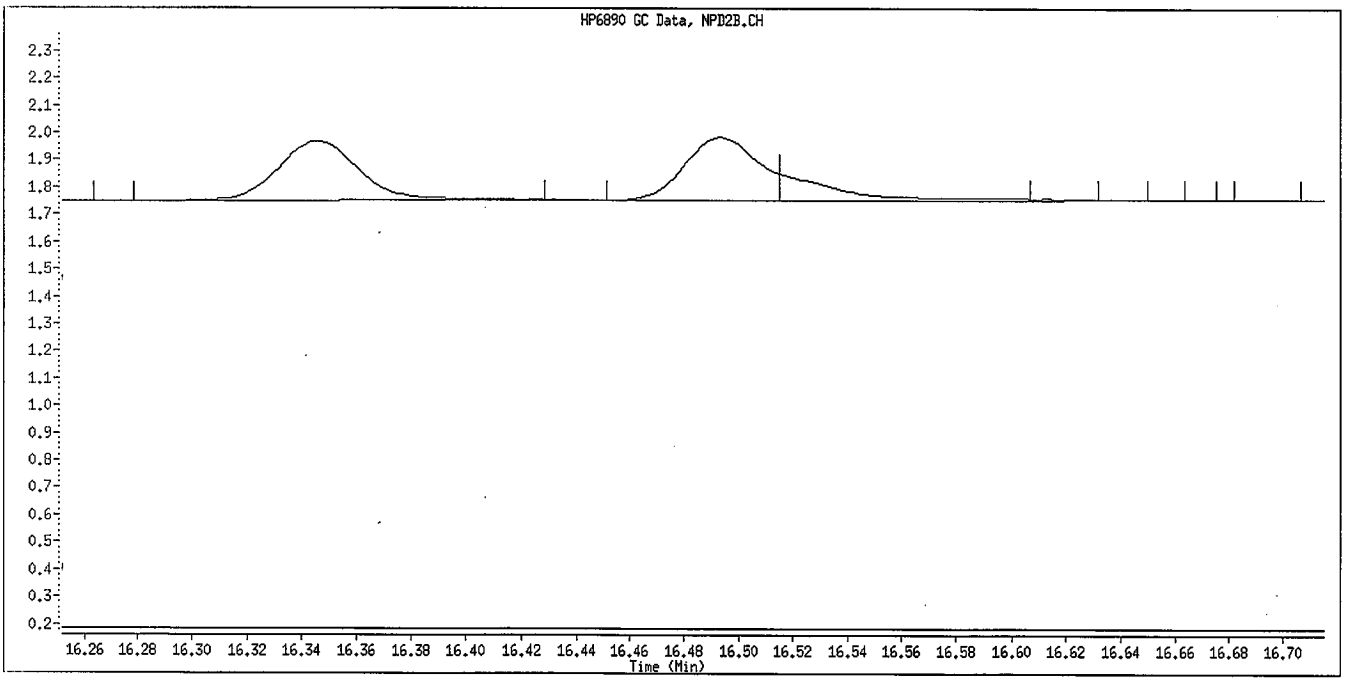
6/30/09

Table of Contents

Data File Name: 007F0701.D
Inj. Date and Time: 26-JUN-2009 20:18
Instrument ID: GC_D2.i
Client ID: OPP L3 GSV0639
Compound Name: Parathion
CAS #:
Report Date: 06/30/2009



Original Integration

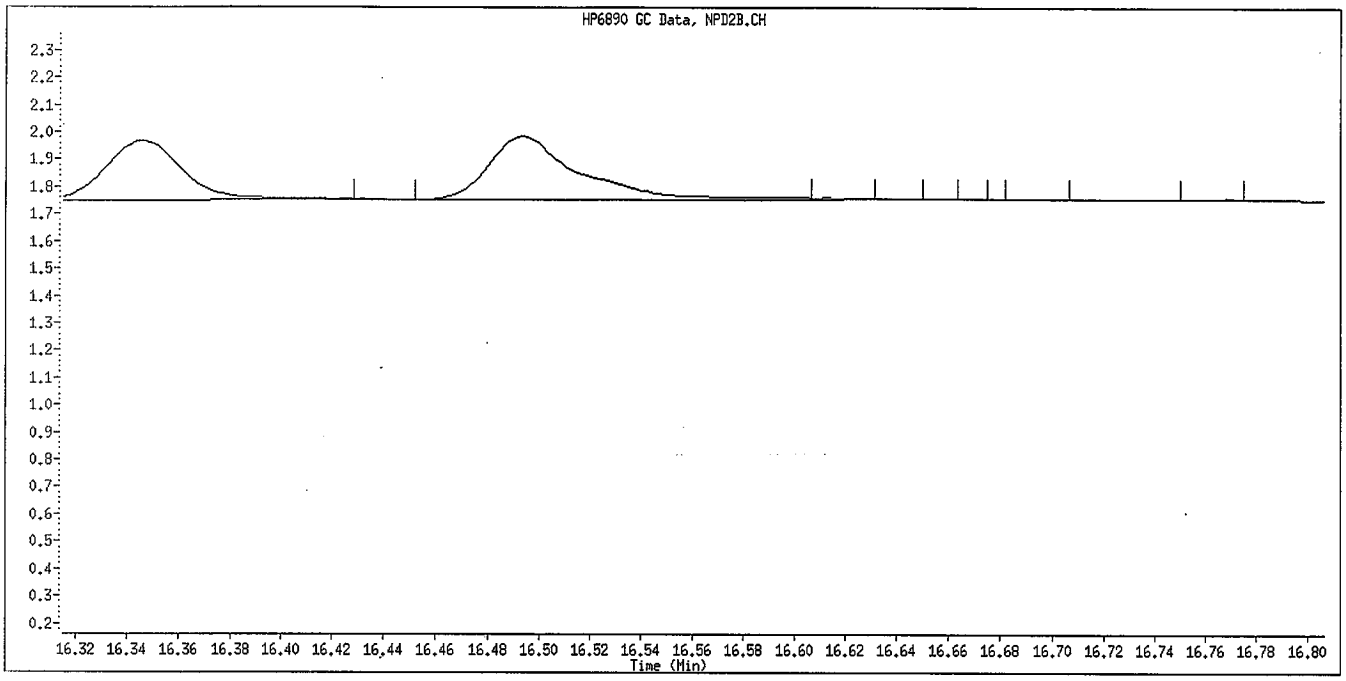


Manual Integration

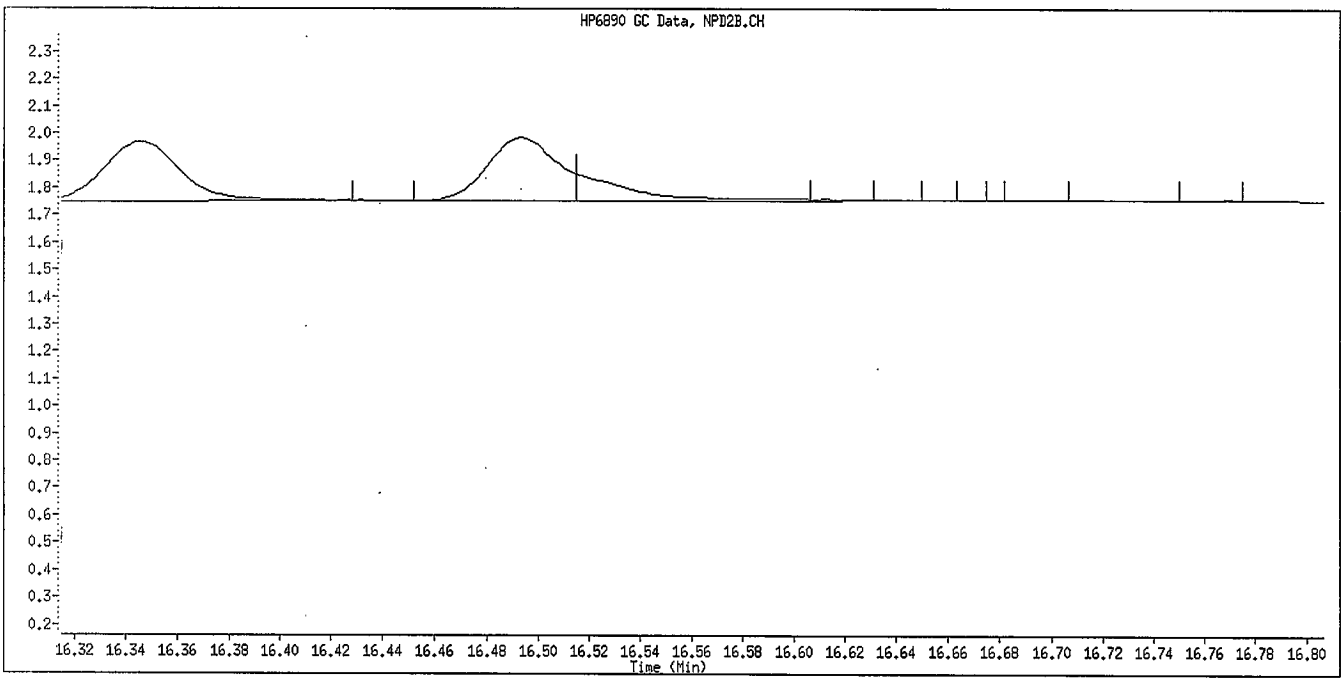
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

Data File Name: 007F0701.D
Inj. Date and Time: 26-JUN-2009 20:18
Instrument ID: GC_D2.i
Client ID: OPP L3 GSV0639
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 06/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\008F0801.D
Lab Smp Id: OPP L2 GSV0640 Client Smp ID: OPP L2 GSV0640
Inj Date : 26-JUN-2009 20:45
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L2 GSV0640
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Meth Date : 30-Jun-2009 12:58 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 20:18 Cal File: 007F0701.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

		Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1	o,o,o-TEPT	4.729	4.731	(0.251)	43725	0.50000	0.4721
	2	Dichlorvos	6.546	6.546	(0.348)	32623	0.50000	0.4511
$	3	Chlormefos	7.383	7.384	(0.392)	32886	0.50000	0.4517
	4	Mevinphos	9.233	9.234	(0.491)	22377	0.50000	0.4593
	5	Demeton-O	9.734	9.734	(0.517)	7562	0.16250	0.1629
	6	Thionazin	9.983	9.984	(0.531)	32975	0.50000	0.4526
	7	Ethoprop	10.501	10.499	(0.558)	25261	0.50000	0.4640
	8	Phorate	10.538	10.539	(0.560)	28693	0.50000	0.4545
	9	Naled	10.934	10.939	(0.581)	1666	0.50000	0.3635
	10	Sulfotepp	11.018	11.017	(0.586)	45401	0.50000	0.4768(A)
*	11	Tributylphosphate	11.118	11.116	(1.000)	107017	2.00000	
	12	Simazine	11.401	11.399	(0.606)	6209	0.50000	0.4553(A)
	13	Diazinon	11.541	11.541	(0.613)	15923	0.50000	0.3370
	14	Atrazine	11.579	11.584	(0.615)	1231	0.50000	0.2736(A)
	15	Propazine	11.746	11.747	(0.624)	8102	0.50000	0.3907
	16	Disulfoton	12.049	12.049	(0.640)	23807	0.50000	0.4741
	17	Demeton-S	12.124	12.124	(0.644)	15766	0.34000	0.3681
	18	Dimethoate	13.281	13.282	(0.706)	33707	0.50000	0.5009
	19	Ronnel	13.588	13.587	(0.722)	19648	0.50000	0.4338
	20	Merphos-A (Merphos)	13.689	13.689	(1.231)	19488	0.50000	0.5025(A)
	21	Chlorpyrifos	14.409	14.409	(0.766)	20746	0.50000	0.4515
	22	Fenthion	14.661	14.662	(0.779)	20747	0.50000	0.4869
	23	Trichloronate	14.709	14.711	(0.782)	26053	0.50000	0.5238
	24	Anilazine	15.213	15.216	(0.809)	2256	0.50000	0.5727(M)
	25	Methyl Parathion	15.519	15.519	(0.825)	20061	0.50000	0.4361
	26	Malathion	15.724	15.724	(0.836)	21428	0.50000	0.4972
	27	Tokuthion	16.346	16.344	(0.869)	23462	0.50000	0.4650
	28	Parathion	16.493	16.494	(0.877)	20700	0.50000	0.4566(M)
	29	Merphos-B (Merphos Oxone)	16.514	16.517	(1.485)	6271	0.50000	0.4377(AM)
	30	Tetrachlorvinphos (stirophos)	16.976	16.977	(0.902)	13089	0.50000	0.4464
	31	Carbophenothion methyl	17.081	17.082	(0.908)	18266	0.50000	0.4346
	32	Bolstar	17.441	17.440	(0.927)	21910	0.50000	0.4949
	33	Carbophenothion	17.521	17.524	(0.931)	20336	0.50000	0.4671(A)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34 Triphenyl phosphate	18.279	18.281	(0.972)	15570	0.50000	0.4358
	35 Fensulfothion	18.558	18.559	(0.986)	14395	0.50000	0.4388
*	36 TOCP	18.814	18.816	(1.000)	71609	2.00000	
	37 Phosmet / EPN	18.908	18.909	(1.005)	35826	1.00000	0.9102
	38 Famphur	19.009	19.011	(1.010)	21626	0.50000	0.4604
	39 Azinphos-methyl	19.146	19.147	(1.018)	19508	0.50000	0.4540
	40 Azinphos-ethyl	19.364	19.366	(1.029)	19984	0.50000	0.4884
	41 Coumaphos	20.348	20.347	(1.081)	14618	0.50000	0.4646
S	42 Merphos				25759	0.50000	0.4316
M	43 Total Demeton				23328	0.50000	0.5310

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

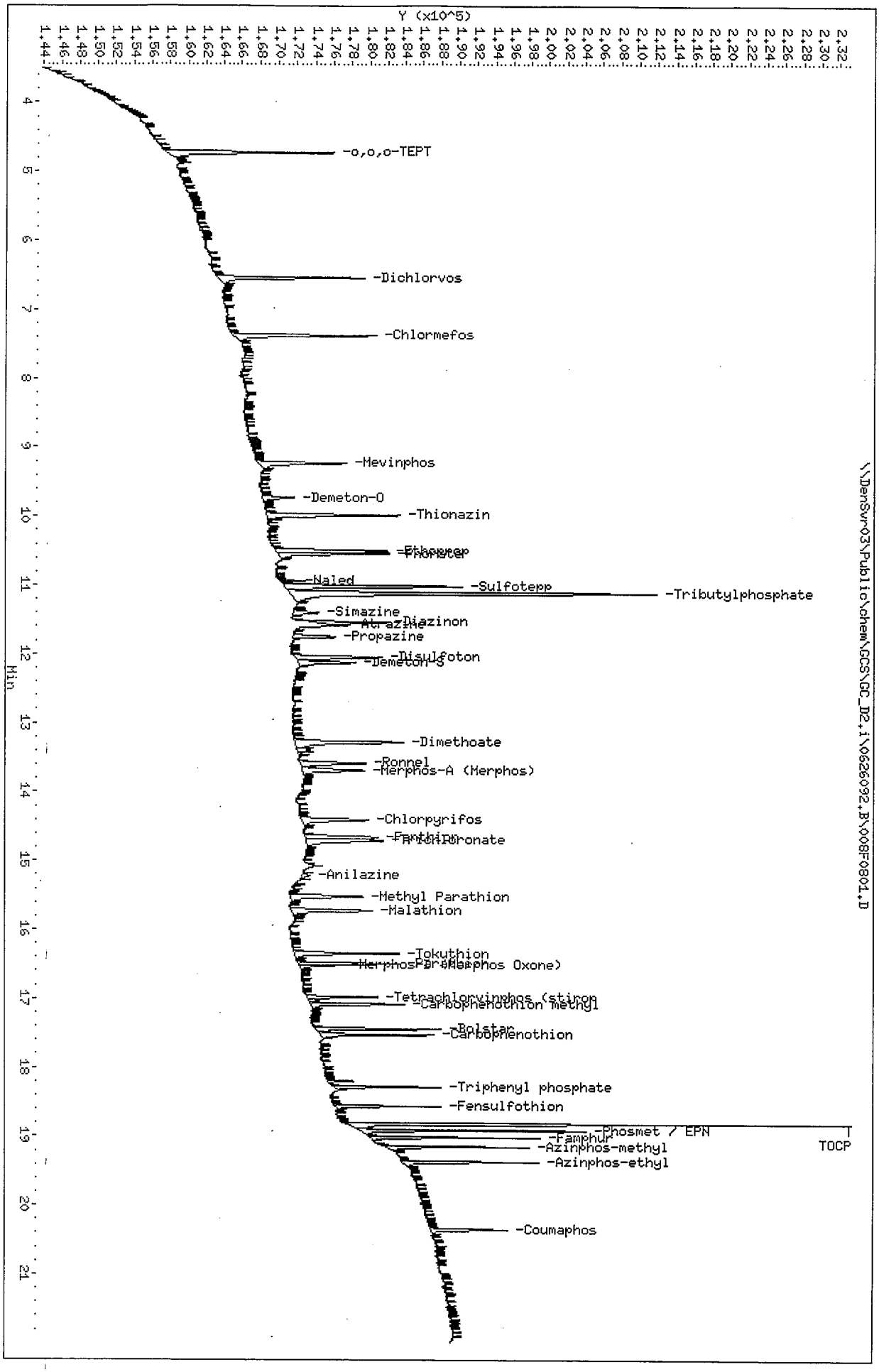
Instrument ID: GC_D2.i
Lab File ID: 008F0801.D
Lab Smp Id: OPP L2 GSV0640
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L2 GSV0640
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	126959	63480	253918	107017	-15.71
36 TOCP	68161	34081	136322	71609	5.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.12	10.62	11.62	11.12	0.02
36 TOCP	18.82	18.32	19.32	18.81	-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.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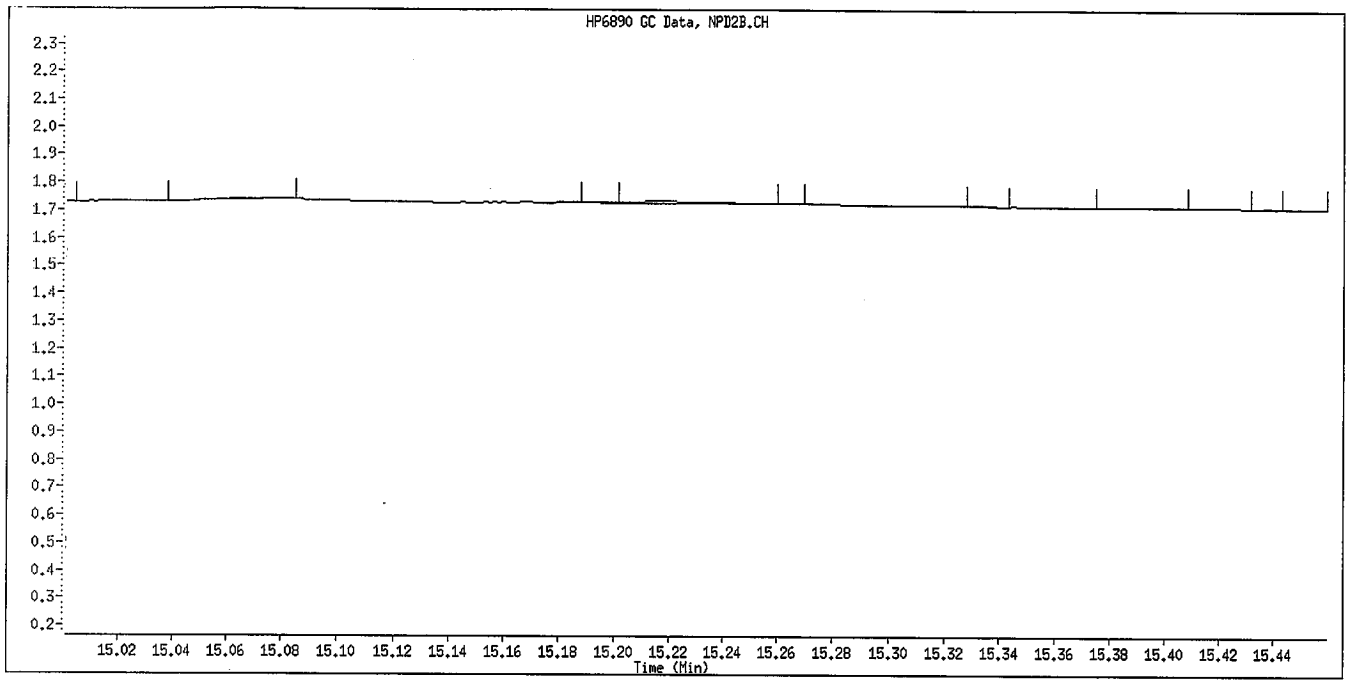
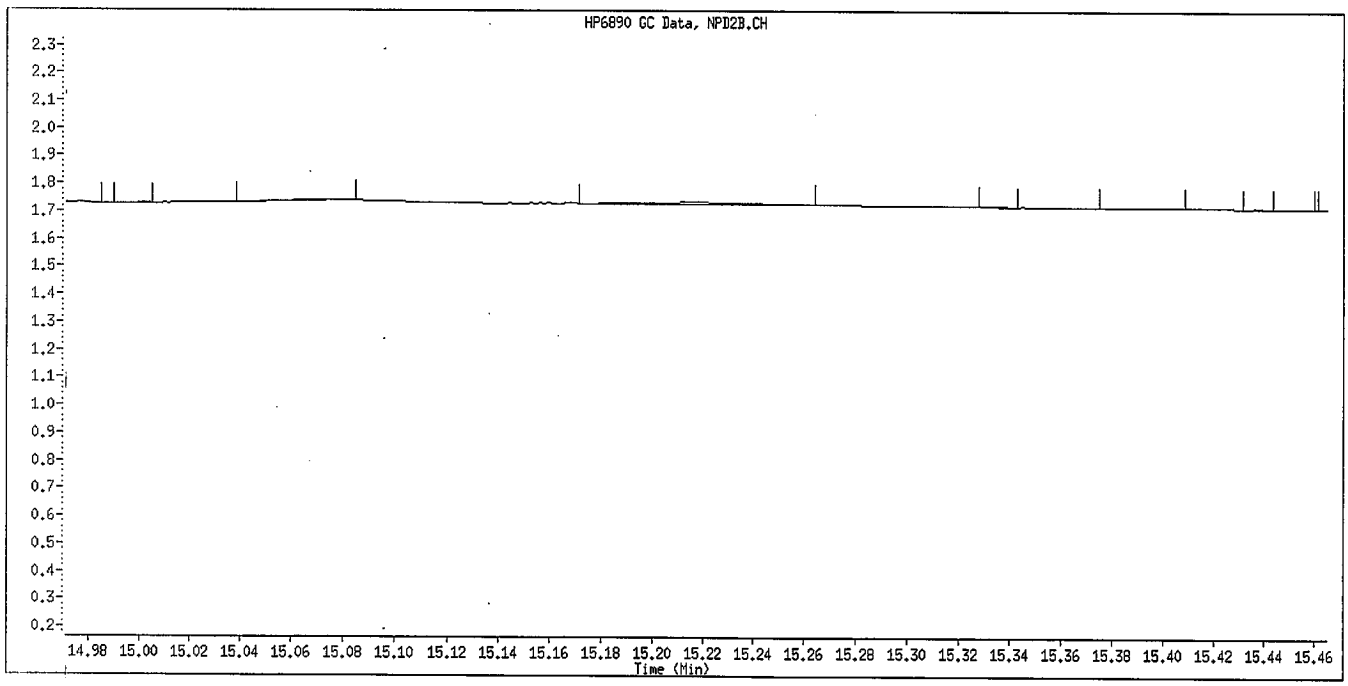
Date : 26-JUN-2009 20:45
Client ID: OPP L2 GSV0640
Sample Info: OPP L2 GSV0640
Column phase: RTx-OPPest
Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\008F0801.D
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Chlormefos
-Mevinphos
-Demeton-O
-Thionazin
-Ethoprop
-Phorate
-Naled
-Sulfotepp
-Tributylphosphate
-Simazine
-Atrazine
-Diazinon
-Propazine
-Disulfoton
-Demeton-S
-Dimethoate
-Ronnel
-Merphos-A (Merphos)
-Chlorpyrifos
-Fenthion
-Trichloronate
-Anilazine
-Methyl Parathion
-Malathion
-Tokuthion
-Merphos-B (Merphos Oxone)
-Tetrachlorvinphos (stirofos)
-Carbophenothion methyl
-Bolstar
-Carbophenothion
-Triphenyl phosphate
-Fensulfothion
-Phosmet / EPN
-Famphur
-Azinphos-methyl
-Azinphos-ethyl
-Coumaphos
TOCP

Table of Contents

Data File Name: 008F0801.D
Inj. Date and Time: 26-JUN-2009 20:45
Instrument ID: GC_D2.i
Client ID: OPP L2 GSV0640
Compound Name: Anilazine
CAS #:
Report Date: 06/30/2009



Original Integration

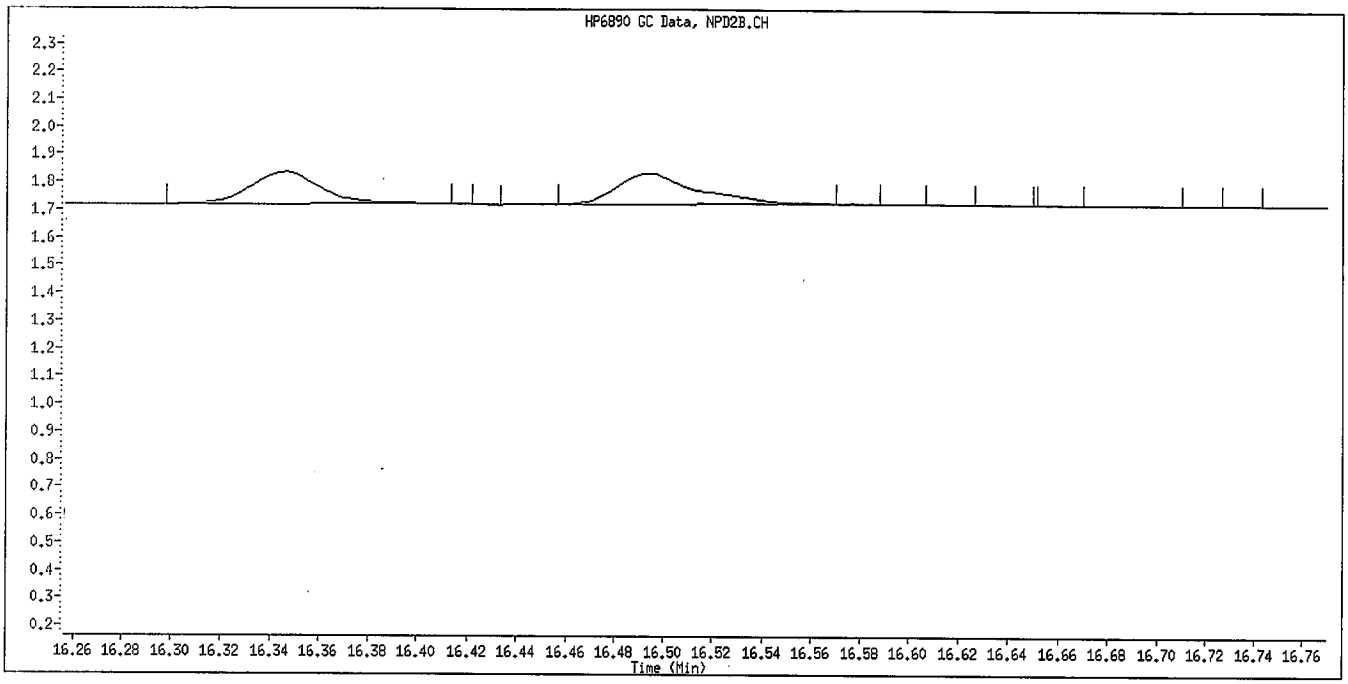


Manual Integration

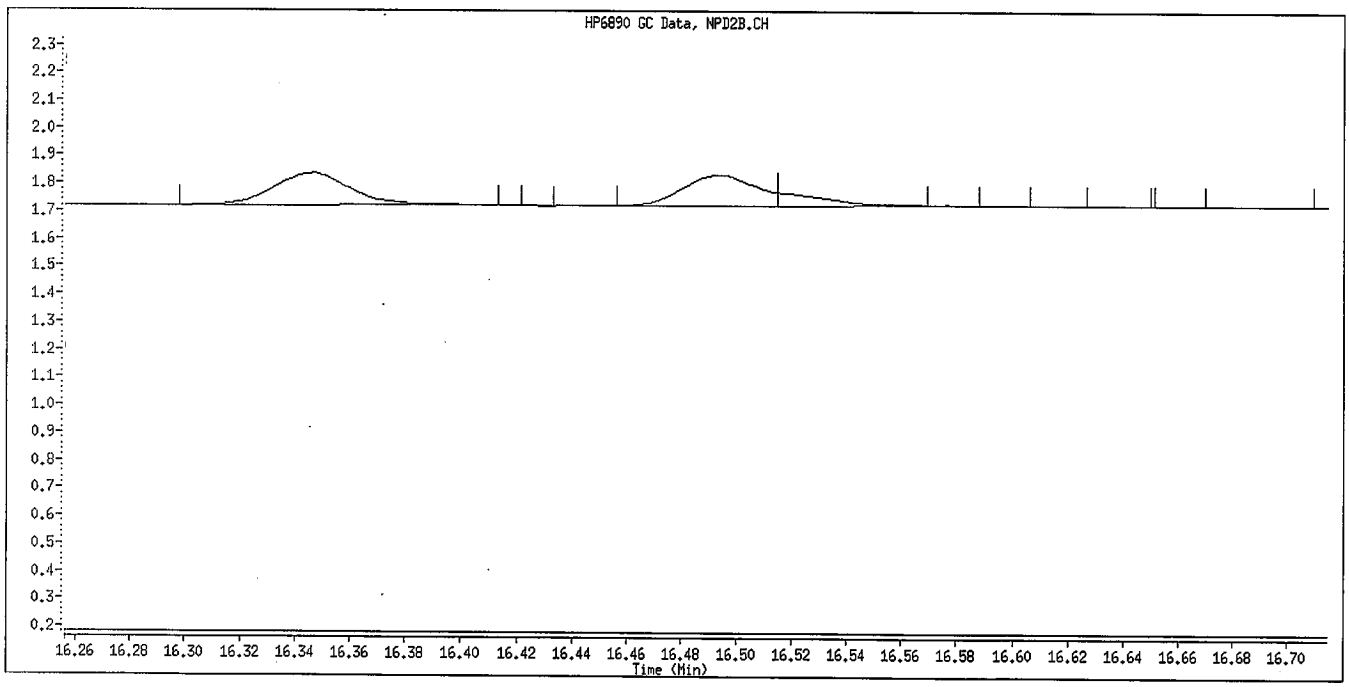
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

Data File Name: 008F0801.D
Inj. Date and Time: 26-JUN-2009 20:45
Instrument ID: GC_D2.i
Client ID: OPP L2 GSV0640
Compound Name: Parathion
CAS #:
Report Date: 06/30/2009



Original Integration



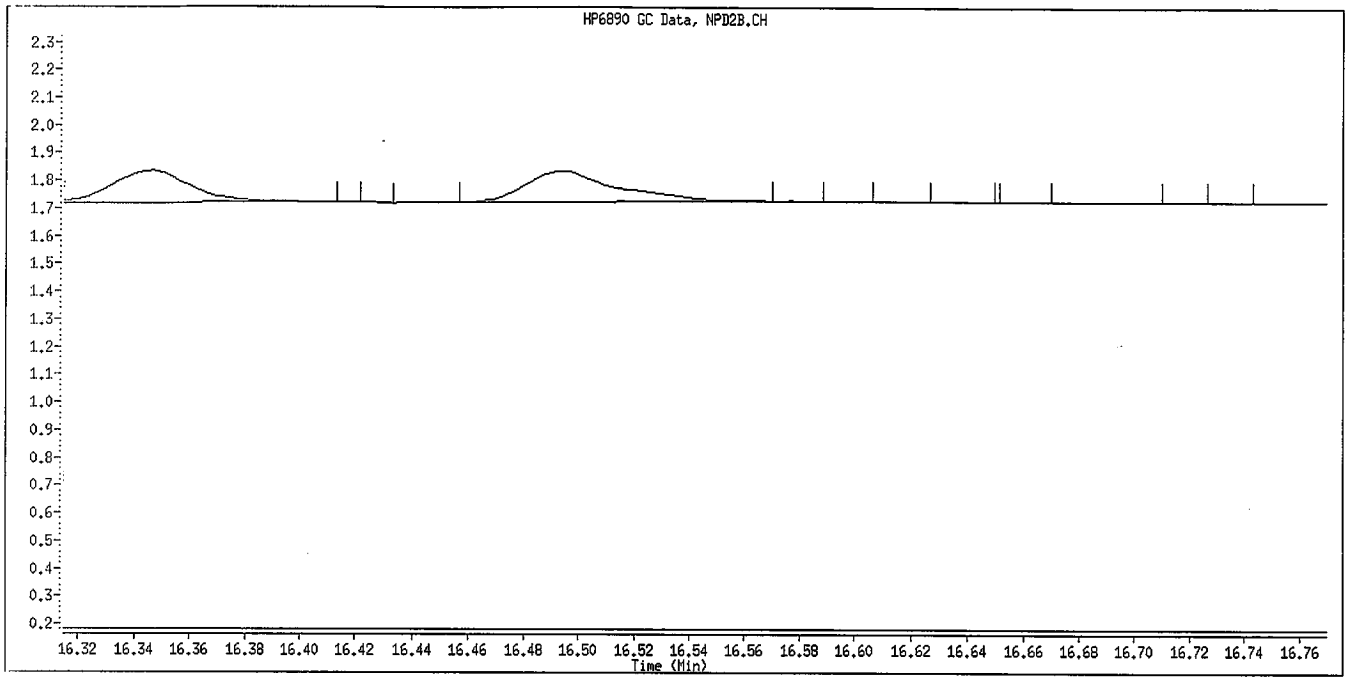
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

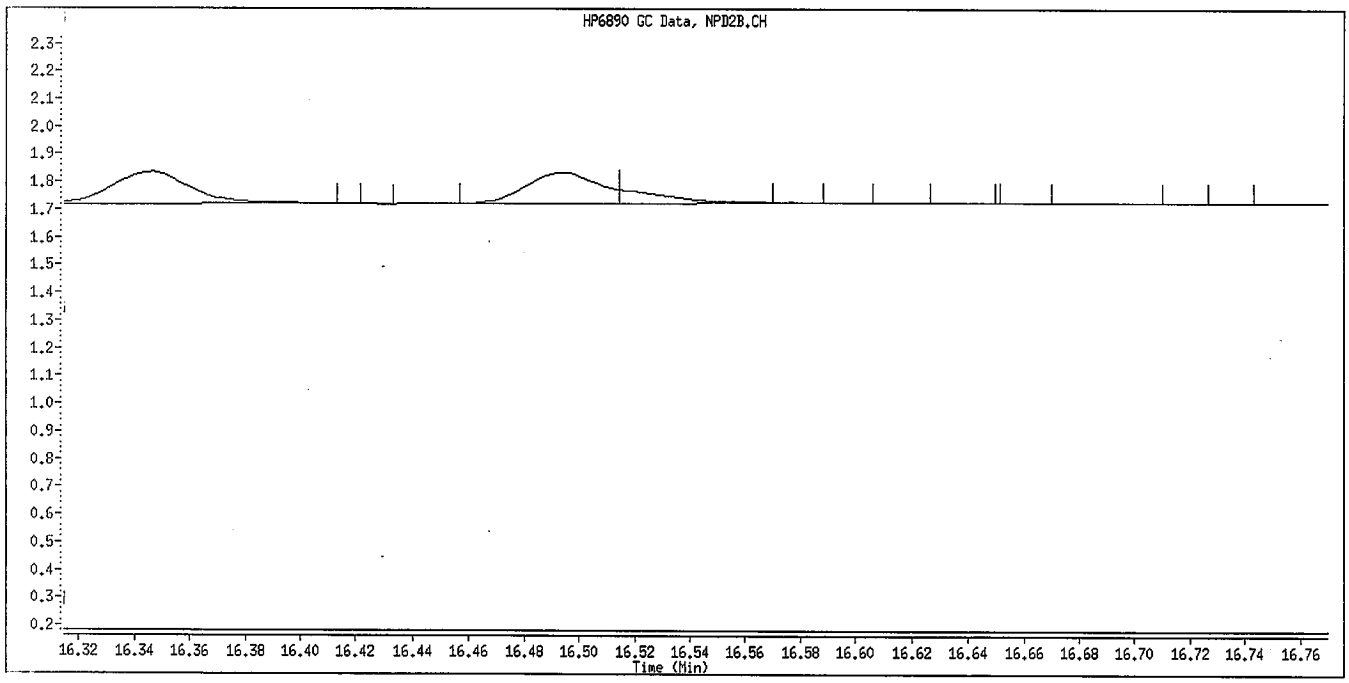
6/30/09

Table of Contents

Data File Name: 008F0801.D
Inj. Date and Time: 26-JUN-2009 20:45
Instrument ID: GC_D2.i
Client ID: OPP L2 GSV0640
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 06/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\009F0901.D
Lab Smp Id: OPP L1 GSV0641 Client Smp ID: OPP L1 GSV0641
Inj Date : 26-JUN-2009 21:13
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP L1 GSV0641
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Meth Date : 30-Jun-2009 12:58 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 20:45 Cal File: 008F0801.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	4.731	4.731	(0.251)	21538	0.20000	0.2262
	2 Dichlorvos	6.546	6.546	(0.348)	14456	0.20000	0.1945
$	3 Chlormefos	7.382	7.384	(0.392)	16155	0.20000	0.2159
	4 Mevinphos	9.236	9.234	(0.491)	10624	0.20000	0.2122
	5 Demeton-O	9.737	9.734	(0.518)	2866	0.06500	0.06007
	6 Thionazin	9.986	9.984	(0.531)	15885	0.20000	0.2121
	7 Ethoprop	10.502	10.499	(0.558)	12514	0.20000	0.2237
	8 Phorate	10.537	10.539	(0.560)	13936	0.20000	0.2148
	9 Naled	10.939	10.939	(0.581)	94	0.20000	0.2739
	10 Sulfotepp	11.016	11.017	(0.585)	20595	0.20000	0.2105 (A)
*	11 Tributylphosphate	11.117	11.116	(1.000)	104756	2.00000	
	12 Simazine	11.399	11.399	(0.606)	2680	0.20000	0.1912 (A)
	13 Diazinon	11.541	11.541	(0.613)	12067	0.20000	0.2561
	14 Atrazine	11.581	11.584	(0.615)	5427	0.20000	0.4092 (A)
	15 Propazine	11.746	11.747	(0.624)	4880	0.20000	0.2531
	16 Disulfoton	12.052	12.049	(0.641)	10273	0.20000	0.1991
	17 Demeton-S	12.121	12.124	(0.644)	667	0.13600	0.1293
	18 Dimethoate	13.282	13.282	(0.706)	14242	0.20000	0.2059
	19 Ronnel	13.587	13.587	(0.722)	10994	0.20000	0.2362
	20 Merphos-A (Merphos)	13.689	13.689	(1.231)	7722	0.20000	0.2034 (A)
	21 Chlorpyrifos	14.409	14.409	(0.766)	9439	0.20000	0.1999
	22 Fenthion	14.661	14.662	(0.779)	8896	0.20000	0.2031
	23 Trichloronate	14.709	14.711	(0.782)	6944	0.20000	0.2138
	24 Anilazine	15.217	15.216	(0.809)	1634	0.20000	0.4033 (M)
	25 Methyl Parathion	15.519	15.519	(0.825)	8934	0.20000	0.1890
	26 Malathion	15.724	15.724	(0.836)	9125	0.20000	0.2060
	27 Tokuthion	16.344	16.344	(0.869)	11061	0.20000	0.2133
	28 Parathion	16.494	16.494	(0.877)	9355	0.20000	0.2008 (M)
	29 Merphos-B (Merphos Oxone)	16.512	16.517	(1.485)	3793	0.20000	0.2310 (AM)
	30 Tetrachlorvinphos (stirophos)	16.976	16.977	(0.902)	6332	0.20000	0.2101
	31 Carbophenothion methyl	17.081	17.082	(0.908)	8575	0.20000	0.1985
	32 Bolstar	17.441	17.440	(0.927)	9809	0.20000	0.2156
	33 Carbophenothion	17.522	17.524	(0.931)	8717	0.20000	0.1948 (A)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34 Triphenyl phosphate	18.281	18.281	(0.972)	8167	0.20000	0.2224
	35 Fensulfothion	18.559	18.559	(0.986)	6502	0.20000	0.1929
*	36 TOCP	18.816	18.816	(1.000)	73597	2.00000	
	37 Phosmet / EPN	18.909	18.909	(1.005)	19707	0.40000	0.4475
	38 Famphur	19.012	19.011	(1.010)	10711	0.20000	0.2219
	39 Azinphos-methyl	19.149	19.147	(1.018)	9243	0.20000	0.2093
	40 Azinphos-ethyl	19.367	19.366	(1.029)	8391	0.20000	0.1995
	41 Coumaphos	20.349	20.347	(1.081)	5809	0.20000	0.1796
S	42 Merphos				11515	0.20000	0.1877
M	43 Total Demeton				3533	0.20000	0.1894

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 009F0901.D
Lab Smp Id: OPP L1 GSV0641
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L1 GSV0641
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	126959	63480	253918	104756	-17.49
36 TOCP	68161	34081	136322	73597	7.98

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.12	10.62	11.62	11.12	0.02
36 TOCP	18.82	18.32	19.32	18.82	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.

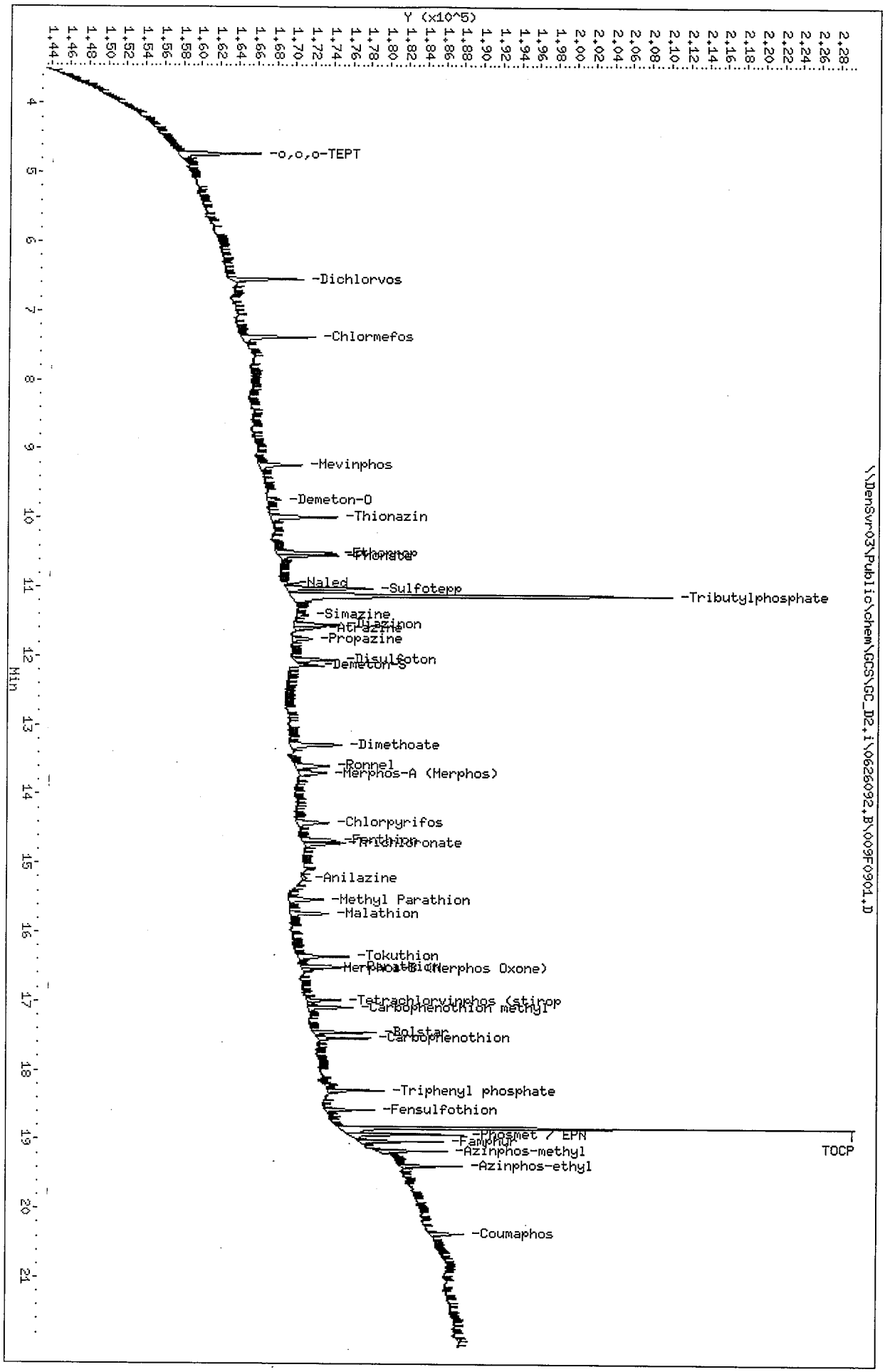
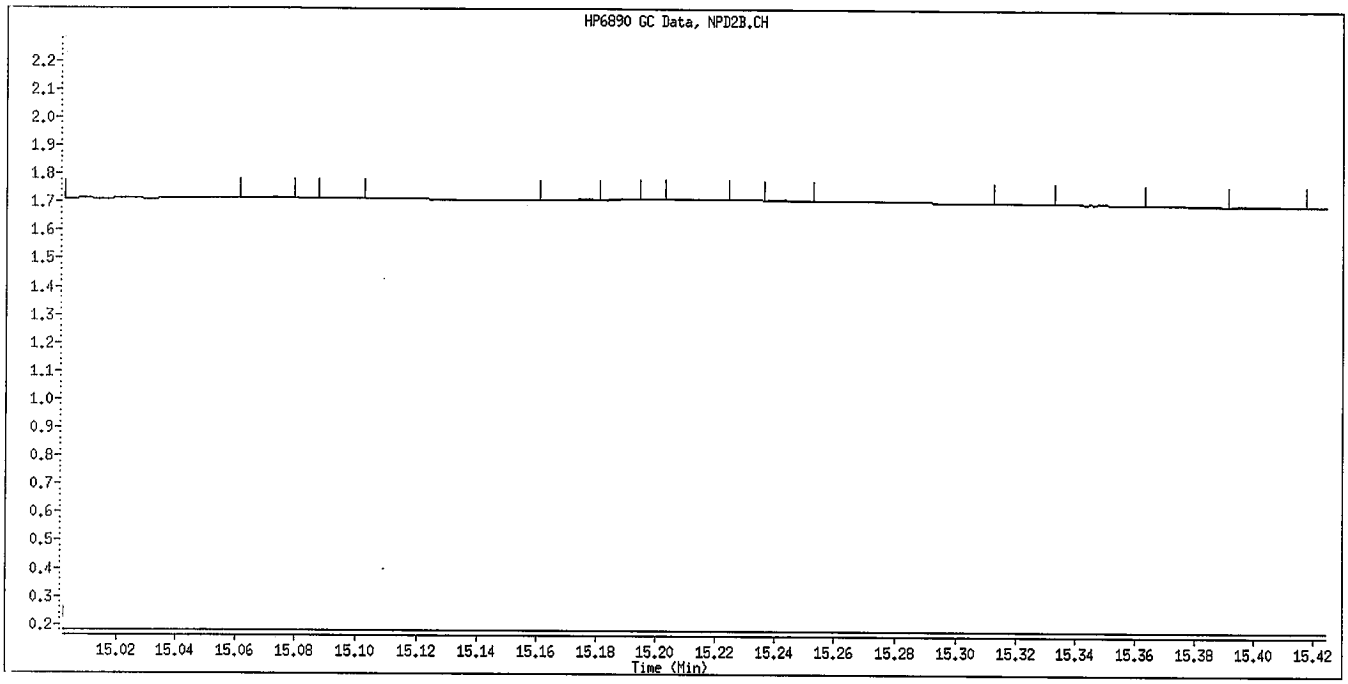
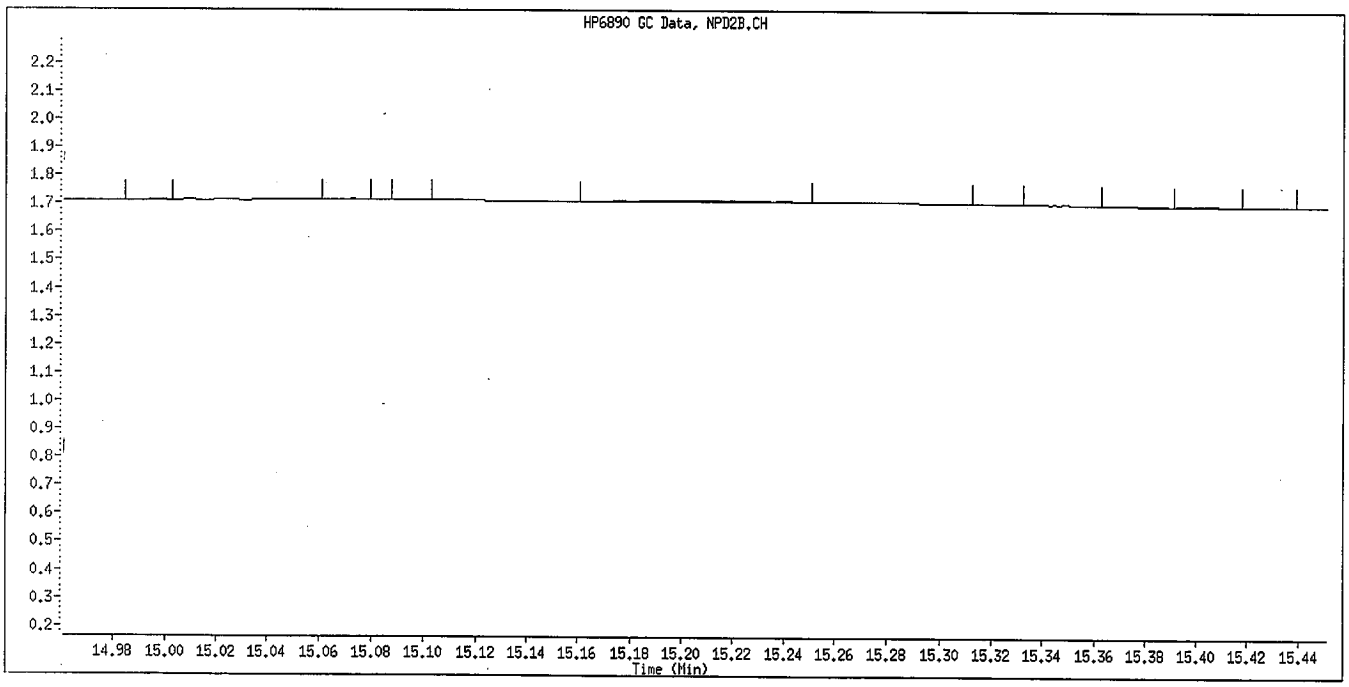

Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\0626092,B\009F0901.D
Date : 26-JUN-2009 21:13
Client ID: OPP L1 GSV0641
Sample Info: OPP L1 GSV0641
Column phase: RTx-OPPest
Instrument: GC_D2,i
Operator: MPK/TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D2,i\0626092,B\009F0901.D
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Chlormefos
-Mevinphos
-Demeton-O
-Thionazin
-Naled
-Sulfotepp
-Tributylphosphate
-Simazine
-Propazine
-Dimethoate
-Ronnel
-Merphos-A (Merphos)
-Chlorpyrifos
-Anilazine
-Methyl Parathion
-Malathion
-Tokuthion
-Tetrachlorvinphos (stirop
-Carbophenothion methyl
-Carbophenothion
-Triphenyl phosphate
-Fensulfothion
-Phosmet / EPN
-Azinphos-methyl
-Azinphos-ethyl
TOCP
-Coumaphos

Table of Contents

Data File Name: 009F0901.D
Inj. Date and Time: 26-JUN-2009 21:13
Instrument ID: GC_D2.i
Client ID: OPP L1 GSV0641
Compound Name: Anilazine
CAS #:
Report Date: 06/30/2009



Original Integration



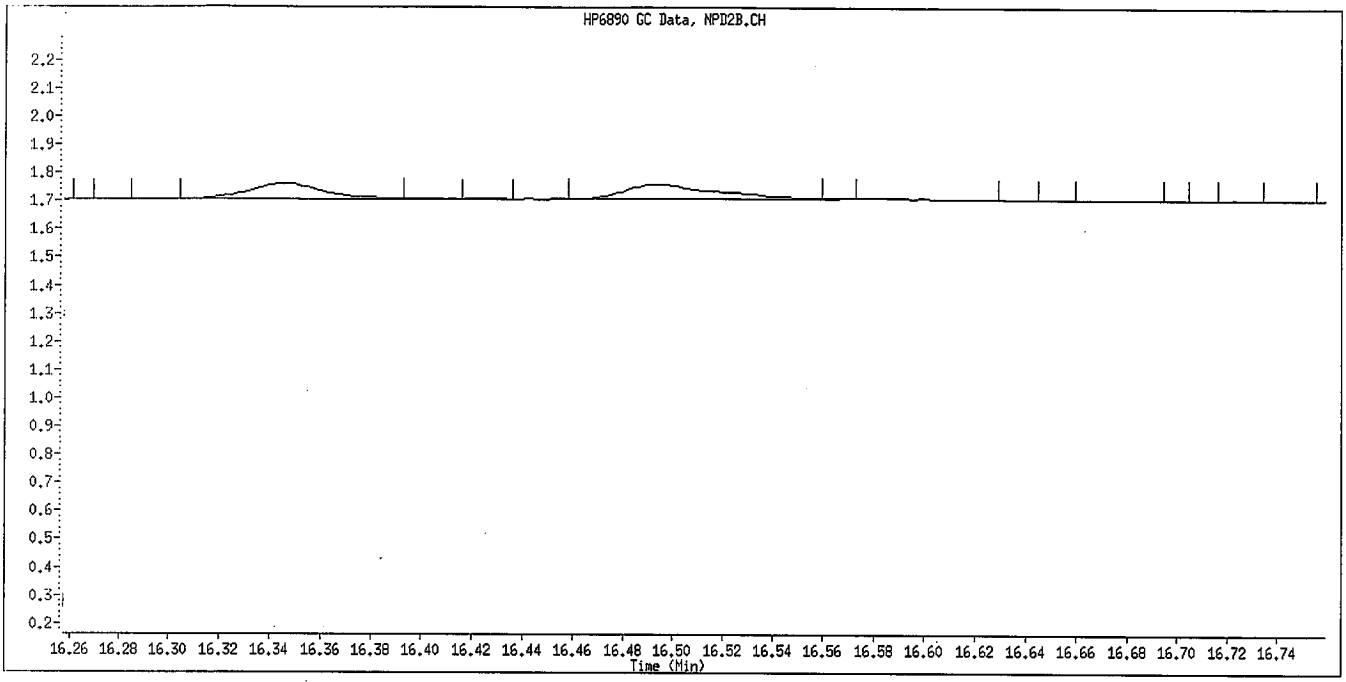
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

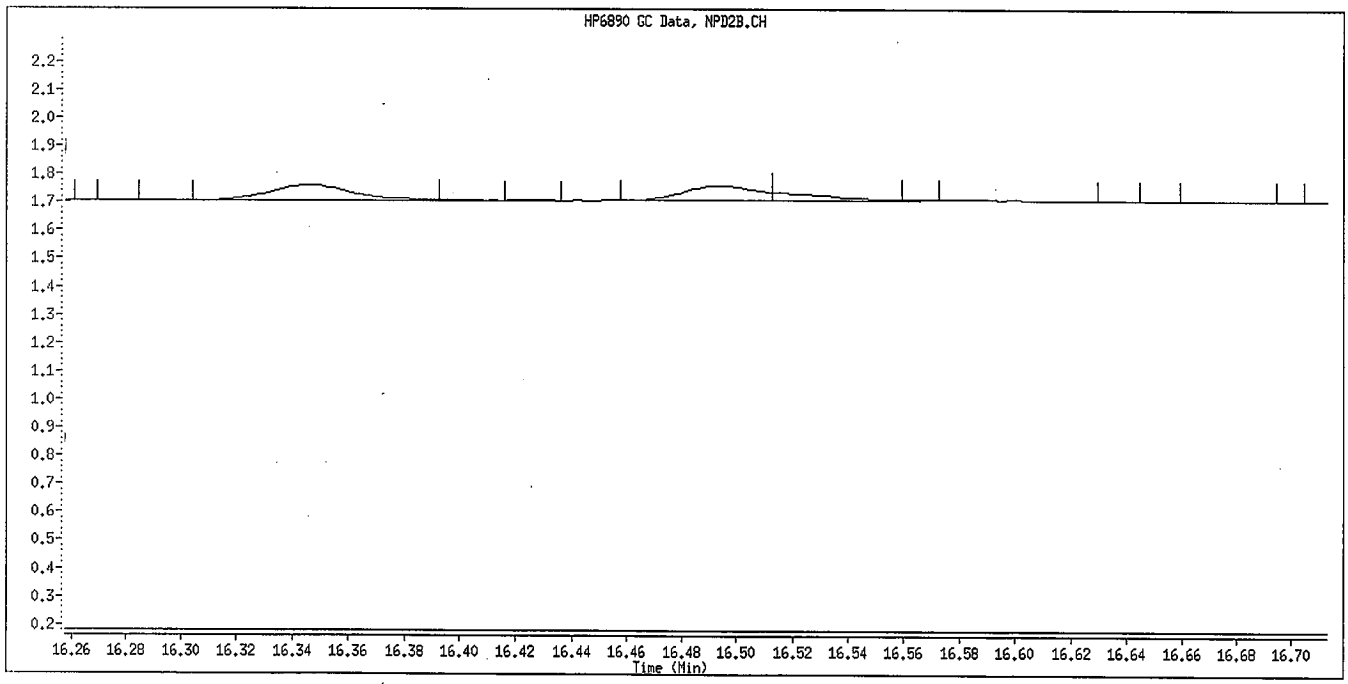
6/30/09

Table of Contents

Data File Name: 009F0901.D
Inj. Date and Time: 26-JUN-2009 21:13
Instrument ID: GC_D2.i
Client ID: OPP L1 GSV0641
Compound Name: Parathion
CAS #:
Report Date: 06/30/2009



Original Integration

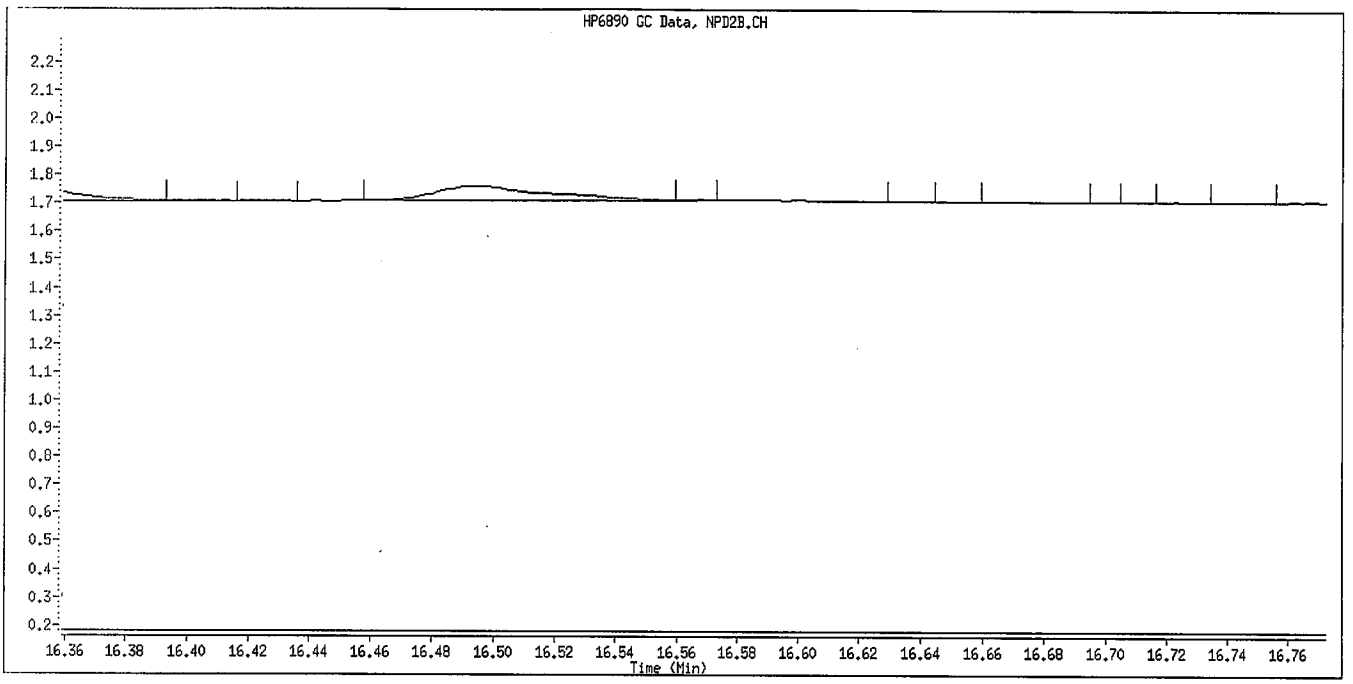


Manual Integration

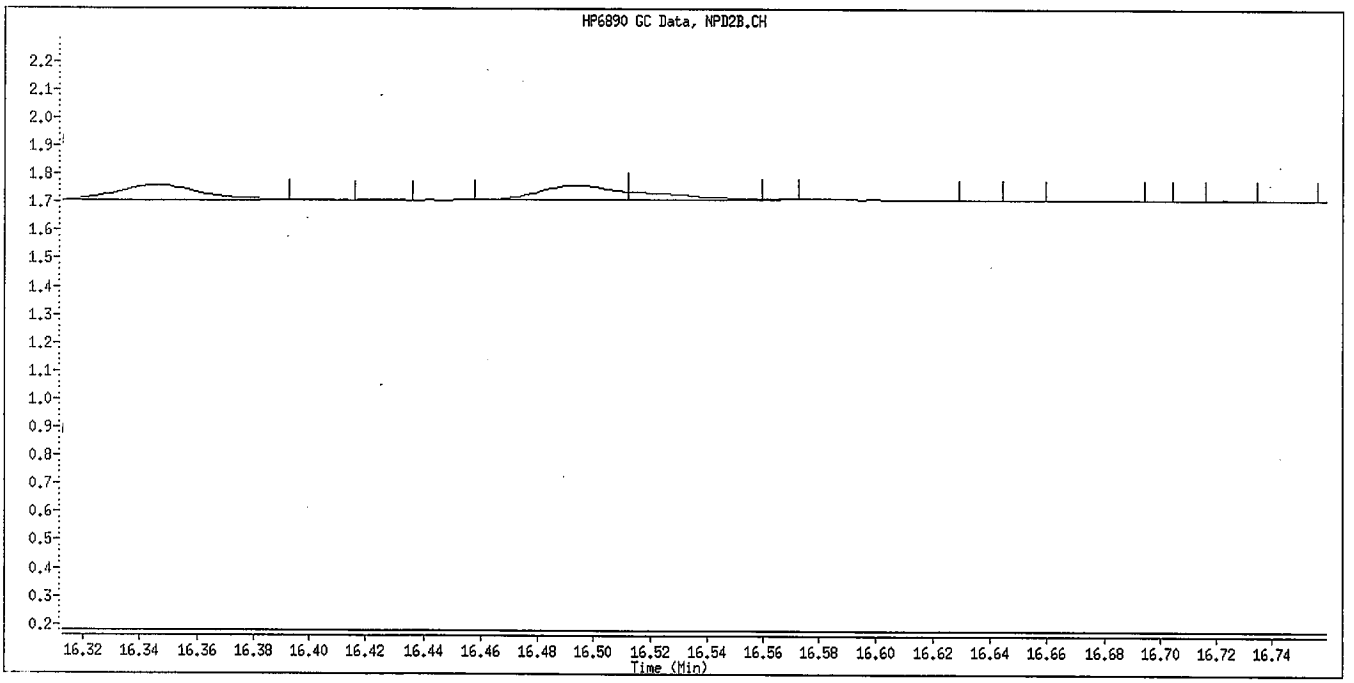
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

Data File Name: 009F0901.D
Inj. Date and Time: 26-JUN-2009 21:13
Instrument ID: GC_D2.i
Client ID: OPP L1 GSV0641
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 06/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

JG 6/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\010F1001.D
Lab Smp Id: OPP SS GSV0633 Client Smp ID: OPP SS GSV0633
Inj Date : 26-JUN-2009 21:40
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP SS GSV0633
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Meth Date : 30-Jun-2009 13:09 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

						AMOUNTS	
	Compounds	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 o,o,o-TEPT	4.728	4.731	(0.251)	178670	2.00000	2.007
	2 Dichlorvos	6.545	6.546	(0.348)	123097	2.00000	1.771
$	3 Chlormefos	7.383	7.384	(0.392)	118669	2.00000	1.696
	4 Mevinphos	9.232	9.234	(0.491)	85996	2.00000	1.836
	5 Demeton-O	9.733	9.734	(0.517)	91352	0.65000	2.047
	6 Thionazin	9.983	9.984	(0.531)	131360	2.00000	1.876
	7 Ethoprop	10.498	10.499	(0.558)	99220	2.00000	1.896
	8 Phorate	10.537	10.539	(0.560)	118380	2.00000	1.951
	9 Naled	10.938	10.939	(0.581)	13173	2.00000	1.049
	10 Sulfotepp	11.017	11.017	(0.586)	156890	2.00000	1.714(A)
*	11 Tributylphosphate	11.115	11.116	(1.000)	123933	2.00000	
	12 Simazine	11.398	11.399	(0.606)	47205	2.00000	3.601(A)
	13 Diazinon	11.540	11.541	(0.613)	101968	2.00000	2.080
	14 Atrazine	11.580	11.584	(0.615)	49851	2.00000	1.969(A)
	15 Propazine	11.745	11.747	(0.624)	42529	2.00000	1.874
	16 Disulfoton	12.048	12.049	(0.640)	81906	2.00000	1.697(M)
	17 Demeton-S	12.120	12.124	(0.644)	4990	1.36000	0.2011(M)
	18 Dimethoate	13.280	13.282	(0.706)	120970	2.00000	1.870
	19 Ronnel	13.587	13.587	(0.722)	87569	2.00000	2.011
	20 Merphos-A (Merphos)	13.687	13.689	(1.231)	24019	2.00000	0.5348(A)
	21 Chlorpyrifos	14.410	14.409	(0.766)	93110	2.00000	2.108
	22 Fenthion	14.660	14.662	(0.779)	84515	2.00000	2.063
	23 Trichloronate	14.708	14.711	(0.782)	105095	2.00000	1.862
	24 Anilazine	15.215	15.216	(0.809)	4699	2.00000	1.242(M)
	25 Methyl Parathion	15.517	15.519	(0.825)	89448	2.00000	2.023(A)
	26 Malathion	15.723	15.724	(0.836)	63638	2.00000	1.536
	27 Tokuthion	16.345	16.344	(0.869)	91793	2.00000	1.892
	28 Parathion	16.493	16.494	(0.877)	92973	2.00000	2.134
	29 Merphos-B (Merphos Oxone)	16.518	16.517	(1.486)	68602	2.00000	5.008(A)
	30 Tetrachlorvinphos (stirophos)	16.975	16.977	(0.902)	58667	2.00000	2.081
	31 Carbophenothion methyl	17.080	17.082	(0.908)	50362	2.00000	1.246
	32 Bolstar	17.440	17.440	(0.927)	88423	2.00000	2.078
	33 Carbophenothion	17.522	17.524	(0.931)	73217	2.00000	1.750(A)

		Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34	Triphenyl phosphate	18.278	18.281	(0.971)	59320	2.00000	1.727
	35	Fensulfothion	18.558	18.559	(0.986)	65657	2.00000	2.082
*	36	TOCP	18.815	18.816	(1.000)	68831	2.00000	
	37	Phosmet / EPN	18.908	18.909	(1.005)	122970	4.00000	3.469
	38	Famphur	19.010	19.011	(1.010)	79361	2.00000	1.758
	39	Azinphos-methyl	19.145	19.147	(1.018)	74782	2.00000	1.811
	40	Azinphos-ethyl	19.363	19.366	(1.029)	70726	2.00000	1.798
	41	Coumaphos	20.347	20.347	(1.081)	59237	2.00000	1.959
S	42	Merphos				92621	2.00000	1.615
M	43	Total Demeton				96342	2.00000	2.248

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

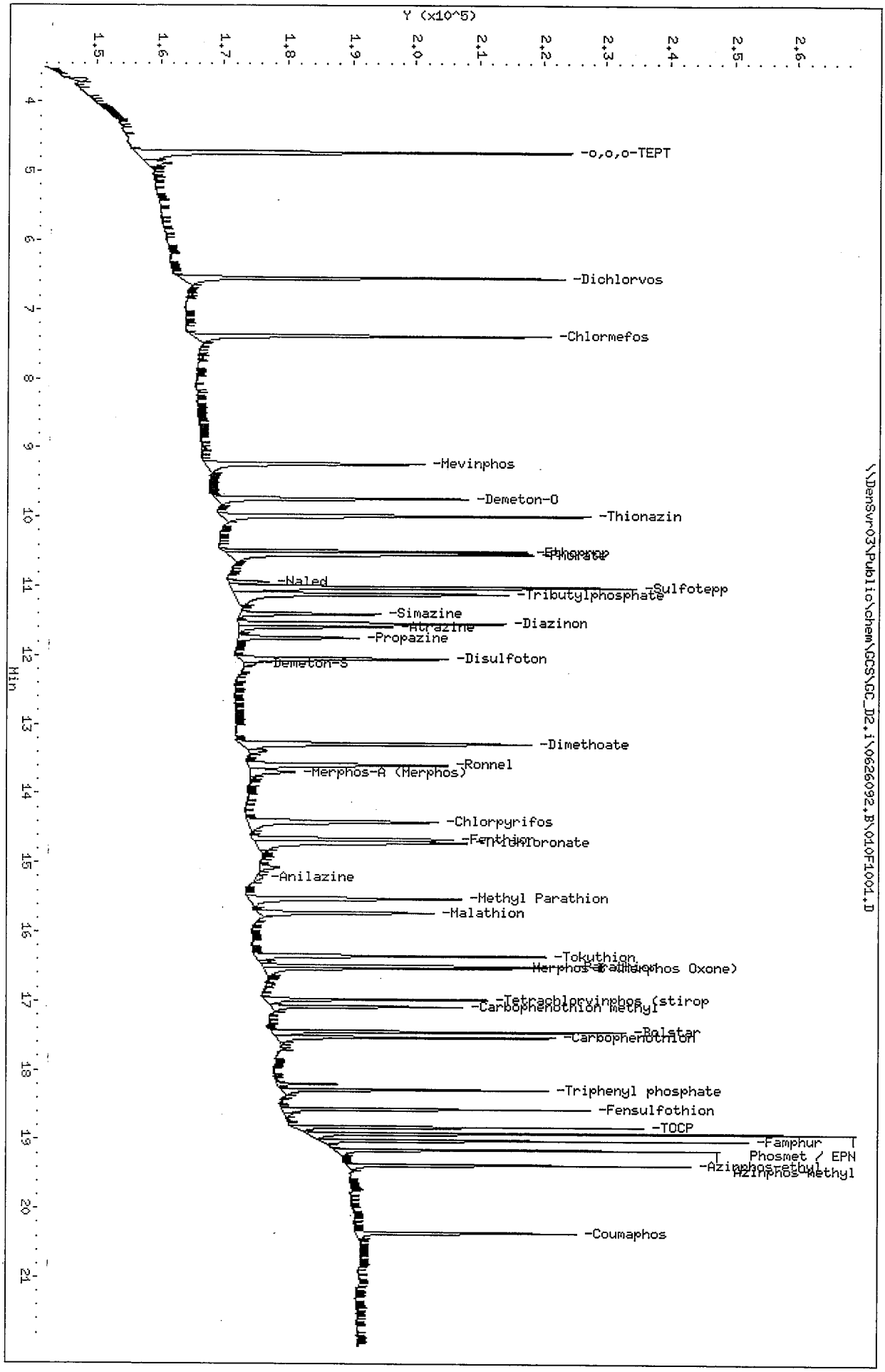
Instrument ID: GC_D2.i
Lab File ID: 010F1001.D
Lab Smp Id: OPP SS GSV0633
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

Calibration Date: 27-JUN-2009
Calibration Time: 04:04
Client Smp ID: OPP SS GSV0633
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	143401	71701	286802	123933	-13.58
36 TOCP	69335	34668	138670	68831	-0.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.12	10.62	11.62	11.12	-0.05
36 TOCP	18.82	18.32	19.32	18.82	-0.01

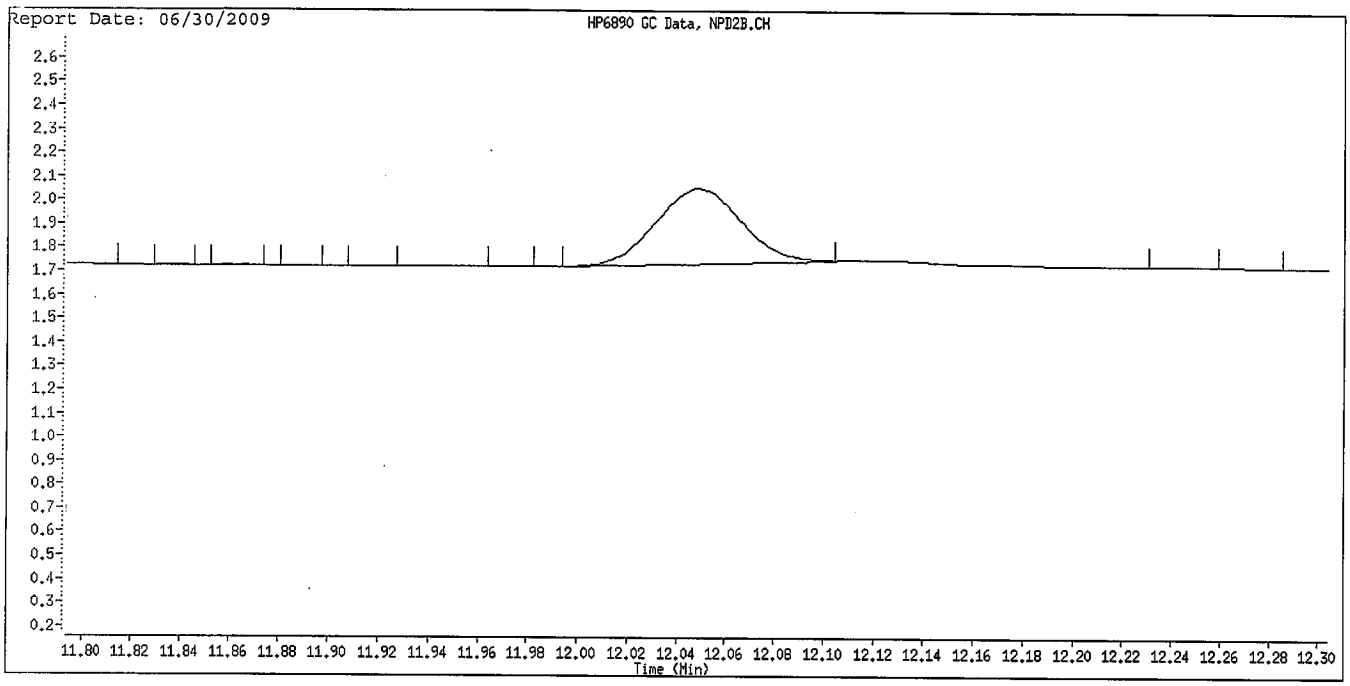
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



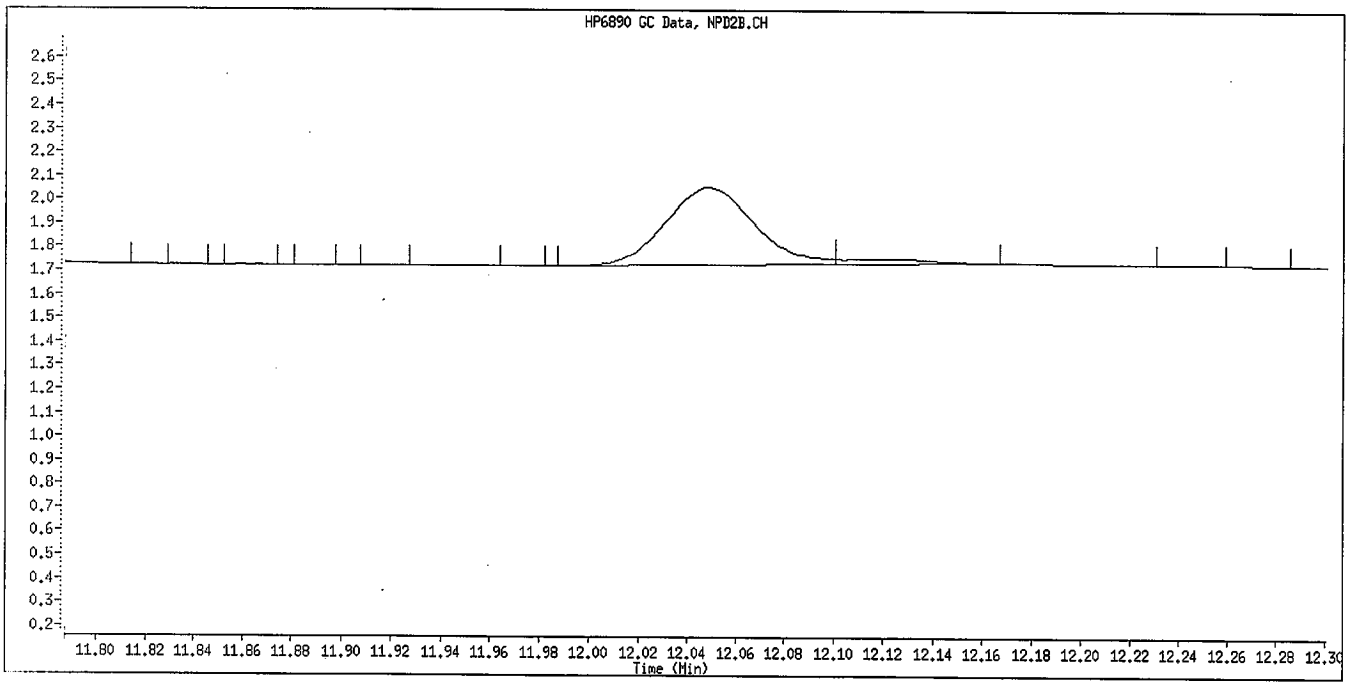
Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\010F1001.D
Date : 26-JUN-2009 21:40
Client ID: OPP SS GSV0633
Sample Info: OPP SS GSV0633
Column phase: RTx-OPPest

Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32

Data File Name: 010F1001.D
Inj. Date and Time: 26-JUN-2009 21:40
Instrument ID: GC_D2.i
Client ID: OPP SS GSV0633
Compound Name: Disulfoton
CAS #: 298-04-4
Report Date: 06/30/2009



Original Integration

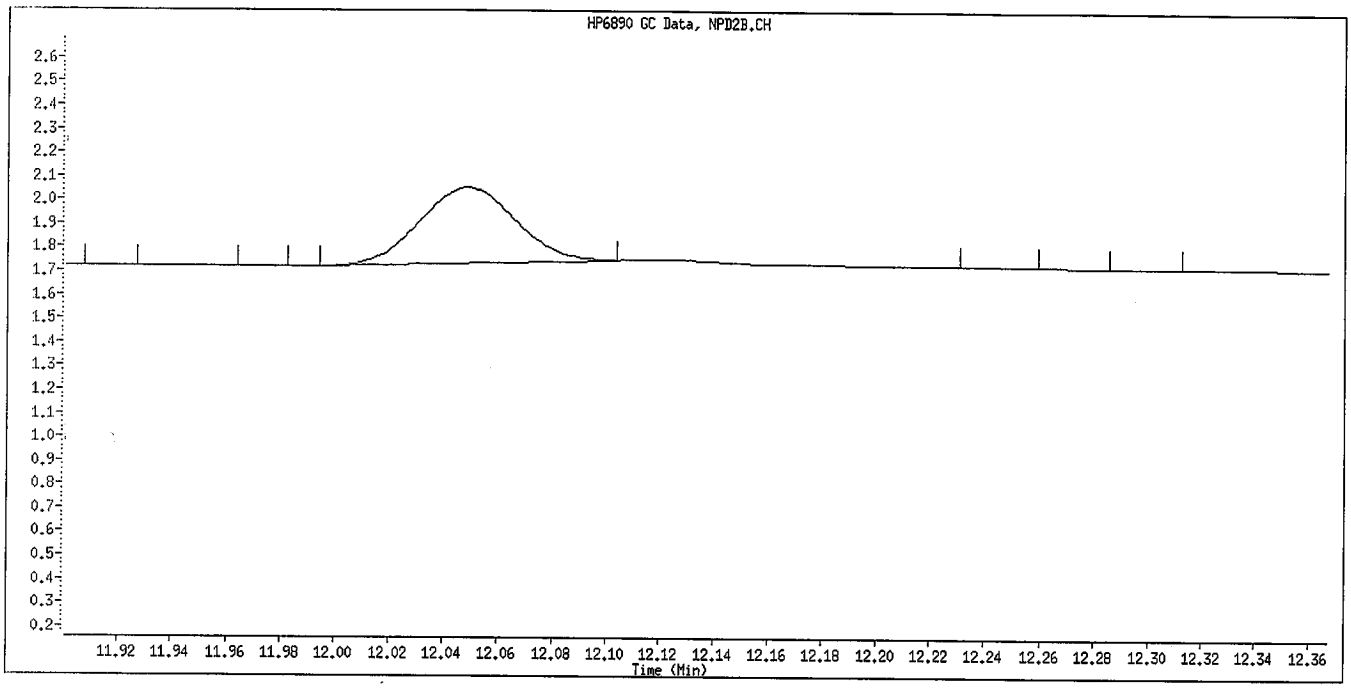


Manual Integration

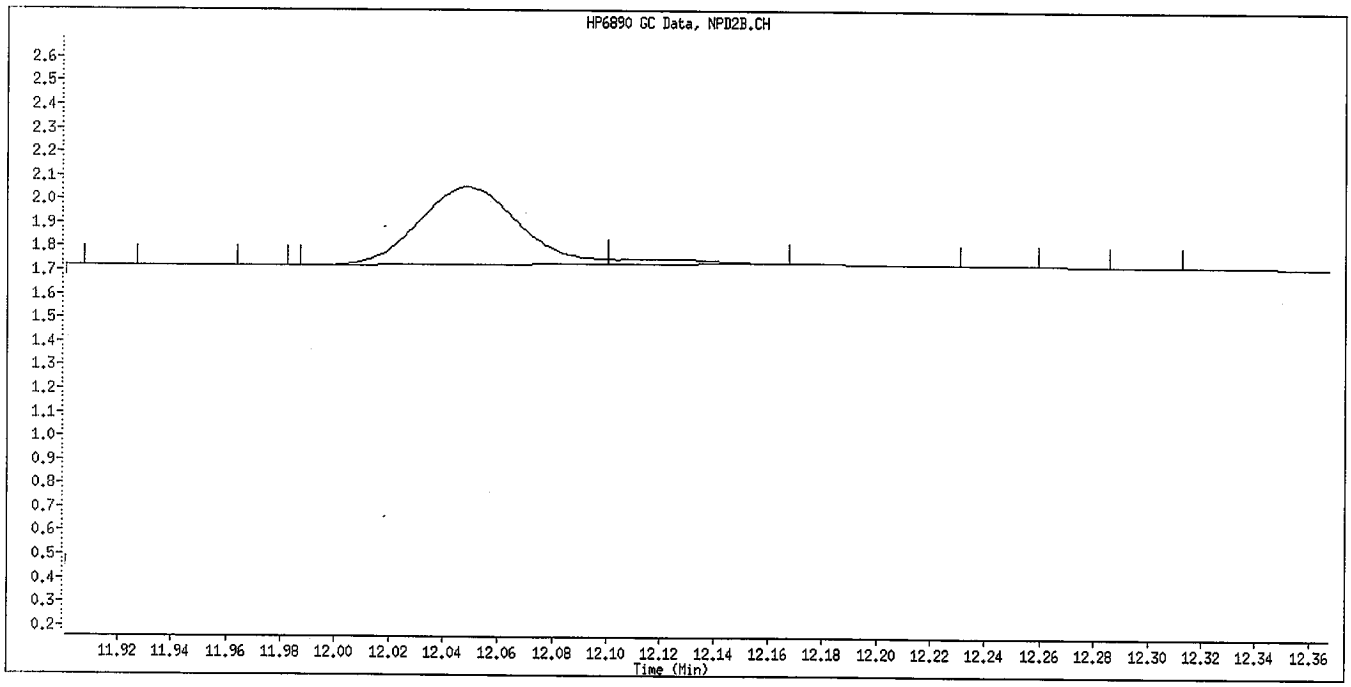
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/07

Data File Name: 010F1001.D
Inj. Date and Time: 26-JUN-2009 21:40
Instrument ID: GC_D2.i
Client ID: OPP SS GSV0633
Compound Name: Demeton-S
CAS #: 126-75-0
Report Date: 06/30/2009



Original Integration

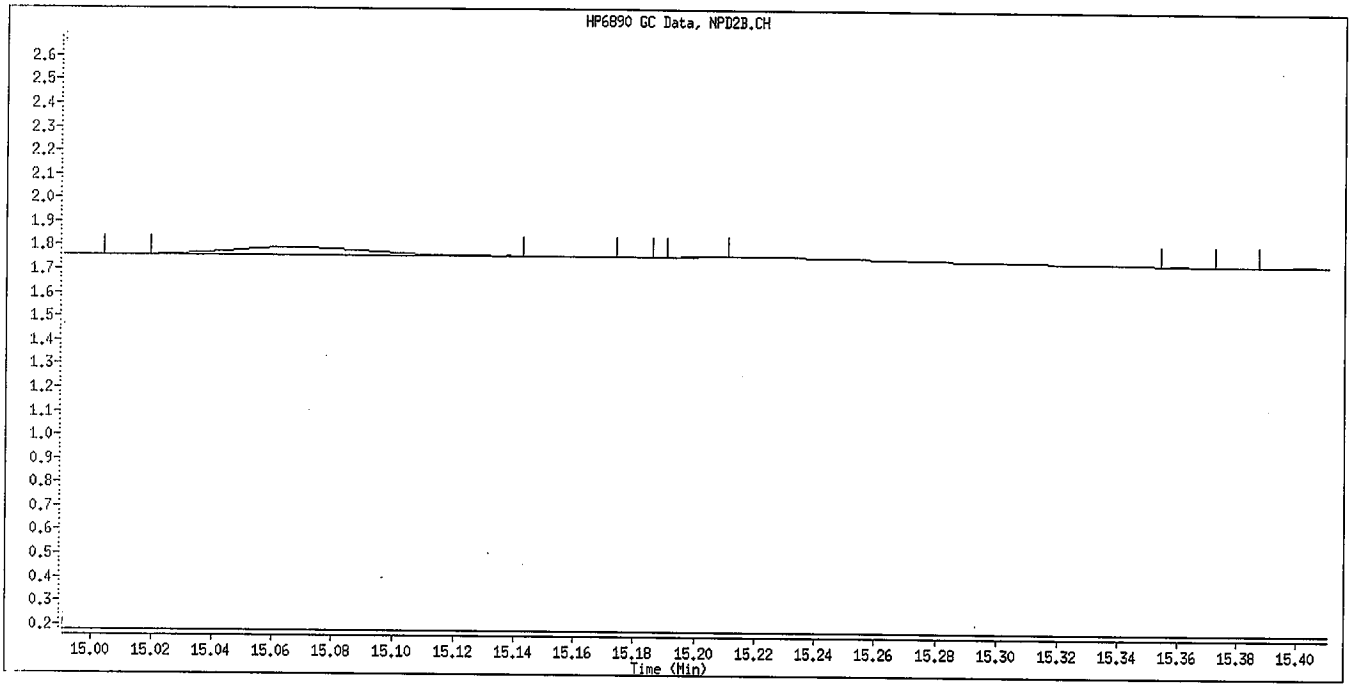


Manual Integration

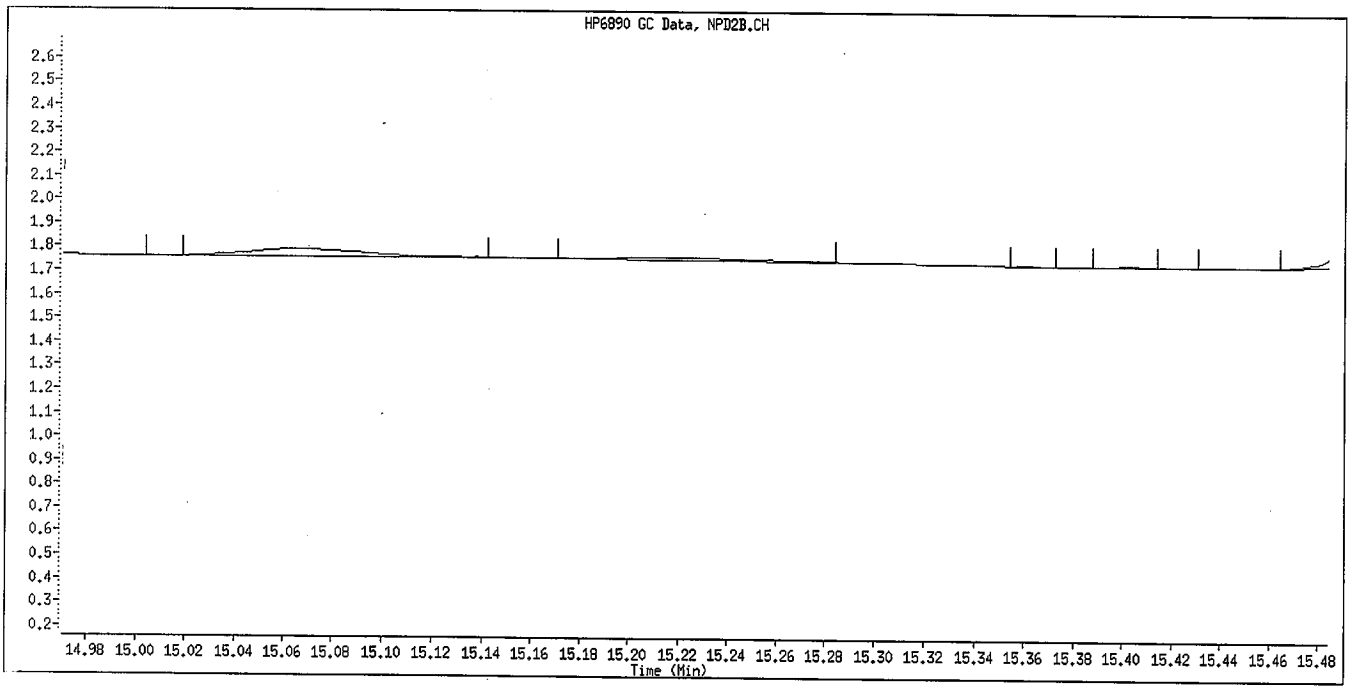
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

Data File Name: 010F1001.D
Inj. Date and Time: 26-JUN-2009 21:40
Instrument ID: GC_D2.i
Client ID: OPP SS GSV0633
Compound Name: Anilazine
CAS #:
Report Date: 06/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

Metals

Supporting Documentation

Sample Sequence, Instrument Printouts

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9F250221

Client: Northgate Environmental

Batch(es) #: 9177109, 9177105

Associated Samples: 1, 2

I certify that, to the best of my knowledge, the attached package represents a complete and accurate copy of the original data.

Signature/Date: 7/2/09

Metals Raw Data RoadMap

LotID		Metal	WorkOrder	Anal Date	TestDesc	Batch	File Id	Instr
D9F250221	1 D	SE	LFLLR1AK	20090702	6020TOTA	9177105	AG070109E	024
D9F250221	1 S	SE	LFLLR1AJ	20090702	6020TOTA	9177105	AG070109E	024
D9F250221	1 D	AS	LFLLR1AH	20090702	6020TOTA	9177105	AG070109E	024
D9F250221	1 S	AS	LFLLR1AG	20090702	6020TOTA	9177105	AG070109E	024
D9F250221	1	SE	LFLLR1AD	20090702	6020TOTA	9177105	AG070109E	024
D9F250221	1	AS	LFLLR1AC	20090702	6020TOTA	9177105	AG070109E	024
D9F250221	2 D	SE	LFLL41AG	20090702	6020DSVD	9177109	AG070109E	024
D9F250221	2 S	SE	LFLL41AF	20090702	6020DSVD	9177109	AG070109E	024
D9F250221	2 D	AS	LFLL41AE	20090702	6020DSVD	9177109	AG070109E	024
D9F250221	2 S	AS	LFLL41AD	20090702	6020DSVD	9177109	AG070109E	024
D9F250221	2	SE	LFLL41AC	20090702	6020DSVD	9177109	AG070109E	024
D9F250221	2	AS	LFLL41AA	20090702	6020DSVD	9177109	AG070109E	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9177109**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 06/29/09
Due Date: 07/07/09

Lot	Work Order			Initial Weight/Volume
D9F260000 Water	**LFM1C**	B	Due Date: SDG:	50 mL
D9F260000 Water	**LFM1C**	C	Due Date: SDG:	50 mL
D9F250221 Water	**LFLL4** Dissolved		Due Date: 07/07/09 SDG:	50 mL
D9F250221 Water	**LFLL4** Dissolved	S	Due Date: 07/07/09 SDG:	50 mL
D9F250221 Water	**LFLL4** Dissolved	D	Due Date: 07/07/09 SDG:	50 mL

Comments:

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE SAMPLE

ICPMS ELEMENTS WITHIN THE BATCH:

AS SE

checked 7/1/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

DISSOLVED WATER DIGESTION FOR ICPMS (Prep code MD)

BATCH # 9177109 **ALLIQUOTTED BY:** JRW
PREP DATE: 6/29/2009 **DIGESTED BY:** JKH

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS267

Were samples filtered in the lab? ☐ Yes ☑ No

If "yes", then the method blank and the LCS were filtered prior to digestion.

Analyst(s) Initials: JKH

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-2636-09	7/1/10	100uL	15
2008Cal-2	STD-2635-09	7/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	2

TEMPERATURE CYCLES

Thermometer ID: 4082 Block & Cup # : 4,16

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3/HCl	6:00	95	11:00	95

Samples and QC revolumed to: 50 mL Analyst's Initials JKH

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kim Hane *Date:* 6/29/09

Batch Number: **9177105**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 06/29/09
Due Date: 07/07/09

Lot	Work Order			Initial Weight/Volume
D9F260000 Water	**LFM05**	B	Due Date: SDG:	50 mL
D9F260000 Water	**LFM05**	C	Due Date: SDG:	50 mL
D9F250221 Water	**LFLLR** Total		Due Date: 07/07/09 SDG:	50 mL
D9F250221 Water	**LFLLR** Total	S	Due Date: 07/07/09 SDG:	50 mL
D9F250221 Water	**LFLLR** Total	D	Due Date: 07/07/09 SDG:	50 mL

Comments:

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE SAMPLE

ICPMS ELEMENTS WITHIN THE BATCH:

AS SE

checked 7/1/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH # 9177105 **ALLIQUOTTED BY:** JRW
PREP DATE: 6/29/2009 **DIGESTED BY:** JKH

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS267

One or more samples were filtered prior to analysis at the instrument. ☐ Yes ☑ No

If "yes", then the method blank and the LCS were also filtered in the same manner using the same type of filter.

Analyst(s) Initials:

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-2636-09	7/1/10	100uL	15
2008Cal-2	STD-2635-09	7/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	3

TEMPERATURE CYCLES

Thermometer ID: 25814 Block & Cup # : 2,9

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	6:00	93	10:30	91
HNO3	10:30	90	11:00	92
HNO3				

Samples and QC revolumed to: 50 mL Analyst's Initials JKH

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kim Ham ***Date:*** 6/29/09

METALS
SAMPLE DATA
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ICP-MS Standard and Spike True Values

Element	Cal. Std. 100 ppb	Initial Calibration Standard	Continuing Calibration Standard	Interference Check Sample A	Interference Check Sample AB	Laboratory Control Sample and Duplicate	Matrix Spike Sample and Duplicate	Post Digestion Spike
Aluminum	100	40	50	100,000 Aluminum	--	40	40	200
Antimony	100	40	50	100,000 Calcium	100	40	40	200
Arsenic	100	40	50	100,000 Iron	100	40	40	200
Barium	100	40	50	100,000 Magnesium	100	40	40	200
Beryllium	100	40	50	100,000 Sodium	100	40	40	200
Cadmium	100	40	50	100,000 Phosphorus	100	40	40	200
Chromium	100	40	50	100,000 Potassium	100	40	40	200
Cobalt	100	40	50	100,000 Sulfur	100	40	40	200
Copper	100	40	50	200,000 Carbon	100	40	40	200
Lead	100	40	50	1,000,000 Chloride	100	40	40	200
Manganese	100	40	50	2000 Molybdenum	--	40	40	200
Molybdenum	100	40	50	2000 Titanium	100	40	40	200
Nickel	100	40	50		100	40	40	200
Selenium	100	40	50		100	40	40	200
Silver	100	40	50		100	40	40	50
Thallium	100	40	50		100	40	40	200
Tin	100	40	50		100	40	40	200
Uranium	100	40	50		100	40	40	200
Vanadium	100	40	50		100	40	40	200
Zinc	100	40	50		100	40	40	200

All units are ug/L.

Due to the presence of trace contaminants in the ICSA solution, the % recovery for the ICSAB solution is calculated by subtracting the levels in the ICSA from the ICSAB.

Quality Control Standards

ICV = Initial Calibration Verification (Second Source)
CCV = Continuing Calibration Verification

ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank

TestAmerica Denver

Standards Preparation Logbook Record

Jul-01-2009

Logbook: \\Densvr06\StdsLog\metals.std

STD4841-08, 1000 Zn (Inorganic Ventures)

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-ZN02045 Vendor's Expiration Date: 10-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 09-04-2008 Date Received: 09-04-2008
Date Expires(1): 10-01-2009 (None)
Date Expires(2): 10-01-2009 (None)
(METALS)-Inventory ID: 779

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1,000.0	1,000.0

STD6653-08, 1000 Se

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SE02003 Vendor's Expiration Date: 12-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 11-25-2008 Date Received: 11-25-2008
Date Expires(1): 12-01-2009 (None)
Date Expires(2): 12-01-2009 (None)
(METALS)-Inventory ID: 803

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1,000.0	1,000.0

STD1198-09, 1000 mg/L Sn

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SN02016 Vendor's Expiration Date: 03-01-2010
Solvent: 1% HNO3
Date Prep./Opened: 03-02-2009 Date Received: 03-02-2009
Date Expires(1): 03-01-2010 (None)
Date Expires(2): 03-01-2010 (None)
(METALS)-Inventory ID: 833

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1,000.0	1,000.0

STD1853-09, 1 mg/l Se

Analyst: DIAZL

Solvent: 5% HN03 Lot No.: H02026 Volume (ml): 100.00
Date Prep./Opened: 04-01-2009
Date Expires(1): 12-01-2009 (1 Year)
pipette: Met 21

Table of Contents

Parent Std No.: STD6653-08, 1000 Se — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 12-01-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1,000.0	1.0000

STD3611-09, ICP-MS 1ppm Sn/Zn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 06-16-2009
Date Expires(1): 10-01-2009 (1 Year)

Parent Std No.: STD3609-09, ICP-MS 10 ppm Zn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 10-01-2009 Parent Date Expires(2): 10-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	10.000	1.0000

Parent Std No.: STD3610-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	10.000	1.0000

STD3662-09, ICP-MS (024) INT STD BRC-HIGH

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 250.00
Date Prep./Opened: 06-17-2009
Date Expires(1): 11-10-2009 (1 Year)
Date Expires(2): 12-01-2009 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD1469-09, Germanium Stock — Aliquot Amount (ml): 1.2000
Parent Date Expires(1): 03-16-2010 Parent Date Expires(2): 04-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ge	1,000.0	4,800.0

Parent Std No.: STD1972-09, Lithium 6 Stock — Aliquot Amount (ml): 1.5000
Parent Date Expires(1): 04-07-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Lithium6	1,000.0	6,000.0

Parent Std No.: STD1973-09, Indium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 04-07-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
In	1,000.0	1,600.0

Parent Std No.: STD6317-08, Scandium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 11-10-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sc	1,000.0	1,600.0

Parent Std No.: STD6318-08, Holmium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 11-10-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ho	1,000.0	1,600.0

STD3913-09, ICP-MS ICSA

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 50.000
Date Prep./Opened: 06-29-2009
Date Expires(1): 07-29-2009 (1 Month)
Date Expires(2): 02-01-2010 (None)
pipettes: Met 8

Parent Std No.: STD0664-09, ICPMS Interferent Check Standard — Aliquot Amount (ml): 5.0000
Parent Date Expires(1): 02-01-2010 Parent Date Expires(2): 02-01-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Al	1,000.0	100,000
C	2,000.0	200,000
Ca	1,000.0	100,000
Cl	10,000	1,000,000
Fe	1,000.0	100,000
K	1,000.0	100,000
Mg	1,000.0	100,000
Mo	20.000	2,000.0
Na	1,000.0	100,000
P	1,000.0	100,000
S	1,000.0	100,000
Ti	20.000	2,000.0

STD3945-09, ICP-MS BLANK

Analyst: DIAZL

Solvent: Water — Volume (ml): 1,000.0
Date Prep./Opened: 07-01-2009
Date Expires(1): 08-01-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD3944-09, NITRIC ACID — Aliquot Amount (ml): 50.000

Component	Initial Conc (%)	Final Conc (%)
HNO3	100.00	5.0000

STD3946-09, ICP-MS 10 ppm Sn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-01-2009
Date Expires(1): 07-02-2009 (1 Day)
Date Expires(2): 03-01-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1198-09, 1000 mg/L Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1,000.0	10.000

STD3947-09, ICP-MS 100 ppb cal

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-01-2009
Date Expires(1): 07-02-2009 (1 Day)
Date Expires(2): 07-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	100.00
Al	20.000	100.00
As	20.000	100.00
Ba	20.000	100.00
Be	20.000	100.00
Cd	20.000	100.00
Co	20.000	100.00
Cr	20.000	100.00
Cu	20.000	100.00
Mn	20.000	100.00
Ni	20.000	100.00
Pb	20.000	100.00
Se	20.000	100.00
Th	20.000	100.00
Tl	20.000	100.00
U	20.000	100.00
V	20.000	100.00
Zn	20.000	100.00

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00

Sb	20.000	100.00

Parent Std No.: STD3862-09, Iron Stock — Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Fe	1,000.0	5,000.0

Parent Std No.: STD3946-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-02-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD3948-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 07-01-2009
Date Expires(1): 07-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures — Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	50.000
Al	20.000	50.000
As	20.000	50.000
Ba	20.000	50.000
Be	20.000	50.000
Cd	20.000	50.000
Co	20.000	50.000
Cr	20.000	50.000
Cu	20.000	50.000
Mn	20.000	50.000
Ni	20.000	50.000
Pb	20.000	50.000
Se	20.000	50.000
Th	20.000	50.000
Tl	20.000	50.000
U	20.000	50.000
V	20.000	50.000
Zn	20.000	50.000

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures — Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	50.000
Sb	20.000	50.000

Parent Std No.: STD3862-09, Iron Stock — Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)

Fe	1,000.0	2,500.0

Parent Std No.: STD3946-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-02-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	50.000

STD3949-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-01-2009
Date Expires(1): 07-02-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD3611-09, ICP-MS 1ppm Sn/Zn — Aliquot Amount (ml): 0.0900

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1.0000	0.0090
1000 Zn	1.0000	0.0090

Parent Std No.: STD3947-09, ICP-MS 100 ppb cal — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-02-2009 Parent Date Expires(2): 07-02-2009

Component	Initial Conc (ug/L)	Final Conc (mg/L)
Ag	100.00	0.0010
Al	100.00	0.0010
As	100.00	0.0010
Ba	100.00	0.0010
Be	100.00	0.0010
Cd	100.00	0.0010
Co	100.00	0.0010
Cr	100.00	0.0010
Cu	100.00	0.0010
Mn	100.00	0.0010
Ni	100.00	0.0010
Pb	100.00	0.0010
Se	100.00	0.0010
Th	100.00	0.0010
Tl	100.00	0.0010
U	100.00	0.0010
V	100.00	0.0010
Zn	100.00	0.0010
Mo	100.00	0.0010
Sb	100.00	0.0010
Fe	5,000.0	0.0500
Sn	100.00	0.0010

STD3950-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-01-2009
Date Expires(1): 07-02-2009 (2 Days)
pipettes: Met 20 and Met 8

Parent Std No.: STD3949-09, ICP-MS RL STD Aliquot Amount (ml): 2.0000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	0.0090	0.0018
1000 Zn	0.0090	0.0018
Ag	0.0010	0.0002
Al	0.0010	0.0002
As	0.0010	0.0002
Ba	0.0010	0.0002
Be	0.0010	0.0002
Cd	0.0010	0.0002
Co	0.0010	0.0002
Cr	0.0010	0.0002
Cu	0.0010	0.0002
Mn	0.0010	0.0002
Ni	0.0010	0.0002
Pb	0.0010	0.0002
Se	0.0010	0.0002
Th	0.0010	0.0002
Tl	0.0010	0.0002
U	0.0010	0.0002
V	0.0010	0.0002
Zn	0.0010	0.0002
Mo	0.0010	0.0002
Sb	0.0010	0.0002
Fe	0.0500	0.0100
Sn	0.0010	0.0002

STD3951-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-01-2009
Date Expires(1): 07-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21, Met 20, and Met 8

Parent Std No.: STD1978-09, ICPMS Interferent Check Standard Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 04-01-2010 Parent Date Expires(2): 04-01-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Al	1,000.0	100,000
C	2,000.0	200,000
Ca	1,000.0	100,000

Cl	10,000	1,000,000
Fe	1,000.0	100,000
K	1,000.0	100,000
Mg	1,000.0	100,000
Mo	20.000	2,000.0
Na	1,000.0	100,000
P	1,000.0	100,000
S	1,000.0	100,000
Ti	20.000	2,000.0

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	100.00
Al	20.000	100.00
As	20.000	100.00
Ba	20.000	100.00
Be	20.000	100.00
Cd	20.000	100.00
Co	20.000	100.00
Cr	20.000	100.00
Cu	20.000	100.00
Mn	20.000	100.00
Ni	20.000	100.00
Pb	20.000	100.00
Se	20.000	100.00
Th	20.000	100.00
Tl	20.000	100.00
U	20.000	100.00
V	20.000	100.00
Zn	20.000	100.00

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	20.000	100.00

Parent Std No.: STD3946-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-02-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD3952-09, ICPMS LR STD 1000 ppb

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-01-2009
Date Expires(1): 07-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20 and Met 8

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	1,000.0
Al	20.000	1,000.0
As	20.000	1,000.0
Ba	20.000	1,000.0
Be	20.000	1,000.0
Cd	20.000	1,000.0
Co	20.000	1,000.0
Cr	20.000	1,000.0
Cu	20.000	1,000.0
Mn	20.000	1,000.0
Ni	20.000	1,000.0
Pb	20.000	1,000.0
Se	20.000	1,000.0
Th	20.000	1,000.0
Tl	20.000	1,000.0
U	20.000	1,000.0
V	20.000	1,000.0
Zn	20.000	1,000.0

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	1,000.0
Sb	20.000	1,000.0

Parent Std No.: STD3946-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 07-02-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	1,000.0

STD3953-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-01-2009
Date Expires(1): 07-02-2009 (1 Day)
Date Expires(2): 02-27-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1213-09, ICPMS ICV SOLUTION A (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Al	10.000	40.000
As	10.000	40.000
Ba	10.000	40.000
Be	10.000	40.000
Cd	10.000	40.000

Co	10.000	40.000
Cr	10.000	40.000
Cu	10.000	40.000
Fe	250.00	1,000.0
Li	10.000	40.000
Mn	10.000	40.000
Ni	10.000	40.000
Pb	10.000	40.000
Se	10.000	40.000
Th	10.000	40.000
Tl	10.000	40.000
U	10.000	40.000
V	10.000	40.000
Zn	10.000	40.000

Parent Std No.: STD1214-09, ICPMS ICV SOLUTION B (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Ag	10.000	40.000
Mo	10.000	40.000
Sb	10.000	40.000
Sn	10.000	40.000
Zr	10.000	40.000

STD3954-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-01-2009
Date Expires(1): 07-02-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD1853-09, 1 mg/l Se Aliquot Amount (ml): 0.1000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1.0000	0.0020

STD3955-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 07-01-2009
Date Expires(1): 07-02-2009 (1 Day)
Date Expires(2): 05-01-2010 (None)
pipettes: Met 20

Parent Std No.: STD3106-09, ICP-MS LLCCV 1 Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	0.5000	5.0000
Al	3.0000	30.000
As	0.5000	5.0000

Ba	0.1000	1.0000
Be	0.1000	1.0000
Ca	5.0000	50.000
Cd	0.1000	1.0000
Co	0.1000	1.0000
Cr	0.2000	2.0000
Cu	0.2000	2.0000
Fe	5.0000	50.000
K	10.000	100.00
Mg	5.0000	50.000
Mn	0.1000	1.0000
Na	5.0000	50.000
Ni	0.2000	2.0000
Pb	0.1000	1.0000
Se	0.5000	5.0000
Th	0.2000	2.0000
Tl	0.1000	1.0000
U	0.1000	1.0000
V	0.5000	5.0000
Zn	1.0000	10.000

Parent Std No.: STD3107-09, ICP-MS LLCCV 2 Aliquot Amount (ml): 1.0000

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	0.2000	2.0000
Sb	0.2000	2.0000
Sn	1.0000	10.000

Reviewed By: LRD 07/01/2009

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/02/09 11:32:16

File ID: AG070109E **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
2	~~Cal Blank~~				~~1.0~~	~~07/01/09 20:52~~	06 1/2/09	☐
3	~~Cal Blank~~				~~1.0~~	07/01/09 20:56	06 1/2/09	☐
4	Cal Blank				1.0	07/01/09 20:59		☐
5	100 ppb				1.0	07/01/09 21:02		☐
6	ICV				1.0	07/01/09 21:06		☐
7	RLIV				1.0	07/01/09 21:09		☐
8	ICB				1.0	07/01/09 21:12		☐
9	RL STD				1.0	07/01/09 21:16		☐
10	AFCEE RL				1.0	07/01/09 21:19		☐
11	ALTSe				1.0	07/01/09 21:23		☐
12	ICSA				1.0	07/01/09 21:26		☐
13	ICSAB				1.0	07/01/09 21:29		☐
14	RINSE				1.0	07/01/09 21:33		☐
15	LR				1.0	07/01/09 21:36		☐
16	RINSE				1.0	07/01/09 21:39		☐
17	CCV				1.0	07/01/09 21:43		☐
18	CCB				1.0	07/01/09 21:46		☐
19	RLCV				1.0	07/01/09 21:49		☐
20	~~LFH8P~~	~~D9F240174-4~~	~~9177141~~	~~04~~	~~1.0~~	~~07/01/09 21:53~~	RT 7/2/09 Did not use.	☐
21	LFH8V	D9F240174-5	9177141	04	1.0	07/01/09 21:56		☐
22	LFH82	D9F240174-6	9177141	04	1.0	07/01/09 22:00		☐
23	LFH84	D9F240174-7	9177141	04	1.0	07/01/09 22:03		☐
24	LFH86	D9F240174-8	9177141	04	1.0	07/01/09 22:06		☐
25	CCV				1.0	07/01/09 22:10		☐
26	CCB				1.0	07/01/09 22:13		☐
27	RLCV				1.0	07/01/09 22:16		☐
28	LFMXEB	D9F260000	9177070	46	1.0	07/01/09 22:20		☐
29	LFMXEC	D9F260000	9177070	46	1.0	07/01/09 22:23		☐
30	LFJ4Q	D9F240290-1	9177070	46	1.0	07/01/09 22:27		☐
31	LFJ4QP5	D9F240290	9177070		5.0	07/01/09 22:30		☐
32	LFJ4QZ	D9F240290-1	9177070		1.0	07/01/09 22:33		☐
33	LFJ4QS	D9F240290-1	9177070	46	1.0	07/01/09 22:37		☐
34	CCV				1.0	07/01/09 22:40		☐
35	CCB				1.0	07/01/09 22:43		☐
36	RLCV				1.0	07/01/09 22:47		☐
37	ICSA				1.0	07/01/09 22:50		☐
38	ICSAB				1.0	07/01/09 22:54		☐
39	WASH				1.0	07/01/09 22:57		☐
40	CCV				1.0	07/01/09 23:00		☐
41	CCB				1.0	07/01/09 23:04		☐
42	RLCV				1.0	07/01/09 23:07		☐
43	LFJ4QD	D9F240290-1	9177070	46	1.0	07/01/09 23:11		☐
44	LFJ5Q	D9F240290-2	9177070	46	1.0	07/01/09 23:14		☐
45	LFJ5W	D9F240290-3	9177070	46	1.0	07/01/09 23:17		☐
46	LFJ52	D9F240290-4	9177070	46	1.0	07/01/09 23:21		☐
47	LFJ6E	D9F240290-5	9177070	46	1.0	07/01/09 23:24		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/02/09 11:32:16

File ID: AG070109E **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
48	CCV				1.0	07/01/09 23:27		
49	CCB				1.0	07/01/09 23:31		
50	RLCV				1.0	07/01/09 23:34		
51	LFJ4Q	D9F240290-1	9177070	46	1.0	07/01/09 23:38	For Confirmation Only, KT 7/2/09	
52	LFJ4QS	D9F240290-1	9177070	46	1.0	07/01/09 23:41		
53	LFJ4QD	D9F240290-1	9177070	46	1.0	07/01/09 23:44		
54	CCV				1.0	07/01/09 23:48		
55	CCB				1.0	07/01/09 23:51		
56	RLCV				1.0	07/01/09 23:55		
57	LFRQMB	D9F290000	9180167	46	1.0	07/01/09 23:58		
58	LFRQMC	D9F290000	9180167	46	1.0	07/02/09 00:01		
59	LFP9Q	D9F260316-10	9180167	46	1.0	07/02/09 00:05		
60	LFP9QP5	D9F260316	9180167		5.0	07/02/09 00:08		
61	LFP9QZ	D9F260316-10	9180167		1.0	07/02/09 00:11		
62	LFP9QS	D9F260316-10	9180167	46	1.0	07/02/09 00:15		
63	CCV				1.0	07/02/09 00:18		
64	CCB				1.0	07/02/09 00:21		
65	RLCV				1.0	07/02/09 00:25		
66	LFP9QD	D9F260316-10	9180167	46	1.0	07/02/09 00:28		
67	LFP9T	D9F260316-11	9180167	46	1.0	07/02/09 00:31		
68	LFP9V	D9F260316-12	9180167	46	1.0	07/02/09 00:35		
69	LFP9W	D9F260316-13	9180167	46	1.0	07/02/09 00:38		
70	LFP9X	D9F260316-14	9180167	46	1.0	07/02/09 00:42		
71	CCV				1.0	07/02/09 00:45		
72	CCB				1.0	07/02/09 00:48		
73	RLCV				1.0	07/02/09 00:52		
74	LFRVMB	D9F290000	9180256	04	1.0	07/02/09 00:55		
75	LFRVMC	D9F290000	9180256	04	1.0	07/02/09 00:58		
76	LFNLV	D9F260137-1	9180256	04	1.0	07/02/09 01:02		
77	LFNLVP5	D9F260137	9180256		5.0	07/02/09 01:05		
78	LFNLVZ	D9F260137-1	9180256		1.0	07/02/09 01:09		
79	LFNLVS	D9F260137-1	9180256	04	1.0	07/02/09 01:12		
80	LFNLVD	D9F260137-1	9180256	04	1.0	07/02/09 01:15		
81	LFN1C	D9F260180-1	9180256	04	1.0	07/02/09 01:19		
82	LFN17	D9F260180-2	9180256	04	1.0	07/02/09 01:22		
83	CCV				1.0	07/02/09 01:25		
84	CCB				1.0	07/02/09 01:29		
85	RLCV				1.0	07/02/09 01:32		
86	LFP17	D9F260284-1	9180256	04	1.0	07/02/09 01:36		
87	LFP19	D9F260284-2	9180256	04	1.0	07/02/09 01:39		
88	LFP2A	D9F260284-3	9180256	04	1.0	07/02/09 01:42		
89	LFP2C	D9F260284-4	9180256	04	1.0	07/02/09 01:46		
90	LFP2D	D9F260284-5	9180256	04	1.0	07/02/09 01:49		
91	LFP2E	D9F260284-6	9180256	04	1.0	07/02/09 01:52		
92	LFP2J	D9F260284-7	9180256	04	1.0	07/02/09 01:56		
93	LFNV6	D9F260164-1	9180256	MS	1.0	07/02/09 01:59		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/02/09 11:32:16

File ID: AG070109E **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
94	CCV				1.0	07/02/09 02:03		
95	CCB				1.0	07/02/09 02:06		
96	RLCV				1.0	07/02/09 02:09		
97	LFK6T	D9F250165-9	9177213	04	1.0	07/02/09 02:13		
98	LFK6W	D9F250165-10	9177213	04	1.0	07/02/09 02:16		
99	LFK6X	D9F250165-11	9177213	04	1.0	07/02/09 02:20		
100	LFK66	D9F250165-12	9177213	04	1.0	07/02/09 02:23		
101	LFK7A	D9F250165-13	9177213	04	1.0	07/02/09 02:26		
102	LFK7G	D9F250165-14	9177213	04	1.0	07/02/09 02:30		
103	LFK7L	D9F250165-15	9177213	04	1.0	07/02/09 02:33		
104	CCV				1.0	07/02/09 02:37		
105	CCB				1.0	07/02/09 02:40		
106	RLCV				1.0	07/02/09 02:43		
107	~~RINSE~~				~~1.0~~	~~07/02/09 02:47~~		
108	RINSE				1.0	07/02/09 02:50		
109	RINSE				1.0	07/02/09 02:53		
110	RINSE				1.0	07/02/09 02:57		
111	RINSE				1.0	07/02/09 03:00		
112	RINSE				1.0	07/02/09 03:03		
113	~~Cal Blank~~				1.0	07/02/09 03:07	VT 7/2/09	
114	Cal Blank				1.0	07/02/09 03:10		
115	100 ppb				1.0	07/02/09 03:13		
116	CCV				1.0	07/02/09 03:17		
117	CCB				1.0	07/02/09 03:20		
118	RLCV				1.0	07/02/09 03:24		
119	LFM1CBF	D9F260000	9177109	MD	1.0	07/02/09 03:27		
120	LFM1CCF	D9F260000	9177109	MD	1.0	07/02/09 03:30		
121	LFLL4F 10X	D9F250221-2	9177109	MD	10.0	07/02/09 03:34		
122	LFLL4P50F	D9F250221	9177109		50.0	07/02/09 03:37		
123	LFLL4ZF	D9F250221-2	9177109		1.0	07/02/09 03:41		
124	LFLL4SF 10X	D9F250221-2	9177109	MD	10.0	07/02/09 03:44		
125	LFLL4DF 10X	D9F250221-2	9177109	MD	10.0	07/02/09 03:47		
126	CCV				1.0	07/02/09 03:51		
127	CCB				1.0	07/02/09 03:54		
128	RLCV				1.0	07/02/09 03:57		
129	LFM05B	D9F260000	9177105	MS	1.0	07/02/09 04:01		
130	LFM05C	D9F260000	9177105	MS	1.0	07/02/09 04:04		
131	LFLLR 10X	D9F250221-1	9177105	MS	10.0	07/02/09 04:08		
132	LFLLRP10	D9F250221	9177105		10.0	07/02/09 04:11		
133	LFLLRZ	D9F250221-1	9177105		1.0	07/02/09 04:14		
134	LFLLRS 10X	D9F250221-1	9177105	MS	10.0	07/02/09 04:18		
135	LFLLRD 10X	D9F250221-1	9177105	MS	10.0	07/02/09 04:21		
136	CCV				1.0	07/02/09 04:25		
137	CCB				1.0	07/02/09 04:28		
138	RLCV				1.0	07/02/09 04:31		
139	~~RINSE~~				~~1.0~~	~~07/02/09 04:35~~	VT 7/2/09	

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/02/09 11:32:16

File ID: AG070109E **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
140	~~RINSE~~				~~1.0~~	~~07/02/09 04:38~~		
141	RINSE				1.0	07/02/09 04:41		
142	RINSE				1.0	07/02/09 04:45		
143	RINSE				1.0	07/02/09 04:48		
144	RINSE				1.0	07/02/09 04:52		
145	~~Cal Blank~~				~~1.0~~	~~07/02/09 04:55~~	VT 7/2/09	
146	Cal Blank				1.0	07/02/09 04:58		
147	100 ppb				1.0	07/02/09 05:02		
148	CCV				1.0	07/02/09 05:05		
149	CCB				1.0	07/02/09 05:08		
150	RLCV				1.0	07/02/09 05:12		
151	LFM69BF	D9F260000	9177180	MD	1.0	07/02/09 05:15		
152	LFM69CF	D9F260000	9177180	MD	1.0	07/02/09 05:18		
153	LFH0FF	D9F240146-1	9177180	MD	1.0	07/02/09 05:22		
154	LFH1MF	D9F240146-2	9177180	MD	1.0	07/02/09 05:25		
155	LFH1PF	D9F240146-3	9177180	MD	1.0	07/02/09 05:29		
156	LFH1QF	D9F240146-4	9177180	MD	1.0	07/02/09 05:32		
157	LFH1RF	D9F240146-5	9177180	MD	1.0	07/02/09 05:36		
158	LFH1VF	D9F240146-6	9177180	MD	1.0	07/02/09 05:39		
159	LFH1XF	D9F240146-7	9177180	MD	1.0	07/02/09 05:42		
160	CCV				1.0	07/02/09 05:46		
161	CCB				1.0	07/02/09 05:49		
162	RLCV				1.0	07/02/09 05:52		
163	LFH12F	D9F240146-8	9177180	MD	1.0	07/02/09 05:56		
164	LFH13F	D9F240146-9	9177180	MD	1.0	07/02/09 05:59		
165	LFH13P5F	D9F240146	9177180		5.0	07/02/09 06:03		
166	LFH13ZF	D9F240146-9	9177180		1.0	07/02/09 06:06		
167	LFH13SF	D9F240146-9	9177180	MD	1.0	07/02/09 06:09		
168	LFH13DF	D9F240146-9	9177180	MD	1.0	07/02/09 06:13		
169	LFH15F	D9F240146-10	9177180	MD	1.0	07/02/09 06:16		
170	LFH16F	D9F240146-11	9177180	MD	1.0	07/02/09 06:20		
171	CCV				1.0	07/02/09 06:23		
172	CCB				1.0	07/02/09 06:26		
173	RLCV				1.0	07/02/09 06:30		
174	LFM3VB	D9F260000	9177160	04	1.0	07/02/09 06:33		
175	LFM3VC	D9F260000	9177160	04	1.0	07/02/09 06:37		
176	LFH0F	D9F240146-1	9177160	04	1.0	07/02/09 06:40		
177	LFH1M	D9F240146-2	9177160	04	1.0	07/02/09 06:43		
178	LFH1P	D9F240146-3	9177160	04	1.0	07/02/09 06:47		
179	LFH1PP5	D9F240146	9177160		5.0	07/02/09 06:50		
180	LFH1PZ	D9F240146-3	9177160		1.0	07/02/09 06:53		
181	LFH1PS	D9F240146-3	9177160	04	1.0	07/02/09 06:57		
182	LFH1PD	D9F240146-3	9177160	04	1.0	07/02/09 07:00		
183	CCV				1.0	07/02/09 07:04		
184	CCB				1.0	07/02/09 07:07		
185	RLCV				1.0	07/02/09 07:10		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/02/09 11:32:16

File ID: AG070109E **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
186	LFH1Q	D9F240146-4	9177160	04	1.0	07/02/09 07:14		
187	LFH1R	D9F240146-5	9177160	04	1.0	07/02/09 07:17		
188	LFH1V	D9F240146-6	9177160	04	1.0	07/02/09 07:21		
189	LFH1X	D9F240146-7	9177160	04	1.0	07/02/09 07:24		
190	LFH12	D9F240146-8	9177160	04	1.0	07/02/09 07:27		
191	LFH13	D9F240146-9	9177160	04	1.0	07/02/09 07:31		
192	LFH15	D9F240146-10	9177160	04	1.0	07/02/09 07:34		
193	LFH16	D9F240146-11	9177160	04	1.0	07/02/09 07:37		
194	CCV				1.0	07/02/09 07:41		
195	CCB				1.0	07/02/09 07:44		
196	RLCV				1.0	07/02/09 07:48		
197	~~RINSE~~				1.0	~~07/02/09 07:51~~		
198	RINSE				1.0	07/02/09 07:54		
199	RINSE				1.0	07/02/09 07:58		
200	RINSE				1.0	07/02/09 08:01		
201	RINSE				1.0	07/02/09 08:04		
202	RINSE				1.0	07/02/09 08:08		
203	~~Cal Blank~~				1.0	~~07/02/09 08:11~~	WT 7/2/09	
204	Cal Blank				1.0	07/02/09 08:15		
205	100 ppb				1.0	07/02/09 08:18		
206	CCV				1.0	07/02/09 08:21		
207	CCB				1.0	07/02/09 08:25		
208	RLCV				1.0	07/02/09 08:28		
209	LFNC4BF	D9F260000	9177203	MD	1.0	07/02/09 08:31		
210	LFNC4CF	D9F260000	9177203	MD	1.0	07/02/09 08:35		
211	LFK57F	D9F250164-1	9177203	MD	1.0	07/02/09 08:38		
212	LFK9DF	D9F250164-2	9177203	MD	1.0	07/02/09 08:42		
213	LFK9EF	D9F250164-3	9177203	MD	1.0	07/02/09 08:45		
214	LFK9GF	D9F250164-4	9177203	MD	1.0	07/02/09 08:48		
215	LFK9JF	D9F250164-5	9177203	MD	1.0	07/02/09 08:52		
216	LFK9KF	D9F250164-6	9177203	MD	1.0	07/02/09 08:55		
217	LFK9LF	D9F250164-7	9177203	MD	1.0	07/02/09 08:59		
218	CCV				1.0	07/02/09 09:02		
219	CCB				1.0	07/02/09 09:05		
220	RLCV				1.0	07/02/09 09:09		
221	LFK9MF	D9F250164-8	9177203	MD	1.0	07/02/09 09:12		
222	LFK9PF	D9F250164-9	9177203	MD	1.0	07/02/09 09:16		
223	LFK9PP5F	D9F250164	9177203		5.0	07/02/09 09:19		
224	LFK9PZF	D9F250164-9	9177203		1.0	07/02/09 09:22		
225	LFK9PSF	D9F250164-9	9177203	MD	1.0	07/02/09 09:26		
226	LFK9PDF	D9F250164-9	9177203	MD	1.0	07/02/09 09:29		
227	LFK9RF	D9F250164-10	9177203	MD	1.0	07/02/09 09:33		
228	LFK9VF	D9F250164-12	9177203	MD	1.0	07/02/09 09:36		
229	CCV				1.0	07/02/09 09:39		
230	CCB				1.0	07/02/09 09:43		
231	RLCV				1.0	07/02/09 09:46		

Denver RUN SUMMARY

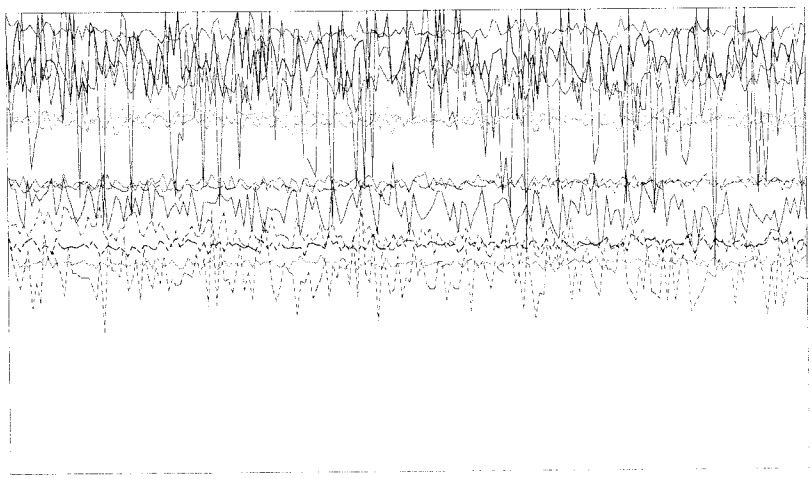
Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/02/09 11:32:16

File ID: AG070109E **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
232	LFM81B	D9F260000	9177190	04	1.0	07/02/09 09:49		☐
233	LFM81C	D9F260000	9177190	04	1.0	07/02/09 09:53		☐
234	LFK57	D9F250164-1	9177190	04	1.0	07/02/09 09:56		☐
235	LFK9D	D9F250164-2	9177190	04	1.0	07/02/09 10:00		☐
236	LFK9E	D9F250164-3	9177190	04	1.0	07/02/09 10:03		☐
237	LFK9EP5	D9F250164	9177190		5.0	07/02/09 10:07		☐
238	LFK9EZ	D9F250164-3	9177190		1.0	07/02/09 10:10		☐
239	LFK9ES	D9F250164-3	9177190	04	1.0	07/02/09 10:13		☐
240	LFK9ED	D9F250164-3	9177190	04	1.0	07/02/09 10:17		☐
241	CCV				1.0	07/02/09 10:20		☐
242	CCB				1.0	07/02/09 10:24		☐
243	RLCV				1.0	07/02/09 10:27		☐
244	LFK9G	D9F250164-4	9177190	04	1.0	07/02/09 10:30		☐
245	LFK9J	D9F250164-5	9177190	04	1.0	07/02/09 10:34		☐
246	LFK9K	D9F250164-6	9177190	04	1.0	07/02/09 10:37		☐
247	LFK9L	D9F250164-7	9177190	04	1.0	07/02/09 10:41		☐
248	LFK9M	D9F250164-8	9177190	04	1.0	07/02/09 10:44		☐
249	LFK9P	D9F250164-9	9177190	04	1.0	07/02/09 10:47		☐
250	LFK9R	D9F250164-10	9177190	04	1.0	07/02/09 10:51		☐
251	LFK9V	D9F250164-12	9177190	04	1.0	07/02/09 10:54		☐
252	CCV				1.0	07/02/09 10:58		☐
253	CCB				1.0	07/02/09 11:01		☐
254	RLCV				1.0	07/02/09 11:04		☐

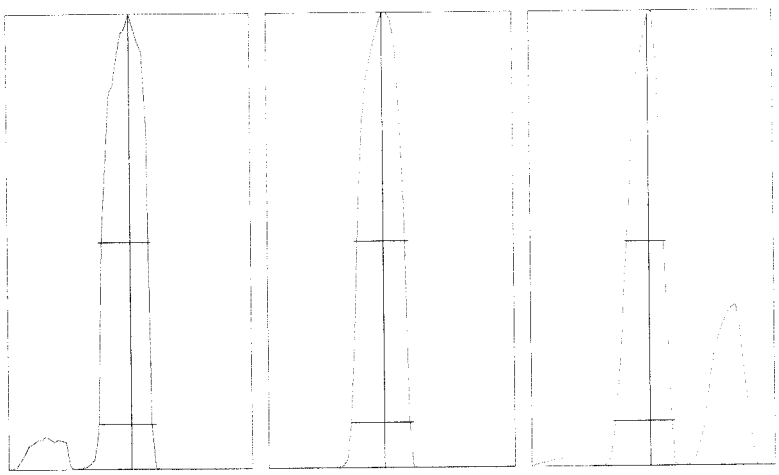
Tune Report

Tune File : NORM.U
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	1.5300 sec	
n:	200	
Oxide:	156/140	1.687%
Doubly Charged:	70/140	1.074%

m/z	Range	Count	Mean	RSD%	Background
6	1,000	859.0	849.1	3.95	0.70
7	20,000	12670.0	12534.5	1.61	1.20
59	50,000	23148.0	22596.1	1.62	0.90
63	500	270.0	286.1	6.30	0.80
70	500	471.0	448.9	5.14	1.30
75	50	44.0	41.8	17.22	1.60
78	1,000	523.0	509.3	5.46	1.00
89	50,000	38253.0	37859.4	1.68	1.10
115	50,000	38483.0	38582.6	1.65	1.60
118	200	82.0	85.6	11.12	1.10
137	10,000	4779.0	4917.8	1.99	1.70
205	50,000	30531.0	31019.4	1.47	3.00
238	50,000	47756.0	47621.5	1.42	4.10
156/140	5	1.729%	1.705%	4.76	
70/140	2	1.140%	1.074%	5.48	



m/z:	7	89	205
Height:	12,774	37,914	31,599
Axis:	7.05	88.95	205.00
W-50%:	0.65	0.65	0.50
W-10%:	0.700	0.7500	0.7500

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : Jul 01, 2009 17:56:12
Printed : Jul 01, 2009 17:56:15

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1550 W	Extract 1	:	0 V	AMU Gain	:	133
RF Matching	:	1.7 V	Extract 2	:	-175 V	AMU Offset	:	123
Smpl Depth	:	7 mm	Omega Bias-ce	:	-30 V	Axis Gain	:	1.0006
Torch-H	:	-0.8 mm	Omega Lens-ce	:	-0.2 V	Axis Offset	:	-0.02
Torch-V	:	-0.3 mm	Cell Entrance	:	-30 V	QP Bias	:	-10 V
Carrier Gas	:	0.83 L/min	QP Focus	:	5 V			
Makeup Gas	:	0.1 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1720 V
Sample Pump	:	--- rps	OctP RF	:	180 V	Pulse HV	:	1390 V
S/C Temp	:	2 degC	OctP Bias	:	-18 V			

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

P/A Factor Tuning Report

Acquired:Jul 1 2009 06:07 pm

Mass[amu]	Element	P/A Factor
6	Li	0.059981
7	(Li)	Sensitivity too low
9	Be	0.067930
45	Sc	0.081974
51	V	0.083074
52	Cr	0.087011
53	(Cr)	Sensitivity too low
55	Mn	0.088949
59	Co	0.092292
60	Ni	0.093733
63	Cu	0.096031
66	Zn	0.095591
72	Ge	0.094453
75	As	0.093571
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
95	Mo	0.094470
98	(Mo)	0.094755
99	(Mo)	0.096235
106	(Cd)	0.100400
107	Ag	Sensitivity too low
108	(Cd)	0.101040
111	Cd	0.101662
114	Cd	0.101639
115	In	0.100681
118	Sn	0.100421
121	Sb	0.100245
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
205	Tl	0.110009
206	(Pb)	0.109090
207	(Pb)	0.109181
208	Pb	0.108889
232	Th	0.107370
238	U	0.107425

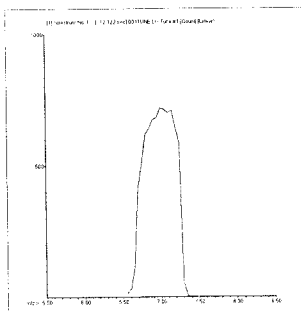
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1720 V
Pulse HV: 1390 V

200.8 QC Tune Report

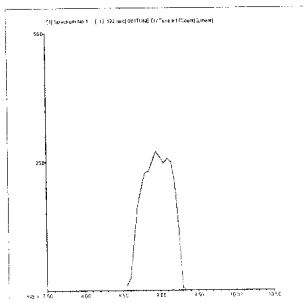
Data File: C:\ICPCHEM\1\DATA\AG070109E.B\001TUNE.D
Date Acquired: Jul 1 2009 08:49 pm
Acq. Method: tun_isis.M
Operator: TEL
Sample Name: 200.8 TUNE
Misc Info:
Vial Number: 4
Current Method: C:\ICPCHEM\1\METHODS\tun_isis.M

RSD (%)

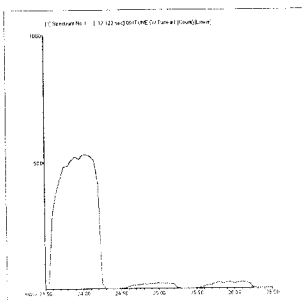
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
7 Li	15627	15756	15517	15668	15503	15686	3.50	5.00	
9 Be	2012	2012	2012	2013	2018	2005	1.96	5.00	
24 Mg	7702	7771	7779	7663	7765	7531	1.25	5.00	
59 Co	53852	54875	54599	54189	53545	52049	2.27	5.00	
115 In	884565	885593	887832	886914	880550	881936	1.02	5.00	
208 Pb	62978	64200	62524	62614	63881	61670	2.34	5.00	
238 U	131741	135588	131960	131149	132755	127249	2.28	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required 0.90
Flag:

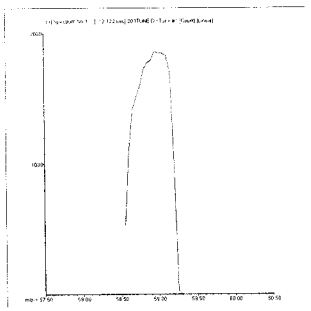


9 Be
Mass Calib.
Actual: 9.00
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



24 Mg
Mass Calib.
Actual: 24.00
Required: 23.90 - 24.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\AG070109E.B\001TUNE.D



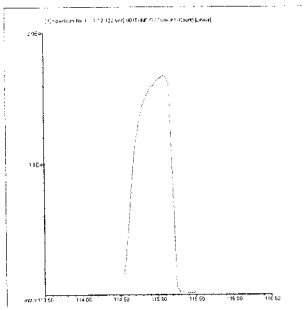
59 Co

Mass Calib.

Actual:	59.00		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.65
Required:	0.90
Flag:	



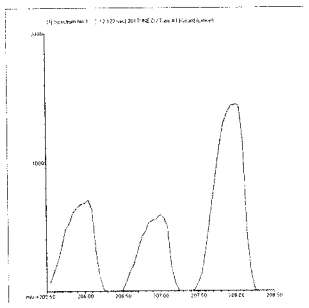
115 In

Mass Calib.

Actual:	115.05		
Required:	114.90	-	115.10
Flag:			

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



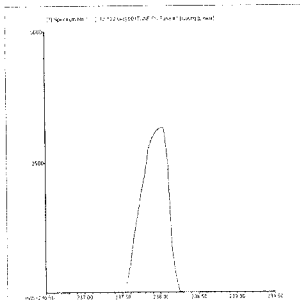
208 Pb

Mass Calib.

Actual:	207.95		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



238 U

Mass Calib.

Actual:	237.95		
Required:	237.90	-	238.10
Flag:			

Peak Width

Actual:	0.55
Required:	0.90
Flag:	

Tune Result: Pass

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070109E.B\002CALB.D\002CALB.D#
Date Acquired:	Jul 1 2009 08:52 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	Cal Blank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 01 2009 08:53 pm
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	3	173.21
51	V	72	1	-216	246.37
52	Cr	72	1	1660	8.43
55	Mn	72	1	273	20.80
59	Co	72	1	50	20.00
60	Ni	72	1	317	1.82
63	Cu	72	1	2454	8.72
66	Zn	72	1	221	2.09
75	As	72	1	39	20.90
78	Se	72	1	50	20.00
95	Mo	72	1	130	13.32
107	Ag	115	1	67	31.23
111	Cd	115	1	26	7.53
118	Sn	115	1	1517	10.84
121	Sb	115	1	60	33.33
137	Ba	115	1	21	24.12
205	Tl	165	1	221	3.48
208	Pb	165	1	423	15.73
232	Th	165	1	400	12.50
238	U	165	1	279	9.73

7/2/09

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	281511	0.22
45	Sc	1	824313	2.04
72	Ge	1	532709	0.42
115	In	1	1567358	1.31
165	Ho	1	3583185	1.69

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\003CALB.D\003CALB.D#
Date Acquired: Jul 1 2009 08:56 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: Cal Blank
Misc Info:
Vial Number: 2101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 01 2009 08:53 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-483	119.79
52	Cr	72	1	1593	11.68
55	Mn	72	1	347	6.01
59	Co	72	1	43	66.62
60	Ni	72	1	53	43.30
63	Cu	72	1	270	3.70
66	Zn	72	1	197	8.13
75	As	72	1	39	16.63
78	Se	72	1	60	16.67
95	Mo	72	1	60	0.00
107	Ag	115	1	13	86.60
111	Cd	115	1	13	31.20
118	Sn	115	1	1797	5.90
121	Sb	115	1	36	23.59
137	Ba	115	1	42	24.12
205	Tl	165	1	64	20.90
208	Pb	165	1	310	9.37
232	Th	165	1	293	13.78
238	U	165	1	27	37.50

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	274372	0.74
45	Sc	1	808414	1.47
72	Ge	1	522286	0.72
115	In	1	1556500	0.70
165	Ho	1	3539696	0.62

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

D6 7/2/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#
Date Acquired:	Jul 1 2009 08:59 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	Cal Blank
Misc Info:	
Vial Number:	2101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 01 2009 08:56 pm
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-907	32.91
52	Cr	72	1	1617	8.07
55	Mn	72	1	320	17.40
59	Co	72	1	50	34.64
60	Ni	72	1	70	37.80
63	Cu	72	1	330	21.85
66	Zn	72	1	222	15.05
75	As	72	1	41	11.17
78	Se	72	1	73	7.87
95	Mo	72	1	33	69.28
107	Ag	115	1	20	50.00
111	Cd	115	1	6	69.28
118	Sn	115	1	1827	1.38
121	Sb	115	1	31	22.30
137	Ba	115	1	26	37.65
205	Tl	165	1	69	10.07
208	Pb	165	1	306	10.08
232	Th	165	1	230	8.70
238	U	165	1	12	62.98

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	270644	1.26
45	Sc	1	793099	1.37
72	Ge	1	514448	0.70
115	In	1	1533367	0.35
165	Ho	1	3512720	0.45

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070109E.B\005ICAL.D\005ICAL.D#
Date Acquired:	Jul 1 2009 09:02 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	100 ppb
Misc Info:	
Vial Number:	2102
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 01 2009 09:00 pm
Sample Type:	ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	32597	2.70
51	V	72	1	491953	1.38
52	Cr	72	1	572907	1.36
55	Mn	72	1	499166	1.13
59	Co	72	1	797771	0.95
60	Ni	72	1	193163	2.12
63	Cu	72	1	491910	0.54
66	Zn	72	1	102314	1.37
75	As	72	1	67615	0.99
78	Se	72	1	8616	2.88
95	Mo	72	1	237071	1.49
107	Ag	115	1	745906	0.39
111	Cd	115	1	134946	1.25
118	Sn	115	1	333226	1.91
121	Sb	115	1	423651	1.19
137	Ba	115	1	149521	0.95
205	Tl	165	1	1784108	1.55
208	Pb	165	1	2426366	0.24
232	Th	165	1	2533198	1.57
238	U	165	1	2816229	0.61

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	264083	0.30	270644	97.6	30 - 120	
45	Sc	1	761622	0.91	793099	96.0	30 - 120	
72	Ge	1	491076	0.70	514448	95.5	30 - 120	
115	In	1	1498695	0.85	1533367	97.7	30 - 120	
165	Ho	1	3460426	1.14	3512720	98.5	30 - 120	

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures	0
0 :ISTD Failures	0

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\006 ICV.D\006 ICV.D#
Date Acquired: Jul 1 2009 09:06 pm
Operator: TEL
Sample Name: ICV
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: ICV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	39.72	ppb	0.86	40	99.3	90 - 110	
51 V	72	1	40.35	ppb	1.63	40	100.9	90 - 110	
52 Cr	72	1	39.78	ppb	1.47	40	99.5	90 - 110	
55 Mn	72	1	40.09	ppb	0.49	40	100.2	90 - 110	
59 Co	72	1	39.44	ppb	1.00	40	98.6	90 - 110	
60 Ni	72	1	40.21	ppb	1.48	40	100.5	90 - 110	
63 Cu	72	1	39.73	ppb	0.07	40	99.3	90 - 110	
66 Zn	72	1	39.98	ppb	0.32	40	100.0	90 - 110	
75 As	72	1	39.29	ppb	1.32	40	98.2	90 - 110	
78 Se	72	1	40.06	ppb	5.46	40	100.2	90 - 110	
95 Mo	72	1	39.45	ppb	1.44	40	98.6	90 - 110	
107 Ag	115	1	39.94	ppb	0.63	40	99.9	90 - 110	
111 Cd	115	1	40.87	ppb	2.49	40	102.2	90 - 110	
118 Sn	115	1	39.02	ppb	2.23	40	97.6	90 - 110	
121 Sb	115	1	38.23	ppb	1.72	40	95.6	90 - 110	
137 Ba	115	1	39.41	ppb	1.90	40	98.5	90 - 110	
205 Tl	165	1	39.95	ppb	0.35	40	99.9	90 - 110	
208 Pb	165	1	40.50	ppb	0.61	40	101.3	90 - 110	
232 Th	165	1	42.76	ppb	0.44	40	106.9	90 - 110	
238 U	165	1	40.57	ppb	1.47	40	101.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	261048	0.68	270644	96.5	30 - 120	
45 Sc	1	747883	0.71	793099	94.3	30 - 120	
72 Ge	1	486418	0.78	514448	94.6	30 - 120	
115 In	1	1486726	0.66	1533367	97.0	30 - 120	
165 Ho	1	3436570	0.83	3512720	97.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\007WASH.D\007WASH.D#
Date Acquired: Jul 1 2009 09:09 pm
Operator: TEL
Sample Name: RLIV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.083 ppb	9.61	1.30	
51 V	72	1	5.353 ppb	5.25	6.50	
52 Cr	72	1	2.126 ppb	7.99	2.60	
55 Mn	72	1	0.960 ppb	5.68	1.30	
59 Co	72	1	1.017 ppb	1.79	1.30	
60 Ni	72	1	2.159 ppb	7.21	2.60	
63 Cu	72	1	2.030 ppb	2.64	2.60	
66 Zn	72	1	10.270 ppb	1.36	13.00	
75 As	72	1	5.021 ppb	3.20	6.50	
78 Se	72	1	3.227 ppb	21.66	6.50	
95 Mo	72	1	2.112 ppb	5.87	2.60	
107 Ag	115	1	5.334 ppb	1.64	6.50	
111 Cd	115	1	1.111 ppb	5.82	1.30	
118 Sn	115	1	10.610 ppb	2.20	13.00	
121 Sb	115	1	2.203 ppb	2.13	2.60	
137 Ba	115	1	1.005 ppb	6.80	1.30	
205 Tl	165	1	1.115 ppb	1.84	1.30	
208 Pb	165	1	1.051 ppb	0.68	1.30	
232 Th	165	1	2.515 ppb	2.59	2.60	
238 U	165	1	1.093 ppb	1.70	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	262005	1.08	270644	96.8	30 - 120	
45 Sc	1	753863	0.28	793099	95.1	30 - 120	
72 Ge	1	487452	0.30	514448	94.8	30 - 120	
115 In	1	1459014	0.53	1533367	95.2	30 - 120	
165 Ho	1	3440794	0.29	3512720	98.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\008 ICB.D\008 ICB.D#
Date Acquired: Jul 1 2009 09:12 pm
Operator: TEL
Sample Name: ICB
Misc Info:
Vial Number: 2104
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: ICB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.01	ppb	173.23	1.00	
51 V	72	1	0.06	ppb	118.50	1.00	
52 Cr	72	1	0.00	ppb	5577.50	1.00	
55 Mn	72	1	-0.02	ppb	28.07	1.00	
59 Co	72	1	0.00	ppb	18.91	1.00	
60 Ni	72	1	-0.01	ppb	223.59	1.00	
63 Cu	72	1	0.01	ppb	208.42	1.00	
66 Zn	72	1	-0.03	ppb	55.41	1.00	
75 As	72	1	0.01	ppb	108.62	1.00	
78 Se	72	1	-0.23	ppb	103.55	1.00	
95 Mo	72	1	0.02	ppb	20.48	1.00	
107 Ag	115	1	0.01	ppb	86.14	1.00	
111 Cd	115	1	0.01	ppb	43.39	1.00	
118 Sn	115	1	-0.08	ppb	38.95	1.00	
121 Sb	115	1	0.07	ppb	9.70	1.00	
137 Ba	115	1	-0.01	ppb	62.74	1.00	
205 Tl	165	1	0.01	ppb	23.49	1.00	
208 Pb	165	1	0.00	ppb	206.10	1.00	
232 Th	165	1	0.11	ppb	5.94	1.00	
238 U	165	1	0.00	ppb	12.88	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	259668	1.08	270644	95.9	30 - 120	
45 Sc	1	747642	1.03	793099	94.3	30 - 120	
72 Ge	1	486352	0.13	514448	94.5	30 - 120	
115 In	1	1466668	0.73	1533367	95.7	30 - 120	
165 Ho	1	3393519	1.27	3512720	96.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

RL STD QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\009RLST.D\009RLST.D#
Date Acquired: Jul 1 2009 09:16 pm
Operator: TEL
Sample Name: RL STD
Misc Info:
Vial Number: 2105
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: RLSTD
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	1.20	ppb	12.35	1	119.6	50 - 150	
51 V	72	1	1.08	ppb	13.63	1	108.0	50 - 150	
52 Cr	72	1	0.94	ppb	3.84	1	93.7	50 - 150	
55 Mn	72	1	1.00	ppb	2.62	1	100.1	50 - 150	
59 Co	72	1	0.97	ppb	6.35	1	96.6	50 - 150	
60 Ni	72	1	0.92	ppb	14.50	1	92.2	50 - 150	
63 Cu	72	1	1.05	ppb	2.36	1	104.7	50 - 150	
66 Zn	72	1	10.31	ppb	1.28	10	103.1	50 - 150	
75 As	72	1	0.96	ppb	3.38	1	96.0	50 - 150	
78 Se	72	1	1.29	ppb	46.63	1	128.7	50 - 150	
95 Mo	72	1	0.96	ppb	5.62	1	95.8	50 - 150	
107 Ag	115	1	1.03	ppb	3.18	1	102.6	50 - 150	
111 Cd	115	1	1.06	ppb	13.86	1	106.1	50 - 150	
118 Sn	115	1	10.33	ppb	3.64	10	103.3	50 - 150	
121 Sb	115	1	1.06	ppb	4.40	1	106.4	50 - 150	
137 Ba	115	1	0.99	ppb	4.14	1	99.5	50 - 150	
205 Tl	165	1	1.03	ppb	2.54	1	102.7	50 - 150	
208 Pb	165	1	1.05	ppb	2.15	1	105.0	50 - 150	
232 Th	165	1	1.07	ppb	1.68	1	107.0	50 - 150	
238 U	165	1	1.06	ppb	3.52	1	105.5	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	259499	0.52	270644	95.9	30 - 120	
45 Sc	1	742494	0.43	793099	93.6	30 - 120	
72 Ge	1	482084	0.12	514448	93.7	30 - 120	
115 In	1	1438243	0.90	1533367	93.8	30 - 120	
165 Ho	1	3384031	0.82	3512720	96.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

AFCEE RL QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\010AFCE.D\010AFCE.D#
Date Acquired: Jul 1 2009 09:19 pm
Operator: TEL
Sample Name: AFCEE RL
Misc Info:
Vial Number: 2106
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: AFCEERL
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	0.16	ppb	53.95	0	65.8	80 - 120	
51 V	72	1	0.15	ppb	65.94	0	68.4	80 - 120	
52 Cr	72	1	0.19	ppb	17.73	0	99.0	80 - 120	
55 Mn	72	1	0.18	ppb	4.62	0	88.8	80 - 120	
59 Co	72	1	0.20	ppb	5.54	0	101.1	80 - 120	
60 Ni	72	1	0.22	ppb	12.53	0	118.0	80 - 120	
63 Cu	72	1	0.20	ppb	13.11	0	94.9	80 - 120	
66 Zn	72	1	2.03	ppb	4.90	2	98.4	80 - 120	
75 As	72	1	0.21	ppb	7.42	0	108.8	80 - 120	
78 Se	72	1	0.02	ppb	2931.10	0	6.9	80 - 120	
95 Mo	72	1	0.20	ppb	12.91	0	102.5	80 - 120	
107 Ag	115	1	0.19	ppb	3.92	0	93.8	80 - 120	
111 Cd	115	1	0.20	ppb	11.26	0	96.3	80 - 120	
118 Sn	115	1	1.74	ppb	9.26	2	84.0	80 - 120	
121 Sb	115	1	0.22	ppb	11.47	0	102.5	80 - 120	
137 Ba	115	1	0.20	ppb	9.26	0	101.6	80 - 120	
205 Tl	165	1	0.21	ppb	0.90	0	100.6	80 - 120	
208 Pb	165	1	0.20	ppb	1.82	0	97.1	80 - 120	
232 Th	165	1	0.23	ppb	4.61	0	107.9	80 - 120	
238 U	165	1	0.21	ppb	2.19	0	100.7	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	258161	0.97	270644	95.4	30 - 120	
45 Sc	1	738513	0.84	793099	93.1	30 - 120	
72 Ge	1	480284	0.78	514448	93.4	30 - 120	
115 In	1	1455715	1.25	1533367	94.9	30 - 120	
165 Ho	1	3371778	1.12	3512720	96.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070109E.B\011SMPL.D\011SMPL.D#
Date Acquired:	Jul 1 2009 09:23 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	ALTSe
Misc Info:	2 ppb
Vial Number:	2107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 01 2009 09:03 pm
Sample Type:	SA
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	-0.07	-0.07	ppb	180.19	3600	
52 Cr	72	1	-0.04	-0.04	ppb	28.52	3600	
55 Mn	72	1	-0.03	-0.03	ppb	47.42	3600	
59 Co	72	1	0.00	0.00	ppb	65.02	3600	
60 Ni	72	1	0.04	0.04	ppb	37.03	3600	
63 Cu	72	1	-0.02	-0.02	ppb	70.64	3600	
66 Zn	72	1	0.01	0.01	ppb	356.36	3600	
75 As	72	1	0.01	0.01	ppb	326.28	3600	
78 Se	72	1	2.09	2.09	ppb	12.02	3600	
95 Mo	72	1	0.00	0.00	ppb	375.70	3600	
107 Ag	115	1	0.00	0.00	ppb	88.02	3600	
111 Cd	115	1	0.00	0.00	ppb	229.89	3600	
118 Sn	115	1	-0.35	-0.35	ppb	4.76	3600	
121 Sb	115	1	0.02	0.02	ppb	48.25	3600	
137 Ba	115	1	-0.01	-0.01	ppb	53.72	3600	
205 Tl	165	1	0.00	0.00	ppb	66.63	3600	
208 Pb	165	1	0.00	0.00	ppb	116.81	3600	
232 Th	165	1	0.01	0.01	ppb	33.43	1000	
238 U	165	1	0.00	0.00	ppb	56.60	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	262057	1.20	270644	96.8	30 - 120	
45 Sc	1	732572	0.30	793099	92.4	30 - 120	
72 Ge	1	479983	0.14	514448	93.3	30 - 120	
115 In	1	1434615	1.16	1533367	93.6	30 - 120	
165 Ho	1	3410705	0.94	3512720	97.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\012ICSA.D\012ICSA.D#
Date Acquired: Jul 1 2009 09:26 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSA
Misc Info:
Vial Number: 2108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 01 2009 09:03 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element		IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9	Be	6	1	0.06 ppb	69.51	1.00	
51	V	72	1	-0.13 ppb	34.64	1.00	
52	Cr	72	1	0.94 ppb	2.96	1.00	
55	Mn	72	1	2.05 ppb	2.68	1.00	
59	Co	72	1	0.04 ppb	20.94	1.00	
60	Ni	72	1	0.70 ppb	7.17	1.00	
63	Cu	72	1	0.35 ppb	12.95	1.00	
66	Zn	72	1	2.74 ppb	4.58	10.00	
75	As	72	1	0.17 ppb	18.75	1.00	
78	Se	72	1	-0.18 ppb	153.17	1.00	
95	Mo	72	1	2011.00 ppb	0.88	2000.00	
107	Ag	115	1	0.08 ppb	23.57	1.00	
111	Cd	115	1	0.39 ppb	68.06	1.00	
118	Sn	115	1	-0.18 ppb	26.22	10.00	
121	Sb	115	1	0.25 ppb	5.22	1.00	
137	Ba	115	1	1.51 ppb	6.34	1.00	
205	Tl	165	1	0.03 ppb	16.62	1.00	
208	Pb	165	1	0.13 ppb	8.25	1.00	
232	Th	165	1	0.05 ppb	9.76	1.00	
238	U	165	1	0.02 ppb	6.80	1.00	

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	244328	0.74	270644	90.3	30 - 120	
45	Sc	1	658285	0.47	793099	83.0	30 - 120	
72	Ge	1	419671	0.93	514448	81.6	30 - 120	
115	In	1	1256000	1.24	1533367	81.9	30 - 120	
165	Ho	1	3131895	1.18	3512720	89.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Nnumber of ISTD Failures Allowed

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\013ICSB.D\013ICSB.D#
Date Acquired: Jul 1 2009 09:29 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSAB
Misc Info:
Vial Number: 2109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 01 2009 09:03 pm
Sample Type: ICSAB
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	6	1	97.49	2.28	100	97.5	80 - 120	
51 V	72	1	99.76	0.87	100	99.8	80 - 120	
52 Cr	72	1	97.08	0.48	100	97.1	80 - 120	
55 Mn	72	1	98.50	0.28	100	98.5	80 - 120	
59 Co	72	1	93.39	0.37	100	93.4	80 - 120	
60 Ni	72	1	91.95	0.84	100	92.0	80 - 120	
63 Cu	72	1	90.43	0.72	100	90.4	80 - 120	
66 Zn	72	1	102.00	0.09	100	102.0	80 - 120	
75 As	72	1	101.40	0.35	100	101.4	80 - 120	
78 Se	72	1	107.30	3.49	100	107.3	80 - 120	
95 Mo	72	1	2082.00	0.17	2100	99.1	80 - 120	
107 Ag	115	1	85.47	2.71	100	85.5	80 - 120	
111 Cd	115	1	96.68	1.77	100	96.7	80 - 120	
118 Sn	115	1	99.76	2.59	100	99.8	80 - 120	
121 Sb	115	1	101.20	2.28	100	101.2	80 - 120	
137 Ba	115	1	102.30	1.73	100	102.3	80 - 120	
205 Tl	165	1	92.51	1.12	100	92.5	80 - 120	
208 Pb	165	1	92.66	0.53	100	92.7	80 - 120	
232 Th	165	1	104.30	0.47	100	104.3	80 - 120	
238 U	165	1	99.40	0.99	100	99.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	245711	1.25	270644	90.8	30 - 120	
45 Sc	1	657709	0.36	793099	82.9	30 - 120	
72 Ge	1	417786	0.78	514448	81.2	30 - 120	
115 In	1	1285379	1.15	1533367	83.8	30 - 120	
165 Ho	1	3209921	0.44	3512720	91.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\014SMPL.D\014SMPL.D#
Date Acquired: Jul 1 2009 09:33 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 01 2009 09:03 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	0.03	0.03	ppb	99.02	3600	
52 Cr	72	1	-0.01	-0.01	ppb	63.99	3600	
55 Mn	72	1	-0.01	-0.01	ppb	122.55	3600	
59 Co	72	1	0.00	0.00	ppb	373.13	3600	
60 Ni	72	1	-0.01	-0.01	ppb	108.00	3600	
63 Cu	72	1	-0.01	-0.01	ppb	132.98	3600	
66 Zn	72	1	-0.02	-0.02	ppb	121.88	3600	
75 As	72	1	0.01	0.01	ppb	56.24	3600	
78 Se	72	1	-0.16	-0.16	ppb	156.85	3600	
95 Mo	72	1	1.18	1.18	ppb	8.50	3600	
107 Ag	115	1	0.01	0.01	ppb	79.32	3600	
111 Cd	115	1	0.01	0.01	ppb	105.74	3600	
118 Sn	115	1	-0.16	-0.16	ppb	26.78	3600	
121 Sb	115	1	0.04	0.04	ppb	29.42	3600	
137 Ba	115	1	0.00	0.00	ppb	81.26	3600	
205 Tl	165	1	0.01	0.01	ppb	34.98	3600	
208 Pb	165	1	0.00	0.00	ppb	40.12	3600	
232 Th	165	1	0.40	0.40	ppb	16.62	1000	
238 U	165	1	0.01	0.01	ppb	17.30	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	270788	0.58	270644	100.1	30 - 120	
45 Sc	1	751124	0.29	793099	94.7	30 - 120	
72 Ge	1	490917	0.58	514448	95.4	30 - 120	
115 In	1	1500266	0.70	1533367	97.8	30 - 120	
165 Ho	1	3499154	0.30	3512720	99.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Linear Dynamic Range Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\015 LR.D\015 LR.D#
Date Acquired: Jul 1 2009 09:36 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR
Misc Info:
Vial Number: 2110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 01 2009 09:03 pm
Sample Type: LR
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	1008.00 ppb	1.19	1000	100.8	90 - 110	
51 V	72	1	937.00 ppb	1.17	1000	93.7	90 - 110	
52 Cr	72	1	948.10 ppb	0.94	1000	94.8	90 - 110	
55 Mn	72	1	974.40 ppb	0.55	1000	97.4	90 - 110	
59 Co	72	1	949.10 ppb	1.30	1000	94.9	90 - 110	
60 Ni	72	1	983.50 ppb	1.93	1000	98.4	90 - 110	
63 Cu	72	1	953.10 ppb	1.16	1000	95.3	90 - 110	
66 Zn	72	1	1011.00 ppb	1.34	1000	101.1	90 - 110	
75 As	72	1	989.00 ppb	0.20	1000	98.9	90 - 110	
78 Se	72	1	1012.00 ppb	0.12	1000	101.2	90 - 110	
95 Mo	72	1	1003.00 ppb	0.66	1000	100.3	90 - 110	
107 Ag	115	1	949.20 ppb	0.72	1000	94.9	90 - 110	
111 Cd	115	1	1014.00 ppb	0.47	1000	101.4	90 - 110	
118 Sn	115	1	984.80 ppb	1.90	1000	98.5	90 - 110	
121 Sb	115	1	972.70 ppb	0.96	1000	97.3	90 - 110	
137 Ba	115	1	1008.00 ppb	0.36	1000	100.8	90 - 110	
205 Tl	165	1	936.40 ppb	0.64	1000	93.6	90 - 110	
208 Pb	165	1	947.00 ppb	0.75	1000	94.7	90 - 110	
232 Th	165	1	988.30 ppb	0.48	1000	98.8	90 - 110	
238 U	165	1	962.30 ppb	0.45	1000	96.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	259119	0.67	270644	95.7	30 - 120	
45 Sc	1	743354	0.64	793099	93.7	30 - 120	
72 Ge	1	482308	0.78	514448	93.8	30 - 120	
115 In	1	1480437	0.76	1533367	96.5	30 - 120	
165 Ho	1	3498034	0.60	3512720	99.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\016SMPL.D\016SMPL.D#
Date Acquired: Jul 1 2009 09:39 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 01 2009 09:03 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.07	0.07	ppb	97.90	3600	
51 V	72	1	0.16	0.16	ppb	63.54	3600	
52 Cr	72	1	0.06	0.06	ppb	55.03	3600	
55 Mn	72	1	0.04	0.04	ppb	30.82	3600	
59 Co	72	1	0.06	0.06	ppb	21.46	3600	
60 Ni	72	1	0.05	0.05	ppb	91.43	3600	
63 Cu	72	1	0.05	0.05	ppb	7.18	3600	
66 Zn	72	1	0.02	0.02	ppb	147.02	3600	
75 As	72	1	0.08	0.08	ppb	8.47	3600	
78 Se	72	1	-0.16	-0.16	ppb	150.66	3600	
95 Mo	72	1	0.72	0.72	ppb	17.14	3600	
107 Ag	115	1	0.07	0.07	ppb	20.09	3600	
111 Cd	115	1	0.07	0.07	ppb	21.60	3600	
118 Sn	115	1	1.57	1.57	ppb	4.53	3600	
121 Sb	115	1	0.66	0.66	ppb	1.14	3600	
137 Ba	115	1	0.05	0.05	ppb	41.71	3600	
205 Tl	165	1	0.12	0.12	ppb	19.70	3600	
208 Pb	165	1	0.06	0.06	ppb	22.47	3600	
232 Th	165	1	2.90	2.90	ppb	18.15	1000	
238 U	165	1	0.14	0.14	ppb	8.19	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	266077	1.25	270644	98.3	30 - 120	
45 Sc	1	758361	0.69	793099	95.6	30 - 120	
72 Ge	1	493185	0.38	514448	95.9	30 - 120	
115 In	1	1484957	0.84	1533367	96.8	30 - 120	
165 Ho	1	3462671	1.12	3512720	98.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\017 CCV.D\017 CCV.D#
Date Acquired: Jul 1 2009 09:43 pm
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	51.45	ppb	4.84	50	102.9	90 - 110	
51 V	72	1	51.86	ppb	7.21	50	103.7	90 - 110	
52 Cr	72	1	51.80	ppb	7.04	50	103.6	90 - 110	
55 Mn	72	1	52.11	ppb	6.63	50	104.2	90 - 110	
59 Co	72	1	51.35	ppb	6.41	50	102.7	90 - 110	
60 Ni	72	1	52.24	ppb	6.33	50	104.5	90 - 110	
63 Cu	72	1	51.94	ppb	6.08	50	103.9	90 - 110	
66 Zn	72	1	52.94	ppb	7.42	50	105.9	90 - 110	
75 As	72	1	52.02	ppb	6.46	50	104.0	90 - 110	
78 Se	72	1	53.75	ppb	5.56	50	107.5	90 - 110	
95 Mo	72	1	52.53	ppb	8.17	50	105.1	90 - 110	
107 Ag	115	1	53.40	ppb	6.95	50	106.8	90 - 110	
111 Cd	115	1	53.79	ppb	7.03	50	107.6	90 - 110	
118 Sn	115	1	53.50	ppb	7.25	50	107.0	90 - 110	
121 Sb	115	1	53.78	ppb	6.31	50	107.6	90 - 110	
137 Ba	115	1	53.02	ppb	7.42	50	106.0	90 - 110	
205 Tl	165	1	52.28	ppb	6.03	50	104.6	90 - 110	
208 Pb	165	1	52.74	ppb	6.47	50	105.5	90 - 110	
232 Th	165	1	55.08	ppb	6.64	50	110.2	90 - 110	Fail
238 U	165	1	53.69	ppb	7.02	50	107.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	252801	6.04	270644	93.4	30 - 120	
45 Sc	1	716957	6.25	793099	90.4	30 - 120	
72 Ge	1	468117	5.63	514448	91.0	30 - 120	
115 In	1	1406022	5.67	1533367	91.7	30 - 120	
165 Ho	1	3311238	5.35	3512720	94.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

1 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\018 CCB.D\018 CCB.D#
Date Acquired: Jul 1 2009 09:46 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.010	ppb	173.16	1.00	
51 V	72	1	0.195	ppb	35.90	1.00	
52 Cr	72	1	-0.004	ppb	590.00	1.00	
55 Mn	72	1	-0.001	ppb	680.23	1.00	
59 Co	72	1	0.003	ppb	138.34	1.00	
60 Ni	72	1	-0.004	ppb	134.76	1.00	
63 Cu	72	1	-0.003	ppb	175.27	1.00	
66 Zn	72	1	0.124	ppb	14.83	1.00	
75 As	72	1	0.012	ppb	47.26	1.00	
78 Se	72	1	-0.241	ppb	166.71	1.00	
95 Mo	72	1	0.152	ppb	11.80	1.00	
107 Ag	115	1	0.031	ppb	4.41	1.00	
111 Cd	115	1	0.006	ppb	71.44	1.00	
118 Sn	115	1	2.179	ppb	3.52	1.00	Fail
121 Sb	115	1	0.136	ppb	13.73	1.00	
137 Ba	115	1	-0.001	ppb	496.57	1.00	
205 Tl	165	1	0.075	ppb	9.94	1.00	
208 Pb	165	1	0.007	ppb	9.76	1.00	
232 Th	165	1	0.537	ppb	18.78	1.00	
238 U	165	1	0.016	ppb	3.69	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	265849	0.96	270644	98.2	30 - 120	
45 Sc	1	773145	0.13	793099	97.5	30 - 120	
72 Ge	1	497140	0.44	514448	96.6	30 - 120	
115 In	1	1488248	1.41	1533367	97.1	30 - 120	
165 Ho	1	3430529	0.35	3512720	97.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

1 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\019WASH.D\019WASH.D#
Date Acquired: Jul 1 2009 09:49 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.935 ppb	24.09	1.30	
51 V	72	1	5.129 ppb	4.76	6.50	
52 Cr	72	1	1.981 ppb	3.52	2.60	
55 Mn	72	1	1.012 ppb	4.02	1.30	
59 Co	72	1	0.991 ppb	2.76	1.30	
60 Ni	72	1	1.987 ppb	8.06	2.60	
63 Cu	72	1	2.033 ppb	2.98	2.60	
66 Zn	72	1	10.290 ppb	0.36	13.00	
75 As	72	1	5.073 ppb	1.80	6.50	
78 Se	72	1	4.746 ppb	18.06	6.50	
95 Mo	72	1	2.126 ppb	9.44	2.60	
107 Ag	115	1	5.268 ppb	1.70	6.50	
111 Cd	115	1	1.096 ppb	5.79	1.30	
118 Sn	115	1	10.390 ppb	0.77	13.00	
121 Sb	115	1	2.020 ppb	1.39	2.60	
137 Ba	115	1	1.015 ppb	6.95	1.30	
205 Tl	165	1	1.086 ppb	1.60	1.30	
208 Pb	165	1	1.047 ppb	0.77	1.30	
232 Th	165	1	2.188 ppb	2.07	2.60	
238 U	165	1	1.063 ppb	1.07	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	266246	1.18	270644	98.4	30 - 120	
45 Sc	1	778232	0.70	793099	98.1	30 - 120	
72 Ge	1	502384	0.55	514448	97.7	30 - 120	
115 In	1	1504318	0.20	1533367	98.1	30 - 120	
165 Ho	1	3471293	0.30	3512720	98.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\034 CCV.D\034 CCV.D#
Date Acquired: Jul 1 2009 10:40 pm
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	51.09	ppb	4.09	50	102.2	90 - 110	
51 V	72	1	50.16	ppb	1.55	50	100.3	90 - 110	
52 Cr	72	1	49.57	ppb	1.18	50	99.1	90 - 110	
55 Mn	72	1	49.12	ppb	0.77	50	98.2	90 - 110	
59 Co	72	1	49.80	ppb	0.93	50	99.6	90 - 110	
60 Ni	72	1	50.61	ppb	1.30	50	101.2	90 - 110	
63 Cu	72	1	50.08	ppb	1.79	50	100.2	90 - 110	
66 Zn	72	1	50.09	ppb	1.37	50	100.2	90 - 110	
75 As	72	1	50.44	ppb	1.33	50	100.9	90 - 110	
78 Se	72	1	52.03	ppb	5.13	50	104.1	90 - 110	
95 Mo	72	1	49.51	ppb	1.77	50	99.0	90 - 110	
107 Ag	115	1	50.65	ppb	0.61	50	101.3	90 - 110	
111 Cd	115	1	49.87	ppb	1.99	50	99.7	90 - 110	
118 Sn	115	1	49.77	ppb	1.73	50	99.5	90 - 110	
121 Sb	115	1	49.58	ppb	1.44	50	99.2	90 - 110	
137 Ba	115	1	49.85	ppb	1.13	50	99.7	90 - 110	
205 Tl	165	1	49.10	ppb	0.49	50	98.2	90 - 110	
208 Pb	165	1	49.38	ppb	0.88	50	98.8	90 - 110	
232 Th	165	1	49.45	ppb	1.75	50	98.9	90 - 110	
238 U	165	1	49.53	ppb	1.03	50	99.1	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	259473	0.47	270644	95.9	30 - 120	
45 Sc	1	771615	0.86	793099	97.3	30 - 120	
72 Ge	1	498369	0.04	514448	96.9	30 - 120	
115 In	1	1483456	0.33	1533367	96.7	30 - 120	
165 Ho	1	3359093	0.45	3512720	95.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\035 CCB.D\035 CCB.D#
Date Acquired: Jul 1 2009 10:43 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.020	ppb	86.57	1.00	
51 V	72	1	0.183	ppb	21.77	1.00	
52 Cr	72	1	-0.051	ppb	46.62	1.00	
55 Mn	72	1	-0.013	ppb	31.31	1.00	
59 Co	72	1	-0.002	ppb	130.98	1.00	
60 Ni	72	1	-0.016	ppb	36.06	1.00	
63 Cu	72	1	-0.015	ppb	45.09	1.00	
66 Zn	72	1	0.154	ppb	12.36	1.00	
75 As	72	1	-0.013	ppb	82.65	1.00	
78 Se	72	1	-0.252	ppb	119.07	1.00	
95 Mo	72	1	0.047	ppb	50.19	1.00	
107 Ag	115	1	0.014	ppb	19.89	1.00	
111 Cd	115	1	0.002	ppb	305.27	1.00	
118 Sn	115	1	1.581	ppb	1.80	1.00	Fail
121 Sb	115	1	0.059	ppb	3.63	1.00	
137 Ba	115	1	-0.007	ppb	81.58	1.00	
205 Tl	165	1	0.029	ppb	10.81	1.00	
208 Pb	165	1	0.001	ppb	163.59	1.00	
232 Th	165	1	0.731	ppb	17.43	1.00	
238 U	165	1	0.009	ppb	19.66	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	263852	0.26	270644	97.5	30 - 120	
45 Sc	1	791031	0.38	793099	99.7	30 - 120	
72 Ge	1	506570	0.18	514448	98.5	30 - 120	
115 In	1	1485596	0.41	1533367	96.9	30 - 120	
165 Ho	1	3376634	0.72	3512720	96.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

1 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\036WASH.D\036WASH.D#
Date Acquired: Jul 1 2009 10:47 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.963 ppb	15.53	1.30	
51 V	72	1	5.436 ppb	2.25	6.50	
52 Cr	72	1	2.069 ppb	2.11	2.60	
55 Mn	72	1	0.989 ppb	4.98	1.30	
59 Co	72	1	1.017 ppb	8.45	1.30	
60 Ni	72	1	2.076 ppb	1.29	2.60	
63 Cu	72	1	2.099 ppb	1.40	2.60	
66 Zn	72	1	10.230 ppb	1.78	13.00	
75 As	72	1	4.973 ppb	3.88	6.50	
78 Se	72	1	4.998 ppb	12.85	6.50	
95 Mo	72	1	2.111 ppb	4.73	2.60	
107 Ag	115	1	5.216 ppb	2.78	6.50	
111 Cd	115	1	0.986 ppb	4.38	1.30	
118 Sn	115	1	10.100 ppb	3.41	13.00	
121 Sb	115	1	1.978 ppb	1.29	2.60	
137 Ba	115	1	1.050 ppb	2.76	1.30	
205 Tl	165	1	1.060 ppb	1.41	1.30	
208 Pb	165	1	1.033 ppb	1.83	1.30	
232 Th	165	1	2.185 ppb	2.11	2.60	
238 U	165	1	1.038 ppb	1.14	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	266470	0.11	270644	98.5	30 - 120	
45 Sc	1	786160	2.74	793099	99.1	30 - 120	
72 Ge	1	513404	0.77	514448	99.8	30 - 120	
115 In	1	1523316	0.62	1533367	99.3	30 - 120	
165 Ho	1	3391378	0.60	3512720	96.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\037ICSA.D\037ICSA.D#
Date Acquired: Jul 1 2009 10:50 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSA
Misc Info:
Vial Number: 2108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 01 2009 09:03 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element		IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9	Be	6	1	0.03 ppb	0.23	1.00	
51	V	72	1	0.15 ppb	163.28	1.00	
52	Cr	72	1	0.90 ppb	14.41	1.00	
55	Mn	72	1	2.10 ppb	6.06	1.00	
59	Co	72	1	0.03 ppb	31.48	1.00	
60	Ni	72	1	0.70 ppb	13.78	1.00	
63	Cu	72	1	0.25 ppb	1.91	1.00	
66	Zn	72	1	2.63 ppb	3.92	10.00	
75	As	72	1	0.12 ppb	23.43	1.00	
78	Se	72	1	-0.42 ppb	31.10	1.00	
95	Mo	72	1	2002.00 ppb	1.34	2000.00	
107	Ag	115	1	0.10 ppb	7.06	1.00	
111	Cd	115	1	0.23 ppb	17.94	1.00	
118	Sn	115	1	-0.14 ppb	19.86	10.00	
121	Sb	115	1	0.25 ppb	3.19	1.00	
137	Ba	115	1	1.49 ppb	3.48	1.00	
205	Tl	165	1	0.04 ppb	14.31	1.00	
208	Pb	165	1	0.12 ppb	1.01	1.00	
232	Th	165	1	0.14 ppb	17.34	1.00	
238	U	165	1	0.02 ppb	10.76	1.00	

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	245039	0.23	270644	90.5	30 - 120	
45	Sc	1	677002	0.50	793099	85.4	30 - 120	
72	Ge	1	430077	0.87	514448	83.6	30 - 120	
115	In	1	1272577	0.07	1533367	83.0	30 - 120	
165	Ho	1	3100909	0.52	3512720	88.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Nnumber of ISTD Failures Allowed

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\038ICSB.D\038ICSB.D#
Date Acquired: Jul 1 2009 10:54 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSAB
Misc Info:
Vial Number: 2109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 01 2009 09:03 pm
Sample Type: ICSAB
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	6	1	98.64	2.05	100	98.6	80 - 120	
51 V	72	1	100.50	0.47	100	100.5	80 - 120	
52 Cr	72	1	97.40	0.48	100	97.4	80 - 120	
55 Mn	72	1	98.50	0.31	100	98.5	80 - 120	
59 Co	72	1	94.69	0.48	100	94.7	80 - 120	
60 Ni	72	1	93.32	1.04	100	93.3	80 - 120	
63 Cu	72	1	91.71	0.62	100	91.7	80 - 120	
66 Zn	72	1	101.90	0.33	100	101.9	80 - 120	
75 As	72	1	103.10	0.60	100	103.1	80 - 120	
78 Se	72	1	108.50	2.77	100	108.5	80 - 120	
95 Mo	72	1	2098.00	0.64	2100	99.9	80 - 120	
107 Ag	115	1	87.40	4.87	100	87.4	80 - 120	
111 Cd	115	1	97.77	1.42	100	97.8	80 - 120	
118 Sn	115	1	101.00	1.18	100	101.0	80 - 120	
121 Sb	115	1	102.00	1.52	100	102.0	80 - 120	
137 Ba	115	1	104.10	1.57	100	104.1	80 - 120	
205 Tl	165	1	91.60	1.37	100	91.6	80 - 120	
208 Pb	165	1	91.97	2.04	100	92.0	80 - 120	
232 Th	165	1	102.20	1.02	100	102.2	80 - 120	
238 U	165	1	97.78	1.06	100	97.8	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	242493	1.15	270644	89.6	30 - 120	
45 Sc	1	662155	0.65	793099	83.5	30 - 120	
72 Ge	1	420768	0.80	514448	81.8	30 - 120	
115 In	1	1260633	1.73	1533367	82.2	30 - 120	
165 Ho	1	3128330	1.05	3512720	89.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\039WASH.D\039WASH.D#
Date Acquired: Jul 1 2009 10:57 pm
Operator: TEL
Sample Name: WASH
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.020 ppb	86.59	1.30	
51 V	72	1	0.125 ppb	33.51	6.50	
52 Cr	72	1	-0.028 ppb	32.82	2.60	
55 Mn	72	1	-0.009 ppb	160.05	1.30	
59 Co	72	1	0.004 ppb	140.44	1.30	
60 Ni	72	1	0.016 ppb	31.44	2.60	
63 Cu	72	1	-0.017 ppb	67.30	2.60	
66 Zn	72	1	0.017 ppb	247.10	13.00	
75 As	72	1	-0.018 ppb	42.51	6.50	
78 Se	72	1	-0.477 ppb	47.87	6.50	
95 Mo	72	1	1.076 ppb	14.02	2.60	
107 Ag	115	1	0.017 ppb	26.16	6.50	
111 Cd	115	1	0.002 ppb	407.91	1.30	
118 Sn	115	1	-0.084 ppb	9.01	13.00	
121 Sb	115	1	0.038 ppb	16.67	2.60	
137 Ba	115	1	-0.003 ppb	135.00	1.30	
205 Tl	165	1	0.014 ppb	44.47	1.30	
208 Pb	165	1	0.004 ppb	76.03	1.30	
232 Th	165	1	0.564 ppb	16.44	2.60	
238 U	165	1	0.017 ppb	14.65	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	271131	0.54	270644	100.2	30 - 120	
45 Sc	1	775146	0.98	793099	97.7	30 - 120	
72 Ge	1	504144	0.13	514448	98.0	30 - 120	
115 In	1	1511223	1.76	1533367	98.6	30 - 120	
165 Ho	1	3409454	1.36	3512720	97.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\040 CCV.D\040 CCV.D#
Date Acquired: Jul 1 2009 11:00 pm
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.02	ppb	0.46	50	100.0	90 - 110	
51 V	72	1	50.14	ppb	1.12	50	100.3	90 - 110	
52 Cr	72	1	49.46	ppb	0.47	50	98.9	90 - 110	
55 Mn	72	1	49.38	ppb	0.87	50	98.8	90 - 110	
59 Co	72	1	49.69	ppb	1.14	50	99.4	90 - 110	
60 Ni	72	1	50.25	ppb	1.70	50	100.5	90 - 110	
63 Cu	72	1	50.55	ppb	0.86	50	101.1	90 - 110	
66 Zn	72	1	49.76	ppb	0.43	50	99.5	90 - 110	
75 As	72	1	50.39	ppb	1.16	50	100.8	90 - 110	
78 Se	72	1	49.49	ppb	0.73	50	99.0	90 - 110	
95 Mo	72	1	49.72	ppb	1.61	50	99.4	90 - 110	
107 Ag	115	1	50.07	ppb	1.25	50	100.1	90 - 110	
111 Cd	115	1	49.99	ppb	0.52	50	100.0	90 - 110	
118 Sn	115	1	49.76	ppb	1.87	50	99.5	90 - 110	
121 Sb	115	1	49.51	ppb	1.85	50	99.0	90 - 110	
137 Ba	115	1	49.54	ppb	1.85	50	99.1	90 - 110	
205 Tl	165	1	49.27	ppb	1.58	50	98.5	90 - 110	
208 Pb	165	1	49.67	ppb	1.33	50	99.3	90 - 110	
232 Th	165	1	49.68	ppb	0.42	50	99.4	90 - 110	
238 U	165	1	50.13	ppb	1.46	50	100.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	269062	0.15	270644	99.4	30 - 120	
45 Sc	1	799768	1.34	793099	100.8	30 - 120	
72 Ge	1	512085	0.14	514448	99.5	30 - 120	
115 In	1	1548943	0.86	1533367	101.0	30 - 120	
165 Ho	1	3472097	0.78	3512720	98.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\041 CCB.D\041 CCB.D#
Date Acquired: Jul 1 2009 11:04 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	0.109	ppb	25.56	1.00	
52 Cr	72	1	-0.029	ppb	35.01	1.00	
55 Mn	72	1	0.009	ppb	208.75	1.00	
59 Co	72	1	0.001	ppb	221.57	1.00	
60 Ni	72	1	0.003	ppb	384.43	1.00	
63 Cu	72	1	-0.009	ppb	112.12	1.00	
66 Zn	72	1	0.240	ppb	15.99	1.00	
75 As	72	1	-0.006	ppb	348.26	1.00	
78 Se	72	1	-0.014	ppb	1184.60	1.00	
95 Mo	72	1	0.145	ppb	3.19	1.00	
107 Ag	115	1	0.023	ppb	8.31	1.00	
111 Cd	115	1	0.015	ppb	32.52	1.00	
118 Sn	115	1	1.552	ppb	0.99	1.00	Fail
121 Sb	115	1	0.050	ppb	11.27	1.00	
137 Ba	115	1	-0.006	ppb	110.87	1.00	
205 Tl	165	1	0.036	ppb	12.18	1.00	
208 Pb	165	1	0.003	ppb	53.21	1.00	
232 Th	165	1	0.693	ppb	14.17	1.00	
238 U	165	1	0.013	ppb	7.78	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	268815	0.48	270644	99.3	30 - 120	
45 Sc	1	790078	2.17	793099	99.6	30 - 120	
72 Ge	1	524083	0.61	514448	101.9	30 - 120	
115 In	1	1535213	0.64	1533367	100.1	30 - 120	
165 Ho	1	3448620	0.67	3512720	98.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

1 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\042WASH.D\042WASH.D#
Date Acquired: Jul 1 2009 11:07 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 01 2009 09:03 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.848 ppb	19.95	1.30	
51 V	72	1	5.282 ppb	2.60	6.50	
52 Cr	72	1	2.073 ppb	0.73	2.60	
55 Mn	72	1	1.018 ppb	2.60	1.30	
59 Co	72	1	1.004 ppb	6.01	1.30	
60 Ni	72	1	2.161 ppb	1.85	2.60	
63 Cu	72	1	2.044 ppb	1.63	2.60	
66 Zn	72	1	10.230 ppb	0.39	13.00	
75 As	72	1	5.225 ppb	3.66	6.50	
78 Se	72	1	3.922 ppb	17.86	6.50	
95 Mo	72	1	2.112 ppb	0.97	2.60	
107 Ag	115	1	5.231 ppb	1.33	6.50	
111 Cd	115	1	1.063 ppb	7.61	1.30	
118 Sn	115	1	10.380 ppb	1.88	13.00	
121 Sb	115	1	1.987 ppb	4.51	2.60	
137 Ba	115	1	1.054 ppb	3.29	1.30	
205 Tl	165	1	1.071 ppb	2.35	1.30	
208 Pb	165	1	1.031 ppb	1.86	1.30	
232 Th	165	1	2.204 ppb	2.44	2.60	
238 U	165	1	1.054 ppb	2.02	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	270540	0.17	270644	100.0	30 - 120	
45 Sc	1	815141	0.27	793099	102.8	30 - 120	
72 Ge	1	529150	0.59	514448	102.9	30 - 120	
115 In	1	1548197	0.65	1533367	101.0	30 - 120	
165 Ho	1	3465098	0.97	3512720	98.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\004CALB.D\004CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Reslope Before Continuing Analytical Run

Corrective action was taken as stated in method 6020 section 7.8

..."During the course of an analytical run, the instrument may be "resloped" or recalibrated to correct for instrument drift. A recalibration must then be followed immediately by a new analysis of a CCV and CCB before any further samples are analyzed."

Analyst: _____

Date: 7/2/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#
Date Acquired:	Jul 2 2009 03:10 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	Cal Blank
Misc Info:	
Vial Number:	2101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 03:07 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	3	173.22
51	V	72	1	-85	99.47
52	Cr	72	1	1627	5.72
55	Mn	72	1	353	17.17
59	Co	72	1	80	32.73
60	Ni	72	1	53	28.09
63	Cu	72	1	293	22.47
66	Zn	72	1	239	4.35
75	As	72	1	28	24.96
78	Se	72	1	77	32.87
95	Mo	72	1	263	20.99
107	Ag	115	1	20	86.61
111	Cd	115	1	20	58.51
118	Sn	115	1	1647	8.17
121	Sb	115	1	36	5.39
137	Ba	115	1	28	50.23
205	Tl	165	1	68	3.06
208	Pb	165	1	218	4.60
232	Th	165	1	663	11.53
238	U	165	1	20	17.40

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	286516	0.73
45	Sc	1	897316	0.91
72	Ge	1	590430	0.69
115	In	1	1676276	0.34
165	Ho	1	3565937	1.19

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\115ICAL.D\115ICAL.D#
Date Acquired: Jul 2 2009 03:13 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: 100 ppb
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:11 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	36196	1.14
51	V	72	1	580519	0.16
52	Cr	72	1	658645	0.79
55	Mn	72	1	578136	0.19
59	Co	72	1	916161	1.12
60	Ni	72	1	226167	0.62
63	Cu	72	1	571589	0.78
66	Zn	72	1	118158	0.63
75	As	72	1	82132	0.60
78	Se	72	1	10611	4.59
95	Mo	72	1	273276	0.48
107	Ag	115	1	842910	1.10
111	Cd	115	1	150261	1.36
118	Sn	115	1	373675	1.74
121	Sb	115	1	472838	1.61
137	Ba	115	1	169183	1.75
205	Tl	165	1	1788621	0.85
208	Pb	165	1	2458109	1.53
232	Th	165	1	2476689	1.85
238	U	165	1	2751225	1.98

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	275794	0.87	286516	96.3	30 - 120	
45	Sc	1	896487	0.84	897316	99.9	30 - 120	
72	Ge	1	571143	0.70	590430	96.7	30 - 120	
115	In	1	1672451	1.10	1676276	99.8	30 - 120	
165	Ho	1	3597942	1.64	3565937	100.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\116 CCV.D\116 CCV.D#
Date Acquired: Jul 2 2009 03:17 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 03:14 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.61	ppb	1.55	50	101.2	90 - 110	
51 V	72	1	50.94	ppb	0.38	50	101.9	90 - 110	
52 Cr	72	1	50.66	ppb	0.31	50	101.3	90 - 110	
55 Mn	72	1	50.36	ppb	1.02	50	100.7	90 - 110	
59 Co	72	1	50.93	ppb	0.79	50	101.9	90 - 110	
60 Ni	72	1	50.95	ppb	0.42	50	101.9	90 - 110	
63 Cu	72	1	50.77	ppb	0.34	50	101.5	90 - 110	
66 Zn	72	1	50.67	ppb	0.76	50	101.3	90 - 110	
75 As	72	1	50.35	ppb	1.23	50	100.7	90 - 110	
78 Se	72	1	49.57	ppb	11.21	50	99.1	90 - 110	
95 Mo	72	1	50.31	ppb	0.15	50	100.6	90 - 110	
107 Ag	115	1	50.53	ppb	0.53	50	101.1	90 - 110	
111 Cd	115	1	50.21	ppb	0.51	50	100.4	90 - 110	
118 Sn	115	1	50.36	ppb	1.87	50	100.7	90 - 110	
121 Sb	115	1	50.34	ppb	1.62	50	100.7	90 - 110	
137 Ba	115	1	50.77	ppb	1.07	50	101.5	90 - 110	
205 Tl	165	1	51.35	ppb	1.10	50	102.7	90 - 110	
208 Pb	165	1	50.83	ppb	1.27	50	101.7	90 - 110	
232 Th	165	1	52.91	ppb	0.17	50	105.8	90 - 110	
238 U	165	1	51.75	ppb	1.58	50	103.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	272935	0.73	286516	95.3	30 - 120	
45 Sc	1	879390	0.60	897316	98.0	30 - 120	
72 Ge	1	561801	0.38	590430	95.2	30 - 120	
115 In	1	1644084	0.13	1676276	98.1	30 - 120	
165 Ho	1	3530856	0.41	3565937	99.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\117 CCB.D\117 CCB.D#
Date Acquired: Jul 2 2009 03:20 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 03:14 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.019	ppb	0.97	1.00	
51 V	72	1	-0.028	ppb	63.71	1.00	
52 Cr	72	1	0.007	ppb	221.20	1.00	
55 Mn	72	1	-0.005	ppb	261.29	1.00	
59 Co	72	1	0.002	ppb	97.02	1.00	
60 Ni	72	1	0.014	ppb	47.74	1.00	
63 Cu	72	1	0.014	ppb	108.12	1.00	
66 Zn	72	1	0.254	ppb	4.87	1.00	
75 As	72	1	0.007	ppb	37.00	1.00	
78 Se	72	1	0.210	ppb	92.66	1.00	
95 Mo	72	1	0.031	ppb	59.39	1.00	
107 Ag	115	1	0.006	ppb	38.62	1.00	
111 Cd	115	1	0.002	ppb	72.95	1.00	
118 Sn	115	1	1.518	ppb	2.28	1.00	Fail
121 Sb	115	1	0.084	ppb	3.36	1.00	
137 Ba	115	1	-0.001	ppb	753.19	1.00	
205 Tl	165	1	0.033	ppb	14.71	1.00	
208 Pb	165	1	0.009	ppb	20.98	1.00	
232 Th	165	1	1.196	ppb	12.92	1.00	Fail
238 U	165	1	0.016	ppb	8.58	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	275110	0.66	286516	96.0	30 - 120	
45 Sc	1	862963	1.72	897316	96.2	30 - 120	
72 Ge	1	573181	0.45	590430	97.1	30 - 120	
115 In	1	1653251	1.30	1676276	98.6	30 - 120	
165 Ho	1	3491936	0.73	3565937	97.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

2 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\118WASH.D\118WASH.D#
Date Acquired: Jul 2 2009 03:24 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 03:14 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.056 ppb	17.37	1.30	
51 V	72	1	5.228 ppb	1.67	6.50	
52 Cr	72	1	2.124 ppb	1.82	2.60	
55 Mn	72	1	1.024 ppb	4.73	1.30	
59 Co	72	1	1.027 ppb	4.97	1.30	
60 Ni	72	1	1.985 ppb	0.51	2.60	
63 Cu	72	1	2.086 ppb	7.54	2.60	
66 Zn	72	1	10.450 ppb	2.33	13.00	
75 As	72	1	5.093 ppb	2.53	6.50	
78 Se	72	1	5.232 ppb	8.59	6.50	
95 Mo	72	1	1.977 ppb	5.57	2.60	
107 Ag	115	1	5.335 ppb	3.53	6.50	
111 Cd	115	1	1.122 ppb	7.64	1.30	
118 Sn	115	1	10.330 ppb	1.69	13.00	
121 Sb	115	1	2.068 ppb	3.58	2.60	
137 Ba	115	1	1.043 ppb	3.98	1.30	
205 Tl	165	1	1.082 ppb	0.92	1.30	
208 Pb	165	1	1.071 ppb	1.17	1.30	
232 Th	165	1	2.453 ppb	1.45	2.60	
238 U	165	1	1.108 ppb	0.54	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	274415	0.81	286516	95.8	30 - 120	
45 Sc	1	873280	0.89	897316	97.3	30 - 120	
72 Ge	1	572180	0.65	590430	96.9	30 - 120	
115 In	1	1657199	1.76	1676276	98.9	30 - 120	
165 Ho	1	3520686	0.04	3565937	98.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\119 BLK.D\119 BLK.D#
Date Acquired: Jul 2 2009 03:27 am
Operator: TEL
Sample Name: LFM1CBF
Misc Info: BLANK 9177109 6020
Vial Number: 3104
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 03:14 am
Sample Type: BLK
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	-0.009 ppb	0.00	2.00	
51 V	72	1	0.012 ppb	14.65	2.00	
52 Cr	72	1	0.024 ppb	45.71	2.00	
55 Mn	72	1	-0.010 ppb	70.40	2.00	
59 Co	72	1	-0.005 ppb	46.39	2.00	
60 Ni	72	1	0.011 ppb	48.59	2.00	
63 Cu	72	1	0.068 ppb	20.66	2.00	
66 Zn	72	1	0.299 ppb	17.20	2.00	
75 As	72	1	-0.010 ppb	74.77	2.00	
78 Se	72	1	-0.048 ppb	391.28	2.00	
95 Mo	72	1	-0.011 ppb	15.66	2.00	
107 Ag	115	1	0.002 ppb	113.37	2.00	
111 Cd	115	1	-0.010 ppb	12.36	2.00	
118 Sn	115	1	-0.257 ppb	17.16	2.00	
121 Sb	115	1	0.024 ppb	17.80	2.00	
137 Ba	115	1	-0.002 ppb	144.16	2.00	
205 Tl	165	1	0.006 ppb	16.97	2.00	
208 Pb	165	1	0.011 ppb	24.98	2.00	
232 Th	165	1	0.096 ppb	5.18	2.00	
238 U	165	1	0.002 ppb	63.25	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	275743	0.57	286516	96.2	30 - 120	
45 Sc	1	884129	0.32	897316	98.5	30 - 120	
72 Ge	1	578902	0.45	590430	98.0	30 - 120	
115 In	1	1652034	0.49	1676276	98.6	30 - 120	
165 Ho	1	3536180	0.55	3565937	99.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Laboratory Control Spike (LCS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\120 LCS.D\120 LCS.D#
Date Acquired: Jul 2 2009 03:30 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFM1CCF
Misc Info: LCS
Vial Number: 3105
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: LCS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	40.83	2.73	40	102.1	80 - 120	
51 V	72	1	40.22	1.75	40	100.6	80 - 120	
52 Cr	72	1	40.37	1.50	40	100.9	80 - 120	
55 Mn	72	1	40.69	1.30	40	101.7	80 - 120	
59 Co	72	1	40.58	0.56	40	101.5	80 - 120	
60 Ni	72	1	39.87	0.94	40	99.7	80 - 120	
63 Cu	72	1	41.51	0.94	40	103.8	80 - 120	
66 Zn	72	1	40.88	0.72	40	102.2	80 - 120	
75 As	72	1	40.86	0.24	40	102.2	80 - 120	
78 Se	72	1	39.51	6.35	40	98.8	80 - 120	
95 Mo	72	1	39.89	1.30	40	99.7	80 - 120	
107 Ag	115	1	40.18	0.91	40	100.5	80 - 120	
111 Cd	115	1	40.27	1.17	40	100.7	80 - 120	
118 Sn	115	1	-0.27	11.57	40	-0.7	80 - 120	
121 Sb	115	1	40.34	0.84	40	100.9	80 - 120	
137 Ba	115	1	40.13	0.93	40	100.3	80 - 120	
205 Tl	165	1	41.32	1.83	40	103.3	80 - 120	
208 Pb	165	1	41.17	1.76	40	102.9	80 - 120	
232 Th	165	1	40.23	1.60	40	100.6	80 - 120	
238 U	165	1	41.15	2.09	40	102.9	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	272385	0.54	286516	95.1	30 - 120	
45 Sc	1	869349	1.41	897316	96.9	30 - 120	
72 Ge	1	563096	0.14	590430	95.4	30 - 120	
115 In	1	1648410	0.25	1676276	98.3	30 - 120	
165 Ho	1	3498335	1.24	3565937	98.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\121AREF.D\121AREF.D#
Date Acquired: Jul 2 2009 03:34 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFLL4F 10X
Misc Info: D9F250221
Vial Number: 3106
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: AllRef
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	-0.09	-0.01	ppb	0.00	3600	
51 V	72	1	31.05	3.11	ppb	4.20	3600	
52 Cr	72	1	2.87	0.29	ppb	26.01	3600	
55 Mn	72	1	26.61	2.66	ppb	2.85	3600	
59 Co	72	1	0.40	0.04	ppb	27.09	3600	
60 Ni	72	1	4.19	0.42	ppb	20.50	3600	
63 Cu	72	1	0.35	0.04	ppb	34.16	3600	
66 Zn	72	1	0.84	0.08	ppb	16.83	3600	
75 As	72	1	56.90	5.69	ppb	1.50	3600	
78 Se	72	1	2.31	0.23	ppb	138.28	3600	
95 Mo	72	1	10.35	1.04	ppb	6.46	3600	
107 Ag	115	1	0.12	0.01	ppb	29.98	3600	
111 Cd	115	1	0.02	0.00	ppb	311.94	3600	
118 Sn	115	1	-3.24	-0.32	ppb	8.40	3600	
121 Sb	115	1	0.57	0.06	ppb	19.57	3600	
137 Ba	115	1	58.18	5.82	ppb	1.62	3600	
205 Tl	165	1	0.29	0.03	ppb	8.47	3600	
208 Pb	165	1	0.09	0.01	ppb	19.92	3600	
232 Th	165	1	10.24	1.02	ppb	16.94	1000	
238 U	165	1	18.30	1.83	ppb	0.84	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	248886	0.33	286516	86.9	30 - 120	
45 Sc	1	772570	0.13	897316	86.1	30 - 120	
72 Ge	1	482239	0.71	590430	81.7	30 - 120	
115 In	1	1404683	0.86	1676276	83.8	30 - 120	
165 Ho	1	3166129	0.50	3565937	88.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\122SDIL.D\122SDIL.D#
Date Acquired: Jul 2 2009 03:37 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFLL4P50F
Misc Info: SERIAL DILUTION
Vial Number: 3107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070109E.B\121AREF.D\121AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	-0.01	ppb	0.00	0.00	500.0	90 - 110	
51 V	72	1	0.63	ppb	7.79	0.62	101.3	90 - 110	
52 Cr	72	1	0.15	ppb	29.62	0.06	266.6	90 - 110	
55 Mn	72	1	0.55	ppb	7.28	0.53	102.4	90 - 110	
59 Co	72	1	0.01	ppb	53.75	0.01	95.0	90 - 110	
60 Ni	72	1	0.19	ppb	12.03	0.08	223.9	90 - 110	
63 Cu	72	1	0.04	ppb	23.05	0.01	535.8	90 - 110	
66 Zn	72	1	0.21	ppb	13.27	0.02	1228.3	90 - 110	
75 As	72	1	1.11	ppb	1.53	1.14	97.9	90 - 110	
78 Se	72	1	0.42	ppb	89.49	0.05	917.6	90 - 110	
95 Mo	72	1	0.14	ppb	14.02	0.21	67.5	90 - 110	
107 Ag	115	1	0.00	ppb	445.65	0.00	24.1	90 - 110	
111 Cd	115	1	0.00	ppb	1912.00	0.00	78.1	90 - 110	
118 Sn	115	1	-0.34	ppb	7.61	-0.06	525.1	90 - 110	
121 Sb	115	1	0.02	ppb	27.90	0.01	163.3	90 - 110	
137 Ba	115	1	1.16	ppb	0.57	1.16	99.9	90 - 110	
205 Tl	165	1	0.01	ppb	42.33	0.01	98.2	90 - 110	
208 Pb	165	1	0.01	ppb	23.72	0.00	292.6	90 - 110	
232 Th	165	1	0.20	ppb	7.93	0.20	98.3	90 - 110	
238 U	165	1	0.37	ppb	0.99	0.37	102.2	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	271632	0.91	286516	94.8	30 - 120	
45 Sc	1	833504	1.36	897316	92.9	30 - 120	
72 Ge	1	544783	0.34	590430	92.3	30 - 120	
115 In	1	1557675	1.07	1676276	92.9	30 - 120	
165 Ho	1	3425936	0.36	3565937	96.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Denver

SERIAL DILUTION

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/02/09 11:32:57

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFLL4P50F** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG070109E # 122
Acquired: 07/02/2009 03:37:00
Calibrated: 07/02/2009 03:10:00

Channel 272
Method 6020_
ICPMS_024

Matrix: AQUEOUS
Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9		-0.43955	-0.08791			*	
7440-62-2	Vanadium	51	3403	31.440	31.050	1.26		*	
7440-47-3	Chromium	52	2460	7.6550	2.8710	167		*	
7439-96-5	Manganese	55	3331	27.260	26.610	2.44		*	
7440-48-4	Cobalt	59	140	0.37860	0.39870	5.04		*	
7440-02-0	Nickel	60	453	9.3750	4.1880	124		*	
7440-50-8	Copper	63	477	1.8915	0.35300	436		*	
7440-66-6	Zinc	66	453	10.335	0.84140	1130		*	
7440-38-2	Arsenic	75	898	55.700	56.900	2.11	0.21	NC	☑
7782-49-2	Selenium	78	113	21.215	2.3120	818	0.70	NC	☑
7439-98-7	Molybdenum	95	607	6.9900	10.350	32.5		*	
7440-22-4	Silver	107	23	0.02953	0.12240	75.9		*	
7440-43-9	Cadmium	111	19	0.01556	0.01993	21.9		*	
7440-31-5	Tin	118	350	-17.020	-3.2410			*	
7440-36-0	Antimony	121	114	0.92500	0.56630	63.3		*	
7440-39-3	Barium	137	1857	58.100	58.180	0.138		*	
7440-28-0	Thallium	205	162	0.28490	0.29010	1.79		*	
7439-92-1	Lead	208	334	0.26755	0.09144	193		*	
7440-61-1	Uranium	238	9825	18.710	18.300	2.24		*	
7440-29-1	Thorium	232	5385	10.065	10.240	1.71		*	
7439-93-2	Lithium	6			0			*	
7440-20-2	Scandium	45			0			*	
7440-74-6	Indium	115			0			*	
7440-56-4	Germanium	72			0			*	
7440-60-0	Holmium	165			0			*	

* Analyte not requested for this batch, no MDL

NC : Serial dilution concentration < 100 X MDL

E : Difference greater than Limit (10%)

Reviewed by: Date:

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\123PDS.D\123PDS.D#
Date Acquired: Jul 2 2009 03:41 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFLL4ZF
Misc Info: POST DIGESTION SPIKE
Vial Number: 3108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: PDS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	196.50	-0.01	ppb	1.91	200	98.3	75 - 125	
51 V	72	1	208.80	3.11	ppb	2.10	200	102.8	75 - 125	
52 Cr	72	1	202.70	0.29	ppb	0.71	200	101.2	75 - 125	
55 Mn	72	1	203.30	2.66	ppb	1.96	200	100.3	75 - 125	
59 Co	72	1	194.70	0.04	ppb	0.13	200	97.3	75 - 125	
60 Ni	72	1	181.20	0.42	ppb	0.10	200	90.4	75 - 125	
63 Cu	72	1	179.20	0.04	ppb	0.43	200	89.6	75 - 125	
66 Zn	72	1	191.80	0.08	ppb	0.45	200	95.9	75 - 125	
75 As	72	1	203.40	5.69	ppb	0.47	200	98.9	75 - 125	
78 Se	72	1	194.60	0.23	ppb	0.83	200	97.2	75 - 125	
95 Mo	72	1	204.30	1.04	ppb	0.61	200	101.6	75 - 125	
107 Ag	115	1	45.05	0.01	ppb	1.11	50	90.1	75 - 125	
111 Cd	115	1	190.50	0.00	ppb	1.45	200	95.2	75 - 125	
118 Sn	115	1	176.70	-0.32	ppb	1.44	200	88.5	75 - 125	
121 Sb	115	1	196.20	0.06	ppb	1.21	200	98.1	75 - 125	
137 Ba	115	1	202.40	5.82	ppb	1.11	200	98.3	75 - 125	
205 Tl	165	1	182.90	0.03	ppb	1.22	200	91.4	75 - 125	
208 Pb	165	1	182.40	0.01	ppb	1.63	200	91.2	75 - 125	
232 Th	165	1	0.10	1.02	ppb	12.58	200	0.0	75 - 125	
238 U	165	1	197.80	1.83	ppb	0.87	200	98.0	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	245667	1.54	286516	85.7	30 - 120	
45 Sc	1	758138	0.59	897316	84.5	30 - 120	
72 Ge	1	476594	0.28	590430	80.7	30 - 120	
115 In	1	1406400	0.60	1676276	83.9	30 - 120	
165 Ho	1	3181571	0.98	3565937	89.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/02/09 11:33:01

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFLL4ZF** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070109E # 123 | Method 6020_
Acquired: 07/02/2009 03:41:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/02/2009 03:10:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	63338	196.50	-0.00879	98.2	200		☑
7440-62-2	Vanadium	51	1011720	208.80	3.1050	103	200		☑
7440-47-3	Chromium	52	1112900	202.70	0.28710	101	200		☑
7439-96-5	Manganese	55	980290	203.30	2.6610	100	200		☐
7440-48-4	Cobalt	59	1488220	194.70	0.03987	97.3	200		☑
7440-02-0	Nickel	60	342012	181.20	0.41880	90.4	200		☑
7440-50-8	Copper	63	854627	179.20	0.03530	89.6	200		☑
7440-66-6	Zinc	66	188896	191.80	0.08414	95.9	200		☐
7440-38-2	Arsenic	75	139399	203.40	5.6900	98.9	200		☑
7782-49-2	Selenium	78	17175	194.60	0.23120	97.2	200		☑
7439-98-7	Molybdenum	95	465672	204.30	1.0350	102	200		☑
7440-22-4	Silver	107	319324	45.050	0.01224	90.1	50.0		☑
7440-43-9	Cadmium	111	240697	190.50	0.00199	95.2	200		☑
7440-31-5	Tin	118	554333	176.70	-0.32410	88.3	200		☐
7440-36-0	Antimony	121	780118	196.20	0.05663	98.1	200		☑
7440-39-3	Barium	137	287888	202.40	5.8180	98.3	200		☑
7440-28-0	Thallium	205	2893230	182.90	0.02901	91.4	200		☑
7439-92-1	Lead	208	3964570	182.40	0.00914	91.2	200		☑
7440-61-1	Uranium	238	4814250	197.80	1.8300	98.0	200		☐
7440-29-1	Thorium	232	2680	0.09545	1.0240				
7439-93-2	Lithium	6			0				
7440-20-2	Scandium	45			0				
7440-74-6	Indium	115			0				
7440-56-4	Germanium	72			0				
7440-60-0	Holmium	165			0				

Reviewed by: Date:

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\124_MS.D\124_MS.D#
Date Acquired: Jul 2 2009 03:44 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFLL4SF 10X
Misc Info: MATRIX SPIKE
Vial Number: 3109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: MS
Prep Dil. Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	4.20	-0.01	ppb	10.27	40	10.5	50 - 150	
51 V	72	1	7.41	3.11	ppb	0.93	40	17.2	50 - 150	
52 Cr	72	1	4.40	0.29	ppb	1.02	40	10.9	50 - 150	
55 Mn	72	1	6.60	2.66	ppb	1.07	40	15.5	50 - 150	
59 Co	72	1	4.12	0.04	ppb	1.77	40	10.3	50 - 150	
60 Ni	72	1	4.40	0.42	ppb	1.64	40	10.9	50 - 150	
63 Cu	72	1	3.96	0.04	ppb	2.48	40	9.9	50 - 150	
66 Zn	72	1	3.95	0.08	ppb	1.47	40	9.9	50 - 150	
75 As	72	1	9.93	5.69	ppb	1.97	40	21.7	50 - 150	
78 Se	72	1	4.21	0.23	ppb	3.85	40	10.5	50 - 150	
95 Mo	72	1	5.34	1.04	ppb	2.65	40	13.0	50 - 150	
107 Ag	115	1	3.83	0.01	ppb	2.34	40	9.6	50 - 150	
111 Cd	115	1	4.15	0.00	ppb	2.40	40	10.4	50 - 150	
118 Sn	115	1	-0.06	-0.32	ppb	109.15	40	-0.2	50 - 150	
121 Sb	115	1	4.37	0.06	ppb	2.54	40	10.9	50 - 150	
137 Ba	115	1	9.99	5.82	ppb	2.21	40	21.8	50 - 150	
205 Tl	165	1	4.01	0.03	ppb	0.56	40	10.0	50 - 150	
208 Pb	165	1	3.99	0.01	ppb	0.25	40	10.0	50 - 150	
232 Th	165	1	4.17	1.02	ppb	1.09	40	10.2	50 - 150	
238 U	165	1	6.19	1.83	ppb	1.11	40	14.8	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	242240	0.22	286516	84.5	30 - 120	
45 Sc	1	758020	0.99	897316	84.5	30 - 120	
72 Ge	1	474456	0.79	590430	80.4	30 - 120	
115 In	1	1384090	0.74	1676276	82.6	30 - 120	
165 Ho	1	3151302	0.21	3565937	88.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Duplicate Spike (MSD) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\125 MSD.D\125 MSD.D#
Date Acquired: Jul 2 2009 03:47 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFLL4DF 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: MSD
Dilution Factor: 10.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070109E.B\124 MS.D\124 MS.D#

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	4.08	ppb	12.02	4.20	2.88	20	
51 V	72	1	7.18	ppb	2.97	7.41	3.11	20	
52 Cr	72	1	4.53	ppb	0.57	4.40	3.07	20	
55 Mn	72	1	6.84	ppb	3.01	6.60	3.62	20	
59 Co	72	1	4.11	ppb	1.76	4.12	0.17	20	
60 Ni	72	1	4.42	ppb	2.85	4.40	0.43	20	
63 Cu	72	1	3.89	ppb	2.63	3.95	1.58	20	
66 Zn	72	1	3.95	ppb	1.54	3.95	0.13	20	
75 As	72	1	9.95	ppb	1.82	9.93	0.17	20	
78 Se	72	1	4.87	ppb	12.40	4.21	14.61	20	
95 Mo	72	1	5.43	ppb	2.67	5.34	1.58	20	
107 Ag	115	1	4.00	ppb	4.22	3.83	4.19	20	
111 Cd	115	1	4.27	ppb	2.63	4.15	2.78	20	
118 Sn	115	1	-0.25	ppb	17.34	-0.06	-118.05	20	
121 Sb	115	1	4.45	ppb	2.19	4.37	1.86	20	
137 Ba	115	1	10.05	ppb	1.33	9.99	0.60	20	
205 Tl	165	1	4.05	ppb	1.38	4.01	1.04	20	
208 Pb	165	1	4.02	ppb	1.07	3.98	0.75	20	
232 Th	165	1	4.41	ppb	0.82	4.17	5.50	20	
238 U	165	1	6.31	ppb	1.14	6.18	2.06	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	245077	1.11	286516	85.5	30 - 120	
45 Sc	1	760174	0.54	897316	84.7	30 - 120	
72 Ge	1	479544	0.36	590430	81.2	30 - 120	
115 In	1	1390282	1.92	1676276	82.9	30 - 120	
165 Ho	1	3181821	0.59	3565937	89.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref. File :C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\126 CCV.D\126 CCV.D#
Date Acquired: Jul 2 2009 03:51 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 03:14 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	48.84	ppb	1.36	50	97.7	90 - 110	
51 V	72	1	50.24	ppb	1.57	50	100.5	90 - 110	
52 Cr	72	1	50.43	ppb	0.26	50	100.9	90 - 110	
55 Mn	72	1	50.24	ppb	0.38	50	100.5	90 - 110	
59 Co	72	1	50.49	ppb	1.07	50	101.0	90 - 110	
60 Ni	72	1	49.86	ppb	1.18	50	99.7	90 - 110	
63 Cu	72	1	50.71	ppb	1.01	50	101.4	90 - 110	
66 Zn	72	1	50.85	ppb	0.73	50	101.7	90 - 110	
75 As	72	1	50.13	ppb	0.47	50	100.3	90 - 110	
78 Se	72	1	49.19	ppb	6.39	50	98.4	90 - 110	
95 Mo	72	1	50.26	ppb	0.41	50	100.5	90 - 110	
107 Ag	115	1	50.26	ppb	0.58	50	100.5	90 - 110	
111 Cd	115	1	50.31	ppb	0.71	50	100.6	90 - 110	
118 Sn	115	1	50.06	ppb	1.04	50	100.1	90 - 110	
121 Sb	115	1	50.46	ppb	0.62	50	100.9	90 - 110	
137 Ba	115	1	51.03	ppb	1.25	50	102.1	90 - 110	
205 Tl	165	1	51.90	ppb	1.22	50	103.8	90 - 110	
208 Pb	165	1	51.87	ppb	1.17	50	103.7	90 - 110	
232 Th	165	1	52.74	ppb	0.49	50	105.5	90 - 110	
238 U	165	1	53.42	ppb	0.45	50	106.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	258412	1.36	286516	90.2	30 - 120	
45 Sc	1	790464	1.16	897316	88.1	30 - 120	
72 Ge	1	516563	0.66	590430	87.5	30 - 120	
115 In	1	1545281	0.33	1676276	92.2	30 - 120	
165 Ho	1	3361589	0.46	3565937	94.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\127 CCB.D\127 CCB.D#
Date Acquired: Jul 2 2009 03:54 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 03:14 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	-0.009	ppb	0.00	1.00	
51 V	72	1	-0.011	ppb	324.89	1.00	
52 Cr	72	1	0.000	ppb	18816.00	1.00	
55 Mn	72	1	-0.006	ppb	166.85	1.00	
59 Co	72	1	0.001	ppb	468.54	1.00	
60 Ni	72	1	0.009	ppb	105.12	1.00	
63 Cu	72	1	0.018	ppb	31.43	1.00	
66 Zn	72	1	0.228	ppb	15.52	1.00	
75 As	72	1	-0.005	ppb	313.97	1.00	
78 Se	72	1	0.436	ppb	125.10	1.00	
95 Mo	72	1	-0.035	ppb	78.80	1.00	
107 Ag	115	1	0.011	ppb	37.25	1.00	
111 Cd	115	1	-0.003	ppb	216.50	1.00	
118 Sn	115	1	1.480	ppb	8.60	1.00	Fail
121 Sb	115	1	0.068	ppb	10.50	1.00	
137 Ba	115	1	0.001	ppb	963.22	1.00	
205 Tl	165	1	0.032	ppb	12.41	1.00	
208 Pb	165	1	0.006	ppb	12.36	1.00	
232 Th	165	1	0.859	ppb	16.96	1.00	
238 U	165	1	0.014	ppb	10.93	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	258291	0.65	286516	90.1	30 - 120	
45 Sc	1	788498	1.22	897316	87.9	30 - 120	
72 Ge	1	522419	0.49	590430	88.5	30 - 120	
115 In	1	1532405	1.42	1676276	91.4	30 - 120	
165 Ho	1	3329721	0.64	3565937	93.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

1 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\128WASH.D\128WASH.D#
Date Acquired: Jul 2 2009 03:57 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 03:14 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.149 ppb	13.15	1.30	
51 V	72	1	5.283 ppb	2.24	6.50	
52 Cr	72	1	2.018 ppb	3.11	2.60	
55 Mn	72	1	1.062 ppb	2.12	1.30	
59 Co	72	1	1.027 ppb	2.73	1.30	
60 Ni	72	1	2.046 ppb	5.72	2.60	
63 Cu	72	1	2.036 ppb	5.45	2.60	
66 Zn	72	1	10.350 ppb	0.95	13.00	
75 As	72	1	5.070 ppb	5.19	6.50	
78 Se	72	1	5.305 ppb	3.84	6.50	
95 Mo	72	1	1.923 ppb	5.42	2.60	
107 Ag	115	1	5.231 ppb	2.63	6.50	
111 Cd	115	1	1.016 ppb	5.77	1.30	
118 Sn	115	1	10.430 ppb	2.92	13.00	
121 Sb	115	1	2.031 ppb	1.46	2.60	
137 Ba	115	1	1.018 ppb	9.21	1.30	
205 Tl	165	1	1.096 ppb	2.61	1.30	
208 Pb	165	1	1.077 ppb	1.13	1.30	
232 Th	165	1	2.305 ppb	3.16	2.60	
238 U	165	1	1.101 ppb	2.47	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	260845	0.89	286516	91.0	30 - 120	
45 Sc	1	807042	1.40	897316	89.9	30 - 120	
72 Ge	1	529193	0.39	590430	89.6	30 - 120	
115 In	1	1548348	0.97	1676276	92.4	30 - 120	
165 Ho	1	3350899	0.94	3565937	94.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\129 BLK.D\129 BLK.D#
Date Acquired: Jul 2 2009 04:01 am
Operator: TEL
Sample Name: LFM05B
Misc Info: BLANK 9177105 6020
Vial Number: 3111
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 03:14 am
Sample Type: BLK
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	-0.009 ppb	0.00	2.00	
51 V	72	1	-0.070 ppb	66.88	2.00	
52 Cr	72	1	0.054 ppb	22.10	2.00	
55 Mn	72	1	-0.001 ppb	421.14	2.00	
59 Co	72	1	-0.005 ppb	12.69	2.00	
60 Ni	72	1	0.001 ppb	825.91	2.00	
63 Cu	72	1	0.029 ppb	21.73	2.00	
66 Zn	72	1	0.183 ppb	24.13	2.00	
75 As	72	1	-0.005 ppb	316.34	2.00	
78 Se	72	1	-0.056 ppb	534.15	2.00	
95 Mo	72	1	-0.064 ppb	9.64	2.00	
107 Ag	115	1	0.001 ppb	539.38	2.00	
111 Cd	115	1	-0.010 ppb	77.24	2.00	
118 Sn	115	1	-0.268 ppb	6.93	2.00	
121 Sb	115	1	0.024 ppb	8.08	2.00	
137 Ba	115	1	0.042 ppb	10.76	2.00	
205 Tl	165	1	0.004 ppb	22.61	2.00	
208 Pb	165	1	0.004 ppb	44.49	2.00	
232 Th	165	1	0.117 ppb	17.01	2.00	
238 U	165	1	0.002 ppb	28.08	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	261827	0.29	286516	91.4	30 - 120	
45 Sc	1	805288	1.17	897316	89.7	30 - 120	
72 Ge	1	530561	0.67	590430	89.9	30 - 120	
115 In	1	1547548	1.63	1676276	92.3	30 - 120	
165 Ho	1	3344388	0.40	3565937	93.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Laboratory Control Spike (LCS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\130 LCS.D\130 LCS.D#
Date Acquired: Jul 2 2009 04:04 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFM05C
Misc Info: LCS
Vial Number: 3112
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: LCS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	40.55	2.29	40	101.4	80 - 120	
51 V	72	1	40.36	1.89	40	100.9	80 - 120	
52 Cr	72	1	40.77	0.72	40	101.9	80 - 120	
55 Mn	72	1	41.07	1.57	40	102.7	80 - 120	
59 Co	72	1	40.97	0.45	40	102.4	80 - 120	
60 Ni	72	1	40.44	0.18	40	101.1	80 - 120	
63 Cu	72	1	41.26	1.29	40	103.2	80 - 120	
66 Zn	72	1	40.08	0.47	40	100.2	80 - 120	
75 As	72	1	39.82	1.02	40	99.6	80 - 120	
78 Se	72	1	38.31	4.54	40	95.8	80 - 120	
95 Mo	72	1	40.50	0.96	40	101.3	80 - 120	
107 Ag	115	1	40.82	1.44	40	102.1	80 - 120	
111 Cd	115	1	40.59	2.45	40	101.5	80 - 120	
118 Sn	115	1	-0.27	8.18	40	-0.7	80 - 120	
121 Sb	115	1	40.51	2.19	40	101.3	80 - 120	
137 Ba	115	1	41.37	2.08	40	103.4	80 - 120	
205 Tl	165	1	41.71	1.36	40	104.3	80 - 120	
208 Pb	165	1	41.69	0.89	40	104.2	80 - 120	
232 Th	165	1	43.35	0.50	40	108.4	80 - 120	
238 U	165	1	42.31	1.28	40	105.8	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	258030	1.94	286516	90.1	30 - 120	
45 Sc	1	795099	0.33	897316	88.6	30 - 120	
72 Ge	1	517024	1.14	590430	87.6	30 - 120	
115 In	1	1536990	1.08	1676276	91.7	30 - 120	
165 Ho	1	3338014	0.09	3565937	93.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\131AREF.D\131AREF.D#
Date Acquired: Jul 2 2009 04:08 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFLLR 10X
Misc Info: D9F250221
Vial Number: 3201
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: AllRef
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.13	0.01	ppb	145.19	3600	
51 V	72	1	35.18	3.52	ppb	1.70	3600	
52 Cr	72	1	13.58	1.36	ppb	1.66	3600	
55 Mn	72	1	27.05	2.71	ppb	3.37	3600	
59 Co	72	1	0.51	0.05	ppb	8.97	3600	
60 Ni	72	1	9.23	0.92	ppb	0.83	3600	
63 Cu	72	1	0.77	0.08	ppb	19.52	3600	
66 Zn	72	1	1.28	0.13	ppb	37.88	3600	
75 As	72	1	61.84	6.18	ppb	2.21	3600	
78 Se	72	1	3.95	0.40	ppb	149.29	3600	
95 Mo	72	1	11.05	1.11	ppb	0.13	3600	
107 Ag	115	1	0.09	0.01	ppb	81.80	3600	
111 Cd	115	1	0.08	0.01	ppb	219.09	3600	
118 Sn	115	1	-3.34	-0.33	ppb	2.84	3600	
121 Sb	115	1	0.54	0.05	ppb	31.31	3600	
137 Ba	115	1	56.10	5.61	ppb	3.03	3600	
205 Tl	165	1	0.25	0.02	ppb	21.08	3600	
208 Pb	165	1	0.15	0.02	ppb	29.34	3600	
232 Th	165	1	7.49	0.75	ppb	16.50	1000	
238 U	165	1	18.77	1.88	ppb	0.93	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	233861	1.03	286516	81.6	30 - 120	
45 Sc	1	729922	0.41	897316	81.3	30 - 120	
72 Ge	1	459370	0.56	590430	77.8	30 - 120	
115 In	1	1349458	1.43	1676276	80.5	30 - 120	
165 Ho	1	3055987	0.61	3565937	85.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\132SDIL.D\132SDIL.D#
Date Acquired: Jul 2 2009 04:11 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFLLRP10
Misc Info: SERIAL DILUTION
Vial Number: 3202
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070109E.B\131AREF.D\131AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	-0.01	ppb	0.00	0.00	-338.4	90 - 110	
51 V	72	1	0.70	ppb	11.76	0.70	99.6	90 - 110	
52 Cr	72	1	0.36	ppb	6.94	0.27	132.8	90 - 110	
55 Mn	72	1	0.59	ppb	2.92	0.54	109.3	90 - 110	
59 Co	72	1	0.01	ppb	31.33	0.01	142.8	90 - 110	
60 Ni	72	1	0.27	ppb	7.73	0.18	144.9	90 - 110	
63 Cu	72	1	0.03	ppb	50.00	0.02	208.3	90 - 110	
66 Zn	72	1	0.18	ppb	13.42	0.03	688.1	90 - 110	
75 As	72	1	1.18	ppb	11.00	1.24	95.4	90 - 110	
78 Se	72	1	0.26	ppb	189.63	0.08	333.0	90 - 110	
95 Mo	72	1	0.18	ppb	23.78	0.22	82.2	90 - 110	
107 Ag	115	1	0.00	ppb	369.53	0.00	-31.4	90 - 110	
111 Cd	115	1	0.00	ppb	215.92	0.00	-149.7	90 - 110	
118 Sn	115	1	-0.34	ppb	4.05	-0.07	509.9	90 - 110	
121 Sb	115	1	0.02	ppb	26.81	0.01	147.7	90 - 110	
137 Ba	115	1	1.19	ppb	10.35	1.12	106.1	90 - 110	
205 Tl	165	1	0.01	ppb	25.77	0.00	103.4	90 - 110	
208 Pb	165	1	0.01	ppb	2.03	0.00	491.0	90 - 110	
232 Th	165	1	0.15	ppb	12.64	0.15	101.9	90 - 110	
238 U	165	1	0.38	ppb	1.67	0.38	100.9	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	253488	0.86	286516	88.5	30 - 120	
45 Sc	1	778051	0.53	897316	86.7	30 - 120	
72 Ge	1	505047	1.21	590430	85.5	30 - 120	
115 In	1	1466456	0.51	1676276	87.5	30 - 120	
165 Ho	1	3245069	0.54	3565937	91.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Denver

SERIAL DILUTION

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/02/09 11:33:07

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFLLRP10** | Serial Dilution: **10.00** | Sample Dilution: **5.00**

Instrument: **Agilent7500** | Channel 272
File: AG070109E # 132 | Method 6020_
Acquired: 07/02/2009 04:11:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/02/2009 03:10:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9		-0.08791	0.07396	219		*	
7440-62-2	Vanadium	51	3523	7.0100	38.940	82.0		*	
7440-47-3	Chromium	52	3487	3.6060	13.230	72.7		*	
7439-96-5	Manganese	55	3324	5.9120	27.840	78.8		*	
7440-48-4	Cobalt	59	187	0.14640	0.55610	73.7		*	
7440-02-0	Nickel	60	580	2.6750	9.7280	72.5		*	
7440-50-8	Copper	63	413	0.32180	0.69540	53.7		*	
7440-66-6	Zinc	66	388	1.7560	-1.9250			*	
7440-38-2	Arsenic	75	881	11.800	66.340	82.2	0.21	NC	☑
7782-49-2	Selenium	78	90	2.6320	7.1430	63.2	0.70	NC	☑
7439-98-7	Molybdenum	95	663	1.8170	12.730	85.7		*	
7440-22-4	Silver	107	13	-0.00563	0.17860	103		*	
7440-43-9	Cadmium	111	14	-0.02431	0.12280	120		*	
7440-31-5	Tin	118	330	-3.4030	0.32450	1150		*	
7440-36-0	Antimony	121	98	0.16070	0.17540	8.38		*	
7440-39-3	Barium	137	1789	11.900	59.950	80.2		*	
7440-28-0	Thallium	205	144	0.05127	0.18230	71.9		*	
7439-92-1	Lead	208	527	0.14810	0.11890	24.6		*	
7440-61-1	Uranium	238	9415	3.7860	18.850	79.9		*	
7440-29-1	Thorium	232	4014	1.5270	2.7590	44.7		*	
7439-93-2	Lithium	6			0			*	
7440-20-2	Scandium	45			0			*	
7440-74-6	Indium	115			0			*	
7440-56-4	Germanium	72			0			*	
7440-60-0	Holmium	165			0			*	

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

NC : Serial dilution concentration < 100 X MDL

E : Difference greater than Limit (10%)

Reviewed by: Date:

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\133PDS.D\133PDS.D#
Date Acquired: Jul 2 2009 04:14 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFLLRZ
Misc Info: POST DIGESTION SPIKE
Vial Number: 3203
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: PDS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	197.50	0.01	ppb	2.12	200	98.7	75 - 125	
51 V	72	1	205.10	3.52	ppb	0.45	200	100.8	75 - 125	
52 Cr	72	1	201.70	1.36	ppb	1.06	200	100.2	75 - 125	
55 Mn	72	1	198.60	2.70	ppb	3.46	200	98.0	75 - 125	
59 Co	72	1	192.80	0.05	ppb	1.47	200	96.4	75 - 125	
60 Ni	72	1	179.70	0.92	ppb	1.04	200	89.4	75 - 125	
63 Cu	72	1	179.00	0.08	ppb	0.63	200	89.5	75 - 125	
66 Zn	72	1	187.90	0.13	ppb	0.15	200	93.9	75 - 125	
75 As	72	1	202.80	6.18	ppb	0.62	200	98.4	75 - 125	
78 Se	72	1	192.80	0.40	ppb	2.63	200	96.2	75 - 125	
95 Mo	72	1	202.50	1.11	ppb	0.54	200	100.7	75 - 125	
107 Ag	115	1	45.05	0.01	ppb	0.33	50	90.1	75 - 125	
111 Cd	115	1	189.60	0.01	ppb	0.62	200	94.8	75 - 125	
118 Sn	115	1	177.30	-0.33	ppb	0.82	200	88.8	75 - 125	
121 Sb	115	1	196.70	0.05	ppb	0.64	200	98.3	75 - 125	
137 Ba	115	1	202.60	5.61	ppb	0.79	200	98.5	75 - 125	
205 Tl	165	1	185.00	0.02	ppb	0.92	200	92.5	75 - 125	
208 Pb	165	1	183.50	0.02	ppb	0.27	200	91.7	75 - 125	
232 Th	165	1	0.09	0.75	ppb	10.95	200	0.0	75 - 125	
238 U	165	1	196.50	1.88	ppb	0.45	200	97.3	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	233210	1.13	286516	81.4	30 - 120	
45 Sc	1	723206	0.82	897316	80.6	30 - 120	
72 Ge	1	456227	0.92	590430	77.3	30 - 120	
115 In	1	1345575	0.80	1676276	80.3	30 - 120	
165 Ho	1	3066698	1.01	3565937	86.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/02/09 11:33:12

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFLLRZ** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG070109E # 133
Acquired: 07/02/2009 04:14:00
Calibrated: 07/02/2009 03:10:00

Channel 272
Method 6020_
ICPMS_024

Matrix: AQUEOUS
Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	60449	197.50	0.01299	98.7	200		☑
7440-62-2	Vanadium	51	951195	205.10	3.5180	101	200		☑
7440-47-3	Chromium	52	1059620	201.70	1.3580	100	200		☑
7439-96-5	Manganese	55	916639	198.60	2.7050	97.9	200		☐
7440-48-4	Cobalt	59	1410730	192.80	0.05126	96.4	200		☑
7440-02-0	Nickel	60	324561	179.70	0.92300	89.4	200		☐
7440-50-8	Copper	63	817002	179.00	0.07725	89.5	200		☑
7440-66-6	Zinc	66	177196	187.90	0.12760	93.9	200		☐
7440-38-2	Arsenic	75	133025	202.80	6.1840	98.3	200		☑
7782-49-2	Selenium	78	16283	192.80	0.39520	96.2	200		☑
7439-98-7	Molybdenum	95	441936	202.50	1.1050	101	200		☑
7440-22-4	Silver	107	305560	45.050	0.00896	90.1	50.0		☑
7440-43-9	Cadmium	111	229276	189.60	0.00812	94.8	200		☑
7440-31-5	Tin	118	532172	177.30	-0.33370	88.7	200		☐
7440-36-0	Antimony	121	748237	196.70	0.05440	98.3	200		☑
7440-39-3	Barium	137	275709	202.60	5.6100	98.5	200		☑
7440-28-0	Thallium	205	2820280	185.00	0.02479	92.5	200		☑
7439-92-1	Lead	208	3844860	183.50	0.01508	91.7	200		☑
7440-61-1	Uranium	238	4608380	196.50	1.8770	97.3	200		☐
7440-29-1	Thorium	232	2560	0.09421	0.74930				
7439-93-2	Lithium	6			0				
7440-20-2	Scandium	45			0				
7440-74-6	Indium	115			0				
7440-56-4	Germanium	72			0				
7440-60-0	Holmium	165			0				

Reviewed by: Date:

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\134_MS.D\134_MS.D#
Date Acquired: Jul 2 2009 04:18 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFLLRS 10X
Misc Info: MATRIX SPIKE
Vial Number: 3204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: MS
Prep Dil. Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	4.03	0.01	ppb	3.70	40	10.1	50 - 150	
51 V	72	1	7.95	3.52	ppb	1.65	40	18.3	50 - 150	
52 Cr	72	1	5.52	1.36	ppb	1.41	40	13.4	50 - 150	
55 Mn	72	1	6.76	2.70	ppb	0.78	40	15.8	50 - 150	
59 Co	72	1	4.07	0.05	ppb	1.70	40	10.1	50 - 150	
60 Ni	72	1	4.70	0.92	ppb	3.65	40	11.5	50 - 150	
63 Cu	72	1	3.88	0.08	ppb	0.90	40	9.7	50 - 150	
66 Zn	72	1	4.16	0.13	ppb	1.26	40	10.4	50 - 150	
75 As	72	1	10.05	6.18	ppb	0.78	40	21.8	50 - 150	
78 Se	72	1	3.98	0.40	ppb	17.65	40	9.8	50 - 150	
95 Mo	72	1	5.35	1.11	ppb	2.12	40	13.0	50 - 150	
107 Ag	115	1	3.90	0.01	ppb	2.31	40	9.7	50 - 150	
111 Cd	115	1	3.96	0.01	ppb	4.00	40	9.9	50 - 150	
118 Sn	115	1	-0.07	-0.33	ppb	28.75	40	-0.2	50 - 150	
121 Sb	115	1	4.45	0.05	ppb	1.43	40	11.1	50 - 150	
137 Ba	115	1	9.98	5.61	ppb	0.59	40	21.9	50 - 150	
205 Tl	165	1	4.07	0.02	ppb	2.19	40	10.2	50 - 150	
208 Pb	165	1	4.01	0.02	ppb	1.79	40	10.0	50 - 150	
232 Th	165	1	4.24	0.75	ppb	0.91	40	10.4	50 - 150	
238 U	165	1	6.30	1.88	ppb	1.58	40	15.1	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	232828	1.35	286516	81.3	30 - 120	
45 Sc	1	724111	0.34	897316	80.7	30 - 120	
72 Ge	1	455220	0.76	590430	77.1	30 - 120	
115 In	1	1323087	0.70	1676276	78.9	30 - 120	
165 Ho	1	3025422	1.31	3565937	84.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Duplicate Spike (MSD) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\135 MSD.D\135 MSD.D#
Date Acquired: Jul 2 2009 04:21 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFLLRD 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3205
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 03:14 am
Sample Type: MSD
Dilution Factor: 10.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070109E.B\134 MS.D\134 MS.D#

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	4.23	ppb	7.65	4.03	4.96	20	
51 V	72	1	7.90	ppb	0.84	7.95	0.57	20	
52 Cr	72	1	5.59	ppb	2.55	5.52	1.15	20	
55 Mn	72	1	6.85	ppb	1.33	6.76	1.26	20	
59 Co	72	1	4.13	ppb	1.96	4.07	1.47	20	
60 Ni	72	1	4.78	ppb	0.51	4.70	1.69	20	
63 Cu	72	1	3.91	ppb	2.87	3.88	0.80	20	
66 Zn	72	1	4.11	ppb	2.92	4.16	1.16	20	
75 As	72	1	10.21	ppb	0.83	10.05	1.58	20	
78 Se	72	1	4.82	ppb	27.35	3.98	19.12	20	
95 Mo	72	1	5.47	ppb	2.64	5.35	2.18	20	
107 Ag	115	1	3.96	ppb	0.57	3.90	1.55	20	
111 Cd	115	1	4.07	ppb	2.04	3.96	2.52	20	
118 Sn	115	1	-0.28	ppb	9.38	-0.07	-123.04	20	
121 Sb	115	1	4.29	ppb	1.94	4.45	3.68	20	
137 Ba	115	1	9.93	ppb	0.98	9.98	0.46	20	
205 Tl	165	1	4.07	ppb	0.92	4.07	0.05	20	
208 Pb	165	1	4.02	ppb	1.16	4.01	0.35	20	
232 Th	165	1	4.46	ppb	0.98	4.24	4.87	20	
238 U	165	1	6.38	ppb	1.42	6.30	1.21	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	231778	1.04	286516	80.9	30 - 120	
45 Sc	1	722192	0.09	897316	80.5	30 - 120	
72 Ge	1	454330	0.55	590430	76.9	30 - 120	
115 In	1	1327298	0.87	1676276	79.2	30 - 120	
165 Ho	1	3016537	0.54	3565937	84.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref. File :C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\136 CCV.D\136 CCV.D#
Date Acquired: Jul 2 2009 04:25 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 03:14 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	47.96	ppb	3.53	50	95.9	90 - 110	
51 V	72	1	50.20	ppb	0.76	50	100.4	90 - 110	
52 Cr	72	1	50.38	ppb	0.38	50	100.8	90 - 110	
55 Mn	72	1	50.48	ppb	0.70	50	101.0	90 - 110	
59 Co	72	1	50.84	ppb	0.29	50	101.7	90 - 110	
60 Ni	72	1	49.82	ppb	0.60	50	99.6	90 - 110	
63 Cu	72	1	50.42	ppb	0.60	50	100.8	90 - 110	
66 Zn	72	1	50.62	ppb	0.32	50	101.2	90 - 110	
75 As	72	1	49.97	ppb	1.66	50	99.9	90 - 110	
78 Se	72	1	48.28	ppb	3.03	50	96.6	90 - 110	
95 Mo	72	1	50.89	ppb	1.76	50	101.8	90 - 110	
107 Ag	115	1	49.96	ppb	1.83	50	99.9	90 - 110	
111 Cd	115	1	50.93	ppb	0.75	50	101.9	90 - 110	
118 Sn	115	1	51.11	ppb	1.51	50	102.2	90 - 110	
121 Sb	115	1	50.80	ppb	1.51	50	101.6	90 - 110	
137 Ba	115	1	50.88	ppb	1.68	50	101.8	90 - 110	
205 Tl	165	1	52.48	ppb	0.97	50	105.0	90 - 110	
208 Pb	165	1	52.34	ppb	1.71	50	104.7	90 - 110	
232 Th	165	1	52.65	ppb	0.64	50	105.3	90 - 110	
238 U	165	1	53.92	ppb	0.46	50	107.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	259876	0.72	286516	90.7	30 - 120	
45 Sc	1	790315	0.88	897316	88.1	30 - 120	
72 Ge	1	515264	0.83	590430	87.3	30 - 120	
115 In	1	1549437	0.19	1676276	92.4	30 - 120	
165 Ho	1	3365519	1.11	3565937	94.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\137 CCB.D\137 CCB.D#
Date Acquired: Jul 2 2009 04:28 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 03:14 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	-0.009	ppb	0.00	1.00	
51 V	72	1	-0.001	ppb	3284.80	1.00	
52 Cr	72	1	0.002	ppb	832.66	1.00	
55 Mn	72	1	-0.025	ppb	11.86	1.00	
59 Co	72	1	0.000	ppb	529.39	1.00	
60 Ni	72	1	0.022	ppb	63.39	1.00	
63 Cu	72	1	0.026	ppb	31.76	1.00	
66 Zn	72	1	0.257	ppb	4.04	1.00	
75 As	72	1	0.000	ppb	1632.10	1.00	
78 Se	72	1	-0.052	ppb	455.44	1.00	
95 Mo	72	1	-0.047	ppb	19.43	1.00	
107 Ag	115	1	0.006	ppb	90.56	1.00	
111 Cd	115	1	-0.001	ppb	221.34	1.00	
118 Sn	115	1	1.467	ppb	1.64	1.00	Fail
121 Sb	115	1	0.066	ppb	15.06	1.00	
137 Ba	115	1	0.001	ppb	652.90	1.00	
205 Tl	165	1	0.031	ppb	15.38	1.00	
208 Pb	165	1	0.005	ppb	31.67	1.00	
232 Th	165	1	1.021	ppb	11.85	1.00	Fail
238 U	165	1	0.012	ppb	10.79	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	257223	0.61	286516	89.8	30 - 120	
45 Sc	1	797278	1.54	897316	88.9	30 - 120	
72 Ge	1	525627	0.39	590430	89.0	30 - 120	
115 In	1	1552853	0.69	1676276	92.6	30 - 120	
165 Ho	1	3371662	0.49	3565937	94.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

2 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070109E.B\138WASH.D\138WASH.D#
Date Acquired: Jul 2 2009 04:31 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 03:14 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.952 ppb	24.50	1.30	
51 V	72	1	5.141 ppb	3.80	6.50	
52 Cr	72	1	2.109 ppb	4.73	2.60	
55 Mn	72	1	0.993 ppb	7.14	1.30	
59 Co	72	1	1.028 ppb	4.66	1.30	
60 Ni	72	1	2.093 ppb	2.21	2.60	
63 Cu	72	1	2.046 ppb	3.65	2.60	
66 Zn	72	1	10.470 ppb	0.58	13.00	
75 As	72	1	4.988 ppb	2.61	6.50	
78 Se	72	1	5.317 ppb	1.37	6.50	
95 Mo	72	1	2.040 ppb	3.78	2.60	
107 Ag	115	1	5.209 ppb	1.33	6.50	
111 Cd	115	1	1.137 ppb	5.81	1.30	
118 Sn	115	1	10.440 ppb	0.86	13.00	
121 Sb	115	1	1.984 ppb	3.33	2.60	
137 Ba	115	1	1.065 ppb	3.86	1.30	
205 Tl	165	1	1.102 ppb	0.89	1.30	
208 Pb	165	1	1.077 ppb	0.64	1.30	
232 Th	165	1	2.393 ppb	2.96	2.60	
238 U	165	1	1.118 ppb	1.03	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	259619	0.98	286516	90.6	30 - 120	
45 Sc	1	812848	1.21	897316	90.6	30 - 120	
72 Ge	1	534134	0.30	590430	90.5	30 - 120	
115 In	1	1566910	0.52	1676276	93.5	30 - 120	
165 Ho	1	3414764	0.80	3565937	95.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070109E.B\114CALB.D\114CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Metals

Supporting Documentation

Sample Sequence, Instrument Printouts

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9F260277

Client: Northgate Environmental

Batch(es) #: 9180268, 9180262

Associated Samples: 1-3

I certify that, to the best of my knowledge, the attached package represents a complete and accurate copy of the original data.

Signature/Date: 7/6/09

Metals Raw Data RoadMap

LotID		*Metal*	*WorkOrder*	*Anal Date*	*TestDesc*	*Batch*	*File Id*	*Instr*
D9F260277	1 D	SE	LFP1G1AG	20090703	6020TOTA	9180262	AG070209D	024
D9F260277	1 S	SE	LFP1G1AF	20090703	6020TOTA	9180262	AG070209D	024
D9F260277	1 D	AS	LFP1G1AE	20090703	6020TOTA	9180262	AG070209D	024
D9F260277	1 S	AS	LFP1G1AD	20090703	6020TOTA	9180262	AG070209D	024
D9F260277	1	SE	LFP1G1AC	20090703	6020TOTA	9180262	AG070209D	024
D9F260277	1	AS	LFP1G1AA	20090703	6020TOTA	9180262	AG070209D	024
D9F260277	2	SE	LFP1K1AC	20090703	6020TOTA	9180262	AG070209D	024
D9F260277	2	AS	LFP1K1AA	20090703	6020TOTA	9180262	AG070209D	024
D9F260277	3	SE	LFP1L1AC	20090703	6020DSVD	9180268	AG070209D	024
D9F260277	3	AS	LFP1L1AA	20090703	6020DSVD	9180268	AG070209D	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9180268**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 06/30/09
Due Date: 07/08/09

Lot	Work Order			Initial Weight/Volume
D9F290000 Water	**LFRWW**	B	Due Date: SDG:	50 mL
D9F290000 Water	**LFRWW**	C	Due Date: SDG:	50 mL
D9F260277 Water	**LFP1L** Dissolved		Due Date: 07/08/09 SDG:	50 mL
D9F270154 Water	**LFQ11** Dissolved		Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ11** Dissolved	S	Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ11** Dissolved	D	Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ13** Dissolved		Due Date: 07/09/09 SDG:	50 mL

Comments:

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE SAMPLE

ICPMS ELEMENTS WITHIN THE BATCH:

AS SE

checked 7/2/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

DISSOLVED WATER DIGESTION FOR ICPMS (Prep code MD)

BATCH # 9180268 **ALLIQUOTTED BY:** JRW
PREP DATE: 6/30/2009 **DIGESTED BY:** JKH

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS267

Were samples filtered in the lab? ☐ Yes ☑ No

If "yes", then the method blank and the LCS were filtered prior to digestion.

Analyst(s) Initials: JKH

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-2636-09	7/1/10	100uL	15
2008Cal-2	STD-2635-09	7/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	2

TEMPERATURE CYCLES

Thermometer ID: 14859 Block & Cup # : 5,26

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3/HCl	6:00	96	11:00	94

Samples and QC revolumed to: 50 mL Analyst's Initials JKH

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kim Hare ***Date:*** 6/30/09

Batch Number: **9180262**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 06/30/09
Due Date: 07/08/09

Lot	Work Order			Initial Weight/Volume
D9F290000 Water	**LFRV2**	B	Due Date: SDG:	50 mL
D9F290000 Water	**LFRV2**	C	Due Date: SDG:	50 mL
D9F260277 Water	**LFP1G** Total		Due Date: 07/08/09 SDG:	50 mL
D9F260277 Water	**LFP1G** Total	S	Due Date: 07/08/09 SDG:	50 mL
D9F260277 Water	**LFP1G** Total	D	Due Date: 07/08/09 SDG:	50 mL
D9F260277 Water	**LFP1K** Total		Due Date: 07/08/09 SDG:	50 mL
D9F270153 Water	**LFQ02** Total		Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ1Q** Total		Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ10** Total		Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ12** Total		Due Date: 07/09/09 SDG:	50 mL

Comments:

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE, SAMPLE

ICPMS ELEMENTS WITHIN THE BATCH:

AS SE

checked 7/2/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH # 9180262 **ALLIQUOTTED BY:** JRW
PREP DATE: 6/30/2009 **DIGESTED BY:** JKH

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS267

One or more samples were filtered prior to analysis at the instrument. ☐ Yes ☐ No

If "yes", then the method blank and the LCS were also filtered in the same manner using the same type of filter.

Analyst(s) Initials:

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-2636-09	7/1/10	100uL	15
2008Cal-2	STD-2635-09	7/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	3

TEMPERATURE CYCLES

Thermometer ID: 4110 Block & Cup # : 3,23

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	6:00	94	10:20	96
HNO3	10:30	96	11:00	96
HNO3				

Samples and QC revolumed to: 50 mL Analyst's Initials JKH

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kris Hare ***Date:*** 6/30/09

METALS
SAMPLE DATA
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ICP-MS Standard and Spike True Values

Element	Cal. Std. 100 ppb	Initial Calibration Standard	Continuing Calibration Standard	Interference Check Sample A	Interference Check Sample AB	Laboratory Control Sample and Duplicate	Matrix Spike Sample and Duplicate	Post Digestion Spike
Aluminum	100	40	50	100,000 Aluminum	--	40	40	200
Antimony	100	40	50	100,000 Calcium	100	40	40	200
Arsenic	100	40	50	100,000 Iron	100	40	40	200
Barium	100	40	50	100,000 Magnesium	100	40	40	200
Beryllium	100	40	50	100,000 Sodium	100	40	40	200
Cadmium	100	40	50	100,000 Phosphorus	100	40	40	200
Chromium	100	40	50	100,000 Potassium	100	40	40	200
Cobalt	100	40	50	100,000 Sulfur	100	40	40	200
Copper	100	40	50	200,000 Carbon	100	40	40	200
Lead	100	40	50	1,000,000 Chloride	100	40	40	200
Manganese	100	40	50	2000 Molybdenum	--	40	40	200
Molybdenum	100	40	50	2000 Titanium	100	40	40	200
Nickel	100	40	50		100	40	40	200
Selenium	100	40	50		100	40	40	200
Silver	100	40	50		100	40	40	50
Thallium	100	40	50		100	40	40	200
Tin	100	40	50		100	40	40	200
Uranium	100	40	50		100	40	40	200
Vanadium	100	40	50		100	40	40	200
Zinc	100	40	50		100	40	40	200

All units are ug/L.

Due to the presence of trace contaminants in the ICSA solution, the % recovery for the ICSAB solution is calculated by subtracting the levels in the ICSA from the ICSAB.

Quality Control Standards

ICV = Initial Calibration Verification (Second Source)
CCV = Continuing Calibration Verification
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
1		Keyword		TUNBEG	Start of TUNE					
2		Keyword		ChngTune	he.u,20					
3	C:\ICPCHEM\1\METHODS\tun_isis.M	TUNE	4		200.8 TUNE		1.000			
4		Keyword		TUNEND	End of TUNE					
5		Keyword		CALBEG	Start of CALIB					
6	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
7	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
8	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
9	C:\ICPCHEM\1\METHODS\NormISIS.M	ICV	2103		ICV		1.000			
10	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLIV		1.000			
11	C:\ICPCHEM\1\METHODS\NormISIS.M	ICB	2104		ICB		1.000			
12	C:\ICPCHEM\1\METHODS\NormISIS.M	RLSTD	2105		RL STD		1.000			
13	C:\ICPCHEM\1\METHODS\NormISIS.M	AFCEERL	2106		AFCEE RL		1.000			
14	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2112		CHECK	STD2637-09	1.000			
15	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2107		ALTSe	2 ppb	1.000			
16	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSA	2108		ICSA		1.000			
17	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSAB	2109		ICSAB		1.000			
18	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000			
19	C:\ICPCHEM\1\METHODS\NormISIS.M	LR	2110		LR		1.000			
20	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000			
21	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
22	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
23	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
24		Keyword		CALEND	End of CALIB					
25		Keyword		SMPLBEG	Start of SMPL					
26	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2201		LFCCFB	BLANK 9171051 6020	1.000	50.00	50.00	1.000
27	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2202		LFCCFC	LCS	1.000	50.00	50.00	1.000
28	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2203		LE4RA	D9F170236	1.000	50.00	50.00	1.000
29	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2204		LE4RAP5	SERIAL DILUTION	1.000	50.00	50.00	1.000
30	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2205		LE4RAZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
31	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2206		LE4RK	D9F170236	1.000	50.00	50.00	1.000
32	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2207		LE4RN	D9F170236	1.000	50.00	50.00	1.000
33	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2208		LE4R9	D9F170236	1.000	50.00	50.00	1.000
34	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
35	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
36	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
37	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2209		LE4TC	D9F170236	1.000	50.00	50.00	1.000
38	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2210		LE4TN	D9F170236	1.000	50.00	50.00	1.000
39	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2211		LE4TP	D9F170236	1.000	50.00	50.00	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
40	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2212		LE4TQ	D9F170236	1.000	50.00	50.00	1.000
41	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2301		LE4T4	D9F170236	1.000	50.00	50.00	1.000
42	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2302		LE4T9	D9F170236	1.000	50.00	50.00	1.000
43	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2303		LE4VA	D9F170236	1.000	50.00	50.00	1.000
44	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2304		LE4VT	D9F170236	1.000	50.00	50.00	1.000
45	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
46	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
47	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
48	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2305		LFJDGB	BLANK 9175365 6020	500.0	500.0	1.000	1.000
49	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2306		LFJDGC	LCS	500.0	500.0	1.000	1.000
50	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2307		LFGCV	D9F230211	495.0	500.0	1.010	1.000
51	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2308		LFGCVP5	SERIAL DILUTION	495.0	500.0	1.010	1.000
52	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2309		LFGCVZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
53	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	2310		LFGCVS	MATRIX SPIKE	495.0	500.0	1.010	1.000
54	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
55	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
56	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
57	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	2311		LFGCVD	MATRIX SPIKE DUPLICATE	495.0	500.0	1.010	1.000
58	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2312		LFGC2	D9F230211	505.1	500.0	9.900E-01	1.000
59	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2401		LFGC8	D9F230211	490.2	500.0	1.020	1.000
60	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2402		LFGC9	D9F230211	500.0	500.0	1.000	1.000
61	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2403		LFGDA	D9F230211	490.2	500.0	1.020	1.000
62	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2404		LFGDD	D9F230211	495.0	500.0	1.010	1.000
63	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
64	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
65	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
66	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSA	2108		ICSA		1.000			
67	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSAB	2109		ICSAB		1.000			
68	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1101		WASH		1.000			
69	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
70	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
71	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
72	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2209		LE4TC	D9F170236	1.000	50.00	50.00	1.000
73	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2210		LE4TN	D9F170236	1.000	50.00	50.00	1.000
74	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2211		LE4TP	D9F170236	1.000	50.00	50.00	1.000
75	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2212		LE4TQ	D9F170236	1.000	50.00	50.00	1.000
76	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2301		LE4T4	D9F170236	1.000	50.00	50.00	1.000
77	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2302		LE4T9	D9F170236	1.000	50.00	50.00	1.000
78	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2303		LE4VA	D9F170236	1.000	50.00	50.00	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
79	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2304		LE4VT	D9F170236	1.000	50.00	50.00	1.000
80	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
81	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
82	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
83	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
84	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
85	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
86	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
87	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
88	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
89	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
90	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
91	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
92	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
93	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
94	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
95	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2405		LFM02B	BLANK 9177095 6020	1.000	50.00	50.00	1.000
96	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2406		LFM02C	LCS	1.000	50.00	50.00	1.000
97	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2407		LFKC2	D9F240311	1.000	50.00	50.00	1.000
98	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2408		LFKC3	D9F240311	1.000	50.00	50.00	1.000
99	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2409		LFKC4	D9F240311	1.000	50.00	50.00	1.000
100	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2410		LFKC4P5	SERIAL DILUTION	1.000	50.00	50.00	1.000
101	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2411		LFKC4Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
102	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	2412		LFKC4S	MATRIX SPIKE	1.000	50.00	50.00	1.000
103	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	2501		LFKC4D	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
104	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2502		LFKC5	D9F240311	1.000	50.00	50.00	1.000
105	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
106	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
107	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
108	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2503		LFM0PB	BLANK 9177090 6020	500.0	500.0	1.000	1.000
109	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2504		LFM0PC	LCS	500.0	500.0	1.000	1.000
110	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2505		LFKC6	D9F240311	505.1	500.0	9.900E-01	1.000
111	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2506		LFKC7	D9F240311	510.2	500.0	9.800E-01	1.000
112	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2507		LFKC7P5	SERIAL DILUTION	510.2	500.0	9.800E-01	1.000
113	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2508		LFKC7Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
114	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	2509		LFKC7S	MATRIX SPIKE	510.2	500.0	9.800E-01	1.000
115	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
116	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
117	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
118	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	2510		LFKC7D	MATRIX SPIKE DUPLICATE	510.2	500.0	9.800E-01	1.000
119	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2511		LFKC8	D9F240311	490.2	500.0	1.020	1.000
120	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2512		LFKC9	D9F240311	485.4	500.0	1.030	1.000
121	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3101		LFKDA	D9F240311	490.2	500.0	1.020	1.000
122	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3102		LFKDC	D9F240311	500.0	500.0	1.000	1.000
123	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3103		LFKDD	D9F240311	500.0	500.0	1.000	1.000
124	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
125	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
126	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
127	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3104		LFT60B	BLANK 9181137 6020	1.000	50.00	50.00	1.000
128	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3105		LFT60C	LCS	1.000	50.00	50.00	1.000
129	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3106		LFTDG	D9F290160	1.000	50.00	50.00	1.000
130	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3107		LFTDGP5	SERIAL DILUTION	1.000	50.00	50.00	1.000
131	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3108		LFTDGZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
132	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3109		LFTDGS	MATRIX SPIKE	1.000	50.00	50.00	1.000
133	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
134	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
135	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
136	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3110		LFTDGD	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
137	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3111		LFTDJ	D9F290160	1.000	50.00	50.00	1.000
138	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3112		LFTDK	D9F290160	1.000	50.00	50.00	1.000
139	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3201		LFTDL	D9F290160	1.000	50.00	50.00	1.000
140	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3202		LFTDM	D9F290160	1.000	50.00	50.00	1.000
141	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
142	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
143	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
144	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3203		LFT67B	BLANK 9181141 6020	500.0	500.0	1.000	1.000
145	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3204		LFT67C	LCS	500.0	500.0	1.000	1.000
146	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3205		LFTDN	D9F290160	495.0	500.0	1.010	1.000
147	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3206		LFTDP	D9F290160	495.0	500.0	1.010	1.000
148	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3207		LFTDQ	D9F290160	500.0	500.0	1.000	1.000
149	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3208		LFTDT	D9F290160	490.2	500.0	1.020	1.000
150	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3209		LFTDW	D9F290160	490.2	500.0	1.020	1.000
151	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
152	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
153	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
154	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3210		LFTD2	D9F290160	505.1	500.0	9.900E-01	1.000
155	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3211		LFTD2P5	SERIAL DILUTION	505.1	500.0	9.900E-01	1.000
156	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3212		LFTD2Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
157	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3301		LFTD2S	MATRIX SPIKE	505.1	500.0	9.900E-01	1.000
158	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3302		LFTD2D	MATRIX SPIKE DUPLICATE	505.1	500.0	9.900E-01	1.000
159	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3303		LFTD8	D9F290160	515.5	500.0	9.700E-01	1.000
160	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3304		LFTD9	D9F290160	505.1	500.0	9.900E-01	1.000
161	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3305		LFTED	D9F290160	510.2	500.0	9.800E-01	1.000
162	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
163	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
164	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
165	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
166	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
167	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
168	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
169	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
170	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
171	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
172	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
173	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
174	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
175	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
176	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
177	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSA	2108		ICSA		1.000			
178	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSAB	2109		ICSAB		1.000			
179	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1101		WASH		1.000			
180	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
181	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
182	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
183	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3306		LFRWWBF	BLANK 9180268 6020	1.000	50.00	50.00	1.000
184	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3307		LFRWWCF	LCS	1.000	50.00	50.00	1.000
185	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3308		LFP1LF 10X	D9F260277	10.00	50.00	50.00	10.00
186	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3309		LFQ11F 10X	D9F270154	10.00	50.00	50.00	10.00
187	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3310		LFQ11P50F	SERIAL DILUTION	10.00	50.00	50.00	10.00
188	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3311		LFQ11ZF	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
189	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3312		LFQ11SF 10X	MATRIX SPIKE	10.00	50.00	50.00	10.00
190	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3401		LFQ11DF 10X	MATRIX SPIKE DUPLICATE	10.00	50.00	50.00	10.00
191	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3402		LFQ13F 10X	D9F270154	10.00	50.00	50.00	10.00
192	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
193	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
194	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
195	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3403		LFRV2B	BLANK 9180262 6020	1.000	50.00	50.00	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
196	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3404		LFRV2C	LCS	1.000	50.00	50.00	1.000
197	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3405		LFP1G 10X	D9F260277	10.00	50.00	50.00	10.00
198	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3406		LFP1GP50	SERIAL DILUTION	10.00	50.00	50.00	10.00
199	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3407		LFP1GZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
200	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3408		LFP1GS 10X	MATRIX SPIKE	10.00	50.00	50.00	10.00
201	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
202	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
203	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
204	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3409		LFP1GD 10X	MATRIX SPIKE DUPLICATE	10.00	50.00	50.00	10.00
205	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3410		LFP1K 10X	D9F260277	10.00	50.00	50.00	10.00
206	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3411		LFQ02 10X	D9F270153	10.00	50.00	50.00	10.00
207	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3412		LFQ1Q 10X	D9F270154	10.00	50.00	50.00	10.00
208	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3501		LFQ10 10X	D9F270154	10.00	50.00	50.00	10.00
209	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3502		LFQ12 10X	D9F270154	10.00	50.00	50.00	10.00
210	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
211	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
212	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
213	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
214	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
215	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
216	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
217	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
218	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
219	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
220	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
221	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
222	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
223	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
224	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
225	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	4110		LFTMDB	BLANK 9180481 6020	1.000	50.00	50.00	1.000
226	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	4111		LFTMDC	LCS	1.000	50.00	50.00	1.000
227	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4112		LFNXL	D9F260175	1.000	50.00	50.00	1.000
228	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4201		LFNXQ	D9F260175	1.000	50.00	50.00	1.000
229	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4202		LFNXT	D9F260175	1.000	50.00	50.00	1.000
230	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4203		LFNXW	D9F260175	1.000	50.00	50.00	1.000
231	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4204		LFNXX	D9F260175	1.000	50.00	50.00	1.000
232	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4205		LFQPE	D9F270122	1.000	50.00	50.00	1.000
233	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
234	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
235	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
236	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4206		LFQPT	D9F270122	1.000	50.00	50.00	1.000
237	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4207		LFQPX	D9F270122	1.000	50.00	50.00	1.000
238	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4208		LFQP2	D9F270122	1.000	50.00	50.00	1.000
239	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4209		LFQP3	D9F270122	1.000	50.00	50.00	1.000
240	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	4210		LFQP5	D9F270122	1.000	50.00	50.00	1.000
241	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	4211		LFQP5P5	SERIAL DILUTION	1.000	50.00	50.00	1.000
242	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	4212		LFQP5Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
243	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
244	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
245	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
246	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	4301		LFQP5S	MATRIX SPIKE	1.000	50.00	50.00	1.000
247	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	4302		LFQP5D	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
248	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4303		LFQQA	D9F270122	1.000	50.00	50.00	1.000
249	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4304		LFQQG	D9F270122	1.000	50.00	50.00	1.000
250	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4305		LFQQL	D9F270122	1.000	50.00	50.00	1.000
251	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4306		LFQQP	D9F270122	1.000	50.00	50.00	1.000
252	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4307		LFQQR	D9F270122	1.000	50.00	50.00	1.000
253	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
254	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
255	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
256	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3503		LFRT8BF	BLANK 9180238 6020	1.000	50.00	50.00	1.000
257	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3504		LFRT8CF	LCS	1.000	50.00	50.00	1.000
258	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3505		LFNV6F 2X	D9F260164	2.000	50.00	50.00	2.000
259	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3506		LFNXLF	D9F260175	1.000	50.00	50.00	1.000
260	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3507		LFNXQF	D9F260175	1.000	50.00	50.00	1.000
261	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3508		LFNXQP5F	SERIAL DILUTION	1.000	50.00	50.00	1.000
262	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
263	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
264	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
265	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3509		LFNXQZF	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
266	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3510		LFNXQSF	MATRIX SPIKE	1.000	50.00	50.00	1.000
267	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3511		LFNXQDF	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
268	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3512		LFNXTF	D9F260175	1.000	50.00	50.00	1.000
269	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4101		LFNXWF	D9F260175	1.000	50.00	50.00	1.000
270	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4102		LFNXXF	D9F260175	1.000	50.00	50.00	1.000
271	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
272	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
273	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
274	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	4103		LFRVEB	BLANK 9180246 6020	1.000	50.00	50.00	1.000
275	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	4104		LFRVEC	LCS	1.000	50.00	50.00	1.000
276	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	4105		LFNV6 2X	D9F260164	2.000	50.00	50.00	2.000
277	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	4106		LFNV6P5	SERIAL DILUTION	2.000	50.00	50.00	2.000
278	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	4107		LFNV6Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
279	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	4108		LFNV6S 2X	MATRIX SPIKE	2.000	50.00	50.00	2.000
280	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	4109		LFNV6D 2X	MATRIX SPIKE DUPLICATE	2.000	50.00	50.00	2.000
281	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
282	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
283	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
284		Keyword		SMPLEND	End of SMPL					
285		Keyword		TERMBEG	Start of TERM					
286		Keyword		StandBy						
287		Keyword		TERMEND	End of TERM					
288		Keyword		End	End of Sequence					
289		Keyword		BLKBEG	Start of BLANK					
290		Keyword		BLKEND	End of BLANK					
291		Keyword		ERRBEG	Start of ERRTERM					
292		Keyword		ERREND	End of ERRTERM					

TestAmerica Denver

Standards Preparation Logbook Record

Jul-02-2009

Logbook: \\Densvr06\StdsLog\metals.std

STD4841-08, 1000 Zn (Inorganic Ventures)

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-ZN02045 Vendor's Expiration Date: 10-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 09-04-2008 Date Received: 09-04-2008
Date Expires(1): 10-01-2009 (None)
Date Expires(2): 10-01-2009 (None)
(METALS)-Inventory ID: 779

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1,000.0	1,000.0

STD6653-08, 1000 Se

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SE02003 Vendor's Expiration Date: 12-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 11-25-2008 Date Received: 11-25-2008
Date Expires(1): 12-01-2009 (None)
Date Expires(2): 12-01-2009 (None)
(METALS)-Inventory ID: 803

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1,000.0	1,000.0

STD1198-09, 1000 mg/L Sn

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SN02016 Vendor's Expiration Date: 03-01-2010
Solvent: 1% HNO3
Date Prep./Opened: 03-02-2009 Date Received: 03-02-2009
Date Expires(1): 03-01-2010 (None)
Date Expires(2): 03-01-2010 (None)
(METALS)-Inventory ID: 833

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1,000.0	1,000.0

STD1853-09, 1 mg/l Se

Analyst: DIAZL

Solvent: 5% HN03 Lot No.: H02026 Volume (ml): 100.00
Date Prep./Opened: 04-01-2009
Date Expires(1): 12-01-2009 (1 Year)
pipette: Met 21

Parent Std No.: STD6653-08, 1000 Se — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 12-01-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1,000.0	1.0000

STD3611-09, ICP-MS 1ppm Sn/Zn — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 06-16-2009
Date Expires(1): 10-01-2009 (1 Year)

Parent Std No.: STD3609-09, ICP-MS 10 ppm Zn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 10-01-2009 Parent Date Expires(2): 10-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	10.000	1.0000

Parent Std No.: STD3610-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	10.000	1.0000

STD3662-09, ICP-MS (024) INT STD BRC-HIGH — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 250.00
Date Prep./Opened: 06-17-2009
Date Expires(1): 11-10-2009 (1 Year)
Date Expires(2): 12-01-2009 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD1469-09, Germanium Stock — Aliquot Amount (ml): 1.2000
Parent Date Expires(1): 03-16-2010 Parent Date Expires(2): 04-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ge	1,000.0	4,800.0

Parent Std No.: STD1972-09, Lithium 6 Stock — Aliquot Amount (ml): 1.5000
Parent Date Expires(1): 04-07-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Lithium6	1,000.0	6,000.0

Parent Std No.: STD1973-09, Indium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 04-07-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
In	1,000.0	1,600.0

Parent Std No.: STD6317-08, Scandium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 11-10-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sc	1,000.0	1,600.0

Parent Std No.: STD6318-08, Holmium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 11-10-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ho	1,000.0	1,600.0

STD3913-09, ICP-MS ICSA — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 50.000
Date Prep./Opened: 06-29-2009
Date Expires(1): 07-29-2009 (1 Month)
Date Expires(2): 02-01-2010 (None)
pipettes: Met 8

Parent Std No.: STD0664-09, ICPMS Interferent Check Standard — Aliquot Amount (ml): 5.0000
Parent Date Expires(1): 02-01-2010 Parent Date Expires(2): 02-01-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Al	1,000.0	100,000
C	2,000.0	200,000
Ca	1,000.0	100,000
Cl	10,000	1,000,000
Fe	1,000.0	100,000
K	1,000.0	100,000
Mg	1,000.0	100,000
Mo	20.000	2,000.0
Na	1,000.0	100,000
P	1,000.0	100,000
S	1,000.0	100,000
Ti	20.000	2,000.0

STD3997-09, ICP-MS BLANK — Analyst: DIAZL

Solvent: Water — Volume (ml): 1,000.0
Date Prep./Opened: 07-02-2009
Date Expires(1): 08-02-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD3996-09, NITRIC ACID — Aliquot Amount (ml): 50.000

Component	Initial Conc (%)	Final Conc (%)
HNO3	100.00	5.0000

STD3998-09, ICP-MS 10 ppm Sn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 03-01-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1198-09, 1000 mg/L Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1,000.0	10.000

STD3999-09, ICP-MS 100 ppb cal

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	100.00
Al	20.000	100.00
As	20.000	100.00
Ba	20.000	100.00
Be	20.000	100.00
Cd	20.000	100.00
Co	20.000	100.00
Cr	20.000	100.00
Cu	20.000	100.00
Mn	20.000	100.00
Ni	20.000	100.00
Pb	20.000	100.00
Se	20.000	100.00
Th	20.000	100.00
Tl	20.000	100.00
U	20.000	100.00
V	20.000	100.00
Zn	20.000	100.00

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00

Sb	20.000	100.00

Parent Std No.: STD3862-09, Iron Stock Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Fe	1,000.0	5,000.0

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4000-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	50.000
Al	20.000	50.000
As	20.000	50.000
Ba	20.000	50.000
Be	20.000	50.000
Cd	20.000	50.000
Co	20.000	50.000
Cr	20.000	50.000
Cu	20.000	50.000
Mn	20.000	50.000
Ni	20.000	50.000
Pb	20.000	50.000
Se	20.000	50.000
Th	20.000	50.000
Tl	20.000	50.000
U	20.000	50.000
V	20.000	50.000
Zn	20.000	50.000

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	50.000
Sb	20.000	50.000

Parent Std No.: STD3862-09, Iron Stock Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)

Fe	1,000.0	2,500.0

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	50.000

STD4001-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD3611-09, ICP-MS 1ppm Sn/Zn — Aliquot Amount (ml): 0.0900

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1.0000	0.0090
1000 Zn	1.0000	0.0090

Parent Std No.: STD3999-09, ICP-MS 100 ppb cal — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 07-03-2009

Component	Initial Conc (ug/L)	Final Conc (mg/L)
Ag	100.00	0.0010
Al	100.00	0.0010
As	100.00	0.0010
Ba	100.00	0.0010
Be	100.00	0.0010
Cd	100.00	0.0010
Co	100.00	0.0010
Cr	100.00	0.0010
Cu	100.00	0.0010
Mn	100.00	0.0010
Ni	100.00	0.0010
Pb	100.00	0.0010
Se	100.00	0.0010
Th	100.00	0.0010
Tl	100.00	0.0010
U	100.00	0.0010
V	100.00	0.0010
Zn	100.00	0.0010
Mo	100.00	0.0010
Sb	100.00	0.0010
Fe	5,000.0	0.0500
Sn	100.00	0.0010

STD4002-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (2 Days)
pipettes: Met 20 and Met 8

Parent Std No.: STD4001-09, ICP-MS RL STD Aliquot Amount (ml): 2.0000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	0.0090	0.0018
1000 Zn	0.0090	0.0018
Ag	0.0010	0.0002
Al	0.0010	0.0002
As	0.0010	0.0002
Ba	0.0010	0.0002
Be	0.0010	0.0002
Cd	0.0010	0.0002
Co	0.0010	0.0002
Cr	0.0010	0.0002
Cu	0.0010	0.0002
Mn	0.0010	0.0002
Ni	0.0010	0.0002
Pb	0.0010	0.0002
Se	0.0010	0.0002
Th	0.0010	0.0002
Tl	0.0010	0.0002
U	0.0010	0.0002
V	0.0010	0.0002
Zn	0.0010	0.0002
Mo	0.0010	0.0002
Sb	0.0010	0.0002
Fe	0.0500	0.0100
Sn	0.0010	0.0002

STD4003-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21, Met 20, and Met 8

Parent Std No.: STD1978-09, ICPMS Interferent Check Standard Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 04-01-2010 Parent Date Expires(2): 04-01-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Al	1,000.0	100,000
C	2,000.0	200,000
Ca	1,000.0	100,000

Cl	10,000	1,000,000
Fe	1,000.0	100,000
K	1,000.0	100,000
Mg	1,000.0	100,000
Mo	20.000	2,000.0
Na	1,000.0	100,000
P	1,000.0	100,000
S	1,000.0	100,000
Ti	20.000	2,000.0

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	100.00
Al	20.000	100.00
As	20.000	100.00
Ba	20.000	100.00
Be	20.000	100.00
Cd	20.000	100.00
Co	20.000	100.00
Cr	20.000	100.00
Cu	20.000	100.00
Mn	20.000	100.00
Ni	20.000	100.00
Pb	20.000	100.00
Se	20.000	100.00
Th	20.000	100.00
Tl	20.000	100.00
U	20.000	100.00
V	20.000	100.00
Zn	20.000	100.00

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	20.000	100.00

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4004-09, ICPMS LR STD 1000 ppb Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20 and Met 8

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	1,000.0
Al	20.000	1,000.0
As	20.000	1,000.0
Ba	20.000	1,000.0
Be	20.000	1,000.0
Cd	20.000	1,000.0
Co	20.000	1,000.0
Cr	20.000	1,000.0
Cu	20.000	1,000.0
Mn	20.000	1,000.0
Ni	20.000	1,000.0
Pb	20.000	1,000.0
Se	20.000	1,000.0
Th	20.000	1,000.0
Tl	20.000	1,000.0
U	20.000	1,000.0
V	20.000	1,000.0
Zn	20.000	1,000.0

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	1,000.0
Sb	20.000	1,000.0

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	1,000.0

STD4005-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 02-27-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1213-09, ICPMS ICV SOLUTION A (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Al	10.000	40.000
As	10.000	40.000
Ba	10.000	40.000
Be	10.000	40.000
Cd	10.000	40.000

Co	10.000	40.000
Cr	10.000	40.000
Cu	10.000	40.000
Fe	250.00	1,000.0
Li	10.000	40.000
Mn	10.000	40.000
Ni	10.000	40.000
Pb	10.000	40.000
Se	10.000	40.000
Th	10.000	40.000
Tl	10.000	40.000
U	10.000	40.000
V	10.000	40.000
Zn	10.000	40.000

Parent Std No.: STD1214-09, ICPMS ICV SOLUTION B (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Ag	10.000	40.000
Mo	10.000	40.000
Sb	10.000	40.000
Sn	10.000	40.000
Zr	10.000	40.000

STD4006-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD1853-09, 1 mg/l Se Aliquot Amount (ml): 0.1000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1.0000	0.0020

STD4007-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 05-01-2010 (None)
pipettes: Met 20

Parent Std No.: STD3106-09, ICP-MS LLCCV 1 Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	0.5000	5.0000
Al	3.0000	30.000
As	0.5000	5.0000

Ba	0.1000	1.0000
Be	0.1000	1.0000
Ca	5.0000	50.000
Cd	0.1000	1.0000
Co	0.1000	1.0000
Cr	0.2000	2.0000
Cu	0.2000	2.0000
Fe	5.0000	50.000
K	10.000	100.00
Mg	5.0000	50.000
Mn	0.1000	1.0000
Na	5.0000	50.000
Ni	0.2000	2.0000
Pb	0.1000	1.0000
Se	0.5000	5.0000
Th	0.2000	2.0000
Tl	0.1000	1.0000
U	0.1000	1.0000
V	0.5000	5.0000
Zn	1.0000	10.000

Parent Std No.: STD3107-09, ICP-MS LLCCV 2 Aliquot Amount (ml): 1.0000

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	0.2000	2.0000
Sb	0.2000	2.0000
Sn	1.0000	10.000

Reviewed By: LRD 07/02/2009

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
2	Cal Blank				1.0	07/02/09 17:27		
3	Cal Blank				1.0	07/02/09 17:31		
4	100 ppb				1.0	07/02/09 17:34		
5	ICV				1.0	07/02/09 17:37		
6	RLIV				1.0	07/02/09 17:41		
7	ICB				1.0	07/02/09 17:44		
8	RL STD				1.0	07/02/09 17:47		
9	AFCEE RL				1.0	07/02/09 17:51		
10	CHECK				1.0	07/02/09 17:54		
11	ALTSe				1.0	07/02/09 17:58		
12	ICSA				1.0	07/02/09 18:01		
13	ICSAB				1.0	07/02/09 18:04		
14	RINSE				1.0	07/02/09 18:08		
15	LR				1.0	07/02/09 18:11		
16	RINSE				1.0	07/02/09 18:14		
17	CCV				1.0	07/02/09 18:18		
18	CCB				1.0	07/02/09 18:21		
19	RLCV				1.0	07/02/09 18:24		
20	LFCCFB	D9F200000	9171051	MS	1.0	07/02/09 18:28		
21	LFCCFC	D9F200000	9171051	MS	1.0	07/02/09 18:31		
22	LE4RA	D9F170236-7	9171051	MS	1.0	07/02/09 18:34		
23	LE4RAP5	D9F170236	9171051		5.0	07/02/09 18:38		
24	LE4RAZ	D9F170236-7	9171051		1.0	07/02/09 18:41		
25	LE4RK	D9F170236-9	9171051	MS	1.0	07/02/09 18:45		
26	LE4RN	D9F170236-11	9171051	MS	1.0	07/02/09 18:48		
27	LE4R9	D9F170236-26	9171051	MS	1.0	07/02/09 18:51		
28	CCV				1.0	07/02/09 18:55		
29	CCB				1.0	07/02/09 18:58		
30	RLCV				1.0	07/02/09 19:01		
31	~~LE4TC~~	~~D9F170236-27~~	~~9171051~~	~~MS~~	~~1.0~~	~~07/02/09 19:05~~		
32	LE4TN	D9F170236-29	9171051	MS	1.0	07/02/09 19:09		
33	LE4TP	D9F170236-30	9171051	MS	1.0	07/02/09 19:12		
34	LE4TQ	D9F170236-31	9171051	MS	1.0	07/02/09 19:16		
35	LE4T4	D9F170236-36	9171051	MS	1.0	07/02/09 19:19		
36	LE4T9	D9F170236-39	9171051	MS	1.0	07/02/09 19:23		
37	LE4VA	D9F170236-40	9171051	MS	1.0	07/02/09 19:26		
38	~~LE4VT~~	~~D9F170236-45~~	~~9171051~~	~~MS~~	~~1.0~~	~~07/02/09 19:29~~	AT 7/6/09 Did not use.	
39	CCV				1.0	07/02/09 19:33		
40	CCB				1.0	07/02/09 19:36		
41	RLCV				1.0	07/02/09 19:40		
42	LFJDGB	D9F240000	9175365	46	1.0	07/02/09 19:43		
43	LFJDGC	D9F240000	9175365	46	1.0	07/02/09 19:46		
44	LFGCV	D9F230211-1	9175365	46	1.0	07/02/09 19:50		
45	LFGCVP5	D9F230211	9175365		5.0	07/02/09 19:53		
46	LFGCVZ	D9F230211-1	9175365		1.0	07/02/09 19:56		
47	LFGCVS	D9F230211-1	9175365	46	1.0	07/02/09 20:00		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
48	CCV				1.0	07/02/09 20:03		
49	CCB				1.0	07/02/09 20:07		
50	RLCV				1.0	07/02/09 20:10		
51	LFGCVD	D9F230211-1	9175365	46	1.0	07/02/09 20:13		
52	LFGC2	D9F230211-2	9175365	46	1.0	07/02/09 20:17		
53	LFGC8	D9F230211-3	9175365	46	1.0	07/02/09 20:20		
54	LFGC9	D9F230211-4	9175365	46	1.0	07/02/09 20:23		
55	LFGDA	D9F230211-5	9175365	46	1.0	07/02/09 20:27		
56	LFGDD	D9F230211-6	9175365	46	1.0	07/02/09 20:30		
57	CCV				1.0	07/02/09 20:34		
58	CCB				1.0	07/02/09 20:37		
59	RLCV				1.0	07/02/09 20:40		
60	ICSA				1.0	07/02/09 20:44		
61	ICSAB				1.0	07/02/09 20:47		
62	WASH				1.0	07/02/09 20:50		
63	CCV				1.0	07/02/09 20:54		
64	CCB				1.0	07/02/09 20:57		
65	RLCV				1.0	07/02/09 21:01		
66	LE4TC	D9F170236-27	9171051	MS	1.0	07/02/09 21:04		
67	LE4TN	D9F170236-29	9171051	MS	1.0	07/02/09 21:07		
68	LE4TP	D9F170236-30	9171051	MS	1.0	07/02/09 21:11		
69	LE4TQ	D9F170236-31	9171051	MS	1.0	07/02/09 21:14		
70	LE4T4	D9F170236-36	9171051	MS	1.0	07/02/09 21:18		
71	LE4T9	D9F170236-39	9171051	MS	1.0	07/02/09 21:21		
72	LE4VA	D9F170236-40	9171051	MS	1.0	07/02/09 21:24		
73	LE4VT	D9F170236-45	9171051	MS	1.0	07/02/09 21:28		
74	CCV				1.0	07/02/09 21:31		
75	CCB				1.0	07/02/09 21:35		
76	RLCV				1.0	07/02/09 21:38		
77	~~RINSE~~				1.0	07/02/09 21:41		
78	RINSE				1.0	07/02/09 21:45		
79	RINSE				1.0	07/02/09 21:48		
80	RINSE				1.0	07/02/09 21:51		
81	RINSE				1.0	07/02/09 21:55		
82	RINSE				1.0	07/02/09 21:58		
83	~~Cal Blank~~				1.0	07/02/09 22:01	V.T 7/6/09	
84	Cal Blank				1.0	07/02/09 22:05		
85	100 ppb				1.0	07/02/09 22:08		
86	CCV				1.0	07/02/09 22:11		
87	CCB				1.0	07/02/09 22:15		
88	RLCV				1.0	07/02/09 22:18		
89	LFM02B	D9F260000	9177095	MS	1.0	07/02/09 22:22		
90	LFM02C	D9F260000	9177095	MS	1.0	07/02/09 22:25		
91	LFKC2	D9F240311-1	9177095	MS	1.0	07/02/09 22:28		
92	LFKC3	D9F240311-2	9177095	MS	1.0	07/02/09 22:32		
93	LFKC4	D9F240311-3	9177095	MS	1.0	07/02/09 22:35		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
94	LFKC4P5	D9F240311	9177095		5.0	07/02/09 22:38		☐
95	LFKC4Z	D9F240311-3	9177095		1.0	07/02/09 22:42		☐
96	LFKC4S	D9F240311-3	9177095	MS	1.0	07/02/09 22:45		☐
97	LFKC4D	D9F240311-3	9177095	MS	1.0	07/02/09 22:49		☐
98	LFKC5	D9F240311-4	9177095	MS	1.0	07/02/09 22:52		☐
99	CCV				1.0	07/02/09 22:55		☐
100	CCB				1.0	07/02/09 22:59		☐
101	RLCV				1.0	07/02/09 23:02		☐
102	LFM0PB	D9F260000	9177090	46	1.0	07/02/09 23:05		☐
103	LFM0PC	D9F260000	9177090	46	1.0	07/02/09 23:09		☐
104	LFKC6	D9F240311-5	9177090	46	1.0	07/02/09 23:12		☐
105	LFKC7	D9F240311-6	9177090	46	1.0	07/02/09 23:16		☐
106	LFKC7P5	D9F240311	9177090		5.0	07/02/09 23:19		☐
107	LFKC7Z	D9F240311-6	9177090		1.0	07/02/09 23:22		☐
108	LFKC7S	D9F240311-6	9177090	46	1.0	07/02/09 23:26		☐
109	CCV				1.0	07/02/09 23:29		☐
110	CCB				1.0	07/02/09 23:32		☐
111	RLCV				1.0	07/02/09 23:36		☐
112	LFKC7D	D9F240311-6	9177090	46	1.0	07/02/09 23:39		☐
113	LFKC8	D9F240311-7	9177090	46	1.0	07/02/09 23:43		☐
114	LFKC9	D9F240311-8	9177090	46	1.0	07/02/09 23:46		☐
115	LFKDA	D9F240311-9	9177090	46	1.0	07/02/09 23:49		☐
116	LFKDC	D9F240311-10	9177090	46	1.0	07/02/09 23:53		☐
117	LFKDD	D9F240311-11	9177090	46	1.0	07/02/09 23:56		☐
118	CCV				1.0	07/03/09 00:00		☐
119	CCB				1.0	07/03/09 00:03		☐
120	RLCV				1.0	07/03/09 00:06		☐
121	~~LFT60B~~	~~D9F300000~~	~~9181137~~	~~MS~~	~~1.0~~	~~07/03/09 00:10~~		☐
122	LFT60C	D9F300000	9181137	MS	1.0	07/03/09 00:13		☐
123	LFTDG	D9F290160-1	9181137	MS	1.0	07/03/09 00:17		☐
124	LFTDGP5	D9F290160	9181137		5.0	07/03/09 00:20		☐
125	LFTDGZ	D9F290160-1	9181137		1.0	07/03/09 00:23		☐
126	LFTDGS	D9F290160-1	9181137	MS	1.0	07/03/09 00:27		☐
127	CCV				1.0	07/03/09 00:30		☐
128	CCB				1.0	07/03/09 00:34		☐
129	RLCV				1.0	07/03/09 00:37		☐
130	LFTDGD	D9F290160-1	9181137	MS	1.0	07/03/09 00:40		☐
131	LFTDJ	D9F290160-2	9181137	MS	1.0	07/03/09 00:44		☐
132	LFTDK	D9F290160-3	9181137	MS	1.0	07/03/09 00:47		☐
133	LFTDL	D9F290160-4	9181137	MS	1.0	07/03/09 00:51		☐
134	LFTDM	D9F290160-5	9181137	MS	1.0	07/03/09 00:54		☐
135	CCV				1.0	07/03/09 00:57		☐
136	CCB				1.0	07/03/09 01:01		☐
137	RLCV				1.0	07/03/09 01:04		☐
138	LFT67B	D9F300000	9181141	46	1.0	07/03/09 01:08		☐
139	~~LFT67C~~	~~D9F300000~~	~~9181141~~	~~46~~	~~1.0~~	~~07/03/09 01:11~~	VT 7/6/09 Did not use.	☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
140	~~LFTDN~~	~~D9F290160-6~~	~~9181141~~	~~46~~	~~1.0~~	~~07/03/09 01:14~~		☐
141	LFTDP	D9F290160-7	9181141	46	1.0	07/03/09 01:18		☐
142	LFTDQ	D9F290160-8	9181141	46	1.0	07/03/09 01:21		☐
143	LFTDT	D9F290160-9	9181141	46	1.0	07/03/09 01:24		☐
144	LFTDW	D9F290160-10	9181141	46	1.0	07/03/09 01:28		☐
145	CCV				1.0	07/03/09 01:31		☐
146	CCB				1.0	07/03/09 01:35		☐
147	RLCV				1.0	07/03/09 01:38		☐
148	LFTD2	D9F290160-11	9181141	46	1.0	07/03/09 01:41		☐
149	LFTD2P5	D9F290160	9181141		5.0	07/03/09 01:45		☐
150	LFTD2Z	D9F290160-11	9181141		1.0	07/03/09 01:48		☐
151	LFTD2S	D9F290160-11	9181141	46	1.0	07/03/09 01:52		☐
152	LFTD2D	D9F290160-11	9181141	46	1.0	07/03/09 01:55		☐
153	LFTD8	D9F290160-12	9181141	46	1.0	07/03/09 01:58		☐
154	LFTD9	D9F290160-13	9181141	46	1.0	07/03/09 02:02		☐
155	LFTED	D9F290160-14	9181141	46	1.0	07/03/09 02:05		☐
156	CCV				1.0	07/03/09 02:09		☐
157	CCB				1.0	07/03/09 02:12		☐
158	RLCV				1.0	07/03/09 02:15		☐
159	RINSE				1.0	07/03/09 02:19		☐
160	RINSE				1.0	07/03/09 02:22		☐
161	RINSE				1.0	07/03/09 02:26		☐
162	RINSE				1.0	07/03/09 02:29		☐
163	RINSE				1.0	07/03/09 02:32		☐
164	RINSE				1.0	07/03/09 02:36		☐
165	~~Cal Blank~~				~~1.0~~	~~07/03/09 02:39~~	KT 7/6/09 Did not use.	☐
166	Cal Blank				1.0	07/03/09 02:42		☐
167	100 ppb				1.0	07/03/09 02:46		☐
168	CCV				1.0	07/03/09 02:49		☐
169	CCB				1.0	07/03/09 02:53		☐
170	RLCV				1.0	07/03/09 02:56		☐
171	ICSA				1.0	07/03/09 02:59		☐
172	ICSAB				1.0	07/03/09 03:03		☐
173	WASH				1.0	07/03/09 03:06		☐
174	CCV				1.0	07/03/09 03:10		☐
175	CCB				1.0	07/03/09 03:13		☐
176	RLCV				1.0	07/03/09 03:16		☐
177	LFRWWBF	D9F290000	9180268	MD	1.0	07/03/09 03:20		☐
178	LFRWWCF	D9F290000	9180268	MD	1.0	07/03/09 03:23		☐
179	LFP1LF 10X	D9F260277-3	9180268	MD	10.0	07/03/09 03:26		☐
180	LFQ11F 10X	D9F270154-3	9180268	MD	10.0	07/03/09 03:30		☐
181	LFQ11P50F	D9F270154	9180268		50.0	07/03/09 03:33		☐
182	LFQ11ZF	D9F270154-3	9180268		1.0	07/03/09 03:37		☐
183	LFQ11SF 10X	D9F270154-3	9180268	MD	10.0	07/03/09 03:40		☐
184	LFQ11DF 10X	D9F270154-3	9180268	MD	10.0	07/03/09 03:43		☐
185	LFQ13F 10X	D9F270154-5	9180268	MD	10.0	07/03/09 03:47		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
186	CCV				1.0	07/03/09 03:50		☐
187	CCB				1.0	07/03/09 03:54		☐
188	RLCV				1.0	07/03/09 03:57		☐
189	LFRV2B	D9F290000	9180262	MS	1.0	07/03/09 04:00		☐
190	LFRV2C	D9F290000	9180262	MS	1.0	07/03/09 04:04		☐
191	LFP1G 10X	D9F260277-1	9180262	MS	10.0	07/03/09 04:07		☐
192	LFP1GP50	D9F260277	9180262		50.0	07/03/09 04:11		☐
193	LFP1GZ	D9F260277-1	9180262		1.0	07/03/09 04:14		☐
194	LFP1GS 10X	D9F260277-1	9180262	MS	10.0	07/03/09 04:17		☐
195	CCV				1.0	07/03/09 04:21		☐
196	CCB				1.0	07/03/09 04:24		☐
197	RLCV				1.0	07/03/09 04:27		☐
198	LFP1GD 10X	D9F260277-1	9180262	MS	10.0	07/03/09 04:31		☐
199	LFP1K 10X	D9F260277-2	9180262	MS	10.0	07/03/09 04:34		☐
200	LFQ02 10X	D9F270153-1	9180262	MS	10.0	07/03/09 04:38		☐
201	LFQ1Q 10X	D9F270154-1	9180262	MS	10.0	07/03/09 04:41		☐
202	LFQ10 10X	D9F270154-2	9180262	MS	10.0	07/03/09 04:44		☐
203	LFQ12 10X	D9F270154-4	9180262	MS	10.0	07/03/09 04:48		☐
204	CCV				1.0	07/03/09 04:51		☐
205	CCB				1.0	07/03/09 04:55		☐
206	RLCV				1.0	07/03/09 04:58		☐
207	~~RINSE~~				~~1.0~~	~~07/03/09 05:01~~		☐
208	RINSE				1.0	07/03/09 05:05		☐
209	RINSE				1.0	07/03/09 05:08		☐
210	RINSE				1.0	07/03/09 05:11		☐
211	RINSE				1.0	07/03/09 05:15		☐
212	RINSE				1.0	07/03/09 05:18		☐
213	~~Cal Blank~~				~~1.0~~	~~07/03/09 05:22~~	KT 7/6/09	☐
214	Cal Blank				1.0	07/03/09 05:25		☐
215	100 ppb				1.0	07/03/09 05:28		☐
216	CCV				1.0	07/03/09 05:32		☐
217	CCB				1.0	07/03/09 05:35		☐
218	RLCV				1.0	07/03/09 05:38		☐
219	LFTMDB	D9F290000	9180481	04	1.0	07/03/09 05:42		☐
220	LFTMDC	D9F290000	9180481	04	1.0	07/03/09 05:45		☐
221	LFNXL	D9F260175-1	9180481	04	1.0	07/03/09 05:49		☐
222	LFNXQ	D9F260175-2	9180481	04	1.0	07/03/09 05:52		☐
223	LFNXT	D9F260175-3	9180481	04	1.0	07/03/09 05:56		☐
224	LFNXW	D9F260175-4	9180481	04	1.0	07/03/09 05:59		☐
225	LFNXX	D9F260175-5	9180481	04	1.0	07/03/09 06:02		☐
226	LFQPE	D9F270122-1	9180481	04	1.0	07/03/09 06:06		☐
227	CCV				1.0	07/03/09 06:09		☐
228	CCB				1.0	07/03/09 06:13		☐
229	RLCV				1.0	07/03/09 06:16		☐
230	~~LFQPT~~	~~D9F270122-2~~	~~9180481~~	~~04~~	~~1.0~~	~~07/03/09 06:19~~		☐
231	~~LFQPX~~	~~D9F270122-3~~	~~9180481~~	~~04~~	~~1.0~~	~~07/03/09 06:23~~	KT 7/6/09 Did not use.	☐

Denver

RUN SUMMARY

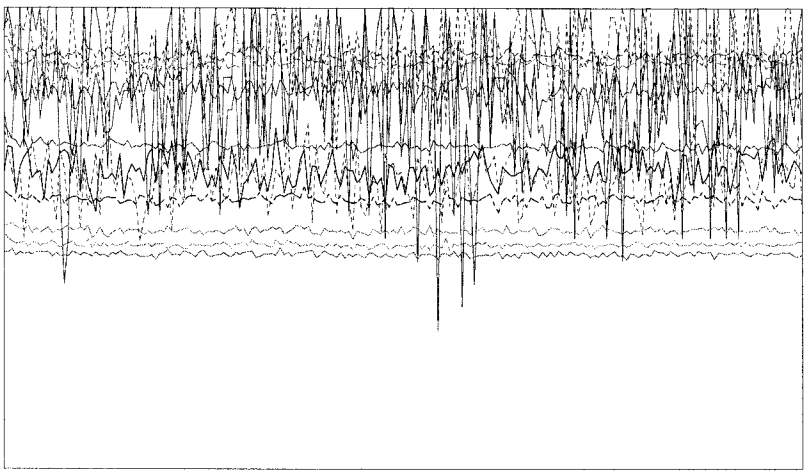
Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
232	LFQP2	D9F270122-4	9180481	04	1.0	07/03/09 06:26		☐
233	LFQP3	D9F270122-5	9180481	04	1.0	07/03/09 06:30		☐
234	LFQP5	D9F270122-6	9180481	04	1.0	07/03/09 06:33		☐
235	LFQP5P5	D9F270122	9180481		5.0	07/03/09 06:37		☐
236	LFQP5Z	D9F270122-6	9180481		1.0	07/03/09 06:40		☐
237	CCV				1.0	07/03/09 06:43		☐
238	CCB				1.0	07/03/09 06:47		☐
239	RLCV				1.0	07/03/09 06:50		☐
240	LFQP5S	D9F270122-6	9180481	04	1.0	07/03/09 06:54		☐
241	LFQP5D	D9F270122-6	9180481	04	1.0	07/03/09 06:57		☐
242	LFQQA	D9F270122-7	9180481	04	1.0	07/03/09 07:00		☐
243	LFQQG	D9F270122-8	9180481	04	1.0	07/03/09 07:04		☐
244	LFQQL	D9F270122-9	9180481	04	1.0	07/03/09 07:07		☐
245	LFQQP	D9F270122-10	9180481	04	1.0	07/03/09 07:11		☐
246	LFQQR	D9F270122-11	9180481	04	1.0	07/03/09 07:14		☐
247	CCV				1.0	07/03/09 07:17		☐
248	CCB				1.0	07/03/09 07:21		☐
249	RLCV				1.0	07/03/09 07:24		☐
250	LFRT8BF	D9F290000	9180238	MD	1.0	07/03/09 07:28		☐
251	LFRT8CF	D9F290000	9180238	MD	1.0	07/03/09 07:31		☐
252	LFNV6F 2X	D9F260164-1	9180238	MD	2.0	07/03/09 07:34		☐
253	LFNXLF	D9F260175-1	9180238	MD	1.0	07/03/09 07:38		☐
254	LFNXQF	D9F260175-2	9180238	MD	1.0	07/03/09 07:41		☐
255	LFNXQP5F	D9F260175	9180238		5.0	07/03/09 07:45		☐
256	CCV				1.0	07/03/09 07:48		☐
257	CCB				1.0	07/03/09 07:51		☐
258	RLCV				1.0	07/03/09 07:55		☐
259	LFNXQZF	D9F260175-2	9180238		1.0	07/03/09 07:58		☐
260	LFNXQSF	D9F260175-2	9180238	MD	1.0	07/03/09 08:02		☐
261	LFNXQDF	D9F260175-2	9180238	MD	1.0	07/03/09 08:05		☐
262	LFNXTF	D9F260175-3	9180238	MD	1.0	07/03/09 08:08		☐
263	LFNXWF	D9F260175-4	9180238	MD	1.0	07/03/09 08:12		☐
264	LFNXXF	D9F260175-5	9180238	MD	1.0	07/03/09 08:15	RTF 7/6/09 Did not use.	☐
265	CCV				1.0	07/03/09 08:19		☐
266	CCB				1.0	07/03/09 08:22		☐
267	RLCV				1.0	07/03/09 08:25		☐
268	LFRVEB	D9F290000	9180246	MS	1.0	07/03/09 08:29		☐
269	LFRVEC	D9F290000	9180246	MS	1.0	07/03/09 08:32		☐
270	LFNV6 2X	D9F260164-1	9180256	MS	2.0	07/03/09 08:36		☐
271	LFNV6P5	D9F260164	9180256		5.0	07/03/09 08:39		☐
272	LFNV6Z	D9F260164-1	9180256		1.0	07/03/09 08:42		☐
273	LFNV6S 2X	D9F260164-1	9180246	MS	2.0	07/03/09 08:46		☐
274	LFNV6D 2X	D9F260164-1	9180246	MS	2.0	07/03/09 08:49		☐
275	CCV				1.0	07/03/09 08:53		☐
276	CCB				1.0	07/03/09 08:56		☐
277	RLCV				1.0	07/03/09 08:59		☐

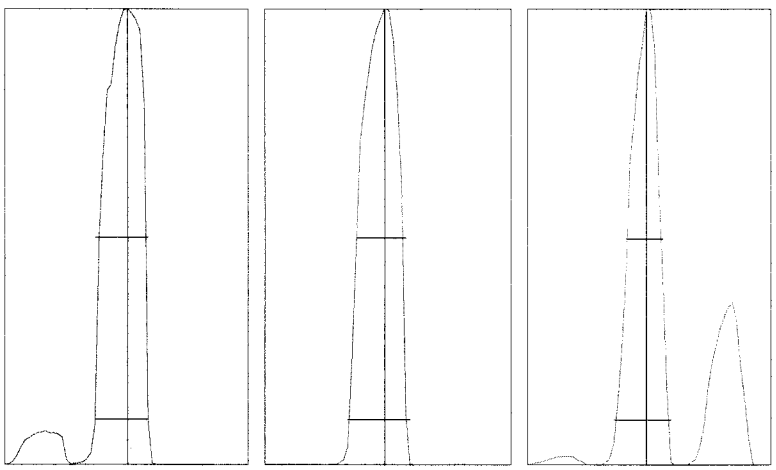
Tune Report

Tune File : NORM.U
Comment :



Integration Time: 0.1000 sec
Sampling Period: 1.5300 sec
n: 200
Oxide: 156/140 2.303%
Doubly Charged: 70/140 1.267%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1640.0	1652.2	2.82	0.40
7	50,000	23181.0	23270.7	1.05	0.50
59	50,000	25829.0	25831.6	1.20	0.30
63	100	70.0	81.5	12.40	0.60
70	1,000	640.0	650.4	5.15	0.60
75	20	24.0	17.2	25.72	0.60
78	200	194.0	182.1	8.34	0.50
89	50,000	44438.0	44018.2	0.98	0.80
115	100,000	49107.0	48640.4	1.04	0.90
118	200	111.0	126.0	9.13	0.80
137	10,000	5841.0	5846.3	1.51	0.80
205	50,000	45602.0	45024.8	1.18	1.20
238	100,000	70365.0	70144.9	1.16	1.30
156/140	5	2.255%	2.330%	4.56	
70/140	2	1.261%	1.284%	5.25	



m/z:	7	89	205
Height:	23,577	44,237	46,123
Axis:	7.05	89.00	205.00
W-50%:	0.65	0.60	0.45
W-10%:	0.6500	0.7500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Jul 02, 2009 16:12:11
Printed : Jul 02, 2009 16:12:14

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1550 W	Extract 1	:	0 V	AMU Gain	:	134
RF Matching	:	1.7 V	Extract 2	:	-175 V	AMU Offset	:	123
Smpl Depth	:	7.5 mm	Omega Bias-ce	:	-30 V	Axis Gain	:	1.0006
Torch-H	:	-0.8 mm	Omega Lens-ce	:	-0.2 V	Axis Offset	:	-0.02
Torch-V	:	-0.3 mm	Cell Entrance	:	-30 V	QP Bias	:	-10 V
Carrier Gas	:	0.83 L/min	QP Focus	:	5 V			
Makeup Gas	:	0.2 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1720 V
Sample Pump	:	--- rps	OctP RF	:	180 V	Pulse HV	:	1390 V
S/C Temp	:	2 degC	OctP Bias	:	-18 V			

===Reaction Cell===								
Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Generated : Jul 02, 2009 16:12:11
Printed : Jul 02, 2009 16:12:17

P/A Factor Tuning Report

Acquired:Jul 2 2009 04:31 pm

Mass[amu]	Element	P/A Factor
6	Li	0.059917
7	(Li)	Sensitivity too low
9	Be	0.067770
45	Sc	0.082015
51	V	0.083844
52	Cr	0.086930
53	(Cr)	Sensitivity too low
55	Mn	0.088862
59	Co	0.091909
60	Ni	0.093634
63	Cu	0.095913
66	Zn	0.095259
72	Ge	0.093959
75	As	0.093070
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
95	Mo	0.094455
98	(Mo)	0.094291
99	(Mo)	0.095897
106	(Cd)	0.100174
107	Ag	Sensitivity too low
108	(Cd)	0.100691
111	Cd	0.101084
114	Cd	0.101314
115	In	0.100349
118	Sn	0.099994
121	Sb	0.099814
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
205	Tl	0.109270
206	(Pb)	0.108330
207	(Pb)	0.108387
208	Pb	0.108123
232	Th	0.106785
238	U	0.106760

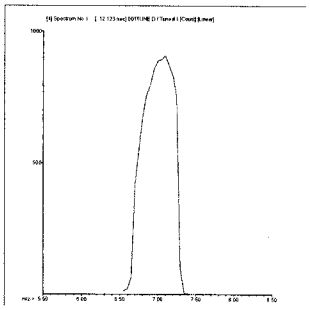
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1720 V
Pulse HV: 1390 V

200.8 QC Tune Report

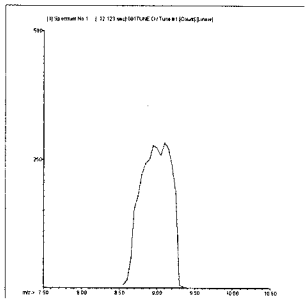
Data File: C:\ICPCHEM\1\DATA\AG070209D.B\001TUNE.D
Date Acquired: Jul 2 2009 05:24 pm
Acq. Method: tun_isis.M
Operator: TEL
Sample Name: 200.8 TUNE
Misc Info:
Vial Number: 4
Current Method: C:\ICPCHEM\1\METHODS\tun_isis.M

RSD (%)

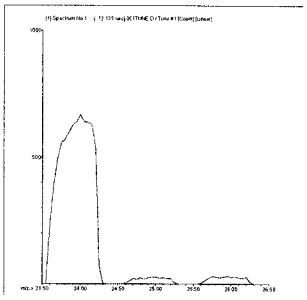
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
7 Li	18736	18245	19358	19013	18672	18386	**3.74**	5.00	
9 Be	2087	2042	2075	2087	2127	2102	**2.28**	5.00	
24 Mg	9125	9088	9038	9266	9054	9177	**3.04**	5.00	
59 Co	54496	54580	53978	54727	54457	54735	**1.99**	5.00	
115 In	802374	782591	836383	800840	797147	794906	**2.27**	5.00	
208 Pb	68333	68370	68983	68309	67968	68033	**1.00**	5.00	
238 U	144234	144446	144907	144132	143416	144266	**1.56**	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required 0.90
Flag:

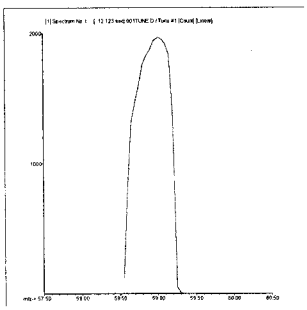


9 Be
Mass Calib.
Actual: 9.05
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



24 Mg
Mass Calib.
Actual: 24.05
Required: 23.90 - 24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\AG070209D.B\001TUNE.D



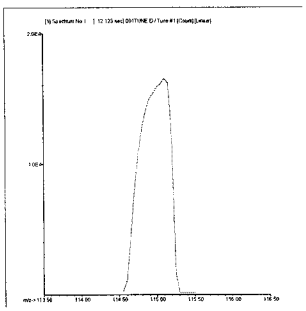
59 Co

Mass Calib.

Actual:	59.00		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



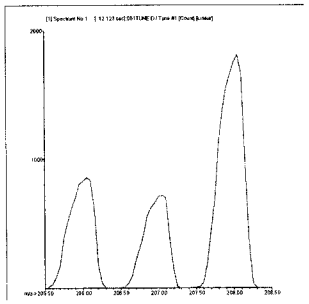
115 In

Mass Calib.

Actual:	115.05		
Required:	114.90	-	115.10
Flag:			

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



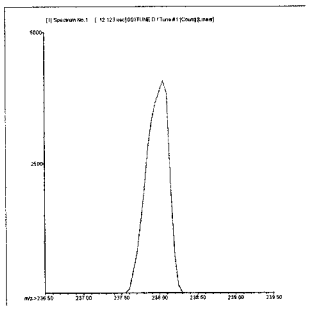
208 Pb

Mass Calib.

Actual:	208.00		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



238 U

Mass Calib.

Actual:	238.00		
Required:	237.90	-	238.10
Flag:			

Peak Width

Actual:	0.50
Required:	0.90
Flag:	

Tune Result: Pass

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\002CALB.D\002CALB.D#
Date Acquired:	Jul 2 2009 05:27 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	Cal Blank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:28 pm
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-19	889.82
52	Cr	72	1	1257	15.52
55	Mn	72	1	150	6.67
59	Co	72	1	20	86.60
60	Ni	72	1	20	0.00
63	Cu	72	1	180	9.62
66	Zn	72	1	111	23.92
75	As	72	1	23	20.38
78	Se	72	1	20	86.60
95	Mo	72	1	30	33.34
107	Ag	115	1	20	50.00
111	Cd	115	1	4	251.91
118	Sn	115	1	170	21.21
121	Sb	115	1	8	49.49
137	Ba	115	1	26	7.53
205	Tl	165	1	142	25.82
208	Pb	165	1	230	23.73
232	Th	165	1	187	17.22
238	U	165	1	134	27.31

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	330381	0.39
45	Sc	1	742768	0.42
72	Ge	1	421900	0.35
115	In	1	1496154	0.77
165	Ho	1	3680882	1.27

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#
Date Acquired: Jul 2 2009 05:31 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: Cal Blank
Misc Info:
Vial Number: 2101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:28 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-46	276.35
52	Cr	72	1	1350	7.52
55	Mn	72	1	157	51.59
59	Co	72	1	20	50.00
60	Ni	72	1	43	70.50
63	Cu	72	1	190	15.79
66	Zn	72	1	121	18.26
75	As	72	1	26	15.39
78	Se	72	1	17	34.64
95	Mo	72	1	37	41.66
107	Ag	115	1	7	173.21
111	Cd	115	1	11	31.74
118	Sn	115	1	400	12.99
121	Sb	115	1	7	50.00
137	Ba	115	1	20	60.09
205	Tl	165	1	107	6.25
208	Pb	165	1	228	3.38
232	Th	165	1	183	25.19
238	U	165	1	80	22.05

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	327414	0.50
45	Sc	1	735158	0.40
72	Ge	1	419596	0.05
115	In	1	1473829	0.73
165	Ho	1	3670206	0.46

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\004ICAL.D\004ICAL.D#
Date Acquired:	Jul 2 2009 05:34 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	100 ppb
Misc Info:	
Vial Number:	2102
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:31 pm
Sample Type:	ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	35511	1.30
51	V	72	1	493306	2.82
52	Cr	72	1	583384	2.00
55	Mn	72	1	550768	0.74
59	Co	72	1	847686	1.59
60	Ni	72	1	199501	2.03
63	Cu	72	1	492508	1.25
66	Zn	72	1	90787	2.05
75	As	72	1	52934	1.62
78	Se	72	1	8706	4.11
95	Mo	72	1	238838	0.60
107	Ag	115	1	844291	1.39
111	Cd	115	1	142187	1.97
118	Sn	115	1	367294	1.44
121	Sb	115	1	366871	1.35
137	Ba	115	1	156202	1.66
205	Tl	165	1	2186150	0.35
208	Pb	165	1	2940793	1.30
232	Th	165	1	2931259	0.71
238	U	165	1	3462419	1.72

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	312482	0.45	327414	95.4	30 - 120	
45	Sc	1	690303	1.07	735158	93.9	30 - 120	
72	Ge	1	400313	1.12	419596	95.4	30 - 120	
115	In	1	1448887	0.69	1473829	98.3	30 - 120	
165	Ho	1	3568324	1.35	3670206	97.2	30 - 120	

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures	0
0 :ISTD Failures	0

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\005 ICV.D\005 ICV.D#
Date Acquired: Jul 2 2009 05:37 pm
Operator: TEL
Sample Name: ICV
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: ICV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	39.64	ppb	1.98	40	99.1	90 - 110	
51 V	72	1	40.02	ppb	1.12	40	100.1	90 - 110	
52 Cr	72	1	40.24	ppb	1.80	40	100.6	90 - 110	
55 Mn	72	1	40.84	ppb	1.38	40	102.1	90 - 110	
59 Co	72	1	39.74	ppb	0.99	40	99.4	90 - 110	
60 Ni	72	1	41.39	ppb	2.91	40	103.5	90 - 110	
63 Cu	72	1	40.38	ppb	1.60	40	101.0	90 - 110	
66 Zn	72	1	40.11	ppb	0.87	40	100.3	90 - 110	
75 As	72	1	39.90	ppb	1.41	40	99.8	90 - 110	
78 Se	72	1	38.25	ppb	5.25	40	95.6	90 - 110	
95 Mo	72	1	40.02	ppb	0.31	40	100.1	90 - 110	
107 Ag	115	1	40.32	ppb	0.04	40	100.8	90 - 110	
111 Cd	115	1	40.76	ppb	1.79	40	101.9	90 - 110	
118 Sn	115	1	39.90	ppb	1.58	40	99.8	90 - 110	
121 Sb	115	1	39.18	ppb	0.82	40	98.0	90 - 110	
137 Ba	115	1	40.53	ppb	1.71	40	101.3	90 - 110	
205 Tl	165	1	40.69	ppb	0.71	40	101.7	90 - 110	
208 Pb	165	1	40.81	ppb	0.67	40	102.0	90 - 110	
232 Th	165	1	43.95	ppb	0.31	40	109.9	90 - 110	
238 U	165	1	40.69	ppb	2.07	40	101.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	306141	0.42	327414	93.5	30 - 120	
45 Sc	1	679151	1.38	735158	92.4	30 - 120	
72 Ge	1	391095	0.86	419596	93.2	30 - 120	
115 In	1	1409419	1.03	1473829	95.6	30 - 120	
165 Ho	1	3499233	1.10	3670206	95.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\006WASH.D\006WASH.D#
Date Acquired:	Jul 2 2009 05:41 pm
Operator:	TEL
Sample Name:	RLIV
Misc Info:	
Vial Number:	1204
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	WASH
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.914 ppb	12.95	1.30	
51 V	72	1	4.994 ppb	2.35	6.50	
52 Cr	72	1	2.038 ppb	4.85	2.60	
55 Mn	72	1	1.031 ppb	2.79	1.30	
59 Co	72	1	1.001 ppb	2.22	1.30	
60 Ni	72	1	1.980 ppb	5.67	2.60	
63 Cu	72	1	2.033 ppb	0.35	2.60	
66 Zn	72	1	10.160 ppb	1.95	13.00	
75 As	72	1	5.132 ppb	0.72	6.50	
78 Se	72	1	5.905 ppb	24.08	6.50	
95 Mo	72	1	2.197 ppb	1.63	2.60	
107 Ag	115	1	5.234 ppb	0.30	6.50	
111 Cd	115	1	1.031 ppb	3.04	1.30	
118 Sn	115	1	10.500 ppb	1.60	13.00	
121 Sb	115	1	2.204 ppb	3.59	2.60	
137 Ba	115	1	1.032 ppb	2.51	1.30	
205 Tl	165	1	1.121 ppb	1.36	1.30	
208 Pb	165	1	1.058 ppb	1.60	1.30	
232 Th	165	1	2.760 ppb	4.59	2.60	
238 U	165	1	1.095 ppb	2.44	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308021	1.44	327414	94.1	30 - 120	
45 Sc	1	688055	0.22	735158	93.6	30 - 120	
72 Ge	1	393405	0.91	419596	93.8	30 - 120	
115 In	1	1414361	1.49	1473829	96.0	30 - 120	
165 Ho	1	3487280	0.57	3670206	95.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\007 ICB.D\007 ICB.D#
Date Acquired: Jul 2 2009 05:44 pm
Operator: TEL
Sample Name: ICB
Misc Info:
Vial Number: 2104
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: ICB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.00	ppb	0.00	1.00	
51 V	72	1	0.00	ppb	1142.50	1.00	
52 Cr	72	1	0.01	ppb	259.17	1.00	
55 Mn	72	1	0.00	ppb	58.19	1.00	
59 Co	72	1	0.00	ppb	2286.70	1.00	
60 Ni	72	1	0.00	ppb	1248.00	1.00	
63 Cu	72	1	0.00	ppb	103.08	1.00	
66 Zn	72	1	0.07	ppb	21.73	1.00	
75 As	72	1	0.01	ppb	278.64	1.00	
78 Se	72	1	0.47	ppb	37.44	1.00	
95 Mo	72	1	0.02	ppb	60.02	1.00	
107 Ag	115	1	0.00	ppb	18.22	1.00	
111 Cd	115	1	-0.01	ppb	94.37	1.00	
118 Sn	115	1	0.13	ppb	2.72	1.00	
121 Sb	115	1	0.09	ppb	7.98	1.00	
137 Ba	115	1	0.00	ppb	57.63	1.00	
205 Tl	165	1	0.02	ppb	13.80	1.00	
208 Pb	165	1	0.00	ppb	858.68	1.00	
232 Th	165	1	0.18	ppb	6.79	1.00	
238 U	165	1	0.00	ppb	61.54	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308390	0.70	327414	94.2	30 - 120	
45 Sc	1	693667	0.51	735158	94.4	30 - 120	
72 Ge	1	399109	0.91	419596	95.1	30 - 120	
115 In	1	1423062	0.84	1473829	96.6	30 - 120	
165 Ho	1	3536712	0.29	3670206	96.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

RL STD QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\008RLST.D\008RLST.D#
Date Acquired: Jul 2 2009 05:47 pm
Operator: TEL
Sample Name: RL STD
Misc Info:
Vial Number: 2105
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: RLSTD
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	0.86	ppb	16.05	1	86.2	50 - 150	
51 V	72	1	0.94	ppb	1.43	1	94.4	50 - 150	
52 Cr	72	1	0.95	ppb	2.47	1	95.1	50 - 150	
55 Mn	72	1	1.02	ppb	4.71	1	102.2	50 - 150	
59 Co	72	1	1.00	ppb	3.07	1	99.7	50 - 150	
60 Ni	72	1	1.12	ppb	3.96	1	111.6	50 - 150	
63 Cu	72	1	1.04	ppb	1.63	1	104.0	50 - 150	
66 Zn	72	1	10.29	ppb	0.67	10	102.9	50 - 150	
75 As	72	1	1.00	ppb	5.47	1	100.0	50 - 150	
78 Se	72	1	0.96	ppb	24.36	1	96.2	50 - 150	
95 Mo	72	1	1.02	ppb	3.33	1	101.6	50 - 150	
107 Ag	115	1	1.01	ppb	4.38	1	101.1	50 - 150	
111 Cd	115	1	1.07	ppb	2.10	1	106.8	50 - 150	
118 Sn	115	1	10.21	ppb	0.58	10	102.1	50 - 150	
121 Sb	115	1	1.08	ppb	2.77	1	108.0	50 - 150	
137 Ba	115	1	1.00	ppb	4.47	1	100.0	50 - 150	
205 Tl	165	1	1.04	ppb	0.42	1	103.8	50 - 150	
208 Pb	165	1	1.03	ppb	1.19	1	102.9	50 - 150	
232 Th	165	1	1.12	ppb	0.92	1	111.8	50 - 150	
238 U	165	1	1.06	ppb	1.43	1	105.5	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	309572	0.31	327414	94.6	30 - 120	
45 Sc	1	699023	0.37	735158	95.1	30 - 120	
72 Ge	1	402654	0.74	419596	96.0	30 - 120	
115 In	1	1423291	1.38	1473829	96.6	30 - 120	
165 Ho	1	3566640	0.31	3670206	97.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

AFCEE RL QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\009AFCE.D\009AFCE.D#
Date Acquired: Jul 2 2009 05:51 pm
Operator: TEL
Sample Name: AFCEE RL
Misc Info:
Vial Number: 2106
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: AFCEERL
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	0.18	ppb	33.05	0	103.4	80 - 120	
51 V	72	1	0.16	ppb	31.98	0	84.1	80 - 120	
52 Cr	72	1	0.17	ppb	9.94	0	90.0	80 - 120	
55 Mn	72	1	0.22	ppb	9.48	0	107.8	80 - 120	
59 Co	72	1	0.21	ppb	6.41	0	104.2	80 - 120	
60 Ni	72	1	0.16	ppb	31.71	0	72.7	80 - 120	
63 Cu	72	1	0.21	ppb	6.55	0	101.3	80 - 120	
66 Zn	72	1	1.94	ppb	1.22	2	94.4	80 - 120	
75 As	72	1	0.20	ppb	19.18	0	99.2	80 - 120	
78 Se	72	1	0.42	ppb	82.44	0	217.0	80 - 120	
95 Mo	72	1	0.24	ppb	7.76	0	118.4	80 - 120	
107 Ag	115	1	0.21	ppb	7.34	0	104.1	80 - 120	
111 Cd	115	1	0.21	ppb	25.37	0	99.2	80 - 120	
118 Sn	115	1	1.99	ppb	1.00	2	97.3	80 - 120	
121 Sb	115	1	0.23	ppb	7.16	0	106.5	80 - 120	
137 Ba	115	1	0.21	ppb	10.98	0	103.0	80 - 120	
205 Tl	165	1	0.21	ppb	1.72	0	98.8	80 - 120	
208 Pb	165	1	0.20	ppb	5.30	0	98.7	80 - 120	
232 Th	165	1	0.25	ppb	2.13	0	112.4	80 - 120	
238 U	165	1	0.21	ppb	1.95	0	98.2	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	313017	0.39	327414	95.6	30 - 120	
45 Sc	1	712854	0.43	735158	97.0	30 - 120	
72 Ge	1	409381	0.13	419596	97.6	30 - 120	
115 In	1	1457349	0.75	1473829	98.9	30 - 120	
165 Ho	1	3601780	0.38	3670206	98.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\010SMPL.D\010SMPL.D#
Date Acquired: Jul 2 2009 05:54 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: CHECK
Misc Info: STD2637-09
Vial Number: 2112
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	103.00	103.00	ppb	4.73	3600	
51 V	72	1	100.50	100.50	ppb	0.99	3600	
52 Cr	72	1	101.20	101.20	ppb	0.96	3600	
55 Mn	72	1	102.10	102.10	ppb	1.04	3600	
59 Co	72	1	101.10	101.10	ppb	0.98	3600	
60 Ni	72	1	101.20	101.20	ppb	0.82	3600	
63 Cu	72	1	101.30	101.30	ppb	1.28	3600	
66 Zn	72	1	100.30	100.30	ppb	1.33	3600	
75 As	72	1	102.00	102.00	ppb	0.75	3600	
78 Se	72	1	101.70	101.70	ppb	2.81	3600	
95 Mo	72	1	0.02	0.02	ppb	97.88	3600	
107 Ag	115	1	102.40	102.40	ppb	1.37	3600	
111 Cd	115	1	103.10	103.10	ppb	2.15	3600	
118 Sn	115	1	0.00	0.00	ppb	321.09	3600	
121 Sb	115	1	0.03	0.03	ppb	14.55	3600	
137 Ba	115	1	104.00	104.00	ppb	1.68	3600	
205 Tl	165	1	100.70	100.70	ppb	0.45	3600	
208 Pb	165	1	102.00	102.00	ppb	1.70	3600	
232 Th	165	1	102.50	102.50	ppb	1.22	1000	
238 U	165	1	101.70	101.70	ppb	1.58	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	306083	0.24	327414	93.5	30 - 120	
45 Sc	1	684899	0.24	735158	93.2	30 - 120	
72 Ge	1	394804	0.46	419596	94.1	30 - 120	
115 In	1	1420410	0.24	1473829	96.4	30 - 120	
165 Ho	1	3560096	0.65	3670206	97.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\011SMPL.D\011SMPL.D#
Date Acquired:	Jul 2 2009 05:58 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	ALTSe
Misc Info:	2 ppb
Vial Number:	2107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:36 pm
Sample Type:	SA
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	0.00	0.00	ppb	541.38	3600	
52 Cr	72	1	0.00	0.00	ppb	1921.30	3600	
55 Mn	72	1	0.01	0.01	ppb	48.21	3600	
59 Co	72	1	0.01	0.01	ppb	52.60	3600	
60 Ni	72	1	0.01	0.01	ppb	60.57	3600	
63 Cu	72	1	0.04	0.04	ppb	24.19	3600	
66 Zn	72	1	0.32	0.32	ppb	5.11	3600	
75 As	72	1	0.01	0.01	ppb	245.03	3600	
78 Se	72	1	1.87	1.87	ppb	37.77	3600	
95 Mo	72	1	0.00	0.00	ppb	52.14	3600	
107 Ag	115	1	0.01	0.01	ppb	0.63	3600	
111 Cd	115	1	0.00	0.00	ppb	1225.90	3600	
118 Sn	115	1	-0.01	-0.01	ppb	94.40	3600	
121 Sb	115	1	0.01	0.01	ppb	63.39	3600	
137 Ba	115	1	0.01	0.01	ppb	180.67	3600	
205 Tl	165	1	0.04	0.04	ppb	6.17	3600	
208 Pb	165	1	0.01	0.01	ppb	22.64	3600	
232 Th	165	1	0.99	0.99	ppb	16.18	1000	
238 U	165	1	0.01	0.01	ppb	3.90	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308172	1.06	327414	94.1	30 - 120	
45 Sc	1	704293	0.24	735158	95.8	30 - 120	
72 Ge	1	404504	0.36	419596	96.4	30 - 120	
115 In	1	1437294	0.56	1473829	97.5	30 - 120	
165 Ho	1	3536472	0.55	3670206	96.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\012ICSA.D\012ICSA.D#
Date Acquired: Jul 2 2009 06:01 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSA
Misc Info:
Vial Number: 2108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element		IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9	Be	6	1	0.02 ppb	86.58	1.00	
51	V	72	1	0.00 ppb	13284.00	1.00	
52	Cr	72	1	1.03 ppb	0.70	1.00	
55	Mn	72	1	2.15 ppb	1.38	1.00	
59	Co	72	1	0.03 ppb	17.53	1.00	
60	Ni	72	1	0.78 ppb	9.25	1.00	
63	Cu	72	1	0.25 ppb	9.01	1.00	
66	Zn	72	1	2.94 ppb	0.29	10.00	
75	As	72	1	0.12 ppb	19.65	1.00	
78	Se	72	1	0.23 ppb	59.06	1.00	
95	Mo	72	1	2103.00 ppb	1.18	2000.00	
107	Ag	115	1	0.06 ppb	23.27	1.00	
111	Cd	115	1	0.38 ppb	16.61	1.00	
118	Sn	115	1	0.09 ppb	37.94	10.00	
121	Sb	115	1	0.25 ppb	4.58	1.00	
137	Ba	115	1	1.60 ppb	7.10	1.00	
205	Tl	165	1	0.04 ppb	12.66	1.00	
208	Pb	165	1	0.13 ppb	3.71	1.00	
232	Th	165	1	0.32 ppb	21.74	1.00	
238	U	165	1	0.03 ppb	4.89	1.00	

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	295380	0.65	327414	90.2	30 - 120	
45	Sc	1	615890	0.12	735158	83.8	30 - 120	
72	Ge	1	335887	0.64	419596	80.1	30 - 120	
115	In	1	1215094	0.94	1473829	82.4	30 - 120	
165	Ho	1	3169706	0.35	3670206	86.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Nnumber of ISTD Failures Allowed

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\013ICSB.D\013ICSB.D#
Date Acquired: Jul 2 2009 06:04 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSAB
Misc Info:
Vial Number: 2109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSAB
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	6		1	92.93	1.83	100	92.9	80 - 120	
51 V	72		1	103.60	0.31	100	103.6	80 - 120	
52 Cr	72		1	101.40	1.40	100	101.4	80 - 120	
55 Mn	72		1	103.10	1.02	100	103.1	80 - 120	
59 Co	72		1	95.73	0.90	100	95.7	80 - 120	
60 Ni	72		1	92.26	0.74	100	92.3	80 - 120	
63 Cu	72		1	87.47	1.15	100	87.5	80 - 120	
66 Zn	72		1	100.60	1.34	100	100.6	80 - 120	
75 As	72		1	101.20	1.43	100	101.2	80 - 120	
78 Se	72		1	106.90	2.76	100	106.9	80 - 120	
95 Mo	72		1	2217.00	1.49	2100	105.6	80 - 120	
107 Ag	115		1	85.36	3.82	100	85.4	80 - 120	
111 Cd	115		1	96.53	1.82	100	96.5	80 - 120	
118 Sn	115		1	104.10	2.98	100	104.1	80 - 120	
121 Sb	115		1	105.20	2.52	100	105.2	80 - 120	
137 Ba	115		1	107.30	2.41	100	107.3	80 - 120	
205 Tl	165		1	93.57	1.44	100	93.6	80 - 120	
208 Pb	165		1	93.32	2.21	100	93.3	80 - 120	
232 Th	165		1	105.70	1.53	100	105.7	80 - 120	
238 U	165		1	100.60	1.87	100	100.6	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	296274	1.16	327414	90.5	30 - 120	
45 Sc	1	594216	0.22	735158	80.8	30 - 120	
72 Ge	1	325915	1.12	419596	77.7	30 - 120	
115 In	1	1188399	0.92	1473829	80.6	30 - 120	
165 Ho	1	3164827	0.90	3670206	86.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\014SMPL.D\014SMPL.D#
Date Acquired:	Jul 2 2009 06:08 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	RINSE
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:36 pm
Sample Type:	SA
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.01	0.01	ppb	173.21	3600	
51 V	72	1	0.00	0.00	ppb	2099.80	3600	
52 Cr	72	1	-0.02	-0.02	ppb	29.26	3600	
55 Mn	72	1	0.01	0.01	ppb	191.54	3600	
59 Co	72	1	0.01	0.01	ppb	66.21	3600	
60 Ni	72	1	0.00	0.00	ppb	217.40	3600	
63 Cu	72	1	0.02	0.02	ppb	95.78	3600	
66 Zn	72	1	0.00	0.00	ppb	763.63	3600	
75 As	72	1	-0.01	-0.01	ppb	111.97	3600	
78 Se	72	1	0.33	0.33	ppb	156.59	3600	
95 Mo	72	1	1.17	1.17	ppb	6.99	3600	
107 Ag	115	1	0.01	0.01	ppb	45.09	3600	
111 Cd	115	1	0.00	0.00	ppb	1474.40	3600	
118 Sn	115	1	0.01	0.01	ppb	239.37	3600	
121 Sb	115	1	0.05	0.05	ppb	2.73	3600	
137 Ba	115	1	0.00	0.00	ppb	176.49	3600	
205 Tl	165	1	0.01	0.01	ppb	24.13	3600	
208 Pb	165	1	0.01	0.01	ppb	27.17	3600	
232 Th	165	1	0.47	0.47	ppb	15.39	1000	
238 U	165	1	0.02	0.02	ppb	10.93	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	344396	0.62	327414	105.2	30 - 120	
45 Sc	1	715937	0.17	735158	97.4	30 - 120	
72 Ge	1	416017	0.25	419596	99.1	30 - 120	
115 In	1	1467783	1.12	1473829	99.6	30 - 120	
165 Ho	1	3676143	0.31	3670206	100.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Linear Dynamic Range Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\015 LR.D\015 LR.D#
Date Acquired:	Jul 2 2009 06:11 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LR
Misc Info:	
Vial Number:	2110
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:36 pm
Sample Type:	LR
Prep Dil. Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	988.30 ppb	0.62	1000	98.8	90 - 110	
51 V	72	1	962.90 ppb	2.34	1000	96.3	90 - 110	
52 Cr	72	1	970.70 ppb	0.58	1000	97.1	90 - 110	
55 Mn	72	1	985.10 ppb	0.14	1000	98.5	90 - 110	
59 Co	72	1	955.70 ppb	0.41	1000	95.6	90 - 110	
60 Ni	72	1	994.40 ppb	0.30	1000	99.4	90 - 110	
63 Cu	72	1	963.60 ppb	0.13	1000	96.4	90 - 110	
66 Zn	72	1	1002.00 ppb	0.17	1000	100.2	90 - 110	
75 As	72	1	993.20 ppb	0.37	1000	99.3	90 - 110	
78 Se	72	1	987.50 ppb	0.23	1000	98.8	90 - 110	
95 Mo	72	1	1022.00 ppb	0.89	1000	102.2	90 - 110	
107 Ag	115	1	967.10 ppb	0.77	1000	96.7	90 - 110	
111 Cd	115	1	1032.00 ppb	0.99	1000	103.2	90 - 110	
118 Sn	115	1	1006.00 ppb	0.90	1000	100.6	90 - 110	
121 Sb	115	1	1005.00 ppb	1.61	1000	100.5	90 - 110	
137 Ba	115	1	1029.00 ppb	1.06	1000	102.9	90 - 110	
205 Tl	165	1	948.60 ppb	1.76	1000	94.9	90 - 110	
208 Pb	165	1	958.90 ppb	1.72	1000	95.9	90 - 110	
232 Th	165	1	1038.00 ppb	2.14	1000	103.8	90 - 110	
238 U	165	1	983.80 ppb	1.32	1000	98.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	321694	1.14	327414	98.3	30 - 120	
45 Sc	1	683351	1.12	735158	93.0	30 - 120	
72 Ge	1	394574	1.02	419596	94.0	30 - 120	
115 In	1	1414979	0.33	1473829	96.0	30 - 120	
165 Ho	1	3618336	1.02	3670206	98.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\016SMPL.D\016SMPL.D#
Date Acquired: Jul 2 2009 06:14 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.09	0.09	ppb	34.61	3600	
51 V	72	1	0.10	0.10	ppb	24.09	3600	
52 Cr	72	1	0.06	0.06	ppb	44.44	3600	
55 Mn	72	1	0.07	0.07	ppb	36.19	3600	
59 Co	72	1	0.06	0.06	ppb	5.78	3600	
60 Ni	72	1	0.05	0.05	ppb	5.45	3600	
63 Cu	72	1	0.07	0.07	ppb	21.96	3600	
66 Zn	72	1	0.06	0.06	ppb	50.82	3600	
75 As	72	1	0.09	0.09	ppb	28.68	3600	
78 Se	72	1	0.55	0.55	ppb	11.38	3600	
95 Mo	72	1	0.76	0.76	ppb	10.41	3600	
107 Ag	115	1	0.06	0.06	ppb	16.99	3600	
111 Cd	115	1	0.06	0.06	ppb	54.88	3600	
118 Sn	115	1	1.58	1.58	ppb	7.59	3600	
121 Sb	115	1	0.63	0.63	ppb	2.90	3600	
137 Ba	115	1	0.07	0.07	ppb	18.44	3600	
205 Tl	165	1	0.12	0.12	ppb	11.62	3600	
208 Pb	165	1	0.06	0.06	ppb	18.00	3600	
232 Th	165	1	3.05	3.05	ppb	14.34	1000	
238 U	165	1	0.14	0.14	ppb	4.97	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	333318	0.10	327414	101.8	30 - 120	
45 Sc	1	727635	0.35	735158	99.0	30 - 120	
72 Ge	1	416414	0.57	419596	99.2	30 - 120	
115 In	1	1452903	1.15	1473829	98.6	30 - 120	
165 Ho	1	3630559	0.56	3670206	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\017 CCV.D\017 CCV.D#
Date Acquired: Jul 2 2009 06:18 pm
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.60	ppb	3.38	50	99.2	90 - 110	
51 V	72	1	49.68	ppb	1.72	50	99.4	90 - 110	
52 Cr	72	1	50.13	ppb	1.49	50	100.3	90 - 110	
55 Mn	72	1	50.82	ppb	0.56	50	101.6	90 - 110	
59 Co	72	1	49.99	ppb	1.60	50	100.0	90 - 110	
60 Ni	72	1	50.12	ppb	1.73	50	100.2	90 - 110	
63 Cu	72	1	50.54	ppb	0.70	50	101.1	90 - 110	
66 Zn	72	1	49.63	ppb	1.20	50	99.3	90 - 110	
75 As	72	1	50.37	ppb	1.72	50	100.7	90 - 110	
78 Se	72	1	49.33	ppb	6.65	50	98.7	90 - 110	
95 Mo	72	1	50.42	ppb	1.21	50	100.8	90 - 110	
107 Ag	115	1	50.25	ppb	0.72	50	100.5	90 - 110	
111 Cd	115	1	50.31	ppb	0.64	50	100.6	90 - 110	
118 Sn	115	1	50.68	ppb	1.29	50	101.4	90 - 110	
121 Sb	115	1	50.46	ppb	0.67	50	100.9	90 - 110	
137 Ba	115	1	51.07	ppb	0.77	50	102.1	90 - 110	
205 Tl	165	1	49.66	ppb	1.87	50	99.3	90 - 110	
208 Pb	165	1	50.48	ppb	1.82	50	101.0	90 - 110	
232 Th	165	1	51.30	ppb	0.98	50	102.6	90 - 110	
238 U	165	1	50.49	ppb	2.17	50	101.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	330223	1.94	327414	100.9	30 - 120	
45 Sc	1	721303	0.77	735158	98.1	30 - 120	
72 Ge	1	412466	0.58	419596	98.3	30 - 120	
115 In	1	1477629	1.09	1473829	100.3	30 - 120	
165 Ho	1	3629005	1.45	3670206	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\018 CCB.D\018 CCB.D#
Date Acquired: Jul 2 2009 06:21 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.015	ppb	113.60	1.00	
52 Cr	72	1	0.003	ppb	775.23	1.00	
55 Mn	72	1	-0.002	ppb	474.55	1.00	
59 Co	72	1	0.004	ppb	67.07	1.00	
60 Ni	72	1	0.000	ppb	6668.50	1.00	
63 Cu	72	1	0.005	ppb	97.86	1.00	
66 Zn	72	1	0.018	ppb	8.02	1.00	
75 As	72	1	0.016	ppb	23.00	1.00	
78 Se	72	1	0.469	ppb	22.90	1.00	
95 Mo	72	1	0.165	ppb	31.85	1.00	
107 Ag	115	1	0.014	ppb	21.84	1.00	
111 Cd	115	1	-0.005	ppb	93.43	1.00	
118 Sn	115	1	0.417	ppb	5.26	1.00	
121 Sb	115	1	0.130	ppb	12.95	1.00	
137 Ba	115	1	0.003	ppb	44.46	1.00	
205 Tl	165	1	0.035	ppb	10.11	1.00	
208 Pb	165	1	0.006	ppb	40.89	1.00	
232 Th	165	1	0.858	ppb	12.87	1.00	
238 U	165	1	0.013	ppb	15.08	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	332471	0.74	327414	101.5	30 - 120	
45 Sc	1	734511	0.46	735158	99.9	30 - 120	
72 Ge	1	423798	0.67	419596	101.0	30 - 120	
115 In	1	1489090	0.47	1473829	101.0	30 - 120	
165 Ho	1	3648589	0.60	3670206	99.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\019WASH.D\019WASH.D#
Date Acquired: Jul 2 2009 06:24 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.200 ppb	3.93	1.30	
51 V	72	1	4.986 ppb	4.00	6.50	
52 Cr	72	1	2.020 ppb	1.12	2.60	
55 Mn	72	1	1.043 ppb	4.76	1.30	
59 Co	72	1	1.020 ppb	2.70	1.30	
60 Ni	72	1	2.041 ppb	2.94	2.60	
63 Cu	72	1	2.085 ppb	2.45	2.60	
66 Zn	72	1	10.220 ppb	2.58	13.00	
75 As	72	1	5.149 ppb	5.20	6.50	
78 Se	72	1	5.652 ppb	8.54	6.50	
95 Mo	72	1	2.189 ppb	6.40	2.60	
107 Ag	115	1	5.244 ppb	2.63	6.50	
111 Cd	115	1	1.014 ppb	5.41	1.30	
118 Sn	115	1	10.660 ppb	0.75	13.00	
121 Sb	115	1	2.054 ppb	3.92	2.60	
137 Ba	115	1	1.086 ppb	6.02	1.30	
205 Tl	165	1	1.089 ppb	0.92	1.30	
208 Pb	165	1	1.057 ppb	2.02	1.30	
232 Th	165	1	2.330 ppb	1.60	2.60	
238 U	165	1	1.072 ppb	1.83	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	329850	1.27	327414	100.7	30 - 120	
45 Sc	1	736964	0.17	735158	100.2	30 - 120	
72 Ge	1	423846	0.99	419596	101.0	30 - 120	
115 In	1	1487625	0.79	1473829	100.9	30 - 120	
165 Ho	1	3629504	0.35	3670206	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\057 CCV.D\057 CCV.D#
Date Acquired:	Jul 2 2009 08:34 pm
Operator:	TEL
Sample Name:	CCV
Misc Info:	
Vial Number:	1107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	CCV
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.17	ppb	3.85	50	100.3	90 - 110	
51 V	72	1	47.92	ppb	1.37	50	95.8	90 - 110	
52 Cr	72	1	47.24	ppb	1.17	50	94.5	90 - 110	
55 Mn	72	1	48.38	ppb	0.42	50	96.8	90 - 110	
59 Co	72	1	48.26	ppb	1.07	50	96.5	90 - 110	
60 Ni	72	1	48.73	ppb	2.40	50	97.5	90 - 110	
63 Cu	72	1	47.98	ppb	1.18	50	96.0	90 - 110	
66 Zn	72	1	47.65	ppb	1.68	50	95.3	90 - 110	
75 As	72	1	50.03	ppb	1.56	50	100.1	90 - 110	
78 Se	72	1	51.00	ppb	8.24	50	102.0	90 - 110	
95 Mo	72	1	49.58	ppb	0.84	50	99.2	90 - 110	
107 Ag	115	1	47.55	ppb	1.36	50	95.1	90 - 110	
111 Cd	115	1	48.02	ppb	1.71	50	96.0	90 - 110	
118 Sn	115	1	48.76	ppb	1.96	50	97.5	90 - 110	
121 Sb	115	1	49.52	ppb	1.44	50	99.0	90 - 110	
137 Ba	115	1	51.06	ppb	1.84	50	102.1	90 - 110	
205 Tl	165	1	50.93	ppb	0.89	50	101.9	90 - 110	
208 Pb	165	1	51.15	ppb	1.47	50	102.3	90 - 110	
232 Th	165	1	51.63	ppb	1.15	50	103.3	90 - 110	
238 U	165	1	52.24	ppb	0.91	50	104.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	245104	0.18	327414	74.9	30 - 120	
45 Sc	1	595639	1.11	735158	81.0	30 - 120	
72 Ge	1	350117	0.52	419596	83.4	30 - 120	
115 In	1	1318797	1.57	1473829	89.5	30 - 120	
165 Ho	1	3221597	0.04	3670206	87.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\058 CCB.D\058 CCB.D#
Date Acquired: Jul 2 2009 08:37 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.005	ppb	725.15	1.00	
52 Cr	72	1	-0.012	ppb	94.51	1.00	
55 Mn	72	1	-0.004	ppb	181.17	1.00	
59 Co	72	1	0.002	ppb	93.99	1.00	
60 Ni	72	1	-0.015	ppb	37.43	1.00	
63 Cu	72	1	0.003	ppb	235.05	1.00	
66 Zn	72	1	0.007	ppb	240.51	1.00	
75 As	72	1	0.000	ppb	2212.70	1.00	
78 Se	72	1	0.073	ppb	462.86	1.00	
95 Mo	72	1	0.038	ppb	40.22	1.00	
107 Ag	115	1	0.003	ppb	27.51	1.00	
111 Cd	115	1	0.002	ppb	660.62	1.00	
118 Sn	115	1	0.141	ppb	52.03	1.00	
121 Sb	115	1	0.053	ppb	1.97	1.00	
137 Ba	115	1	0.000	ppb	26741.00	1.00	
205 Tl	165	1	0.019	ppb	7.76	1.00	
208 Pb	165	1	0.004	ppb	22.00	1.00	
232 Th	165	1	0.917	ppb	13.10	1.00	
238 U	165	1	0.008	ppb	10.22	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	246403	0.74	327414	75.3	30 - 120	
45 Sc	1	608397	0.86	735158	82.8	30 - 120	
72 Ge	1	358356	0.81	419596	85.4	30 - 120	
115 In	1	1310454	0.45	1473829	88.9	30 - 120	
165 Ho	1	3265872	0.46	3670206	89.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\059WASH.D\059WASH.D#
Date Acquired: Jul 2 2009 08:40 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.866 ppb	13.77	1.30	
51 V	72	1	5.112 ppb	2.34	6.50	
52 Cr	72	1	2.031 ppb	7.54	2.60	
55 Mn	72	1	1.022 ppb	1.91	1.30	
59 Co	72	1	0.997 ppb	3.60	1.30	
60 Ni	72	1	1.993 ppb	9.78	2.60	
63 Cu	72	1	1.921 ppb	3.94	2.60	
66 Zn	72	1	9.768 ppb	4.11	13.00	
75 As	72	1	5.258 ppb	4.32	6.50	
78 Se	72	1	7.468 ppb	7.51	6.50	
95 Mo	72	1	2.046 ppb	7.56	2.60	
107 Ag	115	1	5.026 ppb	2.34	6.50	
111 Cd	115	1	0.971 ppb	4.61	1.30	
118 Sn	115	1	10.240 ppb	2.26	13.00	
121 Sb	115	1	1.981 ppb	1.49	2.60	
137 Ba	115	1	1.083 ppb	4.65	1.30	
205 Tl	165	1	1.077 ppb	2.31	1.30	
208 Pb	165	1	1.056 ppb	0.53	1.30	
232 Th	165	1	2.341 ppb	1.38	2.60	
238 U	165	1	1.091 ppb	2.86	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	247230	0.67	327414	75.5	30 - 120	
45 Sc	1	613320	0.29	735158	83.4	30 - 120	
72 Ge	1	359206	0.45	419596	85.6	30 - 120	
115 In	1	1327497	1.55	1473829	90.1	30 - 120	
165 Ho	1	3268023	0.23	3670206	89.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\060ICSA.D\060ICSA.D#
Date Acquired: Jul 2 2009 08:44 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSA
Misc Info:
Vial Number: 2108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	6	1	0.04 ppb	0.41	1.00	
51 V	72	1	-0.14 ppb	76.82	1.00	
52 Cr	72	1	0.93 ppb	1.44	1.00	
55 Mn	72	1	2.12 ppb	4.53	1.00	
59 Co	72	1	0.04 ppb	20.32	1.00	
60 Ni	72	1	0.72 ppb	8.48	1.00	
63 Cu	72	1	0.29 ppb	7.11	1.00	
66 Zn	72	1	2.89 ppb	1.39	10.00	
75 As	72	1	0.17 ppb	15.36	1.00	
78 Se	72	1	0.19 ppb	127.00	1.00	
95 Mo	72	1	2086.00 ppb	0.84	2000.00	
107 Ag	115	1	0.07 ppb	20.32	1.00	
111 Cd	115	1	0.54 ppb	52.04	1.00	
118 Sn	115	1	0.22 ppb	6.57	10.00	
121 Sb	115	1	0.27 ppb	3.82	1.00	
137 Ba	115	1	1.54 ppb	1.82	1.00	
205 Tl	165	1	0.04 ppb	7.00	1.00	
208 Pb	165	1	0.13 ppb	6.92	1.00	
232 Th	165	1	0.23 ppb	19.33	1.00	
238 U	165	1	0.02 ppb	5.83	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	219743	0.41	327414	67.1	30 - 120	
45 Sc	1	515562	1.03	735158	70.1	30 - 120	
72 Ge	1	289244	1.50	419596	68.9	30 - 120	
115 In	1	1071271	1.43	1473829	72.7	30 - 120	
165 Ho	1	2795076	0.76	3670206	76.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Nnumber of ISTD Failures Allowed

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\061ICSB.D\061ICSB.D#
Date Acquired: Jul 2 2009 08:47 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSAB
Misc Info:
Vial Number: 2109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSAB
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	6		1	98.53	0.60	100	98.5	80 - 120	
51 V	72		1	102.70	0.68	100	102.7	80 - 120	
52 Cr	72		1	98.62	1.27	100	98.6	80 - 120	
55 Mn	72		1	100.30	0.60	100	100.3	80 - 120	
59 Co	72		1	95.00	1.30	100	95.0	80 - 120	
60 Ni	72		1	91.50	1.50	100	91.5	80 - 120	
63 Cu	72		1	87.58	1.19	100	87.6	80 - 120	
66 Zn	72		1	96.46	0.14	100	96.5	80 - 120	
75 As	72		1	104.10	0.85	100	104.1	80 - 120	
78 Se	72		1	111.50	3.55	100	111.5	80 - 120	
95 Mo	72		1	2229.00	0.24	2100	106.1	80 - 120	
107 Ag	115		1	83.19	1.42	100	83.2	80 - 120	
111 Cd	115		1	93.31	1.55	100	93.3	80 - 120	
118 Sn	115		1	100.80	2.22	100	100.8	80 - 120	
121 Sb	115		1	102.10	1.91	100	102.1	80 - 120	
137 Ba	115		1	108.80	2.20	100	108.8	80 - 120	
205 Tl	165		1	93.85	0.91	100	93.9	80 - 120	
208 Pb	165		1	93.28	1.01	100	93.3	80 - 120	
232 Th	165		1	108.10	1.63	100	108.1	80 - 120	
238 U	165		1	103.30	1.42	100	103.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	227224	0.69	327414	69.4	30 - 120	
45 Sc	1	514360	0.24	735158	70.0	30 - 120	
72 Ge	1	287157	0.28	419596	68.4	30 - 120	
115 In	1	1083805	0.90	1473829	73.5	30 - 120	
165 Ho	1	2813323	0.77	3670206	76.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\062WASH.D\062WASH.D#
Date Acquired:	Jul 2 2009 08:50 pm
Operator:	TEL
Sample Name:	WASH
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	WASH
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.012 ppb	173.23	1.30	
51 V	72	1	-0.006 ppb	498.31	6.50	
52 Cr	72	1	-0.037 ppb	19.84	2.60	
55 Mn	72	1	0.019 ppb	44.71	1.30	
59 Co	72	1	0.011 ppb	54.83	1.30	
60 Ni	72	1	0.008 ppb	148.11	2.60	
63 Cu	72	1	0.014 ppb	17.92	2.60	
66 Zn	72	1	0.447 ppb	9.40	13.00	
75 As	72	1	0.005 ppb	93.46	6.50	
78 Se	72	1	0.123 ppb	164.36	6.50	
95 Mo	72	1	1.061 ppb	10.35	2.60	
107 Ag	115	1	0.010 ppb	39.18	6.50	
111 Cd	115	1	0.005 ppb	107.74	1.30	
118 Sn	115	1	0.075 ppb	16.44	13.00	
121 Sb	115	1	0.057 ppb	18.12	2.60	
137 Ba	115	1	0.003 ppb	208.39	1.30	
205 Tl	165	1	0.006 ppb	35.15	1.30	
208 Pb	165	1	0.011 ppb	13.36	1.30	
232 Th	165	1	0.750 ppb	12.75	2.60	
238 U	165	1	0.020 ppb	5.61	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	248535	0.50	327414	75.9	30 - 120	
45 Sc	1	599756	1.05	735158	81.6	30 - 120	
72 Ge	1	352379	0.49	419596	84.0	30 - 120	
115 In	1	1302229	1.54	1473829	88.4	30 - 120	
165 Ho	1	3281873	0.68	3670206	89.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\063 CCV.D\063 CCV.D#
Date Acquired:	Jul 2 2009 08:54 pm
Operator:	TEL
Sample Name:	CCV
Misc Info:	
Vial Number:	1107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	CCV
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.81	ppb	2.65	50	101.6	90 - 110	
51 V	72	1	48.89	ppb	1.55	50	97.8	90 - 110	
52 Cr	72	1	47.70	ppb	1.08	50	95.4	90 - 110	
55 Mn	72	1	48.65	ppb	1.46	50	97.3	90 - 110	
59 Co	72	1	48.69	ppb	0.87	50	97.4	90 - 110	
60 Ni	72	1	49.62	ppb	0.30	50	99.2	90 - 110	
63 Cu	72	1	48.82	ppb	0.66	50	97.6	90 - 110	
66 Zn	72	1	51.15	ppb	2.13	50	102.3	90 - 110	
75 As	72	1	50.58	ppb	1.57	50	101.2	90 - 110	
78 Se	72	1	51.64	ppb	5.06	50	103.3	90 - 110	
95 Mo	72	1	50.65	ppb	1.69	50	101.3	90 - 110	
107 Ag	115	1	48.80	ppb	0.58	50	97.6	90 - 110	
111 Cd	115	1	48.14	ppb	0.65	50	96.3	90 - 110	
118 Sn	115	1	49.18	ppb	0.77	50	98.4	90 - 110	
121 Sb	115	1	49.73	ppb	0.46	50	99.5	90 - 110	
137 Ba	115	1	51.43	ppb	0.75	50	102.9	90 - 110	
205 Tl	165	1	50.35	ppb	0.85	50	100.7	90 - 110	
208 Pb	165	1	50.37	ppb	1.17	50	100.7	90 - 110	
232 Th	165	1	51.23	ppb	1.09	50	102.5	90 - 110	
238 U	165	1	51.38	ppb	0.59	50	102.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	253125	1.95	327414	77.3	30 - 120	
45 Sc	1	616804	0.85	735158	83.9	30 - 120	
72 Ge	1	362143	0.62	419596	86.3	30 - 120	
115 In	1	1353200	0.88	1473829	91.8	30 - 120	
165 Ho	1	3355769	0.92	3670206	91.4	30 - 120	

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\064 CCB.D\064 CCB.D#
Date Acquired: Jul 2 2009 08:57 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.034	ppb	99.28	1.00	
51 V	72	1	0.031	ppb	140.72	1.00	
52 Cr	72	1	-0.012	ppb	47.67	1.00	
55 Mn	72	1	0.008	ppb	82.51	1.00	
59 Co	72	1	0.004	ppb	39.36	1.00	
60 Ni	72	1	-0.001	ppb	2130.70	1.00	
63 Cu	72	1	0.019	ppb	26.16	1.00	
66 Zn	72	1	0.034	ppb	33.19	1.00	
75 As	72	1	0.009	ppb	141.02	1.00	
78 Se	72	1	0.150	ppb	209.61	1.00	
95 Mo	72	1	0.177	ppb	6.53	1.00	
107 Ag	115	1	0.002	ppb	88.96	1.00	
111 Cd	115	1	0.001	ppb	560.78	1.00	
118 Sn	115	1	0.143	ppb	31.05	1.00	
121 Sb	115	1	0.056	ppb	5.71	1.00	
137 Ba	115	1	0.005	ppb	266.10	1.00	
205 Tl	165	1	0.023	ppb	10.06	1.00	
208 Pb	165	1	0.005	ppb	12.29	1.00	
232 Th	165	1	0.973	ppb	11.24	1.00	
238 U	165	1	0.008	ppb	23.38	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	254122	1.13	327414	77.6	30 - 120	
45 Sc	1	631375	0.14	735158	85.9	30 - 120	
72 Ge	1	368308	0.39	419596	87.8	30 - 120	
115 In	1	1346068	0.50	1473829	91.3	30 - 120	
165 Ho	1	3320456	0.31	3670206	90.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\065WASH.D\065WASH.D#
Date Acquired: Jul 2 2009 09:01 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.028 ppb	18.91	1.30	
51 V	72	1	5.026 ppb	2.47	6.50	
52 Cr	72	1	2.029 ppb	2.66	2.60	
55 Mn	72	1	1.010 ppb	9.81	1.30	
59 Co	72	1	1.036 ppb	2.98	1.30	
60 Ni	72	1	2.139 ppb	2.35	2.60	
63 Cu	72	1	2.067 ppb	1.88	2.60	
66 Zn	72	1	9.816 ppb	1.81	13.00	
75 As	72	1	5.185 ppb	1.35	6.50	
78 Se	72	1	4.939 ppb	14.49	6.50	
95 Mo	72	1	2.242 ppb	5.27	2.60	
107 Ag	115	1	5.051 ppb	1.92	6.50	
111 Cd	115	1	0.921 ppb	4.96	1.30	
118 Sn	115	1	10.300 ppb	4.21	13.00	
121 Sb	115	1	2.017 ppb	1.93	2.60	
137 Ba	115	1	1.099 ppb	3.63	1.30	
205 Tl	165	1	1.079 ppb	1.96	1.30	
208 Pb	165	1	1.055 ppb	1.16	1.30	
232 Th	165	1	2.362 ppb	2.17	2.60	
238 U	165	1	1.091 ppb	2.13	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	254166	1.01	327414	77.6	30 - 120	
45 Sc	1	639185	1.04	735158	86.9	30 - 120	
72 Ge	1	374974	0.77	419596	89.4	30 - 120	
115 In	1	1377740	0.42	1473829	93.5	30 - 120	
165 Ho	1	3385027	0.51	3670206	92.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\074 CCV.D\074 CCV.D#
Date Acquired: Jul 2 2009 09:31 pm
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	51.30	ppb	4.17	50	102.6	90 - 110	
51 V	72	1	47.64	ppb	3.05	50	95.3	90 - 110	
52 Cr	72	1	46.90	ppb	0.72	50	93.8	90 - 110	
55 Mn	72	1	47.31	ppb	1.84	50	94.6	90 - 110	
59 Co	72	1	47.29	ppb	0.86	50	94.6	90 - 110	
60 Ni	72	1	47.84	ppb	1.54	50	95.7	90 - 110	
63 Cu	72	1	47.60	ppb	1.84	50	95.2	90 - 110	
66 Zn	72	1	48.57	ppb	0.34	50	97.1	90 - 110	
75 As	72	1	50.42	ppb	0.85	50	100.8	90 - 110	
78 Se	72	1	50.93	ppb	4.94	50	101.9	90 - 110	
95 Mo	72	1	48.84	ppb	2.62	50	97.7	90 - 110	
107 Ag	115	1	47.24	ppb	1.23	50	94.5	90 - 110	
111 Cd	115	1	47.18	ppb	2.63	50	94.4	90 - 110	
118 Sn	115	1	47.75	ppb	1.37	50	95.5	90 - 110	
121 Sb	115	1	48.95	ppb	1.63	50	97.9	90 - 110	
137 Ba	115	1	50.74	ppb	1.55	50	101.5	90 - 110	
205 Tl	165	1	49.74	ppb	1.58	50	99.5	90 - 110	
208 Pb	165	1	49.79	ppb	2.18	50	99.6	90 - 110	
232 Th	165	1	50.05	ppb	0.81	50	100.1	90 - 110	
238 U	165	1	50.58	ppb	1.88	50	101.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	233279	1.01	327414	71.2	30 - 120	
45 Sc	1	606568	0.26	735158	82.5	30 - 120	
72 Ge	1	355743	0.69	419596	84.8	30 - 120	
115 In	1	1335049	0.33	1473829	90.6	30 - 120	
165 Ho	1	3258685	1.04	3670206	88.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\075 CCB.D\075 CCB.D#
Date Acquired:	Jul 2 2009 09:35 pm
Operator:	TEL
Sample Name:	CCB
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	CCB
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.013	ppb	173.24	1.00	
51 V	72	1	0.007	ppb	108.03	1.00	
52 Cr	72	1	-0.011	ppb	71.06	1.00	
55 Mn	72	1	-0.002	ppb	176.79	1.00	
59 Co	72	1	0.004	ppb	109.88	1.00	
60 Ni	72	1	0.003	ppb	252.76	1.00	
63 Cu	72	1	0.011	ppb	81.50	1.00	
66 Zn	72	1	0.179	ppb	4.08	1.00	
75 As	72	1	0.006	ppb	76.09	1.00	
78 Se	72	1	0.329	ppb	39.67	1.00	
95 Mo	72	1	0.036	ppb	45.24	1.00	
107 Ag	115	1	0.002	ppb	31.71	1.00	
111 Cd	115	1	0.004	ppb	158.70	1.00	
118 Sn	115	1	0.116	ppb	25.49	1.00	
121 Sb	115	1	0.050	ppb	12.86	1.00	
137 Ba	115	1	0.001	ppb	1154.70	1.00	
205 Tl	165	1	0.020	ppb	1.89	1.00	
208 Pb	165	1	0.003	ppb	76.03	1.00	
232 Th	165	1	0.921	ppb	13.53	1.00	
238 U	165	1	0.008	ppb	17.38	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	230443	0.36	327414	70.4	30 - 120	
45 Sc	1	611190	0.61	735158	83.1	30 - 120	
72 Ge	1	360507	0.63	419596	85.9	30 - 120	
115 In	1	1315345	1.04	1473829	89.2	30 - 120	
165 Ho	1	3251023	0.39	3670206	88.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\076WASH.D\076WASH.D#
Date Acquired: Jul 2 2009 09:38 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.063 ppb	19.31	1.30	
51 V	72	1	4.962 ppb	1.50	6.50	
52 Cr	72	1	1.908 ppb	3.43	2.60	
55 Mn	72	1	1.000 ppb	2.81	1.30	
59 Co	72	1	0.971 ppb	4.52	1.30	
60 Ni	72	1	2.017 ppb	4.73	2.60	
63 Cu	72	1	1.999 ppb	1.87	2.60	
66 Zn	72	1	9.658 ppb	1.73	13.00	
75 As	72	1	5.148 ppb	0.90	6.50	
78 Se	72	1	5.665 ppb	11.84	6.50	
95 Mo	72	1	2.035 ppb	3.08	2.60	
107 Ag	115	1	5.018 ppb	3.31	6.50	
111 Cd	115	1	0.902 ppb	2.36	1.30	
118 Sn	115	1	10.020 ppb	1.21	13.00	
121 Sb	115	1	1.955 ppb	2.96	2.60	
137 Ba	115	1	1.027 ppb	2.95	1.30	
205 Tl	165	1	1.068 ppb	0.54	1.30	
208 Pb	165	1	1.064 ppb	3.69	1.30	
232 Th	165	1	2.313 ppb	1.63	2.60	
238 U	165	1	1.067 ppb	2.71	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	231991	0.78	327414	70.9	30 - 120	
45 Sc	1	608602	0.38	735158	82.8	30 - 120	
72 Ge	1	357167	0.46	419596	85.1	30 - 120	
115 In	1	1338257	0.54	1473829	90.8	30 - 120	
165 Ho	1	3256676	0.70	3670206	88.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Reslope Before Continuing Analytical Run

Corrective action was taken as stated in method 6020 section 7.8

…"During the course of an analytical run, the instrument may be "resloped" or recalibrated to correct for instrument drift. A recalibration must then be followed immediately by a new analysis of a CCV and CCB before any further samples are analyzed."

Analyst: _____

Date: 7/6/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#
Date Acquired: Jul 2 2009 10:05 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: Cal Blank
Misc Info:
Vial Number: 2101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 10:02 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-22	923.56
52	Cr	72	1	1147	7.60
55	Mn	72	1	100	19.73
59	Co	72	1	20	49.59
60	Ni	72	1	30	66.66
63	Cu	72	1	193	16.41
66	Zn	72	1	101	6.52
75	As	72	1	23	30.56
78	Se	72	1	33	86.61
95	Mo	72	1	167	14.36
107	Ag	115	1	7	173.19
111	Cd	115	1	21	30.15
118	Sn	115	1	437	20.16
121	Sb	115	1	23	14.41
137	Ba	115	1	13	24.73
205	Tl	165	1	43	33.08
208	Pb	165	1	161	16.68
232	Th	165	1	287	9.26
238	U	165	1	48	26.51

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	251642	0.92
45	Sc	1	650932	0.67
72	Ge	1	381299	0.66
115	In	1	1392123	0.35
165	Ho	1	3292496	0.64

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\085ICAL.D\085ICAL.D#
Date Acquired: Jul 2 2009 10:08 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: 100 ppb
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 10:05 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	27062	1.00
51	V	72	1	418462	0.85
52	Cr	72	1	487792	0.95
55	Mn	72	1	469696	0.79
59	Co	72	1	717901	0.71
60	Ni	72	1	173160	0.19
63	Cu	72	1	419851	1.55
66	Zn	72	1	75368	0.30
75	As	72	1	47767	0.36
78	Se	72	1	7986	2.25
95	Mo	72	1	210429	0.32
107	Ag	115	1	740054	0.61
111	Cd	115	1	123457	0.46
118	Sn	115	1	326095	0.12
121	Sb	115	1	328478	0.54
137	Ba	115	1	146461	0.56
205	Tl	165	1	1922923	1.17
208	Pb	165	1	2629150	0.50
232	Th	165	1	2660232	1.57
238	U	165	1	3095955	0.54

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	233510	0.70	251642	92.8	30 - 120	
45	Sc	1	606058	0.36	650932	93.1	30 - 120	
72	Ge	1	357646	0.94	381299	93.8	30 - 120	
115	In	1	1356873	1.19	1392123	97.5	30 - 120	
165	Ho	1	3236534	0.58	3292496	98.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\086 CCV.D\086 CCV.D#
Date Acquired: Jul 2 2009 10:11 pm
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 10:09 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.07	ppb	2.56	50	100.1	90 - 110	
51 V	72	1	50.16	ppb	0.59	50	100.3	90 - 110	
52 Cr	72	1	49.74	ppb	0.44	50	99.5	90 - 110	
55 Mn	72	1	49.24	ppb	0.95	50	98.5	90 - 110	
59 Co	72	1	49.54	ppb	0.43	50	99.1	90 - 110	
60 Ni	72	1	49.50	ppb	0.62	50	99.0	90 - 110	
63 Cu	72	1	50.03	ppb	0.60	50	100.1	90 - 110	
66 Zn	72	1	51.88	ppb	0.85	50	103.8	90 - 110	
75 As	72	1	49.82	ppb	1.39	50	99.6	90 - 110	
78 Se	72	1	49.94	ppb	7.58	50	99.9	90 - 110	
95 Mo	72	1	49.20	ppb	2.32	50	98.4	90 - 110	
107 Ag	115	1	50.84	ppb	1.31	50	101.7	90 - 110	
111 Cd	115	1	50.39	ppb	1.04	50	100.8	90 - 110	
118 Sn	115	1	51.11	ppb	0.75	50	102.2	90 - 110	
121 Sb	115	1	50.75	ppb	0.40	50	101.5	90 - 110	
137 Ba	115	1	50.68	ppb	0.61	50	101.4	90 - 110	
205 Tl	165	1	50.63	ppb	1.59	50	101.3	90 - 110	
208 Pb	165	1	50.16	ppb	2.07	50	100.3	90 - 110	
232 Th	165	1	51.25	ppb	0.88	50	102.5	90 - 110	
238 U	165	1	50.26	ppb	1.21	50	100.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	227579	1.65	251642	90.4	30 - 120	
45 Sc	1	599112	0.47	650932	92.0	30 - 120	
72 Ge	1	351453	1.02	381299	92.2	30 - 120	
115 In	1	1310647	0.89	1392123	94.1	30 - 120	
165 Ho	1	3197629	0.62	3292496	97.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\087 CCB.D\087 CCB.D#
Date Acquired: Jul 2 2009 10:15 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 10:09 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.025	ppb	173.20	1.00	
51 V	72	1	0.038	ppb	120.35	1.00	
52 Cr	72	1	0.025	ppb	82.37	1.00	
55 Mn	72	1	0.007	ppb	98.05	1.00	
59 Co	72	1	0.002	ppb	42.27	1.00	
60 Ni	72	1	0.021	ppb	116.49	1.00	
63 Cu	72	1	0.005	ppb	197.71	1.00	
66 Zn	72	1	0.219	ppb	9.38	1.00	
75 As	72	1	-0.001	ppb	181.96	1.00	
78 Se	72	1	0.112	ppb	224.10	1.00	
95 Mo	72	1	0.010	ppb	269.75	1.00	
107 Ag	115	1	0.008	ppb	50.56	1.00	
111 Cd	115	1	-0.006	ppb	76.66	1.00	
118 Sn	115	1	0.210	ppb	3.82	1.00	
121 Sb	115	1	0.081	ppb	14.91	1.00	
137 Ba	115	1	0.002	ppb	452.42	1.00	
205 Tl	165	1	0.048	ppb	18.25	1.00	
208 Pb	165	1	0.004	ppb	36.76	1.00	
232 Th	165	1	0.958	ppb	15.35	1.00	
238 U	165	1	0.011	ppb	16.03	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	228471	0.88	251642	90.8	30 - 120	
45 Sc	1	601272	0.35	650932	92.4	30 - 120	
72 Ge	1	356458	1.32	381299	93.5	30 - 120	
115 In	1	1308431	1.08	1392123	94.0	30 - 120	
165 Ho	1	3177975	0.85	3292496	96.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\088WASH.D\088WASH.D#
Date Acquired: Jul 2 2009 10:18 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 10:09 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.015 ppb	11.88	1.30	
51 V	72	1	5.126 ppb	4.38	6.50	
52 Cr	72	1	2.008 ppb	4.26	2.60	
55 Mn	72	1	1.017 ppb	0.89	1.30	
59 Co	72	1	1.011 ppb	2.60	1.30	
60 Ni	72	1	2.127 ppb	3.24	2.60	
63 Cu	72	1	1.966 ppb	1.91	2.60	
66 Zn	72	1	10.350 ppb	3.25	13.00	
75 As	72	1	5.021 ppb	2.18	6.50	
78 Se	72	1	5.116 ppb	3.15	6.50	
95 Mo	72	1	2.009 ppb	2.29	2.60	
107 Ag	115	1	5.197 ppb	2.65	6.50	
111 Cd	115	1	1.004 ppb	1.66	1.30	
118 Sn	115	1	10.740 ppb	2.53	13.00	
121 Sb	115	1	1.963 ppb	1.94	2.60	
137 Ba	115	1	1.008 ppb	10.13	1.30	
205 Tl	165	1	1.098 ppb	0.73	1.30	
208 Pb	165	1	1.056 ppb	1.84	1.30	
232 Th	165	1	2.304 ppb	2.10	2.60	
238 U	165	1	1.086 ppb	1.36	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	226590	0.33	251642	90.0	30 - 120	
45 Sc	1	609747	0.32	650932	93.7	30 - 120	
72 Ge	1	359276	0.76	381299	94.2	30 - 120	
115 In	1	1345201	1.19	1392123	96.6	30 - 120	
165 Ho	1	3224611	1.00	3292496	97.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Reslope Before Continuing Analytical Run

Corrective action was taken as stated in method 6020 section 7.8

..."During the course of an analytical run, the instrument may be "resloped" or recalibrated to correct for instrument drift. A recalibration must then be followed immediately by a new analysis of a CCV and CCB before any further samples are analyzed."

Analyst: _____

Date: 7/6/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#
Date Acquired:	Jul 3 2009 02:42 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	Cal Blank
Misc Info:	
Vial Number:	2101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:40 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	158	85.33
52	Cr	72	1	747	3.64
55	Mn	72	1	103	68.44
59	Co	72	1	20	86.61
60	Ni	72	1	7	86.59
63	Cu	72	1	623	14.58
66	Zn	72	1	55	20.92
75	As	72	1	17	28.95
78	Se	72	1	80	25.03
95	Mo	72	1	113	40.12
107	Ag	115	1	3	173.22
111	Cd	115	1	4	114.91
118	Sn	115	1	307	19.39
121	Sb	115	1	17	35.17
137	Ba	115	1	10	33.71
205	Tl	165	1	22	29.63
208	Pb	165	1	97	14.76
232	Th	165	1	133	30.33
238	U	165	1	31	14.91

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	143876	0.92
45	Sc	1	425742	0.49
72	Ge	1	252182	0.34
115	In	1	871760	0.50
165	Ho	1	1876593	1.50

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\167ICAL.D\167ICAL.D#
Date Acquired: Jul 3 2009 02:46 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: 100 ppb
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:43 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	17972	2.80
51	V	72	1	293987	1.99
52	Cr	72	1	327356	1.44
55	Mn	72	1	314665	1.22
59	Co	72	1	480008	1.12
60	Ni	72	1	115729	1.05
63	Cu	72	1	287151	1.22
66	Zn	72	1	49426	0.80
75	As	72	1	35955	1.48
78	Se	72	1	5461	5.72
95	Mo	72	1	139490	1.17
107	Ag	115	1	467632	0.57
111	Cd	115	1	79545	0.84
118	Sn	115	1	208755	1.32
121	Sb	115	1	218863	0.77
137	Ba	115	1	98924	0.83
205	Tl	165	1	1090717	1.82
208	Pb	165	1	1475035	1.61
232	Th	165	1	1500997	0.38
238	U	165	1	1699064	1.86

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	139920	1.42	143876	97.3	30 - 120	
45	Sc	1	412638	0.33	425742	96.9	30 - 120	
72	Ge	1	243358	0.30	252182	96.5	30 - 120	
115	In	1	837547	0.94	871760	96.1	30 - 120	
165	Ho	1	1836072	0.59	1876593	97.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\168 CCV.D\168 CCV.D#
Date Acquired: Jul 3 2009 02:49 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	48.51	ppb	3.93	50	97.0	90 - 110	
51 V	72	1	48.96	ppb	2.48	50	97.9	90 - 110	
52 Cr	72	1	50.41	ppb	1.90	50	100.8	90 - 110	
55 Mn	72	1	49.47	ppb	0.83	50	98.9	90 - 110	
59 Co	72	1	50.29	ppb	0.99	50	100.6	90 - 110	
60 Ni	72	1	50.31	ppb	0.59	50	100.6	90 - 110	
63 Cu	72	1	50.29	ppb	1.05	50	100.6	90 - 110	
66 Zn	72	1	53.79	ppb	1.61	50	107.6	90 - 110	
75 As	72	1	50.44	ppb	1.23	50	100.9	90 - 110	
78 Se	72	1	51.90	ppb	4.58	50	103.8	90 - 110	
95 Mo	72	1	50.15	ppb	2.43	50	100.3	90 - 110	
107 Ag	115	1	50.61	ppb	2.09	50	101.2	90 - 110	
111 Cd	115	1	49.92	ppb	1.49	50	99.8	90 - 110	
118 Sn	115	1	50.51	ppb	1.14	50	101.0	90 - 110	
121 Sb	115	1	50.20	ppb	1.38	50	100.4	90 - 110	
137 Ba	115	1	50.61	ppb	1.66	50	101.2	90 - 110	
205 Tl	165	1	49.62	ppb	1.27	50	99.2	90 - 110	
208 Pb	165	1	49.42	ppb	1.59	50	98.8	90 - 110	
232 Th	165	1	51.54	ppb	1.64	50	103.1	90 - 110	
238 U	165	1	50.49	ppb	2.22	50	101.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	139280	1.62	143876	96.8	30 - 120	
45 Sc	1	412259	0.65	425742	96.8	30 - 120	
72 Ge	1	244442	1.09	252182	96.9	30 - 120	
115 In	1	838969	0.55	871760	96.2	30 - 120	
165 Ho	1	1872402	0.38	1876593	99.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\169 CCB.D\169 CCB.D#
Date Acquired:	Jul 3 2009 02:53 am
Operator:	TEL
Sample Name:	CCB
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 02:46 am
Sample Type:	CCB
Total Dil Factor:	1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.093	ppb	117.30	1.00	
52 Cr	72	1	0.003	ppb	31.38	1.00	
55 Mn	72	1	-0.002	ppb	230.00	1.00	
59 Co	72	1	0.008	ppb	42.16	1.00	
60 Ni	72	1	0.042	ppb	12.13	1.00	
63 Cu	72	1	0.018	ppb	124.48	1.00	
66 Zn	72	1	0.203	ppb	22.13	1.00	
75 As	72	1	0.018	ppb	49.08	1.00	
78 Se	72	1	-0.232	ppb	200.34	1.00	
95 Mo	72	1	0.007	ppb	544.70	1.00	
107 Ag	115	1	0.008	ppb	81.44	1.00	
111 Cd	115	1	0.007	ppb	158.32	1.00	
118 Sn	115	1	0.163	ppb	23.00	1.00	
121 Sb	115	1	0.062	ppb	19.62	1.00	
137 Ba	115	1	0.002	ppb	563.91	1.00	
205 Tl	165	1	0.022	ppb	9.63	1.00	
208 Pb	165	1	0.009	ppb	42.63	1.00	
232 Th	165	1	1.036	ppb	14.59	1.00	Fail
238 U	165	1	0.012	ppb	17.54	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	141784	0.34	143876	98.5	30 - 120	
45 Sc	1	424544	0.33	425742	99.7	30 - 120	
72 Ge	1	251238	1.16	252182	99.6	30 - 120	
115 In	1	868238	0.57	871760	99.6	30 - 120	
165 Ho	1	1879945	1.27	1876593	100.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

1 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\170WASH.D\170WASH.D#
Date Acquired: Jul 3 2009 02:56 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.906 ppb	21.59	1.30	
51 V	72	1	5.037 ppb	1.38	6.50	
52 Cr	72	1	2.180 ppb	1.28	2.60	
55 Mn	72	1	1.082 ppb	7.40	1.30	
59 Co	72	1	1.036 ppb	6.96	1.30	
60 Ni	72	1	2.193 ppb	3.91	2.60	
63 Cu	72	1	2.099 ppb	4.21	2.60	
66 Zn	72	1	10.380 ppb	0.41	13.00	
75 As	72	1	4.923 ppb	1.58	6.50	
78 Se	72	1	3.817 ppb	4.39	6.50	
95 Mo	72	1	2.122 ppb	4.15	2.60	
107 Ag	115	1	5.085 ppb	0.66	6.50	
111 Cd	115	1	1.023 ppb	2.59	1.30	
118 Sn	115	1	10.360 ppb	1.99	13.00	
121 Sb	115	1	1.961 ppb	3.79	2.60	
137 Ba	115	1	1.047 ppb	5.91	1.30	
205 Tl	165	1	1.050 ppb	2.59	1.30	
208 Pb	165	1	1.032 ppb	2.47	1.30	
232 Th	165	1	2.255 ppb	0.85	2.60	
238 U	165	1	1.040 ppb	3.69	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	146215	0.70	143876	101.6	30 - 120	
45 Sc	1	436374	0.53	425742	102.5	30 - 120	
72 Ge	1	255360	0.79	252182	101.3	30 - 120	
115 In	1	887865	0.77	871760	101.8	30 - 120	
165 Ho	1	1926036	1.06	1876593	102.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\171ICSA.D\171ICSA.D#
Date Acquired: Jul 3 2009 02:59 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSA
Misc Info:
Vial Number: 2108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	6	1	0.02 ppb	173.21	1.00	
51 V	72	1	-0.29 ppb	59.55	1.00	
52 Cr	72	1	0.97 ppb	5.01	1.00	
55 Mn	72	1	2.18 ppb	3.85	1.00	
59 Co	72	1	0.06 ppb	29.67	1.00	
60 Ni	72	1	1.15 ppb	20.91	1.00	
63 Cu	72	1	0.31 ppb	5.78	1.00	
66 Zn	72	1	3.11 ppb	3.65	10.00	
75 As	72	1	0.16 ppb	12.29	1.00	
78 Se	72	1	-0.35 ppb	175.94	1.00	
95 Mo	72	1	2033.00 ppb	1.08	2000.00	
107 Ag	115	1	0.07 ppb	21.72	1.00	
111 Cd	115	1	0.61 ppb	14.81	1.00	
118 Sn	115	1	0.15 ppb	0.45	10.00	
121 Sb	115	1	0.25 ppb	9.06	1.00	
137 Ba	115	1	1.54 ppb	3.02	1.00	
205 Tl	165	1	0.03 ppb	9.89	1.00	
208 Pb	165	1	0.12 ppb	2.78	1.00	
232 Th	165	1	0.25 ppb	13.36	1.00	
238 U	165	1	0.02 ppb	7.59	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	143669	1.20	143876	99.9	30 - 120	
45 Sc	1	413967	1.00	425742	97.2	30 - 120	
72 Ge	1	235209	0.73	252182	93.3	30 - 120	
115 In	1	786060	0.88	871760	90.2	30 - 120	
165 Ho	1	1754071	0.52	1876593	93.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Nnumber of ISTD Failures Allowed

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\172ICSB.D\172ICSB.D#
Date Acquired: Jul 3 2009 03:03 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSAB
Misc Info:
Vial Number: 2109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: ICSAB
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	6		1	96.24	2.21	100	96.2	80 - 120	
51 V	72		1	101.40	1.80	100	101.4	80 - 120	
52 Cr	72		1	99.00	2.16	100	99.0	80 - 120	
55 Mn	72		1	97.78	0.35	100	97.8	80 - 120	
59 Co	72		1	94.80	0.80	100	94.8	80 - 120	
60 Ni	72		1	91.99	1.55	100	92.0	80 - 120	
63 Cu	72		1	87.71	0.94	100	87.7	80 - 120	
66 Zn	72		1	97.71	1.34	100	97.7	80 - 120	
75 As	72		1	99.21	1.50	100	99.2	80 - 120	
78 Se	72		1	109.50	3.57	100	109.5	80 - 120	
95 Mo	72		1	2120.00	0.78	2100	101.0	80 - 120	
107 Ag	115		1	81.74	5.60	100	81.7	80 - 120	
111 Cd	115		1	91.79	0.75	100	91.8	80 - 120	
118 Sn	115		1	98.59	2.27	100	98.6	80 - 120	
121 Sb	115		1	97.99	0.75	100	98.0	80 - 120	
137 Ba	115		1	99.54	0.42	100	99.5	80 - 120	
205 Tl	165		1	88.47	0.70	100	88.5	80 - 120	
208 Pb	165		1	87.29	1.51	100	87.3	80 - 120	
232 Th	165		1	98.13	1.22	100	98.1	80 - 120	
238 U	165		1	93.34	1.12	100	93.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	143930	1.94	143876	100.0	30 - 120	
45 Sc	1	417913	0.76	425742	98.2	30 - 120	
72 Ge	1	231729	0.91	252182	91.9	30 - 120	
115 In	1	783204	0.18	871760	89.8	30 - 120	
165 Ho	1	1804139	0.19	1876593	96.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\173WASH.D\173WASH.D#
Date Acquired: Jul 3 2009 03:06 am
Operator: TEL
Sample Name: WASH
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	1.30	
51 V	72	1	-0.057 ppb	59.42	6.50	
52 Cr	72	1	0.018 ppb	97.09	2.60	
55 Mn	72	1	-0.007 ppb	53.15	1.30	
59 Co	72	1	0.004 ppb	90.55	1.30	
60 Ni	72	1	0.019 ppb	85.37	2.60	
63 Cu	72	1	-0.081 ppb	35.28	2.60	
66 Zn	72	1	0.483 ppb	8.60	13.00	
75 As	72	1	0.011 ppb	87.16	6.50	
78 Se	72	1	-0.268 ppb	195.82	6.50	
95 Mo	72	1	0.977 ppb	12.75	2.60	
107 Ag	115	1	0.008 ppb	52.29	6.50	
111 Cd	115	1	0.010 ppb	0.34	1.30	
118 Sn	115	1	0.043 ppb	90.95	13.00	
121 Sb	115	1	0.037 ppb	6.06	2.60	
137 Ba	115	1	0.002 ppb	98.28	1.30	
205 Tl	165	1	0.009 ppb	24.82	1.30	
208 Pb	165	1	0.007 ppb	26.51	1.30	
232 Th	165	1	0.654 ppb	14.45	2.60	
238 U	165	1	0.016 ppb	4.25	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	149756	2.37	143876	104.1	30 - 120	
45 Sc	1	435839	1.08	425742	102.4	30 - 120	
72 Ge	1	257884	1.27	252182	102.3	30 - 120	
115 In	1	893592	0.22	871760	102.5	30 - 120	
165 Ho	1	1924035	0.75	1876593	102.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\174 CCV.D\174 CCV.D#
Date Acquired:	Jul 3 2009 03:10 am
Operator:	TEL
Sample Name:	CCV
Misc Info:	
Vial Number:	1107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 02:46 am
Sample Type:	CCV
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.20	ppb	1.27	50	98.4	90 - 110	
51 V	72	1	48.20	ppb	1.83	50	96.4	90 - 110	
52 Cr	72	1	49.39	ppb	1.41	50	98.8	90 - 110	
55 Mn	72	1	49.26	ppb	0.37	50	98.5	90 - 110	
59 Co	72	1	49.20	ppb	0.81	50	98.4	90 - 110	
60 Ni	72	1	49.63	ppb	2.26	50	99.3	90 - 110	
63 Cu	72	1	49.02	ppb	1.58	50	98.0	90 - 110	
66 Zn	72	1	51.93	ppb	1.47	50	103.9	90 - 110	
75 As	72	1	48.53	ppb	0.95	50	97.1	90 - 110	
78 Se	72	1	51.77	ppb	1.95	50	103.5	90 - 110	
95 Mo	72	1	49.23	ppb	2.88	50	98.5	90 - 110	
107 Ag	115	1	49.06	ppb	0.78	50	98.1	90 - 110	
111 Cd	115	1	48.18	ppb	2.41	50	96.4	90 - 110	
118 Sn	115	1	48.99	ppb	1.36	50	98.0	90 - 110	
121 Sb	115	1	48.69	ppb	0.43	50	97.4	90 - 110	
137 Ba	115	1	49.11	ppb	0.74	50	98.2	90 - 110	
205 Tl	165	1	48.63	ppb	1.72	50	97.3	90 - 110	
208 Pb	165	1	48.45	ppb	1.66	50	96.9	90 - 110	
232 Th	165	1	49.38	ppb	0.85	50	98.8	90 - 110	
238 U	165	1	49.17	ppb	1.90	50	98.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	146897	1.47	143876	102.1	30 - 120	
45 Sc	1	434354	0.37	425742	102.0	30 - 120	
72 Ge	1	253500	0.64	252182	100.5	30 - 120	
115 In	1	878353	0.29	871760	100.8	30 - 120	
165 Ho	1	1928072	1.15	1876593	102.7	30 - 120	

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\175 CCB.D\175 CCB.D#
Date Acquired: Jul 3 2009 03:13 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.066	ppb	82.82	1.00	
52 Cr	72	1	-0.009	ppb	84.30	1.00	
55 Mn	72	1	-0.006	ppb	241.79	1.00	
59 Co	72	1	0.010	ppb	123.28	1.00	
60 Ni	72	1	0.021	ppb	132.20	1.00	
63 Cu	72	1	-0.085	ppb	30.06	1.00	
66 Zn	72	1	0.176	ppb	5.60	1.00	
75 As	72	1	0.001	ppb	2139.00	1.00	
78 Se	72	1	-0.733	ppb	48.19	1.00	
95 Mo	72	1	0.086	ppb	29.16	1.00	
107 Ag	115	1	0.006	ppb	69.15	1.00	
111 Cd	115	1	0.000	ppb	15203.00	1.00	
118 Sn	115	1	0.140	ppb	50.75	1.00	
121 Sb	115	1	0.056	ppb	17.12	1.00	
137 Ba	115	1	0.007	ppb	141.71	1.00	
205 Tl	165	1	0.017	ppb	17.44	1.00	
208 Pb	165	1	0.007	ppb	29.55	1.00	
232 Th	165	1	0.877	ppb	8.81	1.00	
238 U	165	1	0.010	ppb	4.17	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	148952	1.52	143876	103.5	30 - 120	
45 Sc	1	440085	0.47	425742	103.4	30 - 120	
72 Ge	1	258151	0.71	252182	102.4	30 - 120	
115 In	1	897971	0.96	871760	103.0	30 - 120	
165 Ho	1	1923654	2.02	1876593	102.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\176WASH.D\176WASH.D#
Date Acquired:	Jul 3 2009 03:16 am
Operator:	TEL
Sample Name:	RLCV
Misc Info:	
Vial Number:	1204
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 02:46 am
Sample Type:	WASH
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.915 ppb	18.87	1.30	
51 V	72	1	5.123 ppb	2.61	6.50	
52 Cr	72	1	2.002 ppb	2.81	2.60	
55 Mn	72	1	1.009 ppb	2.09	1.30	
59 Co	72	1	0.977 ppb	4.22	1.30	
60 Ni	72	1	1.921 ppb	5.21	2.60	
63 Cu	72	1	1.799 ppb	3.58	2.60	
66 Zn	72	1	10.230 ppb	0.24	13.00	
75 As	72	1	4.983 ppb	2.72	6.50	
78 Se	72	1	4.265 ppb	38.12	6.50	
95 Mo	72	1	2.112 ppb	3.58	2.60	
107 Ag	115	1	5.075 ppb	2.24	6.50	
111 Cd	115	1	0.965 ppb	7.30	1.30	
118 Sn	115	1	9.942 ppb	1.60	13.00	
121 Sb	115	1	1.935 ppb	3.48	2.60	
137 Ba	115	1	1.013 ppb	6.53	1.30	
205 Tl	165	1	1.043 ppb	2.52	1.30	
208 Pb	165	1	1.024 ppb	3.90	1.30	
232 Th	165	1	2.182 ppb	2.19	2.60	
238 U	165	1	1.029 ppb	2.79	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	150035	1.06	143876	104.3	30 - 120	
45 Sc	1	448498	1.01	425742	105.3	30 - 120	
72 Ge	1	262041	0.98	252182	103.9	30 - 120	
115 In	1	910615	0.96	871760	104.5	30 - 120	
165 Ho	1	1954333	1.31	1876593	104.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\177 BLK.D\177 BLK.D#
Date Acquired: Jul 3 2009 03:20 am
Operator: TEL
Sample Name: LFRWWBF
Misc Info: BLANK 9180268 6020
Vial Number: 3306
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: BLK
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	2.00	
51 V	72	1	-0.118 ppb	93.63	2.00	
52 Cr	72	1	-0.004 ppb	451.26	2.00	
55 Mn	72	1	0.048 ppb	10.20	2.00	
59 Co	72	1	0.000 ppb	754.47	2.00	
60 Ni	72	1	0.073 ppb	32.64	2.00	
63 Cu	72	1	-0.067 ppb	32.81	2.00	
66 Zn	72	1	1.443 ppb	2.82	2.00	
75 As	72	1	0.007 ppb	178.27	2.00	
78 Se	72	1	0.020 ppb	2031.40	2.00	
95 Mo	72	1	-0.003 ppb	120.78	2.00	
107 Ag	115	1	0.003 ppb	44.38	2.00	
111 Cd	115	1	0.004 ppb	51.39	2.00	
118 Sn	115	1	0.028 ppb	63.65	2.00	
121 Sb	115	1	0.032 ppb	29.21	2.00	
137 Ba	115	1	0.024 ppb	77.68	2.00	
205 Tl	165	1	0.005 ppb	9.81	2.00	
208 Pb	165	1	0.010 ppb	15.98	2.00	
232 Th	165	1	0.087 ppb	4.46	2.00	
238 U	165	1	0.000 ppb	230.05	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	153573	1.28	143876	106.7	30 - 120	
45 Sc	1	453878	0.52	425742	106.6	30 - 120	
72 Ge	1	269027	0.63	252182	106.7	30 - 120	
115 In	1	931710	0.37	871760	106.9	30 - 120	
165 Ho	1	1993838	0.20	1876593	106.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Laboratory Control Spike (LCS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\178 LCS.D\178 LCS.D#
Date Acquired: Jul 3 2009 03:23 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFRWWCF
Misc Info: LCS
Vial Number: 3307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: LCS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	42.95	2.15	40	107.4	80 - 120	
51 V	72	1	41.42	1.63	40	103.6	80 - 120	
52 Cr	72	1	41.82	0.56	40	104.6	80 - 120	
55 Mn	72	1	41.51	0.64	40	103.8	80 - 120	
59 Co	72	1	41.52	1.94	40	103.8	80 - 120	
60 Ni	72	1	42.10	1.29	40	105.3	80 - 120	
63 Cu	72	1	42.18	1.44	40	105.5	80 - 120	
66 Zn	72	1	46.67	0.98	40	116.7	80 - 120	
75 As	72	1	42.64	2.70	40	106.6	80 - 120	
78 Se	72	1	43.31	6.10	40	108.3	80 - 120	
95 Mo	72	1	41.96	1.04	40	104.9	80 - 120	
107 Ag	115	1	42.47	1.57	40	106.2	80 - 120	
111 Cd	115	1	41.88	1.15	40	104.7	80 - 120	
118 Sn	115	1	-0.04	33.06	40	-0.1	80 - 120	
121 Sb	115	1	42.51	1.94	40	106.3	80 - 120	
137 Ba	115	1	41.97	0.65	40	104.9	80 - 120	
205 Tl	165	1	41.60	0.81	40	104.0	80 - 120	
208 Pb	165	1	41.54	1.43	40	103.9	80 - 120	
232 Th	165	1	40.44	0.90	40	101.1	80 - 120	
238 U	165	1	42.02	1.75	40	105.1	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	154143	1.01	143876	107.1	30 - 120	
45 Sc	1	449905	1.17	425742	105.7	30 - 120	
72 Ge	1	265430	0.93	252182	105.3	30 - 120	
115 In	1	913786	0.48	871760	104.8	30 - 120	
165 Ho	1	2001765	0.59	1876593	106.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\179SMPL.D\179SMPL.D#
Date Acquired:	Jul 3 2009 03:26 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFP1LF 10X
Misc Info:	D9F260277
Vial Number:	3308
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	SA
Dilution Factor:	10.00
Autodil Factor:	Undiluted
Final Dil Factor:	10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.18	0.02	ppb	173.17	3600	
51 V	72	1	-1,271.00	-127.10	ppb	17.70	3600	
52 Cr	72	1	27,690.00	2769.00	ppb	3.24	3600	
55 Mn	72	1	0.85	0.08	ppb	23.72	3600	
59 Co	72	1	0.60	0.06	ppb	38.99	3600	
60 Ni	72	1	7.09	0.71	ppb	15.10	3600	
63 Cu	72	1	0.26	0.03	ppb	92.46	3600	
66 Zn	72	1	10.63	1.06	ppb	10.59	3600	
75 As	72	1	86.84	8.68	ppb	1.87	3600	
78 Se	72	1	7.48	0.75	ppb	42.47	3600	
95 Mo	72	1	31.32	3.13	ppb	3.96	3600	
107 Ag	115	1	0.10	0.01	ppb	40.26	3600	
111 Cd	115	1	0.23	0.02	ppb	51.21	3600	
118 Sn	115	1	-0.56	-0.06	ppb	60.66	3600	
121 Sb	115	1	0.49	0.05	ppb	35.14	3600	
137 Ba	115	1	45.42	4.54	ppb	2.30	3600	
205 Tl	165	1	0.26	0.03	ppb	24.92	3600	
208 Pb	165	1	0.11	0.01	ppb	12.75	3600	
232 Th	165	1	9.47	0.95	ppb	16.16	1000	
238 U	165	1	27.64	2.76	ppb	3.16	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	145779	0.25	143876	101.3	30 - 120	
45 Sc	1	430166	1.16	425742	101.0	30 - 120	
72 Ge	1	242110	1.97	252182	96.0	30 - 120	
115 In	1	815832	2.51	871760	93.6	30 - 120	
165 Ho	1	1837864	2.07	1876593	97.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\180AREF.D\180AREF.D#
Date Acquired: Jul 3 2009 03:30 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ11F 10X
Misc Info: D9F270154
Vial Number: 3309
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: AllRef
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	11.10	1.11	ppb	70.55	3600	
52 Cr	72	1	706.40	70.64	ppb	2.59	3600	
55 Mn	72	1	84.56	8.46	ppb	2.01	3600	
59 Co	72	1	0.31	0.03	ppb	2.26	3600	
60 Ni	72	1	3.54	0.35	ppb	9.68	3600	
63 Cu	72	1	-0.79	-0.08	ppb	6.49	3600	
66 Zn	72	1	1.85	0.18	ppb	5.58	3600	
75 As	72	1	112.20	11.22	ppb	4.21	3600	
78 Se	72	1	-0.72	-0.07	ppb	1146.90	3600	
95 Mo	72	1	31.71	3.17	ppb	6.61	3600	
107 Ag	115	1	0.00	0.00	ppb	6215.80	3600	
111 Cd	115	1	0.04	0.00	ppb	315.59	3600	
118 Sn	115	1	-0.59	-0.06	ppb	40.84	3600	
121 Sb	115	1	0.22	0.02	ppb	21.17	3600	
137 Ba	115	1	14.58	1.46	ppb	9.62	3600	
205 Tl	165	1	0.04	0.00	ppb	28.34	3600	
208 Pb	165	1	0.04	0.00	ppb	36.60	3600	
232 Th	165	1	2.38	0.24	ppb	11.97	1000	
238 U	165	1	23.78	2.38	ppb	2.67	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	151780	0.67	143876	105.5	30 - 120	
45 Sc	1	437622	1.18	425742	102.8	30 - 120	
72 Ge	1	253395	1.31	252182	100.5	30 - 120	
115 In	1	849471	1.47	871760	97.4	30 - 120	
165 Ho	1	1895891	2.16	1876593	101.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\181SDIL.D\181SDIL.D#
Date Acquired: Jul 3 2009 03:33 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ11P50F
Misc Info: SERIAL DILUTION
Vial Number: 3310
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070209D.B\180AREF.D\180AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	0.00	ppb	0.00	0.00	#DIV/0!	90 - 110	
51 V	72	1	-0.06	ppb	246.14	0.22	-26.5	90 - 110	
52 Cr	72	1	14.67	ppb	0.65	14.13	103.8	90 - 110	
55 Mn	72	1	1.82	ppb	2.79	1.69	107.8	90 - 110	
59 Co	72	1	0.01	ppb	33.27	0.01	142.7	90 - 110	
60 Ni	72	1	0.17	ppb	27.07	0.07	238.9	90 - 110	
63 Cu	72	1	-0.07	ppb	53.04	-0.02	427.3	90 - 110	
66 Zn	72	1	0.09	ppb	22.23	0.04	232.1	90 - 110	
75 As	72	1	2.49	ppb	5.70	2.24	110.9	90 - 110	
78 Se	72	1	0.24	ppb	207.50	-0.01	-1671.7	90 - 110	
95 Mo	72	1	0.63	ppb	9.46	0.63	99.5	90 - 110	
107 Ag	115	1	0.00	ppb	150.22	0.00	34346.5	90 - 110	
111 Cd	115	1	0.00	ppb	5679.50	0.00	-4.9	90 - 110	
118 Sn	115	1	-0.05	ppb	6.00	-0.01	443.4	90 - 110	
121 Sb	115	1	0.01	ppb	15.94	0.00	240.1	90 - 110	
137 Ba	115	1	0.31	ppb	17.04	0.29	106.2	90 - 110	
205 Tl	165	1	0.00	ppb	91.68	0.00	188.1	90 - 110	
208 Pb	165	1	0.00	ppb	36.65	0.00	490.6	90 - 110	
232 Th	165	1	0.08	ppb	15.80	0.05	176.2	90 - 110	
238 U	165	1	0.49	ppb	1.65	0.48	102.5	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	156018	1.78	143876	108.4	30 - 120	
45 Sc	1	439820	0.66	425742	103.3	30 - 120	
72 Ge	1	260821	0.04	252182	103.4	30 - 120	
115 In	1	874545	0.59	871760	100.3	30 - 120	
165 Ho	1	1897839	0.95	1876593	101.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Denver

SERIAL DILUTION

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/06/09 10:05:34

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFQ11P50F** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070209D # 181 | Method 6020_
Acquired: 07/03/2009 03:33:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/03/2009 02:42:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9		0	0			*	
7440-62-2	Vanadium	51	-22	-2.9455	11.100	127		*	
7440-47-3	Chromium	52	52143	733.50	706.40	3.84		*	
7439-96-5	Manganese	55	6252	91.150	84.560	7.79		*	
7440-48-4	Cobalt	59	67	0.44685	0.31320	42.7		*	
7440-02-0	Nickel	60	217	8.4550	3.5390	139		*	
7440-50-8	Copper	63	437	-3.3840	-0.79200			*	
7440-66-6	Zinc	66	103	4.2910	1.8490	132		*	
7440-38-2	Arsenic	75	977	124.45	112.20	10.9	0.21	NC	☑
7782-49-2	Selenium	78	97	12.060	-0.72140		0.70	NC	☑
7439-98-7	Molybdenum	95	1060	31.555	31.710	0.489		*	
7440-22-4	Silver	107	10	0.06780	0.00020	34200		*	
7440-43-9	Cadmium	111	4	-0.00201	0.04132	105		*	
7440-31-5	Tin	118	193	-2.6230	-0.59160			*	
7440-36-0	Antimony	121	41	0.53350	0.22220	140		*	
7440-39-3	Barium	137	330	15.485	14.580	6.21		*	
7440-28-0	Thallium	205	41	0.08290	0.04407	88.1		*	
7439-92-1	Lead	208	157	0.19305	0.03935	391		*	
7440-61-1	Uranium	238	8591	24.370	23.780	2.48		*	
7440-29-1	Thorium	232	1437	4.2000	2.3840	76.2		*	
7439-93-2	Lithium	6			0			*	
7440-20-2	Scandium	45			0			*	
7440-74-6	Indium	115			0			*	
7440-56-4	Germanium	72			0			*	
7440-60-0	Holmium	165			0			*	

*** Analyte not requested for this batch, no MDL**
NC : Serial dilution concentration < 100 X MDL
E : Difference greater than Limit (10%)

Reviewed by: LRD Date: 7/7/09

Post Digestion Spiked Sample (PDS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\182PDS.D\182PDS.D#
Date Acquired:	Jul 3 2009 03:37 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFQ11ZF
Misc Info:	POST DIGESTION SPIKE
Vial Number:	3311
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	PDS
Prep Dil. Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Spike Ref. File: ---

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	187.40	0.00	ppb	1.95	200	93.7	75 - 125	
51 V	72	1	197.70	1.11	ppb	1.54	200	98.3	75 - 125	
52 Cr	72	1	267.50	70.64	ppb	1.72	200	98.8	75 - 125	
55 Mn	72	1	196.90	8.46	ppb	0.99	200	94.5	75 - 125	
59 Co	72	1	186.20	0.03	ppb	0.40	200	93.1	75 - 125	
60 Ni	72	1	181.50	0.35	ppb	1.14	200	90.6	75 - 125	
63 Cu	72	1	179.40	-0.08	ppb	0.35	200	89.7	75 - 125	
66 Zn	72	1	191.90	0.18	ppb	0.81	200	95.9	75 - 125	
75 As	72	1	204.30	11.22	ppb	1.11	200	96.7	75 - 125	
78 Se	72	1	199.90	-0.07	ppb	5.14	200	100.0	75 - 125	
95 Mo	72	1	197.70	3.17	ppb	1.29	200	97.3	75 - 125	
107 Ag	115	1	45.63	0.00	ppb	0.94	50	91.3	75 - 125	
111 Cd	115	1	188.60	0.00	ppb	0.95	200	94.3	75 - 125	
118 Sn	115	1	176.70	-0.06	ppb	1.02	200	88.4	75 - 125	
121 Sb	115	1	199.00	0.02	ppb	0.76	200	99.5	75 - 125	
137 Ba	115	1	193.40	1.46	ppb	0.22	200	96.0	75 - 125	
205 Tl	165	1	176.70	0.00	ppb	1.04	200	88.3	75 - 125	
208 Pb	165	1	177.50	0.00	ppb	0.83	200	88.7	75 - 125	
232 Th	165	1	0.06	0.24	ppb	12.23	200	0.0	75 - 125	
238 U	165	1	183.90	2.38	ppb	1.63	200	90.9	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	163487	0.70	143876	113.6	30 - 120	
45 Sc	1	451554	0.54	425742	106.1	30 - 120	
72 Ge	1	260458	0.56	252182	103.3	30 - 120	
115 In	1	861286	0.70	871760	98.8	30 - 120	
165 Ho	1	1932433	1.15	1876593	103.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/06/09 10:05:39

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFQ11ZF** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG070209D # 182
Acquired: 07/03/2009 03:37:00
Calibrated: 07/03/2009 02:42:00

Channel 272
Method 6020_
ICPMS_024

Matrix: AQUEOUS
Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	39361	187.40	0	93.7	200		☐
7440-62-2	Vanadium	51	621850	197.70	1.1100	98.3	200		☐
7440-47-3	Chromium	52	935832	267.50	70.640	98.4	200		☐
7439-96-5	Manganese	55	662999	196.90	8.4560	94.2	200		☐
7440-48-4	Cobalt	59	956615	186.20	0.03132	93.1	200		☐
7440-02-0	Nickel	60	224795	181.50	0.35390	90.6	200		☐
7440-50-8	Copper	63	550844	179.40	-0.07920	89.7	200		☑
7440-66-6	Zinc	66	101434	191.90	0.18490	95.9	200		☑
7440-38-2	Arsenic	75	78578	204.30	11.220	96.5	200		☑
7782-49-2	Selenium	78	11599	199.90	-0.07214	99.9	200		☑
7439-98-7	Molybdenum	95	294984	197.70	3.1710	97.3	200		☐
7440-22-4	Silver	107	219422	45.630	0.00002	91.3	50.0		☐
7440-43-9	Cadmium	111	154265	188.60	0.00413	94.3	200		☑
7440-31-5	Tin	118	379179	176.70	-0.05916	88.3	200		☐
7440-36-0	Antimony	121	447814	199.00	0.02222	99.5	200		☑
7440-39-3	Barium	137	196735	193.40	1.4580	96.0	200		☑
7440-28-0	Thallium	205	2028700	176.70	0.00441	88.3	200		☑
7439-92-1	Lead	208	2755160	177.50	0.00394	88.7	200		☑
7440-61-1	Uranium	238	3289380	183.90	2.3780	90.8	200		☐
7440-29-1	Thorium	232	1143	0.06364	0.23840				
7439-93-2	Lithium	6			0				
7440-20-2	Scandium	45			0				
7440-74-6	Indium	115			0				
7440-56-4	Germanium	72			0				
7440-60-0	Holmium	165			0				

Reviewed by: LRD Date: 7/7/09

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\183_MS.D\183_MS.D#
Date Acquired: Jul 3 2009 03:40 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ11SF 10X
Misc Info: MATRIX SPIKE
Vial Number: 3312
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: MS
Prep Dil. Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	4.05	0.00	ppb	2.64	40	10.1	50 - 150	
51 V	72	1	5.60	1.11	ppb	10.66	40	13.6	50 - 150	
52 Cr	72	1	78.22	70.64	ppb	1.62	40	70.7	50 - 150	
55 Mn	72	1	12.90	8.46	ppb	0.87	40	26.6	50 - 150	
59 Co	72	1	4.16	0.03	ppb	0.55	40	10.4	50 - 150	
60 Ni	72	1	4.65	0.35	ppb	2.14	40	11.5	50 - 150	
63 Cu	72	1	3.96	-0.08	ppb	4.16	40	9.9	50 - 150	
66 Zn	72	1	4.36	0.18	ppb	0.46	40	10.9	50 - 150	
75 As	72	1	16.13	11.22	ppb	0.30	40	31.5	50 - 150	
78 Se	72	1	3.72	-0.07	ppb	23.54	40	9.3	50 - 150	
95 Mo	72	1	7.77	3.17	ppb	3.84	40	18.0	50 - 150	
107 Ag	115	1	4.09	0.00	ppb	0.74	40	10.2	50 - 150	
111 Cd	115	1	4.25	0.00	ppb	1.41	40	10.6	50 - 150	
118 Sn	115	1	0.28	-0.06	ppb	16.41	40	0.7	50 - 150	
121 Sb	115	1	4.64	0.02	ppb	0.73	40	11.6	50 - 150	
137 Ba	115	1	5.83	1.46	ppb	2.53	40	14.1	50 - 150	
205 Tl	165	1	4.07	0.00	ppb	0.63	40	10.2	50 - 150	
208 Pb	165	1	4.04	0.00	ppb	0.44	40	10.1	50 - 150	
232 Th	165	1	4.15	0.24	ppb	1.49	40	10.3	50 - 150	
238 U	165	1	6.76	2.38	ppb	0.72	40	15.9	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	153024	2.06	143876	106.4	30 - 120	
45 Sc	1	434232	2.10	425742	102.0	30 - 120	
72 Ge	1	250964	1.55	252182	99.5	30 - 120	
115 In	1	845093	1.72	871760	96.9	30 - 120	
165 Ho	1	1877158	1.53	1876593	100.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Duplicate Spike (MSD) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\184 MSD.D\184 MSD.D#
Date Acquired: Jul 3 2009 03:43 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ11DF 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3401
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: MSD
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070209D.B\183 MS.D\183 MS.D#

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	4.07	ppb	3.91	4.05	0.32	20	
51 V	72	1	5.53	ppb	17.23	5.60	1.24	20	
52 Cr	72	1	77.52	ppb	1.02	78.22	0.90	20	
55 Mn	72	1	12.83	ppb	1.93	12.90	0.54	20	
59 Co	72	1	4.17	ppb	4.14	4.16	0.24	20	
60 Ni	72	1	4.29	ppb	5.66	4.65	8.10	20	
63 Cu	72	1	4.15	ppb	1.89	3.96	4.66	20	
66 Zn	72	1	4.67	ppb	2.85	4.36	6.82	20	
75 As	72	1	16.52	ppb	4.25	16.13	2.39	20	
78 Se	72	1	4.53	ppb	23.23	3.72	19.42	20	
95 Mo	72	1	7.62	ppb	2.38	7.77	1.96	20	
107 Ag	115	1	4.04	ppb	2.05	4.09	1.18	20	
111 Cd	115	1	4.45	ppb	2.78	4.25	4.53	20	
118 Sn	115	1	0.03	ppb	56.96	0.28	156.70	20	
121 Sb	115	1	4.56	ppb	1.44	4.64	1.85	20	
137 Ba	115	1	5.86	ppb	0.65	5.83	0.58	20	
205 Tl	165	1	4.07	ppb	2.68	4.07	0.15	20	
208 Pb	165	1	4.09	ppb	1.42	4.04	1.13	20	
232 Th	165	1	4.36	ppb	1.84	4.15	5.01	20	
238 U	165	1	6.77	ppb	2.03	6.76	0.16	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	153922	2.03	143876	107.0	30 - 120	
45 Sc	1	433322	1.71	425742	101.8	30 - 120	
72 Ge	1	253114	2.06	252182	100.4	30 - 120	
115 In	1	846909	1.01	871760	97.1	30 - 120	
165 Ho	1	1873087	1.45	1876593	99.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref. File :C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\185SMPL.D\185SMPL.D#
Date Acquired: Jul 3 2009 03:47 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ13F 10X
Misc Info: D9F270154
Vial Number: 3402
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	14.71	1.47	ppb	62.87	3600	
52 Cr	72	1	712.10	71.21	ppb	0.64	3600	
55 Mn	72	1	82.70	8.27	ppb	1.09	3600	
59 Co	72	1	0.30	0.03	ppb	19.80	3600	
60 Ni	72	1	3.46	0.35	ppb	15.17	3600	
63 Cu	72	1	-1.03	-0.10	ppb	24.71	3600	
66 Zn	72	1	1.00	0.10	ppb	14.97	3600	
75 As	72	1	116.00	11.60	ppb	1.89	3600	
78 Se	72	1	0.63	0.06	ppb	1137.40	3600	
95 Mo	72	1	32.42	3.24	ppb	4.41	3600	
107 Ag	115	1	0.01	0.00	ppb	1.61	3600	
111 Cd	115	1	0.06	0.01	ppb	147.45	3600	
118 Sn	115	1	-0.08	-0.01	ppb	130.93	3600	
121 Sb	115	1	0.39	0.04	ppb	24.39	3600	
137 Ba	115	1	14.31	1.43	ppb	4.29	3600	
205 Tl	165	1	0.08	0.01	ppb	23.75	3600	
208 Pb	165	1	0.04	0.00	ppb	31.56	3600	
232 Th	165	1	1.34	0.13	ppb	14.20	1000	
238 U	165	1	23.79	2.38	ppb	2.56	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	154328	0.22	143876	107.3	30 - 120	
45 Sc	1	429223	0.35	425742	100.8	30 - 120	
72 Ge	1	251186	0.43	252182	99.6	30 - 120	
115 In	1	834351	1.10	871760	95.7	30 - 120	
165 Ho	1	1860431	0.89	1876593	99.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\186 CCV.D\186 CCV.D#
Date Acquired: Jul 3 2009 03:50 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.54	ppb	1.33	50	101.1	90 - 110	
51 V	72	1	50.71	ppb	2.28	50	101.4	90 - 110	
52 Cr	72	1	51.17	ppb	0.76	50	102.3	90 - 110	
55 Mn	72	1	51.30	ppb	1.17	50	102.6	90 - 110	
59 Co	72	1	50.81	ppb	1.47	50	101.6	90 - 110	
60 Ni	72	1	50.18	ppb	1.06	50	100.4	90 - 110	
63 Cu	72	1	50.28	ppb	0.96	50	100.6	90 - 110	
66 Zn	72	1	54.97	ppb	0.68	50	109.9	90 - 110	
75 As	72	1	50.85	ppb	1.76	50	101.7	90 - 110	
78 Se	72	1	50.96	ppb	4.73	50	101.9	90 - 110	
95 Mo	72	1	51.23	ppb	2.28	50	102.5	90 - 110	
107 Ag	115	1	51.98	ppb	0.08	50	104.0	90 - 110	
111 Cd	115	1	51.46	ppb	0.28	50	102.9	90 - 110	
118 Sn	115	1	51.74	ppb	0.37	50	103.5	90 - 110	
121 Sb	115	1	52.48	ppb	0.97	50	105.0	90 - 110	
137 Ba	115	1	51.70	ppb	0.81	50	103.4	90 - 110	
205 Tl	165	1	51.28	ppb	0.65	50	102.6	90 - 110	
208 Pb	165	1	51.15	ppb	0.90	50	102.3	90 - 110	
232 Th	165	1	52.00	ppb	0.95	50	104.0	90 - 110	
238 U	165	1	51.90	ppb	1.41	50	103.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	156857	1.15	143876	109.0	30 - 120	
45 Sc	1	441904	1.32	425742	103.8	30 - 120	
72 Ge	1	260791	0.94	252182	103.4	30 - 120	
115 In	1	879331	1.67	871760	100.9	30 - 120	
165 Ho	1	1913586	0.71	1876593	102.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\187 CCB.D\187 CCB.D#
Date Acquired: Jul 3 2009 03:54 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.049	ppb	99.06	1.00	
51 V	72	1	-0.089	ppb	56.75	1.00	
52 Cr	72	1	0.019	ppb	118.03	1.00	
55 Mn	72	1	0.006	ppb	160.34	1.00	
59 Co	72	1	0.007	ppb	41.67	1.00	
60 Ni	72	1	0.040	ppb	11.00	1.00	
63 Cu	72	1	-0.090	ppb	26.23	1.00	
66 Zn	72	1	0.217	ppb	16.40	1.00	
75 As	72	1	0.019	ppb	129.15	1.00	
78 Se	72	1	-0.340	ppb	129.46	1.00	
95 Mo	72	1	0.008	ppb	296.81	1.00	
107 Ag	115	1	0.005	ppb	37.39	1.00	
111 Cd	115	1	0.010	ppb	38.24	1.00	
118 Sn	115	1	0.172	ppb	15.57	1.00	
121 Sb	115	1	0.059	ppb	14.71	1.00	
137 Ba	115	1	0.004	ppb	120.83	1.00	
205 Tl	165	1	0.018	ppb	4.81	1.00	
208 Pb	165	1	0.009	ppb	33.96	1.00	
232 Th	165	1	0.918	ppb	13.45	1.00	
238 U	165	1	0.014	ppb	10.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	157321	1.57	143876	109.3	30 - 120	
45 Sc	1	437053	0.50	425742	102.7	30 - 120	
72 Ge	1	261976	0.68	252182	103.9	30 - 120	
115 In	1	890924	0.59	871760	102.2	30 - 120	
165 Ho	1	1892158	1.70	1876593	100.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\188WASH.D\188WASH.D#
Date Acquired: Jul 3 2009 03:57 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.074 ppb	4.18	1.30	
51 V	72	1	5.208 ppb	0.27	6.50	
52 Cr	72	1	2.197 ppb	5.38	2.60	
55 Mn	72	1	1.094 ppb	3.97	1.30	
59 Co	72	1	1.068 ppb	5.19	1.30	
60 Ni	72	1	2.198 ppb	4.18	2.60	
63 Cu	72	1	1.994 ppb	4.02	2.60	
66 Zn	72	1	11.050 ppb	1.75	13.00	
75 As	72	1	5.324 ppb	3.62	6.50	
78 Se	72	1	4.212 ppb	29.54	6.50	
95 Mo	72	1	2.060 ppb	3.40	2.60	
107 Ag	115	1	5.506 ppb	1.49	6.50	
111 Cd	115	1	1.101 ppb	7.00	1.30	
118 Sn	115	1	10.940 ppb	1.26	13.00	
121 Sb	115	1	2.088 ppb	1.80	2.60	
137 Ba	115	1	1.182 ppb	5.53	1.30	
205 Tl	165	1	1.123 ppb	1.35	1.30	
208 Pb	165	1	1.095 ppb	2.44	1.30	
232 Th	165	1	2.330 ppb	3.34	2.60	
238 U	165	1	1.101 ppb	2.76	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	159424	0.40	143876	110.8	30 - 120	
45 Sc	1	443747	0.93	425742	104.2	30 - 120	
72 Ge	1	264311	0.72	252182	104.8	30 - 120	
115 In	1	890239	0.86	871760	102.1	30 - 120	
165 Ho	1	1933740	1.32	1876593	103.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\189 BLK.D\189 BLK.D#
Date Acquired:	Jul 3 2009 04:00 am
Operator:	TEL
Sample Name:	LFRV2B
Misc Info:	BLANK 9180262 6020
Vial Number:	3403
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 02:46 am
Sample Type:	BLK
Total Dil Factor:	1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	2.00	
51 V	72	1	-0.121 ppb	43.14	2.00	
52 Cr	72	1	0.140 ppb	28.62	2.00	
55 Mn	72	1	0.122 ppb	8.22	2.00	
59 Co	72	1	0.003 ppb	44.09	2.00	
60 Ni	72	1	0.035 ppb	45.87	2.00	
63 Cu	72	1	-0.079 ppb	26.14	2.00	
66 Zn	72	1	2.921 ppb	1.87	2.00	
75 As	72	1	0.011 ppb	159.82	2.00	Fail
78 Se	72	1	-0.031 ppb	1647.50	2.00	
95 Mo	72	1	-0.042 ppb	39.76	2.00	
107 Ag	115	1	0.003 ppb	157.15	2.00	
111 Cd	115	1	-0.005 ppb	418.26	2.00	
118 Sn	115	1	0.123 ppb	9.42	2.00	
121 Sb	115	1	0.036 ppb	11.61	2.00	
137 Ba	115	1	0.033 ppb	35.11	2.00	
205 Tl	165	1	0.009 ppb	17.07	2.00	
208 Pb	165	1	0.018 ppb	3.14	2.00	
232 Th	165	1	0.207 ppb	12.00	2.00	
238 U	165	1	0.001 ppb	73.08	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	157433	0.83	143876	109.4	30 - 120	
45 Sc	1	438783	0.20	425742	103.1	30 - 120	
72 Ge	1	257413	0.67	252182	102.1	30 - 120	
115 In	1	881464	0.80	871760	101.1	30 - 120	
165 Ho	1	1891756	0.80	1876593	100.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

1 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Laboratory Control Spike (LCS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\190 LCS.D\190 LCS.D#
Date Acquired:	Jul 3 2009 04:04 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFRV2C
Misc Info:	LCS
Vial Number:	3404
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	LCS
Prep Dil. Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	42.70	1.02	40	106.8	80 - 120	
51 V	72	1	43.69	2.50	40	109.2	80 - 120	
52 Cr	72	1	44.14	0.73	40	110.4	80 - 120	
55 Mn	72	1	44.11	1.51	40	110.3	80 - 120	
59 Co	72	1	43.62	1.00	40	109.1	80 - 120	
60 Ni	72	1	42.76	1.53	40	106.9	80 - 120	
63 Cu	72	1	43.76	0.83	40	109.4	80 - 120	
66 Zn	72	1	43.00	1.03	40	107.5	80 - 120	
75 As	72	1	41.33	0.76	40	103.3	80 - 120	
78 Se	72	1	41.54	7.95	40	103.9	80 - 120	
95 Mo	72	1	44.16	1.24	40	110.4	80 - 120	
107 Ag	115	1	43.73	0.66	40	109.3	80 - 120	
111 Cd	115	1	43.10	1.67	40	107.8	80 - 120	
118 Sn	115	1	0.41	9.85	40	1.0	80 - 120	
121 Sb	115	1	44.00	0.55	40	110.0	80 - 120	
137 Ba	115	1	43.97	0.63	40	109.9	80 - 120	
205 Tl	165	1	44.02	1.68	40	110.1	80 - 120	
208 Pb	165	1	43.87	1.72	40	109.7	80 - 120	
232 Th	165	1	45.59	1.65	40	114.0	80 - 120	
238 U	165	1	44.55	2.50	40	111.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	157795	0.39	143876	109.7	30 - 120	
45 Sc	1	433664	0.66	425742	101.9	30 - 120	
72 Ge	1	255928	0.96	252182	101.5	30 - 120	
115 In	1	869906	0.64	871760	99.8	30 - 120	
165 Ho	1	1903357	1.00	1876593	101.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\191AREF.D\191AREF.D#
Date Acquired: Jul 3 2009 04:07 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1G 10X
Misc Info: D9F260277
Vial Number: 3405
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: AllRef
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	-1,375.00	-137.50	ppb	17.81	3600	
52 Cr	72	1	31,760.00	3176.00	ppb	1.09	3600	
55 Mn	72	1	99.29	9.93	ppb	2.30	3600	
59 Co	72	1	0.75	0.07	ppb	20.70	3600	
60 Ni	72	1	7.20	0.72	ppb	4.72	3600	
63 Cu	72	1	-0.47	-0.05	ppb	33.86	3600	
66 Zn	72	1	3.99	0.40	ppb	15.19	3600	
75 As	72	1	99.98	10.00	ppb	3.28	3600	
78 Se	72	1	1.71	0.17	ppb	361.12	3600	
95 Mo	72	1	19.37	1.94	ppb	4.00	3600	
107 Ag	115	1	0.73	0.07	ppb	24.65	3600	
111 Cd	115	1	0.20	0.02	ppb	76.63	3600	
118 Sn	115	1	-0.42	-0.04	ppb	43.28	3600	
121 Sb	115	1	0.62	0.06	ppb	7.85	3600	
137 Ba	115	1	47.86	4.79	ppb	4.58	3600	
205 Tl	165	1	0.54	0.05	ppb	4.29	3600	
208 Pb	165	1	0.11	0.01	ppb	32.50	3600	
232 Th	165	1	6.49	0.65	ppb	9.06	1000	
238 U	165	1	38.10	3.81	ppb	0.81	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	162513	2.52	143876	113.0	30 - 120	
45 Sc	1	458642	1.67	425742	107.7	30 - 120	
72 Ge	1	252216	2.27	252182	100.0	30 - 120	
115 In	1	849327	2.21	871760	97.4	30 - 120	
165 Ho	1	1899617	0.89	1876593	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\192SDIL.D\192SDIL.D#
Date Acquired: Jul 3 2009 04:11 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1GP50
Misc Info: SERIAL DILUTION
Vial Number: 3406
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070209D.B\191AREF.D\191AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	0.00	ppb	0.00	0.00	#DIV/0!	90 - 110	
51 V	72	1	-20.70	ppb	23.91	-27.50	75.3	90 - 110	
52 Cr	72	1	635.20	ppb	0.60	635.20	100.0	90 - 110	
55 Mn	72	1	1.96	ppb	4.05	1.99	98.8	90 - 110	
59 Co	72	1	0.02	ppb	43.96	0.01	143.5	90 - 110	
60 Ni	72	1	0.48	ppb	12.23	0.14	336.3	90 - 110	
63 Cu	72	1	-0.12	ppb	28.87	-0.01	1259.5	90 - 110	
66 Zn	72	1	0.14	ppb	12.55	0.08	175.1	90 - 110	
75 As	72	1	1.95	ppb	6.77	2.00	97.5	90 - 110	
78 Se	72	1	-0.35	ppb	72.11	0.03	-1037.2	90 - 110	
95 Mo	72	1	0.32	ppb	8.51	0.39	83.5	90 - 110	
107 Ag	115	1	0.02	ppb	74.71	0.01	158.4	90 - 110	
111 Cd	115	1	0.00	ppb	1791.80	0.00	-9.1	90 - 110	
118 Sn	115	1	-0.05	ppb	39.81	-0.01	595.2	90 - 110	
121 Sb	115	1	0.02	ppb	66.31	0.01	134.9	90 - 110	
137 Ba	115	1	0.93	ppb	3.36	0.96	97.4	90 - 110	
205 Tl	165	1	0.01	ppb	20.02	0.01	119.1	90 - 110	
208 Pb	165	1	0.00	ppb	77.04	0.00	129.3	90 - 110	
232 Th	165	1	0.14	ppb	14.50	0.13	104.5	90 - 110	
238 U	165	1	0.76	ppb	4.28	0.76	99.6	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	167801	0.23	143876	116.6	30 - 120	
45 Sc	1	460936	2.04	425742	108.3	30 - 120	
72 Ge	1	264934	0.45	252182	105.1	30 - 120	
115 In	1	890678	1.85	871760	102.2	30 - 120	
165 Ho	1	1989898	1.72	1876593	106.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Denver

SERIAL DILUTION

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/06/09 10:05:45

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFP1GP50** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG070209D # 192
Acquired: 07/03/2009 04:11:00
Calibrated: 07/03/2009 02:42:00

Channel 272
Method 6020_
ICPMS_024

Matrix: AQUEOUS
Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9		0	0			*	
7440-62-2	Vanadium	51	-66096	-1035.0	-1375.0			*	
7440-47-3	Chromium	52	2259530	31760	31760	0.00		*	
7439-96-5	Manganese	55	6825	98.050	99.290	1.25		*	
7440-48-4	Cobalt	59	133	1.0750	0.74920	43.5		*	
7440-02-0	Nickel	60	617	24.205	7.1970	236		*	
7440-50-8	Copper	63	283	-5.9550	-0.47280			*	
7440-66-6	Zinc	66	133	6.9950	3.9940	75.1		*	
7440-38-2	Arsenic	75	781	97.500	99.980	2.48	0.21	NC	☑
7782-49-2	Selenium	78	63	-17.715	1.7080	1140	0.70	NC	☑
7439-98-7	Molybdenum	95	610	16.170	19.370	16.5		*	
7440-22-4	Silver	107	120	1.1625	0.73380	58.4		*	
7440-43-9	Cadmium	111	4	-0.01823	0.19940	109		*	
7440-31-5	Tin	118	203	-2.4905	-0.41840			*	
7440-36-0	Antimony	121	56	0.83400	0.61820	34.9		*	
7440-39-3	Barium	137	991	46.620	47.860	2.59		*	
7440-28-0	Thallium	205	176	0.64150	0.53850	19.1		*	
7439-92-1	Lead	208	147	0.13805	0.10680	29.3		*	
7440-61-1	Uranium	238	14001	37.940	38.100	0.420		*	
7440-29-1	Thorium	232	2347	6.7850	6.4900	4.55		*	
7439-93-2	Lithium	6			0			*	
7440-20-2	Scandium	45			0			*	
7440-74-6	Indium	115			0			*	
7440-56-4	Germanium	72			0			*	
7440-60-0	Holmium	165			0			*	

*** Analyte not requested for this batch, no MDL**
NC : Serial dilution concentration < 100 X MDL
E : Difference greater than Limit (10%)

Reviewed by: LRD Date: 7/7/09

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\193PDS.D\193PDS.D#
Date Acquired: Jul 3 2009 04:14 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1GZ
Misc Info: POST DIGESTION SPIKE
Vial Number: 3407
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: PDS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	180.40	0.00	ppb	3.99	200	90.2	75 - 125	
51 V	72	1	42.04	-137.50	ppb	51.33	200	67.3	75 - 125	
52 Cr	72	1	3292.00	3176.00	ppb	1.82	200	97.5	75 - 125	
55 Mn	72	1	201.30	9.93	ppb	2.40	200	95.9	75 - 125	
59 Co	72	1	188.40	0.07	ppb	2.72	200	94.2	75 - 125	
60 Ni	72	1	177.20	0.72	ppb	1.72	200	88.3	75 - 125	
63 Cu	72	1	172.90	-0.05	ppb	1.95	200	86.5	75 - 125	
66 Zn	72	1	184.30	0.40	ppb	2.50	200	92.0	75 - 125	
75 As	72	1	202.70	10.00	ppb	2.66	200	96.5	75 - 125	
78 Se	72	1	203.00	0.17	ppb	4.39	200	101.4	75 - 125	
95 Mo	72	1	203.20	1.94	ppb	2.78	200	100.6	75 - 125	
107 Ag	115	1	42.29	0.07	ppb	0.90	50	84.5	75 - 125	
111 Cd	115	1	179.40	0.02	ppb	2.26	200	89.7	75 - 125	
118 Sn	115	1	175.30	-0.04	ppb	2.50	200	87.7	75 - 125	
121 Sb	115	1	193.20	0.06	ppb	1.78	200	96.6	75 - 125	
137 Ba	115	1	194.00	4.79	ppb	1.73	200	94.7	75 - 125	
205 Tl	165	1	167.70	0.05	ppb	1.76	200	83.8	75 - 125	
208 Pb	165	1	166.90	0.01	ppb	2.17	200	83.4	75 - 125	
232 Th	165	1	0.08	0.65	ppb	20.31	200	0.0	75 - 125	
238 U	165	1	182.00	3.81	ppb	1.71	200	89.3	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	169683	1.88	143876	117.9	30 - 120	
45 Sc	1	464544	1.65	425742	109.1	30 - 120	
72 Ge	1	252017	1.40	252182	99.9	30 - 120	
115 In	1	850970	0.69	871760	97.6	30 - 120	
165 Ho	1	1952437	1.37	1876593	104.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/06/09 10:05:49

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFP1GZ** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070209D # 193 | Method 6020_
Acquired: 07/03/2009 04:14:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/03/2009 02:42:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	39297	180.40	0	90.2	200		☐
7440-62-2	Vanadium	51	127497	42.040	-137.50	21.0	200		☐
7440-47-3	Chromium	52	11133400	3292.0	3176.0	58.0	200	*	☐
7439-96-5	Manganese	55	655725	201.30	9.9290	95.7	200		☐
7440-48-4	Cobalt	59	936368	188.40	0.07492	94.2	200		☐
7440-02-0	Nickel	60	212293	177.20	0.71970	88.2	200		☐
7440-50-8	Copper	63	513610	172.90	-0.04728	86.4	200		☑
7440-66-6	Zinc	66	94283	184.30	0.39940	92.0	200		☑
7440-38-2	Arsenic	75	75452	202.70	9.9980	96.4	200		☑
7782-49-2	Selenium	78	11395	203.00	0.17080	101	200		☑
7439-98-7	Molybdenum	95	293383	203.20	1.9370	101	200		☐
7440-22-4	Silver	107	200949	42.290	0.07338	84.4	50.0		☐
7440-43-9	Cadmium	111	144931	179.40	0.01994	89.7	200		☑
7440-31-5	Tin	118	371647	175.30	-0.04184	87.7	200		☐
7440-36-0	Antimony	121	429628	193.20	0.06182	96.6	200		☑
7440-39-3	Barium	137	194951	194.00	4.7860	94.6	200		☑
7440-28-0	Thallium	205	1945320	167.70	0.05385	83.8	200		☑
7439-92-1	Lead	208	2617950	166.90	0.01068	83.4	200		☑
7440-61-1	Uranium	238	3287590	182.00	3.8100	89.1	200		☐
7440-29-1	Thorium	232	1337	0.07504	0.64900				
7439-93-2	Lithium	6			0				
7440-20-2	Scandium	45			0				
7440-74-6	Indium	115			0				
7440-56-4	Germanium	72			0				
7440-60-0	Holmium	165			0				

Reviewed by: LRD Date: 7/7/09

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\194_MS.D\194_MS.D#
Date Acquired: Jul 3 2009 04:17 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1GS 10X
Misc Info: MATRIX SPIKE
Vial Number: 3408
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: MS
Prep Dil. Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	4.15	0.00	ppb	11.13	40	10.4	50 - 150	
51 V	72	1	-150.60	-137.50	ppb	3.80	40	154.5	50 - 150	
52 Cr	72	1	3007.00	3176.00	ppb	1.46	40	93.5	50 - 150	
55 Mn	72	1	13.37	9.93	ppb	1.28	40	26.8	50 - 150	
59 Co	72	1	3.92	0.07	ppb	3.59	40	9.8	50 - 150	
60 Ni	72	1	4.25	0.72	ppb	2.02	40	10.4	50 - 150	
63 Cu	72	1	3.68	-0.05	ppb	2.53	40	9.2	50 - 150	
66 Zn	72	1	4.19	0.40	ppb	3.17	40	10.4	50 - 150	
75 As	72	1	13.52	10.00	ppb	4.65	40	27.0	50 - 150	
78 Se	72	1	4.41	0.17	ppb	38.55	40	11.0	50 - 150	
95 Mo	72	1	6.15	1.94	ppb	1.37	40	14.7	50 - 150	
107 Ag	115	1	3.62	0.07	ppb	5.97	40	9.0	50 - 150	
111 Cd	115	1	3.81	0.02	ppb	3.46	40	9.5	50 - 150	
118 Sn	115	1	0.24	-0.04	ppb	17.75	40	0.6	50 - 150	
121 Sb	115	1	4.14	0.06	ppb	3.42	40	10.3	50 - 150	
137 Ba	115	1	8.39	4.79	ppb	1.28	40	18.7	50 - 150	
205 Tl	165	1	3.57	0.05	ppb	1.73	40	8.9	50 - 150	
208 Pb	165	1	3.54	0.01	ppb	1.85	40	8.8	50 - 150	
232 Th	165	1	3.76	0.65	ppb	0.59	40	9.2	50 - 150	
238 U	165	1	7.42	3.81	ppb	1.34	40	16.9	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	171407	1.25	143876	119.1	30 - 120	
45 Sc	1	475702	1.39	425742	111.7	30 - 120	
72 Ge	1	258577	1.09	252182	102.5	30 - 120	
115 In	1	880252	1.42	871760	101.0	30 - 120	
165 Ho	1	1991955	0.65	1876593	106.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\195 CCV.D\195 CCV.D#
Date Acquired: Jul 3 2009 04:21 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	44.98	ppb	5.19	50	90.0	90 - 110	Fail
51 V	72	1	49.15	ppb	0.75	50	98.3	90 - 110	
52 Cr	72	1	50.20	ppb	0.73	50	100.4	90 - 110	
55 Mn	72	1	49.24	ppb	2.05	50	98.5	90 - 110	
59 Co	72	1	48.82	ppb	0.76	50	97.6	90 - 110	
60 Ni	72	1	48.36	ppb	1.78	50	96.7	90 - 110	
63 Cu	72	1	48.70	ppb	1.03	50	97.4	90 - 110	
66 Zn	72	1	52.07	ppb	0.39	50	104.1	90 - 110	
75 As	72	1	47.62	ppb	0.13	50	95.2	90 - 110	
78 Se	72	1	50.11	ppb	5.24	50	100.2	90 - 110	
95 Mo	72	1	49.14	ppb	1.24	50	98.3	90 - 110	
107 Ag	115	1	49.06	ppb	0.54	50	98.1	90 - 110	
111 Cd	115	1	48.54	ppb	1.11	50	97.1	90 - 110	
118 Sn	115	1	49.33	ppb	1.40	50	98.7	90 - 110	
121 Sb	115	1	49.41	ppb	0.66	50	98.8	90 - 110	
137 Ba	115	1	47.85	ppb	1.60	50	95.7	90 - 110	
205 Tl	165	1	48.24	ppb	2.11	50	96.5	90 - 110	
208 Pb	165	1	48.33	ppb	2.10	50	96.7	90 - 110	
232 Th	165	1	48.78	ppb	3.19	50	97.6	90 - 110	
238 U	165	1	48.89	ppb	1.52	50	97.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	177912	1.21	143876	123.7	30 - 120	ISFail
45 Sc	1	474153	1.56	425742	111.4	30 - 120	
72 Ge	1	275529	1.39	252182	109.3	30 - 120	
115 In	1	938053	0.97	871760	107.6	30 - 120	
165 Ho	1	2043019	2.90	1876593	108.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

1 :Element Failures — 0 :Max. Number of Failures Allowed
1 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\196 CCB.D\196 CCB.D#
Date Acquired: Jul 3 2009 04:24 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.043	ppb	248.67	1.00	
52 Cr	72	1	0.103	ppb	38.67	1.00	
55 Mn	72	1	-0.001	ppb	240.66	1.00	
59 Co	72	1	0.004	ppb	99.79	1.00	
60 Ni	72	1	0.037	ppb	12.72	1.00	
63 Cu	72	1	-0.134	ppb	14.19	1.00	
66 Zn	72	1	0.192	ppb	17.41	1.00	
75 As	72	1	0.017	ppb	107.28	1.00	
78 Se	72	1	-0.210	ppb	120.48	1.00	
95 Mo	72	1	-0.021	ppb	132.52	1.00	
107 Ag	115	1	0.007	ppb	27.21	1.00	
111 Cd	115	1	0.003	ppb	784.72	1.00	
118 Sn	115	1	0.183	ppb	25.30	1.00	
121 Sb	115	1	0.076	ppb	30.93	1.00	
137 Ba	115	1	0.009	ppb	76.91	1.00	
205 Tl	165	1	0.020	ppb	12.41	1.00	
208 Pb	165	1	0.007	ppb	24.21	1.00	
232 Th	165	1	0.829	ppb	10.35	1.00	
238 U	165	1	0.016	ppb	16.50	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	180625	0.76	143876	125.5	30 - 120	ISFail
45 Sc	1	484578	0.73	425742	113.8	30 - 120	
72 Ge	1	283318	0.93	252182	112.3	30 - 120	
115 In	1	974107	0.37	871760	111.7	30 - 120	
165 Ho	1	2081168	0.46	1876593	110.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\197WASH.D\197WASH.D#
Date Acquired: Jul 3 2009 04:27 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.106 ppb	33.73	1.30	
51 V	72	1	4.906 ppb	0.78	6.50	
52 Cr	72	1	2.057 ppb	4.53	2.60	
55 Mn	72	1	0.991 ppb	2.86	1.30	
59 Co	72	1	0.919 ppb	1.71	1.30	
60 Ni	72	1	2.067 ppb	2.63	2.60	
63 Cu	72	1	1.859 ppb	3.22	2.60	
66 Zn	72	1	10.310 ppb	2.07	13.00	
75 As	72	1	4.854 ppb	1.42	6.50	
78 Se	72	1	4.954 ppb	16.44	6.50	
95 Mo	72	1	1.940 ppb	4.94	2.60	
107 Ag	115	1	4.933 ppb	2.45	6.50	
111 Cd	115	1	0.944 ppb	7.56	1.30	
118 Sn	115	1	9.947 ppb	1.99	13.00	
121 Sb	115	1	1.922 ppb	5.62	2.60	
137 Ba	115	1	1.089 ppb	3.73	1.30	
205 Tl	165	1	1.027 ppb	2.29	1.30	
208 Pb	165	1	1.000 ppb	1.05	1.30	
232 Th	165	1	2.136 ppb	3.43	2.60	
238 U	165	1	1.018 ppb	2.62	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	180890	0.76	143876	125.7	30 - 120	IS Fail
45 Sc	1	487616	0.64	425742	114.5	30 - 120	
72 Ge	1	283111	0.26	252182	112.3	30 - 120	
115 In	1	974666	0.45	871760	111.8	30 - 120	
165 Ho	1	2093398	0.37	1876593	111.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Duplicate Spike (MSD) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\198 MSD.D\198 MSD.D#
Date Acquired: Jul 3 2009 04:31 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1GD 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3409
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: MSD
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Fail

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070209D.B\194 MS.D\194 MS.D#

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	3.80	ppb	15.62	4.15	8.91	20	
51 V	72	1	-148.30	ppb	1.20	-150.60	-1.54	20	
52 Cr	72	1	2958.00	ppb	0.31	3007.00	1.64	20	
55 Mn	72	1	13.30	ppb	3.07	13.37	0.52	20	
59 Co	72	1	3.91	ppb	4.27	3.92	0.23	20	
60 Ni	72	1	4.33	ppb	3.52	4.25	1.87	20	
63 Cu	72	1	3.49	ppb	3.00	3.68	5.30	20	
66 Zn	72	1	4.00	ppb	4.73	4.19	4.74	20	
75 As	72	1	13.13	ppb	1.51	13.52	2.93	20	
78 Se	72	1	4.16	ppb	11.50	4.41	5.70	20	
95 Mo	72	1	5.88	ppb	3.27	6.15	4.39	20	
107 Ag	115	1	3.63	ppb	3.87	3.62	0.28	20	
111 Cd	115	1	3.76	ppb	3.78	3.81	1.27	20	
118 Sn	115	1	0.01	ppb	190.29	0.24	183.38	20	
121 Sb	115	1	4.07	ppb	0.94	4.14	1.68	20	
137 Ba	115	1	8.37	ppb	3.03	8.39	0.21	20	
205 Tl	165	1	3.64	ppb	3.03	3.57	2.00	20	
208 Pb	165	1	3.58	ppb	2.37	3.54	0.98	20	
232 Th	165	1	3.93	ppb	2.48	3.76	4.50	20	
238 U	165	1	7.39	ppb	2.24	7.42	0.42	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	177692	1.24	143876	123.5	30 - 120	IS Fail
45 Sc	1	494104	1.08	425742	116.1	30 - 120	
72 Ge	1	266698	0.67	252182	105.8	30 - 120	
115 In	1	899601	0.30	871760	103.2	30 - 120	
165 Ho	1	2030852	0.99	1876593	108.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref. File :C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\199SMPL.D\199SMPL.D#
Date Acquired:	Jul 3 2009 04:34 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFP1K 10X
Misc Info:	D9F260277
Vial Number:	3410
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	SA
Dilution Factor:	10.00
Autodil Factor:	Undiluted
Final Dil Factor:	10.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.15	0.01	ppb	173.20	3600	
51 V	72	1	-1,279.00	-127.90	ppb	21.47	3600	
52 Cr	72	1	28,570.00	2857.00	ppb	1.80	3600	
55 Mn	72	1	2.68	0.27	ppb	10.88	3600	
59 Co	72	1	0.38	0.04	ppb	21.97	3600	
60 Ni	72	1	5.19	0.52	ppb	4.86	3600	
63 Cu	72	1	-0.56	-0.06	ppb	27.54	3600	
66 Zn	72	1	2.52	0.25	ppb	23.21	3600	
75 As	72	1	85.19	8.52	ppb	1.56	3600	
78 Se	72	1	1.88	0.19	ppb	378.33	3600	
95 Mo	72	1	30.23	3.02	ppb	4.33	3600	
107 Ag	115	1	0.22	0.02	ppb	130.98	3600	
111 Cd	115	1	0.10	0.01	ppb	44.08	3600	
118 Sn	115	1	-0.49	-0.05	ppb	17.03	3600	
121 Sb	115	1	0.28	0.03	ppb	24.38	3600	
137 Ba	115	1	45.94	4.59	ppb	3.06	3600	
205 Tl	165	1	0.14	0.01	ppb	2.56	3600	
208 Pb	165	1	0.11	0.01	ppb	16.94	3600	
232 Th	165	1	1.46	0.15	ppb	6.23	1000	
238 U	165	1	27.40	2.74	ppb	1.16	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	176055	2.93	143876	122.4	30 - 120	IS Fail
45 Sc	1	482240	1.51	425742	113.3	30 - 120	
72 Ge	1	260535	2.55	252182	103.3	30 - 120	
115 In	1	886255	1.51	871760	101.7	30 - 120	
165 Ho	1	1958518	1.38	1876593	104.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\200SMPL.D\200SMPL.D#
Date Acquired: Jul 3 2009 04:38 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ02 10X
Misc Info: D9F270153
Vial Number: 3411
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.16	0.02	ppb	173.15	3600	
51 V	72	1	-340.90	-34.09	ppb	12.26	3600	
52 Cr	72	1	9,975.00	997.50	ppb	3.31	3600	
55 Mn	72	1	164.30	16.43	ppb	5.23	3600	
59 Co	72	1	0.57	0.06	ppb	20.18	3600	
60 Ni	72	1	3.68	0.37	ppb	28.80	3600	
63 Cu	72	1	-0.36	-0.04	ppb	56.02	3600	
66 Zn	72	1	9.55	0.96	ppb	10.89	3600	
75 As	72	1	117.50	11.75	ppb	2.48	3600	
78 Se	72	1	3.63	0.36	ppb	119.57	3600	
95 Mo	72	1	23.77	2.38	ppb	5.96	3600	
107 Ag	115	1	0.03	0.00	ppb	89.70	3600	
111 Cd	115	1	0.03	0.00	ppb	948.06	3600	
118 Sn	115	1	-0.26	-0.03	ppb	100.63	3600	
121 Sb	115	1	0.25	0.03	ppb	20.85	3600	
137 Ba	115	1	51.90	5.19	ppb	5.21	3600	
205 Tl	165	1	0.25	0.03	ppb	1.58	3600	
208 Pb	165	1	0.16	0.02	ppb	13.91	3600	
232 Th	165	1	0.49	0.05	ppb	17.04	1000	
238 U	165	1	55.32	5.53	ppb	3.54	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	170427	2.37	143876	118.5	30 - 120	
45 Sc	1	473452	2.47	425742	111.2	30 - 120	
72 Ge	1	259703	1.94	252182	103.0	30 - 120	
115 In	1	887696	2.86	871760	101.8	30 - 120	
165 Ho	1	1986742	1.42	1876593	105.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\201SMPL.D\201SMPL.D#
Date Acquired: Jul 3 2009 04:41 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ1Q 10X
Misc Info: D9F270154
Vial Number: 3412
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.30	0.03	ppb	86.61	3600	
51 V	72	1	-30.03	-3.00	ppb	80.89	3600	
52 Cr	72	1	3,213.00	321.30	ppb	2.28	3600	
55 Mn	72	1	1.59	0.16	ppb	15.41	3600	
59 Co	72	1	0.35	0.03	ppb	51.67	3600	
60 Ni	72	1	2.14	0.21	ppb	10.78	3600	
63 Cu	72	1	-0.78	-0.08	ppb	18.86	3600	
66 Zn	72	1	1.74	0.17	ppb	20.48	3600	
75 As	72	1	142.50	14.25	ppb	1.56	3600	
78 Se	72	1	2.98	0.30	ppb	325.98	3600	
95 Mo	72	1	22.97	2.30	ppb	2.17	3600	
107 Ag	115	1	0.03	0.00	ppb	61.18	3600	
111 Cd	115	1	0.04	0.00	ppb	209.74	3600	
118 Sn	115	1	-0.67	-0.07	ppb	46.76	3600	
121 Sb	115	1	0.19	0.02	ppb	64.33	3600	
137 Ba	115	1	29.98	3.00	ppb	0.25	3600	
205 Tl	165	1	0.14	0.01	ppb	14.73	3600	
208 Pb	165	1	0.05	0.01	ppb	11.18	3600	
232 Th	165	1	0.25	0.02	ppb	16.25	1000	
238 U	165	1	13.60	1.36	ppb	3.98	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	172035	0.99	143876	119.6	30 - 120	
45 Sc	1	463432	1.58	425742	108.9	30 - 120	
72 Ge	1	261966	1.33	252182	103.9	30 - 120	
115 In	1	880196	1.28	871760	101.0	30 - 120	
165 Ho	1	1956397	1.83	1876593	104.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\202SMPL.D\202SMPL.D#
Date Acquired: Jul 3 2009 04:44 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ10 10X
Misc Info: D9F270154
Vial Number: 3501
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	16.81	1.68	ppb	21.43	3600	
52 Cr	72	1	801.20	80.12	ppb	1.57	3600	
55 Mn	72	1	145.40	14.54	ppb	1.69	3600	
59 Co	72	1	0.31	0.03	ppb	20.43	3600	
60 Ni	72	1	4.08	0.41	ppb	17.26	3600	
63 Cu	72	1	-1.11	-0.11	ppb	0.93	3600	
66 Zn	72	1	1.57	0.16	ppb	2.95	3600	
75 As	72	1	123.60	12.36	ppb	3.78	3600	
78 Se	72	1	4.31	0.43	ppb	169.81	3600	
95 Mo	72	1	32.04	3.20	ppb	8.15	3600	
107 Ag	115	1	0.01	0.00	ppb	150.91	3600	
111 Cd	115	1	0.00	0.00	ppb	5156.40	3600	
118 Sn	115	1	-0.67	-0.07	ppb	29.75	3600	
121 Sb	115	1	0.19	0.02	ppb	16.54	3600	
137 Ba	115	1	15.93	1.59	ppb	3.41	3600	
205 Tl	165	1	0.03	0.00	ppb	68.33	3600	
208 Pb	165	1	0.08	0.01	ppb	24.63	3600	
232 Th	165	1	0.13	0.01	ppb	18.09	1000	
238 U	165	1	24.32	2.43	ppb	0.31	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	167857	1.53	143876	116.7	30 - 120	
45 Sc	1	460300	2.39	425742	108.1	30 - 120	
72 Ge	1	259872	2.21	252182	103.0	30 - 120	
115 In	1	876825	2.44	871760	100.6	30 - 120	
165 Ho	1	1963242	1.28	1876593	104.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\203SMPL.D\203SMPL.D#
Date Acquired: Jul 3 2009 04:48 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ12 10X
Misc Info: D9F270154
Vial Number: 3502
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	14.33	1.43	ppb	94.49	3600	
52 Cr	72	1	787.10	78.71	ppb	2.23	3600	
55 Mn	72	1	116.30	11.63	ppb	1.02	3600	
59 Co	72	1	0.27	0.03	ppb	22.10	3600	
60 Ni	72	1	4.15	0.42	ppb	4.51	3600	
63 Cu	72	1	-1.11	-0.11	ppb	10.51	3600	
66 Zn	72	1	0.99	0.10	ppb	27.19	3600	
75 As	72	1	122.60	12.26	ppb	2.70	3600	
78 Se	72	1	2.92	0.29	ppb	210.54	3600	
95 Mo	72	1	32.48	3.25	ppb	6.53	3600	
107 Ag	115	1	0.01	0.00	ppb	351.25	3600	
111 Cd	115	1	0.06	0.01	ppb	81.68	3600	
118 Sn	115	1	-0.65	-0.07	ppb	39.36	3600	
121 Sb	115	1	0.12	0.01	ppb	18.10	3600	
137 Ba	115	1	14.60	1.46	ppb	1.43	3600	
205 Tl	165	1	0.04	0.00	ppb	45.25	3600	
208 Pb	165	1	0.03	0.00	ppb	18.84	3600	
232 Th	165	1	0.04	0.00	ppb	34.85	1000	
238 U	165	1	24.30	2.43	ppb	1.61	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	171303	0.94	143876	119.1	30 - 120	
45 Sc	1	459176	0.39	425742	107.9	30 - 120	
72 Ge	1	261636	0.50	252182	103.7	30 - 120	
115 In	1	878418	0.49	871760	100.8	30 - 120	
165 Ho	1	1964559	0.56	1876593	104.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\204 CCV.D\204 CCV.D#
Date Acquired: Jul 3 2009 04:51 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	47.62	ppb	4.79	50	95.2	90 - 110	
51 V	72	1	50.95	ppb	0.94	50	101.9	90 - 110	
52 Cr	72	1	51.61	ppb	1.53	50	103.2	90 - 110	
55 Mn	72	1	50.97	ppb	0.71	50	101.9	90 - 110	
59 Co	72	1	50.67	ppb	0.04	50	101.3	90 - 110	
60 Ni	72	1	50.74	ppb	0.47	50	101.5	90 - 110	
63 Cu	72	1	49.76	ppb	0.99	50	99.5	90 - 110	
66 Zn	72	1	53.79	ppb	0.80	50	107.6	90 - 110	
75 As	72	1	49.63	ppb	1.80	50	99.3	90 - 110	
78 Se	72	1	53.22	ppb	3.50	50	106.4	90 - 110	
95 Mo	72	1	51.33	ppb	1.17	50	102.7	90 - 110	
107 Ag	115	1	50.59	ppb	1.34	50	101.2	90 - 110	
111 Cd	115	1	50.06	ppb	1.51	50	100.1	90 - 110	
118 Sn	115	1	51.05	ppb	2.00	50	102.1	90 - 110	
121 Sb	115	1	50.84	ppb	0.95	50	101.7	90 - 110	
137 Ba	115	1	49.90	ppb	1.40	50	99.8	90 - 110	
205 Tl	165	1	49.27	ppb	1.28	50	98.5	90 - 110	
208 Pb	165	1	49.46	ppb	1.90	50	98.9	90 - 110	
232 Th	165	1	49.47	ppb	1.34	50	98.9	90 - 110	
238 U	165	1	49.84	ppb	2.49	50	99.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	172056	0.85	143876	119.6	30 - 120	
45 Sc	1	462860	0.42	425742	108.7	30 - 120	
72 Ge	1	268562	0.41	252182	106.5	30 - 120	
115 In	1	918348	0.47	871760	105.3	30 - 120	
165 Ho	1	2038964	0.85	1876593	108.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\205 CCB.D\205 CCB.D#
Date Acquired: Jul 3 2009 04:55 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.015	ppb	173.21	1.00	
51 V	72	1	-0.013	ppb	105.49	1.00	
52 Cr	72	1	0.044	ppb	66.17	1.00	
55 Mn	72	1	0.001	ppb	1127.70	1.00	
59 Co	72	1	0.003	ppb	190.83	1.00	
60 Ni	72	1	0.012	ppb	71.51	1.00	
63 Cu	72	1	-0.140	ppb	22.03	1.00	
66 Zn	72	1	0.248	ppb	2.53	1.00	
75 As	72	1	-0.005	ppb	132.20	1.00	
78 Se	72	1	-0.720	ppb	35.52	1.00	
95 Mo	72	1	-0.013	ppb	142.24	1.00	
107 Ag	115	1	0.008	ppb	27.05	1.00	
111 Cd	115	1	-0.003	ppb	543.13	1.00	
118 Sn	115	1	0.102	ppb	22.69	1.00	
121 Sb	115	1	0.047	ppb	18.87	1.00	
137 Ba	115	1	0.000	ppb	4026.80	1.00	
205 Tl	165	1	0.016	ppb	2.35	1.00	
208 Pb	165	1	0.008	ppb	19.84	1.00	
232 Th	165	1	0.841	ppb	14.70	1.00	
238 U	165	1	0.010	ppb	25.57	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	175614	0.76	143876	122.1	30 - 120	ISFail
45 Sc	1	476307	0.24	425742	111.9	30 - 120	
72 Ge	1	274779	0.61	252182	109.0	30 - 120	
115 In	1	948257	0.77	871760	108.8	30 - 120	
165 Ho	1	2044042	0.66	1876593	108.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\206WASH.D\206WASH.D#
Date Acquired: Jul 3 2009 04:58 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.035 ppb	9.59	1.30	
51 V	72	1	5.015 ppb	1.22	6.50	
52 Cr	72	1	2.138 ppb	3.59	2.60	
55 Mn	72	1	1.002 ppb	7.78	1.30	
59 Co	72	1	1.075 ppb	3.08	1.30	
60 Ni	72	1	2.033 ppb	3.06	2.60	
63 Cu	72	1	1.947 ppb	3.38	2.60	
66 Zn	72	1	10.600 ppb	0.97	13.00	
75 As	72	1	4.988 ppb	2.42	6.50	
78 Se	72	1	4.972 ppb	12.48	6.50	
95 Mo	72	1	2.035 ppb	7.36	2.60	
107 Ag	115	1	5.253 ppb	2.91	6.50	
111 Cd	115	1	0.948 ppb	2.22	1.30	
118 Sn	115	1	10.270 ppb	1.38	13.00	
121 Sb	115	1	1.932 ppb	1.88	2.60	
137 Ba	115	1	0.993 ppb	4.52	1.30	
205 Tl	165	1	1.065 ppb	0.69	1.30	
208 Pb	165	1	1.045 ppb	2.08	1.30	
232 Th	165	1	2.176 ppb	0.57	2.60	
238 U	165	1	1.035 ppb	0.63	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	175383	1.22	143876	121.9	30 - 120	IS Fail
45 Sc	1	477637	0.65	425742	112.2	30 - 120	
72 Ge	1	277547	0.43	252182	110.1	30 - 120	
115 In	1	950658	0.57	871760	109.1	30 - 120	
165 Ho	1	2062718	0.80	1876593	109.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Reslope Before Continuing Analytical Run

Corrective action was taken as stated in method 6020 section 7.8

…"During the course of an analytical run, the instrument may be "resloped" or recalibrated to correct for instrument drift. A recalibration must then be followed immediately by a new analysis of a CCV and CCB before any further samples are analyzed."

Analyst: _____

Date: 7/6/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#
Date Acquired:	Jul 3 2009 05:25 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	Cal Blank
Misc Info:	
Vial Number:	2101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 05:22 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	27	97.88
52	Cr	72	1	760	14.80
55	Mn	72	1	63	19.21
59	Co	72	1	3	173.19
60	Ni	72	1	27	22.60
63	Cu	72	1	140	24.46
66	Zn	72	1	61	4.33
75	As	72	1	17	29.39
78	Se	72	1	73	30.27
95	Mo	72	1	110	41.96
107	Ag	115	1	10	173.20
111	Cd	115	1	11	103.54
118	Sn	115	1	313	13.37
121	Sb	115	1	16	66.10
137	Ba	115	1	4	43.03
205	Tl	165	1	20	27.29
208	Pb	165	1	99	15.53
232	Th	165	1	163	37.50
238	U	165	1	28	17.10

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	170358	0.63
45	Sc	1	473040	0.38
72	Ge	1	273279	1.44
115	In	1	937855	0.66
165	Ho	1	2015364	2.02

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\215ICAL.D\215ICAL.D#
Date Acquired: Jul 3 2009 05:28 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: 100 ppb
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 05:26 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	21126	2.38
51	V	72	1	328011	0.78
52	Cr	72	1	369104	1.34
55	Mn	72	1	350375	1.50
59	Co	72	1	534048	0.74
60	Ni	72	1	126131	0.64
63	Cu	72	1	317329	1.23
66	Zn	72	1	55499	1.24
75	As	72	1	39306	1.20
78	Se	72	1	6095	4.28
95	Mo	72	1	154896	2.28
107	Ag	115	1	517369	0.23
111	Cd	115	1	86570	0.12
118	Sn	115	1	232927	0.45
121	Sb	115	1	241780	0.78
137	Ba	115	1	108520	0.76
205	Tl	165	1	1178851	1.11
208	Pb	165	1	1607350	1.30
232	Th	165	1	1627260	1.85
238	U	165	1	1838564	0.49

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	171063	0.11	170358	100.4	30 - 120	
45	Sc	1	462328	0.46	473040	97.7	30 - 120	
72	Ge	1	268656	0.22	273279	98.3	30 - 120	
115	In	1	914728	0.46	937855	97.5	30 - 120	
165	Ho	1	1999942	0.49	2015364	99.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\216 CCV.D\216 CCV.D#
Date Acquired:	Jul 3 2009 05:32 am
Operator:	TEL
Sample Name:	CCV
Misc Info:	
Vial Number:	1107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 05:29 am
Sample Type:	CCV
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.44	ppb	1.98	50	100.9	90 - 110	
51 V	72	1	50.20	ppb	2.24	50	100.4	90 - 110	
52 Cr	72	1	50.57	ppb	1.61	50	101.1	90 - 110	
55 Mn	72	1	50.25	ppb	1.47	50	100.5	90 - 110	
59 Co	72	1	50.26	ppb	0.72	50	100.5	90 - 110	
60 Ni	72	1	51.20	ppb	1.25	50	102.4	90 - 110	
63 Cu	72	1	49.78	ppb	1.11	50	99.6	90 - 110	
66 Zn	72	1	52.90	ppb	0.51	50	105.8	90 - 110	
75 As	72	1	49.98	ppb	1.40	50	100.0	90 - 110	
78 Se	72	1	50.26	ppb	5.38	50	100.5	90 - 110	
95 Mo	72	1	51.60	ppb	2.10	50	103.2	90 - 110	
107 Ag	115	1	50.07	ppb	1.25	50	100.1	90 - 110	
111 Cd	115	1	50.52	ppb	1.97	50	101.0	90 - 110	
118 Sn	115	1	49.52	ppb	0.58	50	99.0	90 - 110	
121 Sb	115	1	49.94	ppb	1.34	50	99.9	90 - 110	
137 Ba	115	1	50.09	ppb	0.55	50	100.2	90 - 110	
205 Tl	165	1	49.97	ppb	0.37	50	99.9	90 - 110	
208 Pb	165	1	49.67	ppb	1.08	50	99.3	90 - 110	
232 Th	165	1	51.31	ppb	1.02	50	102.6	90 - 110	
238 U	165	1	50.61	ppb	1.19	50	101.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	168836	0.51	170358	99.1	30 - 120	
45 Sc	1	460117	0.48	473040	97.3	30 - 120	
72 Ge	1	267551	0.91	273279	97.9	30 - 120	
115 In	1	914828	0.23	937855	97.5	30 - 120	
165 Ho	1	2024982	0.50	2015364	100.5	30 - 120	

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\217 CCB.D\217 CCB.D#
Date Acquired:	Jul 3 2009 05:35 am
Operator:	TEL
Sample Name:	CCB
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 05:29 am
Sample Type:	CCB
Total Dil Factor:	1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.016	ppb	173.19	1.00	
51 V	72	1	-0.041	ppb	75.89	1.00	
52 Cr	72	1	0.026	ppb	76.50	1.00	
55 Mn	72	1	0.015	ppb	101.75	1.00	
59 Co	72	1	0.005	ppb	64.92	1.00	
60 Ni	72	1	0.000	ppb	213130.00	1.00	
63 Cu	72	1	0.015	ppb	119.42	1.00	
66 Zn	72	1	0.222	ppb	13.19	1.00	
75 As	72	1	-0.002	ppb	286.69	1.00	
78 Se	72	1	0.335	ppb	249.21	1.00	
95 Mo	72	1	0.030	ppb	10.00	1.00	
107 Ag	115	1	0.007	ppb	89.38	1.00	
111 Cd	115	1	-0.003	ppb	175.11	1.00	
118 Sn	115	1	0.190	ppb	25.52	1.00	
121 Sb	115	1	0.075	ppb	8.50	1.00	
137 Ba	115	1	0.008	ppb	99.30	1.00	
205 Tl	165	1	0.026	ppb	10.22	1.00	
208 Pb	165	1	0.010	ppb	10.02	1.00	
232 Th	165	1	1.053	ppb	13.26	1.00	Fail
238 U	165	1	0.013	ppb	17.10	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	168547	1.32	170358	98.9	30 - 120	
45 Sc	1	467753	0.16	473040	98.9	30 - 120	
72 Ge	1	273100	0.89	273279	99.9	30 - 120	
115 In	1	938928	0.92	937855	100.1	30 - 120	
165 Ho	1	2019806	1.22	2015364	100.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

1 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\218WASH.D\218WASH.D#
Date Acquired: Jul 3 2009 05:38 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 05:29 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.913 ppb	19.40	1.30	
51 V	72	1	5.062 ppb	4.42	6.50	
52 Cr	72	1	2.143 ppb	3.42	2.60	
55 Mn	72	1	1.049 ppb	5.72	1.30	
59 Co	72	1	0.998 ppb	4.65	1.30	
60 Ni	72	1	2.101 ppb	5.70	2.60	
63 Cu	72	1	2.009 ppb	2.99	2.60	
66 Zn	72	1	10.450 ppb	2.21	13.00	
75 As	72	1	4.952 ppb	3.13	6.50	
78 Se	72	1	4.761 ppb	25.92	6.50	
95 Mo	72	1	2.018 ppb	7.18	2.60	
107 Ag	115	1	5.183 ppb	2.25	6.50	
111 Cd	115	1	1.058 ppb	8.62	1.30	
118 Sn	115	1	10.250 ppb	2.04	13.00	
121 Sb	115	1	2.001 ppb	7.44	2.60	
137 Ba	115	1	1.063 ppb	3.17	1.30	
205 Tl	165	1	1.069 ppb	1.63	1.30	
208 Pb	165	1	1.066 ppb	1.56	1.30	
232 Th	165	1	2.330 ppb	4.05	2.60	
238 U	165	1	1.071 ppb	3.26	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	168734	2.17	170358	99.0	30 - 120	
45 Sc	1	467881	1.14	473040	98.9	30 - 120	
72 Ge	1	272164	0.56	273279	99.6	30 - 120	
115 In	1	938479	0.85	937855	100.1	30 - 120	
165 Ho	1	2036153	1.57	2015364	101.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Metals

Supporting Documentation

Sample Sequence, Instrument Printouts

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9F270153

Client: Northgate Environmental

Batch(es) #: 9180262

Associated Samples: 1

I certify that, to the best of my knowledge, the attached package represents a complete and accurate copy of the original data.

Signature/Date: 7/6/09

Metals Raw Data RoadMap

LotID		*Metal*	*WorkOrder*	*Anal Date*	*TestDesc*	*Batch*	*File Id*	*Instr*
D9F270153	1	SE	LFQ021AC	20090703	6020TOTA	9180262	AG070209D	024
D9F270153	1	AS	LFQ021AA	20090703	6020TOTA	9180262	AG070209D	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9180262**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 06/30/09
Due Date: 07/08/09

Lot	Work Order			Initial Weight/Volume
D9F290000 Water	**LFRV2**	B	Due Date: SDG:	50 mL
D9F290000 Water	**LFRV2**	C	Due Date: SDG:	50 mL
D9F260277 Water	**LFP1G** Total		Due Date: 07/08/09 SDG:	50 mL
D9F260277 Water	**LFP1G** Total	S	Due Date: 07/08/09 SDG:	50 mL
D9F260277 Water	**LFP1G** Total	D	Due Date: 07/08/09 SDG:	50 mL
D9F260277 Water	**LFP1K** Total		Due Date: 07/08/09 SDG:	50 mL
D9F270153 Water	**LFQ02** Total		Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ1Q** Total		Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ10** Total		Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ12** Total		Due Date: 07/09/09 SDG:	50 mL

Comments:

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE, SAMPLE

ICPMS ELEMENTS WITHIN THE BATCH:

AS SE

checked 7/2/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH # 9180262 **ALLIQUOTTED BY:** JRW
PREP DATE: 6/30/2009 **DIGESTED BY:** JKH

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS267

One or more samples were filtered prior to analysis at the instrument. ☐ Yes ☐ No

If "yes", then the method blank and the LCS were also filtered in the same manner using the same type of filter.

Analyst(s) Initials:

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-2636-09	7/1/10	100uL	15
2008Cal-2	STD-2635-09	7/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	3

TEMPERATURE CYCLES

Thermometer ID: 4110 Block & Cup # : 3,23

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	6:00	94	10:20	96
HNO3	10:30	96	11:00	96
HNO3				

Samples and QC revolumed to: 50 mL Analyst's Initials JKH

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kris Hare ***Date:*** 6/30/09

METALS
SAMPLE DATA
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ICP-MS Standard and Spike True Values

Element	Cal. Std. 100 ppb	Initial Calibration Standard	Continuing Calibration Standard	Interference Check Sample A	Interference Check Sample AB	Laboratory Control Sample and Duplicate	Matrix Spike Sample and Duplicate	Post Digestion Spike
Aluminum	100	40	50	100,000 Aluminum	--	40	40	200
Antimony	100	40	50	100,000 Calcium	100	40	40	200
Arsenic	100	40	50	100,000 Iron	100	40	40	200
Barium	100	40	50	100,000 Magnesium	100	40	40	200
Beryllium	100	40	50	100,000 Sodium	100	40	40	200
Cadmium	100	40	50	100,000 Phosphorus	100	40	40	200
Chromium	100	40	50	100,000 Potassium	100	40	40	200
Cobalt	100	40	50	100,000 Sulfur	100	40	40	200
Copper	100	40	50	200,000 Carbon	100	40	40	200
Lead	100	40	50	1,000,000 Chloride	100	40	40	200
Manganese	100	40	50	2000 Molybdenum	--	40	40	200
Molybdenum	100	40	50	2000 Titanium	100	40	40	200
Nickel	100	40	50		100	40	40	200
Selenium	100	40	50		100	40	40	200
Silver	100	40	50		100	40	40	50
Thallium	100	40	50		100	40	40	200
Tin	100	40	50		100	40	40	200
Uranium	100	40	50		100	40	40	200
Vanadium	100	40	50		100	40	40	200
Zinc	100	40	50		100	40	40	200

All units are ug/L.

Due to the presence of trace contaminants in the ICSA solution, the % recovery for the ICSAB solution is calculated by subtracting the levels in the ICSA from the ICSAB.

Quality Control Standards

ICV = Initial Calibration Verification (Second Source)
CCV = Continuing Calibration Verification

ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
1		Keyword		TUNBEG	Start of TUNE					
2		Keyword		ChngTune	he.u,20					
3	C:\ICPCHEM\1\METHODS\tun_isis.M	TUNE	4		200.8 TUNE		1.000			
4		Keyword		TUNEND	End of TUNE					
5		Keyword		CALBEG	Start of CALIB					
6	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
7	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
8	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
9	C:\ICPCHEM\1\METHODS\NormISIS.M	ICV	2103		ICV		1.000			
10	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLIV		1.000			
11	C:\ICPCHEM\1\METHODS\NormISIS.M	ICB	2104		ICB		1.000			
12	C:\ICPCHEM\1\METHODS\NormISIS.M	RLSTD	2105		RL STD		1.000			
13	C:\ICPCHEM\1\METHODS\NormISIS.M	AFCEERL	2106		AFCEE RL		1.000			
14	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2112		CHECK	STD2637-09	1.000			
15	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2107		ALTSe	2 ppb	1.000			
16	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSA	2108		ICSA		1.000			
17	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSAB	2109		ICSAB		1.000			
18	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000			
19	C:\ICPCHEM\1\METHODS\NormISIS.M	LR	2110		LR		1.000			
20	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000			
21	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
22	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
23	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
24		Keyword		CALEND	End of CALIB					
25		Keyword		SMPLBEG	Start of SMPL					
26	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2201		LFCCFB	BLANK 9171051 6020	1.000	50.00	50.00	1.000
27	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2202		LFCCFC	LCS	1.000	50.00	50.00	1.000
28	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2203		LE4RA	D9F170236	1.000	50.00	50.00	1.000
29	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2204		LE4RAP5	SERIAL DILUTION	1.000	50.00	50.00	1.000
30	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2205		LE4RAZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
31	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2206		LE4RK	D9F170236	1.000	50.00	50.00	1.000
32	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2207		LE4RN	D9F170236	1.000	50.00	50.00	1.000
33	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2208		LE4R9	D9F170236	1.000	50.00	50.00	1.000
34	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
35	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
36	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
37	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2209		LE4TC	D9F170236	1.000	50.00	50.00	1.000
38	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2210		LE4TN	D9F170236	1.000	50.00	50.00	1.000
39	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2211		LE4TP	D9F170236	1.000	50.00	50.00	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
40	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2212		LE4TQ	D9F170236	1.000	50.00	50.00	1.000
41	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2301		LE4T4	D9F170236	1.000	50.00	50.00	1.000
42	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2302		LE4T9	D9F170236	1.000	50.00	50.00	1.000
43	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2303		LE4VA	D9F170236	1.000	50.00	50.00	1.000
44	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2304		LE4VT	D9F170236	1.000	50.00	50.00	1.000
45	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
46	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
47	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
48	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2305		LFJDGB	BLANK 9175365 6020	500.0	500.0	1.000	1.000
49	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2306		LFJDGC	LCS	500.0	500.0	1.000	1.000
50	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2307		LFGCV	D9F230211	495.0	500.0	1.010	1.000
51	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2308		LFGCVP5	SERIAL DILUTION	495.0	500.0	1.010	1.000
52	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2309		LFGCVZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
53	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	2310		LFGCVS	MATRIX SPIKE	495.0	500.0	1.010	1.000
54	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
55	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
56	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
57	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	2311		LFGCVD	MATRIX SPIKE DUPLICATE	495.0	500.0	1.010	1.000
58	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2312		LFGC2	D9F230211	505.1	500.0	9.900E-01	1.000
59	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2401		LFGC8	D9F230211	490.2	500.0	1.020	1.000
60	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2402		LFGC9	D9F230211	500.0	500.0	1.000	1.000
61	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2403		LFGDA	D9F230211	490.2	500.0	1.020	1.000
62	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2404		LFGDD	D9F230211	495.0	500.0	1.010	1.000
63	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
64	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
65	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
66	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSA	2108		ICSA		1.000			
67	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSAB	2109		ICSAB		1.000			
68	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1101		WASH		1.000			
69	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
70	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
71	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
72	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2209		LE4TC	D9F170236	1.000	50.00	50.00	1.000
73	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2210		LE4TN	D9F170236	1.000	50.00	50.00	1.000
74	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2211		LE4TP	D9F170236	1.000	50.00	50.00	1.000
75	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2212		LE4TQ	D9F170236	1.000	50.00	50.00	1.000
76	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2301		LE4T4	D9F170236	1.000	50.00	50.00	1.000
77	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2302		LE4T9	D9F170236	1.000	50.00	50.00	1.000
78	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2303		LE4VA	D9F170236	1.000	50.00	50.00	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
79	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2304		LE4VT	D9F170236	1.000	50.00	50.00	1.000
80	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
81	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
82	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
83	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
84	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
85	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
86	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
87	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
88	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
89	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
90	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
91	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
92	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
93	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
94	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
95	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2405		LFM02B	BLANK 9177095 6020	1.000	50.00	50.00	1.000
96	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2406		LFM02C	LCS	1.000	50.00	50.00	1.000
97	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2407		LFKC2	D9F240311	1.000	50.00	50.00	1.000
98	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2408		LFKC3	D9F240311	1.000	50.00	50.00	1.000
99	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2409		LFKC4	D9F240311	1.000	50.00	50.00	1.000
100	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2410		LFKC4P5	SERIAL DILUTION	1.000	50.00	50.00	1.000
101	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2411		LFKC4Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
102	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	2412		LFKC4S	MATRIX SPIKE	1.000	50.00	50.00	1.000
103	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	2501		LFKC4D	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
104	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2502		LFKC5	D9F240311	1.000	50.00	50.00	1.000
105	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
106	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
107	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
108	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2503		LFM0PB	BLANK 9177090 6020	500.0	500.0	1.000	1.000
109	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2504		LFM0PC	LCS	500.0	500.0	1.000	1.000
110	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2505		LFKC6	D9F240311	505.1	500.0	9.900E-01	1.000
111	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2506		LFKC7	D9F240311	510.2	500.0	9.800E-01	1.000
112	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2507		LFKC7P5	SERIAL DILUTION	510.2	500.0	9.800E-01	1.000
113	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2508		LFKC7Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
114	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	2509		LFKC7S	MATRIX SPIKE	510.2	500.0	9.800E-01	1.000
115	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
116	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
117	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
118	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	2510		LFKC7D	MATRIX SPIKE DUPLICATE	510.2	500.0	9.800E-01	1.000
119	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2511		LFKC8	D9F240311	490.2	500.0	1.020	1.000
120	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2512		LFKC9	D9F240311	485.4	500.0	1.030	1.000
121	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3101		LFKDA	D9F240311	490.2	500.0	1.020	1.000
122	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3102		LFKDC	D9F240311	500.0	500.0	1.000	1.000
123	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3103		LFKDD	D9F240311	500.0	500.0	1.000	1.000
124	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
125	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
126	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
127	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3104		LFT60B	BLANK 9181137 6020	1.000	50.00	50.00	1.000
128	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3105		LFT60C	LCS	1.000	50.00	50.00	1.000
129	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3106		LFTDG	D9F290160	1.000	50.00	50.00	1.000
130	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3107		LFTDGP5	SERIAL DILUTION	1.000	50.00	50.00	1.000
131	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3108		LFTDGZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
132	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3109		LFTDGS	MATRIX SPIKE	1.000	50.00	50.00	1.000
133	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
134	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
135	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
136	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3110		LFTDGD	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
137	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3111		LFTDJ	D9F290160	1.000	50.00	50.00	1.000
138	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3112		LFTDK	D9F290160	1.000	50.00	50.00	1.000
139	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3201		LFTDL	D9F290160	1.000	50.00	50.00	1.000
140	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3202		LFTDM	D9F290160	1.000	50.00	50.00	1.000
141	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
142	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
143	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
144	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3203		LFT67B	BLANK 9181141 6020	500.0	500.0	1.000	1.000
145	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3204		LFT67C	LCS	500.0	500.0	1.000	1.000
146	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3205		LFTDN	D9F290160	495.0	500.0	1.010	1.000
147	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3206		LFTDP	D9F290160	495.0	500.0	1.010	1.000
148	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3207		LFTDQ	D9F290160	500.0	500.0	1.000	1.000
149	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3208		LFTDT	D9F290160	490.2	500.0	1.020	1.000
150	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3209		LFTDW	D9F290160	490.2	500.0	1.020	1.000
151	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
152	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
153	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
154	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3210		LFTD2	D9F290160	505.1	500.0	9.900E-01	1.000
155	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3211		LFTD2P5	SERIAL DILUTION	505.1	500.0	9.900E-01	1.000
156	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3212		LFTD2Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
157	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3301		LFTD2S	MATRIX SPIKE	505.1	500.0	9.900E-01	1.000
158	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3302		LFTD2D	MATRIX SPIKE DUPLICATE	505.1	500.0	9.900E-01	1.000
159	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3303		LFTD8	D9F290160	515.5	500.0	9.700E-01	1.000
160	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3304		LFTD9	D9F290160	505.1	500.0	9.900E-01	1.000
161	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3305		LFTED	D9F290160	510.2	500.0	9.800E-01	1.000
162	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
163	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
164	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
165	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
166	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
167	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
168	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
169	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
170	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
171	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
172	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
173	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
174	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
175	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
176	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
177	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSA	2108		ICSA		1.000			
178	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSAB	2109		ICSAB		1.000			
179	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1101		WASH		1.000			
180	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
181	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
182	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
183	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3306		LFRWWBF	BLANK 9180268 6020	1.000	50.00	50.00	1.000
184	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3307		LFRWWCF	LCS	1.000	50.00	50.00	1.000
185	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3308		LFP1LF 10X	D9F260277	10.00	50.00	50.00	10.00
186	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3309		LFQ11F 10X	D9F270154	10.00	50.00	50.00	10.00
187	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3310		LFQ11P50F	SERIAL DILUTION	10.00	50.00	50.00	10.00
188	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3311		LFQ11ZF	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
189	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3312		LFQ11SF 10X	MATRIX SPIKE	10.00	50.00	50.00	10.00
190	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3401		LFQ11DF 10X	MATRIX SPIKE DUPLICATE	10.00	50.00	50.00	10.00
191	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3402		LFQ13F 10X	D9F270154	10.00	50.00	50.00	10.00
192	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
193	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
194	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
195	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3403		LFRV2B	BLANK 9180262 6020	1.000	50.00	50.00	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
196	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3404		LFRV2C	LCS	1.000	50.00	50.00	1.000
197	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3405		LFP1G 10X	D9F260277	10.00	50.00	50.00	10.00
198	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3406		LFP1GP50	SERIAL DILUTION	10.00	50.00	50.00	10.00
199	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3407		LFP1GZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
200	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3408		LFP1GS 10X	MATRIX SPIKE	10.00	50.00	50.00	10.00
201	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
202	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
203	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
204	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3409		LFP1GD 10X	MATRIX SPIKE DUPLICATE	10.00	50.00	50.00	10.00
205	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3410		LFP1K 10X	D9F260277	10.00	50.00	50.00	10.00
206	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3411		LFQ02 10X	D9F270153	10.00	50.00	50.00	10.00
207	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3412		LFQ1Q 10X	D9F270154	10.00	50.00	50.00	10.00
208	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3501		LFQ10 10X	D9F270154	10.00	50.00	50.00	10.00
209	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3502		LFQ12 10X	D9F270154	10.00	50.00	50.00	10.00
210	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
211	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
212	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
213	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
214	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
215	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
216	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
217	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
218	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
219	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
220	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
221	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
222	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
223	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
224	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
225	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	4110		LFTMDB	BLANK 9180481 6020	1.000	50.00	50.00	1.000
226	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	4111		LFTMDC	LCS	1.000	50.00	50.00	1.000
227	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4112		LFNXL	D9F260175	1.000	50.00	50.00	1.000
228	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4201		LFNXQ	D9F260175	1.000	50.00	50.00	1.000
229	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4202		LFNXT	D9F260175	1.000	50.00	50.00	1.000
230	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4203		LFNXW	D9F260175	1.000	50.00	50.00	1.000
231	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4204		LFNXX	D9F260175	1.000	50.00	50.00	1.000
232	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4205		LFQPE	D9F270122	1.000	50.00	50.00	1.000
233	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
234	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
235	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
236	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4206		LFQPT	D9F270122	1.000	50.00	50.00	1.000
237	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4207		LFQPX	D9F270122	1.000	50.00	50.00	1.000
238	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4208		LFQP2	D9F270122	1.000	50.00	50.00	1.000
239	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4209		LFQP3	D9F270122	1.000	50.00	50.00	1.000
240	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	4210		LFQP5	D9F270122	1.000	50.00	50.00	1.000
241	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	4211		LFQP5P5	SERIAL DILUTION	1.000	50.00	50.00	1.000
242	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	4212		LFQP5Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
243	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
244	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
245	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
246	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	4301		LFQP5S	MATRIX SPIKE	1.000	50.00	50.00	1.000
247	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	4302		LFQP5D	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
248	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4303		LFQQA	D9F270122	1.000	50.00	50.00	1.000
249	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4304		LFQQG	D9F270122	1.000	50.00	50.00	1.000
250	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4305		LFQQL	D9F270122	1.000	50.00	50.00	1.000
251	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4306		LFQQP	D9F270122	1.000	50.00	50.00	1.000
252	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4307		LFQQR	D9F270122	1.000	50.00	50.00	1.000
253	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
254	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
255	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
256	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3503		LFRT8BF	BLANK 9180238 6020	1.000	50.00	50.00	1.000
257	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3504		LFRT8CF	LCS	1.000	50.00	50.00	1.000
258	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3505		LFNV6F 2X	D9F260164	2.000	50.00	50.00	2.000
259	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3506		LFNXLF	D9F260175	1.000	50.00	50.00	1.000
260	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3507		LFNXQF	D9F260175	1.000	50.00	50.00	1.000
261	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3508		LFNXQP5F	SERIAL DILUTION	1.000	50.00	50.00	1.000
262	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
263	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
264	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
265	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3509		LFNXQZF	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
266	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3510		LFNXQSF	MATRIX SPIKE	1.000	50.00	50.00	1.000
267	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3511		LFNXQDF	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
268	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3512		LFNXTF	D9F260175	1.000	50.00	50.00	1.000
269	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4101		LFNXWF	D9F260175	1.000	50.00	50.00	1.000
270	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4102		LFNXXF	D9F260175	1.000	50.00	50.00	1.000
271	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
272	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
273	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
274	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	4103		LFRVEB	BLANK 9180246 6020	1.000	50.00	50.00	1.000
275	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	4104		LFRVEC	LCS	1.000	50.00	50.00	1.000
276	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	4105		LFNV6 2X	D9F260164	2.000	50.00	50.00	2.000
277	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	4106		LFNV6P5	SERIAL DILUTION	2.000	50.00	50.00	2.000
278	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	4107		LFNV6Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
279	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	4108		LFNV6S 2X	MATRIX SPIKE	2.000	50.00	50.00	2.000
280	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	4109		LFNV6D 2X	MATRIX SPIKE DUPLICATE	2.000	50.00	50.00	2.000
281	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
282	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
283	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
284		Keyword		SMPLEND	End of SMPL					
285		Keyword		TERMBEG	Start of TERM					
286		Keyword		StandBy						
287		Keyword		TERMEND	End of TERM					
288		Keyword		End	End of Sequence					
289		Keyword		BLKBEG	Start of BLANK					
290		Keyword		BLKEND	End of BLANK					
291		Keyword		ERRBEG	Start of ERRTERM					
292		Keyword		ERREND	End of ERRTERM					

TestAmerica Denver

Standards Preparation Logbook Record

Jul-02-2009

Logbook: \\Densvr06\StdsLog\metals.std

STD4841-08, 1000 Zn (Inorganic Ventures)

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-ZN02045 Vendor's Expiration Date: 10-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 09-04-2008 Date Received: 09-04-2008
Date Expires(1): 10-01-2009 (None)
Date Expires(2): 10-01-2009 (None)
(METALS)-Inventory ID: 779

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1,000.0	1,000.0

STD6653-08, 1000 Se

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SE02003 Vendor's Expiration Date: 12-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 11-25-2008 Date Received: 11-25-2008
Date Expires(1): 12-01-2009 (None)
Date Expires(2): 12-01-2009 (None)
(METALS)-Inventory ID: 803

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1,000.0	1,000.0

STD1198-09, 1000 mg/L Sn

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SN02016 Vendor's Expiration Date: 03-01-2010
Solvent: 1% HNO3
Date Prep./Opened: 03-02-2009 Date Received: 03-02-2009
Date Expires(1): 03-01-2010 (None)
Date Expires(2): 03-01-2010 (None)
(METALS)-Inventory ID: 833

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1,000.0	1,000.0

STD1853-09, 1 mg/l Se

Analyst: DIAZL

Solvent: 5% HN03 Lot No.: H02026 Volume (ml): 100.00
Date Prep./Opened: 04-01-2009
Date Expires(1): 12-01-2009 (1 Year)
pipette: Met 21

Parent Std No.: STD6653-08, 1000 Se — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 12-01-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1,000.0	1.0000

STD3611-09, ICP-MS 1ppm Sn/Zn — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 06-16-2009
Date Expires(1): 10-01-2009 (1 Year)

Parent Std No.: STD3609-09, ICP-MS 10 ppm Zn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 10-01-2009 Parent Date Expires(2): 10-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	10.000	1.0000

Parent Std No.: STD3610-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	10.000	1.0000

STD3662-09, ICP-MS (024) INT STD BRC-HIGH — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 250.00
Date Prep./Opened: 06-17-2009
Date Expires(1): 11-10-2009 (1 Year)
Date Expires(2): 12-01-2009 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD1469-09, Germanium Stock — Aliquot Amount (ml): 1.2000
Parent Date Expires(1): 03-16-2010 Parent Date Expires(2): 04-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ge	1,000.0	4,800.0

Parent Std No.: STD1972-09, Lithium 6 Stock — Aliquot Amount (ml): 1.5000
Parent Date Expires(1): 04-07-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Lithium6	1,000.0	6,000.0

Parent Std No.: STD1973-09, Indium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 04-07-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
In	1,000.0	1,600.0

Parent Std No.: STD6317-08, Scandium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 11-10-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sc	1,000.0	1,600.0

Parent Std No.: STD6318-08, Holmium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 11-10-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ho	1,000.0	1,600.0

STD3913-09, ICP-MS ICSA — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 06-29-2009
Date Expires(1): 07-29-2009 (1 Month)
Date Expires(2): 02-01-2010 (None)
pipettes: Met 8

Parent Std No.: STD0664-09, ICPMS Interferent Check Standard — Aliquot Amount (ml): 5.0000
Parent Date Expires(1): 02-01-2010 Parent Date Expires(2): 02-01-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Al	1,000.0	100,000
C	2,000.0	200,000
Ca	1,000.0	100,000
Cl	10,000	1,000,000
Fe	1,000.0	100,000
K	1,000.0	100,000
Mg	1,000.0	100,000
Mo	20.000	2,000.0
Na	1,000.0	100,000
P	1,000.0	100,000
S	1,000.0	100,000
Ti	20.000	2,000.0

STD3997-09, ICP-MS BLANK — Analyst: DIAZL

Solvent: Water Volume (ml): 1,000.0
Date Prep./Opened: 07-02-2009
Date Expires(1): 08-02-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD3996-09, NITRIC ACID — Aliquot Amount (ml): 50.000

Component	Initial Conc (%)	Final Conc (%)
HNO3	100.00	5.0000

STD3998-09, ICP-MS 10 ppm Sn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 03-01-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1198-09, 1000 mg/L Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1,000.0	10.000

STD3999-09, ICP-MS 100 ppb cal

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	100.00
Al	20.000	100.00
As	20.000	100.00
Ba	20.000	100.00
Be	20.000	100.00
Cd	20.000	100.00
Co	20.000	100.00
Cr	20.000	100.00
Cu	20.000	100.00
Mn	20.000	100.00
Ni	20.000	100.00
Pb	20.000	100.00
Se	20.000	100.00
Th	20.000	100.00
Tl	20.000	100.00
U	20.000	100.00
V	20.000	100.00
Zn	20.000	100.00

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00

Sb	20.000	100.00

Parent Std No.: STD3862-09, Iron Stock Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Fe	1,000.0	5,000.0

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4000-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	50.000
Al	20.000	50.000
As	20.000	50.000
Ba	20.000	50.000
Be	20.000	50.000
Cd	20.000	50.000
Co	20.000	50.000
Cr	20.000	50.000
Cu	20.000	50.000
Mn	20.000	50.000
Ni	20.000	50.000
Pb	20.000	50.000
Se	20.000	50.000
Th	20.000	50.000
Tl	20.000	50.000
U	20.000	50.000
V	20.000	50.000
Zn	20.000	50.000

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	50.000
Sb	20.000	50.000

Parent Std No.: STD3862-09, Iron Stock Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)

Fe	1,000.0	2,500.0

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	50.000

STD4001-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD3611-09, ICP-MS 1ppm Sn/Zn — Aliquot Amount (ml): 0.0900

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1.0000	0.0090
1000 Zn	1.0000	0.0090

Parent Std No.: STD3999-09, ICP-MS 100 ppb cal — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 07-03-2009

Component	Initial Conc (ug/L)	Final Conc (mg/L)
Ag	100.00	0.0010
Al	100.00	0.0010
As	100.00	0.0010
Ba	100.00	0.0010
Be	100.00	0.0010
Cd	100.00	0.0010
Co	100.00	0.0010
Cr	100.00	0.0010
Cu	100.00	0.0010
Mn	100.00	0.0010
Ni	100.00	0.0010
Pb	100.00	0.0010
Se	100.00	0.0010
Th	100.00	0.0010
Tl	100.00	0.0010
U	100.00	0.0010
V	100.00	0.0010
Zn	100.00	0.0010
Mo	100.00	0.0010
Sb	100.00	0.0010
Fe	5,000.0	0.0500
Sn	100.00	0.0010

STD4002-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (2 Days)
pipettes: Met 20 and Met 8

Parent Std No.: STD4001-09, ICP-MS RL STD Aliquot Amount (ml): 2.0000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	0.0090	0.0018
1000 Zn	0.0090	0.0018
Ag	0.0010	0.0002
Al	0.0010	0.0002
As	0.0010	0.0002
Ba	0.0010	0.0002
Be	0.0010	0.0002
Cd	0.0010	0.0002
Co	0.0010	0.0002
Cr	0.0010	0.0002
Cu	0.0010	0.0002
Mn	0.0010	0.0002
Ni	0.0010	0.0002
Pb	0.0010	0.0002
Se	0.0010	0.0002
Th	0.0010	0.0002
Tl	0.0010	0.0002
U	0.0010	0.0002
V	0.0010	0.0002
Zn	0.0010	0.0002
Mo	0.0010	0.0002
Sb	0.0010	0.0002
Fe	0.0500	0.0100
Sn	0.0010	0.0002

STD4003-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21, Met 20, and Met 8

Parent Std No.: STD1978-09, ICPMS Interferent Check Standard Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 04-01-2010 Parent Date Expires(2): 04-01-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Al	1,000.0	100,000
C	2,000.0	200,000
Ca	1,000.0	100,000

Cl	10,000	1,000,000
Fe	1,000.0	100,000
K	1,000.0	100,000
Mg	1,000.0	100,000
Mo	20.000	2,000.0
Na	1,000.0	100,000
P	1,000.0	100,000
S	1,000.0	100,000
Ti	20.000	2,000.0

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	100.00
Al	20.000	100.00
As	20.000	100.00
Ba	20.000	100.00
Be	20.000	100.00
Cd	20.000	100.00
Co	20.000	100.00
Cr	20.000	100.00
Cu	20.000	100.00
Mn	20.000	100.00
Ni	20.000	100.00
Pb	20.000	100.00
Se	20.000	100.00
Th	20.000	100.00
Tl	20.000	100.00
U	20.000	100.00
V	20.000	100.00
Zn	20.000	100.00

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	20.000	100.00

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4004-09, ICPMS LR STD 1000 ppb Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20 and Met 8

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	1,000.0
Al	20.000	1,000.0
As	20.000	1,000.0
Ba	20.000	1,000.0
Be	20.000	1,000.0
Cd	20.000	1,000.0
Co	20.000	1,000.0
Cr	20.000	1,000.0
Cu	20.000	1,000.0
Mn	20.000	1,000.0
Ni	20.000	1,000.0
Pb	20.000	1,000.0
Se	20.000	1,000.0
Th	20.000	1,000.0
Tl	20.000	1,000.0
U	20.000	1,000.0
V	20.000	1,000.0
Zn	20.000	1,000.0

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	1,000.0
Sb	20.000	1,000.0

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	1,000.0

STD4005-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 02-27-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1213-09, ICPMS ICV SOLUTION A (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Al	10.000	40.000
As	10.000	40.000
Ba	10.000	40.000
Be	10.000	40.000
Cd	10.000	40.000

Co	10.000	40.000
Cr	10.000	40.000
Cu	10.000	40.000
Fe	250.00	1,000.0
Li	10.000	40.000
Mn	10.000	40.000
Ni	10.000	40.000
Pb	10.000	40.000
Se	10.000	40.000
Th	10.000	40.000
Tl	10.000	40.000
U	10.000	40.000
V	10.000	40.000
Zn	10.000	40.000

Parent Std No.: STD1214-09, ICPMS ICV SOLUTION B (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Ag	10.000	40.000
Mo	10.000	40.000
Sb	10.000	40.000
Sn	10.000	40.000
Zr	10.000	40.000

STD4006-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD1853-09, 1 mg/l Se Aliquot Amount (ml): 0.1000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1.0000	0.0020

STD4007-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 05-01-2010 (None)
pipettes: Met 20

Parent Std No.: STD3106-09, ICP-MS LLCCV 1 Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	0.5000	5.0000
Al	3.0000	30.000
As	0.5000	5.0000

Ba	0.1000	1.0000
Be	0.1000	1.0000
Ca	5.0000	50.000
Cd	0.1000	1.0000
Co	0.1000	1.0000
Cr	0.2000	2.0000
Cu	0.2000	2.0000
Fe	5.0000	50.000
K	10.000	100.00
Mg	5.0000	50.000
Mn	0.1000	1.0000
Na	5.0000	50.000
Ni	0.2000	2.0000
Pb	0.1000	1.0000
Se	0.5000	5.0000
Th	0.2000	2.0000
Tl	0.1000	1.0000
U	0.1000	1.0000
V	0.5000	5.0000
Zn	1.0000	10.000

Parent Std No.: STD3107-09, ICP-MS LLCCV 2 Aliquot Amount (ml): 1.0000

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	0.2000	2.0000
Sb	0.2000	2.0000
Sn	1.0000	10.000

Reviewed By: LRD 07/02/2009

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
2	Cal Blank				1.0	07/02/09 17:27		
3	Cal Blank				1.0	07/02/09 17:31		
4	100 ppb				1.0	07/02/09 17:34		
5	ICV				1.0	07/02/09 17:37		
6	RLIV				1.0	07/02/09 17:41		
7	ICB				1.0	07/02/09 17:44		
8	RL STD				1.0	07/02/09 17:47		
9	AFCEE RL				1.0	07/02/09 17:51		
10	CHECK				1.0	07/02/09 17:54		
11	ALTSe				1.0	07/02/09 17:58		
12	ICSA				1.0	07/02/09 18:01		
13	ICSAB				1.0	07/02/09 18:04		
14	RINSE				1.0	07/02/09 18:08		
15	LR				1.0	07/02/09 18:11		
16	RINSE				1.0	07/02/09 18:14		
17	CCV				1.0	07/02/09 18:18		
18	CCB				1.0	07/02/09 18:21		
19	RLCV				1.0	07/02/09 18:24		
20	LFCCFB	D9F200000	9171051	MS	1.0	07/02/09 18:28		
21	LFCCFC	D9F200000	9171051	MS	1.0	07/02/09 18:31		
22	LE4RA	D9F170236-7	9171051	MS	1.0	07/02/09 18:34		
23	LE4RAP5	D9F170236	9171051		5.0	07/02/09 18:38		
24	LE4RAZ	D9F170236-7	9171051		1.0	07/02/09 18:41		
25	LE4RK	D9F170236-9	9171051	MS	1.0	07/02/09 18:45		
26	LE4RN	D9F170236-11	9171051	MS	1.0	07/02/09 18:48		
27	LE4R9	D9F170236-26	9171051	MS	1.0	07/02/09 18:51		
28	CCV				1.0	07/02/09 18:55		
29	CCB				1.0	07/02/09 18:58		
30	RLCV				1.0	07/02/09 19:01		
31	~~LE4TC~~	~~D9F170236-27~~	~~9171051~~	~~MS~~	~~1.0~~	~~07/02/09 19:05~~		
32	LE4TN	D9F170236-29	9171051	MS	1.0	07/02/09 19:09		
33	LE4TP	D9F170236-30	9171051	MS	1.0	07/02/09 19:12		
34	LE4TQ	D9F170236-31	9171051	MS	1.0	07/02/09 19:16		
35	LE4T4	D9F170236-36	9171051	MS	1.0	07/02/09 19:19		
36	LE4T9	D9F170236-39	9171051	MS	1.0	07/02/09 19:23		
37	LE4VA	D9F170236-40	9171051	MS	1.0	07/02/09 19:26		
38	~~LE4VT~~	~~D9F170236-45~~	~~9171051~~	~~MS~~	~~1.0~~	~~07/02/09 19:29~~	AT 7/6/09 Did not use.	
39	CCV				1.0	07/02/09 19:33		
40	CCB				1.0	07/02/09 19:36		
41	RLCV				1.0	07/02/09 19:40		
42	LFJDGB	D9F240000	9175365	46	1.0	07/02/09 19:43		
43	LFJDGC	D9F240000	9175365	46	1.0	07/02/09 19:46		
44	LFGCV	D9F230211-1	9175365	46	1.0	07/02/09 19:50		
45	LFGCVP5	D9F230211	9175365		5.0	07/02/09 19:53		
46	LFGCVZ	D9F230211-1	9175365		1.0	07/02/09 19:56		
47	LFGCVS	D9F230211-1	9175365	46	1.0	07/02/09 20:00		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
48	CCV				1.0	07/02/09 20:03		
49	CCB				1.0	07/02/09 20:07		
50	RLCV				1.0	07/02/09 20:10		
51	LFGCVD	D9F230211-1	9175365	46	1.0	07/02/09 20:13		
52	LFGC2	D9F230211-2	9175365	46	1.0	07/02/09 20:17		
53	LFGC8	D9F230211-3	9175365	46	1.0	07/02/09 20:20		
54	LFGC9	D9F230211-4	9175365	46	1.0	07/02/09 20:23		
55	LFGDA	D9F230211-5	9175365	46	1.0	07/02/09 20:27		
56	LFGDD	D9F230211-6	9175365	46	1.0	07/02/09 20:30		
57	CCV				1.0	07/02/09 20:34		
58	CCB				1.0	07/02/09 20:37		
59	RLCV				1.0	07/02/09 20:40		
60	ICSA				1.0	07/02/09 20:44		
61	ICSAB				1.0	07/02/09 20:47		
62	WASH				1.0	07/02/09 20:50		
63	CCV				1.0	07/02/09 20:54		
64	CCB				1.0	07/02/09 20:57		
65	RLCV				1.0	07/02/09 21:01		
66	LE4TC	D9F170236-27	9171051	MS	1.0	07/02/09 21:04		
67	LE4TN	D9F170236-29	9171051	MS	1.0	07/02/09 21:07		
68	LE4TP	D9F170236-30	9171051	MS	1.0	07/02/09 21:11		
69	LE4TQ	D9F170236-31	9171051	MS	1.0	07/02/09 21:14		
70	LE4T4	D9F170236-36	9171051	MS	1.0	07/02/09 21:18		
71	LE4T9	D9F170236-39	9171051	MS	1.0	07/02/09 21:21		
72	LE4VA	D9F170236-40	9171051	MS	1.0	07/02/09 21:24		
73	LE4VT	D9F170236-45	9171051	MS	1.0	07/02/09 21:28		
74	CCV				1.0	07/02/09 21:31		
75	CCB				1.0	07/02/09 21:35		
76	RLCV				1.0	07/02/09 21:38		
77	~~RINSE~~				1.0	07/02/09 21:41		
78	RINSE				1.0	07/02/09 21:45		
79	RINSE				1.0	07/02/09 21:48		
80	RINSE				1.0	07/02/09 21:51		
81	RINSE				1.0	07/02/09 21:55		
82	RINSE				1.0	07/02/09 21:58		
83	~~Cal Blank~~				1.0	07/02/09 22:01	V.T 7/6/09	
84	Cal Blank				1.0	07/02/09 22:05		
85	100 ppb				1.0	07/02/09 22:08		
86	CCV				1.0	07/02/09 22:11		
87	CCB				1.0	07/02/09 22:15		
88	RLCV				1.0	07/02/09 22:18		
89	LFM02B	D9F260000	9177095	MS	1.0	07/02/09 22:22		
90	LFM02C	D9F260000	9177095	MS	1.0	07/02/09 22:25		
91	LFKC2	D9F240311-1	9177095	MS	1.0	07/02/09 22:28		
92	LFKC3	D9F240311-2	9177095	MS	1.0	07/02/09 22:32		
93	LFKC4	D9F240311-3	9177095	MS	1.0	07/02/09 22:35		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
94	LFKC4P5	D9F240311	9177095		5.0	07/02/09 22:38		☐
95	LFKC4Z	D9F240311-3	9177095		1.0	07/02/09 22:42		☐
96	LFKC4S	D9F240311-3	9177095	MS	1.0	07/02/09 22:45		☐
97	LFKC4D	D9F240311-3	9177095	MS	1.0	07/02/09 22:49		☐
98	LFKC5	D9F240311-4	9177095	MS	1.0	07/02/09 22:52		☐
99	CCV				1.0	07/02/09 22:55		☐
100	CCB				1.0	07/02/09 22:59		☐
101	RLCV				1.0	07/02/09 23:02		☐
102	LFM0PB	D9F260000	9177090	46	1.0	07/02/09 23:05		☐
103	LFM0PC	D9F260000	9177090	46	1.0	07/02/09 23:09		☐
104	LFKC6	D9F240311-5	9177090	46	1.0	07/02/09 23:12		☐
105	LFKC7	D9F240311-6	9177090	46	1.0	07/02/09 23:16		☐
106	LFKC7P5	D9F240311	9177090		5.0	07/02/09 23:19		☐
107	LFKC7Z	D9F240311-6	9177090		1.0	07/02/09 23:22		☐
108	LFKC7S	D9F240311-6	9177090	46	1.0	07/02/09 23:26		☐
109	CCV				1.0	07/02/09 23:29		☐
110	CCB				1.0	07/02/09 23:32		☐
111	RLCV				1.0	07/02/09 23:36		☐
112	LFKC7D	D9F240311-6	9177090	46	1.0	07/02/09 23:39		☐
113	LFKC8	D9F240311-7	9177090	46	1.0	07/02/09 23:43		☐
114	LFKC9	D9F240311-8	9177090	46	1.0	07/02/09 23:46		☐
115	LFKDA	D9F240311-9	9177090	46	1.0	07/02/09 23:49		☐
116	LFKDC	D9F240311-10	9177090	46	1.0	07/02/09 23:53		☐
117	LFKDD	D9F240311-11	9177090	46	1.0	07/02/09 23:56		☐
118	CCV				1.0	07/03/09 00:00		☐
119	CCB				1.0	07/03/09 00:03		☐
120	RLCV				1.0	07/03/09 00:06		☐
121	~~LFT60B~~	~~D9F300000~~	~~9181137~~	~~MS~~	~~1.0~~	~~07/03/09 00:10~~		☐
122	LFT60C	D9F300000	9181137	MS	1.0	07/03/09 00:13		☐
123	LFTDG	D9F290160-1	9181137	MS	1.0	07/03/09 00:17		☐
124	LFTDGP5	D9F290160	9181137		5.0	07/03/09 00:20		☐
125	LFTDGZ	D9F290160-1	9181137		1.0	07/03/09 00:23		☐
126	LFTDGS	D9F290160-1	9181137	MS	1.0	07/03/09 00:27		☐
127	CCV				1.0	07/03/09 00:30		☐
128	CCB				1.0	07/03/09 00:34		☐
129	RLCV				1.0	07/03/09 00:37		☐
130	LFTDGD	D9F290160-1	9181137	MS	1.0	07/03/09 00:40		☐
131	LFTDJ	D9F290160-2	9181137	MS	1.0	07/03/09 00:44		☐
132	LFTDK	D9F290160-3	9181137	MS	1.0	07/03/09 00:47		☐
133	LFTDL	D9F290160-4	9181137	MS	1.0	07/03/09 00:51		☐
134	LFTDM	D9F290160-5	9181137	MS	1.0	07/03/09 00:54		☐
135	CCV				1.0	07/03/09 00:57		☐
136	CCB				1.0	07/03/09 01:01		☐
137	RLCV				1.0	07/03/09 01:04		☐
138	LFT67B	D9F300000	9181141	46	1.0	07/03/09 01:08		☐
139	~~LFT67C~~	~~D9F300000~~	~~9181141~~	~~46~~	~~1.0~~	~~07/03/09 01:11~~	VT 7/6/09 Did not use.	☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
140	~~LFTDN~~	~~D9F290160-6~~	~~9181141~~	~~46~~	~~1.0~~	~~07/03/09 01:14~~		
141	LFTDP	D9F290160-7	9181141	46	1.0	07/03/09 01:18		
142	LFTDQ	D9F290160-8	9181141	46	1.0	07/03/09 01:21		
143	LFTDT	D9F290160-9	9181141	46	1.0	07/03/09 01:24		
144	LFTDW	D9F290160-10	9181141	46	1.0	07/03/09 01:28		
145	CCV				1.0	07/03/09 01:31		
146	CCB				1.0	07/03/09 01:35		
147	RLCV				1.0	07/03/09 01:38		
148	LFTD2	D9F290160-11	9181141	46	1.0	07/03/09 01:41		
149	LFTD2P5	D9F290160	9181141		5.0	07/03/09 01:45		
150	LFTD2Z	D9F290160-11	9181141		1.0	07/03/09 01:48		
151	LFTD2S	D9F290160-11	9181141	46	1.0	07/03/09 01:52		
152	LFTD2D	D9F290160-11	9181141	46	1.0	07/03/09 01:55		
153	LFTD8	D9F290160-12	9181141	46	1.0	07/03/09 01:58		
154	LFTD9	D9F290160-13	9181141	46	1.0	07/03/09 02:02		
155	LFTED	D9F290160-14	9181141	46	1.0	07/03/09 02:05		
156	CCV				1.0	07/03/09 02:09		
157	CCB				1.0	07/03/09 02:12		
158	RLCV				1.0	07/03/09 02:15		
159	RINSE				1.0	07/03/09 02:19		
160	RINSE				1.0	07/03/09 02:22		
161	RINSE				1.0	07/03/09 02:26		
162	RINSE				1.0	07/03/09 02:29		
163	RINSE				1.0	07/03/09 02:32		
164	RINSE				1.0	07/03/09 02:36		
165	~~Cal Blank~~				~~1.0~~	~~07/03/09 02:39~~	KT 7/6/09 Did not use.	
166	Cal Blank				1.0	07/03/09 02:42		
167	100 ppb				1.0	07/03/09 02:46		
168	CCV				1.0	07/03/09 02:49		
169	CCB				1.0	07/03/09 02:53		
170	RLCV				1.0	07/03/09 02:56		
171	ICSA				1.0	07/03/09 02:59		
172	ICSAB				1.0	07/03/09 03:03		
173	WASH				1.0	07/03/09 03:06		
174	CCV				1.0	07/03/09 03:10		
175	CCB				1.0	07/03/09 03:13		
176	RLCV				1.0	07/03/09 03:16		
177	LFRWWBF	D9F290000	9180268	MD	1.0	07/03/09 03:20		
178	LFRWWCF	D9F290000	9180268	MD	1.0	07/03/09 03:23		
179	LFP1LF 10X	D9F260277-3	9180268	MD	10.0	07/03/09 03:26		
180	LFQ11F 10X	D9F270154-3	9180268	MD	10.0	07/03/09 03:30		
181	LFQ11P50F	D9F270154	9180268		50.0	07/03/09 03:33		
182	LFQ11ZF	D9F270154-3	9180268		1.0	07/03/09 03:37		
183	LFQ11SF 10X	D9F270154-3	9180268	MD	10.0	07/03/09 03:40		
184	LFQ11DF 10X	D9F270154-3	9180268	MD	10.0	07/03/09 03:43		
185	LFQ13F 10X	D9F270154-5	9180268	MD	10.0	07/03/09 03:47		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
186	CCV				1.0	07/03/09 03:50		☐
187	CCB				1.0	07/03/09 03:54		☐
188	RLCV				1.0	07/03/09 03:57		☐
189	LFRV2B	D9F290000	9180262	MS	1.0	07/03/09 04:00		☐
190	LFRV2C	D9F290000	9180262	MS	1.0	07/03/09 04:04		☐
191	LFP1G 10X	D9F260277-1	9180262	MS	10.0	07/03/09 04:07		☐
192	LFP1GP50	D9F260277	9180262		50.0	07/03/09 04:11		☐
193	LFP1GZ	D9F260277-1	9180262		1.0	07/03/09 04:14		☐
194	LFP1GS 10X	D9F260277-1	9180262	MS	10.0	07/03/09 04:17		☐
195	CCV				1.0	07/03/09 04:21		☐
196	CCB				1.0	07/03/09 04:24		☐
197	RLCV				1.0	07/03/09 04:27		☐
198	LFP1GD 10X	D9F260277-1	9180262	MS	10.0	07/03/09 04:31		☐
199	LFP1K 10X	D9F260277-2	9180262	MS	10.0	07/03/09 04:34		☐
200	LFQ02 10X	D9F270153-1	9180262	MS	10.0	07/03/09 04:38		☐
201	LFQ1Q 10X	D9F270154-1	9180262	MS	10.0	07/03/09 04:41		☐
202	LFQ10 10X	D9F270154-2	9180262	MS	10.0	07/03/09 04:44		☐
203	LFQ12 10X	D9F270154-4	9180262	MS	10.0	07/03/09 04:48		☐
204	CCV				1.0	07/03/09 04:51		☐
205	CCB				1.0	07/03/09 04:55		☐
206	RLCV				1.0	07/03/09 04:58		☐
207	~~RINSE~~				~~1.0~~	~~07/03/09 05:01~~		☐
208	RINSE				1.0	07/03/09 05:05		☐
209	RINSE				1.0	07/03/09 05:08		☐
210	RINSE				1.0	07/03/09 05:11		☐
211	RINSE				1.0	07/03/09 05:15		☐
212	RINSE				1.0	07/03/09 05:18		☐
213	~~Cal Blank~~				~~1.0~~	~~07/03/09 05:22~~	RT 7/6/09	☐
214	Cal Blank				1.0	07/03/09 05:25		☐
215	100 ppb				1.0	07/03/09 05:28		☐
216	CCV				1.0	07/03/09 05:32		☐
217	CCB				1.0	07/03/09 05:35		☐
218	RLCV				1.0	07/03/09 05:38		☐
219	LFTMDB	D9F290000	9180481	04	1.0	07/03/09 05:42		☐
220	LFTMDC	D9F290000	9180481	04	1.0	07/03/09 05:45		☐
221	LFNXL	D9F260175-1	9180481	04	1.0	07/03/09 05:49		☐
222	LFNXQ	D9F260175-2	9180481	04	1.0	07/03/09 05:52		☐
223	LFNXT	D9F260175-3	9180481	04	1.0	07/03/09 05:56		☐
224	LFNXW	D9F260175-4	9180481	04	1.0	07/03/09 05:59		☐
225	LFNXX	D9F260175-5	9180481	04	1.0	07/03/09 06:02		☐
226	LFQPE	D9F270122-1	9180481	04	1.0	07/03/09 06:06		☐
227	CCV				1.0	07/03/09 06:09		☐
228	CCB				1.0	07/03/09 06:13		☐
229	RLCV				1.0	07/03/09 06:16		☐
230	~~LFQPT~~	~~D9F270122-2~~	~~9180481~~	~~04~~	~~1.0~~	~~07/03/09 06:19~~		☐
231	~~LFQPX~~	~~D9F270122-3~~	~~9180481~~	~~04~~	~~1.0~~	~~07/03/09 06:23~~	RT 7/6/09 Did not use.	☐

Denver

RUN SUMMARY

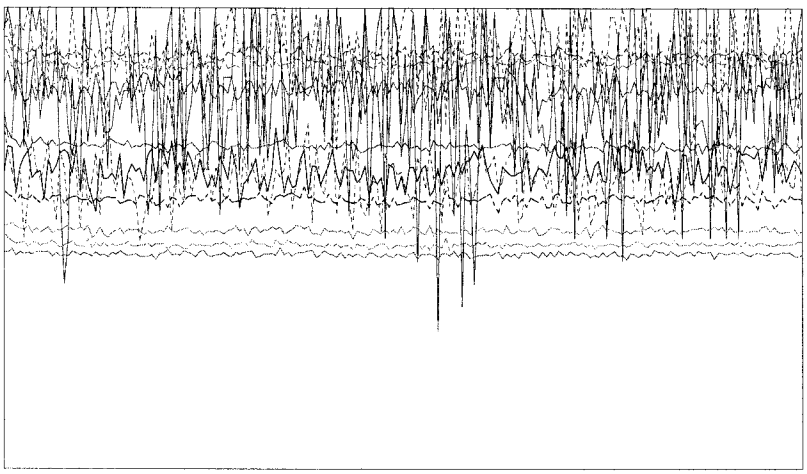
Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
232	LFQP2	D9F270122-4	9180481	04	1.0	07/03/09 06:26		☐
233	LFQP3	D9F270122-5	9180481	04	1.0	07/03/09 06:30		☐
234	LFQP5	D9F270122-6	9180481	04	1.0	07/03/09 06:33		☐
235	LFQP5P5	D9F270122	9180481		5.0	07/03/09 06:37		☐
236	LFQP5Z	D9F270122-6	9180481		1.0	07/03/09 06:40		☐
237	CCV				1.0	07/03/09 06:43		☐
238	CCB				1.0	07/03/09 06:47		☐
239	RLCV				1.0	07/03/09 06:50		☐
240	LFQP5S	D9F270122-6	9180481	04	1.0	07/03/09 06:54		☐
241	LFQP5D	D9F270122-6	9180481	04	1.0	07/03/09 06:57		☐
242	LFQQA	D9F270122-7	9180481	04	1.0	07/03/09 07:00		☐
243	LFQQG	D9F270122-8	9180481	04	1.0	07/03/09 07:04		☐
244	LFQQL	D9F270122-9	9180481	04	1.0	07/03/09 07:07		☐
245	LFQQP	D9F270122-10	9180481	04	1.0	07/03/09 07:11		☐
246	LFQQR	D9F270122-11	9180481	04	1.0	07/03/09 07:14		☐
247	CCV				1.0	07/03/09 07:17		☐
248	CCB				1.0	07/03/09 07:21		☐
249	RLCV				1.0	07/03/09 07:24		☐
250	LFRT8BF	D9F290000	9180238	MD	1.0	07/03/09 07:28		☐
251	LFRT8CF	D9F290000	9180238	MD	1.0	07/03/09 07:31		☐
252	LFNV6F 2X	D9F260164-1	9180238	MD	2.0	07/03/09 07:34		☐
253	LFNXLF	D9F260175-1	9180238	MD	1.0	07/03/09 07:38		☐
254	LFNXQF	D9F260175-2	9180238	MD	1.0	07/03/09 07:41		☐
255	LFNXQP5F	D9F260175	9180238		5.0	07/03/09 07:45		☐
256	CCV				1.0	07/03/09 07:48		☐
257	CCB				1.0	07/03/09 07:51		☐
258	RLCV				1.0	07/03/09 07:55		☐
259	LFNXQZF	D9F260175-2	9180238		1.0	07/03/09 07:58		☐
260	LFNXQSF	D9F260175-2	9180238	MD	1.0	07/03/09 08:02		☐
261	LFNXQDF	D9F260175-2	9180238	MD	1.0	07/03/09 08:05		☐
262	LFNXTF	D9F260175-3	9180238	MD	1.0	07/03/09 08:08		☐
263	LFNXWF	D9F260175-4	9180238	MD	1.0	07/03/09 08:12		☐
264	LFNXXF	D9F260175-5	9180238	MD	1.0	07/03/09 08:15	RLF 7/6/09 Did not use.	☐
265	CCV				1.0	07/03/09 08:19		☐
266	CCB				1.0	07/03/09 08:22		☐
267	RLCV				1.0	07/03/09 08:25		☐
268	LFRVEB	D9F290000	9180246	MS	1.0	07/03/09 08:29		☐
269	LFRVEC	D9F290000	9180246	MS	1.0	07/03/09 08:32		☐
270	LFNV6 2X	D9F260164-1	9180256	MS	2.0	07/03/09 08:36		☐
271	LFNV6P5	D9F260164	9180256		5.0	07/03/09 08:39		☐
272	LFNV6Z	D9F260164-1	9180256		1.0	07/03/09 08:42		☐
273	LFNV6S 2X	D9F260164-1	9180246	MS	2.0	07/03/09 08:46		☐
274	LFNV6D 2X	D9F260164-1	9180246	MS	2.0	07/03/09 08:49		☐
275	CCV				1.0	07/03/09 08:53		☐
276	CCB				1.0	07/03/09 08:56		☐
277	RLCV				1.0	07/03/09 08:59		☐

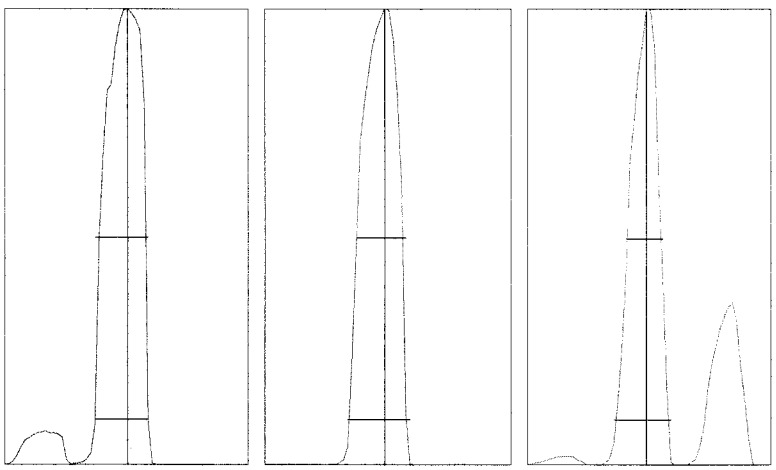
Tune Report

Tune File : NORM.U
Comment :



Integration Time: 0.1000 sec
Sampling Period: 1.5300 sec
n: 200
Oxide: 156/140 2.303%
Doubly Charged: 70/140 1.267%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1640.0	1652.2	2.82	0.40
7	50,000	23181.0	23270.7	1.05	0.50
59	50,000	25829.0	25831.6	1.20	0.30
63	100	70.0	81.5	12.40	0.60
70	1,000	640.0	650.4	5.15	0.60
75	20	24.0	17.2	25.72	0.60
78	200	194.0	182.1	8.34	0.50
89	50,000	44438.0	44018.2	0.98	0.80
115	100,000	49107.0	48640.4	1.04	0.90
118	200	111.0	126.0	9.13	0.80
137	10,000	5841.0	5846.3	1.51	0.80
205	50,000	45602.0	45024.8	1.18	1.20
238	100,000	70365.0	70144.9	1.16	1.30
156/140	5	2.255%	2.330%	4.56	
70/140	2	1.261%	1.284%	5.25	



m/z:	7	89	205
Height:	23,577	44,237	46,123
Axis:	7.05	89.00	205.00
W-50%:	0.65	0.60	0.45
W-10%:	0.6500	0.7500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Jul 02, 2009 16:12:11
Printed : Jul 02, 2009 16:12:14

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1550 W	Extract 1	:	0 V	AMU Gain	:	134
RF Matching	:	1.7 V	Extract 2	:	-175 V	AMU Offset	:	123
Smpl Depth	:	7.5 mm	Omega Bias-ce	:	-30 V	Axis Gain	:	1.0006
Torch-H	:	-0.8 mm	Omega Lens-ce	:	-0.2 V	Axis Offset	:	-0.02
Torch-V	:	-0.3 mm	Cell Entrance	:	-30 V	QP Bias	:	-10 V
Carrier Gas	:	0.83 L/min	QP Focus	:	5 V			
Makeup Gas	:	0.2 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1720 V
Sample Pump	:	--- rps	OctP RF	:	180 V	Pulse HV	:	1390 V
S/C Temp	:	2 degC	OctP Bias	:	-18 V			

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Generated : Jul 02, 2009 16:12:11
Printed : Jul 02, 2009 16:12:17

P/A Factor Tuning Report

Acquired:Jul 2 2009 04:31 pm

Mass[amu]	Element	P/A Factor
6	Li	0.059917
7	(Li)	Sensitivity too low
9	Be	0.067770
45	Sc	0.082015
51	V	0.083844
52	Cr	0.086930
53	(Cr)	Sensitivity too low
55	Mn	0.088862
59	Co	0.091909
60	Ni	0.093634
63	Cu	0.095913
66	Zn	0.095259
72	Ge	0.093959
75	As	0.093070
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
95	Mo	0.094455
98	(Mo)	0.094291
99	(Mo)	0.095897
106	(Cd)	0.100174
107	Ag	Sensitivity too low
108	(Cd)	0.100691
111	Cd	0.101084
114	Cd	0.101314
115	In	0.100349
118	Sn	0.099994
121	Sb	0.099814
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
205	Tl	0.109270
206	(Pb)	0.108330
207	(Pb)	0.108387
208	Pb	0.108123
232	Th	0.106785
238	U	0.106760

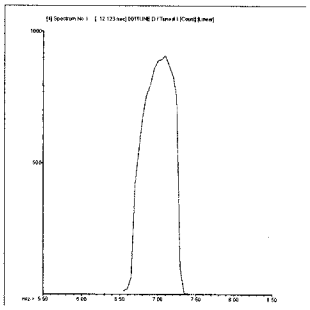
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1720 V
Pulse HV: 1390 V

200.8 QC Tune Report

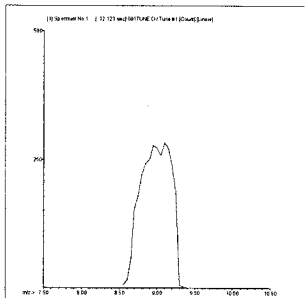
Data File: C:\ICPCHEM\1\DATA\AG070209D.B\001TUNE.D
Date Acquired: Jul 2 2009 05:24 pm
Acq. Method: tun_isis.M
Operator: TEL
Sample Name: 200.8 TUNE
Misc Info:
Vial Number: 4
Current Method: C:\ICPCHEM\1\METHODS\tun_isis.M

RSD (%)

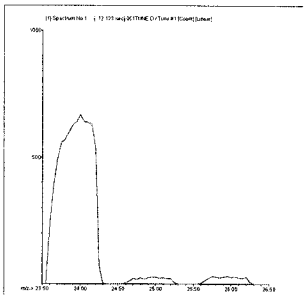
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
7 Li	18736	18245	19358	19013	18672	18386	**3.74**	5.00	
9 Be	2087	2042	2075	2087	2127	2102	**2.28**	5.00	
24 Mg	9125	9088	9038	9266	9054	9177	**3.04**	5.00	
59 Co	54496	54580	53978	54727	54457	54735	**1.99**	5.00	
115 In	802374	782591	836383	800840	797147	794906	**2.27**	5.00	
208 Pb	68333	68370	68983	68309	67968	68033	**1.00**	5.00	
238 U	144234	144446	144907	144132	143416	144266	**1.56**	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required 0.90
Flag:

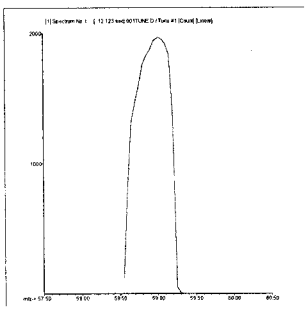


9 Be
Mass Calib.
Actual: 9.05
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



24 Mg
Mass Calib.
Actual: 24.05
Required: 23.90 - 24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\AG070209D.B\001TUNE.D



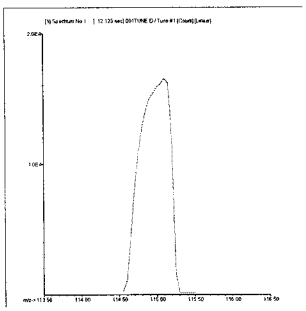
59 Co

Mass Calib.

Actual:	59.00		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.60		
Required:	0.90		
Flag:			



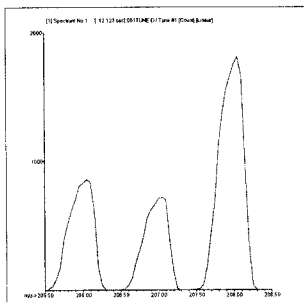
115 In

Mass Calib.

Actual:	115.05		
Required:	114.90	-	115.10
Flag:			

Peak Width

Actual:	0.55		
Required:	0.90		
Flag:			



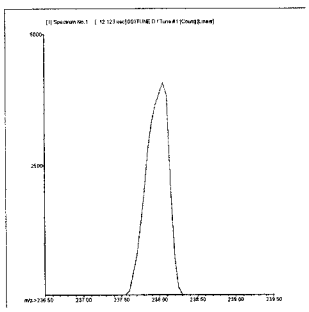
208 Pb

Mass Calib.

Actual:	208.00		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.55		
Required:	0.90		
Flag:			



238 U

Mass Calib.

Actual:	238.00		
Required:	237.90	-	238.10
Flag:			

Peak Width

Actual:	0.50		
Required:	0.90		
Flag:			

Tune Result: Pass

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\002CALB.D\002CALB.D#
Date Acquired:	Jul 2 2009 05:27 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	Cal Blank
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:28 pm
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-19	889.82
52	Cr	72	1	1257	15.52
55	Mn	72	1	150	6.67
59	Co	72	1	20	86.60
60	Ni	72	1	20	0.00
63	Cu	72	1	180	9.62
66	Zn	72	1	111	23.92
75	As	72	1	23	20.38
78	Se	72	1	20	86.60
95	Mo	72	1	30	33.34
107	Ag	115	1	20	50.00
111	Cd	115	1	4	251.91
118	Sn	115	1	170	21.21
121	Sb	115	1	8	49.49
137	Ba	115	1	26	7.53
205	Tl	165	1	142	25.82
208	Pb	165	1	230	23.73
232	Th	165	1	187	17.22
238	U	165	1	134	27.31

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	330381	0.39
45	Sc	1	742768	0.42
72	Ge	1	421900	0.35
115	In	1	1496154	0.77
165	Ho	1	3680882	1.27

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#
Date Acquired: Jul 2 2009 05:31 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: Cal Blank
Misc Info:
Vial Number: 2101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:28 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-46	276.35
52	Cr	72	1	1350	7.52
55	Mn	72	1	157	51.59
59	Co	72	1	20	50.00
60	Ni	72	1	43	70.50
63	Cu	72	1	190	15.79
66	Zn	72	1	121	18.26
75	As	72	1	26	15.39
78	Se	72	1	17	34.64
95	Mo	72	1	37	41.66
107	Ag	115	1	7	173.21
111	Cd	115	1	11	31.74
118	Sn	115	1	400	12.99
121	Sb	115	1	7	50.00
137	Ba	115	1	20	60.09
205	Tl	165	1	107	6.25
208	Pb	165	1	228	3.38
232	Th	165	1	183	25.19
238	U	165	1	80	22.05

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	327414	0.50
45	Sc	1	735158	0.40
72	Ge	1	419596	0.05
115	In	1	1473829	0.73
165	Ho	1	3670206	0.46

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\004ICAL.D\004ICAL.D#
Date Acquired: Jul 2 2009 05:34 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: 100 ppb
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:31 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	35511	1.30
51	V	72	1	493306	2.82
52	Cr	72	1	583384	2.00
55	Mn	72	1	550768	0.74
59	Co	72	1	847686	1.59
60	Ni	72	1	199501	2.03
63	Cu	72	1	492508	1.25
66	Zn	72	1	90787	2.05
75	As	72	1	52934	1.62
78	Se	72	1	8706	4.11
95	Mo	72	1	238838	0.60
107	Ag	115	1	844291	1.39
111	Cd	115	1	142187	1.97
118	Sn	115	1	367294	1.44
121	Sb	115	1	366871	1.35
137	Ba	115	1	156202	1.66
205	Tl	165	1	2186150	0.35
208	Pb	165	1	2940793	1.30
232	Th	165	1	2931259	0.71
238	U	165	1	3462419	1.72

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	312482	0.45	327414	95.4	30 - 120	
45	Sc	1	690303	1.07	735158	93.9	30 - 120	
72	Ge	1	400313	1.12	419596	95.4	30 - 120	
115	In	1	1448887	0.69	1473829	98.3	30 - 120	
165	Ho	1	3568324	1.35	3670206	97.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\005 ICV.D\005 ICV.D#
Date Acquired: Jul 2 2009 05:37 pm
Operator: TEL
Sample Name: ICV
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: ICV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	39.64	ppb	1.98	40	99.1	90 - 110	
51 V	72	1	40.02	ppb	1.12	40	100.1	90 - 110	
52 Cr	72	1	40.24	ppb	1.80	40	100.6	90 - 110	
55 Mn	72	1	40.84	ppb	1.38	40	102.1	90 - 110	
59 Co	72	1	39.74	ppb	0.99	40	99.4	90 - 110	
60 Ni	72	1	41.39	ppb	2.91	40	103.5	90 - 110	
63 Cu	72	1	40.38	ppb	1.60	40	101.0	90 - 110	
66 Zn	72	1	40.11	ppb	0.87	40	100.3	90 - 110	
75 As	72	1	39.90	ppb	1.41	40	99.8	90 - 110	
78 Se	72	1	38.25	ppb	5.25	40	95.6	90 - 110	
95 Mo	72	1	40.02	ppb	0.31	40	100.1	90 - 110	
107 Ag	115	1	40.32	ppb	0.04	40	100.8	90 - 110	
111 Cd	115	1	40.76	ppb	1.79	40	101.9	90 - 110	
118 Sn	115	1	39.90	ppb	1.58	40	99.8	90 - 110	
121 Sb	115	1	39.18	ppb	0.82	40	98.0	90 - 110	
137 Ba	115	1	40.53	ppb	1.71	40	101.3	90 - 110	
205 Tl	165	1	40.69	ppb	0.71	40	101.7	90 - 110	
208 Pb	165	1	40.81	ppb	0.67	40	102.0	90 - 110	
232 Th	165	1	43.95	ppb	0.31	40	109.9	90 - 110	
238 U	165	1	40.69	ppb	2.07	40	101.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	306141	0.42	327414	93.5	30 - 120	
45 Sc	1	679151	1.38	735158	92.4	30 - 120	
72 Ge	1	391095	0.86	419596	93.2	30 - 120	
115 In	1	1409419	1.03	1473829	95.6	30 - 120	
165 Ho	1	3499233	1.10	3670206	95.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\006WASH.D\006WASH.D#
Date Acquired:	Jul 2 2009 05:41 pm
Operator:	TEL
Sample Name:	RLIV
Misc Info:	
Vial Number:	1204
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	WASH
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.914 ppb	12.95	1.30	
51 V	72	1	4.994 ppb	2.35	6.50	
52 Cr	72	1	2.038 ppb	4.85	2.60	
55 Mn	72	1	1.031 ppb	2.79	1.30	
59 Co	72	1	1.001 ppb	2.22	1.30	
60 Ni	72	1	1.980 ppb	5.67	2.60	
63 Cu	72	1	2.033 ppb	0.35	2.60	
66 Zn	72	1	10.160 ppb	1.95	13.00	
75 As	72	1	5.132 ppb	0.72	6.50	
78 Se	72	1	5.905 ppb	24.08	6.50	
95 Mo	72	1	2.197 ppb	1.63	2.60	
107 Ag	115	1	5.234 ppb	0.30	6.50	
111 Cd	115	1	1.031 ppb	3.04	1.30	
118 Sn	115	1	10.500 ppb	1.60	13.00	
121 Sb	115	1	2.204 ppb	3.59	2.60	
137 Ba	115	1	1.032 ppb	2.51	1.30	
205 Tl	165	1	1.121 ppb	1.36	1.30	
208 Pb	165	1	1.058 ppb	1.60	1.30	
232 Th	165	1	2.760 ppb	4.59	2.60	
238 U	165	1	1.095 ppb	2.44	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308021	1.44	327414	94.1	30 - 120	
45 Sc	1	688055	0.22	735158	93.6	30 - 120	
72 Ge	1	393405	0.91	419596	93.8	30 - 120	
115 In	1	1414361	1.49	1473829	96.0	30 - 120	
165 Ho	1	3487280	0.57	3670206	95.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\007 ICB.D\007 ICB.D#
Date Acquired: Jul 2 2009 05:44 pm
Operator: TEL
Sample Name: ICB
Misc Info:
Vial Number: 2104
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: ICB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.00	ppb	0.00	1.00	
51 V	72	1	0.00	ppb	1142.50	1.00	
52 Cr	72	1	0.01	ppb	259.17	1.00	
55 Mn	72	1	0.00	ppb	58.19	1.00	
59 Co	72	1	0.00	ppb	2286.70	1.00	
60 Ni	72	1	0.00	ppb	1248.00	1.00	
63 Cu	72	1	0.00	ppb	103.08	1.00	
66 Zn	72	1	0.07	ppb	21.73	1.00	
75 As	72	1	0.01	ppb	278.64	1.00	
78 Se	72	1	0.47	ppb	37.44	1.00	
95 Mo	72	1	0.02	ppb	60.02	1.00	
107 Ag	115	1	0.00	ppb	18.22	1.00	
111 Cd	115	1	-0.01	ppb	94.37	1.00	
118 Sn	115	1	0.13	ppb	2.72	1.00	
121 Sb	115	1	0.09	ppb	7.98	1.00	
137 Ba	115	1	0.00	ppb	57.63	1.00	
205 Tl	165	1	0.02	ppb	13.80	1.00	
208 Pb	165	1	0.00	ppb	858.68	1.00	
232 Th	165	1	0.18	ppb	6.79	1.00	
238 U	165	1	0.00	ppb	61.54	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308390	0.70	327414	94.2	30 - 120	
45 Sc	1	693667	0.51	735158	94.4	30 - 120	
72 Ge	1	399109	0.91	419596	95.1	30 - 120	
115 In	1	1423062	0.84	1473829	96.6	30 - 120	
165 Ho	1	3536712	0.29	3670206	96.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

RL STD QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\008RLST.D\008RLST.D#
Date Acquired: Jul 2 2009 05:47 pm
Operator: TEL
Sample Name: RL STD
Misc Info:
Vial Number: 2105
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: RLSTD
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	0.86	ppb	16.05	1	86.2	50 - 150	
51 V	72	1	0.94	ppb	1.43	1	94.4	50 - 150	
52 Cr	72	1	0.95	ppb	2.47	1	95.1	50 - 150	
55 Mn	72	1	1.02	ppb	4.71	1	102.2	50 - 150	
59 Co	72	1	1.00	ppb	3.07	1	99.7	50 - 150	
60 Ni	72	1	1.12	ppb	3.96	1	111.6	50 - 150	
63 Cu	72	1	1.04	ppb	1.63	1	104.0	50 - 150	
66 Zn	72	1	10.29	ppb	0.67	10	102.9	50 - 150	
75 As	72	1	1.00	ppb	5.47	1	100.0	50 - 150	
78 Se	72	1	0.96	ppb	24.36	1	96.2	50 - 150	
95 Mo	72	1	1.02	ppb	3.33	1	101.6	50 - 150	
107 Ag	115	1	1.01	ppb	4.38	1	101.1	50 - 150	
111 Cd	115	1	1.07	ppb	2.10	1	106.8	50 - 150	
118 Sn	115	1	10.21	ppb	0.58	10	102.1	50 - 150	
121 Sb	115	1	1.08	ppb	2.77	1	108.0	50 - 150	
137 Ba	115	1	1.00	ppb	4.47	1	100.0	50 - 150	
205 Tl	165	1	1.04	ppb	0.42	1	103.8	50 - 150	
208 Pb	165	1	1.03	ppb	1.19	1	102.9	50 - 150	
232 Th	165	1	1.12	ppb	0.92	1	111.8	50 - 150	
238 U	165	1	1.06	ppb	1.43	1	105.5	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	309572	0.31	327414	94.6	30 - 120	
45 Sc	1	699023	0.37	735158	95.1	30 - 120	
72 Ge	1	402654	0.74	419596	96.0	30 - 120	
115 In	1	1423291	1.38	1473829	96.6	30 - 120	
165 Ho	1	3566640	0.31	3670206	97.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

AFCEE RL QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\009AFCE.D\009AFCE.D#
Date Acquired: Jul 2 2009 05:51 pm
Operator: TEL
Sample Name: AFCEE RL
Misc Info:
Vial Number: 2106
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: AFCEERL
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	0.18	ppb	33.05	0	103.4	80 - 120	
51 V	72	1	0.16	ppb	31.98	0	84.1	80 - 120	
52 Cr	72	1	0.17	ppb	9.94	0	90.0	80 - 120	
55 Mn	72	1	0.22	ppb	9.48	0	107.8	80 - 120	
59 Co	72	1	0.21	ppb	6.41	0	104.2	80 - 120	
60 Ni	72	1	0.16	ppb	31.71	0	72.7	80 - 120	
63 Cu	72	1	0.21	ppb	6.55	0	101.3	80 - 120	
66 Zn	72	1	1.94	ppb	1.22	2	94.4	80 - 120	
75 As	72	1	0.20	ppb	19.18	0	99.2	80 - 120	
78 Se	72	1	0.42	ppb	82.44	0	217.0	80 - 120	
95 Mo	72	1	0.24	ppb	7.76	0	118.4	80 - 120	
107 Ag	115	1	0.21	ppb	7.34	0	104.1	80 - 120	
111 Cd	115	1	0.21	ppb	25.37	0	99.2	80 - 120	
118 Sn	115	1	1.99	ppb	1.00	2	97.3	80 - 120	
121 Sb	115	1	0.23	ppb	7.16	0	106.5	80 - 120	
137 Ba	115	1	0.21	ppb	10.98	0	103.0	80 - 120	
205 Tl	165	1	0.21	ppb	1.72	0	98.8	80 - 120	
208 Pb	165	1	0.20	ppb	5.30	0	98.7	80 - 120	
232 Th	165	1	0.25	ppb	2.13	0	112.4	80 - 120	
238 U	165	1	0.21	ppb	1.95	0	98.2	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	313017	0.39	327414	95.6	30 - 120	
45 Sc	1	712854	0.43	735158	97.0	30 - 120	
72 Ge	1	409381	0.13	419596	97.6	30 - 120	
115 In	1	1457349	0.75	1473829	98.9	30 - 120	
165 Ho	1	3601780	0.38	3670206	98.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\010SMPL.D\010SMPL.D#
Date Acquired: Jul 2 2009 05:54 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: CHECK
Misc Info: STD2637-09
Vial Number: 2112
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	103.00	103.00	ppb	4.73	3600	
51 V	72	1	100.50	100.50	ppb	0.99	3600	
52 Cr	72	1	101.20	101.20	ppb	0.96	3600	
55 Mn	72	1	102.10	102.10	ppb	1.04	3600	
59 Co	72	1	101.10	101.10	ppb	0.98	3600	
60 Ni	72	1	101.20	101.20	ppb	0.82	3600	
63 Cu	72	1	101.30	101.30	ppb	1.28	3600	
66 Zn	72	1	100.30	100.30	ppb	1.33	3600	
75 As	72	1	102.00	102.00	ppb	0.75	3600	
78 Se	72	1	101.70	101.70	ppb	2.81	3600	
95 Mo	72	1	0.02	0.02	ppb	97.88	3600	
107 Ag	115	1	102.40	102.40	ppb	1.37	3600	
111 Cd	115	1	103.10	103.10	ppb	2.15	3600	
118 Sn	115	1	0.00	0.00	ppb	321.09	3600	
121 Sb	115	1	0.03	0.03	ppb	14.55	3600	
137 Ba	115	1	104.00	104.00	ppb	1.68	3600	
205 Tl	165	1	100.70	100.70	ppb	0.45	3600	
208 Pb	165	1	102.00	102.00	ppb	1.70	3600	
232 Th	165	1	102.50	102.50	ppb	1.22	1000	
238 U	165	1	101.70	101.70	ppb	1.58	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	306083	0.24	327414	93.5	30 - 120	
45 Sc	1	684899	0.24	735158	93.2	30 - 120	
72 Ge	1	394804	0.46	419596	94.1	30 - 120	
115 In	1	1420410	0.24	1473829	96.4	30 - 120	
165 Ho	1	3560096	0.65	3670206	97.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\011SMPL.D\011SMPL.D#
Date Acquired:	Jul 2 2009 05:58 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	ALTSe
Misc Info:	2 ppb
Vial Number:	2107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:36 pm
Sample Type:	SA
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	0.00	0.00	ppb	541.38	3600	
52 Cr	72	1	0.00	0.00	ppb	1921.30	3600	
55 Mn	72	1	0.01	0.01	ppb	48.21	3600	
59 Co	72	1	0.01	0.01	ppb	52.60	3600	
60 Ni	72	1	0.01	0.01	ppb	60.57	3600	
63 Cu	72	1	0.04	0.04	ppb	24.19	3600	
66 Zn	72	1	0.32	0.32	ppb	5.11	3600	
75 As	72	1	0.01	0.01	ppb	245.03	3600	
78 Se	72	1	1.87	1.87	ppb	37.77	3600	
95 Mo	72	1	0.00	0.00	ppb	52.14	3600	
107 Ag	115	1	0.01	0.01	ppb	0.63	3600	
111 Cd	115	1	0.00	0.00	ppb	1225.90	3600	
118 Sn	115	1	-0.01	-0.01	ppb	94.40	3600	
121 Sb	115	1	0.01	0.01	ppb	63.39	3600	
137 Ba	115	1	0.01	0.01	ppb	180.67	3600	
205 Tl	165	1	0.04	0.04	ppb	6.17	3600	
208 Pb	165	1	0.01	0.01	ppb	22.64	3600	
232 Th	165	1	0.99	0.99	ppb	16.18	1000	
238 U	165	1	0.01	0.01	ppb	3.90	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308172	1.06	327414	94.1	30 - 120	
45 Sc	1	704293	0.24	735158	95.8	30 - 120	
72 Ge	1	404504	0.36	419596	96.4	30 - 120	
115 In	1	1437294	0.56	1473829	97.5	30 - 120	
165 Ho	1	3536472	0.55	3670206	96.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\012ICSA.D\012ICSA.D#
Date Acquired: Jul 2 2009 06:01 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSA
Misc Info:
Vial Number: 2108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	6	1	0.02 ppb	86.58	1.00	
51 V	72	1	0.00 ppb	13284.00	1.00	
52 Cr	72	1	1.03 ppb	0.70	1.00	
55 Mn	72	1	2.15 ppb	1.38	1.00	
59 Co	72	1	0.03 ppb	17.53	1.00	
60 Ni	72	1	0.78 ppb	9.25	1.00	
63 Cu	72	1	0.25 ppb	9.01	1.00	
66 Zn	72	1	2.94 ppb	0.29	10.00	
75 As	72	1	0.12 ppb	19.65	1.00	
78 Se	72	1	0.23 ppb	59.06	1.00	
95 Mo	72	1	2103.00 ppb	1.18	2000.00	
107 Ag	115	1	0.06 ppb	23.27	1.00	
111 Cd	115	1	0.38 ppb	16.61	1.00	
118 Sn	115	1	0.09 ppb	37.94	10.00	
121 Sb	115	1	0.25 ppb	4.58	1.00	
137 Ba	115	1	1.60 ppb	7.10	1.00	
205 Tl	165	1	0.04 ppb	12.66	1.00	
208 Pb	165	1	0.13 ppb	3.71	1.00	
232 Th	165	1	0.32 ppb	21.74	1.00	
238 U	165	1	0.03 ppb	4.89	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	295380	0.65	327414	90.2	30 - 120	
45 Sc	1	615890	0.12	735158	83.8	30 - 120	
72 Ge	1	335887	0.64	419596	80.1	30 - 120	
115 In	1	1215094	0.94	1473829	82.4	30 - 120	
165 Ho	1	3169706	0.35	3670206	86.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Nnumber of ISTD Failures Allowed

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\013ICSB.D\013ICSB.D#
Date Acquired: Jul 2 2009 06:04 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSAB
Misc Info:
Vial Number: 2109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSAB
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	6		1	92.93	1.83	100	92.9	80 - 120	
51 V	72		1	103.60	0.31	100	103.6	80 - 120	
52 Cr	72		1	101.40	1.40	100	101.4	80 - 120	
55 Mn	72		1	103.10	1.02	100	103.1	80 - 120	
59 Co	72		1	95.73	0.90	100	95.7	80 - 120	
60 Ni	72		1	92.26	0.74	100	92.3	80 - 120	
63 Cu	72		1	87.47	1.15	100	87.5	80 - 120	
66 Zn	72		1	100.60	1.34	100	100.6	80 - 120	
75 As	72		1	101.20	1.43	100	101.2	80 - 120	
78 Se	72		1	106.90	2.76	100	106.9	80 - 120	
95 Mo	72		1	2217.00	1.49	2100	105.6	80 - 120	
107 Ag	115		1	85.36	3.82	100	85.4	80 - 120	
111 Cd	115		1	96.53	1.82	100	96.5	80 - 120	
118 Sn	115		1	104.10	2.98	100	104.1	80 - 120	
121 Sb	115		1	105.20	2.52	100	105.2	80 - 120	
137 Ba	115		1	107.30	2.41	100	107.3	80 - 120	
205 Tl	165		1	93.57	1.44	100	93.6	80 - 120	
208 Pb	165		1	93.32	2.21	100	93.3	80 - 120	
232 Th	165		1	105.70	1.53	100	105.7	80 - 120	
238 U	165		1	100.60	1.87	100	100.6	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	296274	1.16	327414	90.5	30 - 120	
45 Sc	1	594216	0.22	735158	80.8	30 - 120	
72 Ge	1	325915	1.12	419596	77.7	30 - 120	
115 In	1	1188399	0.92	1473829	80.6	30 - 120	
165 Ho	1	3164827	0.90	3670206	86.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\014SMPL.D\014SMPL.D#
Date Acquired:	Jul 2 2009 06:08 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	RINSE
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:36 pm
Sample Type:	SA
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.01	0.01	ppb	173.21	3600	
51 V	72	1	0.00	0.00	ppb	2099.80	3600	
52 Cr	72	1	-0.02	-0.02	ppb	29.26	3600	
55 Mn	72	1	0.01	0.01	ppb	191.54	3600	
59 Co	72	1	0.01	0.01	ppb	66.21	3600	
60 Ni	72	1	0.00	0.00	ppb	217.40	3600	
63 Cu	72	1	0.02	0.02	ppb	95.78	3600	
66 Zn	72	1	0.00	0.00	ppb	763.63	3600	
75 As	72	1	-0.01	-0.01	ppb	111.97	3600	
78 Se	72	1	0.33	0.33	ppb	156.59	3600	
95 Mo	72	1	1.17	1.17	ppb	6.99	3600	
107 Ag	115	1	0.01	0.01	ppb	45.09	3600	
111 Cd	115	1	0.00	0.00	ppb	1474.40	3600	
118 Sn	115	1	0.01	0.01	ppb	239.37	3600	
121 Sb	115	1	0.05	0.05	ppb	2.73	3600	
137 Ba	115	1	0.00	0.00	ppb	176.49	3600	
205 Tl	165	1	0.01	0.01	ppb	24.13	3600	
208 Pb	165	1	0.01	0.01	ppb	27.17	3600	
232 Th	165	1	0.47	0.47	ppb	15.39	1000	
238 U	165	1	0.02	0.02	ppb	10.93	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	344396	0.62	327414	105.2	30 - 120	
45 Sc	1	715937	0.17	735158	97.4	30 - 120	
72 Ge	1	416017	0.25	419596	99.1	30 - 120	
115 In	1	1467783	1.12	1473829	99.6	30 - 120	
165 Ho	1	3676143	0.31	3670206	100.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Linear Dynamic Range Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\015 LR.D\015 LR.D#
Date Acquired: Jul 2 2009 06:11 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR
Misc Info:
Vial Number: 2110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: LR
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	988.30 ppb	0.62	1000	98.8	90 - 110	
51 V	72	1	962.90 ppb	2.34	1000	96.3	90 - 110	
52 Cr	72	1	970.70 ppb	0.58	1000	97.1	90 - 110	
55 Mn	72	1	985.10 ppb	0.14	1000	98.5	90 - 110	
59 Co	72	1	955.70 ppb	0.41	1000	95.6	90 - 110	
60 Ni	72	1	994.40 ppb	0.30	1000	99.4	90 - 110	
63 Cu	72	1	963.60 ppb	0.13	1000	96.4	90 - 110	
66 Zn	72	1	1002.00 ppb	0.17	1000	100.2	90 - 110	
75 As	72	1	993.20 ppb	0.37	1000	99.3	90 - 110	
78 Se	72	1	987.50 ppb	0.23	1000	98.8	90 - 110	
95 Mo	72	1	1022.00 ppb	0.89	1000	102.2	90 - 110	
107 Ag	115	1	967.10 ppb	0.77	1000	96.7	90 - 110	
111 Cd	115	1	1032.00 ppb	0.99	1000	103.2	90 - 110	
118 Sn	115	1	1006.00 ppb	0.90	1000	100.6	90 - 110	
121 Sb	115	1	1005.00 ppb	1.61	1000	100.5	90 - 110	
137 Ba	115	1	1029.00 ppb	1.06	1000	102.9	90 - 110	
205 Tl	165	1	948.60 ppb	1.76	1000	94.9	90 - 110	
208 Pb	165	1	958.90 ppb	1.72	1000	95.9	90 - 110	
232 Th	165	1	1038.00 ppb	2.14	1000	103.8	90 - 110	
238 U	165	1	983.80 ppb	1.32	1000	98.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	321694	1.14	327414	98.3	30 - 120	
45 Sc	1	683351	1.12	735158	93.0	30 - 120	
72 Ge	1	394574	1.02	419596	94.0	30 - 120	
115 In	1	1414979	0.33	1473829	96.0	30 - 120	
165 Ho	1	3618336	1.02	3670206	98.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\016SMPL.D\016SMPL.D#
Date Acquired: Jul 2 2009 06:14 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.09	0.09	ppb	34.61	3600	
51 V	72	1	0.10	0.10	ppb	24.09	3600	
52 Cr	72	1	0.06	0.06	ppb	44.44	3600	
55 Mn	72	1	0.07	0.07	ppb	36.19	3600	
59 Co	72	1	0.06	0.06	ppb	5.78	3600	
60 Ni	72	1	0.05	0.05	ppb	5.45	3600	
63 Cu	72	1	0.07	0.07	ppb	21.96	3600	
66 Zn	72	1	0.06	0.06	ppb	50.82	3600	
75 As	72	1	0.09	0.09	ppb	28.68	3600	
78 Se	72	1	0.55	0.55	ppb	11.38	3600	
95 Mo	72	1	0.76	0.76	ppb	10.41	3600	
107 Ag	115	1	0.06	0.06	ppb	16.99	3600	
111 Cd	115	1	0.06	0.06	ppb	54.88	3600	
118 Sn	115	1	1.58	1.58	ppb	7.59	3600	
121 Sb	115	1	0.63	0.63	ppb	2.90	3600	
137 Ba	115	1	0.07	0.07	ppb	18.44	3600	
205 Tl	165	1	0.12	0.12	ppb	11.62	3600	
208 Pb	165	1	0.06	0.06	ppb	18.00	3600	
232 Th	165	1	3.05	3.05	ppb	14.34	1000	
238 U	165	1	0.14	0.14	ppb	4.97	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	333318	0.10	327414	101.8	30 - 120	
45 Sc	1	727635	0.35	735158	99.0	30 - 120	
72 Ge	1	416414	0.57	419596	99.2	30 - 120	
115 In	1	1452903	1.15	1473829	98.6	30 - 120	
165 Ho	1	3630559	0.56	3670206	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\017 CCV.D\017 CCV.D#
Date Acquired: Jul 2 2009 06:18 pm
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.60	ppb	3.38	50	99.2	90 - 110	
51 V	72	1	49.68	ppb	1.72	50	99.4	90 - 110	
52 Cr	72	1	50.13	ppb	1.49	50	100.3	90 - 110	
55 Mn	72	1	50.82	ppb	0.56	50	101.6	90 - 110	
59 Co	72	1	49.99	ppb	1.60	50	100.0	90 - 110	
60 Ni	72	1	50.12	ppb	1.73	50	100.2	90 - 110	
63 Cu	72	1	50.54	ppb	0.70	50	101.1	90 - 110	
66 Zn	72	1	49.63	ppb	1.20	50	99.3	90 - 110	
75 As	72	1	50.37	ppb	1.72	50	100.7	90 - 110	
78 Se	72	1	49.33	ppb	6.65	50	98.7	90 - 110	
95 Mo	72	1	50.42	ppb	1.21	50	100.8	90 - 110	
107 Ag	115	1	50.25	ppb	0.72	50	100.5	90 - 110	
111 Cd	115	1	50.31	ppb	0.64	50	100.6	90 - 110	
118 Sn	115	1	50.68	ppb	1.29	50	101.4	90 - 110	
121 Sb	115	1	50.46	ppb	0.67	50	100.9	90 - 110	
137 Ba	115	1	51.07	ppb	0.77	50	102.1	90 - 110	
205 Tl	165	1	49.66	ppb	1.87	50	99.3	90 - 110	
208 Pb	165	1	50.48	ppb	1.82	50	101.0	90 - 110	
232 Th	165	1	51.30	ppb	0.98	50	102.6	90 - 110	
238 U	165	1	50.49	ppb	2.17	50	101.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	330223	1.94	327414	100.9	30 - 120	
45 Sc	1	721303	0.77	735158	98.1	30 - 120	
72 Ge	1	412466	0.58	419596	98.3	30 - 120	
115 In	1	1477629	1.09	1473829	100.3	30 - 120	
165 Ho	1	3629005	1.45	3670206	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\018 CCB.D\018 CCB.D#
Date Acquired: Jul 2 2009 06:21 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.015	ppb	113.60	1.00	
52 Cr	72	1	0.003	ppb	775.23	1.00	
55 Mn	72	1	-0.002	ppb	474.55	1.00	
59 Co	72	1	0.004	ppb	67.07	1.00	
60 Ni	72	1	0.000	ppb	6668.50	1.00	
63 Cu	72	1	0.005	ppb	97.86	1.00	
66 Zn	72	1	0.018	ppb	8.02	1.00	
75 As	72	1	0.016	ppb	23.00	1.00	
78 Se	72	1	0.469	ppb	22.90	1.00	
95 Mo	72	1	0.165	ppb	31.85	1.00	
107 Ag	115	1	0.014	ppb	21.84	1.00	
111 Cd	115	1	-0.005	ppb	93.43	1.00	
118 Sn	115	1	0.417	ppb	5.26	1.00	
121 Sb	115	1	0.130	ppb	12.95	1.00	
137 Ba	115	1	0.003	ppb	44.46	1.00	
205 Tl	165	1	0.035	ppb	10.11	1.00	
208 Pb	165	1	0.006	ppb	40.89	1.00	
232 Th	165	1	0.858	ppb	12.87	1.00	
238 U	165	1	0.013	ppb	15.08	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	332471	0.74	327414	101.5	30 - 120	
45 Sc	1	734511	0.46	735158	99.9	30 - 120	
72 Ge	1	423798	0.67	419596	101.0	30 - 120	
115 In	1	1489090	0.47	1473829	101.0	30 - 120	
165 Ho	1	3648589	0.60	3670206	99.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\019WASH.D\019WASH.D#
Date Acquired: Jul 2 2009 06:24 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.200 ppb	3.93	1.30	
51 V	72	1	4.986 ppb	4.00	6.50	
52 Cr	72	1	2.020 ppb	1.12	2.60	
55 Mn	72	1	1.043 ppb	4.76	1.30	
59 Co	72	1	1.020 ppb	2.70	1.30	
60 Ni	72	1	2.041 ppb	2.94	2.60	
63 Cu	72	1	2.085 ppb	2.45	2.60	
66 Zn	72	1	10.220 ppb	2.58	13.00	
75 As	72	1	5.149 ppb	5.20	6.50	
78 Se	72	1	5.652 ppb	8.54	6.50	
95 Mo	72	1	2.189 ppb	6.40	2.60	
107 Ag	115	1	5.244 ppb	2.63	6.50	
111 Cd	115	1	1.014 ppb	5.41	1.30	
118 Sn	115	1	10.660 ppb	0.75	13.00	
121 Sb	115	1	2.054 ppb	3.92	2.60	
137 Ba	115	1	1.086 ppb	6.02	1.30	
205 Tl	165	1	1.089 ppb	0.92	1.30	
208 Pb	165	1	1.057 ppb	2.02	1.30	
232 Th	165	1	2.330 ppb	1.60	2.60	
238 U	165	1	1.072 ppb	1.83	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	329850	1.27	327414	100.7	30 - 120	
45 Sc	1	736964	0.17	735158	100.2	30 - 120	
72 Ge	1	423846	0.99	419596	101.0	30 - 120	
115 In	1	1487625	0.79	1473829	100.9	30 - 120	
165 Ho	1	3629504	0.35	3670206	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\057 CCV.D\057 CCV.D#
Date Acquired:	Jul 2 2009 08:34 pm
Operator:	TEL
Sample Name:	CCV
Misc Info:	
Vial Number:	1107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	CCV
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.17	ppb	3.85	50	100.3	90 - 110	
51 V	72	1	47.92	ppb	1.37	50	95.8	90 - 110	
52 Cr	72	1	47.24	ppb	1.17	50	94.5	90 - 110	
55 Mn	72	1	48.38	ppb	0.42	50	96.8	90 - 110	
59 Co	72	1	48.26	ppb	1.07	50	96.5	90 - 110	
60 Ni	72	1	48.73	ppb	2.40	50	97.5	90 - 110	
63 Cu	72	1	47.98	ppb	1.18	50	96.0	90 - 110	
66 Zn	72	1	47.65	ppb	1.68	50	95.3	90 - 110	
75 As	72	1	50.03	ppb	1.56	50	100.1	90 - 110	
78 Se	72	1	51.00	ppb	8.24	50	102.0	90 - 110	
95 Mo	72	1	49.58	ppb	0.84	50	99.2	90 - 110	
107 Ag	115	1	47.55	ppb	1.36	50	95.1	90 - 110	
111 Cd	115	1	48.02	ppb	1.71	50	96.0	90 - 110	
118 Sn	115	1	48.76	ppb	1.96	50	97.5	90 - 110	
121 Sb	115	1	49.52	ppb	1.44	50	99.0	90 - 110	
137 Ba	115	1	51.06	ppb	1.84	50	102.1	90 - 110	
205 Tl	165	1	50.93	ppb	0.89	50	101.9	90 - 110	
208 Pb	165	1	51.15	ppb	1.47	50	102.3	90 - 110	
232 Th	165	1	51.63	ppb	1.15	50	103.3	90 - 110	
238 U	165	1	52.24	ppb	0.91	50	104.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	245104	0.18	327414	74.9	30 - 120	
45 Sc	1	595639	1.11	735158	81.0	30 - 120	
72 Ge	1	350117	0.52	419596	83.4	30 - 120	
115 In	1	1318797	1.57	1473829	89.5	30 - 120	
165 Ho	1	3221597	0.04	3670206	87.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\058 CCB.D\058 CCB.D#
Date Acquired: Jul 2 2009 08:37 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.005	ppb	725.15	1.00	
52 Cr	72	1	-0.012	ppb	94.51	1.00	
55 Mn	72	1	-0.004	ppb	181.17	1.00	
59 Co	72	1	0.002	ppb	93.99	1.00	
60 Ni	72	1	-0.015	ppb	37.43	1.00	
63 Cu	72	1	0.003	ppb	235.05	1.00	
66 Zn	72	1	0.007	ppb	240.51	1.00	
75 As	72	1	0.000	ppb	2212.70	1.00	
78 Se	72	1	0.073	ppb	462.86	1.00	
95 Mo	72	1	0.038	ppb	40.22	1.00	
107 Ag	115	1	0.003	ppb	27.51	1.00	
111 Cd	115	1	0.002	ppb	660.62	1.00	
118 Sn	115	1	0.141	ppb	52.03	1.00	
121 Sb	115	1	0.053	ppb	1.97	1.00	
137 Ba	115	1	0.000	ppb	26741.00	1.00	
205 Tl	165	1	0.019	ppb	7.76	1.00	
208 Pb	165	1	0.004	ppb	22.00	1.00	
232 Th	165	1	0.917	ppb	13.10	1.00	
238 U	165	1	0.008	ppb	10.22	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	246403	0.74	327414	75.3	30 - 120	
45 Sc	1	608397	0.86	735158	82.8	30 - 120	
72 Ge	1	358356	0.81	419596	85.4	30 - 120	
115 In	1	1310454	0.45	1473829	88.9	30 - 120	
165 Ho	1	3265872	0.46	3670206	89.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\059WASH.D\059WASH.D#
Date Acquired: Jul 2 2009 08:40 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.866 ppb	13.77	1.30	
51 V	72	1	5.112 ppb	2.34	6.50	
52 Cr	72	1	2.031 ppb	7.54	2.60	
55 Mn	72	1	1.022 ppb	1.91	1.30	
59 Co	72	1	0.997 ppb	3.60	1.30	
60 Ni	72	1	1.993 ppb	9.78	2.60	
63 Cu	72	1	1.921 ppb	3.94	2.60	
66 Zn	72	1	9.768 ppb	4.11	13.00	
75 As	72	1	5.258 ppb	4.32	6.50	
78 Se	72	1	7.468 ppb	7.51	6.50	
95 Mo	72	1	2.046 ppb	7.56	2.60	
107 Ag	115	1	5.026 ppb	2.34	6.50	
111 Cd	115	1	0.971 ppb	4.61	1.30	
118 Sn	115	1	10.240 ppb	2.26	13.00	
121 Sb	115	1	1.981 ppb	1.49	2.60	
137 Ba	115	1	1.083 ppb	4.65	1.30	
205 Tl	165	1	1.077 ppb	2.31	1.30	
208 Pb	165	1	1.056 ppb	0.53	1.30	
232 Th	165	1	2.341 ppb	1.38	2.60	
238 U	165	1	1.091 ppb	2.86	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	247230	0.67	327414	75.5	30 - 120	
45 Sc	1	613320	0.29	735158	83.4	30 - 120	
72 Ge	1	359206	0.45	419596	85.6	30 - 120	
115 In	1	1327497	1.55	1473829	90.1	30 - 120	
165 Ho	1	3268023	0.23	3670206	89.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\060ICSA.D\060ICSA.D#
Date Acquired: Jul 2 2009 08:44 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSA
Misc Info:
Vial Number: 2108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	6	1	0.04 ppb	0.41	1.00	
51 V	72	1	-0.14 ppb	76.82	1.00	
52 Cr	72	1	0.93 ppb	1.44	1.00	
55 Mn	72	1	2.12 ppb	4.53	1.00	
59 Co	72	1	0.04 ppb	20.32	1.00	
60 Ni	72	1	0.72 ppb	8.48	1.00	
63 Cu	72	1	0.29 ppb	7.11	1.00	
66 Zn	72	1	2.89 ppb	1.39	10.00	
75 As	72	1	0.17 ppb	15.36	1.00	
78 Se	72	1	0.19 ppb	127.00	1.00	
95 Mo	72	1	2086.00 ppb	0.84	2000.00	
107 Ag	115	1	0.07 ppb	20.32	1.00	
111 Cd	115	1	0.54 ppb	52.04	1.00	
118 Sn	115	1	0.22 ppb	6.57	10.00	
121 Sb	115	1	0.27 ppb	3.82	1.00	
137 Ba	115	1	1.54 ppb	1.82	1.00	
205 Tl	165	1	0.04 ppb	7.00	1.00	
208 Pb	165	1	0.13 ppb	6.92	1.00	
232 Th	165	1	0.23 ppb	19.33	1.00	
238 U	165	1	0.02 ppb	5.83	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	219743	0.41	327414	67.1	30 - 120	
45 Sc	1	515562	1.03	735158	70.1	30 - 120	
72 Ge	1	289244	1.50	419596	68.9	30 - 120	
115 In	1	1071271	1.43	1473829	72.7	30 - 120	
165 Ho	1	2795076	0.76	3670206	76.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Nnumber of ISTD Failures Allowed

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\061ICSB.D\061ICSB.D#
Date Acquired: Jul 2 2009 08:47 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSAB
Misc Info:
Vial Number: 2109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSAB
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	6		1	98.53	0.60	100	98.5	80 - 120	
51 V	72		1	102.70	0.68	100	102.7	80 - 120	
52 Cr	72		1	98.62	1.27	100	98.6	80 - 120	
55 Mn	72		1	100.30	0.60	100	100.3	80 - 120	
59 Co	72		1	95.00	1.30	100	95.0	80 - 120	
60 Ni	72		1	91.50	1.50	100	91.5	80 - 120	
63 Cu	72		1	87.58	1.19	100	87.6	80 - 120	
66 Zn	72		1	96.46	0.14	100	96.5	80 - 120	
75 As	72		1	104.10	0.85	100	104.1	80 - 120	
78 Se	72		1	111.50	3.55	100	111.5	80 - 120	
95 Mo	72		1	2229.00	0.24	2100	106.1	80 - 120	
107 Ag	115		1	83.19	1.42	100	83.2	80 - 120	
111 Cd	115		1	93.31	1.55	100	93.3	80 - 120	
118 Sn	115		1	100.80	2.22	100	100.8	80 - 120	
121 Sb	115		1	102.10	1.91	100	102.1	80 - 120	
137 Ba	115		1	108.80	2.20	100	108.8	80 - 120	
205 Tl	165		1	93.85	0.91	100	93.9	80 - 120	
208 Pb	165		1	93.28	1.01	100	93.3	80 - 120	
232 Th	165		1	108.10	1.63	100	108.1	80 - 120	
238 U	165		1	103.30	1.42	100	103.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	227224	0.69	327414	69.4	30 - 120	
45 Sc	1	514360	0.24	735158	70.0	30 - 120	
72 Ge	1	287157	0.28	419596	68.4	30 - 120	
115 In	1	1083805	0.90	1473829	73.5	30 - 120	
165 Ho	1	2813323	0.77	3670206	76.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\062WASH.D\062WASH.D#
Date Acquired:	Jul 2 2009 08:50 pm
Operator:	TEL
Sample Name:	WASH
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	WASH
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.012 ppb	173.23	1.30	
51 V	72	1	-0.006 ppb	498.31	6.50	
52 Cr	72	1	-0.037 ppb	19.84	2.60	
55 Mn	72	1	0.019 ppb	44.71	1.30	
59 Co	72	1	0.011 ppb	54.83	1.30	
60 Ni	72	1	0.008 ppb	148.11	2.60	
63 Cu	72	1	0.014 ppb	17.92	2.60	
66 Zn	72	1	0.447 ppb	9.40	13.00	
75 As	72	1	0.005 ppb	93.46	6.50	
78 Se	72	1	0.123 ppb	164.36	6.50	
95 Mo	72	1	1.061 ppb	10.35	2.60	
107 Ag	115	1	0.010 ppb	39.18	6.50	
111 Cd	115	1	0.005 ppb	107.74	1.30	
118 Sn	115	1	0.075 ppb	16.44	13.00	
121 Sb	115	1	0.057 ppb	18.12	2.60	
137 Ba	115	1	0.003 ppb	208.39	1.30	
205 Tl	165	1	0.006 ppb	35.15	1.30	
208 Pb	165	1	0.011 ppb	13.36	1.30	
232 Th	165	1	0.750 ppb	12.75	2.60	
238 U	165	1	0.020 ppb	5.61	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	248535	0.50	327414	75.9	30 - 120	
45 Sc	1	599756	1.05	735158	81.6	30 - 120	
72 Ge	1	352379	0.49	419596	84.0	30 - 120	
115 In	1	1302229	1.54	1473829	88.4	30 - 120	
165 Ho	1	3281873	0.68	3670206	89.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\063 CCV.D\063 CCV.D#
Date Acquired:	Jul 2 2009 08:54 pm
Operator:	TEL
Sample Name:	CCV
Misc Info:	
Vial Number:	1107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	CCV
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.81	ppb	2.65	50	101.6	90 - 110	
51 V	72	1	48.89	ppb	1.55	50	97.8	90 - 110	
52 Cr	72	1	47.70	ppb	1.08	50	95.4	90 - 110	
55 Mn	72	1	48.65	ppb	1.46	50	97.3	90 - 110	
59 Co	72	1	48.69	ppb	0.87	50	97.4	90 - 110	
60 Ni	72	1	49.62	ppb	0.30	50	99.2	90 - 110	
63 Cu	72	1	48.82	ppb	0.66	50	97.6	90 - 110	
66 Zn	72	1	51.15	ppb	2.13	50	102.3	90 - 110	
75 As	72	1	50.58	ppb	1.57	50	101.2	90 - 110	
78 Se	72	1	51.64	ppb	5.06	50	103.3	90 - 110	
95 Mo	72	1	50.65	ppb	1.69	50	101.3	90 - 110	
107 Ag	115	1	48.80	ppb	0.58	50	97.6	90 - 110	
111 Cd	115	1	48.14	ppb	0.65	50	96.3	90 - 110	
118 Sn	115	1	49.18	ppb	0.77	50	98.4	90 - 110	
121 Sb	115	1	49.73	ppb	0.46	50	99.5	90 - 110	
137 Ba	115	1	51.43	ppb	0.75	50	102.9	90 - 110	
205 Tl	165	1	50.35	ppb	0.85	50	100.7	90 - 110	
208 Pb	165	1	50.37	ppb	1.17	50	100.7	90 - 110	
232 Th	165	1	51.23	ppb	1.09	50	102.5	90 - 110	
238 U	165	1	51.38	ppb	0.59	50	102.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	253125	1.95	327414	77.3	30 - 120	
45 Sc	1	616804	0.85	735158	83.9	30 - 120	
72 Ge	1	362143	0.62	419596	86.3	30 - 120	
115 In	1	1353200	0.88	1473829	91.8	30 - 120	
165 Ho	1	3355769	0.92	3670206	91.4	30 - 120	

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\064 CCB.D\064 CCB.D#
Date Acquired: Jul 2 2009 08:57 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.034	ppb	99.28	1.00	
51 V	72	1	0.031	ppb	140.72	1.00	
52 Cr	72	1	-0.012	ppb	47.67	1.00	
55 Mn	72	1	0.008	ppb	82.51	1.00	
59 Co	72	1	0.004	ppb	39.36	1.00	
60 Ni	72	1	-0.001	ppb	2130.70	1.00	
63 Cu	72	1	0.019	ppb	26.16	1.00	
66 Zn	72	1	0.034	ppb	33.19	1.00	
75 As	72	1	0.009	ppb	141.02	1.00	
78 Se	72	1	0.150	ppb	209.61	1.00	
95 Mo	72	1	0.177	ppb	6.53	1.00	
107 Ag	115	1	0.002	ppb	88.96	1.00	
111 Cd	115	1	0.001	ppb	560.78	1.00	
118 Sn	115	1	0.143	ppb	31.05	1.00	
121 Sb	115	1	0.056	ppb	5.71	1.00	
137 Ba	115	1	0.005	ppb	266.10	1.00	
205 Tl	165	1	0.023	ppb	10.06	1.00	
208 Pb	165	1	0.005	ppb	12.29	1.00	
232 Th	165	1	0.973	ppb	11.24	1.00	
238 U	165	1	0.008	ppb	23.38	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	254122	1.13	327414	77.6	30 - 120	
45 Sc	1	631375	0.14	735158	85.9	30 - 120	
72 Ge	1	368308	0.39	419596	87.8	30 - 120	
115 In	1	1346068	0.50	1473829	91.3	30 - 120	
165 Ho	1	3320456	0.31	3670206	90.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\065WASH.D\065WASH.D#
Date Acquired: Jul 2 2009 09:01 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.028 ppb	18.91	1.30	
51 V	72	1	5.026 ppb	2.47	6.50	
52 Cr	72	1	2.029 ppb	2.66	2.60	
55 Mn	72	1	1.010 ppb	9.81	1.30	
59 Co	72	1	1.036 ppb	2.98	1.30	
60 Ni	72	1	2.139 ppb	2.35	2.60	
63 Cu	72	1	2.067 ppb	1.88	2.60	
66 Zn	72	1	9.816 ppb	1.81	13.00	
75 As	72	1	5.185 ppb	1.35	6.50	
78 Se	72	1	4.939 ppb	14.49	6.50	
95 Mo	72	1	2.242 ppb	5.27	2.60	
107 Ag	115	1	5.051 ppb	1.92	6.50	
111 Cd	115	1	0.921 ppb	4.96	1.30	
118 Sn	115	1	10.300 ppb	4.21	13.00	
121 Sb	115	1	2.017 ppb	1.93	2.60	
137 Ba	115	1	1.099 ppb	3.63	1.30	
205 Tl	165	1	1.079 ppb	1.96	1.30	
208 Pb	165	1	1.055 ppb	1.16	1.30	
232 Th	165	1	2.362 ppb	2.17	2.60	
238 U	165	1	1.091 ppb	2.13	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	254166	1.01	327414	77.6	30 - 120	
45 Sc	1	639185	1.04	735158	86.9	30 - 120	
72 Ge	1	374974	0.77	419596	89.4	30 - 120	
115 In	1	1377740	0.42	1473829	93.5	30 - 120	
165 Ho	1	3385027	0.51	3670206	92.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Reslope Before Continuing Analytical Run

Corrective action was taken as stated in method 6020 section 7.8

…"During the course of an analytical run, the instrument may be "resloped" or recalibrated to correct for instrument drift. A recalibration must then be followed immediately by a new analysis of a CCV and CCB before any further samples are analyzed."

Analyst: _____

Date: 7/6/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#
Date Acquired: Jul 2 2009 10:05 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: Cal Blank
Misc Info:
Vial Number: 2101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 10:02 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-22	923.56
52	Cr	72	1	1147	7.60
55	Mn	72	1	100	19.73
59	Co	72	1	20	49.59
60	Ni	72	1	30	66.66
63	Cu	72	1	193	16.41
66	Zn	72	1	101	6.52
75	As	72	1	23	30.56
78	Se	72	1	33	86.61
95	Mo	72	1	167	14.36
107	Ag	115	1	7	173.19
111	Cd	115	1	21	30.15
118	Sn	115	1	437	20.16
121	Sb	115	1	23	14.41
137	Ba	115	1	13	24.73
205	Tl	165	1	43	33.08
208	Pb	165	1	161	16.68
232	Th	165	1	287	9.26
238	U	165	1	48	26.51

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	251642	0.92
45	Sc	1	650932	0.67
72	Ge	1	381299	0.66
115	In	1	1392123	0.35
165	Ho	1	3292496	0.64

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\085ICAL.D\085ICAL.D#
Date Acquired: Jul 2 2009 10:08 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: 100 ppb
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 10:05 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	27062	1.00
51	V	72	1	418462	0.85
52	Cr	72	1	487792	0.95
55	Mn	72	1	469696	0.79
59	Co	72	1	717901	0.71
60	Ni	72	1	173160	0.19
63	Cu	72	1	419851	1.55
66	Zn	72	1	75368	0.30
75	As	72	1	47767	0.36
78	Se	72	1	7986	2.25
95	Mo	72	1	210429	0.32
107	Ag	115	1	740054	0.61
111	Cd	115	1	123457	0.46
118	Sn	115	1	326095	0.12
121	Sb	115	1	328478	0.54
137	Ba	115	1	146461	0.56
205	Tl	165	1	1922923	1.17
208	Pb	165	1	2629150	0.50
232	Th	165	1	2660232	1.57
238	U	165	1	3095955	0.54

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	233510	0.70	251642	92.8	30 - 120	
45	Sc	1	606058	0.36	650932	93.1	30 - 120	
72	Ge	1	357646	0.94	381299	93.8	30 - 120	
115	In	1	1356873	1.19	1392123	97.5	30 - 120	
165	Ho	1	3236534	0.58	3292496	98.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\086 CCV.D\086 CCV.D#
Date Acquired: Jul 2 2009 10:11 pm
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 10:09 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.07	ppb	2.56	50	100.1	90 - 110	
51 V	72	1	50.16	ppb	0.59	50	100.3	90 - 110	
52 Cr	72	1	49.74	ppb	0.44	50	99.5	90 - 110	
55 Mn	72	1	49.24	ppb	0.95	50	98.5	90 - 110	
59 Co	72	1	49.54	ppb	0.43	50	99.1	90 - 110	
60 Ni	72	1	49.50	ppb	0.62	50	99.0	90 - 110	
63 Cu	72	1	50.03	ppb	0.60	50	100.1	90 - 110	
66 Zn	72	1	51.88	ppb	0.85	50	103.8	90 - 110	
75 As	72	1	49.82	ppb	1.39	50	99.6	90 - 110	
78 Se	72	1	49.94	ppb	7.58	50	99.9	90 - 110	
95 Mo	72	1	49.20	ppb	2.32	50	98.4	90 - 110	
107 Ag	115	1	50.84	ppb	1.31	50	101.7	90 - 110	
111 Cd	115	1	50.39	ppb	1.04	50	100.8	90 - 110	
118 Sn	115	1	51.11	ppb	0.75	50	102.2	90 - 110	
121 Sb	115	1	50.75	ppb	0.40	50	101.5	90 - 110	
137 Ba	115	1	50.68	ppb	0.61	50	101.4	90 - 110	
205 Tl	165	1	50.63	ppb	1.59	50	101.3	90 - 110	
208 Pb	165	1	50.16	ppb	2.07	50	100.3	90 - 110	
232 Th	165	1	51.25	ppb	0.88	50	102.5	90 - 110	
238 U	165	1	50.26	ppb	1.21	50	100.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	227579	1.65	251642	90.4	30 - 120	
45 Sc	1	599112	0.47	650932	92.0	30 - 120	
72 Ge	1	351453	1.02	381299	92.2	30 - 120	
115 In	1	1310647	0.89	1392123	94.1	30 - 120	
165 Ho	1	3197629	0.62	3292496	97.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\087 CCB.D\087 CCB.D#
Date Acquired: Jul 2 2009 10:15 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 10:09 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.025	ppb	173.20	1.00	
51 V	72	1	0.038	ppb	120.35	1.00	
52 Cr	72	1	0.025	ppb	82.37	1.00	
55 Mn	72	1	0.007	ppb	98.05	1.00	
59 Co	72	1	0.002	ppb	42.27	1.00	
60 Ni	72	1	0.021	ppb	116.49	1.00	
63 Cu	72	1	0.005	ppb	197.71	1.00	
66 Zn	72	1	0.219	ppb	9.38	1.00	
75 As	72	1	-0.001	ppb	181.96	1.00	
78 Se	72	1	0.112	ppb	224.10	1.00	
95 Mo	72	1	0.010	ppb	269.75	1.00	
107 Ag	115	1	0.008	ppb	50.56	1.00	
111 Cd	115	1	-0.006	ppb	76.66	1.00	
118 Sn	115	1	0.210	ppb	3.82	1.00	
121 Sb	115	1	0.081	ppb	14.91	1.00	
137 Ba	115	1	0.002	ppb	452.42	1.00	
205 Tl	165	1	0.048	ppb	18.25	1.00	
208 Pb	165	1	0.004	ppb	36.76	1.00	
232 Th	165	1	0.958	ppb	15.35	1.00	
238 U	165	1	0.011	ppb	16.03	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	228471	0.88	251642	90.8	30 - 120	
45 Sc	1	601272	0.35	650932	92.4	30 - 120	
72 Ge	1	356458	1.32	381299	93.5	30 - 120	
115 In	1	1308431	1.08	1392123	94.0	30 - 120	
165 Ho	1	3177975	0.85	3292496	96.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\088WASH.D\088WASH.D#
Date Acquired: Jul 2 2009 10:18 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 10:09 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.015 ppb	11.88	1.30	
51 V	72	1	5.126 ppb	4.38	6.50	
52 Cr	72	1	2.008 ppb	4.26	2.60	
55 Mn	72	1	1.017 ppb	0.89	1.30	
59 Co	72	1	1.011 ppb	2.60	1.30	
60 Ni	72	1	2.127 ppb	3.24	2.60	
63 Cu	72	1	1.966 ppb	1.91	2.60	
66 Zn	72	1	10.350 ppb	3.25	13.00	
75 As	72	1	5.021 ppb	2.18	6.50	
78 Se	72	1	5.116 ppb	3.15	6.50	
95 Mo	72	1	2.009 ppb	2.29	2.60	
107 Ag	115	1	5.197 ppb	2.65	6.50	
111 Cd	115	1	1.004 ppb	1.66	1.30	
118 Sn	115	1	10.740 ppb	2.53	13.00	
121 Sb	115	1	1.963 ppb	1.94	2.60	
137 Ba	115	1	1.008 ppb	10.13	1.30	
205 Tl	165	1	1.098 ppb	0.73	1.30	
208 Pb	165	1	1.056 ppb	1.84	1.30	
232 Th	165	1	2.304 ppb	2.10	2.60	
238 U	165	1	1.086 ppb	1.36	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	226590	0.33	251642	90.0	30 - 120	
45 Sc	1	609747	0.32	650932	93.7	30 - 120	
72 Ge	1	359276	0.76	381299	94.2	30 - 120	
115 In	1	1345201	1.19	1392123	96.6	30 - 120	
165 Ho	1	3224611	1.00	3292496	97.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Reslope Before Continuing Analytical Run

Corrective action was taken as stated in method 6020 section 7.8

..."During the course of an analytical run, the instrument may be "resloped" or recalibrated to correct for instrument drift. A recalibration must then be followed immediately by a new analysis of a CCV and CCB before any further samples are analyzed."

Analyst: _____

Date: 7/6/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#
Date Acquired:	Jul 3 2009 02:42 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	Cal Blank
Misc Info:	
Vial Number:	2101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:40 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	158	85.33
52	Cr	72	1	747	3.64
55	Mn	72	1	103	68.44
59	Co	72	1	20	86.61
60	Ni	72	1	7	86.59
63	Cu	72	1	623	14.58
66	Zn	72	1	55	20.92
75	As	72	1	17	28.95
78	Se	72	1	80	25.03
95	Mo	72	1	113	40.12
107	Ag	115	1	3	173.22
111	Cd	115	1	4	114.91
118	Sn	115	1	307	19.39
121	Sb	115	1	17	35.17
137	Ba	115	1	10	33.71
205	Tl	165	1	22	29.63
208	Pb	165	1	97	14.76
232	Th	165	1	133	30.33
238	U	165	1	31	14.91

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	143876	0.92
45	Sc	1	425742	0.49
72	Ge	1	252182	0.34
115	In	1	871760	0.50
165	Ho	1	1876593	1.50

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\167ICAL.D\167ICAL.D#
Date Acquired: Jul 3 2009 02:46 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: 100 ppb
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:43 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	17972	2.80
51	V	72	1	293987	1.99
52	Cr	72	1	327356	1.44
55	Mn	72	1	314665	1.22
59	Co	72	1	480008	1.12
60	Ni	72	1	115729	1.05
63	Cu	72	1	287151	1.22
66	Zn	72	1	49426	0.80
75	As	72	1	35955	1.48
78	Se	72	1	5461	5.72
95	Mo	72	1	139490	1.17
107	Ag	115	1	467632	0.57
111	Cd	115	1	79545	0.84
118	Sn	115	1	208755	1.32
121	Sb	115	1	218863	0.77
137	Ba	115	1	98924	0.83
205	Tl	165	1	1090717	1.82
208	Pb	165	1	1475035	1.61
232	Th	165	1	1500997	0.38
238	U	165	1	1699064	1.86

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	139920	1.42	143876	97.3	30 - 120	
45	Sc	1	412638	0.33	425742	96.9	30 - 120	
72	Ge	1	243358	0.30	252182	96.5	30 - 120	
115	In	1	837547	0.94	871760	96.1	30 - 120	
165	Ho	1	1836072	0.59	1876593	97.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\168 CCV.D\168 CCV.D#
Date Acquired: Jul 3 2009 02:49 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	48.51	ppb	3.93	50	97.0	90 - 110	
51 V	72	1	48.96	ppb	2.48	50	97.9	90 - 110	
52 Cr	72	1	50.41	ppb	1.90	50	100.8	90 - 110	
55 Mn	72	1	49.47	ppb	0.83	50	98.9	90 - 110	
59 Co	72	1	50.29	ppb	0.99	50	100.6	90 - 110	
60 Ni	72	1	50.31	ppb	0.59	50	100.6	90 - 110	
63 Cu	72	1	50.29	ppb	1.05	50	100.6	90 - 110	
66 Zn	72	1	53.79	ppb	1.61	50	107.6	90 - 110	
75 As	72	1	50.44	ppb	1.23	50	100.9	90 - 110	
78 Se	72	1	51.90	ppb	4.58	50	103.8	90 - 110	
95 Mo	72	1	50.15	ppb	2.43	50	100.3	90 - 110	
107 Ag	115	1	50.61	ppb	2.09	50	101.2	90 - 110	
111 Cd	115	1	49.92	ppb	1.49	50	99.8	90 - 110	
118 Sn	115	1	50.51	ppb	1.14	50	101.0	90 - 110	
121 Sb	115	1	50.20	ppb	1.38	50	100.4	90 - 110	
137 Ba	115	1	50.61	ppb	1.66	50	101.2	90 - 110	
205 Tl	165	1	49.62	ppb	1.27	50	99.2	90 - 110	
208 Pb	165	1	49.42	ppb	1.59	50	98.8	90 - 110	
232 Th	165	1	51.54	ppb	1.64	50	103.1	90 - 110	
238 U	165	1	50.49	ppb	2.22	50	101.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	139280	1.62	143876	96.8	30 - 120	
45 Sc	1	412259	0.65	425742	96.8	30 - 120	
72 Ge	1	244442	1.09	252182	96.9	30 - 120	
115 In	1	838969	0.55	871760	96.2	30 - 120	
165 Ho	1	1872402	0.38	1876593	99.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\169 CCB.D\169 CCB.D#
Date Acquired:	Jul 3 2009 02:53 am
Operator:	TEL
Sample Name:	CCB
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 02:46 am
Sample Type:	CCB
Total Dil Factor:	1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.093	ppb	117.30	1.00	
52 Cr	72	1	0.003	ppb	31.38	1.00	
55 Mn	72	1	-0.002	ppb	230.00	1.00	
59 Co	72	1	0.008	ppb	42.16	1.00	
60 Ni	72	1	0.042	ppb	12.13	1.00	
63 Cu	72	1	0.018	ppb	124.48	1.00	
66 Zn	72	1	0.203	ppb	22.13	1.00	
75 As	72	1	0.018	ppb	49.08	1.00	
78 Se	72	1	-0.232	ppb	200.34	1.00	
95 Mo	72	1	0.007	ppb	544.70	1.00	
107 Ag	115	1	0.008	ppb	81.44	1.00	
111 Cd	115	1	0.007	ppb	158.32	1.00	
118 Sn	115	1	0.163	ppb	23.00	1.00	
121 Sb	115	1	0.062	ppb	19.62	1.00	
137 Ba	115	1	0.002	ppb	563.91	1.00	
205 Tl	165	1	0.022	ppb	9.63	1.00	
208 Pb	165	1	0.009	ppb	42.63	1.00	
232 Th	165	1	1.036	ppb	14.59	1.00	Fail
238 U	165	1	0.012	ppb	17.54	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	141784	0.34	143876	98.5	30 - 120	
45 Sc	1	424544	0.33	425742	99.7	30 - 120	
72 Ge	1	251238	1.16	252182	99.6	30 - 120	
115 In	1	868238	0.57	871760	99.6	30 - 120	
165 Ho	1	1879945	1.27	1876593	100.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

1 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\170WASH.D\170WASH.D#
Date Acquired: Jul 3 2009 02:56 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.906 ppb	21.59	1.30	
51 V	72	1	5.037 ppb	1.38	6.50	
52 Cr	72	1	2.180 ppb	1.28	2.60	
55 Mn	72	1	1.082 ppb	7.40	1.30	
59 Co	72	1	1.036 ppb	6.96	1.30	
60 Ni	72	1	2.193 ppb	3.91	2.60	
63 Cu	72	1	2.099 ppb	4.21	2.60	
66 Zn	72	1	10.380 ppb	0.41	13.00	
75 As	72	1	4.923 ppb	1.58	6.50	
78 Se	72	1	3.817 ppb	4.39	6.50	
95 Mo	72	1	2.122 ppb	4.15	2.60	
107 Ag	115	1	5.085 ppb	0.66	6.50	
111 Cd	115	1	1.023 ppb	2.59	1.30	
118 Sn	115	1	10.360 ppb	1.99	13.00	
121 Sb	115	1	1.961 ppb	3.79	2.60	
137 Ba	115	1	1.047 ppb	5.91	1.30	
205 Tl	165	1	1.050 ppb	2.59	1.30	
208 Pb	165	1	1.032 ppb	2.47	1.30	
232 Th	165	1	2.255 ppb	0.85	2.60	
238 U	165	1	1.040 ppb	3.69	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	146215	0.70	143876	101.6	30 - 120	
45 Sc	1	436374	0.53	425742	102.5	30 - 120	
72 Ge	1	255360	0.79	252182	101.3	30 - 120	
115 In	1	887865	0.77	871760	101.8	30 - 120	
165 Ho	1	1926036	1.06	1876593	102.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\171ICSA.D\171ICSA.D#
Date Acquired: Jul 3 2009 02:59 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSA
Misc Info:
Vial Number: 2108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	6	1	0.02 ppb	173.21	1.00	
51 V	72	1	-0.29 ppb	59.55	1.00	
52 Cr	72	1	0.97 ppb	5.01	1.00	
55 Mn	72	1	2.18 ppb	3.85	1.00	
59 Co	72	1	0.06 ppb	29.67	1.00	
60 Ni	72	1	1.15 ppb	20.91	1.00	
63 Cu	72	1	0.31 ppb	5.78	1.00	
66 Zn	72	1	3.11 ppb	3.65	10.00	
75 As	72	1	0.16 ppb	12.29	1.00	
78 Se	72	1	-0.35 ppb	175.94	1.00	
95 Mo	72	1	2033.00 ppb	1.08	2000.00	
107 Ag	115	1	0.07 ppb	21.72	1.00	
111 Cd	115	1	0.61 ppb	14.81	1.00	
118 Sn	115	1	0.15 ppb	0.45	10.00	
121 Sb	115	1	0.25 ppb	9.06	1.00	
137 Ba	115	1	1.54 ppb	3.02	1.00	
205 Tl	165	1	0.03 ppb	9.89	1.00	
208 Pb	165	1	0.12 ppb	2.78	1.00	
232 Th	165	1	0.25 ppb	13.36	1.00	
238 U	165	1	0.02 ppb	7.59	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	143669	1.20	143876	99.9	30 - 120	
45 Sc	1	413967	1.00	425742	97.2	30 - 120	
72 Ge	1	235209	0.73	252182	93.3	30 - 120	
115 In	1	786060	0.88	871760	90.2	30 - 120	
165 Ho	1	1754071	0.52	1876593	93.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Nnumber of ISTD Failures Allowed

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\172ICSB.D\172ICSB.D#
Date Acquired: Jul 3 2009 03:03 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSAB
Misc Info:
Vial Number: 2109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: ICSAB
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	6	1	96.24	2.21	100	96.2	80 - 120	
51 V	72	1	101.40	1.80	100	101.4	80 - 120	
52 Cr	72	1	99.00	2.16	100	99.0	80 - 120	
55 Mn	72	1	97.78	0.35	100	97.8	80 - 120	
59 Co	72	1	94.80	0.80	100	94.8	80 - 120	
60 Ni	72	1	91.99	1.55	100	92.0	80 - 120	
63 Cu	72	1	87.71	0.94	100	87.7	80 - 120	
66 Zn	72	1	97.71	1.34	100	97.7	80 - 120	
75 As	72	1	99.21	1.50	100	99.2	80 - 120	
78 Se	72	1	109.50	3.57	100	109.5	80 - 120	
95 Mo	72	1	2120.00	0.78	2100	101.0	80 - 120	
107 Ag	115	1	81.74	5.60	100	81.7	80 - 120	
111 Cd	115	1	91.79	0.75	100	91.8	80 - 120	
118 Sn	115	1	98.59	2.27	100	98.6	80 - 120	
121 Sb	115	1	97.99	0.75	100	98.0	80 - 120	
137 Ba	115	1	99.54	0.42	100	99.5	80 - 120	
205 Tl	165	1	88.47	0.70	100	88.5	80 - 120	
208 Pb	165	1	87.29	1.51	100	87.3	80 - 120	
232 Th	165	1	98.13	1.22	100	98.1	80 - 120	
238 U	165	1	93.34	1.12	100	93.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	143930	1.94	143876	100.0	30 - 120	
45 Sc	1	417913	0.76	425742	98.2	30 - 120	
72 Ge	1	231729	0.91	252182	91.9	30 - 120	
115 In	1	783204	0.18	871760	89.8	30 - 120	
165 Ho	1	1804139	0.19	1876593	96.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\173WASH.D\173WASH.D#
Date Acquired: Jul 3 2009 03:06 am
Operator: TEL
Sample Name: WASH
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	1.30	
51 V	72	1	-0.057 ppb	59.42	6.50	
52 Cr	72	1	0.018 ppb	97.09	2.60	
55 Mn	72	1	-0.007 ppb	53.15	1.30	
59 Co	72	1	0.004 ppb	90.55	1.30	
60 Ni	72	1	0.019 ppb	85.37	2.60	
63 Cu	72	1	-0.081 ppb	35.28	2.60	
66 Zn	72	1	0.483 ppb	8.60	13.00	
75 As	72	1	0.011 ppb	87.16	6.50	
78 Se	72	1	-0.268 ppb	195.82	6.50	
95 Mo	72	1	0.977 ppb	12.75	2.60	
107 Ag	115	1	0.008 ppb	52.29	6.50	
111 Cd	115	1	0.010 ppb	0.34	1.30	
118 Sn	115	1	0.043 ppb	90.95	13.00	
121 Sb	115	1	0.037 ppb	6.06	2.60	
137 Ba	115	1	0.002 ppb	98.28	1.30	
205 Tl	165	1	0.009 ppb	24.82	1.30	
208 Pb	165	1	0.007 ppb	26.51	1.30	
232 Th	165	1	0.654 ppb	14.45	2.60	
238 U	165	1	0.016 ppb	4.25	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	149756	2.37	143876	104.1	30 - 120	
45 Sc	1	435839	1.08	425742	102.4	30 - 120	
72 Ge	1	257884	1.27	252182	102.3	30 - 120	
115 In	1	893592	0.22	871760	102.5	30 - 120	
165 Ho	1	1924035	0.75	1876593	102.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\174 CCV.D\174 CCV.D#
Date Acquired:	Jul 3 2009 03:10 am
Operator:	TEL
Sample Name:	CCV
Misc Info:	
Vial Number:	1107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 02:46 am
Sample Type:	CCV
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.20	ppb	1.27	50	98.4	90 - 110	
51 V	72	1	48.20	ppb	1.83	50	96.4	90 - 110	
52 Cr	72	1	49.39	ppb	1.41	50	98.8	90 - 110	
55 Mn	72	1	49.26	ppb	0.37	50	98.5	90 - 110	
59 Co	72	1	49.20	ppb	0.81	50	98.4	90 - 110	
60 Ni	72	1	49.63	ppb	2.26	50	99.3	90 - 110	
63 Cu	72	1	49.02	ppb	1.58	50	98.0	90 - 110	
66 Zn	72	1	51.93	ppb	1.47	50	103.9	90 - 110	
75 As	72	1	48.53	ppb	0.95	50	97.1	90 - 110	
78 Se	72	1	51.77	ppb	1.95	50	103.5	90 - 110	
95 Mo	72	1	49.23	ppb	2.88	50	98.5	90 - 110	
107 Ag	115	1	49.06	ppb	0.78	50	98.1	90 - 110	
111 Cd	115	1	48.18	ppb	2.41	50	96.4	90 - 110	
118 Sn	115	1	48.99	ppb	1.36	50	98.0	90 - 110	
121 Sb	115	1	48.69	ppb	0.43	50	97.4	90 - 110	
137 Ba	115	1	49.11	ppb	0.74	50	98.2	90 - 110	
205 Tl	165	1	48.63	ppb	1.72	50	97.3	90 - 110	
208 Pb	165	1	48.45	ppb	1.66	50	96.9	90 - 110	
232 Th	165	1	49.38	ppb	0.85	50	98.8	90 - 110	
238 U	165	1	49.17	ppb	1.90	50	98.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	146897	1.47	143876	102.1	30 - 120	
45 Sc	1	434354	0.37	425742	102.0	30 - 120	
72 Ge	1	253500	0.64	252182	100.5	30 - 120	
115 In	1	878353	0.29	871760	100.8	30 - 120	
165 Ho	1	1928072	1.15	1876593	102.7	30 - 120	

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\175 CCB.D\175 CCB.D#
Date Acquired: Jul 3 2009 03:13 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.066	ppb	82.82	1.00	
52 Cr	72	1	-0.009	ppb	84.30	1.00	
55 Mn	72	1	-0.006	ppb	241.79	1.00	
59 Co	72	1	0.010	ppb	123.28	1.00	
60 Ni	72	1	0.021	ppb	132.20	1.00	
63 Cu	72	1	-0.085	ppb	30.06	1.00	
66 Zn	72	1	0.176	ppb	5.60	1.00	
75 As	72	1	0.001	ppb	2139.00	1.00	
78 Se	72	1	-0.733	ppb	48.19	1.00	
95 Mo	72	1	0.086	ppb	29.16	1.00	
107 Ag	115	1	0.006	ppb	69.15	1.00	
111 Cd	115	1	0.000	ppb	15203.00	1.00	
118 Sn	115	1	0.140	ppb	50.75	1.00	
121 Sb	115	1	0.056	ppb	17.12	1.00	
137 Ba	115	1	0.007	ppb	141.71	1.00	
205 Tl	165	1	0.017	ppb	17.44	1.00	
208 Pb	165	1	0.007	ppb	29.55	1.00	
232 Th	165	1	0.877	ppb	8.81	1.00	
238 U	165	1	0.010	ppb	4.17	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	148952	1.52	143876	103.5	30 - 120	
45 Sc	1	440085	0.47	425742	103.4	30 - 120	
72 Ge	1	258151	0.71	252182	102.4	30 - 120	
115 In	1	897971	0.96	871760	103.0	30 - 120	
165 Ho	1	1923654	2.02	1876593	102.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\176WASH.D\176WASH.D#
Date Acquired:	Jul 3 2009 03:16 am
Operator:	TEL
Sample Name:	RLCV
Misc Info:	
Vial Number:	1204
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 02:46 am
Sample Type:	WASH
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.915 ppb	18.87	1.30	
51 V	72	1	5.123 ppb	2.61	6.50	
52 Cr	72	1	2.002 ppb	2.81	2.60	
55 Mn	72	1	1.009 ppb	2.09	1.30	
59 Co	72	1	0.977 ppb	4.22	1.30	
60 Ni	72	1	1.921 ppb	5.21	2.60	
63 Cu	72	1	1.799 ppb	3.58	2.60	
66 Zn	72	1	10.230 ppb	0.24	13.00	
75 As	72	1	4.983 ppb	2.72	6.50	
78 Se	72	1	4.265 ppb	38.12	6.50	
95 Mo	72	1	2.112 ppb	3.58	2.60	
107 Ag	115	1	5.075 ppb	2.24	6.50	
111 Cd	115	1	0.965 ppb	7.30	1.30	
118 Sn	115	1	9.942 ppb	1.60	13.00	
121 Sb	115	1	1.935 ppb	3.48	2.60	
137 Ba	115	1	1.013 ppb	6.53	1.30	
205 Tl	165	1	1.043 ppb	2.52	1.30	
208 Pb	165	1	1.024 ppb	3.90	1.30	
232 Th	165	1	2.182 ppb	2.19	2.60	
238 U	165	1	1.029 ppb	2.79	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	150035	1.06	143876	104.3	30 - 120	
45 Sc	1	448498	1.01	425742	105.3	30 - 120	
72 Ge	1	262041	0.98	252182	103.9	30 - 120	
115 In	1	910615	0.96	871760	104.5	30 - 120	
165 Ho	1	1954333	1.31	1876593	104.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\186 CCV.D\186 CCV.D#
Date Acquired: Jul 3 2009 03:50 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.54	ppb	1.33	50	101.1	90 - 110	
51 V	72	1	50.71	ppb	2.28	50	101.4	90 - 110	
52 Cr	72	1	51.17	ppb	0.76	50	102.3	90 - 110	
55 Mn	72	1	51.30	ppb	1.17	50	102.6	90 - 110	
59 Co	72	1	50.81	ppb	1.47	50	101.6	90 - 110	
60 Ni	72	1	50.18	ppb	1.06	50	100.4	90 - 110	
63 Cu	72	1	50.28	ppb	0.96	50	100.6	90 - 110	
66 Zn	72	1	54.97	ppb	0.68	50	109.9	90 - 110	
75 As	72	1	50.85	ppb	1.76	50	101.7	90 - 110	
78 Se	72	1	50.96	ppb	4.73	50	101.9	90 - 110	
95 Mo	72	1	51.23	ppb	2.28	50	102.5	90 - 110	
107 Ag	115	1	51.98	ppb	0.08	50	104.0	90 - 110	
111 Cd	115	1	51.46	ppb	0.28	50	102.9	90 - 110	
118 Sn	115	1	51.74	ppb	0.37	50	103.5	90 - 110	
121 Sb	115	1	52.48	ppb	0.97	50	105.0	90 - 110	
137 Ba	115	1	51.70	ppb	0.81	50	103.4	90 - 110	
205 Tl	165	1	51.28	ppb	0.65	50	102.6	90 - 110	
208 Pb	165	1	51.15	ppb	0.90	50	102.3	90 - 110	
232 Th	165	1	52.00	ppb	0.95	50	104.0	90 - 110	
238 U	165	1	51.90	ppb	1.41	50	103.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	156857	1.15	143876	109.0	30 - 120	
45 Sc	1	441904	1.32	425742	103.8	30 - 120	
72 Ge	1	260791	0.94	252182	103.4	30 - 120	
115 In	1	879331	1.67	871760	100.9	30 - 120	
165 Ho	1	1913586	0.71	1876593	102.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\187 CCB.D\187 CCB.D#
Date Acquired: Jul 3 2009 03:54 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.049	ppb	99.06	1.00	
51 V	72	1	-0.089	ppb	56.75	1.00	
52 Cr	72	1	0.019	ppb	118.03	1.00	
55 Mn	72	1	0.006	ppb	160.34	1.00	
59 Co	72	1	0.007	ppb	41.67	1.00	
60 Ni	72	1	0.040	ppb	11.00	1.00	
63 Cu	72	1	-0.090	ppb	26.23	1.00	
66 Zn	72	1	0.217	ppb	16.40	1.00	
75 As	72	1	0.019	ppb	129.15	1.00	
78 Se	72	1	-0.340	ppb	129.46	1.00	
95 Mo	72	1	0.008	ppb	296.81	1.00	
107 Ag	115	1	0.005	ppb	37.39	1.00	
111 Cd	115	1	0.010	ppb	38.24	1.00	
118 Sn	115	1	0.172	ppb	15.57	1.00	
121 Sb	115	1	0.059	ppb	14.71	1.00	
137 Ba	115	1	0.004	ppb	120.83	1.00	
205 Tl	165	1	0.018	ppb	4.81	1.00	
208 Pb	165	1	0.009	ppb	33.96	1.00	
232 Th	165	1	0.918	ppb	13.45	1.00	
238 U	165	1	0.014	ppb	10.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	157321	1.57	143876	109.3	30 - 120	
45 Sc	1	437053	0.50	425742	102.7	30 - 120	
72 Ge	1	261976	0.68	252182	103.9	30 - 120	
115 In	1	890924	0.59	871760	102.2	30 - 120	
165 Ho	1	1892158	1.70	1876593	100.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\188WASH.D\188WASH.D#
Date Acquired: Jul 3 2009 03:57 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.074 ppb	4.18	1.30	
51 V	72	1	5.208 ppb	0.27	6.50	
52 Cr	72	1	2.197 ppb	5.38	2.60	
55 Mn	72	1	1.094 ppb	3.97	1.30	
59 Co	72	1	1.068 ppb	5.19	1.30	
60 Ni	72	1	2.198 ppb	4.18	2.60	
63 Cu	72	1	1.994 ppb	4.02	2.60	
66 Zn	72	1	11.050 ppb	1.75	13.00	
75 As	72	1	5.324 ppb	3.62	6.50	
78 Se	72	1	4.212 ppb	29.54	6.50	
95 Mo	72	1	2.060 ppb	3.40	2.60	
107 Ag	115	1	5.506 ppb	1.49	6.50	
111 Cd	115	1	1.101 ppb	7.00	1.30	
118 Sn	115	1	10.940 ppb	1.26	13.00	
121 Sb	115	1	2.088 ppb	1.80	2.60	
137 Ba	115	1	1.182 ppb	5.53	1.30	
205 Tl	165	1	1.123 ppb	1.35	1.30	
208 Pb	165	1	1.095 ppb	2.44	1.30	
232 Th	165	1	2.330 ppb	3.34	2.60	
238 U	165	1	1.101 ppb	2.76	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	159424	0.40	143876	110.8	30 - 120	
45 Sc	1	443747	0.93	425742	104.2	30 - 120	
72 Ge	1	264311	0.72	252182	104.8	30 - 120	
115 In	1	890239	0.86	871760	102.1	30 - 120	
165 Ho	1	1933740	1.32	1876593	103.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\189 BLK.D\189 BLK.D#
Date Acquired:	Jul 3 2009 04:00 am
Operator:	TEL
Sample Name:	LFRV2B
Misc Info:	BLANK 9180262 6020
Vial Number:	3403
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 02:46 am
Sample Type:	BLK
Total Dil Factor:	1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	2.00	
51 V	72	1	-0.121 ppb	43.14	2.00	
52 Cr	72	1	0.140 ppb	28.62	2.00	
55 Mn	72	1	0.122 ppb	8.22	2.00	
59 Co	72	1	0.003 ppb	44.09	2.00	
60 Ni	72	1	0.035 ppb	45.87	2.00	
63 Cu	72	1	-0.079 ppb	26.14	2.00	
66 Zn	72	1	2.921 ppb	1.87	2.00	Fail
75 As	72	1	0.011 ppb	159.82	2.00	
78 Se	72	1	-0.031 ppb	1647.50	2.00	
95 Mo	72	1	-0.042 ppb	39.76	2.00	
107 Ag	115	1	0.003 ppb	157.15	2.00	
111 Cd	115	1	-0.005 ppb	418.26	2.00	
118 Sn	115	1	0.123 ppb	9.42	2.00	
121 Sb	115	1	0.036 ppb	11.61	2.00	
137 Ba	115	1	0.033 ppb	35.11	2.00	
205 Tl	165	1	0.009 ppb	17.07	2.00	
208 Pb	165	1	0.018 ppb	3.14	2.00	
232 Th	165	1	0.207 ppb	12.00	2.00	
238 U	165	1	0.001 ppb	73.08	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	157433	0.83	143876	109.4	30 - 120	
45 Sc	1	438783	0.20	425742	103.1	30 - 120	
72 Ge	1	257413	0.67	252182	102.1	30 - 120	
115 In	1	881464	0.80	871760	101.1	30 - 120	
165 Ho	1	1891756	0.80	1876593	100.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

1 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Laboratory Control Spike (LCS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\190 LCS.D\190 LCS.D#
Date Acquired:	Jul 3 2009 04:04 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFRV2C
Misc Info:	LCS
Vial Number:	3404
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	LCS
Prep Dil. Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	42.70	1.02	40	106.8	80 - 120	
51 V	72	1	43.69	2.50	40	109.2	80 - 120	
52 Cr	72	1	44.14	0.73	40	110.4	80 - 120	
55 Mn	72	1	44.11	1.51	40	110.3	80 - 120	
59 Co	72	1	43.62	1.00	40	109.1	80 - 120	
60 Ni	72	1	42.76	1.53	40	106.9	80 - 120	
63 Cu	72	1	43.76	0.83	40	109.4	80 - 120	
66 Zn	72	1	43.00	1.03	40	107.5	80 - 120	
75 As	72	1	41.33	0.76	40	103.3	80 - 120	
78 Se	72	1	41.54	7.95	40	103.9	80 - 120	
95 Mo	72	1	44.16	1.24	40	110.4	80 - 120	
107 Ag	115	1	43.73	0.66	40	109.3	80 - 120	
111 Cd	115	1	43.10	1.67	40	107.8	80 - 120	
118 Sn	115	1	0.41	9.85	40	1.0	80 - 120	
121 Sb	115	1	44.00	0.55	40	110.0	80 - 120	
137 Ba	115	1	43.97	0.63	40	109.9	80 - 120	
205 Tl	165	1	44.02	1.68	40	110.1	80 - 120	
208 Pb	165	1	43.87	1.72	40	109.7	80 - 120	
232 Th	165	1	45.59	1.65	40	114.0	80 - 120	
238 U	165	1	44.55	2.50	40	111.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	157795	0.39	143876	109.7	30 - 120	
45 Sc	1	433664	0.66	425742	101.9	30 - 120	
72 Ge	1	255928	0.96	252182	101.5	30 - 120	
115 In	1	869906	0.64	871760	99.8	30 - 120	
165 Ho	1	1903357	1.00	1876593	101.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\191AREF.D\191AREF.D#
Date Acquired: Jul 3 2009 04:07 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1G 10X
Misc Info: D9F260277
Vial Number: 3405
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: AllRef
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	-1,375.00	-137.50	ppb	17.81	3600	
52 Cr	72	1	31,760.00	3176.00	ppb	1.09	3600	
55 Mn	72	1	99.29	9.93	ppb	2.30	3600	
59 Co	72	1	0.75	0.07	ppb	20.70	3600	
60 Ni	72	1	7.20	0.72	ppb	4.72	3600	
63 Cu	72	1	-0.47	-0.05	ppb	33.86	3600	
66 Zn	72	1	3.99	0.40	ppb	15.19	3600	
75 As	72	1	99.98	10.00	ppb	3.28	3600	
78 Se	72	1	1.71	0.17	ppb	361.12	3600	
95 Mo	72	1	19.37	1.94	ppb	4.00	3600	
107 Ag	115	1	0.73	0.07	ppb	24.65	3600	
111 Cd	115	1	0.20	0.02	ppb	76.63	3600	
118 Sn	115	1	-0.42	-0.04	ppb	43.28	3600	
121 Sb	115	1	0.62	0.06	ppb	7.85	3600	
137 Ba	115	1	47.86	4.79	ppb	4.58	3600	
205 Tl	165	1	0.54	0.05	ppb	4.29	3600	
208 Pb	165	1	0.11	0.01	ppb	32.50	3600	
232 Th	165	1	6.49	0.65	ppb	9.06	1000	
238 U	165	1	38.10	3.81	ppb	0.81	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	162513	2.52	143876	113.0	30 - 120	
45 Sc	1	458642	1.67	425742	107.7	30 - 120	
72 Ge	1	252216	2.27	252182	100.0	30 - 120	
115 In	1	849327	2.21	871760	97.4	30 - 120	
165 Ho	1	1899617	0.89	1876593	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\192SDIL.D\192SDIL.D#
Date Acquired: Jul 3 2009 04:11 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1GP50
Misc Info: SERIAL DILUTION
Vial Number: 3406
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070209D.B\191AREF.D\191AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	0.00	ppb	0.00	0.00	#DIV/0!	90 - 110	
51 V	72	1	-20.70	ppb	23.91	-27.50	75.3	90 - 110	
52 Cr	72	1	635.20	ppb	0.60	635.20	100.0	90 - 110	
55 Mn	72	1	1.96	ppb	4.05	1.99	98.8	90 - 110	
59 Co	72	1	0.02	ppb	43.96	0.01	143.5	90 - 110	
60 Ni	72	1	0.48	ppb	12.23	0.14	336.3	90 - 110	
63 Cu	72	1	-0.12	ppb	28.87	-0.01	1259.5	90 - 110	
66 Zn	72	1	0.14	ppb	12.55	0.08	175.1	90 - 110	
75 As	72	1	1.95	ppb	6.77	2.00	97.5	90 - 110	
78 Se	72	1	-0.35	ppb	72.11	0.03	-1037.2	90 - 110	
95 Mo	72	1	0.32	ppb	8.51	0.39	83.5	90 - 110	
107 Ag	115	1	0.02	ppb	74.71	0.01	158.4	90 - 110	
111 Cd	115	1	0.00	ppb	1791.80	0.00	-9.1	90 - 110	
118 Sn	115	1	-0.05	ppb	39.81	-0.01	595.2	90 - 110	
121 Sb	115	1	0.02	ppb	66.31	0.01	134.9	90 - 110	
137 Ba	115	1	0.93	ppb	3.36	0.96	97.4	90 - 110	
205 Tl	165	1	0.01	ppb	20.02	0.01	119.1	90 - 110	
208 Pb	165	1	0.00	ppb	77.04	0.00	129.3	90 - 110	
232 Th	165	1	0.14	ppb	14.50	0.13	104.5	90 - 110	
238 U	165	1	0.76	ppb	4.28	0.76	99.6	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	167801	0.23	143876	116.6	30 - 120	
45 Sc	1	460936	2.04	425742	108.3	30 - 120	
72 Ge	1	264934	0.45	252182	105.1	30 - 120	
115 In	1	890678	1.85	871760	102.2	30 - 120	
165 Ho	1	1989898	1.72	1876593	106.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Denver

SERIAL DILUTION

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/06/09 10:05:45

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFP1GP50** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG070209D # 192
Acquired: 07/03/2009 04:11:00
Calibrated: 07/03/2009 02:42:00

Channel 272
Method 6020_
ICPMS_024

Matrix: AQUEOUS
Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9		0	0			*	
7440-62-2	Vanadium	51	-66096	-1035.0	-1375.0			*	
7440-47-3	Chromium	52	2259530	31760	31760	0.00		*	
7439-96-5	Manganese	55	6825	98.050	99.290	1.25		*	
7440-48-4	Cobalt	59	133	1.0750	0.74920	43.5		*	
7440-02-0	Nickel	60	617	24.205	7.1970	236		*	
7440-50-8	Copper	63	283	-5.9550	-0.47280			*	
7440-66-6	Zinc	66	133	6.9950	3.9940	75.1		*	
7440-38-2	Arsenic	75	781	97.500	99.980	2.48	0.21	NC	☑
7782-49-2	Selenium	78	63	-17.715	1.7080	1140	0.70	NC	☑
7439-98-7	Molybdenum	95	610	16.170	19.370	16.5		*	
7440-22-4	Silver	107	120	1.1625	0.73380	58.4		*	
7440-43-9	Cadmium	111	4	-0.01823	0.19940	109		*	
7440-31-5	Tin	118	203	-2.4905	-0.41840			*	
7440-36-0	Antimony	121	56	0.83400	0.61820	34.9		*	
7440-39-3	Barium	137	991	46.620	47.860	2.59		*	
7440-28-0	Thallium	205	176	0.64150	0.53850	19.1		*	
7439-92-1	Lead	208	147	0.13805	0.10680	29.3		*	
7440-61-1	Uranium	238	14001	37.940	38.100	0.420		*	
7440-29-1	Thorium	232	2347	6.7850	6.4900	4.55		*	
7439-93-2	Lithium	6			0			*	
7440-20-2	Scandium	45			0			*	
7440-74-6	Indium	115			0			*	
7440-56-4	Germanium	72			0			*	
7440-60-0	Holmium	165			0			*	

*** Analyte not requested for this batch, no MDL**
NC : Serial dilution concentration < 100 X MDL
E : Difference greater than Limit (10%)

Reviewed by: LRD Date: 7/7/09

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\193PDS.D\193PDS.D#
Date Acquired: Jul 3 2009 04:14 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1GZ
Misc Info: POST DIGESTION SPIKE
Vial Number: 3407
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: PDS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	180.40	0.00	ppb	3.99	200	90.2	75 - 125	
51 V	72	1	42.04	-137.50	ppb	51.33	200	67.3	75 - 125	
52 Cr	72	1	3292.00	3176.00	ppb	1.82	200	97.5	75 - 125	
55 Mn	72	1	201.30	9.93	ppb	2.40	200	95.9	75 - 125	
59 Co	72	1	188.40	0.07	ppb	2.72	200	94.2	75 - 125	
60 Ni	72	1	177.20	0.72	ppb	1.72	200	88.3	75 - 125	
63 Cu	72	1	172.90	-0.05	ppb	1.95	200	86.5	75 - 125	
66 Zn	72	1	184.30	0.40	ppb	2.50	200	92.0	75 - 125	
75 As	72	1	202.70	10.00	ppb	2.66	200	96.5	75 - 125	
78 Se	72	1	203.00	0.17	ppb	4.39	200	101.4	75 - 125	
95 Mo	72	1	203.20	1.94	ppb	2.78	200	100.6	75 - 125	
107 Ag	115	1	42.29	0.07	ppb	0.90	50	84.5	75 - 125	
111 Cd	115	1	179.40	0.02	ppb	2.26	200	89.7	75 - 125	
118 Sn	115	1	175.30	-0.04	ppb	2.50	200	87.7	75 - 125	
121 Sb	115	1	193.20	0.06	ppb	1.78	200	96.6	75 - 125	
137 Ba	115	1	194.00	4.79	ppb	1.73	200	94.7	75 - 125	
205 Tl	165	1	167.70	0.05	ppb	1.76	200	83.8	75 - 125	
208 Pb	165	1	166.90	0.01	ppb	2.17	200	83.4	75 - 125	
232 Th	165	1	0.08	0.65	ppb	20.31	200	0.0	75 - 125	
238 U	165	1	182.00	3.81	ppb	1.71	200	89.3	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	169683	1.88	143876	117.9	30 - 120	
45 Sc	1	464544	1.65	425742	109.1	30 - 120	
72 Ge	1	252017	1.40	252182	99.9	30 - 120	
115 In	1	850970	0.69	871760	97.6	30 - 120	
165 Ho	1	1952437	1.37	1876593	104.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/06/09 10:05:49

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFP1GZ** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070209D # 193 | Method 6020_
Acquired: 07/03/2009 04:14:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/03/2009 02:42:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	39297	180.40	0	90.2	200		☐
7440-62-2	Vanadium	51	127497	42.040	-137.50	21.0	200		☐
7440-47-3	Chromium	52	11133400	3292.0	3176.0	58.0	200	*	☐
7439-96-5	Manganese	55	655725	201.30	9.9290	95.7	200		☐
7440-48-4	Cobalt	59	936368	188.40	0.07492	94.2	200		☐
7440-02-0	Nickel	60	212293	177.20	0.71970	88.2	200		☐
7440-50-8	Copper	63	513610	172.90	-0.04728	86.4	200		☑
7440-66-6	Zinc	66	94283	184.30	0.39940	92.0	200		☑
7440-38-2	Arsenic	75	75452	202.70	9.9980	96.4	200		☑
7782-49-2	Selenium	78	11395	203.00	0.17080	101	200		☑
7439-98-7	Molybdenum	95	293383	203.20	1.9370	101	200		☐
7440-22-4	Silver	107	200949	42.290	0.07338	84.4	50.0		☐
7440-43-9	Cadmium	111	144931	179.40	0.01994	89.7	200		☑
7440-31-5	Tin	118	371647	175.30	-0.04184	87.7	200		☐
7440-36-0	Antimony	121	429628	193.20	0.06182	96.6	200		☑
7440-39-3	Barium	137	194951	194.00	4.7860	94.6	200		☑
7440-28-0	Thallium	205	1945320	167.70	0.05385	83.8	200		☑
7439-92-1	Lead	208	2617950	166.90	0.01068	83.4	200		☑
7440-61-1	Uranium	238	3287590	182.00	3.8100	89.1	200		☐
7440-29-1	Thorium	232	1337	0.07504	0.64900				
7439-93-2	Lithium	6			0				
7440-20-2	Scandium	45			0				
7440-74-6	Indium	115			0				
7440-56-4	Germanium	72			0				
7440-60-0	Holmium	165			0				

Reviewed by: LRD Date: 7/7/09

Spiked Sample (MS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\194_MS.D\194_MS.D#
Date Acquired:	Jul 3 2009 04:17 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFP1GS 10X
Misc Info:	MATRIX SPIKE
Vial Number:	3408
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	MS
Prep Dil. Factor:	10.00
Autodil Factor:	Undiluted
Final Dil Factor:	10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Spike Ref. File: ---

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	4.15	0.00	ppb	11.13	40	10.4	50 - 150	
51 V	72	1	-150.60	-137.50	ppb	3.80	40	154.5	50 - 150	
52 Cr	72	1	3007.00	3176.00	ppb	1.46	40	93.5	50 - 150	
55 Mn	72	1	13.37	9.93	ppb	1.28	40	26.8	50 - 150	
59 Co	72	1	3.92	0.07	ppb	3.59	40	9.8	50 - 150	
60 Ni	72	1	4.25	0.72	ppb	2.02	40	10.4	50 - 150	
63 Cu	72	1	3.68	-0.05	ppb	2.53	40	9.2	50 - 150	
66 Zn	72	1	4.19	0.40	ppb	3.17	40	10.4	50 - 150	
75 As	72	1	13.52	10.00	ppb	4.65	40	27.0	50 - 150	
78 Se	72	1	4.41	0.17	ppb	38.55	40	11.0	50 - 150	
95 Mo	72	1	6.15	1.94	ppb	1.37	40	14.7	50 - 150	
107 Ag	115	1	3.62	0.07	ppb	5.97	40	9.0	50 - 150	
111 Cd	115	1	3.81	0.02	ppb	3.46	40	9.5	50 - 150	
118 Sn	115	1	0.24	-0.04	ppb	17.75	40	0.6	50 - 150	
121 Sb	115	1	4.14	0.06	ppb	3.42	40	10.3	50 - 150	
137 Ba	115	1	8.39	4.79	ppb	1.28	40	18.7	50 - 150	
205 Tl	165	1	3.57	0.05	ppb	1.73	40	8.9	50 - 150	
208 Pb	165	1	3.54	0.01	ppb	1.85	40	8.8	50 - 150	
232 Th	165	1	3.76	0.65	ppb	0.59	40	9.2	50 - 150	
238 U	165	1	7.42	3.81	ppb	1.34	40	16.9	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	171407	1.25	143876	119.1	30 - 120	
45 Sc	1	475702	1.39	425742	111.7	30 - 120	
72 Ge	1	258577	1.09	252182	102.5	30 - 120	
115 In	1	880252	1.42	871760	101.0	30 - 120	
165 Ho	1	1991955	0.65	1876593	106.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\195 CCV.D\195 CCV.D#
Date Acquired: Jul 3 2009 04:21 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	44.98	ppb	5.19	50	90.0	90 - 110	Fail
51 V	72	1	49.15	ppb	0.75	50	98.3	90 - 110	
52 Cr	72	1	50.20	ppb	0.73	50	100.4	90 - 110	
55 Mn	72	1	49.24	ppb	2.05	50	98.5	90 - 110	
59 Co	72	1	48.82	ppb	0.76	50	97.6	90 - 110	
60 Ni	72	1	48.36	ppb	1.78	50	96.7	90 - 110	
63 Cu	72	1	48.70	ppb	1.03	50	97.4	90 - 110	
66 Zn	72	1	52.07	ppb	0.39	50	104.1	90 - 110	
75 As	72	1	47.62	ppb	0.13	50	95.2	90 - 110	
78 Se	72	1	50.11	ppb	5.24	50	100.2	90 - 110	
95 Mo	72	1	49.14	ppb	1.24	50	98.3	90 - 110	
107 Ag	115	1	49.06	ppb	0.54	50	98.1	90 - 110	
111 Cd	115	1	48.54	ppb	1.11	50	97.1	90 - 110	
118 Sn	115	1	49.33	ppb	1.40	50	98.7	90 - 110	
121 Sb	115	1	49.41	ppb	0.66	50	98.8	90 - 110	
137 Ba	115	1	47.85	ppb	1.60	50	95.7	90 - 110	
205 Tl	165	1	48.24	ppb	2.11	50	96.5	90 - 110	
208 Pb	165	1	48.33	ppb	2.10	50	96.7	90 - 110	
232 Th	165	1	48.78	ppb	3.19	50	97.6	90 - 110	
238 U	165	1	48.89	ppb	1.52	50	97.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	177912	1.21	143876	123.7	30 - 120	ISFail
45 Sc	1	474153	1.56	425742	111.4	30 - 120	
72 Ge	1	275529	1.39	252182	109.3	30 - 120	
115 In	1	938053	0.97	871760	107.6	30 - 120	
165 Ho	1	2043019	2.90	1876593	108.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

1 :Element Failures — 0 :Max. Number of Failures Allowed
1 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\196 CCB.D\196 CCB.D#
Date Acquired: Jul 3 2009 04:24 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.043	ppb	248.67	1.00	
52 Cr	72	1	0.103	ppb	38.67	1.00	
55 Mn	72	1	-0.001	ppb	240.66	1.00	
59 Co	72	1	0.004	ppb	99.79	1.00	
60 Ni	72	1	0.037	ppb	12.72	1.00	
63 Cu	72	1	-0.134	ppb	14.19	1.00	
66 Zn	72	1	0.192	ppb	17.41	1.00	
75 As	72	1	0.017	ppb	107.28	1.00	
78 Se	72	1	-0.210	ppb	120.48	1.00	
95 Mo	72	1	-0.021	ppb	132.52	1.00	
107 Ag	115	1	0.007	ppb	27.21	1.00	
111 Cd	115	1	0.003	ppb	784.72	1.00	
118 Sn	115	1	0.183	ppb	25.30	1.00	
121 Sb	115	1	0.076	ppb	30.93	1.00	
137 Ba	115	1	0.009	ppb	76.91	1.00	
205 Tl	165	1	0.020	ppb	12.41	1.00	
208 Pb	165	1	0.007	ppb	24.21	1.00	
232 Th	165	1	0.829	ppb	10.35	1.00	
238 U	165	1	0.016	ppb	16.50	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	180625	0.76	143876	125.5	30 - 120	ISFail
45 Sc	1	484578	0.73	425742	113.8	30 - 120	
72 Ge	1	283318	0.93	252182	112.3	30 - 120	
115 In	1	974107	0.37	871760	111.7	30 - 120	
165 Ho	1	2081168	0.46	1876593	110.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\197WASH.D\197WASH.D#
Date Acquired: Jul 3 2009 04:27 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.106 ppb	33.73	1.30	
51 V	72	1	4.906 ppb	0.78	6.50	
52 Cr	72	1	2.057 ppb	4.53	2.60	
55 Mn	72	1	0.991 ppb	2.86	1.30	
59 Co	72	1	0.919 ppb	1.71	1.30	
60 Ni	72	1	2.067 ppb	2.63	2.60	
63 Cu	72	1	1.859 ppb	3.22	2.60	
66 Zn	72	1	10.310 ppb	2.07	13.00	
75 As	72	1	4.854 ppb	1.42	6.50	
78 Se	72	1	4.954 ppb	16.44	6.50	
95 Mo	72	1	1.940 ppb	4.94	2.60	
107 Ag	115	1	4.933 ppb	2.45	6.50	
111 Cd	115	1	0.944 ppb	7.56	1.30	
118 Sn	115	1	9.947 ppb	1.99	13.00	
121 Sb	115	1	1.922 ppb	5.62	2.60	
137 Ba	115	1	1.089 ppb	3.73	1.30	
205 Tl	165	1	1.027 ppb	2.29	1.30	
208 Pb	165	1	1.000 ppb	1.05	1.30	
232 Th	165	1	2.136 ppb	3.43	2.60	
238 U	165	1	1.018 ppb	2.62	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	180890	0.76	143876	125.7	30 - 120	IS Fail
45 Sc	1	487616	0.64	425742	114.5	30 - 120	
72 Ge	1	283111	0.26	252182	112.3	30 - 120	
115 In	1	974666	0.45	871760	111.8	30 - 120	
165 Ho	1	2093398	0.37	1876593	111.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Duplicate Spike (MSD) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\198 MSD.D\198 MSD.D#
Date Acquired: Jul 3 2009 04:31 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1GD 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3409
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: MSD
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Fail

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070209D.B\194 MS.D\194 MS.D#

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	3.80	ppb	15.62	4.15	8.91	20	
51 V	72	1	-148.30	ppb	1.20	-150.60	-1.54	20	
52 Cr	72	1	2958.00	ppb	0.31	3007.00	1.64	20	
55 Mn	72	1	13.30	ppb	3.07	13.37	0.52	20	
59 Co	72	1	3.91	ppb	4.27	3.92	0.23	20	
60 Ni	72	1	4.33	ppb	3.52	4.25	1.87	20	
63 Cu	72	1	3.49	ppb	3.00	3.68	5.30	20	
66 Zn	72	1	4.00	ppb	4.73	4.19	4.74	20	
75 As	72	1	13.13	ppb	1.51	13.52	2.93	20	
78 Se	72	1	4.16	ppb	11.50	4.41	5.70	20	
95 Mo	72	1	5.88	ppb	3.27	6.15	4.39	20	
107 Ag	115	1	3.63	ppb	3.87	3.62	0.28	20	
111 Cd	115	1	3.76	ppb	3.78	3.81	1.27	20	
118 Sn	115	1	0.01	ppb	190.29	0.24	183.38	20	
121 Sb	115	1	4.07	ppb	0.94	4.14	1.68	20	
137 Ba	115	1	8.37	ppb	3.03	8.39	0.21	20	
205 Tl	165	1	3.64	ppb	3.03	3.57	2.00	20	
208 Pb	165	1	3.58	ppb	2.37	3.54	0.98	20	
232 Th	165	1	3.93	ppb	2.48	3.76	4.50	20	
238 U	165	1	7.39	ppb	2.24	7.42	0.42	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	177692	1.24	143876	123.5	30 - 120	IS Fail
45 Sc	1	494104	1.08	425742	116.1	30 - 120	
72 Ge	1	266698	0.67	252182	105.8	30 - 120	
115 In	1	899601	0.30	871760	103.2	30 - 120	
165 Ho	1	2030852	0.99	1876593	108.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref. File :C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\199SMPL.D\199SMPL.D#
Date Acquired:	Jul 3 2009 04:34 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFP1K 10X
Misc Info:	D9F260277
Vial Number:	3410
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	SA
Dilution Factor:	10.00
Autodil Factor:	Undiluted
Final Dil Factor:	10.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.15	0.01	ppb	173.20	3600	
51 V	72	1	-1,279.00	-127.90	ppb	21.47	3600	
52 Cr	72	1	28,570.00	2857.00	ppb	1.80	3600	
55 Mn	72	1	2.68	0.27	ppb	10.88	3600	
59 Co	72	1	0.38	0.04	ppb	21.97	3600	
60 Ni	72	1	5.19	0.52	ppb	4.86	3600	
63 Cu	72	1	-0.56	-0.06	ppb	27.54	3600	
66 Zn	72	1	2.52	0.25	ppb	23.21	3600	
75 As	72	1	85.19	8.52	ppb	1.56	3600	
78 Se	72	1	1.88	0.19	ppb	378.33	3600	
95 Mo	72	1	30.23	3.02	ppb	4.33	3600	
107 Ag	115	1	0.22	0.02	ppb	130.98	3600	
111 Cd	115	1	0.10	0.01	ppb	44.08	3600	
118 Sn	115	1	-0.49	-0.05	ppb	17.03	3600	
121 Sb	115	1	0.28	0.03	ppb	24.38	3600	
137 Ba	115	1	45.94	4.59	ppb	3.06	3600	
205 Tl	165	1	0.14	0.01	ppb	2.56	3600	
208 Pb	165	1	0.11	0.01	ppb	16.94	3600	
232 Th	165	1	1.46	0.15	ppb	6.23	1000	
238 U	165	1	27.40	2.74	ppb	1.16	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	176055	2.93	143876	122.4	30 - 120	IS Fail
45 Sc	1	482240	1.51	425742	113.3	30 - 120	
72 Ge	1	260535	2.55	252182	103.3	30 - 120	
115 In	1	886255	1.51	871760	101.7	30 - 120	
165 Ho	1	1958518	1.38	1876593	104.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\200SMPL.D\200SMPL.D#
Date Acquired: Jul 3 2009 04:38 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ02 10X
Misc Info: D9F270153
Vial Number: 3411
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.16	0.02	ppb	173.15	3600	
51 V	72	1	-340.90	-34.09	ppb	12.26	3600	
52 Cr	72	1	9,975.00	997.50	ppb	3.31	3600	
55 Mn	72	1	164.30	16.43	ppb	5.23	3600	
59 Co	72	1	0.57	0.06	ppb	20.18	3600	
60 Ni	72	1	3.68	0.37	ppb	28.80	3600	
63 Cu	72	1	-0.36	-0.04	ppb	56.02	3600	
66 Zn	72	1	9.55	0.96	ppb	10.89	3600	
75 As	72	1	117.50	11.75	ppb	2.48	3600	
78 Se	72	1	3.63	0.36	ppb	119.57	3600	
95 Mo	72	1	23.77	2.38	ppb	5.96	3600	
107 Ag	115	1	0.03	0.00	ppb	89.70	3600	
111 Cd	115	1	0.03	0.00	ppb	948.06	3600	
118 Sn	115	1	-0.26	-0.03	ppb	100.63	3600	
121 Sb	115	1	0.25	0.03	ppb	20.85	3600	
137 Ba	115	1	51.90	5.19	ppb	5.21	3600	
205 Tl	165	1	0.25	0.03	ppb	1.58	3600	
208 Pb	165	1	0.16	0.02	ppb	13.91	3600	
232 Th	165	1	0.49	0.05	ppb	17.04	1000	
238 U	165	1	55.32	5.53	ppb	3.54	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	170427	2.37	143876	118.5	30 - 120	
45 Sc	1	473452	2.47	425742	111.2	30 - 120	
72 Ge	1	259703	1.94	252182	103.0	30 - 120	
115 In	1	887696	2.86	871760	101.8	30 - 120	
165 Ho	1	1986742	1.42	1876593	105.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\201SMPL.D\201SMPL.D#
Date Acquired: Jul 3 2009 04:41 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ1Q 10X
Misc Info: D9F270154
Vial Number: 3412
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.30	0.03	ppb	86.61	3600	
51 V	72	1	-30.03	-3.00	ppb	80.89	3600	
52 Cr	72	1	3,213.00	321.30	ppb	2.28	3600	
55 Mn	72	1	1.59	0.16	ppb	15.41	3600	
59 Co	72	1	0.35	0.03	ppb	51.67	3600	
60 Ni	72	1	2.14	0.21	ppb	10.78	3600	
63 Cu	72	1	-0.78	-0.08	ppb	18.86	3600	
66 Zn	72	1	1.74	0.17	ppb	20.48	3600	
75 As	72	1	142.50	14.25	ppb	1.56	3600	
78 Se	72	1	2.98	0.30	ppb	325.98	3600	
95 Mo	72	1	22.97	2.30	ppb	2.17	3600	
107 Ag	115	1	0.03	0.00	ppb	61.18	3600	
111 Cd	115	1	0.04	0.00	ppb	209.74	3600	
118 Sn	115	1	-0.67	-0.07	ppb	46.76	3600	
121 Sb	115	1	0.19	0.02	ppb	64.33	3600	
137 Ba	115	1	29.98	3.00	ppb	0.25	3600	
205 Tl	165	1	0.14	0.01	ppb	14.73	3600	
208 Pb	165	1	0.05	0.01	ppb	11.18	3600	
232 Th	165	1	0.25	0.02	ppb	16.25	1000	
238 U	165	1	13.60	1.36	ppb	3.98	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	172035	0.99	143876	119.6	30 - 120	
45 Sc	1	463432	1.58	425742	108.9	30 - 120	
72 Ge	1	261966	1.33	252182	103.9	30 - 120	
115 In	1	880196	1.28	871760	101.0	30 - 120	
165 Ho	1	1956397	1.83	1876593	104.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\202SMPL.D\202SMPL.D#
Date Acquired: Jul 3 2009 04:44 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ10 10X
Misc Info: D9F270154
Vial Number: 3501
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	16.81	1.68	ppb	21.43	3600	
52 Cr	72	1	801.20	80.12	ppb	1.57	3600	
55 Mn	72	1	145.40	14.54	ppb	1.69	3600	
59 Co	72	1	0.31	0.03	ppb	20.43	3600	
60 Ni	72	1	4.08	0.41	ppb	17.26	3600	
63 Cu	72	1	-1.11	-0.11	ppb	0.93	3600	
66 Zn	72	1	1.57	0.16	ppb	2.95	3600	
75 As	72	1	123.60	12.36	ppb	3.78	3600	
78 Se	72	1	4.31	0.43	ppb	169.81	3600	
95 Mo	72	1	32.04	3.20	ppb	8.15	3600	
107 Ag	115	1	0.01	0.00	ppb	150.91	3600	
111 Cd	115	1	0.00	0.00	ppb	5156.40	3600	
118 Sn	115	1	-0.67	-0.07	ppb	29.75	3600	
121 Sb	115	1	0.19	0.02	ppb	16.54	3600	
137 Ba	115	1	15.93	1.59	ppb	3.41	3600	
205 Tl	165	1	0.03	0.00	ppb	68.33	3600	
208 Pb	165	1	0.08	0.01	ppb	24.63	3600	
232 Th	165	1	0.13	0.01	ppb	18.09	1000	
238 U	165	1	24.32	2.43	ppb	0.31	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	167857	1.53	143876	116.7	30 - 120	
45 Sc	1	460300	2.39	425742	108.1	30 - 120	
72 Ge	1	259872	2.21	252182	103.0	30 - 120	
115 In	1	876825	2.44	871760	100.6	30 - 120	
165 Ho	1	1963242	1.28	1876593	104.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\203SMPL.D\203SMPL.D#
Date Acquired: Jul 3 2009 04:48 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ12 10X
Misc Info: D9F270154
Vial Number: 3502
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	14.33	1.43	ppb	94.49	3600	
52 Cr	72	1	787.10	78.71	ppb	2.23	3600	
55 Mn	72	1	116.30	11.63	ppb	1.02	3600	
59 Co	72	1	0.27	0.03	ppb	22.10	3600	
60 Ni	72	1	4.15	0.42	ppb	4.51	3600	
63 Cu	72	1	-1.11	-0.11	ppb	10.51	3600	
66 Zn	72	1	0.99	0.10	ppb	27.19	3600	
75 As	72	1	122.60	12.26	ppb	2.70	3600	
78 Se	72	1	2.92	0.29	ppb	210.54	3600	
95 Mo	72	1	32.48	3.25	ppb	6.53	3600	
107 Ag	115	1	0.01	0.00	ppb	351.25	3600	
111 Cd	115	1	0.06	0.01	ppb	81.68	3600	
118 Sn	115	1	-0.65	-0.07	ppb	39.36	3600	
121 Sb	115	1	0.12	0.01	ppb	18.10	3600	
137 Ba	115	1	14.60	1.46	ppb	1.43	3600	
205 Tl	165	1	0.04	0.00	ppb	45.25	3600	
208 Pb	165	1	0.03	0.00	ppb	18.84	3600	
232 Th	165	1	0.04	0.00	ppb	34.85	1000	
238 U	165	1	24.30	2.43	ppb	1.61	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	171303	0.94	143876	119.1	30 - 120	
45 Sc	1	459176	0.39	425742	107.9	30 - 120	
72 Ge	1	261636	0.50	252182	103.7	30 - 120	
115 In	1	878418	0.49	871760	100.8	30 - 120	
165 Ho	1	1964559	0.56	1876593	104.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\204 CCV.D\204 CCV.D#
Date Acquired: Jul 3 2009 04:51 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	47.62	ppb	4.79	50	95.2	90 - 110	
51 V	72	1	50.95	ppb	0.94	50	101.9	90 - 110	
52 Cr	72	1	51.61	ppb	1.53	50	103.2	90 - 110	
55 Mn	72	1	50.97	ppb	0.71	50	101.9	90 - 110	
59 Co	72	1	50.67	ppb	0.04	50	101.3	90 - 110	
60 Ni	72	1	50.74	ppb	0.47	50	101.5	90 - 110	
63 Cu	72	1	49.76	ppb	0.99	50	99.5	90 - 110	
66 Zn	72	1	53.79	ppb	0.80	50	107.6	90 - 110	
75 As	72	1	49.63	ppb	1.80	50	99.3	90 - 110	
78 Se	72	1	53.22	ppb	3.50	50	106.4	90 - 110	
95 Mo	72	1	51.33	ppb	1.17	50	102.7	90 - 110	
107 Ag	115	1	50.59	ppb	1.34	50	101.2	90 - 110	
111 Cd	115	1	50.06	ppb	1.51	50	100.1	90 - 110	
118 Sn	115	1	51.05	ppb	2.00	50	102.1	90 - 110	
121 Sb	115	1	50.84	ppb	0.95	50	101.7	90 - 110	
137 Ba	115	1	49.90	ppb	1.40	50	99.8	90 - 110	
205 Tl	165	1	49.27	ppb	1.28	50	98.5	90 - 110	
208 Pb	165	1	49.46	ppb	1.90	50	98.9	90 - 110	
232 Th	165	1	49.47	ppb	1.34	50	98.9	90 - 110	
238 U	165	1	49.84	ppb	2.49	50	99.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	172056	0.85	143876	119.6	30 - 120	
45 Sc	1	462860	0.42	425742	108.7	30 - 120	
72 Ge	1	268562	0.41	252182	106.5	30 - 120	
115 In	1	918348	0.47	871760	105.3	30 - 120	
165 Ho	1	2038964	0.85	1876593	108.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\205 CCB.D\205 CCB.D#
Date Acquired: Jul 3 2009 04:55 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.015	ppb	173.21	1.00	
51 V	72	1	-0.013	ppb	105.49	1.00	
52 Cr	72	1	0.044	ppb	66.17	1.00	
55 Mn	72	1	0.001	ppb	1127.70	1.00	
59 Co	72	1	0.003	ppb	190.83	1.00	
60 Ni	72	1	0.012	ppb	71.51	1.00	
63 Cu	72	1	-0.140	ppb	22.03	1.00	
66 Zn	72	1	0.248	ppb	2.53	1.00	
75 As	72	1	-0.005	ppb	132.20	1.00	
78 Se	72	1	-0.720	ppb	35.52	1.00	
95 Mo	72	1	-0.013	ppb	142.24	1.00	
107 Ag	115	1	0.008	ppb	27.05	1.00	
111 Cd	115	1	-0.003	ppb	543.13	1.00	
118 Sn	115	1	0.102	ppb	22.69	1.00	
121 Sb	115	1	0.047	ppb	18.87	1.00	
137 Ba	115	1	0.000	ppb	4026.80	1.00	
205 Tl	165	1	0.016	ppb	2.35	1.00	
208 Pb	165	1	0.008	ppb	19.84	1.00	
232 Th	165	1	0.841	ppb	14.70	1.00	
238 U	165	1	0.010	ppb	25.57	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	175614	0.76	143876	122.1	30 - 120	ISFail
45 Sc	1	476307	0.24	425742	111.9	30 - 120	
72 Ge	1	274779	0.61	252182	109.0	30 - 120	
115 In	1	948257	0.77	871760	108.8	30 - 120	
165 Ho	1	2044042	0.66	1876593	108.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\206WASH.D\206WASH.D#
Date Acquired: Jul 3 2009 04:58 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.035 ppb	9.59	1.30	
51 V	72	1	5.015 ppb	1.22	6.50	
52 Cr	72	1	2.138 ppb	3.59	2.60	
55 Mn	72	1	1.002 ppb	7.78	1.30	
59 Co	72	1	1.075 ppb	3.08	1.30	
60 Ni	72	1	2.033 ppb	3.06	2.60	
63 Cu	72	1	1.947 ppb	3.38	2.60	
66 Zn	72	1	10.600 ppb	0.97	13.00	
75 As	72	1	4.988 ppb	2.42	6.50	
78 Se	72	1	4.972 ppb	12.48	6.50	
95 Mo	72	1	2.035 ppb	7.36	2.60	
107 Ag	115	1	5.253 ppb	2.91	6.50	
111 Cd	115	1	0.948 ppb	2.22	1.30	
118 Sn	115	1	10.270 ppb	1.38	13.00	
121 Sb	115	1	1.932 ppb	1.88	2.60	
137 Ba	115	1	0.993 ppb	4.52	1.30	
205 Tl	165	1	1.065 ppb	0.69	1.30	
208 Pb	165	1	1.045 ppb	2.08	1.30	
232 Th	165	1	2.176 ppb	0.57	2.60	
238 U	165	1	1.035 ppb	0.63	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	175383	1.22	143876	121.9	30 - 120	IS Fail
45 Sc	1	477637	0.65	425742	112.2	30 - 120	
72 Ge	1	277547	0.43	252182	110.1	30 - 120	
115 In	1	950658	0.57	871760	109.1	30 - 120	
165 Ho	1	2062718	0.80	1876593	109.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Reslope Before Continuing Analytical Run

Corrective action was taken as stated in method 6020 section 7.8

…"During the course of an analytical run, the instrument may be "resloped" or recalibrated to correct for instrument drift. A recalibration must then be followed immediately by a new analysis of a CCV and CCB before any further samples are analyzed."

Analyst: _____

Date: 7/6/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#
Date Acquired:	Jul 3 2009 05:25 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	Cal Blank
Misc Info:	
Vial Number:	2101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 05:22 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	27	97.88
52	Cr	72	1	760	14.80
55	Mn	72	1	63	19.21
59	Co	72	1	3	173.19
60	Ni	72	1	27	22.60
63	Cu	72	1	140	24.46
66	Zn	72	1	61	4.33
75	As	72	1	17	29.39
78	Se	72	1	73	30.27
95	Mo	72	1	110	41.96
107	Ag	115	1	10	173.20
111	Cd	115	1	11	103.54
118	Sn	115	1	313	13.37
121	Sb	115	1	16	66.10
137	Ba	115	1	4	43.03
205	Tl	165	1	20	27.29
208	Pb	165	1	99	15.53
232	Th	165	1	163	37.50
238	U	165	1	28	17.10

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	170358	0.63
45	Sc	1	473040	0.38
72	Ge	1	273279	1.44
115	In	1	937855	0.66
165	Ho	1	2015364	2.02

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\215ICAL.D\215ICAL.D#
Date Acquired: Jul 3 2009 05:28 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: 100 ppb
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 05:26 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	21126	2.38
51	V	72	1	328011	0.78
52	Cr	72	1	369104	1.34
55	Mn	72	1	350375	1.50
59	Co	72	1	534048	0.74
60	Ni	72	1	126131	0.64
63	Cu	72	1	317329	1.23
66	Zn	72	1	55499	1.24
75	As	72	1	39306	1.20
78	Se	72	1	6095	4.28
95	Mo	72	1	154896	2.28
107	Ag	115	1	517369	0.23
111	Cd	115	1	86570	0.12
118	Sn	115	1	232927	0.45
121	Sb	115	1	241780	0.78
137	Ba	115	1	108520	0.76
205	Tl	165	1	1178851	1.11
208	Pb	165	1	1607350	1.30
232	Th	165	1	1627260	1.85
238	U	165	1	1838564	0.49

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	171063	0.11	170358	100.4	30 - 120	
45	Sc	1	462328	0.46	473040	97.7	30 - 120	
72	Ge	1	268656	0.22	273279	98.3	30 - 120	
115	In	1	914728	0.46	937855	97.5	30 - 120	
165	Ho	1	1999942	0.49	2015364	99.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\216 CCV.D\216 CCV.D#
Date Acquired:	Jul 3 2009 05:32 am
Operator:	TEL
Sample Name:	CCV
Misc Info:	
Vial Number:	1107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 05:29 am
Sample Type:	CCV
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.44	ppb	1.98	50	100.9	90 - 110	
51 V	72	1	50.20	ppb	2.24	50	100.4	90 - 110	
52 Cr	72	1	50.57	ppb	1.61	50	101.1	90 - 110	
55 Mn	72	1	50.25	ppb	1.47	50	100.5	90 - 110	
59 Co	72	1	50.26	ppb	0.72	50	100.5	90 - 110	
60 Ni	72	1	51.20	ppb	1.25	50	102.4	90 - 110	
63 Cu	72	1	49.78	ppb	1.11	50	99.6	90 - 110	
66 Zn	72	1	52.90	ppb	0.51	50	105.8	90 - 110	
75 As	72	1	49.98	ppb	1.40	50	100.0	90 - 110	
78 Se	72	1	50.26	ppb	5.38	50	100.5	90 - 110	
95 Mo	72	1	51.60	ppb	2.10	50	103.2	90 - 110	
107 Ag	115	1	50.07	ppb	1.25	50	100.1	90 - 110	
111 Cd	115	1	50.52	ppb	1.97	50	101.0	90 - 110	
118 Sn	115	1	49.52	ppb	0.58	50	99.0	90 - 110	
121 Sb	115	1	49.94	ppb	1.34	50	99.9	90 - 110	
137 Ba	115	1	50.09	ppb	0.55	50	100.2	90 - 110	
205 Tl	165	1	49.97	ppb	0.37	50	99.9	90 - 110	
208 Pb	165	1	49.67	ppb	1.08	50	99.3	90 - 110	
232 Th	165	1	51.31	ppb	1.02	50	102.6	90 - 110	
238 U	165	1	50.61	ppb	1.19	50	101.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	168836	0.51	170358	99.1	30 - 120	
45 Sc	1	460117	0.48	473040	97.3	30 - 120	
72 Ge	1	267551	0.91	273279	97.9	30 - 120	
115 In	1	914828	0.23	937855	97.5	30 - 120	
165 Ho	1	2024982	0.50	2015364	100.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\217 CCB.D\217 CCB.D#
Date Acquired:	Jul 3 2009 05:35 am
Operator:	TEL
Sample Name:	CCB
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 05:29 am
Sample Type:	CCB
Total Dil Factor:	1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.016	ppb	173.19	1.00	
51 V	72	1	-0.041	ppb	75.89	1.00	
52 Cr	72	1	0.026	ppb	76.50	1.00	
55 Mn	72	1	0.015	ppb	101.75	1.00	
59 Co	72	1	0.005	ppb	64.92	1.00	
60 Ni	72	1	0.000	ppb	213130.00	1.00	
63 Cu	72	1	0.015	ppb	119.42	1.00	
66 Zn	72	1	0.222	ppb	13.19	1.00	
75 As	72	1	-0.002	ppb	286.69	1.00	
78 Se	72	1	0.335	ppb	249.21	1.00	
95 Mo	72	1	0.030	ppb	10.00	1.00	
107 Ag	115	1	0.007	ppb	89.38	1.00	
111 Cd	115	1	-0.003	ppb	175.11	1.00	
118 Sn	115	1	0.190	ppb	25.52	1.00	
121 Sb	115	1	0.075	ppb	8.50	1.00	
137 Ba	115	1	0.008	ppb	99.30	1.00	
205 Tl	165	1	0.026	ppb	10.22	1.00	
208 Pb	165	1	0.010	ppb	10.02	1.00	
232 Th	165	1	1.053	ppb	13.26	1.00	Fail
238 U	165	1	0.013	ppb	17.10	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	168547	1.32	170358	98.9	30 - 120	
45 Sc	1	467753	0.16	473040	98.9	30 - 120	
72 Ge	1	273100	0.89	273279	99.9	30 - 120	
115 In	1	938928	0.92	937855	100.1	30 - 120	
165 Ho	1	2019806	1.22	2015364	100.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

1 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\218WASH.D\218WASH.D#
Date Acquired: Jul 3 2009 05:38 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 05:29 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.913 ppb	19.40	1.30	
51 V	72	1	5.062 ppb	4.42	6.50	
52 Cr	72	1	2.143 ppb	3.42	2.60	
55 Mn	72	1	1.049 ppb	5.72	1.30	
59 Co	72	1	0.998 ppb	4.65	1.30	
60 Ni	72	1	2.101 ppb	5.70	2.60	
63 Cu	72	1	2.009 ppb	2.99	2.60	
66 Zn	72	1	10.450 ppb	2.21	13.00	
75 As	72	1	4.952 ppb	3.13	6.50	
78 Se	72	1	4.761 ppb	25.92	6.50	
95 Mo	72	1	2.018 ppb	7.18	2.60	
107 Ag	115	1	5.183 ppb	2.25	6.50	
111 Cd	115	1	1.058 ppb	8.62	1.30	
118 Sn	115	1	10.250 ppb	2.04	13.00	
121 Sb	115	1	2.001 ppb	7.44	2.60	
137 Ba	115	1	1.063 ppb	3.17	1.30	
205 Tl	165	1	1.069 ppb	1.63	1.30	
208 Pb	165	1	1.066 ppb	1.56	1.30	
232 Th	165	1	2.330 ppb	4.05	2.60	
238 U	165	1	1.071 ppb	3.26	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	168734	2.17	170358	99.0	30 - 120	
45 Sc	1	467881	1.14	473040	98.9	30 - 120	
72 Ge	1	272164	0.56	273279	99.6	30 - 120	
115 In	1	938479	0.85	937855	100.1	30 - 120	
165 Ho	1	2036153	1.57	2015364	101.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Metals

Supporting Documentation

Sample Sequence, Instrument Printouts

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9F270154

Client: Northgate Environmental

Batch(es) #: 9180268, 9180262

Associated Samples: 1-5

I certify that, to the best of my knowledge, the attached package represents a complete and accurate copy of the original data.

Signature/Date: 7/6/09

Metals Raw Data RoadMap

LotID		*Metal*	*WorkOrder*	*Anal Date*	*TestDesc*	*Batch*	*File Id*	*Instr*
D9F270154	1	SE	LFQ1Q1AC	20090703	6020TOTA	9180262	AG070209D	024
D9F270154	1	AS	LFQ1Q1AA	20090703	6020TOTA	9180262	AG070209D	024
D9F270154	2	SE	LFQ101AC	20090703	6020TOTA	9180262	AG070209D	024
D9F270154	2	AS	LFQ101AA	20090703	6020TOTA	9180262	AG070209D	024
D9F270154	3 S	AS	LFQ111AD	20090703	6020DSVD	9180268	AG070209D	024
D9F270154	3	SE	LFQ111AC	20090703	6020DSVD	9180268	AG070209D	024
D9F270154	3	AS	LFQ111AA	20090703	6020DSVD	9180268	AG070209D	024
D9F270154	3 D	SE	LFQ111AG	20090703	6020DSVD	9180268	AG070209D	024
D9F270154	3 S	SE	LFQ111AF	20090703	6020DSVD	9180268	AG070209D	024
D9F270154	3 D	AS	LFQ111AE	20090703	6020DSVD	9180268	AG070209D	024
D9F270154	4	SE	LFQ121AC	20090703	6020TOTA	9180262	AG070209D	024
D9F270154	4	AS	LFQ121AA	20090703	6020TOTA	9180262	AG070209D	024
D9F270154	5	SE	LFQ131AC	20090703	6020DSVD	9180268	AG070209D	024
D9F270154	5	AS	LFQ131AA	20090703	6020DSVD	9180268	AG070209D	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9180268**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 06/30/09
Due Date: 07/08/09

Lot	Work Order			Initial Weight/Volume
D9F290000 Water	**LFRWW**	B	Due Date: SDG:	50 mL
D9F290000 Water	**LFRWW**	C	Due Date: SDG:	50 mL
D9F260277 Water	**LFP1L** Dissolved		Due Date: 07/08/09 SDG:	50 mL
D9F270154 Water	**LFQ11** Dissolved		Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ11** Dissolved	S	Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ11** Dissolved	D	Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ13** Dissolved		Due Date: 07/09/09 SDG:	50 mL

Comments:

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE SAMPLE

ICPMS ELEMENTS WITHIN THE BATCH:

AS SE

checked 7/2/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

DISSOLVED WATER DIGESTION FOR ICPMS (Prep code MD)

BATCH #	9180268	**ALLIQUOTTED BY:**	JRW
PREP DATE:	6/30/2009	**DIGESTED BY:**	JKH

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS267

Were samples filtered in the lab? ☐ Yes ☑ No

If "yes", then the method blank and the LCS were filtered prior to digestion.

Analyst(s) Initials: JKH

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-2636-09	7/1/10	100uL	15
2008Cal-2	STD-2635-09	7/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	2

TEMPERATURE CYCLES

Thermometer ID: 14859 Block & Cup # : 5,26

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3/HCl	6:00	96	11:00	94

Samples and QC revolumed to: 50 mL Analyst's Initials JKH

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kim Hare ***Date:*** 6/30/09

Batch Number: **9180262**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 06/30/09
Due Date: 07/08/09

Lot	Work Order			Initial Weight/Volume
D9F290000 Water	**LFRV2**	B	Due Date: SDG:	50 mL
D9F290000 Water	**LFRV2**	C	Due Date: SDG:	50 mL
D9F260277 Water	**LFP1G** Total		Due Date: 07/08/09 SDG:	50 mL
D9F260277 Water	**LFP1G** Total	S	Due Date: 07/08/09 SDG:	50 mL
D9F260277 Water	**LFP1G** Total	D	Due Date: 07/08/09 SDG:	50 mL
D9F260277 Water	**LFP1K** Total		Due Date: 07/08/09 SDG:	50 mL
D9F270153 Water	**LFQ02** Total		Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ1Q** Total		Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ10** Total		Due Date: 07/09/09 SDG:	50 mL
D9F270154 Water	**LFQ12** Total		Due Date: 07/09/09 SDG:	50 mL

Comments:

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE, SAMPLE

ICPMS ELEMENTS WITHIN THE BATCH:

AS SE

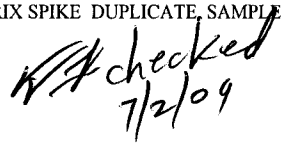


Table of Contents

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH # 9180262 **ALLIQUOTTED BY:** JRW
PREP DATE: 6/30/2009 **DIGESTED BY:** JKH

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS267

One or more samples were filtered prior to analysis at the instrument. ☐ Yes ☐ No

If "yes", then the method blank and the LCS were also filtered in the same manner using the same type of filter.

Analyst(s) Initials:

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-2636-09	7/1/10	100uL	15
2008Cal-2	STD-2635-09	7/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	3

TEMPERATURE CYCLES

Thermometer ID: 4110 Block & Cup # : 3,23

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	6:00	94	10:20	96
HNO3	10:30	96	11:00	96
HNO3				

Samples and QC revolumed to: 50 mL Analyst's Initials JKH

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kris Hare ***Date:*** 6/30/09

METALS
SAMPLE DATA
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ICP-MS Standard and Spike True Values

Element	Cal. Std. 100 ppb	Initial Calibration Standard	Continuing Calibration Standard	Interference Check Sample A	Interference Check Sample AB	Laboratory Control Sample and Duplicate	Matrix Spike Sample and Duplicate	Post Digestion Spike
Aluminum	100	40	50	100,000 Aluminum	--	40	40	200
Antimony	100	40	50	100,000 Calcium	100	40	40	200
Arsenic	100	40	50	100,000 Iron	100	40	40	200
Barium	100	40	50	100,000 Magnesium	100	40	40	200
Beryllium	100	40	50	100,000 Sodium	100	40	40	200
Cadmium	100	40	50	100,000 Phosphorus	100	40	40	200
Chromium	100	40	50	100,000 Potassium	100	40	40	200
Cobalt	100	40	50	100,000 Sulfur	100	40	40	200
Copper	100	40	50	200,000 Carbon	100	40	40	200
Lead	100	40	50	1,000,000 Chloride	100	40	40	200
Manganese	100	40	50	2000 Molybdenum	--	40	40	200
Molybdenum	100	40	50	2000 Titanium	100	40	40	200
Nickel	100	40	50		100	40	40	200
Selenium	100	40	50		100	40	40	200
Silver	100	40	50		100	40	40	50
Thallium	100	40	50		100	40	40	200
Tin	100	40	50		100	40	40	200
Uranium	100	40	50		100	40	40	200
Vanadium	100	40	50		100	40	40	200
Zinc	100	40	50		100	40	40	200

All units are ug/L.

Due to the presence of trace contaminants in the ICSA solution, the % recovery for the ICSAB solution is calculated by subtracting the levels in the ICSA from the ICSAB.

Quality Control Standards

ICV = Initial Calibration Verification (Second Source)
CCV = Continuing Calibration Verification
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
1		Keyword		TUNBEG	Start of TUNE					
2		Keyword		ChngTune	he.u,20					
3	C:\ICPCHEM\1\METHODS\tun_isis.M	TUNE	4		200.8 TUNE		1.000			
4		Keyword		TUNEND	End of TUNE					
5		Keyword		CALBEG	Start of CALIB					
6	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
7	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
8	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
9	C:\ICPCHEM\1\METHODS\NormISIS.M	ICV	2103		ICV		1.000			
10	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLIV		1.000			
11	C:\ICPCHEM\1\METHODS\NormISIS.M	ICB	2104		ICB		1.000			
12	C:\ICPCHEM\1\METHODS\NormISIS.M	RLSTD	2105		RL STD		1.000			
13	C:\ICPCHEM\1\METHODS\NormISIS.M	AFCEERL	2106		AFCEE RL		1.000			
14	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2112		CHECK	STD2637-09	1.000			
15	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2107		ALTSe	2 ppb	1.000			
16	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSA	2108		ICSA		1.000			
17	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSAB	2109		ICSAB		1.000			
18	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000			
19	C:\ICPCHEM\1\METHODS\NormISIS.M	LR	2110		LR		1.000			
20	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000			
21	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
22	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
23	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
24		Keyword		CALEND	End of CALIB					
25		Keyword		SMPLBEG	Start of SMPL					
26	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2201		LFCCFB	BLANK 9171051 6020	1.000	50.00	50.00	1.000
27	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2202		LFCCFC	LCS	1.000	50.00	50.00	1.000
28	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2203		LE4RA	D9F170236	1.000	50.00	50.00	1.000
29	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2204		LE4RAP5	SERIAL DILUTION	1.000	50.00	50.00	1.000
30	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2205		LE4RAZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
31	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2206		LE4RK	D9F170236	1.000	50.00	50.00	1.000
32	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2207		LE4RN	D9F170236	1.000	50.00	50.00	1.000
33	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2208		LE4R9	D9F170236	1.000	50.00	50.00	1.000
34	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
35	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
36	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
37	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2209		LE4TC	D9F170236	1.000	50.00	50.00	1.000
38	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2210		LE4TN	D9F170236	1.000	50.00	50.00	1.000
39	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2211		LE4TP	D9F170236	1.000	50.00	50.00	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
40	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2212		LE4TQ	D9F170236	1.000	50.00	50.00	1.000
41	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2301		LE4T4	D9F170236	1.000	50.00	50.00	1.000
42	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2302		LE4T9	D9F170236	1.000	50.00	50.00	1.000
43	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2303		LE4VA	D9F170236	1.000	50.00	50.00	1.000
44	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2304		LE4VT	D9F170236	1.000	50.00	50.00	1.000
45	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
46	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
47	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
48	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2305		LFJDGB	BLANK 9175365 6020	500.0	500.0	1.000	1.000
49	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2306		LFJDGC	LCS	500.0	500.0	1.000	1.000
50	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2307		LFGCV	D9F230211	495.0	500.0	1.010	1.000
51	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2308		LFGCVP5	SERIAL DILUTION	495.0	500.0	1.010	1.000
52	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2309		LFGCVZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
53	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	2310		LFGCVS	MATRIX SPIKE	495.0	500.0	1.010	1.000
54	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
55	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
56	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
57	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	2311		LFGCVD	MATRIX SPIKE DUPLICATE	495.0	500.0	1.010	1.000
58	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2312		LFGC2	D9F230211	505.1	500.0	9.900E-01	1.000
59	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2401		LFGC8	D9F230211	490.2	500.0	1.020	1.000
60	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2402		LFGC9	D9F230211	500.0	500.0	1.000	1.000
61	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2403		LFGDA	D9F230211	490.2	500.0	1.020	1.000
62	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2404		LFGDD	D9F230211	495.0	500.0	1.010	1.000
63	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
64	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
65	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
66	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSA	2108		ICSA		1.000			
67	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSAB	2109		ICSAB		1.000			
68	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1101		WASH		1.000			
69	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
70	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
71	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
72	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2209		LE4TC	D9F170236	1.000	50.00	50.00	1.000
73	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2210		LE4TN	D9F170236	1.000	50.00	50.00	1.000
74	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2211		LE4TP	D9F170236	1.000	50.00	50.00	1.000
75	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2212		LE4TQ	D9F170236	1.000	50.00	50.00	1.000
76	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2301		LE4T4	D9F170236	1.000	50.00	50.00	1.000
77	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2302		LE4T9	D9F170236	1.000	50.00	50.00	1.000
78	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2303		LE4VA	D9F170236	1.000	50.00	50.00	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
79	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2304		LE4VT	D9F170236	1.000	50.00	50.00	1.000
80	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
81	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
82	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
83	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
84	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
85	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
86	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
87	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
88	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
89	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
90	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
91	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
92	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
93	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
94	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
95	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2405		LFM02B	BLANK 9177095 6020	1.000	50.00	50.00	1.000
96	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2406		LFM02C	LCS	1.000	50.00	50.00	1.000
97	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2407		LFKC2	D9F240311	1.000	50.00	50.00	1.000
98	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2408		LFKC3	D9F240311	1.000	50.00	50.00	1.000
99	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2409		LFKC4	D9F240311	1.000	50.00	50.00	1.000
100	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2410		LFKC4P5	SERIAL DILUTION	1.000	50.00	50.00	1.000
101	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2411		LFKC4Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
102	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	2412		LFKC4S	MATRIX SPIKE	1.000	50.00	50.00	1.000
103	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	2501		LFKC4D	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
104	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2502		LFKC5	D9F240311	1.000	50.00	50.00	1.000
105	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
106	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
107	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
108	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	2503		LFM0PB	BLANK 9177090 6020	500.0	500.0	1.000	1.000
109	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	2504		LFM0PC	LCS	500.0	500.0	1.000	1.000
110	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2505		LFKC6	D9F240311	505.1	500.0	9.900E-01	1.000
111	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	2506		LFKC7	D9F240311	510.2	500.0	9.800E-01	1.000
112	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	2507		LFKC7P5	SERIAL DILUTION	510.2	500.0	9.800E-01	1.000
113	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	2508		LFKC7Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
114	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	2509		LFKC7S	MATRIX SPIKE	510.2	500.0	9.800E-01	1.000
115	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
116	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
117	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
118	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	2510		LFKC7D	MATRIX SPIKE DUPLICATE	510.2	500.0	9.800E-01	1.000
119	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2511		LFKC8	D9F240311	490.2	500.0	1.020	1.000
120	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	2512		LFKC9	D9F240311	485.4	500.0	1.030	1.000
121	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3101		LFKDA	D9F240311	490.2	500.0	1.020	1.000
122	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3102		LFKDC	D9F240311	500.0	500.0	1.000	1.000
123	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3103		LFKDD	D9F240311	500.0	500.0	1.000	1.000
124	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
125	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
126	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
127	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3104		LFT60B	BLANK 9181137 6020	1.000	50.00	50.00	1.000
128	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3105		LFT60C	LCS	1.000	50.00	50.00	1.000
129	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3106		LFTDG	D9F290160	1.000	50.00	50.00	1.000
130	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3107		LFTDGP5	SERIAL DILUTION	1.000	50.00	50.00	1.000
131	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3108		LFTDGZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
132	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3109		LFTDGS	MATRIX SPIKE	1.000	50.00	50.00	1.000
133	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
134	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
135	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
136	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3110		LFTDGD	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
137	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3111		LFTDJ	D9F290160	1.000	50.00	50.00	1.000
138	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3112		LFTDK	D9F290160	1.000	50.00	50.00	1.000
139	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3201		LFTDL	D9F290160	1.000	50.00	50.00	1.000
140	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3202		LFTDM	D9F290160	1.000	50.00	50.00	1.000
141	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
142	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
143	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
144	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3203		LFT67B	BLANK 9181141 6020	500.0	500.0	1.000	1.000
145	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3204		LFT67C	LCS	500.0	500.0	1.000	1.000
146	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3205		LFTDN	D9F290160	495.0	500.0	1.010	1.000
147	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3206		LFTDP	D9F290160	495.0	500.0	1.010	1.000
148	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3207		LFTDQ	D9F290160	500.0	500.0	1.000	1.000
149	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3208		LFTDT	D9F290160	490.2	500.0	1.020	1.000
150	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3209		LFTDW	D9F290160	490.2	500.0	1.020	1.000
151	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
152	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
153	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
154	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3210		LFTD2	D9F290160	505.1	500.0	9.900E-01	1.000
155	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3211		LFTD2P5	SERIAL DILUTION	505.1	500.0	9.900E-01	1.000
156	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3212		LFTD2Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
157	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3301		LFTD2S	MATRIX SPIKE	505.1	500.0	9.900E-01	1.000
158	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3302		LFTD2D	MATRIX SPIKE DUPLICATE	505.1	500.0	9.900E-01	1.000
159	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3303		LFTD8	D9F290160	515.5	500.0	9.700E-01	1.000
160	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3304		LFTD9	D9F290160	505.1	500.0	9.900E-01	1.000
161	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3305		LFTED	D9F290160	510.2	500.0	9.800E-01	1.000
162	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
163	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
164	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
165	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
166	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
167	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
168	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
169	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
170	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
171	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
172	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
173	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
174	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
175	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
176	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
177	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSA	2108		ICSA		1.000			
178	C:\ICPCHEM\1\METHODS\NormISIS.M	ICSAB	2109		ICSAB		1.000			
179	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1101		WASH		1.000			
180	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
181	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
182	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
183	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3306		LFRWWBF	BLANK 9180268 6020	1.000	50.00	50.00	1.000
184	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3307		LFRWWCF	LCS	1.000	50.00	50.00	1.000
185	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3308		LFP1LF 10X	D9F260277	10.00	50.00	50.00	10.00
186	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3309		LFQ11F 10X	D9F270154	10.00	50.00	50.00	10.00
187	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3310		LFQ11P50F	SERIAL DILUTION	10.00	50.00	50.00	10.00
188	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3311		LFQ11ZF	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
189	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3312		LFQ11SF 10X	MATRIX SPIKE	10.00	50.00	50.00	10.00
190	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3401		LFQ11DF 10X	MATRIX SPIKE DUPLICATE	10.00	50.00	50.00	10.00
191	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3402		LFQ13F 10X	D9F270154	10.00	50.00	50.00	10.00
192	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
193	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
194	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
195	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3403		LFRV2B	BLANK 9180262 6020	1.000	50.00	50.00	1.000

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
196	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3404		LFRV2C	LCS	1.000	50.00	50.00	1.000
197	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3405		LFP1G 10X	D9F260277	10.00	50.00	50.00	10.00
198	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3406		LFP1GP50	SERIAL DILUTION	10.00	50.00	50.00	10.00
199	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3407		LFP1GZ	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
200	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3408		LFP1GS 10X	MATRIX SPIKE	10.00	50.00	50.00	10.00
201	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
202	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
203	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
204	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3409		LFP1GD 10X	MATRIX SPIKE DUPLICATE	10.00	50.00	50.00	10.00
205	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3410		LFP1K 10X	D9F260277	10.00	50.00	50.00	10.00
206	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3411		LFQ02 10X	D9F270153	10.00	50.00	50.00	10.00
207	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3412		LFQ1Q 10X	D9F270154	10.00	50.00	50.00	10.00
208	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3501		LFQ10 10X	D9F270154	10.00	50.00	50.00	10.00
209	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3502		LFQ12 10X	D9F270154	10.00	50.00	50.00	10.00
210	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
211	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
212	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
213	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
214	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
215	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
216	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1301		RINSE		1.000	50.00	50.00	1.000
217	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
218	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	1101		RINSE		1.000	50.00	50.00	1.000
219	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	1101		Cal Blank		Level 1			
220	C:\ICPCHEM\1\METHODS\NormISIS.M	CalBlk	2101		Cal Blank		Level 1			
221	C:\ICPCHEM\1\METHODS\NormISIS.M	ICAL	2102		100 ppb		Level 2			
222	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
223	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
224	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
225	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	4110		LFTMDB	BLANK 9180481 6020	1.000	50.00	50.00	1.000
226	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	4111		LFTMDC	LCS	1.000	50.00	50.00	1.000
227	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4112		LFNXL	D9F260175	1.000	50.00	50.00	1.000
228	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4201		LFNXQ	D9F260175	1.000	50.00	50.00	1.000
229	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4202		LFNXT	D9F260175	1.000	50.00	50.00	1.000
230	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4203		LFNXW	D9F260175	1.000	50.00	50.00	1.000
231	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4204		LFNXX	D9F260175	1.000	50.00	50.00	1.000
232	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4205		LFQPE	D9F270122	1.000	50.00	50.00	1.000
233	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
234	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
235	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
236	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4206		LFQPT	D9F270122	1.000	50.00	50.00	1.000
237	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4207		LFQPX	D9F270122	1.000	50.00	50.00	1.000
238	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4208		LFQP2	D9F270122	1.000	50.00	50.00	1.000
239	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4209		LFQP3	D9F270122	1.000	50.00	50.00	1.000
240	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	4210		LFQP5	D9F270122	1.000	50.00	50.00	1.000
241	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	4211		LFQP5P5	SERIAL DILUTION	1.000	50.00	50.00	1.000
242	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	4212		LFQP5Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
243	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
244	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
245	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
246	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	4301		LFQP5S	MATRIX SPIKE	1.000	50.00	50.00	1.000
247	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	4302		LFQP5D	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
248	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4303		LFQQA	D9F270122	1.000	50.00	50.00	1.000
249	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4304		LFQQG	D9F270122	1.000	50.00	50.00	1.000
250	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4305		LFQQL	D9F270122	1.000	50.00	50.00	1.000
251	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4306		LFQQP	D9F270122	1.000	50.00	50.00	1.000
252	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4307		LFQQR	D9F270122	1.000	50.00	50.00	1.000
253	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
254	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
255	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
256	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	3503		LFRT8BF	BLANK 9180238 6020	1.000	50.00	50.00	1.000
257	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	3504		LFRT8CF	LCS	1.000	50.00	50.00	1.000
258	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3505		LFNV6F 2X	D9F260164	2.000	50.00	50.00	2.000
259	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3506		LFNXLF	D9F260175	1.000	50.00	50.00	1.000
260	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	3507		LFNXQF	D9F260175	1.000	50.00	50.00	1.000
261	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	3508		LFNXQP5F	SERIAL DILUTION	1.000	50.00	50.00	1.000
262	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
263	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
264	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
265	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	3509		LFNXQZF	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
266	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	3510		LFNXQSF	MATRIX SPIKE	1.000	50.00	50.00	1.000
267	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	3511		LFNXQDF	MATRIX SPIKE DUPLICATE	1.000	50.00	50.00	1.000
268	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	3512		LFNXTF	D9F260175	1.000	50.00	50.00	1.000
269	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4101		LFNXWF	D9F260175	1.000	50.00	50.00	1.000
270	C:\ICPCHEM\1\METHODS\NormISIS.M	SA	4102		LFNXXF	D9F260175	1.000	50.00	50.00	1.000
271	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
272	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
273	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			

	Method	Type	Vial	Data File	Sample	Comment	Dil/Lvl	Final WT or Vol	Sample WT or Vol	Dil Multiplier
274	C:\ICPCHEM\1\METHODS\NormISIS.M	BLK	4103		LFRVEB	BLANK 9180246 6020	1.000	50.00	50.00	1.000
275	C:\ICPCHEM\1\METHODS\NormISIS.M	LCS	4104		LFRVEC	LCS	1.000	50.00	50.00	1.000
276	C:\ICPCHEM\1\METHODS\NormISIS.M	AllRef	4105		LFNV6 2X	D9F260164	2.000	50.00	50.00	2.000
277	C:\ICPCHEM\1\METHODS\NormISIS.M	SDIL	4106		LFNV6P5	SERIAL DILUTION	2.000	50.00	50.00	2.000
278	C:\ICPCHEM\1\METHODS\NormISIS.M	PDS	4107		LFNV6Z	POST DIGESTION SPIKE	1.000	1.000	1.000	1.000
279	C:\ICPCHEM\1\METHODS\NormISIS.M	MS	4108		LFNV6S 2X	MATRIX SPIKE	2.000	50.00	50.00	2.000
280	C:\ICPCHEM\1\METHODS\NormISIS.M	MSD	4109		LFNV6D 2X	MATRIX SPIKE DUPLICATE	2.000	50.00	50.00	2.000
281	C:\ICPCHEM\1\METHODS\NormISIS.M	CCV	1107		CCV		1.000			
282	C:\ICPCHEM\1\METHODS\NormISIS.M	CCB	1307		CCB		1.000			
283	C:\ICPCHEM\1\METHODS\NormISIS.M	WASH	1204		RLCV		1.000			
284		Keyword		SMPLEND	End of SMPL					
285		Keyword		TERMBEG	Start of TERM					
286		Keyword		StandBy						
287		Keyword		TERMEND	End of TERM					
288		Keyword		End	End of Sequence					
289		Keyword		BLKBEG	Start of BLANK					
290		Keyword		BLKEND	End of BLANK					
291		Keyword		ERRBEG	Start of ERRTERM					
292		Keyword		ERREND	End of ERRTERM					

TestAmerica Denver

Standards Preparation Logbook Record

Jul-02-2009

Logbook: \\Densvr06\StdsLog\metals.std

STD4841-08, 1000 Zn (Inorganic Ventures)

Analyst: trudelll

Vendor: Inorganic Ventures | Lot No.: B2-ZN02045 | Vendor's Expiration Date: 10-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 09-04-2008 | Date Received: 09-04-2008
Date Expires(1): 10-01-2009 (None)
Date Expires(2): 10-01-2009 (None)
(METALS)-Inventory ID: 779

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1,000.0	1,000.0

STD6653-08, 1000 Se

Analyst: trudelll

Vendor: Inorganic Ventures | Lot No.: B2-SE02003 | Vendor's Expiration Date: 12-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 11-25-2008 | Date Received: 11-25-2008
Date Expires(1): 12-01-2009 (None)
Date Expires(2): 12-01-2009 (None)
(METALS)-Inventory ID: 803

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1,000.0	1,000.0

STD1198-09, 1000 mg/L Sn

Analyst: trudelll

Vendor: Inorganic Ventures | Lot No.: B2-SN02016 | Vendor's Expiration Date: 03-01-2010
Solvent: 1% HNO3
Date Prep./Opened: 03-02-2009 | Date Received: 03-02-2009
Date Expires(1): 03-01-2010 (None)
Date Expires(2): 03-01-2010 (None)
(METALS)-Inventory ID: 833

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1,000.0	1,000.0

STD1853-09, 1 mg/l Se

Analyst: DIAZL

Solvent: 5% HN03 | Lot No.: H02026 | Volume (ml): 100.00
Date Prep./Opened: 04-01-2009
Date Expires(1): 12-01-2009 (1 Year)
pipette: Met 21

Parent Std No.: STD6653-08, 1000 Se — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 12-01-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1,000.0	1.0000

STD3611-09, ICP-MS 1ppm Sn/Zn — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 06-16-2009
Date Expires(1): 10-01-2009 (1 Year)

Parent Std No.: STD3609-09, ICP-MS 10 ppm Zn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 10-01-2009 Parent Date Expires(2): 10-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	10.000	1.0000

Parent Std No.: STD3610-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	10.000	1.0000

STD3662-09, ICP-MS (024) INT STD BRC-HIGH — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 250.00
Date Prep./Opened: 06-17-2009
Date Expires(1): 11-10-2009 (1 Year)
Date Expires(2): 12-01-2009 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD1469-09, Germanium Stock — Aliquot Amount (ml): 1.2000
Parent Date Expires(1): 03-16-2010 Parent Date Expires(2): 04-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ge	1,000.0	4,800.0

Parent Std No.: STD1972-09, Lithium 6 Stock — Aliquot Amount (ml): 1.5000
Parent Date Expires(1): 04-07-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Lithium6	1,000.0	6,000.0

Parent Std No.: STD1973-09, Indium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 04-07-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
In	1,000.0	1,600.0

Parent Std No.: STD6317-08, Scandium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 11-10-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sc	1,000.0	1,600.0

Parent Std No.: STD6318-08, Holmium Stock — Aliquot Amount (ml): 0.4000
Parent Date Expires(1): 11-10-2009 Parent Date Expires(2): 12-01-2009

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ho	1,000.0	1,600.0

STD3913-09, ICP-MS ICSA — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 50.000
Date Prep./Opened: 06-29-2009
Date Expires(1): 07-29-2009 (1 Month)
Date Expires(2): 02-01-2010 (None)
pipettes: Met 8

Parent Std No.: STD0664-09, ICPMS Interferent Check Standard — Aliquot Amount (ml): 5.0000
Parent Date Expires(1): 02-01-2010 Parent Date Expires(2): 02-01-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Al	1,000.0	100,000
C	2,000.0	200,000
Ca	1,000.0	100,000
Cl	10,000	1,000,000
Fe	1,000.0	100,000
K	1,000.0	100,000
Mg	1,000.0	100,000
Mo	20.000	2,000.0
Na	1,000.0	100,000
P	1,000.0	100,000
S	1,000.0	100,000
Ti	20.000	2,000.0

STD3997-09, ICP-MS BLANK — Analyst: DIAZL

Solvent: Water — Volume (ml): 1,000.0
Date Prep./Opened: 07-02-2009
Date Expires(1): 08-02-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD3996-09, NITRIC ACID — Aliquot Amount (ml): 50.000

Component	Initial Conc (%)	Final Conc (%)
HNO3	100.00	5.0000

STD3998-09, ICP-MS 10 ppm Sn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 03-01-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1198-09, 1000 mg/L Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1,000.0	10.000

STD3999-09, ICP-MS 100 ppb cal

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	100.00
Al	20.000	100.00
As	20.000	100.00
Ba	20.000	100.00
Be	20.000	100.00
Cd	20.000	100.00
Co	20.000	100.00
Cr	20.000	100.00
Cu	20.000	100.00
Mn	20.000	100.00
Ni	20.000	100.00
Pb	20.000	100.00
Se	20.000	100.00
Th	20.000	100.00
Tl	20.000	100.00
U	20.000	100.00
V	20.000	100.00
Zn	20.000	100.00

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00

Sb	20.000	100.00

Parent Std No.: STD3862-09, Iron Stock — Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Fe	1,000.0	5,000.0

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4000-09, ICP-MS CCV — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures — Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	50.000
Al	20.000	50.000
As	20.000	50.000
Ba	20.000	50.000
Be	20.000	50.000
Cd	20.000	50.000
Co	20.000	50.000
Cr	20.000	50.000
Cu	20.000	50.000
Mn	20.000	50.000
Ni	20.000	50.000
Pb	20.000	50.000
Se	20.000	50.000
Th	20.000	50.000
Tl	20.000	50.000
U	20.000	50.000
V	20.000	50.000
Zn	20.000	50.000

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures — Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	50.000
Sb	20.000	50.000

Parent Std No.: STD3862-09, Iron Stock — Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)

Fe	1,000.0	2,500.0

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	50.000

STD4001-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD3611-09, ICP-MS 1ppm Sn/Zn — Aliquot Amount (ml): 0.0900

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	1.0000	0.0090
1000 Zn	1.0000	0.0090

Parent Std No.: STD3999-09, ICP-MS 100 ppb cal — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 07-03-2009

Component	Initial Conc (ug/L)	Final Conc (mg/L)
Ag	100.00	0.0010
Al	100.00	0.0010
As	100.00	0.0010
Ba	100.00	0.0010
Be	100.00	0.0010
Cd	100.00	0.0010
Co	100.00	0.0010
Cr	100.00	0.0010
Cu	100.00	0.0010
Mn	100.00	0.0010
Ni	100.00	0.0010
Pb	100.00	0.0010
Se	100.00	0.0010
Th	100.00	0.0010
Tl	100.00	0.0010
U	100.00	0.0010
V	100.00	0.0010
Zn	100.00	0.0010
Mo	100.00	0.0010
Sb	100.00	0.0010
Fe	5,000.0	0.0500
Sn	100.00	0.0010

STD4002-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (2 Days)
pipettes: Met 20 and Met 8

Parent Std No.: STD4001-09, ICP-MS RL STD Aliquot Amount (ml): 2.0000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	0.0090	0.0018
1000 Zn	0.0090	0.0018
Ag	0.0010	0.0002
Al	0.0010	0.0002
As	0.0010	0.0002
Ba	0.0010	0.0002
Be	0.0010	0.0002
Cd	0.0010	0.0002
Co	0.0010	0.0002
Cr	0.0010	0.0002
Cu	0.0010	0.0002
Mn	0.0010	0.0002
Ni	0.0010	0.0002
Pb	0.0010	0.0002
Se	0.0010	0.0002
Th	0.0010	0.0002
Tl	0.0010	0.0002
U	0.0010	0.0002
V	0.0010	0.0002
Zn	0.0010	0.0002
Mo	0.0010	0.0002
Sb	0.0010	0.0002
Fe	0.0500	0.0100
Sn	0.0010	0.0002

STD4003-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21, Met 20, and Met 8

Parent Std No.: STD1978-09, ICPMS Interferent Check Standard Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 04-01-2010 Parent Date Expires(2): 04-01-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Al	1,000.0	100,000
C	2,000.0	200,000
Ca	1,000.0	100,000

Cl	10,000	1,000,000
Fe	1,000.0	100,000
K	1,000.0	100,000
Mg	1,000.0	100,000
Mo	20.000	2,000.0
Na	1,000.0	100,000
P	1,000.0	100,000
S	1,000.0	100,000
Ti	20.000	2,000.0

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	100.00
Al	20.000	100.00
As	20.000	100.00
Ba	20.000	100.00
Be	20.000	100.00
Cd	20.000	100.00
Co	20.000	100.00
Cr	20.000	100.00
Cu	20.000	100.00
Mn	20.000	100.00
Ni	20.000	100.00
Pb	20.000	100.00
Se	20.000	100.00
Th	20.000	100.00
Tl	20.000	100.00
U	20.000	100.00
V	20.000	100.00
Zn	20.000	100.00

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	20.000	100.00

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4004-09, ICPMS LR STD 1000 ppb Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20 and Met 8

Parent Std No.: STD2635-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	20.000	1,000.0
Al	20.000	1,000.0
As	20.000	1,000.0
Ba	20.000	1,000.0
Be	20.000	1,000.0
Cd	20.000	1,000.0
Co	20.000	1,000.0
Cr	20.000	1,000.0
Cu	20.000	1,000.0
Mn	20.000	1,000.0
Ni	20.000	1,000.0
Pb	20.000	1,000.0
Se	20.000	1,000.0
Th	20.000	1,000.0
Tl	20.000	1,000.0
U	20.000	1,000.0
V	20.000	1,000.0
Zn	20.000	1,000.0

Parent Std No.: STD2636-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	1,000.0
Sb	20.000	1,000.0

Parent Std No.: STD3998-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 07-03-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	1,000.0

STD4005-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 02-27-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1213-09, ICPMS ICV SOLUTION A (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Al	10.000	40.000
As	10.000	40.000
Ba	10.000	40.000
Be	10.000	40.000
Cd	10.000	40.000

Co	10.000	40.000
Cr	10.000	40.000
Cu	10.000	40.000
Fe	250.00	1,000.0
Li	10.000	40.000
Mn	10.000	40.000
Ni	10.000	40.000
Pb	10.000	40.000
Se	10.000	40.000
Th	10.000	40.000
Tl	10.000	40.000
U	10.000	40.000
V	10.000	40.000
Zn	10.000	40.000

Parent Std No.: STD1214-09, ICPMS ICV SOLUTION B (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Ag	10.000	40.000
Mo	10.000	40.000
Sb	10.000	40.000
Sn	10.000	40.000
Zr	10.000	40.000

STD4006-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD1853-09, 1 mg/l Se Aliquot Amount (ml): 0.1000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1.0000	0.0020

STD4007-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 07-02-2009
Date Expires(1): 07-03-2009 (1 Day)
Date Expires(2): 05-01-2010 (None)
pipettes: Met 20

Parent Std No.: STD3106-09, ICP-MS LLCCV 1 Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	0.5000	5.0000
Al	3.0000	30.000
As	0.5000	5.0000

Ba	0.1000	1.0000
Be	0.1000	1.0000
Ca	5.0000	50.000
Cd	0.1000	1.0000
Co	0.1000	1.0000
Cr	0.2000	2.0000
Cu	0.2000	2.0000
Fe	5.0000	50.000
K	10.000	100.00
Mg	5.0000	50.000
Mn	0.1000	1.0000
Na	5.0000	50.000
Ni	0.2000	2.0000
Pb	0.1000	1.0000
Se	0.5000	5.0000
Th	0.2000	2.0000
Tl	0.1000	1.0000
U	0.1000	1.0000
V	0.5000	5.0000
Zn	1.0000	10.000

Parent Std No.: STD3107-09, ICP-MS LLCCV 2 Aliquot Amount (ml): 1.0000

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	0.2000	2.0000
Sb	0.2000	2.0000
Sn	1.0000	10.000

Reviewed By: LRD 07/02/2009

Denver RUN SUMMARY

Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
2	Cal Blank				1.0	07/02/09 17:27		☐
3	Cal Blank				1.0	07/02/09 17:31		☐
4	100 ppb				1.0	07/02/09 17:34		☐
5	ICV				1.0	07/02/09 17:37		☐
6	RLIV				1.0	07/02/09 17:41		☐
7	ICB				1.0	07/02/09 17:44		☐
8	RL STD				1.0	07/02/09 17:47		☐
9	AFCEE RL				1.0	07/02/09 17:51		☐
10	CHECK				1.0	07/02/09 17:54		☐
11	ALTSe				1.0	07/02/09 17:58		☐
12	ICSA				1.0	07/02/09 18:01		☐
13	ICSAB				1.0	07/02/09 18:04		☐
14	RINSE				1.0	07/02/09 18:08		☐
15	LR				1.0	07/02/09 18:11		☐
16	RINSE				1.0	07/02/09 18:14		☐
17	CCV				1.0	07/02/09 18:18		☐
18	CCB				1.0	07/02/09 18:21		☐
19	RLCV				1.0	07/02/09 18:24		☐
20	LFCCFB	D9F200000	9171051	MS	1.0	07/02/09 18:28		☐
21	LFCCFC	D9F200000	9171051	MS	1.0	07/02/09 18:31		☐
22	LE4RA	D9F170236-7	9171051	MS	1.0	07/02/09 18:34		☐
23	LE4RAP5	D9F170236	9171051		5.0	07/02/09 18:38		☐
24	LE4RAZ	D9F170236-7	9171051		1.0	07/02/09 18:41		☐
25	LE4RK	D9F170236-9	9171051	MS	1.0	07/02/09 18:45		☐
26	LE4RN	D9F170236-11	9171051	MS	1.0	07/02/09 18:48		☐
27	LE4R9	D9F170236-26	9171051	MS	1.0	07/02/09 18:51		☐
28	CCV				1.0	07/02/09 18:55		☐
29	CCB				1.0	07/02/09 18:58		☐
30	RLCV				1.0	07/02/09 19:01		☐
31	~~LE4TC~~	~~D9F170236-27~~	~~9171051~~	~~MS~~	~~1.0~~	~~07/02/09 19:05~~		☐
32	LE4TN	D9F170236-29	9171051	MS	1.0	07/02/09 19:09		☐
33	LE4TP	D9F170236-30	9171051	MS	1.0	07/02/09 19:12		☐
34	LE4TQ	D9F170236-31	9171051	MS	1.0	07/02/09 19:16		☐
35	LE4T4	D9F170236-36	9171051	MS	1.0	07/02/09 19:19		☐
36	LE4T9	D9F170236-39	9171051	MS	1.0	07/02/09 19:23		☐
37	LE4VA	D9F170236-40	9171051	MS	1.0	07/02/09 19:26		☐
38	~~LE4VT~~	~~D9F170236-45~~	~~9171051~~	~~MS~~	~~1.0~~	~~07/02/09 19:29~~	AT 7/6/09 Did not use.	☐
39	CCV				1.0	07/02/09 19:33		☐
40	CCB				1.0	07/02/09 19:36		☐
41	RLCV				1.0	07/02/09 19:40		☐
42	LFJDGB	D9F240000	9175365	46	1.0	07/02/09 19:43		☐
43	LFJDGC	D9F240000	9175365	46	1.0	07/02/09 19:46		☐
44	LFGCV	D9F230211-1	9175365	46	1.0	07/02/09 19:50		☐
45	LFGCVP5	D9F230211	9175365		5.0	07/02/09 19:53		☐
46	LFGCVZ	D9F230211-1	9175365		1.0	07/02/09 19:56		☐
47	LFGCVS	D9F230211-1	9175365	46	1.0	07/02/09 20:00		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
48	CCV				1.0	07/02/09 20:03		
49	CCB				1.0	07/02/09 20:07		
50	RLCV				1.0	07/02/09 20:10		
51	LFGCVD	D9F230211-1	9175365	46	1.0	07/02/09 20:13		
52	LFGC2	D9F230211-2	9175365	46	1.0	07/02/09 20:17		
53	LFGC8	D9F230211-3	9175365	46	1.0	07/02/09 20:20		
54	LFGC9	D9F230211-4	9175365	46	1.0	07/02/09 20:23		
55	LFGDA	D9F230211-5	9175365	46	1.0	07/02/09 20:27		
56	LFGDD	D9F230211-6	9175365	46	1.0	07/02/09 20:30		
57	CCV				1.0	07/02/09 20:34		
58	CCB				1.0	07/02/09 20:37		
59	RLCV				1.0	07/02/09 20:40		
60	ICSA				1.0	07/02/09 20:44		
61	ICSAB				1.0	07/02/09 20:47		
62	WASH				1.0	07/02/09 20:50		
63	CCV				1.0	07/02/09 20:54		
64	CCB				1.0	07/02/09 20:57		
65	RLCV				1.0	07/02/09 21:01		
66	LE4TC	D9F170236-27	9171051	MS	1.0	07/02/09 21:04		
67	LE4TN	D9F170236-29	9171051	MS	1.0	07/02/09 21:07		
68	LE4TP	D9F170236-30	9171051	MS	1.0	07/02/09 21:11		
69	LE4TQ	D9F170236-31	9171051	MS	1.0	07/02/09 21:14		
70	LE4T4	D9F170236-36	9171051	MS	1.0	07/02/09 21:18		
71	LE4T9	D9F170236-39	9171051	MS	1.0	07/02/09 21:21		
72	LE4VA	D9F170236-40	9171051	MS	1.0	07/02/09 21:24		
73	LE4VT	D9F170236-45	9171051	MS	1.0	07/02/09 21:28		
74	CCV				1.0	07/02/09 21:31		
75	CCB				1.0	07/02/09 21:35		
76	RLCV				1.0	07/02/09 21:38		
77	~~RINSE~~				1.0	07/02/09 21:41		
78	RINSE				1.0	07/02/09 21:45		
79	RINSE				1.0	07/02/09 21:48		
80	RINSE				1.0	07/02/09 21:51		
81	RINSE				1.0	07/02/09 21:55		
82	RINSE				1.0	07/02/09 21:58		
83	~~Cal Blank~~				1.0	07/02/09 22:01	V.T 7/6/09	
84	Cal Blank				1.0	07/02/09 22:05		
85	100 ppb				1.0	07/02/09 22:08		
86	CCV				1.0	07/02/09 22:11		
87	CCB				1.0	07/02/09 22:15		
88	RLCV				1.0	07/02/09 22:18		
89	LFM02B	D9F260000	9177095	MS	1.0	07/02/09 22:22		
90	LFM02C	D9F260000	9177095	MS	1.0	07/02/09 22:25		
91	LFKC2	D9F240311-1	9177095	MS	1.0	07/02/09 22:28		
92	LFKC3	D9F240311-2	9177095	MS	1.0	07/02/09 22:32		
93	LFKC4	D9F240311-3	9177095	MS	1.0	07/02/09 22:35		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
94	LFKC4P5	D9F240311	9177095		5.0	07/02/09 22:38		☐
95	LFKC4Z	D9F240311-3	9177095		1.0	07/02/09 22:42		☐
96	LFKC4S	D9F240311-3	9177095	MS	1.0	07/02/09 22:45		☐
97	LFKC4D	D9F240311-3	9177095	MS	1.0	07/02/09 22:49		☐
98	LFKC5	D9F240311-4	9177095	MS	1.0	07/02/09 22:52		☐
99	CCV				1.0	07/02/09 22:55		☐
100	CCB				1.0	07/02/09 22:59		☐
101	RLCV				1.0	07/02/09 23:02		☐
102	LFM0PB	D9F260000	9177090	46	1.0	07/02/09 23:05		☐
103	LFM0PC	D9F260000	9177090	46	1.0	07/02/09 23:09		☐
104	LFKC6	D9F240311-5	9177090	46	1.0	07/02/09 23:12		☐
105	LFKC7	D9F240311-6	9177090	46	1.0	07/02/09 23:16		☐
106	LFKC7P5	D9F240311	9177090		5.0	07/02/09 23:19		☐
107	LFKC7Z	D9F240311-6	9177090		1.0	07/02/09 23:22		☐
108	LFKC7S	D9F240311-6	9177090	46	1.0	07/02/09 23:26		☐
109	CCV				1.0	07/02/09 23:29		☐
110	CCB				1.0	07/02/09 23:32		☐
111	RLCV				1.0	07/02/09 23:36		☐
112	LFKC7D	D9F240311-6	9177090	46	1.0	07/02/09 23:39		☐
113	LFKC8	D9F240311-7	9177090	46	1.0	07/02/09 23:43		☐
114	LFKC9	D9F240311-8	9177090	46	1.0	07/02/09 23:46		☐
115	LFKDA	D9F240311-9	9177090	46	1.0	07/02/09 23:49		☐
116	LFKDC	D9F240311-10	9177090	46	1.0	07/02/09 23:53		☐
117	LFKDD	D9F240311-11	9177090	46	1.0	07/02/09 23:56		☐
118	CCV				1.0	07/03/09 00:00		☐
119	CCB				1.0	07/03/09 00:03		☐
120	RLCV				1.0	07/03/09 00:06		☐
121	~~LFT60B~~	~~D9F300000~~	~~9181137~~	~~MS~~	~~1.0~~	~~07/03/09 00:10~~		☐
122	LFT60C	D9F300000	9181137	MS	1.0	07/03/09 00:13		☐
123	LFTDG	D9F290160-1	9181137	MS	1.0	07/03/09 00:17		☐
124	LFTDGP5	D9F290160	9181137		5.0	07/03/09 00:20		☐
125	LFTDGZ	D9F290160-1	9181137		1.0	07/03/09 00:23		☐
126	LFTDGS	D9F290160-1	9181137	MS	1.0	07/03/09 00:27		☐
127	CCV				1.0	07/03/09 00:30		☐
128	CCB				1.0	07/03/09 00:34		☐
129	RLCV				1.0	07/03/09 00:37		☐
130	LFTDGD	D9F290160-1	9181137	MS	1.0	07/03/09 00:40		☐
131	LFTDJ	D9F290160-2	9181137	MS	1.0	07/03/09 00:44		☐
132	LFTDK	D9F290160-3	9181137	MS	1.0	07/03/09 00:47		☐
133	LFTDL	D9F290160-4	9181137	MS	1.0	07/03/09 00:51		☐
134	LFTDM	D9F290160-5	9181137	MS	1.0	07/03/09 00:54		☐
135	CCV				1.0	07/03/09 00:57		☐
136	CCB				1.0	07/03/09 01:01		☐
137	RLCV				1.0	07/03/09 01:04		☐
138	LFT67B	D9F300000	9181141	46	1.0	07/03/09 01:08		☐
139	~~LFT67C~~	~~D9F300000~~	~~9181141~~	~~46~~	~~1.0~~	~~07/03/09 01:11~~	VT 7/6/09 Did not use.	☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
140	~~LFTDN~~	~~D9F290160-6~~	~~9181141~~	~~46~~	~~1.0~~	~~07/03/09 01:14~~		☐
141	LFTDP	D9F290160-7	9181141	46	1.0	07/03/09 01:18		☐
142	LFTDQ	D9F290160-8	9181141	46	1.0	07/03/09 01:21		☐
143	LFTDT	D9F290160-9	9181141	46	1.0	07/03/09 01:24		☐
144	LFTDW	D9F290160-10	9181141	46	1.0	07/03/09 01:28		☐
145	CCV				1.0	07/03/09 01:31		☐
146	CCB				1.0	07/03/09 01:35		☐
147	RLCV				1.0	07/03/09 01:38		☐
148	LFTD2	D9F290160-11	9181141	46	1.0	07/03/09 01:41		☐
149	LFTD2P5	D9F290160	9181141		5.0	07/03/09 01:45		☐
150	LFTD2Z	D9F290160-11	9181141		1.0	07/03/09 01:48		☐
151	LFTD2S	D9F290160-11	9181141	46	1.0	07/03/09 01:52		☐
152	LFTD2D	D9F290160-11	9181141	46	1.0	07/03/09 01:55		☐
153	LFTD8	D9F290160-12	9181141	46	1.0	07/03/09 01:58		☐
154	LFTD9	D9F290160-13	9181141	46	1.0	07/03/09 02:02		☐
155	LFTED	D9F290160-14	9181141	46	1.0	07/03/09 02:05		☐
156	CCV				1.0	07/03/09 02:09		☐
157	CCB				1.0	07/03/09 02:12		☐
158	RLCV				1.0	07/03/09 02:15		☐
159	RINSE				1.0	07/03/09 02:19		☐
160	RINSE				1.0	07/03/09 02:22		☐
161	RINSE				1.0	07/03/09 02:26		☐
162	RINSE				1.0	07/03/09 02:29		☐
163	RINSE				1.0	07/03/09 02:32		☐
164	RINSE				1.0	07/03/09 02:36		☐
165	~~Cal Blank~~				~~1.0~~	~~07/03/09 02:39~~	KT 7/6/09 Did not use.	☐
166	Cal Blank				1.0	07/03/09 02:42		☐
167	100 ppb				1.0	07/03/09 02:46		☐
168	CCV				1.0	07/03/09 02:49		☐
169	CCB				1.0	07/03/09 02:53		☐
170	RLCV				1.0	07/03/09 02:56		☐
171	ICSA				1.0	07/03/09 02:59		☐
172	ICSAB				1.0	07/03/09 03:03		☐
173	WASH				1.0	07/03/09 03:06		☐
174	CCV				1.0	07/03/09 03:10		☐
175	CCB				1.0	07/03/09 03:13		☐
176	RLCV				1.0	07/03/09 03:16		☐
177	LFRWWBF	D9F290000	9180268	MD	1.0	07/03/09 03:20		☐
178	LFRWWCF	D9F290000	9180268	MD	1.0	07/03/09 03:23		☐
179	LFP1LF 10X	D9F260277-3	9180268	MD	10.0	07/03/09 03:26		☐
180	LFQ11F 10X	D9F270154-3	9180268	MD	10.0	07/03/09 03:30		☐
181	LFQ11P50F	D9F270154	9180268		50.0	07/03/09 03:33		☐
182	LFQ11ZF	D9F270154-3	9180268		1.0	07/03/09 03:37		☐
183	LFQ11SF 10X	D9F270154-3	9180268	MD	10.0	07/03/09 03:40		☐
184	LFQ11DF 10X	D9F270154-3	9180268	MD	10.0	07/03/09 03:43		☐
185	LFQ13F 10X	D9F270154-5	9180268	MD	10.0	07/03/09 03:47		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
186	CCV				1.0	07/03/09 03:50		☐
187	CCB				1.0	07/03/09 03:54		☐
188	RLCV				1.0	07/03/09 03:57		☐
189	LFRV2B	D9F290000	9180262	MS	1.0	07/03/09 04:00		☐
190	LFRV2C	D9F290000	9180262	MS	1.0	07/03/09 04:04		☐
191	LFP1G 10X	D9F260277-1	9180262	MS	10.0	07/03/09 04:07		☐
192	LFP1GP50	D9F260277	9180262		50.0	07/03/09 04:11		☐
193	LFP1GZ	D9F260277-1	9180262		1.0	07/03/09 04:14		☐
194	LFP1GS 10X	D9F260277-1	9180262	MS	10.0	07/03/09 04:17		☐
195	CCV				1.0	07/03/09 04:21		☐
196	CCB				1.0	07/03/09 04:24		☐
197	RLCV				1.0	07/03/09 04:27		☐
198	LFP1GD 10X	D9F260277-1	9180262	MS	10.0	07/03/09 04:31		☐
199	LFP1K 10X	D9F260277-2	9180262	MS	10.0	07/03/09 04:34		☐
200	LFQ02 10X	D9F270153-1	9180262	MS	10.0	07/03/09 04:38		☐
201	LFQ1Q 10X	D9F270154-1	9180262	MS	10.0	07/03/09 04:41		☐
202	LFQ10 10X	D9F270154-2	9180262	MS	10.0	07/03/09 04:44		☐
203	LFQ12 10X	D9F270154-4	9180262	MS	10.0	07/03/09 04:48		☐
204	CCV				1.0	07/03/09 04:51		☐
205	CCB				1.0	07/03/09 04:55		☐
206	RLCV				1.0	07/03/09 04:58		☐
207	~~RINSE~~				~~1.0~~	~~07/03/09 05:01~~		☐
208	RINSE				1.0	07/03/09 05:05		☐
209	RINSE				1.0	07/03/09 05:08		☐
210	RINSE				1.0	07/03/09 05:11		☐
211	RINSE				1.0	07/03/09 05:15		☐
212	RINSE				1.0	07/03/09 05:18		☐
213	~~Cal Blank~~				~~1.0~~	~~07/03/09 05:22~~	KT 7/6/09	☐
214	Cal Blank				1.0	07/03/09 05:25		☐
215	100 ppb				1.0	07/03/09 05:28		☐
216	CCV				1.0	07/03/09 05:32		☐
217	CCB				1.0	07/03/09 05:35		☐
218	RLCV				1.0	07/03/09 05:38		☐
219	LFTMDB	D9F290000	9180481	04	1.0	07/03/09 05:42		☐
220	LFTMDC	D9F290000	9180481	04	1.0	07/03/09 05:45		☐
221	LFNXL	D9F260175-1	9180481	04	1.0	07/03/09 05:49		☐
222	LFNXQ	D9F260175-2	9180481	04	1.0	07/03/09 05:52		☐
223	LFNXT	D9F260175-3	9180481	04	1.0	07/03/09 05:56		☐
224	LFNXW	D9F260175-4	9180481	04	1.0	07/03/09 05:59		☐
225	LFNXX	D9F260175-5	9180481	04	1.0	07/03/09 06:02		☐
226	LFQPE	D9F270122-1	9180481	04	1.0	07/03/09 06:06		☐
227	CCV				1.0	07/03/09 06:09		☐
228	CCB				1.0	07/03/09 06:13		☐
229	RLCV				1.0	07/03/09 06:16		☐
230	~~LFQPT~~	~~D9F270122-2~~	~~9180481~~	~~04~~	~~1.0~~	~~07/03/09 06:19~~		☐
231	~~LFQPX~~	~~D9F270122-3~~	~~9180481~~	~~04~~	~~1.0~~	~~07/03/09 06:23~~	KT 7/6/09 Did not use.	☐

Denver

RUN SUMMARY

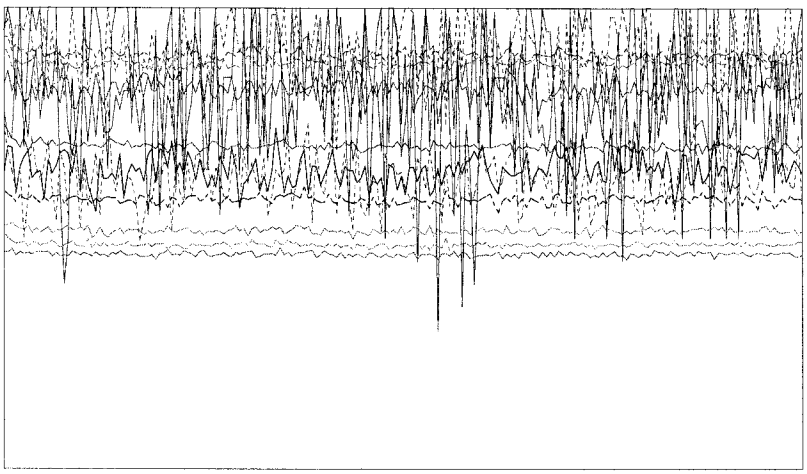
Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/06/09 10:04:16

File ID: AG070209D **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
232	LFQP2	D9F270122-4	9180481	04	1.0	07/03/09 06:26		☐
233	LFQP3	D9F270122-5	9180481	04	1.0	07/03/09 06:30		☐
234	LFQP5	D9F270122-6	9180481	04	1.0	07/03/09 06:33		☐
235	LFQP5P5	D9F270122	9180481		5.0	07/03/09 06:37		☐
236	LFQP5Z	D9F270122-6	9180481		1.0	07/03/09 06:40		☐
237	CCV				1.0	07/03/09 06:43		☐
238	CCB				1.0	07/03/09 06:47		☐
239	RLCV				1.0	07/03/09 06:50		☐
240	LFQP5S	D9F270122-6	9180481	04	1.0	07/03/09 06:54		☐
241	LFQP5D	D9F270122-6	9180481	04	1.0	07/03/09 06:57		☐
242	LFQQA	D9F270122-7	9180481	04	1.0	07/03/09 07:00		☐
243	LFQQG	D9F270122-8	9180481	04	1.0	07/03/09 07:04		☐
244	LFQQL	D9F270122-9	9180481	04	1.0	07/03/09 07:07		☐
245	LFQQP	D9F270122-10	9180481	04	1.0	07/03/09 07:11		☐
246	LFQQR	D9F270122-11	9180481	04	1.0	07/03/09 07:14		☐
247	CCV				1.0	07/03/09 07:17		☐
248	CCB				1.0	07/03/09 07:21		☐
249	RLCV				1.0	07/03/09 07:24		☐
250	LFRT8BF	D9F290000	9180238	MD	1.0	07/03/09 07:28		☐
251	LFRT8CF	D9F290000	9180238	MD	1.0	07/03/09 07:31		☐
252	LFNV6F 2X	D9F260164-1	9180238	MD	2.0	07/03/09 07:34		☐
253	LFNXLF	D9F260175-1	9180238	MD	1.0	07/03/09 07:38		☐
254	LFNXQF	D9F260175-2	9180238	MD	1.0	07/03/09 07:41		☐
255	LFNXQP5F	D9F260175	9180238		5.0	07/03/09 07:45		☐
256	CCV				1.0	07/03/09 07:48		☐
257	CCB				1.0	07/03/09 07:51		☐
258	RLCV				1.0	07/03/09 07:55		☐
259	LFNXQZF	D9F260175-2	9180238		1.0	07/03/09 07:58		☐
260	LFNXQSF	D9F260175-2	9180238	MD	1.0	07/03/09 08:02		☐
261	LFNXQDF	D9F260175-2	9180238	MD	1.0	07/03/09 08:05		☐
262	LFNXTF	D9F260175-3	9180238	MD	1.0	07/03/09 08:08		☐
263	LFNXWF	D9F260175-4	9180238	MD	1.0	07/03/09 08:12		☐
264	LFNXXF	D9F260175-5	9180238	MD	1.0	07/03/09 08:15	RT 7/6/09 Did not use.	☐
265	CCV				1.0	07/03/09 08:19		☐
266	CCB				1.0	07/03/09 08:22		☐
267	RLCV				1.0	07/03/09 08:25		☐
268	LFRVEB	D9F290000	9180246	MS	1.0	07/03/09 08:29		☐
269	LFRVEC	D9F290000	9180246	MS	1.0	07/03/09 08:32		☐
270	LFNV6 2X	D9F260164-1	9180256	MS	2.0	07/03/09 08:36		☐
271	LFNV6P5	D9F260164	9180256		5.0	07/03/09 08:39		☐
272	LFNV6Z	D9F260164-1	9180256		1.0	07/03/09 08:42		☐
273	LFNV6S 2X	D9F260164-1	9180246	MS	2.0	07/03/09 08:46		☐
274	LFNV6D 2X	D9F260164-1	9180246	MS	2.0	07/03/09 08:49		☐
275	CCV				1.0	07/03/09 08:53		☐
276	CCB				1.0	07/03/09 08:56		☐
277	RLCV				1.0	07/03/09 08:59		☐

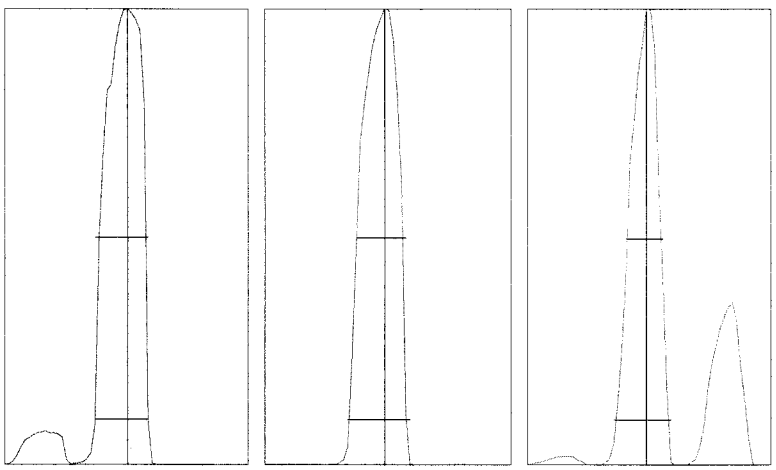
Tune Report

Tune File : NORM.U
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	1.5300 sec	
n:	200	
Oxide:	156/140	2.303%
Doubly Charged:	70/140	1.267%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1640.0	1652.2	2.82	0.40
7	50,000	23181.0	23270.7	1.05	0.50
59	50,000	25829.0	25831.6	1.20	0.30
63	100	70.0	81.5	12.40	0.60
70	1,000	640.0	650.4	5.15	0.60
75	20	24.0	17.2	25.72	0.60
78	200	194.0	182.1	8.34	0.50
89	50,000	44438.0	44018.2	0.98	0.80
115	100,000	49107.0	48640.4	1.04	0.90
118	200	111.0	126.0	9.13	0.80
137	10,000	5841.0	5846.3	1.51	0.80
205	50,000	45602.0	45024.8	1.18	1.20
238	100,000	70365.0	70144.9	1.16	1.30
156/140	5	2.255%	2.330%	4.56	
70/140	2	1.261%	1.284%	5.25	



m/z:	7	89	205
Height:	23,577	44,237	46,123
Axis:	7.05	89.00	205.00
W-50%:	0.65	0.60	0.45
W-10%:	0.6500	0.7500	0.700

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : Jul 02, 2009 16:12:11
Printed : Jul 02, 2009 16:12:14

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1550 W	Extract 1	:	0 V	AMU Gain	:	134
RF Matching	:	1.7 V	Extract 2	:	-175 V	AMU Offset	:	123
Smpl Depth	:	7.5 mm	Omega Bias-ce	:	-30 V	Axis Gain	:	1.0006
Torch-H	:	-0.8 mm	Omega Lens-ce	:	-0.2 V	Axis Offset	:	-0.02
Torch-V	:	-0.3 mm	Cell Entrance	:	-30 V	QP Bias	:	-10 V
Carrier Gas	:	0.83 L/min	QP Focus	:	5 V			
Makeup Gas	:	0.2 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1720 V
Sample Pump	:	--- rps	OctP RF	:	180 V	Pulse HV	:	1390 V
S/C Temp	:	2 degC	OctP Bias	:	-18 V			

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Generated : Jul 02, 2009 16:12:11
Printed : Jul 02, 2009 16:12:17

P/A Factor Tuning Report

Acquired:Jul 2 2009 04:31 pm

Mass[amu]	Element	P/A Factor
6	Li	0.059917
7	(Li)	Sensitivity too low
9	Be	0.067770
45	Sc	0.082015
51	V	0.083844
52	Cr	0.086930
53	(Cr)	Sensitivity too low
55	Mn	0.088862
59	Co	0.091909
60	Ni	0.093634
63	Cu	0.095913
66	Zn	0.095259
72	Ge	0.093959
75	As	0.093070
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
95	Mo	0.094455
98	(Mo)	0.094291
99	(Mo)	0.095897
106	(Cd)	0.100174
107	Ag	Sensitivity too low
108	(Cd)	0.100691
111	Cd	0.101084
114	Cd	0.101314
115	In	0.100349
118	Sn	0.099994
121	Sb	0.099814
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
205	Tl	0.109270
206	(Pb)	0.108330
207	(Pb)	0.108387
208	Pb	0.108123
232	Th	0.106785
238	U	0.106760

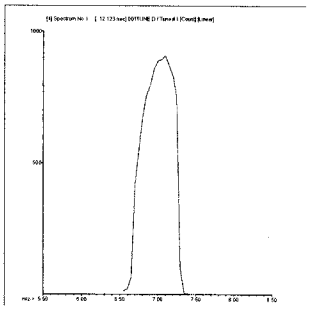
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1720 V
Pulse HV: 1390 V

200.8 QC Tune Report

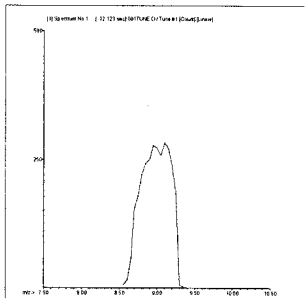
Data File: C:\ICPCHEM\1\DATA\AG070209D.B\001TUNE.D
Date Acquired: Jul 2 2009 05:24 pm
Acq. Method: tun_isis.M
Operator: TEL
Sample Name: 200.8 TUNE
Misc Info:
Vial Number: 4
Current Method: C:\ICPCHEM\1\METHODS\tun_isis.M

RSD (%)

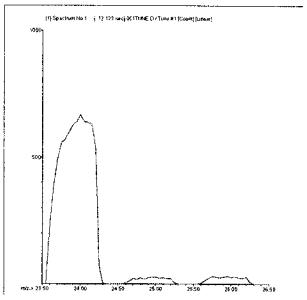
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
7 Li	18736	18245	19358	19013	18672	18386	**3.74**	5.00	
9 Be	2087	2042	2075	2087	2127	2102	**2.28**	5.00	
24 Mg	9125	9088	9038	9266	9054	9177	**3.04**	5.00	
59 Co	54496	54580	53978	54727	54457	54735	**1.99**	5.00	
115 In	802374	782591	836383	800840	797147	794906	**2.27**	5.00	
208 Pb	68333	68370	68983	68309	67968	68033	**1.00**	5.00	
238 U	144234	144446	144907	144132	143416	144266	**1.56**	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required 0.90
Flag:

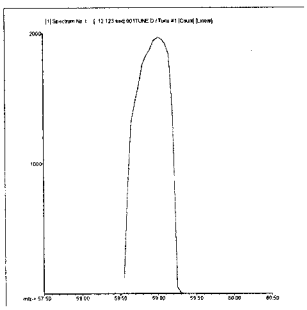


9 Be
Mass Calib.
Actual: 9.05
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



24 Mg
Mass Calib.
Actual: 24.05
Required: 23.90 - 24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\AG070209D.B\001TUNE.D



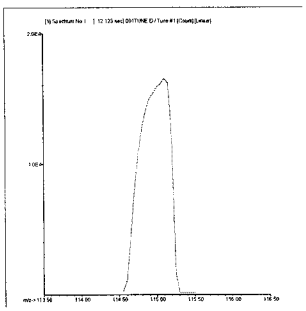
59 Co

Mass Calib.

Actual:	59.00		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



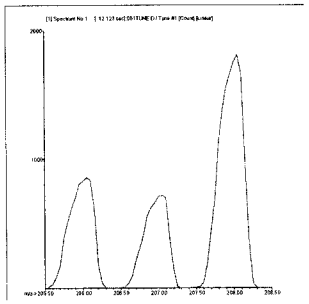
115 In

Mass Calib.

Actual:	115.05		
Required:	114.90	-	115.10
Flag:			

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



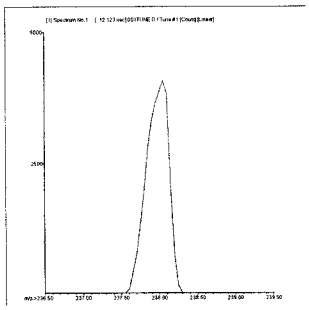
208 Pb

Mass Calib.

Actual:	208.00		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



238 U

Mass Calib.

Actual:	238.00		
Required:	237.90	-	238.10
Flag:			

Peak Width

Actual:	0.50
Required:	0.90
Flag:	

Tune Result: Pass

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\002CALB.D\002CALB.D#
Date Acquired: Jul 2 2009 05:27 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: Cal Blank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:28 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-19	889.82
52	Cr	72	1	1257	15.52
55	Mn	72	1	150	6.67
59	Co	72	1	20	86.60
60	Ni	72	1	20	0.00
63	Cu	72	1	180	9.62
66	Zn	72	1	111	23.92
75	As	72	1	23	20.38
78	Se	72	1	20	86.60
95	Mo	72	1	30	33.34
107	Ag	115	1	20	50.00
111	Cd	115	1	4	251.91
118	Sn	115	1	170	21.21
121	Sb	115	1	8	49.49
137	Ba	115	1	26	7.53
205	Tl	165	1	142	25.82
208	Pb	165	1	230	23.73
232	Th	165	1	187	17.22
238	U	165	1	134	27.31

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	330381	0.39
45	Sc	1	742768	0.42
72	Ge	1	421900	0.35
115	In	1	1496154	0.77
165	Ho	1	3680882	1.27

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#
Date Acquired: Jul 2 2009 05:31 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: Cal Blank
Misc Info:
Vial Number: 2101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:28 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-46	276.35
52	Cr	72	1	1350	7.52
55	Mn	72	1	157	51.59
59	Co	72	1	20	50.00
60	Ni	72	1	43	70.50
63	Cu	72	1	190	15.79
66	Zn	72	1	121	18.26
75	As	72	1	26	15.39
78	Se	72	1	17	34.64
95	Mo	72	1	37	41.66
107	Ag	115	1	7	173.21
111	Cd	115	1	11	31.74
118	Sn	115	1	400	12.99
121	Sb	115	1	7	50.00
137	Ba	115	1	20	60.09
205	Tl	165	1	107	6.25
208	Pb	165	1	228	3.38
232	Th	165	1	183	25.19
238	U	165	1	80	22.05

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	327414	0.50
45	Sc	1	735158	0.40
72	Ge	1	419596	0.05
115	In	1	1473829	0.73
165	Ho	1	3670206	0.46

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\004ICAL.D\004ICAL.D#
Date Acquired:	Jul 2 2009 05:34 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	100 ppb
Misc Info:	
Vial Number:	2102
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:31 pm
Sample Type:	ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	35511	1.30
51	V	72	1	493306	2.82
52	Cr	72	1	583384	2.00
55	Mn	72	1	550768	0.74
59	Co	72	1	847686	1.59
60	Ni	72	1	199501	2.03
63	Cu	72	1	492508	1.25
66	Zn	72	1	90787	2.05
75	As	72	1	52934	1.62
78	Se	72	1	8706	4.11
95	Mo	72	1	238838	0.60
107	Ag	115	1	844291	1.39
111	Cd	115	1	142187	1.97
118	Sn	115	1	367294	1.44
121	Sb	115	1	366871	1.35
137	Ba	115	1	156202	1.66
205	Tl	165	1	2186150	0.35
208	Pb	165	1	2940793	1.30
232	Th	165	1	2931259	0.71
238	U	165	1	3462419	1.72

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	312482	0.45	327414	95.4	30 - 120	
45	Sc	1	690303	1.07	735158	93.9	30 - 120	
72	Ge	1	400313	1.12	419596	95.4	30 - 120	
115	In	1	1448887	0.69	1473829	98.3	30 - 120	
165	Ho	1	3568324	1.35	3670206	97.2	30 - 120	

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures	0
0 :ISTD Failures	0

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\005 ICV.D\005 ICV.D#
Date Acquired: Jul 2 2009 05:37 pm
Operator: TEL
Sample Name: ICV
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: ICV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	39.64	ppb	1.98	40	99.1	90 - 110	
51 V	72	1	40.02	ppb	1.12	40	100.1	90 - 110	
52 Cr	72	1	40.24	ppb	1.80	40	100.6	90 - 110	
55 Mn	72	1	40.84	ppb	1.38	40	102.1	90 - 110	
59 Co	72	1	39.74	ppb	0.99	40	99.4	90 - 110	
60 Ni	72	1	41.39	ppb	2.91	40	103.5	90 - 110	
63 Cu	72	1	40.38	ppb	1.60	40	101.0	90 - 110	
66 Zn	72	1	40.11	ppb	0.87	40	100.3	90 - 110	
75 As	72	1	39.90	ppb	1.41	40	99.8	90 - 110	
78 Se	72	1	38.25	ppb	5.25	40	95.6	90 - 110	
95 Mo	72	1	40.02	ppb	0.31	40	100.1	90 - 110	
107 Ag	115	1	40.32	ppb	0.04	40	100.8	90 - 110	
111 Cd	115	1	40.76	ppb	1.79	40	101.9	90 - 110	
118 Sn	115	1	39.90	ppb	1.58	40	99.8	90 - 110	
121 Sb	115	1	39.18	ppb	0.82	40	98.0	90 - 110	
137 Ba	115	1	40.53	ppb	1.71	40	101.3	90 - 110	
205 Tl	165	1	40.69	ppb	0.71	40	101.7	90 - 110	
208 Pb	165	1	40.81	ppb	0.67	40	102.0	90 - 110	
232 Th	165	1	43.95	ppb	0.31	40	109.9	90 - 110	
238 U	165	1	40.69	ppb	2.07	40	101.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	306141	0.42	327414	93.5	30 - 120	
45 Sc	1	679151	1.38	735158	92.4	30 - 120	
72 Ge	1	391095	0.86	419596	93.2	30 - 120	
115 In	1	1409419	1.03	1473829	95.6	30 - 120	
165 Ho	1	3499233	1.10	3670206	95.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\006WASH.D\006WASH.D#
Date Acquired:	Jul 2 2009 05:41 pm
Operator:	TEL
Sample Name:	RLIV
Misc Info:	
Vial Number:	1204
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	WASH
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.914 ppb	12.95	1.30	
51 V	72	1	4.994 ppb	2.35	6.50	
52 Cr	72	1	2.038 ppb	4.85	2.60	
55 Mn	72	1	1.031 ppb	2.79	1.30	
59 Co	72	1	1.001 ppb	2.22	1.30	
60 Ni	72	1	1.980 ppb	5.67	2.60	
63 Cu	72	1	2.033 ppb	0.35	2.60	
66 Zn	72	1	10.160 ppb	1.95	13.00	
75 As	72	1	5.132 ppb	0.72	6.50	
78 Se	72	1	5.905 ppb	24.08	6.50	
95 Mo	72	1	2.197 ppb	1.63	2.60	
107 Ag	115	1	5.234 ppb	0.30	6.50	
111 Cd	115	1	1.031 ppb	3.04	1.30	
118 Sn	115	1	10.500 ppb	1.60	13.00	
121 Sb	115	1	2.204 ppb	3.59	2.60	
137 Ba	115	1	1.032 ppb	2.51	1.30	
205 Tl	165	1	1.121 ppb	1.36	1.30	
208 Pb	165	1	1.058 ppb	1.60	1.30	
232 Th	165	1	2.760 ppb	4.59	2.60	
238 U	165	1	1.095 ppb	2.44	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308021	1.44	327414	94.1	30 - 120	
45 Sc	1	688055	0.22	735158	93.6	30 - 120	
72 Ge	1	393405	0.91	419596	93.8	30 - 120	
115 In	1	1414361	1.49	1473829	96.0	30 - 120	
165 Ho	1	3487280	0.57	3670206	95.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\007 ICB.D\007 ICB.D#
Date Acquired: Jul 2 2009 05:44 pm
Operator: TEL
Sample Name: ICB
Misc Info:
Vial Number: 2104
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: ICB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.00	ppb	0.00	1.00	
51 V	72	1	0.00	ppb	1142.50	1.00	
52 Cr	72	1	0.01	ppb	259.17	1.00	
55 Mn	72	1	0.00	ppb	58.19	1.00	
59 Co	72	1	0.00	ppb	2286.70	1.00	
60 Ni	72	1	0.00	ppb	1248.00	1.00	
63 Cu	72	1	0.00	ppb	103.08	1.00	
66 Zn	72	1	0.07	ppb	21.73	1.00	
75 As	72	1	0.01	ppb	278.64	1.00	
78 Se	72	1	0.47	ppb	37.44	1.00	
95 Mo	72	1	0.02	ppb	60.02	1.00	
107 Ag	115	1	0.00	ppb	18.22	1.00	
111 Cd	115	1	-0.01	ppb	94.37	1.00	
118 Sn	115	1	0.13	ppb	2.72	1.00	
121 Sb	115	1	0.09	ppb	7.98	1.00	
137 Ba	115	1	0.00	ppb	57.63	1.00	
205 Tl	165	1	0.02	ppb	13.80	1.00	
208 Pb	165	1	0.00	ppb	858.68	1.00	
232 Th	165	1	0.18	ppb	6.79	1.00	
238 U	165	1	0.00	ppb	61.54	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308390	0.70	327414	94.2	30 - 120	
45 Sc	1	693667	0.51	735158	94.4	30 - 120	
72 Ge	1	399109	0.91	419596	95.1	30 - 120	
115 In	1	1423062	0.84	1473829	96.6	30 - 120	
165 Ho	1	3536712	0.29	3670206	96.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

RL STD QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\008RLST.D\008RLST.D#
Date Acquired: Jul 2 2009 05:47 pm
Operator: TEL
Sample Name: RL STD
Misc Info:
Vial Number: 2105
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: RLSTD
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	0.86	ppb	16.05	1	86.2	50 - 150	
51 V	72	1	0.94	ppb	1.43	1	94.4	50 - 150	
52 Cr	72	1	0.95	ppb	2.47	1	95.1	50 - 150	
55 Mn	72	1	1.02	ppb	4.71	1	102.2	50 - 150	
59 Co	72	1	1.00	ppb	3.07	1	99.7	50 - 150	
60 Ni	72	1	1.12	ppb	3.96	1	111.6	50 - 150	
63 Cu	72	1	1.04	ppb	1.63	1	104.0	50 - 150	
66 Zn	72	1	10.29	ppb	0.67	10	102.9	50 - 150	
75 As	72	1	1.00	ppb	5.47	1	100.0	50 - 150	
78 Se	72	1	0.96	ppb	24.36	1	96.2	50 - 150	
95 Mo	72	1	1.02	ppb	3.33	1	101.6	50 - 150	
107 Ag	115	1	1.01	ppb	4.38	1	101.1	50 - 150	
111 Cd	115	1	1.07	ppb	2.10	1	106.8	50 - 150	
118 Sn	115	1	10.21	ppb	0.58	10	102.1	50 - 150	
121 Sb	115	1	1.08	ppb	2.77	1	108.0	50 - 150	
137 Ba	115	1	1.00	ppb	4.47	1	100.0	50 - 150	
205 Tl	165	1	1.04	ppb	0.42	1	103.8	50 - 150	
208 Pb	165	1	1.03	ppb	1.19	1	102.9	50 - 150	
232 Th	165	1	1.12	ppb	0.92	1	111.8	50 - 150	
238 U	165	1	1.06	ppb	1.43	1	105.5	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	309572	0.31	327414	94.6	30 - 120	
45 Sc	1	699023	0.37	735158	95.1	30 - 120	
72 Ge	1	402654	0.74	419596	96.0	30 - 120	
115 In	1	1423291	1.38	1473829	96.6	30 - 120	
165 Ho	1	3566640	0.31	3670206	97.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

AFCEE RL QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\009AFCE.D\009AFCE.D#
Date Acquired: Jul 2 2009 05:51 pm
Operator: TEL
Sample Name: AFCEE RL
Misc Info:
Vial Number: 2106
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: AFCEERL
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	0.18	ppb	33.05	0	103.4	80 - 120	
51 V	72	1	0.16	ppb	31.98	0	84.1	80 - 120	
52 Cr	72	1	0.17	ppb	9.94	0	90.0	80 - 120	
55 Mn	72	1	0.22	ppb	9.48	0	107.8	80 - 120	
59 Co	72	1	0.21	ppb	6.41	0	104.2	80 - 120	
60 Ni	72	1	0.16	ppb	31.71	0	72.7	80 - 120	
63 Cu	72	1	0.21	ppb	6.55	0	101.3	80 - 120	
66 Zn	72	1	1.94	ppb	1.22	2	94.4	80 - 120	
75 As	72	1	0.20	ppb	19.18	0	99.2	80 - 120	
78 Se	72	1	0.42	ppb	82.44	0	217.0	80 - 120	
95 Mo	72	1	0.24	ppb	7.76	0	118.4	80 - 120	
107 Ag	115	1	0.21	ppb	7.34	0	104.1	80 - 120	
111 Cd	115	1	0.21	ppb	25.37	0	99.2	80 - 120	
118 Sn	115	1	1.99	ppb	1.00	2	97.3	80 - 120	
121 Sb	115	1	0.23	ppb	7.16	0	106.5	80 - 120	
137 Ba	115	1	0.21	ppb	10.98	0	103.0	80 - 120	
205 Tl	165	1	0.21	ppb	1.72	0	98.8	80 - 120	
208 Pb	165	1	0.20	ppb	5.30	0	98.7	80 - 120	
232 Th	165	1	0.25	ppb	2.13	0	112.4	80 - 120	
238 U	165	1	0.21	ppb	1.95	0	98.2	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	313017	0.39	327414	95.6	30 - 120	
45 Sc	1	712854	0.43	735158	97.0	30 - 120	
72 Ge	1	409381	0.13	419596	97.6	30 - 120	
115 In	1	1457349	0.75	1473829	98.9	30 - 120	
165 Ho	1	3601780	0.38	3670206	98.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\010SMPL.D\010SMPL.D#
Date Acquired: Jul 2 2009 05:54 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: CHECK
Misc Info: STD2637-09
Vial Number: 2112
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	103.00	103.00	ppb	4.73	3600	
51 V	72	1	100.50	100.50	ppb	0.99	3600	
52 Cr	72	1	101.20	101.20	ppb	0.96	3600	
55 Mn	72	1	102.10	102.10	ppb	1.04	3600	
59 Co	72	1	101.10	101.10	ppb	0.98	3600	
60 Ni	72	1	101.20	101.20	ppb	0.82	3600	
63 Cu	72	1	101.30	101.30	ppb	1.28	3600	
66 Zn	72	1	100.30	100.30	ppb	1.33	3600	
75 As	72	1	102.00	102.00	ppb	0.75	3600	
78 Se	72	1	101.70	101.70	ppb	2.81	3600	
95 Mo	72	1	0.02	0.02	ppb	97.88	3600	
107 Ag	115	1	102.40	102.40	ppb	1.37	3600	
111 Cd	115	1	103.10	103.10	ppb	2.15	3600	
118 Sn	115	1	0.00	0.00	ppb	321.09	3600	
121 Sb	115	1	0.03	0.03	ppb	14.55	3600	
137 Ba	115	1	104.00	104.00	ppb	1.68	3600	
205 Tl	165	1	100.70	100.70	ppb	0.45	3600	
208 Pb	165	1	102.00	102.00	ppb	1.70	3600	
232 Th	165	1	102.50	102.50	ppb	1.22	1000	
238 U	165	1	101.70	101.70	ppb	1.58	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	306083	0.24	327414	93.5	30 - 120	
45 Sc	1	684899	0.24	735158	93.2	30 - 120	
72 Ge	1	394804	0.46	419596	94.1	30 - 120	
115 In	1	1420410	0.24	1473829	96.4	30 - 120	
165 Ho	1	3560096	0.65	3670206	97.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\011SMPL.D\011SMPL.D#
Date Acquired:	Jul 2 2009 05:58 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	ALTSe
Misc Info:	2 ppb
Vial Number:	2107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:36 pm
Sample Type:	SA
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	0.00	0.00	ppb	541.38	3600	
52 Cr	72	1	0.00	0.00	ppb	1921.30	3600	
55 Mn	72	1	0.01	0.01	ppb	48.21	3600	
59 Co	72	1	0.01	0.01	ppb	52.60	3600	
60 Ni	72	1	0.01	0.01	ppb	60.57	3600	
63 Cu	72	1	0.04	0.04	ppb	24.19	3600	
66 Zn	72	1	0.32	0.32	ppb	5.11	3600	
75 As	72	1	0.01	0.01	ppb	245.03	3600	
78 Se	72	1	1.87	1.87	ppb	37.77	3600	
95 Mo	72	1	0.00	0.00	ppb	52.14	3600	
107 Ag	115	1	0.01	0.01	ppb	0.63	3600	
111 Cd	115	1	0.00	0.00	ppb	1225.90	3600	
118 Sn	115	1	-0.01	-0.01	ppb	94.40	3600	
121 Sb	115	1	0.01	0.01	ppb	63.39	3600	
137 Ba	115	1	0.01	0.01	ppb	180.67	3600	
205 Tl	165	1	0.04	0.04	ppb	6.17	3600	
208 Pb	165	1	0.01	0.01	ppb	22.64	3600	
232 Th	165	1	0.99	0.99	ppb	16.18	1000	
238 U	165	1	0.01	0.01	ppb	3.90	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308172	1.06	327414	94.1	30 - 120	
45 Sc	1	704293	0.24	735158	95.8	30 - 120	
72 Ge	1	404504	0.36	419596	96.4	30 - 120	
115 In	1	1437294	0.56	1473829	97.5	30 - 120	
165 Ho	1	3536472	0.55	3670206	96.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\012ICSA.D\012ICSA.D#
Date Acquired: Jul 2 2009 06:01 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSA
Misc Info:
Vial Number: 2108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element		IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9	Be	6	1	0.02 ppb	86.58	1.00	
51	V	72	1	0.00 ppb	13284.00	1.00	
52	Cr	72	1	1.03 ppb	0.70	1.00	
55	Mn	72	1	2.15 ppb	1.38	1.00	
59	Co	72	1	0.03 ppb	17.53	1.00	
60	Ni	72	1	0.78 ppb	9.25	1.00	
63	Cu	72	1	0.25 ppb	9.01	1.00	
66	Zn	72	1	2.94 ppb	0.29	10.00	
75	As	72	1	0.12 ppb	19.65	1.00	
78	Se	72	1	0.23 ppb	59.06	1.00	
95	Mo	72	1	2103.00 ppb	1.18	2000.00	
107	Ag	115	1	0.06 ppb	23.27	1.00	
111	Cd	115	1	0.38 ppb	16.61	1.00	
118	Sn	115	1	0.09 ppb	37.94	10.00	
121	Sb	115	1	0.25 ppb	4.58	1.00	
137	Ba	115	1	1.60 ppb	7.10	1.00	
205	Tl	165	1	0.04 ppb	12.66	1.00	
208	Pb	165	1	0.13 ppb	3.71	1.00	
232	Th	165	1	0.32 ppb	21.74	1.00	
238	U	165	1	0.03 ppb	4.89	1.00	

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	295380	0.65	327414	90.2	30 - 120	
45	Sc	1	615890	0.12	735158	83.8	30 - 120	
72	Ge	1	335887	0.64	419596	80.1	30 - 120	
115	In	1	1215094	0.94	1473829	82.4	30 - 120	
165	Ho	1	3169706	0.35	3670206	86.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Nnumber of ISTD Failures Allowed

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\013ICSB.D\013ICSB.D#
Date Acquired: Jul 2 2009 06:04 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSAB
Misc Info:
Vial Number: 2109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSAB
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	6		1	92.93	1.83	100	92.9	80 - 120	
51 V	72		1	103.60	0.31	100	103.6	80 - 120	
52 Cr	72		1	101.40	1.40	100	101.4	80 - 120	
55 Mn	72		1	103.10	1.02	100	103.1	80 - 120	
59 Co	72		1	95.73	0.90	100	95.7	80 - 120	
60 Ni	72		1	92.26	0.74	100	92.3	80 - 120	
63 Cu	72		1	87.47	1.15	100	87.5	80 - 120	
66 Zn	72		1	100.60	1.34	100	100.6	80 - 120	
75 As	72		1	101.20	1.43	100	101.2	80 - 120	
78 Se	72		1	106.90	2.76	100	106.9	80 - 120	
95 Mo	72		1	2217.00	1.49	2100	105.6	80 - 120	
107 Ag	115		1	85.36	3.82	100	85.4	80 - 120	
111 Cd	115		1	96.53	1.82	100	96.5	80 - 120	
118 Sn	115		1	104.10	2.98	100	104.1	80 - 120	
121 Sb	115		1	105.20	2.52	100	105.2	80 - 120	
137 Ba	115		1	107.30	2.41	100	107.3	80 - 120	
205 Tl	165		1	93.57	1.44	100	93.6	80 - 120	
208 Pb	165		1	93.32	2.21	100	93.3	80 - 120	
232 Th	165		1	105.70	1.53	100	105.7	80 - 120	
238 U	165		1	100.60	1.87	100	100.6	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	296274	1.16	327414	90.5	30 - 120	
45 Sc	1	594216	0.22	735158	80.8	30 - 120	
72 Ge	1	325915	1.12	419596	77.7	30 - 120	
115 In	1	1188399	0.92	1473829	80.6	30 - 120	
165 Ho	1	3164827	0.90	3670206	86.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\014SMPL.D\014SMPL.D#
Date Acquired:	Jul 2 2009 06:08 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	RINSE
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:36 pm
Sample Type:	SA
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.01	0.01	ppb	173.21	3600	
51 V	72	1	0.00	0.00	ppb	2099.80	3600	
52 Cr	72	1	-0.02	-0.02	ppb	29.26	3600	
55 Mn	72	1	0.01	0.01	ppb	191.54	3600	
59 Co	72	1	0.01	0.01	ppb	66.21	3600	
60 Ni	72	1	0.00	0.00	ppb	217.40	3600	
63 Cu	72	1	0.02	0.02	ppb	95.78	3600	
66 Zn	72	1	0.00	0.00	ppb	763.63	3600	
75 As	72	1	-0.01	-0.01	ppb	111.97	3600	
78 Se	72	1	0.33	0.33	ppb	156.59	3600	
95 Mo	72	1	1.17	1.17	ppb	6.99	3600	
107 Ag	115	1	0.01	0.01	ppb	45.09	3600	
111 Cd	115	1	0.00	0.00	ppb	1474.40	3600	
118 Sn	115	1	0.01	0.01	ppb	239.37	3600	
121 Sb	115	1	0.05	0.05	ppb	2.73	3600	
137 Ba	115	1	0.00	0.00	ppb	176.49	3600	
205 Tl	165	1	0.01	0.01	ppb	24.13	3600	
208 Pb	165	1	0.01	0.01	ppb	27.17	3600	
232 Th	165	1	0.47	0.47	ppb	15.39	1000	
238 U	165	1	0.02	0.02	ppb	10.93	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	344396	0.62	327414	105.2	30 - 120	
45 Sc	1	715937	0.17	735158	97.4	30 - 120	
72 Ge	1	416017	0.25	419596	99.1	30 - 120	
115 In	1	1467783	1.12	1473829	99.6	30 - 120	
165 Ho	1	3676143	0.31	3670206	100.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Linear Dynamic Range Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\015 LR.D\015 LR.D#
Date Acquired:	Jul 2 2009 06:11 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LR
Misc Info:	
Vial Number:	2110
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 02 2009 05:36 pm
Sample Type:	LR
Prep Dil. Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	988.30 ppb	0.62	1000	98.8	90 - 110	
51 V	72	1	962.90 ppb	2.34	1000	96.3	90 - 110	
52 Cr	72	1	970.70 ppb	0.58	1000	97.1	90 - 110	
55 Mn	72	1	985.10 ppb	0.14	1000	98.5	90 - 110	
59 Co	72	1	955.70 ppb	0.41	1000	95.6	90 - 110	
60 Ni	72	1	994.40 ppb	0.30	1000	99.4	90 - 110	
63 Cu	72	1	963.60 ppb	0.13	1000	96.4	90 - 110	
66 Zn	72	1	1002.00 ppb	0.17	1000	100.2	90 - 110	
75 As	72	1	993.20 ppb	0.37	1000	99.3	90 - 110	
78 Se	72	1	987.50 ppb	0.23	1000	98.8	90 - 110	
95 Mo	72	1	1022.00 ppb	0.89	1000	102.2	90 - 110	
107 Ag	115	1	967.10 ppb	0.77	1000	96.7	90 - 110	
111 Cd	115	1	1032.00 ppb	0.99	1000	103.2	90 - 110	
118 Sn	115	1	1006.00 ppb	0.90	1000	100.6	90 - 110	
121 Sb	115	1	1005.00 ppb	1.61	1000	100.5	90 - 110	
137 Ba	115	1	1029.00 ppb	1.06	1000	102.9	90 - 110	
205 Tl	165	1	948.60 ppb	1.76	1000	94.9	90 - 110	
208 Pb	165	1	958.90 ppb	1.72	1000	95.9	90 - 110	
232 Th	165	1	1038.00 ppb	2.14	1000	103.8	90 - 110	
238 U	165	1	983.80 ppb	1.32	1000	98.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	321694	1.14	327414	98.3	30 - 120	
45 Sc	1	683351	1.12	735158	93.0	30 - 120	
72 Ge	1	394574	1.02	419596	94.0	30 - 120	
115 In	1	1414979	0.33	1473829	96.0	30 - 120	
165 Ho	1	3618336	1.02	3670206	98.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\016SMPL.D\016SMPL.D#
Date Acquired: Jul 2 2009 06:14 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.09	0.09	ppb	34.61	3600	
51 V	72	1	0.10	0.10	ppb	24.09	3600	
52 Cr	72	1	0.06	0.06	ppb	44.44	3600	
55 Mn	72	1	0.07	0.07	ppb	36.19	3600	
59 Co	72	1	0.06	0.06	ppb	5.78	3600	
60 Ni	72	1	0.05	0.05	ppb	5.45	3600	
63 Cu	72	1	0.07	0.07	ppb	21.96	3600	
66 Zn	72	1	0.06	0.06	ppb	50.82	3600	
75 As	72	1	0.09	0.09	ppb	28.68	3600	
78 Se	72	1	0.55	0.55	ppb	11.38	3600	
95 Mo	72	1	0.76	0.76	ppb	10.41	3600	
107 Ag	115	1	0.06	0.06	ppb	16.99	3600	
111 Cd	115	1	0.06	0.06	ppb	54.88	3600	
118 Sn	115	1	1.58	1.58	ppb	7.59	3600	
121 Sb	115	1	0.63	0.63	ppb	2.90	3600	
137 Ba	115	1	0.07	0.07	ppb	18.44	3600	
205 Tl	165	1	0.12	0.12	ppb	11.62	3600	
208 Pb	165	1	0.06	0.06	ppb	18.00	3600	
232 Th	165	1	3.05	3.05	ppb	14.34	1000	
238 U	165	1	0.14	0.14	ppb	4.97	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	333318	0.10	327414	101.8	30 - 120	
45 Sc	1	727635	0.35	735158	99.0	30 - 120	
72 Ge	1	416414	0.57	419596	99.2	30 - 120	
115 In	1	1452903	1.15	1473829	98.6	30 - 120	
165 Ho	1	3630559	0.56	3670206	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\017 CCV.D\017 CCV.D#
Date Acquired: Jul 2 2009 06:18 pm
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.60	ppb	3.38	50	99.2	90 - 110	
51 V	72	1	49.68	ppb	1.72	50	99.4	90 - 110	
52 Cr	72	1	50.13	ppb	1.49	50	100.3	90 - 110	
55 Mn	72	1	50.82	ppb	0.56	50	101.6	90 - 110	
59 Co	72	1	49.99	ppb	1.60	50	100.0	90 - 110	
60 Ni	72	1	50.12	ppb	1.73	50	100.2	90 - 110	
63 Cu	72	1	50.54	ppb	0.70	50	101.1	90 - 110	
66 Zn	72	1	49.63	ppb	1.20	50	99.3	90 - 110	
75 As	72	1	50.37	ppb	1.72	50	100.7	90 - 110	
78 Se	72	1	49.33	ppb	6.65	50	98.7	90 - 110	
95 Mo	72	1	50.42	ppb	1.21	50	100.8	90 - 110	
107 Ag	115	1	50.25	ppb	0.72	50	100.5	90 - 110	
111 Cd	115	1	50.31	ppb	0.64	50	100.6	90 - 110	
118 Sn	115	1	50.68	ppb	1.29	50	101.4	90 - 110	
121 Sb	115	1	50.46	ppb	0.67	50	100.9	90 - 110	
137 Ba	115	1	51.07	ppb	0.77	50	102.1	90 - 110	
205 Tl	165	1	49.66	ppb	1.87	50	99.3	90 - 110	
208 Pb	165	1	50.48	ppb	1.82	50	101.0	90 - 110	
232 Th	165	1	51.30	ppb	0.98	50	102.6	90 - 110	
238 U	165	1	50.49	ppb	2.17	50	101.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	330223	1.94	327414	100.9	30 - 120	
45 Sc	1	721303	0.77	735158	98.1	30 - 120	
72 Ge	1	412466	0.58	419596	98.3	30 - 120	
115 In	1	1477629	1.09	1473829	100.3	30 - 120	
165 Ho	1	3629005	1.45	3670206	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\018 CCB.D\018 CCB.D#
Date Acquired: Jul 2 2009 06:21 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.015	ppb	113.60	1.00	
52 Cr	72	1	0.003	ppb	775.23	1.00	
55 Mn	72	1	-0.002	ppb	474.55	1.00	
59 Co	72	1	0.004	ppb	67.07	1.00	
60 Ni	72	1	0.000	ppb	6668.50	1.00	
63 Cu	72	1	0.005	ppb	97.86	1.00	
66 Zn	72	1	0.018	ppb	8.02	1.00	
75 As	72	1	0.016	ppb	23.00	1.00	
78 Se	72	1	0.469	ppb	22.90	1.00	
95 Mo	72	1	0.165	ppb	31.85	1.00	
107 Ag	115	1	0.014	ppb	21.84	1.00	
111 Cd	115	1	-0.005	ppb	93.43	1.00	
118 Sn	115	1	0.417	ppb	5.26	1.00	
121 Sb	115	1	0.130	ppb	12.95	1.00	
137 Ba	115	1	0.003	ppb	44.46	1.00	
205 Tl	165	1	0.035	ppb	10.11	1.00	
208 Pb	165	1	0.006	ppb	40.89	1.00	
232 Th	165	1	0.858	ppb	12.87	1.00	
238 U	165	1	0.013	ppb	15.08	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	332471	0.74	327414	101.5	30 - 120	
45 Sc	1	734511	0.46	735158	99.9	30 - 120	
72 Ge	1	423798	0.67	419596	101.0	30 - 120	
115 In	1	1489090	0.47	1473829	101.0	30 - 120	
165 Ho	1	3648589	0.60	3670206	99.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\019WASH.D\019WASH.D#
Date Acquired: Jul 2 2009 06:24 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.200 ppb	3.93	1.30	
51 V	72	1	4.986 ppb	4.00	6.50	
52 Cr	72	1	2.020 ppb	1.12	2.60	
55 Mn	72	1	1.043 ppb	4.76	1.30	
59 Co	72	1	1.020 ppb	2.70	1.30	
60 Ni	72	1	2.041 ppb	2.94	2.60	
63 Cu	72	1	2.085 ppb	2.45	2.60	
66 Zn	72	1	10.220 ppb	2.58	13.00	
75 As	72	1	5.149 ppb	5.20	6.50	
78 Se	72	1	5.652 ppb	8.54	6.50	
95 Mo	72	1	2.189 ppb	6.40	2.60	
107 Ag	115	1	5.244 ppb	2.63	6.50	
111 Cd	115	1	1.014 ppb	5.41	1.30	
118 Sn	115	1	10.660 ppb	0.75	13.00	
121 Sb	115	1	2.054 ppb	3.92	2.60	
137 Ba	115	1	1.086 ppb	6.02	1.30	
205 Tl	165	1	1.089 ppb	0.92	1.30	
208 Pb	165	1	1.057 ppb	2.02	1.30	
232 Th	165	1	2.330 ppb	1.60	2.60	
238 U	165	1	1.072 ppb	1.83	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	329850	1.27	327414	100.7	30 - 120	
45 Sc	1	736964	0.17	735158	100.2	30 - 120	
72 Ge	1	423846	0.99	419596	101.0	30 - 120	
115 In	1	1487625	0.79	1473829	100.9	30 - 120	
165 Ho	1	3629504	0.35	3670206	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\057 CCV.D\057 CCV.D#
Date Acquired:	Jul 2 2009 08:34 pm
Operator:	TEL
Sample Name:	CCV
Misc Info:	
Vial Number:	1107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	CCV
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.17	ppb	3.85	50	100.3	90 - 110	
51 V	72	1	47.92	ppb	1.37	50	95.8	90 - 110	
52 Cr	72	1	47.24	ppb	1.17	50	94.5	90 - 110	
55 Mn	72	1	48.38	ppb	0.42	50	96.8	90 - 110	
59 Co	72	1	48.26	ppb	1.07	50	96.5	90 - 110	
60 Ni	72	1	48.73	ppb	2.40	50	97.5	90 - 110	
63 Cu	72	1	47.98	ppb	1.18	50	96.0	90 - 110	
66 Zn	72	1	47.65	ppb	1.68	50	95.3	90 - 110	
75 As	72	1	50.03	ppb	1.56	50	100.1	90 - 110	
78 Se	72	1	51.00	ppb	8.24	50	102.0	90 - 110	
95 Mo	72	1	49.58	ppb	0.84	50	99.2	90 - 110	
107 Ag	115	1	47.55	ppb	1.36	50	95.1	90 - 110	
111 Cd	115	1	48.02	ppb	1.71	50	96.0	90 - 110	
118 Sn	115	1	48.76	ppb	1.96	50	97.5	90 - 110	
121 Sb	115	1	49.52	ppb	1.44	50	99.0	90 - 110	
137 Ba	115	1	51.06	ppb	1.84	50	102.1	90 - 110	
205 Tl	165	1	50.93	ppb	0.89	50	101.9	90 - 110	
208 Pb	165	1	51.15	ppb	1.47	50	102.3	90 - 110	
232 Th	165	1	51.63	ppb	1.15	50	103.3	90 - 110	
238 U	165	1	52.24	ppb	0.91	50	104.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	245104	0.18	327414	74.9	30 - 120	
45 Sc	1	595639	1.11	735158	81.0	30 - 120	
72 Ge	1	350117	0.52	419596	83.4	30 - 120	
115 In	1	1318797	1.57	1473829	89.5	30 - 120	
165 Ho	1	3221597	0.04	3670206	87.8	30 - 120	

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\058 CCB.D\058 CCB.D#
Date Acquired: Jul 2 2009 08:37 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.005	ppb	725.15	1.00	
52 Cr	72	1	-0.012	ppb	94.51	1.00	
55 Mn	72	1	-0.004	ppb	181.17	1.00	
59 Co	72	1	0.002	ppb	93.99	1.00	
60 Ni	72	1	-0.015	ppb	37.43	1.00	
63 Cu	72	1	0.003	ppb	235.05	1.00	
66 Zn	72	1	0.007	ppb	240.51	1.00	
75 As	72	1	0.000	ppb	2212.70	1.00	
78 Se	72	1	0.073	ppb	462.86	1.00	
95 Mo	72	1	0.038	ppb	40.22	1.00	
107 Ag	115	1	0.003	ppb	27.51	1.00	
111 Cd	115	1	0.002	ppb	660.62	1.00	
118 Sn	115	1	0.141	ppb	52.03	1.00	
121 Sb	115	1	0.053	ppb	1.97	1.00	
137 Ba	115	1	0.000	ppb	26741.00	1.00	
205 Tl	165	1	0.019	ppb	7.76	1.00	
208 Pb	165	1	0.004	ppb	22.00	1.00	
232 Th	165	1	0.917	ppb	13.10	1.00	
238 U	165	1	0.008	ppb	10.22	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	246403	0.74	327414	75.3	30 - 120	
45 Sc	1	608397	0.86	735158	82.8	30 - 120	
72 Ge	1	358356	0.81	419596	85.4	30 - 120	
115 In	1	1310454	0.45	1473829	88.9	30 - 120	
165 Ho	1	3265872	0.46	3670206	89.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\059WASH.D\059WASH.D#
Date Acquired: Jul 2 2009 08:40 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.866 ppb	13.77	1.30	
51 V	72	1	5.112 ppb	2.34	6.50	
52 Cr	72	1	2.031 ppb	7.54	2.60	
55 Mn	72	1	1.022 ppb	1.91	1.30	
59 Co	72	1	0.997 ppb	3.60	1.30	
60 Ni	72	1	1.993 ppb	9.78	2.60	
63 Cu	72	1	1.921 ppb	3.94	2.60	
66 Zn	72	1	9.768 ppb	4.11	13.00	
75 As	72	1	5.258 ppb	4.32	6.50	
78 Se	72	1	7.468 ppb	7.51	6.50	
95 Mo	72	1	2.046 ppb	7.56	2.60	
107 Ag	115	1	5.026 ppb	2.34	6.50	
111 Cd	115	1	0.971 ppb	4.61	1.30	
118 Sn	115	1	10.240 ppb	2.26	13.00	
121 Sb	115	1	1.981 ppb	1.49	2.60	
137 Ba	115	1	1.083 ppb	4.65	1.30	
205 Tl	165	1	1.077 ppb	2.31	1.30	
208 Pb	165	1	1.056 ppb	0.53	1.30	
232 Th	165	1	2.341 ppb	1.38	2.60	
238 U	165	1	1.091 ppb	2.86	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	247230	0.67	327414	75.5	30 - 120	
45 Sc	1	613320	0.29	735158	83.4	30 - 120	
72 Ge	1	359206	0.45	419596	85.6	30 - 120	
115 In	1	1327497	1.55	1473829	90.1	30 - 120	
165 Ho	1	3268023	0.23	3670206	89.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\060ICSA.D\060ICSA.D#
Date Acquired: Jul 2 2009 08:44 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSA
Misc Info:
Vial Number: 2108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	6	1	0.04 ppb	0.41	1.00	
51 V	72	1	-0.14 ppb	76.82	1.00	
52 Cr	72	1	0.93 ppb	1.44	1.00	
55 Mn	72	1	2.12 ppb	4.53	1.00	
59 Co	72	1	0.04 ppb	20.32	1.00	
60 Ni	72	1	0.72 ppb	8.48	1.00	
63 Cu	72	1	0.29 ppb	7.11	1.00	
66 Zn	72	1	2.89 ppb	1.39	10.00	
75 As	72	1	0.17 ppb	15.36	1.00	
78 Se	72	1	0.19 ppb	127.00	1.00	
95 Mo	72	1	2086.00 ppb	0.84	2000.00	
107 Ag	115	1	0.07 ppb	20.32	1.00	
111 Cd	115	1	0.54 ppb	52.04	1.00	
118 Sn	115	1	0.22 ppb	6.57	10.00	
121 Sb	115	1	0.27 ppb	3.82	1.00	
137 Ba	115	1	1.54 ppb	1.82	1.00	
205 Tl	165	1	0.04 ppb	7.00	1.00	
208 Pb	165	1	0.13 ppb	6.92	1.00	
232 Th	165	1	0.23 ppb	19.33	1.00	
238 U	165	1	0.02 ppb	5.83	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	219743	0.41	327414	67.1	30 - 120	
45 Sc	1	515562	1.03	735158	70.1	30 - 120	
72 Ge	1	289244	1.50	419596	68.9	30 - 120	
115 In	1	1071271	1.43	1473829	72.7	30 - 120	
165 Ho	1	2795076	0.76	3670206	76.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Nnumber of ISTD Failures Allowed

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\061ICSB.D\061ICSB.D#
Date Acquired: Jul 2 2009 08:47 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSAB
Misc Info:
Vial Number: 2109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 05:36 pm
Sample Type: ICSAB
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	6		1	98.53	0.60	100	98.5	80 - 120	
51 V	72		1	102.70	0.68	100	102.7	80 - 120	
52 Cr	72		1	98.62	1.27	100	98.6	80 - 120	
55 Mn	72		1	100.30	0.60	100	100.3	80 - 120	
59 Co	72		1	95.00	1.30	100	95.0	80 - 120	
60 Ni	72		1	91.50	1.50	100	91.5	80 - 120	
63 Cu	72		1	87.58	1.19	100	87.6	80 - 120	
66 Zn	72		1	96.46	0.14	100	96.5	80 - 120	
75 As	72		1	104.10	0.85	100	104.1	80 - 120	
78 Se	72		1	111.50	3.55	100	111.5	80 - 120	
95 Mo	72		1	2229.00	0.24	2100	106.1	80 - 120	
107 Ag	115		1	83.19	1.42	100	83.2	80 - 120	
111 Cd	115		1	93.31	1.55	100	93.3	80 - 120	
118 Sn	115		1	100.80	2.22	100	100.8	80 - 120	
121 Sb	115		1	102.10	1.91	100	102.1	80 - 120	
137 Ba	115		1	108.80	2.20	100	108.8	80 - 120	
205 Tl	165		1	93.85	0.91	100	93.9	80 - 120	
208 Pb	165		1	93.28	1.01	100	93.3	80 - 120	
232 Th	165		1	108.10	1.63	100	108.1	80 - 120	
238 U	165		1	103.30	1.42	100	103.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	227224	0.69	327414	69.4	30 - 120	
45 Sc	1	514360	0.24	735158	70.0	30 - 120	
72 Ge	1	287157	0.28	419596	68.4	30 - 120	
115 In	1	1083805	0.90	1473829	73.5	30 - 120	
165 Ho	1	2813323	0.77	3670206	76.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\062WASH.D\062WASH.D#
Date Acquired:	Jul 2 2009 08:50 pm
Operator:	TEL
Sample Name:	WASH
Misc Info:	
Vial Number:	1101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	WASH
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.012 ppb	173.23	1.30	
51 V	72	1	-0.006 ppb	498.31	6.50	
52 Cr	72	1	-0.037 ppb	19.84	2.60	
55 Mn	72	1	0.019 ppb	44.71	1.30	
59 Co	72	1	0.011 ppb	54.83	1.30	
60 Ni	72	1	0.008 ppb	148.11	2.60	
63 Cu	72	1	0.014 ppb	17.92	2.60	
66 Zn	72	1	0.447 ppb	9.40	13.00	
75 As	72	1	0.005 ppb	93.46	6.50	
78 Se	72	1	0.123 ppb	164.36	6.50	
95 Mo	72	1	1.061 ppb	10.35	2.60	
107 Ag	115	1	0.010 ppb	39.18	6.50	
111 Cd	115	1	0.005 ppb	107.74	1.30	
118 Sn	115	1	0.075 ppb	16.44	13.00	
121 Sb	115	1	0.057 ppb	18.12	2.60	
137 Ba	115	1	0.003 ppb	208.39	1.30	
205 Tl	165	1	0.006 ppb	35.15	1.30	
208 Pb	165	1	0.011 ppb	13.36	1.30	
232 Th	165	1	0.750 ppb	12.75	2.60	
238 U	165	1	0.020 ppb	5.61	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	248535	0.50	327414	75.9	30 - 120	
45 Sc	1	599756	1.05	735158	81.6	30 - 120	
72 Ge	1	352379	0.49	419596	84.0	30 - 120	
115 In	1	1302229	1.54	1473829	88.4	30 - 120	
165 Ho	1	3281873	0.68	3670206	89.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\063 CCV.D\063 CCV.D#
Date Acquired:	Jul 2 2009 08:54 pm
Operator:	TEL
Sample Name:	CCV
Misc Info:	
Vial Number:	1107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	CCV
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.81	ppb	2.65	50	101.6	90 - 110	
51 V	72	1	48.89	ppb	1.55	50	97.8	90 - 110	
52 Cr	72	1	47.70	ppb	1.08	50	95.4	90 - 110	
55 Mn	72	1	48.65	ppb	1.46	50	97.3	90 - 110	
59 Co	72	1	48.69	ppb	0.87	50	97.4	90 - 110	
60 Ni	72	1	49.62	ppb	0.30	50	99.2	90 - 110	
63 Cu	72	1	48.82	ppb	0.66	50	97.6	90 - 110	
66 Zn	72	1	51.15	ppb	2.13	50	102.3	90 - 110	
75 As	72	1	50.58	ppb	1.57	50	101.2	90 - 110	
78 Se	72	1	51.64	ppb	5.06	50	103.3	90 - 110	
95 Mo	72	1	50.65	ppb	1.69	50	101.3	90 - 110	
107 Ag	115	1	48.80	ppb	0.58	50	97.6	90 - 110	
111 Cd	115	1	48.14	ppb	0.65	50	96.3	90 - 110	
118 Sn	115	1	49.18	ppb	0.77	50	98.4	90 - 110	
121 Sb	115	1	49.73	ppb	0.46	50	99.5	90 - 110	
137 Ba	115	1	51.43	ppb	0.75	50	102.9	90 - 110	
205 Tl	165	1	50.35	ppb	0.85	50	100.7	90 - 110	
208 Pb	165	1	50.37	ppb	1.17	50	100.7	90 - 110	
232 Th	165	1	51.23	ppb	1.09	50	102.5	90 - 110	
238 U	165	1	51.38	ppb	0.59	50	102.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	253125	1.95	327414	77.3	30 - 120	
45 Sc	1	616804	0.85	735158	83.9	30 - 120	
72 Ge	1	362143	0.62	419596	86.3	30 - 120	
115 In	1	1353200	0.88	1473829	91.8	30 - 120	
165 Ho	1	3355769	0.92	3670206	91.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\064 CCB.D\064 CCB.D#
Date Acquired: Jul 2 2009 08:57 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.034	ppb	99.28	1.00	
51 V	72	1	0.031	ppb	140.72	1.00	
52 Cr	72	1	-0.012	ppb	47.67	1.00	
55 Mn	72	1	0.008	ppb	82.51	1.00	
59 Co	72	1	0.004	ppb	39.36	1.00	
60 Ni	72	1	-0.001	ppb	2130.70	1.00	
63 Cu	72	1	0.019	ppb	26.16	1.00	
66 Zn	72	1	0.034	ppb	33.19	1.00	
75 As	72	1	0.009	ppb	141.02	1.00	
78 Se	72	1	0.150	ppb	209.61	1.00	
95 Mo	72	1	0.177	ppb	6.53	1.00	
107 Ag	115	1	0.002	ppb	88.96	1.00	
111 Cd	115	1	0.001	ppb	560.78	1.00	
118 Sn	115	1	0.143	ppb	31.05	1.00	
121 Sb	115	1	0.056	ppb	5.71	1.00	
137 Ba	115	1	0.005	ppb	266.10	1.00	
205 Tl	165	1	0.023	ppb	10.06	1.00	
208 Pb	165	1	0.005	ppb	12.29	1.00	
232 Th	165	1	0.973	ppb	11.24	1.00	
238 U	165	1	0.008	ppb	23.38	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	254122	1.13	327414	77.6	30 - 120	
45 Sc	1	631375	0.14	735158	85.9	30 - 120	
72 Ge	1	368308	0.39	419596	87.8	30 - 120	
115 In	1	1346068	0.50	1473829	91.3	30 - 120	
165 Ho	1	3320456	0.31	3670206	90.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\065WASH.D\065WASH.D#
Date Acquired: Jul 2 2009 09:01 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.028 ppb	18.91	1.30	
51 V	72	1	5.026 ppb	2.47	6.50	
52 Cr	72	1	2.029 ppb	2.66	2.60	
55 Mn	72	1	1.010 ppb	9.81	1.30	
59 Co	72	1	1.036 ppb	2.98	1.30	
60 Ni	72	1	2.139 ppb	2.35	2.60	
63 Cu	72	1	2.067 ppb	1.88	2.60	
66 Zn	72	1	9.816 ppb	1.81	13.00	
75 As	72	1	5.185 ppb	1.35	6.50	
78 Se	72	1	4.939 ppb	14.49	6.50	
95 Mo	72	1	2.242 ppb	5.27	2.60	
107 Ag	115	1	5.051 ppb	1.92	6.50	
111 Cd	115	1	0.921 ppb	4.96	1.30	
118 Sn	115	1	10.300 ppb	4.21	13.00	
121 Sb	115	1	2.017 ppb	1.93	2.60	
137 Ba	115	1	1.099 ppb	3.63	1.30	
205 Tl	165	1	1.079 ppb	1.96	1.30	
208 Pb	165	1	1.055 ppb	1.16	1.30	
232 Th	165	1	2.362 ppb	2.17	2.60	
238 U	165	1	1.091 ppb	2.13	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	254166	1.01	327414	77.6	30 - 120	
45 Sc	1	639185	1.04	735158	86.9	30 - 120	
72 Ge	1	374974	0.77	419596	89.4	30 - 120	
115 In	1	1377740	0.42	1473829	93.5	30 - 120	
165 Ho	1	3385027	0.51	3670206	92.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\074 CCV.D\074 CCV.D#
Date Acquired: Jul 2 2009 09:31 pm
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	51.30	ppb	4.17	50	102.6	90 - 110	
51 V	72	1	47.64	ppb	3.05	50	95.3	90 - 110	
52 Cr	72	1	46.90	ppb	0.72	50	93.8	90 - 110	
55 Mn	72	1	47.31	ppb	1.84	50	94.6	90 - 110	
59 Co	72	1	47.29	ppb	0.86	50	94.6	90 - 110	
60 Ni	72	1	47.84	ppb	1.54	50	95.7	90 - 110	
63 Cu	72	1	47.60	ppb	1.84	50	95.2	90 - 110	
66 Zn	72	1	48.57	ppb	0.34	50	97.1	90 - 110	
75 As	72	1	50.42	ppb	0.85	50	100.8	90 - 110	
78 Se	72	1	50.93	ppb	4.94	50	101.9	90 - 110	
95 Mo	72	1	48.84	ppb	2.62	50	97.7	90 - 110	
107 Ag	115	1	47.24	ppb	1.23	50	94.5	90 - 110	
111 Cd	115	1	47.18	ppb	2.63	50	94.4	90 - 110	
118 Sn	115	1	47.75	ppb	1.37	50	95.5	90 - 110	
121 Sb	115	1	48.95	ppb	1.63	50	97.9	90 - 110	
137 Ba	115	1	50.74	ppb	1.55	50	101.5	90 - 110	
205 Tl	165	1	49.74	ppb	1.58	50	99.5	90 - 110	
208 Pb	165	1	49.79	ppb	2.18	50	99.6	90 - 110	
232 Th	165	1	50.05	ppb	0.81	50	100.1	90 - 110	
238 U	165	1	50.58	ppb	1.88	50	101.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	233279	1.01	327414	71.2	30 - 120	
45 Sc	1	606568	0.26	735158	82.5	30 - 120	
72 Ge	1	355743	0.69	419596	84.8	30 - 120	
115 In	1	1335049	0.33	1473829	90.6	30 - 120	
165 Ho	1	3258685	1.04	3670206	88.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\075 CCB.D\075 CCB.D#
Date Acquired:	Jul 2 2009 09:35 pm
Operator:	TEL
Sample Name:	CCB
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 02 2009 05:36 pm
Sample Type:	CCB
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.013	ppb	173.24	1.00	
51 V	72	1	0.007	ppb	108.03	1.00	
52 Cr	72	1	-0.011	ppb	71.06	1.00	
55 Mn	72	1	-0.002	ppb	176.79	1.00	
59 Co	72	1	0.004	ppb	109.88	1.00	
60 Ni	72	1	0.003	ppb	252.76	1.00	
63 Cu	72	1	0.011	ppb	81.50	1.00	
66 Zn	72	1	0.179	ppb	4.08	1.00	
75 As	72	1	0.006	ppb	76.09	1.00	
78 Se	72	1	0.329	ppb	39.67	1.00	
95 Mo	72	1	0.036	ppb	45.24	1.00	
107 Ag	115	1	0.002	ppb	31.71	1.00	
111 Cd	115	1	0.004	ppb	158.70	1.00	
118 Sn	115	1	0.116	ppb	25.49	1.00	
121 Sb	115	1	0.050	ppb	12.86	1.00	
137 Ba	115	1	0.001	ppb	1154.70	1.00	
205 Tl	165	1	0.020	ppb	1.89	1.00	
208 Pb	165	1	0.003	ppb	76.03	1.00	
232 Th	165	1	0.921	ppb	13.53	1.00	
238 U	165	1	0.008	ppb	17.38	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	230443	0.36	327414	70.4	30 - 120	
45 Sc	1	611190	0.61	735158	83.1	30 - 120	
72 Ge	1	360507	0.63	419596	85.9	30 - 120	
115 In	1	1315345	1.04	1473829	89.2	30 - 120	
165 Ho	1	3251023	0.39	3670206	88.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\076WASH.D\076WASH.D#
Date Acquired: Jul 2 2009 09:38 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 05:36 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.063 ppb	19.31	1.30	
51 V	72	1	4.962 ppb	1.50	6.50	
52 Cr	72	1	1.908 ppb	3.43	2.60	
55 Mn	72	1	1.000 ppb	2.81	1.30	
59 Co	72	1	0.971 ppb	4.52	1.30	
60 Ni	72	1	2.017 ppb	4.73	2.60	
63 Cu	72	1	1.999 ppb	1.87	2.60	
66 Zn	72	1	9.658 ppb	1.73	13.00	
75 As	72	1	5.148 ppb	0.90	6.50	
78 Se	72	1	5.665 ppb	11.84	6.50	
95 Mo	72	1	2.035 ppb	3.08	2.60	
107 Ag	115	1	5.018 ppb	3.31	6.50	
111 Cd	115	1	0.902 ppb	2.36	1.30	
118 Sn	115	1	10.020 ppb	1.21	13.00	
121 Sb	115	1	1.955 ppb	2.96	2.60	
137 Ba	115	1	1.027 ppb	2.95	1.30	
205 Tl	165	1	1.068 ppb	0.54	1.30	
208 Pb	165	1	1.064 ppb	3.69	1.30	
232 Th	165	1	2.313 ppb	1.63	2.60	
238 U	165	1	1.067 ppb	2.71	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	231991	0.78	327414	70.9	30 - 120	
45 Sc	1	608602	0.38	735158	82.8	30 - 120	
72 Ge	1	357167	0.46	419596	85.1	30 - 120	
115 In	1	1338257	0.54	1473829	90.8	30 - 120	
165 Ho	1	3256676	0.70	3670206	88.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Reslope Before Continuing Analytical Run

Corrective action was taken as stated in method 6020 section 7.8

…"During the course of an analytical run, the instrument may be "resloped" or recalibrated to correct for instrument drift. A recalibration must then be followed immediately by a new analysis of a CCV and CCB before any further samples are analyzed."

Analyst: _____

Date: 7/6/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#
Date Acquired: Jul 2 2009 10:05 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: Cal Blank
Misc Info:
Vial Number: 2101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 10:02 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-22	923.56
52	Cr	72	1	1147	7.60
55	Mn	72	1	100	19.73
59	Co	72	1	20	49.59
60	Ni	72	1	30	66.66
63	Cu	72	1	193	16.41
66	Zn	72	1	101	6.52
75	As	72	1	23	30.56
78	Se	72	1	33	86.61
95	Mo	72	1	167	14.36
107	Ag	115	1	7	173.19
111	Cd	115	1	21	30.15
118	Sn	115	1	437	20.16
121	Sb	115	1	23	14.41
137	Ba	115	1	13	24.73
205	Tl	165	1	43	33.08
208	Pb	165	1	161	16.68
232	Th	165	1	287	9.26
238	U	165	1	48	26.51

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	251642	0.92
45	Sc	1	650932	0.67
72	Ge	1	381299	0.66
115	In	1	1392123	0.35
165	Ho	1	3292496	0.64

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\085ICAL.D\085ICAL.D#
Date Acquired: Jul 2 2009 10:08 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: 100 ppb
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 02 2009 10:05 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	27062	1.00
51	V	72	1	418462	0.85
52	Cr	72	1	487792	0.95
55	Mn	72	1	469696	0.79
59	Co	72	1	717901	0.71
60	Ni	72	1	173160	0.19
63	Cu	72	1	419851	1.55
66	Zn	72	1	75368	0.30
75	As	72	1	47767	0.36
78	Se	72	1	7986	2.25
95	Mo	72	1	210429	0.32
107	Ag	115	1	740054	0.61
111	Cd	115	1	123457	0.46
118	Sn	115	1	326095	0.12
121	Sb	115	1	328478	0.54
137	Ba	115	1	146461	0.56
205	Tl	165	1	1922923	1.17
208	Pb	165	1	2629150	0.50
232	Th	165	1	2660232	1.57
238	U	165	1	3095955	0.54

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	233510	0.70	251642	92.8	30 - 120	
45	Sc	1	606058	0.36	650932	93.1	30 - 120	
72	Ge	1	357646	0.94	381299	93.8	30 - 120	
115	In	1	1356873	1.19	1392123	97.5	30 - 120	
165	Ho	1	3236534	0.58	3292496	98.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\086 CCV.D\086 CCV.D#
Date Acquired: Jul 2 2009 10:11 pm
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 10:09 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.07	ppb	2.56	50	100.1	90 - 110	
51 V	72	1	50.16	ppb	0.59	50	100.3	90 - 110	
52 Cr	72	1	49.74	ppb	0.44	50	99.5	90 - 110	
55 Mn	72	1	49.24	ppb	0.95	50	98.5	90 - 110	
59 Co	72	1	49.54	ppb	0.43	50	99.1	90 - 110	
60 Ni	72	1	49.50	ppb	0.62	50	99.0	90 - 110	
63 Cu	72	1	50.03	ppb	0.60	50	100.1	90 - 110	
66 Zn	72	1	51.88	ppb	0.85	50	103.8	90 - 110	
75 As	72	1	49.82	ppb	1.39	50	99.6	90 - 110	
78 Se	72	1	49.94	ppb	7.58	50	99.9	90 - 110	
95 Mo	72	1	49.20	ppb	2.32	50	98.4	90 - 110	
107 Ag	115	1	50.84	ppb	1.31	50	101.7	90 - 110	
111 Cd	115	1	50.39	ppb	1.04	50	100.8	90 - 110	
118 Sn	115	1	51.11	ppb	0.75	50	102.2	90 - 110	
121 Sb	115	1	50.75	ppb	0.40	50	101.5	90 - 110	
137 Ba	115	1	50.68	ppb	0.61	50	101.4	90 - 110	
205 Tl	165	1	50.63	ppb	1.59	50	101.3	90 - 110	
208 Pb	165	1	50.16	ppb	2.07	50	100.3	90 - 110	
232 Th	165	1	51.25	ppb	0.88	50	102.5	90 - 110	
238 U	165	1	50.26	ppb	1.21	50	100.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	227579	1.65	251642	90.4	30 - 120	
45 Sc	1	599112	0.47	650932	92.0	30 - 120	
72 Ge	1	351453	1.02	381299	92.2	30 - 120	
115 In	1	1310647	0.89	1392123	94.1	30 - 120	
165 Ho	1	3197629	0.62	3292496	97.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\087 CCB.D\087 CCB.D#
Date Acquired: Jul 2 2009 10:15 pm
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 10:09 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.025	ppb	173.20	1.00	
51 V	72	1	0.038	ppb	120.35	1.00	
52 Cr	72	1	0.025	ppb	82.37	1.00	
55 Mn	72	1	0.007	ppb	98.05	1.00	
59 Co	72	1	0.002	ppb	42.27	1.00	
60 Ni	72	1	0.021	ppb	116.49	1.00	
63 Cu	72	1	0.005	ppb	197.71	1.00	
66 Zn	72	1	0.219	ppb	9.38	1.00	
75 As	72	1	-0.001	ppb	181.96	1.00	
78 Se	72	1	0.112	ppb	224.10	1.00	
95 Mo	72	1	0.010	ppb	269.75	1.00	
107 Ag	115	1	0.008	ppb	50.56	1.00	
111 Cd	115	1	-0.006	ppb	76.66	1.00	
118 Sn	115	1	0.210	ppb	3.82	1.00	
121 Sb	115	1	0.081	ppb	14.91	1.00	
137 Ba	115	1	0.002	ppb	452.42	1.00	
205 Tl	165	1	0.048	ppb	18.25	1.00	
208 Pb	165	1	0.004	ppb	36.76	1.00	
232 Th	165	1	0.958	ppb	15.35	1.00	
238 U	165	1	0.011	ppb	16.03	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	228471	0.88	251642	90.8	30 - 120	
45 Sc	1	601272	0.35	650932	92.4	30 - 120	
72 Ge	1	356458	1.32	381299	93.5	30 - 120	
115 In	1	1308431	1.08	1392123	94.0	30 - 120	
165 Ho	1	3177975	0.85	3292496	96.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\088WASH.D\088WASH.D#
Date Acquired: Jul 2 2009 10:18 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 02 2009 10:09 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.015 ppb	11.88	1.30	
51 V	72	1	5.126 ppb	4.38	6.50	
52 Cr	72	1	2.008 ppb	4.26	2.60	
55 Mn	72	1	1.017 ppb	0.89	1.30	
59 Co	72	1	1.011 ppb	2.60	1.30	
60 Ni	72	1	2.127 ppb	3.24	2.60	
63 Cu	72	1	1.966 ppb	1.91	2.60	
66 Zn	72	1	10.350 ppb	3.25	13.00	
75 As	72	1	5.021 ppb	2.18	6.50	
78 Se	72	1	5.116 ppb	3.15	6.50	
95 Mo	72	1	2.009 ppb	2.29	2.60	
107 Ag	115	1	5.197 ppb	2.65	6.50	
111 Cd	115	1	1.004 ppb	1.66	1.30	
118 Sn	115	1	10.740 ppb	2.53	13.00	
121 Sb	115	1	1.963 ppb	1.94	2.60	
137 Ba	115	1	1.008 ppb	10.13	1.30	
205 Tl	165	1	1.098 ppb	0.73	1.30	
208 Pb	165	1	1.056 ppb	1.84	1.30	
232 Th	165	1	2.304 ppb	2.10	2.60	
238 U	165	1	1.086 ppb	1.36	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	226590	0.33	251642	90.0	30 - 120	
45 Sc	1	609747	0.32	650932	93.7	30 - 120	
72 Ge	1	359276	0.76	381299	94.2	30 - 120	
115 In	1	1345201	1.19	1392123	96.6	30 - 120	
165 Ho	1	3224611	1.00	3292496	97.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\084CALB.D\084CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Reslope Before Continuing Analytical Run

Corrective action was taken as stated in method 6020 section 7.8

..."During the course of an analytical run, the instrument may be "resloped" or recalibrated to correct for instrument drift. A recalibration must then be followed immediately by a new analysis of a CCV and CCB before any further samples are analyzed."

Analyst: _____

Date: 7/6/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#
Date Acquired:	Jul 3 2009 02:42 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	Cal Blank
Misc Info:	
Vial Number:	2101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:40 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	158	85.33
52	Cr	72	1	747	3.64
55	Mn	72	1	103	68.44
59	Co	72	1	20	86.61
60	Ni	72	1	7	86.59
63	Cu	72	1	623	14.58
66	Zn	72	1	55	20.92
75	As	72	1	17	28.95
78	Se	72	1	80	25.03
95	Mo	72	1	113	40.12
107	Ag	115	1	3	173.22
111	Cd	115	1	4	114.91
118	Sn	115	1	307	19.39
121	Sb	115	1	17	35.17
137	Ba	115	1	10	33.71
205	Tl	165	1	22	29.63
208	Pb	165	1	97	14.76
232	Th	165	1	133	30.33
238	U	165	1	31	14.91

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	143876	0.92
45	Sc	1	425742	0.49
72	Ge	1	252182	0.34
115	In	1	871760	0.50
165	Ho	1	1876593	1.50

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\167ICAL.D\167ICAL.D#
Date Acquired: Jul 3 2009 02:46 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: 100 ppb
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:43 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	17972	2.80
51	V	72	1	293987	1.99
52	Cr	72	1	327356	1.44
55	Mn	72	1	314665	1.22
59	Co	72	1	480008	1.12
60	Ni	72	1	115729	1.05
63	Cu	72	1	287151	1.22
66	Zn	72	1	49426	0.80
75	As	72	1	35955	1.48
78	Se	72	1	5461	5.72
95	Mo	72	1	139490	1.17
107	Ag	115	1	467632	0.57
111	Cd	115	1	79545	0.84
118	Sn	115	1	208755	1.32
121	Sb	115	1	218863	0.77
137	Ba	115	1	98924	0.83
205	Tl	165	1	1090717	1.82
208	Pb	165	1	1475035	1.61
232	Th	165	1	1500997	0.38
238	U	165	1	1699064	1.86

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	139920	1.42	143876	97.3	30 - 120	
45	Sc	1	412638	0.33	425742	96.9	30 - 120	
72	Ge	1	243358	0.30	252182	96.5	30 - 120	
115	In	1	837547	0.94	871760	96.1	30 - 120	
165	Ho	1	1836072	0.59	1876593	97.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\168 CCV.D\168 CCV.D#
Date Acquired: Jul 3 2009 02:49 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	48.51	ppb	3.93	50	97.0	90 - 110	
51 V	72	1	48.96	ppb	2.48	50	97.9	90 - 110	
52 Cr	72	1	50.41	ppb	1.90	50	100.8	90 - 110	
55 Mn	72	1	49.47	ppb	0.83	50	98.9	90 - 110	
59 Co	72	1	50.29	ppb	0.99	50	100.6	90 - 110	
60 Ni	72	1	50.31	ppb	0.59	50	100.6	90 - 110	
63 Cu	72	1	50.29	ppb	1.05	50	100.6	90 - 110	
66 Zn	72	1	53.79	ppb	1.61	50	107.6	90 - 110	
75 As	72	1	50.44	ppb	1.23	50	100.9	90 - 110	
78 Se	72	1	51.90	ppb	4.58	50	103.8	90 - 110	
95 Mo	72	1	50.15	ppb	2.43	50	100.3	90 - 110	
107 Ag	115	1	50.61	ppb	2.09	50	101.2	90 - 110	
111 Cd	115	1	49.92	ppb	1.49	50	99.8	90 - 110	
118 Sn	115	1	50.51	ppb	1.14	50	101.0	90 - 110	
121 Sb	115	1	50.20	ppb	1.38	50	100.4	90 - 110	
137 Ba	115	1	50.61	ppb	1.66	50	101.2	90 - 110	
205 Tl	165	1	49.62	ppb	1.27	50	99.2	90 - 110	
208 Pb	165	1	49.42	ppb	1.59	50	98.8	90 - 110	
232 Th	165	1	51.54	ppb	1.64	50	103.1	90 - 110	
238 U	165	1	50.49	ppb	2.22	50	101.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	139280	1.62	143876	96.8	30 - 120	
45 Sc	1	412259	0.65	425742	96.8	30 - 120	
72 Ge	1	244442	1.09	252182	96.9	30 - 120	
115 In	1	838969	0.55	871760	96.2	30 - 120	
165 Ho	1	1872402	0.38	1876593	99.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\169 CCB.D\169 CCB.D#
Date Acquired:	Jul 3 2009 02:53 am
Operator:	TEL
Sample Name:	CCB
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 02:46 am
Sample Type:	CCB
Total Dil Factor:	1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.093	ppb	117.30	1.00	
52 Cr	72	1	0.003	ppb	31.38	1.00	
55 Mn	72	1	-0.002	ppb	230.00	1.00	
59 Co	72	1	0.008	ppb	42.16	1.00	
60 Ni	72	1	0.042	ppb	12.13	1.00	
63 Cu	72	1	0.018	ppb	124.48	1.00	
66 Zn	72	1	0.203	ppb	22.13	1.00	
75 As	72	1	0.018	ppb	49.08	1.00	
78 Se	72	1	-0.232	ppb	200.34	1.00	
95 Mo	72	1	0.007	ppb	544.70	1.00	
107 Ag	115	1	0.008	ppb	81.44	1.00	
111 Cd	115	1	0.007	ppb	158.32	1.00	
118 Sn	115	1	0.163	ppb	23.00	1.00	
121 Sb	115	1	0.062	ppb	19.62	1.00	
137 Ba	115	1	0.002	ppb	563.91	1.00	
205 Tl	165	1	0.022	ppb	9.63	1.00	
208 Pb	165	1	0.009	ppb	42.63	1.00	
232 Th	165	1	1.036	ppb	14.59	1.00	Fail
238 U	165	1	0.012	ppb	17.54	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	141784	0.34	143876	98.5	30 - 120	
45 Sc	1	424544	0.33	425742	99.7	30 - 120	
72 Ge	1	251238	1.16	252182	99.6	30 - 120	
115 In	1	868238	0.57	871760	99.6	30 - 120	
165 Ho	1	1879945	1.27	1876593	100.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

1 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\170WASH.D\170WASH.D#
Date Acquired: Jul 3 2009 02:56 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.906 ppb	21.59	1.30	
51 V	72	1	5.037 ppb	1.38	6.50	
52 Cr	72	1	2.180 ppb	1.28	2.60	
55 Mn	72	1	1.082 ppb	7.40	1.30	
59 Co	72	1	1.036 ppb	6.96	1.30	
60 Ni	72	1	2.193 ppb	3.91	2.60	
63 Cu	72	1	2.099 ppb	4.21	2.60	
66 Zn	72	1	10.380 ppb	0.41	13.00	
75 As	72	1	4.923 ppb	1.58	6.50	
78 Se	72	1	3.817 ppb	4.39	6.50	
95 Mo	72	1	2.122 ppb	4.15	2.60	
107 Ag	115	1	5.085 ppb	0.66	6.50	
111 Cd	115	1	1.023 ppb	2.59	1.30	
118 Sn	115	1	10.360 ppb	1.99	13.00	
121 Sb	115	1	1.961 ppb	3.79	2.60	
137 Ba	115	1	1.047 ppb	5.91	1.30	
205 Tl	165	1	1.050 ppb	2.59	1.30	
208 Pb	165	1	1.032 ppb	2.47	1.30	
232 Th	165	1	2.255 ppb	0.85	2.60	
238 U	165	1	1.040 ppb	3.69	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	146215	0.70	143876	101.6	30 - 120	
45 Sc	1	436374	0.53	425742	102.5	30 - 120	
72 Ge	1	255360	0.79	252182	101.3	30 - 120	
115 In	1	887865	0.77	871760	101.8	30 - 120	
165 Ho	1	1926036	1.06	1876593	102.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\171ICSA.D\171ICSA.D#
Date Acquired: Jul 3 2009 02:59 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSA
Misc Info:
Vial Number: 2108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	6	1	0.02 ppb	173.21	1.00	
51 V	72	1	-0.29 ppb	59.55	1.00	
52 Cr	72	1	0.97 ppb	5.01	1.00	
55 Mn	72	1	2.18 ppb	3.85	1.00	
59 Co	72	1	0.06 ppb	29.67	1.00	
60 Ni	72	1	1.15 ppb	20.91	1.00	
63 Cu	72	1	0.31 ppb	5.78	1.00	
66 Zn	72	1	3.11 ppb	3.65	10.00	
75 As	72	1	0.16 ppb	12.29	1.00	
78 Se	72	1	-0.35 ppb	175.94	1.00	
95 Mo	72	1	2033.00 ppb	1.08	2000.00	
107 Ag	115	1	0.07 ppb	21.72	1.00	
111 Cd	115	1	0.61 ppb	14.81	1.00	
118 Sn	115	1	0.15 ppb	0.45	10.00	
121 Sb	115	1	0.25 ppb	9.06	1.00	
137 Ba	115	1	1.54 ppb	3.02	1.00	
205 Tl	165	1	0.03 ppb	9.89	1.00	
208 Pb	165	1	0.12 ppb	2.78	1.00	
232 Th	165	1	0.25 ppb	13.36	1.00	
238 U	165	1	0.02 ppb	7.59	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	143669	1.20	143876	99.9	30 - 120	
45 Sc	1	413967	1.00	425742	97.2	30 - 120	
72 Ge	1	235209	0.73	252182	93.3	30 - 120	
115 In	1	786060	0.88	871760	90.2	30 - 120	
165 Ho	1	1754071	0.52	1876593	93.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Nnumber of ISTD Failures Allowed

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\172ICSB.D\172ICSB.D#
Date Acquired: Jul 3 2009 03:03 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: ICSAB
Misc Info:
Vial Number: 2109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: ICSAB
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	6	1	96.24	2.21	100	96.2	80 - 120	
51 V	72	1	101.40	1.80	100	101.4	80 - 120	
52 Cr	72	1	99.00	2.16	100	99.0	80 - 120	
55 Mn	72	1	97.78	0.35	100	97.8	80 - 120	
59 Co	72	1	94.80	0.80	100	94.8	80 - 120	
60 Ni	72	1	91.99	1.55	100	92.0	80 - 120	
63 Cu	72	1	87.71	0.94	100	87.7	80 - 120	
66 Zn	72	1	97.71	1.34	100	97.7	80 - 120	
75 As	72	1	99.21	1.50	100	99.2	80 - 120	
78 Se	72	1	109.50	3.57	100	109.5	80 - 120	
95 Mo	72	1	2120.00	0.78	2100	101.0	80 - 120	
107 Ag	115	1	81.74	5.60	100	81.7	80 - 120	
111 Cd	115	1	91.79	0.75	100	91.8	80 - 120	
118 Sn	115	1	98.59	2.27	100	98.6	80 - 120	
121 Sb	115	1	97.99	0.75	100	98.0	80 - 120	
137 Ba	115	1	99.54	0.42	100	99.5	80 - 120	
205 Tl	165	1	88.47	0.70	100	88.5	80 - 120	
208 Pb	165	1	87.29	1.51	100	87.3	80 - 120	
232 Th	165	1	98.13	1.22	100	98.1	80 - 120	
238 U	165	1	93.34	1.12	100	93.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	143930	1.94	143876	100.0	30 - 120	
45 Sc	1	417913	0.76	425742	98.2	30 - 120	
72 Ge	1	231729	0.91	252182	91.9	30 - 120	
115 In	1	783204	0.18	871760	89.8	30 - 120	
165 Ho	1	1804139	0.19	1876593	96.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\173WASH.D\173WASH.D#
Date Acquired: Jul 3 2009 03:06 am
Operator: TEL
Sample Name: WASH
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	1.30	
51 V	72	1	-0.057 ppb	59.42	6.50	
52 Cr	72	1	0.018 ppb	97.09	2.60	
55 Mn	72	1	-0.007 ppb	53.15	1.30	
59 Co	72	1	0.004 ppb	90.55	1.30	
60 Ni	72	1	0.019 ppb	85.37	2.60	
63 Cu	72	1	-0.081 ppb	35.28	2.60	
66 Zn	72	1	0.483 ppb	8.60	13.00	
75 As	72	1	0.011 ppb	87.16	6.50	
78 Se	72	1	-0.268 ppb	195.82	6.50	
95 Mo	72	1	0.977 ppb	12.75	2.60	
107 Ag	115	1	0.008 ppb	52.29	6.50	
111 Cd	115	1	0.010 ppb	0.34	1.30	
118 Sn	115	1	0.043 ppb	90.95	13.00	
121 Sb	115	1	0.037 ppb	6.06	2.60	
137 Ba	115	1	0.002 ppb	98.28	1.30	
205 Tl	165	1	0.009 ppb	24.82	1.30	
208 Pb	165	1	0.007 ppb	26.51	1.30	
232 Th	165	1	0.654 ppb	14.45	2.60	
238 U	165	1	0.016 ppb	4.25	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	149756	2.37	143876	104.1	30 - 120	
45 Sc	1	435839	1.08	425742	102.4	30 - 120	
72 Ge	1	257884	1.27	252182	102.3	30 - 120	
115 In	1	893592	0.22	871760	102.5	30 - 120	
165 Ho	1	1924035	0.75	1876593	102.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\174 CCV.D\174 CCV.D#
Date Acquired: Jul 3 2009 03:10 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.20	ppb	1.27	50	98.4	90 - 110	
51 V	72	1	48.20	ppb	1.83	50	96.4	90 - 110	
52 Cr	72	1	49.39	ppb	1.41	50	98.8	90 - 110	
55 Mn	72	1	49.26	ppb	0.37	50	98.5	90 - 110	
59 Co	72	1	49.20	ppb	0.81	50	98.4	90 - 110	
60 Ni	72	1	49.63	ppb	2.26	50	99.3	90 - 110	
63 Cu	72	1	49.02	ppb	1.58	50	98.0	90 - 110	
66 Zn	72	1	51.93	ppb	1.47	50	103.9	90 - 110	
75 As	72	1	48.53	ppb	0.95	50	97.1	90 - 110	
78 Se	72	1	51.77	ppb	1.95	50	103.5	90 - 110	
95 Mo	72	1	49.23	ppb	2.88	50	98.5	90 - 110	
107 Ag	115	1	49.06	ppb	0.78	50	98.1	90 - 110	
111 Cd	115	1	48.18	ppb	2.41	50	96.4	90 - 110	
118 Sn	115	1	48.99	ppb	1.36	50	98.0	90 - 110	
121 Sb	115	1	48.69	ppb	0.43	50	97.4	90 - 110	
137 Ba	115	1	49.11	ppb	0.74	50	98.2	90 - 110	
205 Tl	165	1	48.63	ppb	1.72	50	97.3	90 - 110	
208 Pb	165	1	48.45	ppb	1.66	50	96.9	90 - 110	
232 Th	165	1	49.38	ppb	0.85	50	98.8	90 - 110	
238 U	165	1	49.17	ppb	1.90	50	98.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	146897	1.47	143876	102.1	30 - 120	
45 Sc	1	434354	0.37	425742	102.0	30 - 120	
72 Ge	1	253500	0.64	252182	100.5	30 - 120	
115 In	1	878353	0.29	871760	100.8	30 - 120	
165 Ho	1	1928072	1.15	1876593	102.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\175 CCB.D\175 CCB.D#
Date Acquired: Jul 3 2009 03:13 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.066	ppb	82.82	1.00	
52 Cr	72	1	-0.009	ppb	84.30	1.00	
55 Mn	72	1	-0.006	ppb	241.79	1.00	
59 Co	72	1	0.010	ppb	123.28	1.00	
60 Ni	72	1	0.021	ppb	132.20	1.00	
63 Cu	72	1	-0.085	ppb	30.06	1.00	
66 Zn	72	1	0.176	ppb	5.60	1.00	
75 As	72	1	0.001	ppb	2139.00	1.00	
78 Se	72	1	-0.733	ppb	48.19	1.00	
95 Mo	72	1	0.086	ppb	29.16	1.00	
107 Ag	115	1	0.006	ppb	69.15	1.00	
111 Cd	115	1	0.000	ppb	15203.00	1.00	
118 Sn	115	1	0.140	ppb	50.75	1.00	
121 Sb	115	1	0.056	ppb	17.12	1.00	
137 Ba	115	1	0.007	ppb	141.71	1.00	
205 Tl	165	1	0.017	ppb	17.44	1.00	
208 Pb	165	1	0.007	ppb	29.55	1.00	
232 Th	165	1	0.877	ppb	8.81	1.00	
238 U	165	1	0.010	ppb	4.17	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	148952	1.52	143876	103.5	30 - 120	
45 Sc	1	440085	0.47	425742	103.4	30 - 120	
72 Ge	1	258151	0.71	252182	102.4	30 - 120	
115 In	1	897971	0.96	871760	103.0	30 - 120	
165 Ho	1	1923654	2.02	1876593	102.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\176WASH.D\176WASH.D#
Date Acquired:	Jul 3 2009 03:16 am
Operator:	TEL
Sample Name:	RLCV
Misc Info:	
Vial Number:	1204
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 02:46 am
Sample Type:	WASH
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.915 ppb	18.87	1.30	
51 V	72	1	5.123 ppb	2.61	6.50	
52 Cr	72	1	2.002 ppb	2.81	2.60	
55 Mn	72	1	1.009 ppb	2.09	1.30	
59 Co	72	1	0.977 ppb	4.22	1.30	
60 Ni	72	1	1.921 ppb	5.21	2.60	
63 Cu	72	1	1.799 ppb	3.58	2.60	
66 Zn	72	1	10.230 ppb	0.24	13.00	
75 As	72	1	4.983 ppb	2.72	6.50	
78 Se	72	1	4.265 ppb	38.12	6.50	
95 Mo	72	1	2.112 ppb	3.58	2.60	
107 Ag	115	1	5.075 ppb	2.24	6.50	
111 Cd	115	1	0.965 ppb	7.30	1.30	
118 Sn	115	1	9.942 ppb	1.60	13.00	
121 Sb	115	1	1.935 ppb	3.48	2.60	
137 Ba	115	1	1.013 ppb	6.53	1.30	
205 Tl	165	1	1.043 ppb	2.52	1.30	
208 Pb	165	1	1.024 ppb	3.90	1.30	
232 Th	165	1	2.182 ppb	2.19	2.60	
238 U	165	1	1.029 ppb	2.79	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	150035	1.06	143876	104.3	30 - 120	
45 Sc	1	448498	1.01	425742	105.3	30 - 120	
72 Ge	1	262041	0.98	252182	103.9	30 - 120	
115 In	1	910615	0.96	871760	104.5	30 - 120	
165 Ho	1	1954333	1.31	1876593	104.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\177 BLK.D\177 BLK.D#
Date Acquired: Jul 3 2009 03:20 am
Operator: TEL
Sample Name: LFRWWBF
Misc Info: BLANK 9180268 6020
Vial Number: 3306
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: BLK
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	2.00	
51 V	72	1	-0.118 ppb	93.63	2.00	
52 Cr	72	1	-0.004 ppb	451.26	2.00	
55 Mn	72	1	0.048 ppb	10.20	2.00	
59 Co	72	1	0.000 ppb	754.47	2.00	
60 Ni	72	1	0.073 ppb	32.64	2.00	
63 Cu	72	1	-0.067 ppb	32.81	2.00	
66 Zn	72	1	1.443 ppb	2.82	2.00	
75 As	72	1	0.007 ppb	178.27	2.00	
78 Se	72	1	0.020 ppb	2031.40	2.00	
95 Mo	72	1	-0.003 ppb	120.78	2.00	
107 Ag	115	1	0.003 ppb	44.38	2.00	
111 Cd	115	1	0.004 ppb	51.39	2.00	
118 Sn	115	1	0.028 ppb	63.65	2.00	
121 Sb	115	1	0.032 ppb	29.21	2.00	
137 Ba	115	1	0.024 ppb	77.68	2.00	
205 Tl	165	1	0.005 ppb	9.81	2.00	
208 Pb	165	1	0.010 ppb	15.98	2.00	
232 Th	165	1	0.087 ppb	4.46	2.00	
238 U	165	1	0.000 ppb	230.05	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	153573	1.28	143876	106.7	30 - 120	
45 Sc	1	453878	0.52	425742	106.6	30 - 120	
72 Ge	1	269027	0.63	252182	106.7	30 - 120	
115 In	1	931710	0.37	871760	106.9	30 - 120	
165 Ho	1	1993838	0.20	1876593	106.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Laboratory Control Spike (LCS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\178 LCS.D\178 LCS.D#
Date Acquired:	Jul 3 2009 03:23 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFRWWCF
Misc Info:	LCS
Vial Number:	3307
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	LCS
Prep Dil. Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	42.95	2.15	40	107.4	80 - 120	
51 V	72	1	41.42	1.63	40	103.6	80 - 120	
52 Cr	72	1	41.82	0.56	40	104.6	80 - 120	
55 Mn	72	1	41.51	0.64	40	103.8	80 - 120	
59 Co	72	1	41.52	1.94	40	103.8	80 - 120	
60 Ni	72	1	42.10	1.29	40	105.3	80 - 120	
63 Cu	72	1	42.18	1.44	40	105.5	80 - 120	
66 Zn	72	1	46.67	0.98	40	116.7	80 - 120	
75 As	72	1	42.64	2.70	40	106.6	80 - 120	
78 Se	72	1	43.31	6.10	40	108.3	80 - 120	
95 Mo	72	1	41.96	1.04	40	104.9	80 - 120	
107 Ag	115	1	42.47	1.57	40	106.2	80 - 120	
111 Cd	115	1	41.88	1.15	40	104.7	80 - 120	
118 Sn	115	1	-0.04	33.06	40	-0.1	80 - 120	
121 Sb	115	1	42.51	1.94	40	106.3	80 - 120	
137 Ba	115	1	41.97	0.65	40	104.9	80 - 120	
205 Tl	165	1	41.60	0.81	40	104.0	80 - 120	
208 Pb	165	1	41.54	1.43	40	103.9	80 - 120	
232 Th	165	1	40.44	0.90	40	101.1	80 - 120	
238 U	165	1	42.02	1.75	40	105.1	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	154143	1.01	143876	107.1	30 - 120	
45 Sc	1	449905	1.17	425742	105.7	30 - 120	
72 Ge	1	265430	0.93	252182	105.3	30 - 120	
115 In	1	913786	0.48	871760	104.8	30 - 120	
165 Ho	1	2001765	0.59	1876593	106.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\179SMPL.D\179SMPL.D#
Date Acquired:	Jul 3 2009 03:26 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFP1LF 10X
Misc Info:	D9F260277
Vial Number:	3308
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	SA
Dilution Factor:	10.00
Autodil Factor:	Undiluted
Final Dil Factor:	10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.18	0.02	ppb	173.17	3600	
51 V	72	1	-1,271.00	-127.10	ppb	17.70	3600	
52 Cr	72	1	27,690.00	2769.00	ppb	3.24	3600	
55 Mn	72	1	0.85	0.08	ppb	23.72	3600	
59 Co	72	1	0.60	0.06	ppb	38.99	3600	
60 Ni	72	1	7.09	0.71	ppb	15.10	3600	
63 Cu	72	1	0.26	0.03	ppb	92.46	3600	
66 Zn	72	1	10.63	1.06	ppb	10.59	3600	
75 As	72	1	86.84	8.68	ppb	1.87	3600	
78 Se	72	1	7.48	0.75	ppb	42.47	3600	
95 Mo	72	1	31.32	3.13	ppb	3.96	3600	
107 Ag	115	1	0.10	0.01	ppb	40.26	3600	
111 Cd	115	1	0.23	0.02	ppb	51.21	3600	
118 Sn	115	1	-0.56	-0.06	ppb	60.66	3600	
121 Sb	115	1	0.49	0.05	ppb	35.14	3600	
137 Ba	115	1	45.42	4.54	ppb	2.30	3600	
205 Tl	165	1	0.26	0.03	ppb	24.92	3600	
208 Pb	165	1	0.11	0.01	ppb	12.75	3600	
232 Th	165	1	9.47	0.95	ppb	16.16	1000	
238 U	165	1	27.64	2.76	ppb	3.16	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	145779	0.25	143876	101.3	30 - 120	
45 Sc	1	430166	1.16	425742	101.0	30 - 120	
72 Ge	1	242110	1.97	252182	96.0	30 - 120	
115 In	1	815832	2.51	871760	93.6	30 - 120	
165 Ho	1	1837864	2.07	1876593	97.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\180AREF.D\180AREF.D#
Date Acquired: Jul 3 2009 03:30 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ11F 10X
Misc Info: D9F270154
Vial Number: 3309
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: AllRef
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	11.10	1.11	ppb	70.55	3600	
52 Cr	72	1	706.40	70.64	ppb	2.59	3600	
55 Mn	72	1	84.56	8.46	ppb	2.01	3600	
59 Co	72	1	0.31	0.03	ppb	2.26	3600	
60 Ni	72	1	3.54	0.35	ppb	9.68	3600	
63 Cu	72	1	-0.79	-0.08	ppb	6.49	3600	
66 Zn	72	1	1.85	0.18	ppb	5.58	3600	
75 As	72	1	112.20	11.22	ppb	4.21	3600	
78 Se	72	1	-0.72	-0.07	ppb	1146.90	3600	
95 Mo	72	1	31.71	3.17	ppb	6.61	3600	
107 Ag	115	1	0.00	0.00	ppb	6215.80	3600	
111 Cd	115	1	0.04	0.00	ppb	315.59	3600	
118 Sn	115	1	-0.59	-0.06	ppb	40.84	3600	
121 Sb	115	1	0.22	0.02	ppb	21.17	3600	
137 Ba	115	1	14.58	1.46	ppb	9.62	3600	
205 Tl	165	1	0.04	0.00	ppb	28.34	3600	
208 Pb	165	1	0.04	0.00	ppb	36.60	3600	
232 Th	165	1	2.38	0.24	ppb	11.97	1000	
238 U	165	1	23.78	2.38	ppb	2.67	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	151780	0.67	143876	105.5	30 - 120	
45 Sc	1	437622	1.18	425742	102.8	30 - 120	
72 Ge	1	253395	1.31	252182	100.5	30 - 120	
115 In	1	849471	1.47	871760	97.4	30 - 120	
165 Ho	1	1895891	2.16	1876593	101.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\181SDIL.D\181SDIL.D#
Date Acquired: Jul 3 2009 03:33 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ11P50F
Misc Info: SERIAL DILUTION
Vial Number: 3310
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070209D.B\180AREF.D\180AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	0.00	ppb	0.00	0.00	#DIV/0!	90 - 110	
51 V	72	1	-0.06	ppb	246.14	0.22	-26.5	90 - 110	
52 Cr	72	1	14.67	ppb	0.65	14.13	103.8	90 - 110	
55 Mn	72	1	1.82	ppb	2.79	1.69	107.8	90 - 110	
59 Co	72	1	0.01	ppb	33.27	0.01	142.7	90 - 110	
60 Ni	72	1	0.17	ppb	27.07	0.07	238.9	90 - 110	
63 Cu	72	1	-0.07	ppb	53.04	-0.02	427.3	90 - 110	
66 Zn	72	1	0.09	ppb	22.23	0.04	232.1	90 - 110	
75 As	72	1	2.49	ppb	5.70	2.24	110.9	90 - 110	
78 Se	72	1	0.24	ppb	207.50	-0.01	-1671.7	90 - 110	
95 Mo	72	1	0.63	ppb	9.46	0.63	99.5	90 - 110	
107 Ag	115	1	0.00	ppb	150.22	0.00	34346.5	90 - 110	
111 Cd	115	1	0.00	ppb	5679.50	0.00	-4.9	90 - 110	
118 Sn	115	1	-0.05	ppb	6.00	-0.01	443.4	90 - 110	
121 Sb	115	1	0.01	ppb	15.94	0.00	240.1	90 - 110	
137 Ba	115	1	0.31	ppb	17.04	0.29	106.2	90 - 110	
205 Tl	165	1	0.00	ppb	91.68	0.00	188.1	90 - 110	
208 Pb	165	1	0.00	ppb	36.65	0.00	490.6	90 - 110	
232 Th	165	1	0.08	ppb	15.80	0.05	176.2	90 - 110	
238 U	165	1	0.49	ppb	1.65	0.48	102.5	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	156018	1.78	143876	108.4	30 - 120	
45 Sc	1	439820	0.66	425742	103.3	30 - 120	
72 Ge	1	260821	0.04	252182	103.4	30 - 120	
115 In	1	874545	0.59	871760	100.3	30 - 120	
165 Ho	1	1897839	0.95	1876593	101.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Denver

SERIAL DILUTION

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/06/09 10:05:34

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFQ11P50F** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070209D # 181 | Method 6020_
Acquired: 07/03/2009 03:33:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/03/2009 02:42:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9		0	0			*	
7440-62-2	Vanadium	51	-22	-2.9455	11.100	127		*	
7440-47-3	Chromium	52	52143	733.50	706.40	3.84		*	
7439-96-5	Manganese	55	6252	91.150	84.560	7.79		*	
7440-48-4	Cobalt	59	67	0.44685	0.31320	42.7		*	
7440-02-0	Nickel	60	217	8.4550	3.5390	139		*	
7440-50-8	Copper	63	437	-3.3840	-0.79200			*	
7440-66-6	Zinc	66	103	4.2910	1.8490	132		*	
7440-38-2	Arsenic	75	977	124.45	112.20	10.9	0.21	NC	☑
7782-49-2	Selenium	78	97	12.060	-0.72140		0.70	NC	☑
7439-98-7	Molybdenum	95	1060	31.555	31.710	0.489		*	
7440-22-4	Silver	107	10	0.06780	0.00020	34200		*	
7440-43-9	Cadmium	111	4	-0.00201	0.04132	105		*	
7440-31-5	Tin	118	193	-2.6230	-0.59160			*	
7440-36-0	Antimony	121	41	0.53350	0.22220	140		*	
7440-39-3	Barium	137	330	15.485	14.580	6.21		*	
7440-28-0	Thallium	205	41	0.08290	0.04407	88.1		*	
7439-92-1	Lead	208	157	0.19305	0.03935	391		*	
7440-61-1	Uranium	238	8591	24.370	23.780	2.48		*	
7440-29-1	Thorium	232	1437	4.2000	2.3840	76.2		*	
7439-93-2	Lithium	6			0			*	
7440-20-2	Scandium	45			0			*	
7440-74-6	Indium	115			0			*	
7440-56-4	Germanium	72			0			*	
7440-60-0	Holmium	165			0			*	

*** Analyte not requested for this batch, no MDL**
NC : Serial dilution concentration < 100 X MDL
E : Difference greater than Limit (10%)

Reviewed by: LRD Date: 7/7/09

Post Digestion Spiked Sample (PDS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\182PDS.D\182PDS.D#
Date Acquired:	Jul 3 2009 03:37 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFQ11ZF
Misc Info:	POST DIGESTION SPIKE
Vial Number:	3311
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	PDS
Prep Dil. Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Spike Ref. File: ---

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	187.40	0.00	ppb	1.95	200	93.7	75 - 125	
51 V	72	1	197.70	1.11	ppb	1.54	200	98.3	75 - 125	
52 Cr	72	1	267.50	70.64	ppb	1.72	200	98.8	75 - 125	
55 Mn	72	1	196.90	8.46	ppb	0.99	200	94.5	75 - 125	
59 Co	72	1	186.20	0.03	ppb	0.40	200	93.1	75 - 125	
60 Ni	72	1	181.50	0.35	ppb	1.14	200	90.6	75 - 125	
63 Cu	72	1	179.40	-0.08	ppb	0.35	200	89.7	75 - 125	
66 Zn	72	1	191.90	0.18	ppb	0.81	200	95.9	75 - 125	
75 As	72	1	204.30	11.22	ppb	1.11	200	96.7	75 - 125	
78 Se	72	1	199.90	-0.07	ppb	5.14	200	100.0	75 - 125	
95 Mo	72	1	197.70	3.17	ppb	1.29	200	97.3	75 - 125	
107 Ag	115	1	45.63	0.00	ppb	0.94	50	91.3	75 - 125	
111 Cd	115	1	188.60	0.00	ppb	0.95	200	94.3	75 - 125	
118 Sn	115	1	176.70	-0.06	ppb	1.02	200	88.4	75 - 125	
121 Sb	115	1	199.00	0.02	ppb	0.76	200	99.5	75 - 125	
137 Ba	115	1	193.40	1.46	ppb	0.22	200	96.0	75 - 125	
205 Tl	165	1	176.70	0.00	ppb	1.04	200	88.3	75 - 125	
208 Pb	165	1	177.50	0.00	ppb	0.83	200	88.7	75 - 125	
232 Th	165	1	0.06	0.24	ppb	12.23	200	0.0	75 - 125	
238 U	165	1	183.90	2.38	ppb	1.63	200	90.9	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	163487	0.70	143876	113.6	30 - 120	
45 Sc	1	451554	0.54	425742	106.1	30 - 120	
72 Ge	1	260458	0.56	252182	103.3	30 - 120	
115 In	1	861286	0.70	871760	98.8	30 - 120	
165 Ho	1	1932433	1.15	1876593	103.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/06/09 10:05:39

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFQ11ZF** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG070209D # 182
Acquired: 07/03/2009 03:37:00
Calibrated: 07/03/2009 02:42:00

Channel 272
Method 6020_
ICPMS_024

Matrix: AQUEOUS
Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	39361	187.40	0	93.7	200		☐
7440-62-2	Vanadium	51	621850	197.70	1.1100	98.3	200		☐
7440-47-3	Chromium	52	935832	267.50	70.640	98.4	200		☐
7439-96-5	Manganese	55	662999	196.90	8.4560	94.2	200		☐
7440-48-4	Cobalt	59	956615	186.20	0.03132	93.1	200		☐
7440-02-0	Nickel	60	224795	181.50	0.35390	90.6	200		☐
7440-50-8	Copper	63	550844	179.40	-0.07920	89.7	200		☑
7440-66-6	Zinc	66	101434	191.90	0.18490	95.9	200		☑
7440-38-2	Arsenic	75	78578	204.30	11.220	96.5	200		☑
7782-49-2	Selenium	78	11599	199.90	-0.07214	99.9	200		☑
7439-98-7	Molybdenum	95	294984	197.70	3.1710	97.3	200		☐
7440-22-4	Silver	107	219422	45.630	0.00002	91.3	50.0		☐
7440-43-9	Cadmium	111	154265	188.60	0.00413	94.3	200		☑
7440-31-5	Tin	118	379179	176.70	-0.05916	88.3	200		☐
7440-36-0	Antimony	121	447814	199.00	0.02222	99.5	200		☑
7440-39-3	Barium	137	196735	193.40	1.4580	96.0	200		☑
7440-28-0	Thallium	205	2028700	176.70	0.00441	88.3	200		☑
7439-92-1	Lead	208	2755160	177.50	0.00394	88.7	200		☑
7440-61-1	Uranium	238	3289380	183.90	2.3780	90.8	200		☐
7440-29-1	Thorium	232	1143	0.06364	0.23840				
7439-93-2	Lithium	6			0				
7440-20-2	Scandium	45			0				
7440-74-6	Indium	115			0				
7440-56-4	Germanium	72			0				
7440-60-0	Holmium	165			0				

Reviewed by: LRD Date: 7/7/09

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\183_MS.D\183_MS.D#
Date Acquired: Jul 3 2009 03:40 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ11SF 10X
Misc Info: MATRIX SPIKE
Vial Number: 3312
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: MS
Prep Dil. Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	4.05	0.00	ppb	2.64	40	10.1	50 - 150	
51 V	72	1	5.60	1.11	ppb	10.66	40	13.6	50 - 150	
52 Cr	72	1	78.22	70.64	ppb	1.62	40	70.7	50 - 150	
55 Mn	72	1	12.90	8.46	ppb	0.87	40	26.6	50 - 150	
59 Co	72	1	4.16	0.03	ppb	0.55	40	10.4	50 - 150	
60 Ni	72	1	4.65	0.35	ppb	2.14	40	11.5	50 - 150	
63 Cu	72	1	3.96	-0.08	ppb	4.16	40	9.9	50 - 150	
66 Zn	72	1	4.36	0.18	ppb	0.46	40	10.9	50 - 150	
75 As	72	1	16.13	11.22	ppb	0.30	40	31.5	50 - 150	
78 Se	72	1	3.72	-0.07	ppb	23.54	40	9.3	50 - 150	
95 Mo	72	1	7.77	3.17	ppb	3.84	40	18.0	50 - 150	
107 Ag	115	1	4.09	0.00	ppb	0.74	40	10.2	50 - 150	
111 Cd	115	1	4.25	0.00	ppb	1.41	40	10.6	50 - 150	
118 Sn	115	1	0.28	-0.06	ppb	16.41	40	0.7	50 - 150	
121 Sb	115	1	4.64	0.02	ppb	0.73	40	11.6	50 - 150	
137 Ba	115	1	5.83	1.46	ppb	2.53	40	14.1	50 - 150	
205 Tl	165	1	4.07	0.00	ppb	0.63	40	10.2	50 - 150	
208 Pb	165	1	4.04	0.00	ppb	0.44	40	10.1	50 - 150	
232 Th	165	1	4.15	0.24	ppb	1.49	40	10.3	50 - 150	
238 U	165	1	6.76	2.38	ppb	0.72	40	15.9	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	153024	2.06	143876	106.4	30 - 120	
45 Sc	1	434232	2.10	425742	102.0	30 - 120	
72 Ge	1	250964	1.55	252182	99.5	30 - 120	
115 In	1	845093	1.72	871760	96.9	30 - 120	
165 Ho	1	1877158	1.53	1876593	100.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Duplicate Spike (MSD) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\184 MSD.D\184 MSD.D#
Date Acquired:	Jul 3 2009 03:43 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFQ11DF 10X
Misc Info:	MATRIX SPIKE DUPLICATE
Vial Number:	3401
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	MSD
Dilution Factor:	10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070209D.B\183 MS.D\183 MS.D#

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	4.07	ppb	3.91	4.05	0.32	20	
51 V	72	1	5.53	ppb	17.23	5.60	1.24	20	
52 Cr	72	1	77.52	ppb	1.02	78.22	0.90	20	
55 Mn	72	1	12.83	ppb	1.93	12.90	0.54	20	
59 Co	72	1	4.17	ppb	4.14	4.16	0.24	20	
60 Ni	72	1	4.29	ppb	5.66	4.65	8.10	20	
63 Cu	72	1	4.15	ppb	1.89	3.96	4.66	20	
66 Zn	72	1	4.67	ppb	2.85	4.36	6.82	20	
75 As	72	1	16.52	ppb	4.25	16.13	2.39	20	
78 Se	72	1	4.53	ppb	23.23	3.72	19.42	20	
95 Mo	72	1	7.62	ppb	2.38	7.77	1.96	20	
107 Ag	115	1	4.04	ppb	2.05	4.09	1.18	20	
111 Cd	115	1	4.45	ppb	2.78	4.25	4.53	20	
118 Sn	115	1	0.03	ppb	56.96	0.28	156.70	20	
121 Sb	115	1	4.56	ppb	1.44	4.64	1.85	20	
137 Ba	115	1	5.86	ppb	0.65	5.83	0.58	20	
205 Tl	165	1	4.07	ppb	2.68	4.07	0.15	20	
208 Pb	165	1	4.09	ppb	1.42	4.04	1.13	20	
232 Th	165	1	4.36	ppb	1.84	4.15	5.01	20	
238 U	165	1	6.77	ppb	2.03	6.76	0.16	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	153922	2.03	143876	107.0	30 - 120	
45 Sc	1	433322	1.71	425742	101.8	30 - 120	
72 Ge	1	253114	2.06	252182	100.4	30 - 120	
115 In	1	846909	1.01	871760	97.1	30 - 120	
165 Ho	1	1873087	1.45	1876593	99.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref. File :C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\185SMPL.D\185SMPL.D#
Date Acquired:	Jul 3 2009 03:47 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFQ13F 10X
Misc Info:	D9F270154
Vial Number:	3402
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	SA
Dilution Factor:	10.00
Autodil Factor:	Undiluted
Final Dil Factor:	10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	14.71	1.47	ppb	62.87	3600	
52 Cr	72	1	712.10	71.21	ppb	0.64	3600	
55 Mn	72	1	82.70	8.27	ppb	1.09	3600	
59 Co	72	1	0.30	0.03	ppb	19.80	3600	
60 Ni	72	1	3.46	0.35	ppb	15.17	3600	
63 Cu	72	1	-1.03	-0.10	ppb	24.71	3600	
66 Zn	72	1	1.00	0.10	ppb	14.97	3600	
75 As	72	1	116.00	11.60	ppb	1.89	3600	
78 Se	72	1	0.63	0.06	ppb	1137.40	3600	
95 Mo	72	1	32.42	3.24	ppb	4.41	3600	
107 Ag	115	1	0.01	0.00	ppb	1.61	3600	
111 Cd	115	1	0.06	0.01	ppb	147.45	3600	
118 Sn	115	1	-0.08	-0.01	ppb	130.93	3600	
121 Sb	115	1	0.39	0.04	ppb	24.39	3600	
137 Ba	115	1	14.31	1.43	ppb	4.29	3600	
205 Tl	165	1	0.08	0.01	ppb	23.75	3600	
208 Pb	165	1	0.04	0.00	ppb	31.56	3600	
232 Th	165	1	1.34	0.13	ppb	14.20	1000	
238 U	165	1	23.79	2.38	ppb	2.56	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	154328	0.22	143876	107.3	30 - 120	
45 Sc	1	429223	0.35	425742	100.8	30 - 120	
72 Ge	1	251186	0.43	252182	99.6	30 - 120	
115 In	1	834351	1.10	871760	95.7	30 - 120	
165 Ho	1	1860431	0.89	1876593	99.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\186 CCV.D\186 CCV.D#
Date Acquired: Jul 3 2009 03:50 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.54	ppb	1.33	50	101.1	90 - 110	
51 V	72	1	50.71	ppb	2.28	50	101.4	90 - 110	
52 Cr	72	1	51.17	ppb	0.76	50	102.3	90 - 110	
55 Mn	72	1	51.30	ppb	1.17	50	102.6	90 - 110	
59 Co	72	1	50.81	ppb	1.47	50	101.6	90 - 110	
60 Ni	72	1	50.18	ppb	1.06	50	100.4	90 - 110	
63 Cu	72	1	50.28	ppb	0.96	50	100.6	90 - 110	
66 Zn	72	1	54.97	ppb	0.68	50	109.9	90 - 110	
75 As	72	1	50.85	ppb	1.76	50	101.7	90 - 110	
78 Se	72	1	50.96	ppb	4.73	50	101.9	90 - 110	
95 Mo	72	1	51.23	ppb	2.28	50	102.5	90 - 110	
107 Ag	115	1	51.98	ppb	0.08	50	104.0	90 - 110	
111 Cd	115	1	51.46	ppb	0.28	50	102.9	90 - 110	
118 Sn	115	1	51.74	ppb	0.37	50	103.5	90 - 110	
121 Sb	115	1	52.48	ppb	0.97	50	105.0	90 - 110	
137 Ba	115	1	51.70	ppb	0.81	50	103.4	90 - 110	
205 Tl	165	1	51.28	ppb	0.65	50	102.6	90 - 110	
208 Pb	165	1	51.15	ppb	0.90	50	102.3	90 - 110	
232 Th	165	1	52.00	ppb	0.95	50	104.0	90 - 110	
238 U	165	1	51.90	ppb	1.41	50	103.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	156857	1.15	143876	109.0	30 - 120	
45 Sc	1	441904	1.32	425742	103.8	30 - 120	
72 Ge	1	260791	0.94	252182	103.4	30 - 120	
115 In	1	879331	1.67	871760	100.9	30 - 120	
165 Ho	1	1913586	0.71	1876593	102.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\187 CCB.D\187 CCB.D#
Date Acquired: Jul 3 2009 03:54 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.049	ppb	99.06	1.00	
51 V	72	1	-0.089	ppb	56.75	1.00	
52 Cr	72	1	0.019	ppb	118.03	1.00	
55 Mn	72	1	0.006	ppb	160.34	1.00	
59 Co	72	1	0.007	ppb	41.67	1.00	
60 Ni	72	1	0.040	ppb	11.00	1.00	
63 Cu	72	1	-0.090	ppb	26.23	1.00	
66 Zn	72	1	0.217	ppb	16.40	1.00	
75 As	72	1	0.019	ppb	129.15	1.00	
78 Se	72	1	-0.340	ppb	129.46	1.00	
95 Mo	72	1	0.008	ppb	296.81	1.00	
107 Ag	115	1	0.005	ppb	37.39	1.00	
111 Cd	115	1	0.010	ppb	38.24	1.00	
118 Sn	115	1	0.172	ppb	15.57	1.00	
121 Sb	115	1	0.059	ppb	14.71	1.00	
137 Ba	115	1	0.004	ppb	120.83	1.00	
205 Tl	165	1	0.018	ppb	4.81	1.00	
208 Pb	165	1	0.009	ppb	33.96	1.00	
232 Th	165	1	0.918	ppb	13.45	1.00	
238 U	165	1	0.014	ppb	10.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	157321	1.57	143876	109.3	30 - 120	
45 Sc	1	437053	0.50	425742	102.7	30 - 120	
72 Ge	1	261976	0.68	252182	103.9	30 - 120	
115 In	1	890924	0.59	871760	102.2	30 - 120	
165 Ho	1	1892158	1.70	1876593	100.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\188WASH.D\188WASH.D#
Date Acquired: Jul 3 2009 03:57 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.074 ppb	4.18	1.30	
51 V	72	1	5.208 ppb	0.27	6.50	
52 Cr	72	1	2.197 ppb	5.38	2.60	
55 Mn	72	1	1.094 ppb	3.97	1.30	
59 Co	72	1	1.068 ppb	5.19	1.30	
60 Ni	72	1	2.198 ppb	4.18	2.60	
63 Cu	72	1	1.994 ppb	4.02	2.60	
66 Zn	72	1	11.050 ppb	1.75	13.00	
75 As	72	1	5.324 ppb	3.62	6.50	
78 Se	72	1	4.212 ppb	29.54	6.50	
95 Mo	72	1	2.060 ppb	3.40	2.60	
107 Ag	115	1	5.506 ppb	1.49	6.50	
111 Cd	115	1	1.101 ppb	7.00	1.30	
118 Sn	115	1	10.940 ppb	1.26	13.00	
121 Sb	115	1	2.088 ppb	1.80	2.60	
137 Ba	115	1	1.182 ppb	5.53	1.30	
205 Tl	165	1	1.123 ppb	1.35	1.30	
208 Pb	165	1	1.095 ppb	2.44	1.30	
232 Th	165	1	2.330 ppb	3.34	2.60	
238 U	165	1	1.101 ppb	2.76	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	159424	0.40	143876	110.8	30 - 120	
45 Sc	1	443747	0.93	425742	104.2	30 - 120	
72 Ge	1	264311	0.72	252182	104.8	30 - 120	
115 In	1	890239	0.86	871760	102.1	30 - 120	
165 Ho	1	1933740	1.32	1876593	103.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\189 BLK.D\189 BLK.D#
Date Acquired: Jul 3 2009 04:00 am
Operator: TEL
Sample Name: LFRV2B
Misc Info: BLANK 9180262 6020
Vial Number: 3403
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: BLK
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	2.00	
51 V	72	1	-0.121 ppb	43.14	2.00	
52 Cr	72	1	0.140 ppb	28.62	2.00	
55 Mn	72	1	0.122 ppb	8.22	2.00	
59 Co	72	1	0.003 ppb	44.09	2.00	
60 Ni	72	1	0.035 ppb	45.87	2.00	
63 Cu	72	1	-0.079 ppb	26.14	2.00	
66 Zn	72	1	2.921 ppb	1.87	2.00	
75 As	72	1	0.011 ppb	159.82	2.00	Fail
78 Se	72	1	-0.031 ppb	1647.50	2.00	
95 Mo	72	1	-0.042 ppb	39.76	2.00	
107 Ag	115	1	0.003 ppb	157.15	2.00	
111 Cd	115	1	-0.005 ppb	418.26	2.00	
118 Sn	115	1	0.123 ppb	9.42	2.00	
121 Sb	115	1	0.036 ppb	11.61	2.00	
137 Ba	115	1	0.033 ppb	35.11	2.00	
205 Tl	165	1	0.009 ppb	17.07	2.00	
208 Pb	165	1	0.018 ppb	3.14	2.00	
232 Th	165	1	0.207 ppb	12.00	2.00	
238 U	165	1	0.001 ppb	73.08	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	157433	0.83	143876	109.4	30 - 120	
45 Sc	1	438783	0.20	425742	103.1	30 - 120	
72 Ge	1	257413	0.67	252182	102.1	30 - 120	
115 In	1	881464	0.80	871760	101.1	30 - 120	
165 Ho	1	1891756	0.80	1876593	100.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

1 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Laboratory Control Spike (LCS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\190 LCS.D\190 LCS.D#
Date Acquired:	Jul 3 2009 04:04 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFRV2C
Misc Info:	LCS
Vial Number:	3404
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	LCS
Prep Dil. Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	42.70	1.02	40	106.8	80 - 120	
51 V	72	1	43.69	2.50	40	109.2	80 - 120	
52 Cr	72	1	44.14	0.73	40	110.4	80 - 120	
55 Mn	72	1	44.11	1.51	40	110.3	80 - 120	
59 Co	72	1	43.62	1.00	40	109.1	80 - 120	
60 Ni	72	1	42.76	1.53	40	106.9	80 - 120	
63 Cu	72	1	43.76	0.83	40	109.4	80 - 120	
66 Zn	72	1	43.00	1.03	40	107.5	80 - 120	
75 As	72	1	41.33	0.76	40	103.3	80 - 120	
78 Se	72	1	41.54	7.95	40	103.9	80 - 120	
95 Mo	72	1	44.16	1.24	40	110.4	80 - 120	
107 Ag	115	1	43.73	0.66	40	109.3	80 - 120	
111 Cd	115	1	43.10	1.67	40	107.8	80 - 120	
118 Sn	115	1	0.41	9.85	40	1.0	80 - 120	
121 Sb	115	1	44.00	0.55	40	110.0	80 - 120	
137 Ba	115	1	43.97	0.63	40	109.9	80 - 120	
205 Tl	165	1	44.02	1.68	40	110.1	80 - 120	
208 Pb	165	1	43.87	1.72	40	109.7	80 - 120	
232 Th	165	1	45.59	1.65	40	114.0	80 - 120	
238 U	165	1	44.55	2.50	40	111.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	157795	0.39	143876	109.7	30 - 120	
45 Sc	1	433664	0.66	425742	101.9	30 - 120	
72 Ge	1	255928	0.96	252182	101.5	30 - 120	
115 In	1	869906	0.64	871760	99.8	30 - 120	
165 Ho	1	1903357	1.00	1876593	101.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\191AREF.D\191AREF.D#
Date Acquired: Jul 3 2009 04:07 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1G 10X
Misc Info: D9F260277
Vial Number: 3405
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: AllRef
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	-1,375.00	-137.50	ppb	17.81	3600	
52 Cr	72	1	31,760.00	3176.00	ppb	1.09	3600	
55 Mn	72	1	99.29	9.93	ppb	2.30	3600	
59 Co	72	1	0.75	0.07	ppb	20.70	3600	
60 Ni	72	1	7.20	0.72	ppb	4.72	3600	
63 Cu	72	1	-0.47	-0.05	ppb	33.86	3600	
66 Zn	72	1	3.99	0.40	ppb	15.19	3600	
75 As	72	1	99.98	10.00	ppb	3.28	3600	
78 Se	72	1	1.71	0.17	ppb	361.12	3600	
95 Mo	72	1	19.37	1.94	ppb	4.00	3600	
107 Ag	115	1	0.73	0.07	ppb	24.65	3600	
111 Cd	115	1	0.20	0.02	ppb	76.63	3600	
118 Sn	115	1	-0.42	-0.04	ppb	43.28	3600	
121 Sb	115	1	0.62	0.06	ppb	7.85	3600	
137 Ba	115	1	47.86	4.79	ppb	4.58	3600	
205 Tl	165	1	0.54	0.05	ppb	4.29	3600	
208 Pb	165	1	0.11	0.01	ppb	32.50	3600	
232 Th	165	1	6.49	0.65	ppb	9.06	1000	
238 U	165	1	38.10	3.81	ppb	0.81	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	162513	2.52	143876	113.0	30 - 120	
45 Sc	1	458642	1.67	425742	107.7	30 - 120	
72 Ge	1	252216	2.27	252182	100.0	30 - 120	
115 In	1	849327	2.21	871760	97.4	30 - 120	
165 Ho	1	1899617	0.89	1876593	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\192SDIL.D\192SDIL.D#
Date Acquired: Jul 3 2009 04:11 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1GP50
Misc Info: SERIAL DILUTION
Vial Number: 3406
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070209D.B\191AREF.D\191AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	0.00	ppb	0.00	0.00	#DIV/0!	90 - 110	
51 V	72	1	-20.70	ppb	23.91	-27.50	75.3	90 - 110	
52 Cr	72	1	635.20	ppb	0.60	635.20	100.0	90 - 110	
55 Mn	72	1	1.96	ppb	4.05	1.99	98.8	90 - 110	
59 Co	72	1	0.02	ppb	43.96	0.01	143.5	90 - 110	
60 Ni	72	1	0.48	ppb	12.23	0.14	336.3	90 - 110	
63 Cu	72	1	-0.12	ppb	28.87	-0.01	1259.5	90 - 110	
66 Zn	72	1	0.14	ppb	12.55	0.08	175.1	90 - 110	
75 As	72	1	1.95	ppb	6.77	2.00	97.5	90 - 110	
78 Se	72	1	-0.35	ppb	72.11	0.03	-1037.2	90 - 110	
95 Mo	72	1	0.32	ppb	8.51	0.39	83.5	90 - 110	
107 Ag	115	1	0.02	ppb	74.71	0.01	158.4	90 - 110	
111 Cd	115	1	0.00	ppb	1791.80	0.00	-9.1	90 - 110	
118 Sn	115	1	-0.05	ppb	39.81	-0.01	595.2	90 - 110	
121 Sb	115	1	0.02	ppb	66.31	0.01	134.9	90 - 110	
137 Ba	115	1	0.93	ppb	3.36	0.96	97.4	90 - 110	
205 Tl	165	1	0.01	ppb	20.02	0.01	119.1	90 - 110	
208 Pb	165	1	0.00	ppb	77.04	0.00	129.3	90 - 110	
232 Th	165	1	0.14	ppb	14.50	0.13	104.5	90 - 110	
238 U	165	1	0.76	ppb	4.28	0.76	99.6	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	167801	0.23	143876	116.6	30 - 120	
45 Sc	1	460936	2.04	425742	108.3	30 - 120	
72 Ge	1	264934	0.45	252182	105.1	30 - 120	
115 In	1	890678	1.85	871760	102.2	30 - 120	
165 Ho	1	1989898	1.72	1876593	106.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Denver

SERIAL DILUTION

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/06/09 10:05:45

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFP1GP50** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG070209D # 192
Acquired: 07/03/2009 04:11:00
Calibrated: 07/03/2009 02:42:00

Channel 272
Method 6020_
ICPMS_024

Matrix: AQUEOUS
Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9		0	0			*	
7440-62-2	Vanadium	51	-66096	-1035.0	-1375.0			*	
7440-47-3	Chromium	52	2259530	31760	31760	0.00		*	
7439-96-5	Manganese	55	6825	98.050	99.290	1.25		*	
7440-48-4	Cobalt	59	133	1.0750	0.74920	43.5		*	
7440-02-0	Nickel	60	617	24.205	7.1970	236		*	
7440-50-8	Copper	63	283	-5.9550	-0.47280			*	
7440-66-6	Zinc	66	133	6.9950	3.9940	75.1		*	
7440-38-2	Arsenic	75	781	97.500	99.980	2.48	0.21	NC	☑
7782-49-2	Selenium	78	63	-17.715	1.7080	1140	0.70	NC	☑
7439-98-7	Molybdenum	95	610	16.170	19.370	16.5		*	
7440-22-4	Silver	107	120	1.1625	0.73380	58.4		*	
7440-43-9	Cadmium	111	4	-0.01823	0.19940	109		*	
7440-31-5	Tin	118	203	-2.4905	-0.41840			*	
7440-36-0	Antimony	121	56	0.83400	0.61820	34.9		*	
7440-39-3	Barium	137	991	46.620	47.860	2.59		*	
7440-28-0	Thallium	205	176	0.64150	0.53850	19.1		*	
7439-92-1	Lead	208	147	0.13805	0.10680	29.3		*	
7440-61-1	Uranium	238	14001	37.940	38.100	0.420		*	
7440-29-1	Thorium	232	2347	6.7850	6.4900	4.55		*	
7439-93-2	Lithium	6			0			*	
7440-20-2	Scandium	45			0			*	
7440-74-6	Indium	115			0			*	
7440-56-4	Germanium	72			0			*	
7440-60-0	Holmium	165			0			*	

*** Analyte not requested for this batch, no MDL**
NC : Serial dilution concentration < 100 X MDL
E : Difference greater than Limit (10%)

Reviewed by: LRD Date: 7/7/09

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\193PDS.D\193PDS.D#
Date Acquired: Jul 3 2009 04:14 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1GZ
Misc Info: POST DIGESTION SPIKE
Vial Number: 3407
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: PDS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	180.40	0.00	ppb	3.99	200	90.2	75 - 125	
51 V	72	1	42.04	-137.50	ppb	51.33	200	67.3	75 - 125	
52 Cr	72	1	3292.00	3176.00	ppb	1.82	200	97.5	75 - 125	
55 Mn	72	1	201.30	9.93	ppb	2.40	200	95.9	75 - 125	
59 Co	72	1	188.40	0.07	ppb	2.72	200	94.2	75 - 125	
60 Ni	72	1	177.20	0.72	ppb	1.72	200	88.3	75 - 125	
63 Cu	72	1	172.90	-0.05	ppb	1.95	200	86.5	75 - 125	
66 Zn	72	1	184.30	0.40	ppb	2.50	200	92.0	75 - 125	
75 As	72	1	202.70	10.00	ppb	2.66	200	96.5	75 - 125	
78 Se	72	1	203.00	0.17	ppb	4.39	200	101.4	75 - 125	
95 Mo	72	1	203.20	1.94	ppb	2.78	200	100.6	75 - 125	
107 Ag	115	1	42.29	0.07	ppb	0.90	50	84.5	75 - 125	
111 Cd	115	1	179.40	0.02	ppb	2.26	200	89.7	75 - 125	
118 Sn	115	1	175.30	-0.04	ppb	2.50	200	87.7	75 - 125	
121 Sb	115	1	193.20	0.06	ppb	1.78	200	96.6	75 - 125	
137 Ba	115	1	194.00	4.79	ppb	1.73	200	94.7	75 - 125	
205 Tl	165	1	167.70	0.05	ppb	1.76	200	83.8	75 - 125	
208 Pb	165	1	166.90	0.01	ppb	2.17	200	83.4	75 - 125	
232 Th	165	1	0.08	0.65	ppb	20.31	200	0.0	75 - 125	
238 U	165	1	182.00	3.81	ppb	1.71	200	89.3	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	169683	1.88	143876	117.9	30 - 120	
45 Sc	1	464544	1.65	425742	109.1	30 - 120	
72 Ge	1	252017	1.40	252182	99.9	30 - 120	
115 In	1	850970	0.69	871760	97.6	30 - 120	
165 Ho	1	1952437	1.37	1876593	104.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 07/06/09 10:05:49

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LFP1GZ** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070209D # 193 | Method 6020_
Acquired: 07/03/2009 04:14:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/03/2009 02:42:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	39297	180.40	0	90.2	200		☐
7440-62-2	Vanadium	51	127497	42.040	-137.50	21.0	200		☐
7440-47-3	Chromium	52	11133400	3292.0	3176.0	58.0	200	*	☐
7439-96-5	Manganese	55	655725	201.30	9.9290	95.7	200		☐
7440-48-4	Cobalt	59	936368	188.40	0.07492	94.2	200		☐
7440-02-0	Nickel	60	212293	177.20	0.71970	88.2	200		☐
7440-50-8	Copper	63	513610	172.90	-0.04728	86.4	200		☑
7440-66-6	Zinc	66	94283	184.30	0.39940	92.0	200		☑
7440-38-2	Arsenic	75	75452	202.70	9.9980	96.4	200		☑
7782-49-2	Selenium	78	11395	203.00	0.17080	101	200		☑
7439-98-7	Molybdenum	95	293383	203.20	1.9370	101	200		☐
7440-22-4	Silver	107	200949	42.290	0.07338	84.4	50.0		☐
7440-43-9	Cadmium	111	144931	179.40	0.01994	89.7	200		☑
7440-31-5	Tin	118	371647	175.30	-0.04184	87.7	200		☐
7440-36-0	Antimony	121	429628	193.20	0.06182	96.6	200		☑
7440-39-3	Barium	137	194951	194.00	4.7860	94.6	200		☑
7440-28-0	Thallium	205	1945320	167.70	0.05385	83.8	200		☑
7439-92-1	Lead	208	2617950	166.90	0.01068	83.4	200		☑
7440-61-1	Uranium	238	3287590	182.00	3.8100	89.1	200		☐
7440-29-1	Thorium	232	1337	0.07504	0.64900				
7439-93-2	Lithium	6			0				
7440-20-2	Scandium	45			0				
7440-74-6	Indium	115			0				
7440-56-4	Germanium	72			0				
7440-60-0	Holmium	165			0				

Reviewed by: LRD Date: 7/7/09

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\194_MS.D\194_MS.D#
Date Acquired: Jul 3 2009 04:17 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1GS 10X
Misc Info: MATRIX SPIKE
Vial Number: 3408
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: MS
Prep Dil. Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	4.15	0.00	ppb	11.13	40	10.4	50 - 150	
51 V	72	1	-150.60	-137.50	ppb	3.80	40	154.5	50 - 150	
52 Cr	72	1	3007.00	3176.00	ppb	1.46	40	93.5	50 - 150	
55 Mn	72	1	13.37	9.93	ppb	1.28	40	26.8	50 - 150	
59 Co	72	1	3.92	0.07	ppb	3.59	40	9.8	50 - 150	
60 Ni	72	1	4.25	0.72	ppb	2.02	40	10.4	50 - 150	
63 Cu	72	1	3.68	-0.05	ppb	2.53	40	9.2	50 - 150	
66 Zn	72	1	4.19	0.40	ppb	3.17	40	10.4	50 - 150	
75 As	72	1	13.52	10.00	ppb	4.65	40	27.0	50 - 150	
78 Se	72	1	4.41	0.17	ppb	38.55	40	11.0	50 - 150	
95 Mo	72	1	6.15	1.94	ppb	1.37	40	14.7	50 - 150	
107 Ag	115	1	3.62	0.07	ppb	5.97	40	9.0	50 - 150	
111 Cd	115	1	3.81	0.02	ppb	3.46	40	9.5	50 - 150	
118 Sn	115	1	0.24	-0.04	ppb	17.75	40	0.6	50 - 150	
121 Sb	115	1	4.14	0.06	ppb	3.42	40	10.3	50 - 150	
137 Ba	115	1	8.39	4.79	ppb	1.28	40	18.7	50 - 150	
205 Tl	165	1	3.57	0.05	ppb	1.73	40	8.9	50 - 150	
208 Pb	165	1	3.54	0.01	ppb	1.85	40	8.8	50 - 150	
232 Th	165	1	3.76	0.65	ppb	0.59	40	9.2	50 - 150	
238 U	165	1	7.42	3.81	ppb	1.34	40	16.9	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	171407	1.25	143876	119.1	30 - 120	
45 Sc	1	475702	1.39	425742	111.7	30 - 120	
72 Ge	1	258577	1.09	252182	102.5	30 - 120	
115 In	1	880252	1.42	871760	101.0	30 - 120	
165 Ho	1	1991955	0.65	1876593	106.1	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\195 CCV.D\195 CCV.D#
Date Acquired: Jul 3 2009 04:21 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	44.98	ppb	5.19	50	90.0	90 - 110	Fail
51 V	72	1	49.15	ppb	0.75	50	98.3	90 - 110	
52 Cr	72	1	50.20	ppb	0.73	50	100.4	90 - 110	
55 Mn	72	1	49.24	ppb	2.05	50	98.5	90 - 110	
59 Co	72	1	48.82	ppb	0.76	50	97.6	90 - 110	
60 Ni	72	1	48.36	ppb	1.78	50	96.7	90 - 110	
63 Cu	72	1	48.70	ppb	1.03	50	97.4	90 - 110	
66 Zn	72	1	52.07	ppb	0.39	50	104.1	90 - 110	
75 As	72	1	47.62	ppb	0.13	50	95.2	90 - 110	
78 Se	72	1	50.11	ppb	5.24	50	100.2	90 - 110	
95 Mo	72	1	49.14	ppb	1.24	50	98.3	90 - 110	
107 Ag	115	1	49.06	ppb	0.54	50	98.1	90 - 110	
111 Cd	115	1	48.54	ppb	1.11	50	97.1	90 - 110	
118 Sn	115	1	49.33	ppb	1.40	50	98.7	90 - 110	
121 Sb	115	1	49.41	ppb	0.66	50	98.8	90 - 110	
137 Ba	115	1	47.85	ppb	1.60	50	95.7	90 - 110	
205 Tl	165	1	48.24	ppb	2.11	50	96.5	90 - 110	
208 Pb	165	1	48.33	ppb	2.10	50	96.7	90 - 110	
232 Th	165	1	48.78	ppb	3.19	50	97.6	90 - 110	
238 U	165	1	48.89	ppb	1.52	50	97.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	177912	1.21	143876	123.7	30 - 120	ISFail
45 Sc	1	474153	1.56	425742	111.4	30 - 120	
72 Ge	1	275529	1.39	252182	109.3	30 - 120	
115 In	1	938053	0.97	871760	107.6	30 - 120	
165 Ho	1	2043019	2.90	1876593	108.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

1 :Element Failures — 0 :Max. Number of Failures Allowed
1 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\196 CCB.D\196 CCB.D#
Date Acquired:	Jul 3 2009 04:24 am
Operator:	TEL
Sample Name:	CCB
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 02:46 am
Sample Type:	CCB
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.043	ppb	248.67	1.00	
52 Cr	72	1	0.103	ppb	38.67	1.00	
55 Mn	72	1	-0.001	ppb	240.66	1.00	
59 Co	72	1	0.004	ppb	99.79	1.00	
60 Ni	72	1	0.037	ppb	12.72	1.00	
63 Cu	72	1	-0.134	ppb	14.19	1.00	
66 Zn	72	1	0.192	ppb	17.41	1.00	
75 As	72	1	0.017	ppb	107.28	1.00	
78 Se	72	1	-0.210	ppb	120.48	1.00	
95 Mo	72	1	-0.021	ppb	132.52	1.00	
107 Ag	115	1	0.007	ppb	27.21	1.00	
111 Cd	115	1	0.003	ppb	784.72	1.00	
118 Sn	115	1	0.183	ppb	25.30	1.00	
121 Sb	115	1	0.076	ppb	30.93	1.00	
137 Ba	115	1	0.009	ppb	76.91	1.00	
205 Tl	165	1	0.020	ppb	12.41	1.00	
208 Pb	165	1	0.007	ppb	24.21	1.00	
232 Th	165	1	0.829	ppb	10.35	1.00	
238 U	165	1	0.016	ppb	16.50	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	180625	0.76	143876	125.5	30 - 120	ISFail
45 Sc	1	484578	0.73	425742	113.8	30 - 120	
72 Ge	1	283318	0.93	252182	112.3	30 - 120	
115 In	1	974107	0.37	871760	111.7	30 - 120	
165 Ho	1	2081168	0.46	1876593	110.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\197WASH.D\197WASH.D#
Date Acquired: Jul 3 2009 04:27 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.106 ppb	33.73	1.30	
51 V	72	1	4.906 ppb	0.78	6.50	
52 Cr	72	1	2.057 ppb	4.53	2.60	
55 Mn	72	1	0.991 ppb	2.86	1.30	
59 Co	72	1	0.919 ppb	1.71	1.30	
60 Ni	72	1	2.067 ppb	2.63	2.60	
63 Cu	72	1	1.859 ppb	3.22	2.60	
66 Zn	72	1	10.310 ppb	2.07	13.00	
75 As	72	1	4.854 ppb	1.42	6.50	
78 Se	72	1	4.954 ppb	16.44	6.50	
95 Mo	72	1	1.940 ppb	4.94	2.60	
107 Ag	115	1	4.933 ppb	2.45	6.50	
111 Cd	115	1	0.944 ppb	7.56	1.30	
118 Sn	115	1	9.947 ppb	1.99	13.00	
121 Sb	115	1	1.922 ppb	5.62	2.60	
137 Ba	115	1	1.089 ppb	3.73	1.30	
205 Tl	165	1	1.027 ppb	2.29	1.30	
208 Pb	165	1	1.000 ppb	1.05	1.30	
232 Th	165	1	2.136 ppb	3.43	2.60	
238 U	165	1	1.018 ppb	2.62	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	180890	0.76	143876	125.7	30 - 120	IS Fail
45 Sc	1	487616	0.64	425742	114.5	30 - 120	
72 Ge	1	283111	0.26	252182	112.3	30 - 120	
115 In	1	974666	0.45	871760	111.8	30 - 120	
165 Ho	1	2093398	0.37	1876593	111.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Duplicate Spike (MSD) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\198 MSD.D\198 MSD.D#
Date Acquired: Jul 3 2009 04:31 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFP1GD 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3409
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: MSD
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Fail

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070209D.B\194 MS.D\194 MS.D#

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	3.80	ppb	15.62	4.15	8.91	20	
51 V	72	1	-148.30	ppb	1.20	-150.60	-1.54	20	
52 Cr	72	1	2958.00	ppb	0.31	3007.00	1.64	20	
55 Mn	72	1	13.30	ppb	3.07	13.37	0.52	20	
59 Co	72	1	3.91	ppb	4.27	3.92	0.23	20	
60 Ni	72	1	4.33	ppb	3.52	4.25	1.87	20	
63 Cu	72	1	3.49	ppb	3.00	3.68	5.30	20	
66 Zn	72	1	4.00	ppb	4.73	4.19	4.74	20	
75 As	72	1	13.13	ppb	1.51	13.52	2.93	20	
78 Se	72	1	4.16	ppb	11.50	4.41	5.70	20	
95 Mo	72	1	5.88	ppb	3.27	6.15	4.39	20	
107 Ag	115	1	3.63	ppb	3.87	3.62	0.28	20	
111 Cd	115	1	3.76	ppb	3.78	3.81	1.27	20	
118 Sn	115	1	0.01	ppb	190.29	0.24	183.38	20	
121 Sb	115	1	4.07	ppb	0.94	4.14	1.68	20	
137 Ba	115	1	8.37	ppb	3.03	8.39	0.21	20	
205 Tl	165	1	3.64	ppb	3.03	3.57	2.00	20	
208 Pb	165	1	3.58	ppb	2.37	3.54	0.98	20	
232 Th	165	1	3.93	ppb	2.48	3.76	4.50	20	
238 U	165	1	7.39	ppb	2.24	7.42	0.42	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	177692	1.24	143876	123.5	30 - 120	IS Fail
45 Sc	1	494104	1.08	425742	116.1	30 - 120	
72 Ge	1	266698	0.67	252182	105.8	30 - 120	
115 In	1	899601	0.30	871760	103.2	30 - 120	
165 Ho	1	2030852	0.99	1876593	108.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref. File :C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\199SMPL.D\199SMPL.D#
Date Acquired:	Jul 3 2009 04:34 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFP1K 10X
Misc Info:	D9F260277
Vial Number:	3410
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 02:46 am
Sample Type:	SA
Dilution Factor:	10.00
Autodil Factor:	Undiluted
Final Dil Factor:	10.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.15	0.01	ppb	173.20	3600	
51 V	72	1	-1,279.00	-127.90	ppb	21.47	3600	
52 Cr	72	1	28,570.00	2857.00	ppb	1.80	3600	
55 Mn	72	1	2.68	0.27	ppb	10.88	3600	
59 Co	72	1	0.38	0.04	ppb	21.97	3600	
60 Ni	72	1	5.19	0.52	ppb	4.86	3600	
63 Cu	72	1	-0.56	-0.06	ppb	27.54	3600	
66 Zn	72	1	2.52	0.25	ppb	23.21	3600	
75 As	72	1	85.19	8.52	ppb	1.56	3600	
78 Se	72	1	1.88	0.19	ppb	378.33	3600	
95 Mo	72	1	30.23	3.02	ppb	4.33	3600	
107 Ag	115	1	0.22	0.02	ppb	130.98	3600	
111 Cd	115	1	0.10	0.01	ppb	44.08	3600	
118 Sn	115	1	-0.49	-0.05	ppb	17.03	3600	
121 Sb	115	1	0.28	0.03	ppb	24.38	3600	
137 Ba	115	1	45.94	4.59	ppb	3.06	3600	
205 Tl	165	1	0.14	0.01	ppb	2.56	3600	
208 Pb	165	1	0.11	0.01	ppb	16.94	3600	
232 Th	165	1	1.46	0.15	ppb	6.23	1000	
238 U	165	1	27.40	2.74	ppb	1.16	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	176055	2.93	143876	122.4	30 - 120	IS Fail
45 Sc	1	482240	1.51	425742	113.3	30 - 120	
72 Ge	1	260535	2.55	252182	103.3	30 - 120	
115 In	1	886255	1.51	871760	101.7	30 - 120	
165 Ho	1	1958518	1.38	1876593	104.4	30 - 120	

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures	0 :Max. Number of Failures Allowed
1 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\200SMPL.D\200SMPL.D#
Date Acquired: Jul 3 2009 04:38 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ02 10X
Misc Info: D9F270153
Vial Number: 3411
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.16	0.02	ppb	173.15	3600	
51 V	72	1	-340.90	-34.09	ppb	12.26	3600	
52 Cr	72	1	9,975.00	997.50	ppb	3.31	3600	
55 Mn	72	1	164.30	16.43	ppb	5.23	3600	
59 Co	72	1	0.57	0.06	ppb	20.18	3600	
60 Ni	72	1	3.68	0.37	ppb	28.80	3600	
63 Cu	72	1	-0.36	-0.04	ppb	56.02	3600	
66 Zn	72	1	9.55	0.96	ppb	10.89	3600	
75 As	72	1	117.50	11.75	ppb	2.48	3600	
78 Se	72	1	3.63	0.36	ppb	119.57	3600	
95 Mo	72	1	23.77	2.38	ppb	5.96	3600	
107 Ag	115	1	0.03	0.00	ppb	89.70	3600	
111 Cd	115	1	0.03	0.00	ppb	948.06	3600	
118 Sn	115	1	-0.26	-0.03	ppb	100.63	3600	
121 Sb	115	1	0.25	0.03	ppb	20.85	3600	
137 Ba	115	1	51.90	5.19	ppb	5.21	3600	
205 Tl	165	1	0.25	0.03	ppb	1.58	3600	
208 Pb	165	1	0.16	0.02	ppb	13.91	3600	
232 Th	165	1	0.49	0.05	ppb	17.04	1000	
238 U	165	1	55.32	5.53	ppb	3.54	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	170427	2.37	143876	118.5	30 - 120	
45 Sc	1	473452	2.47	425742	111.2	30 - 120	
72 Ge	1	259703	1.94	252182	103.0	30 - 120	
115 In	1	887696	2.86	871760	101.8	30 - 120	
165 Ho	1	1986742	1.42	1876593	105.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\201SMPL.D\201SMPL.D#
Date Acquired: Jul 3 2009 04:41 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ1Q 10X
Misc Info: D9F270154
Vial Number: 3412
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.30	0.03	ppb	86.61	3600	
51 V	72	1	-30.03	-3.00	ppb	80.89	3600	
52 Cr	72	1	3,213.00	321.30	ppb	2.28	3600	
55 Mn	72	1	1.59	0.16	ppb	15.41	3600	
59 Co	72	1	0.35	0.03	ppb	51.67	3600	
60 Ni	72	1	2.14	0.21	ppb	10.78	3600	
63 Cu	72	1	-0.78	-0.08	ppb	18.86	3600	
66 Zn	72	1	1.74	0.17	ppb	20.48	3600	
75 As	72	1	142.50	14.25	ppb	1.56	3600	
78 Se	72	1	2.98	0.30	ppb	325.98	3600	
95 Mo	72	1	22.97	2.30	ppb	2.17	3600	
107 Ag	115	1	0.03	0.00	ppb	61.18	3600	
111 Cd	115	1	0.04	0.00	ppb	209.74	3600	
118 Sn	115	1	-0.67	-0.07	ppb	46.76	3600	
121 Sb	115	1	0.19	0.02	ppb	64.33	3600	
137 Ba	115	1	29.98	3.00	ppb	0.25	3600	
205 Tl	165	1	0.14	0.01	ppb	14.73	3600	
208 Pb	165	1	0.05	0.01	ppb	11.18	3600	
232 Th	165	1	0.25	0.02	ppb	16.25	1000	
238 U	165	1	13.60	1.36	ppb	3.98	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	172035	0.99	143876	119.6	30 - 120	
45 Sc	1	463432	1.58	425742	108.9	30 - 120	
72 Ge	1	261966	1.33	252182	103.9	30 - 120	
115 In	1	880196	1.28	871760	101.0	30 - 120	
165 Ho	1	1956397	1.83	1876593	104.3	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\202SMPL.D\202SMPL.D#
Date Acquired: Jul 3 2009 04:44 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ10 10X
Misc Info: D9F270154
Vial Number: 3501
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	16.81	1.68	ppb	21.43	3600	
52 Cr	72	1	801.20	80.12	ppb	1.57	3600	
55 Mn	72	1	145.40	14.54	ppb	1.69	3600	
59 Co	72	1	0.31	0.03	ppb	20.43	3600	
60 Ni	72	1	4.08	0.41	ppb	17.26	3600	
63 Cu	72	1	-1.11	-0.11	ppb	0.93	3600	
66 Zn	72	1	1.57	0.16	ppb	2.95	3600	
75 As	72	1	123.60	12.36	ppb	3.78	3600	
78 Se	72	1	4.31	0.43	ppb	169.81	3600	
95 Mo	72	1	32.04	3.20	ppb	8.15	3600	
107 Ag	115	1	0.01	0.00	ppb	150.91	3600	
111 Cd	115	1	0.00	0.00	ppb	5156.40	3600	
118 Sn	115	1	-0.67	-0.07	ppb	29.75	3600	
121 Sb	115	1	0.19	0.02	ppb	16.54	3600	
137 Ba	115	1	15.93	1.59	ppb	3.41	3600	
205 Tl	165	1	0.03	0.00	ppb	68.33	3600	
208 Pb	165	1	0.08	0.01	ppb	24.63	3600	
232 Th	165	1	0.13	0.01	ppb	18.09	1000	
238 U	165	1	24.32	2.43	ppb	0.31	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	167857	1.53	143876	116.7	30 - 120	
45 Sc	1	460300	2.39	425742	108.1	30 - 120	
72 Ge	1	259872	2.21	252182	103.0	30 - 120	
115 In	1	876825	2.44	871760	100.6	30 - 120	
165 Ho	1	1963242	1.28	1876593	104.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\203SMPL.D\203SMPL.D#
Date Acquired: Jul 3 2009 04:48 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LFQ12 10X
Misc Info: D9F270154
Vial Number: 3502
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 02:46 am
Sample Type: SA
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	14.33	1.43	ppb	94.49	3600	
52 Cr	72	1	787.10	78.71	ppb	2.23	3600	
55 Mn	72	1	116.30	11.63	ppb	1.02	3600	
59 Co	72	1	0.27	0.03	ppb	22.10	3600	
60 Ni	72	1	4.15	0.42	ppb	4.51	3600	
63 Cu	72	1	-1.11	-0.11	ppb	10.51	3600	
66 Zn	72	1	0.99	0.10	ppb	27.19	3600	
75 As	72	1	122.60	12.26	ppb	2.70	3600	
78 Se	72	1	2.92	0.29	ppb	210.54	3600	
95 Mo	72	1	32.48	3.25	ppb	6.53	3600	
107 Ag	115	1	0.01	0.00	ppb	351.25	3600	
111 Cd	115	1	0.06	0.01	ppb	81.68	3600	
118 Sn	115	1	-0.65	-0.07	ppb	39.36	3600	
121 Sb	115	1	0.12	0.01	ppb	18.10	3600	
137 Ba	115	1	14.60	1.46	ppb	1.43	3600	
205 Tl	165	1	0.04	0.00	ppb	45.25	3600	
208 Pb	165	1	0.03	0.00	ppb	18.84	3600	
232 Th	165	1	0.04	0.00	ppb	34.85	1000	
238 U	165	1	24.30	2.43	ppb	1.61	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	171303	0.94	143876	119.1	30 - 120	
45 Sc	1	459176	0.39	425742	107.9	30 - 120	
72 Ge	1	261636	0.50	252182	103.7	30 - 120	
115 In	1	878418	0.49	871760	100.8	30 - 120	
165 Ho	1	1964559	0.56	1876593	104.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\204 CCV.D\204 CCV.D#
Date Acquired: Jul 3 2009 04:51 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	47.62	ppb	4.79	50	95.2	90 - 110	
51 V	72	1	50.95	ppb	0.94	50	101.9	90 - 110	
52 Cr	72	1	51.61	ppb	1.53	50	103.2	90 - 110	
55 Mn	72	1	50.97	ppb	0.71	50	101.9	90 - 110	
59 Co	72	1	50.67	ppb	0.04	50	101.3	90 - 110	
60 Ni	72	1	50.74	ppb	0.47	50	101.5	90 - 110	
63 Cu	72	1	49.76	ppb	0.99	50	99.5	90 - 110	
66 Zn	72	1	53.79	ppb	0.80	50	107.6	90 - 110	
75 As	72	1	49.63	ppb	1.80	50	99.3	90 - 110	
78 Se	72	1	53.22	ppb	3.50	50	106.4	90 - 110	
95 Mo	72	1	51.33	ppb	1.17	50	102.7	90 - 110	
107 Ag	115	1	50.59	ppb	1.34	50	101.2	90 - 110	
111 Cd	115	1	50.06	ppb	1.51	50	100.1	90 - 110	
118 Sn	115	1	51.05	ppb	2.00	50	102.1	90 - 110	
121 Sb	115	1	50.84	ppb	0.95	50	101.7	90 - 110	
137 Ba	115	1	49.90	ppb	1.40	50	99.8	90 - 110	
205 Tl	165	1	49.27	ppb	1.28	50	98.5	90 - 110	
208 Pb	165	1	49.46	ppb	1.90	50	98.9	90 - 110	
232 Th	165	1	49.47	ppb	1.34	50	98.9	90 - 110	
238 U	165	1	49.84	ppb	2.49	50	99.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	172056	0.85	143876	119.6	30 - 120	
45 Sc	1	462860	0.42	425742	108.7	30 - 120	
72 Ge	1	268562	0.41	252182	106.5	30 - 120	
115 In	1	918348	0.47	871760	105.3	30 - 120	
165 Ho	1	2038964	0.85	1876593	108.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\205 CCB.D\205 CCB.D#
Date Acquired: Jul 3 2009 04:55 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.015	ppb	173.21	1.00	
51 V	72	1	-0.013	ppb	105.49	1.00	
52 Cr	72	1	0.044	ppb	66.17	1.00	
55 Mn	72	1	0.001	ppb	1127.70	1.00	
59 Co	72	1	0.003	ppb	190.83	1.00	
60 Ni	72	1	0.012	ppb	71.51	1.00	
63 Cu	72	1	-0.140	ppb	22.03	1.00	
66 Zn	72	1	0.248	ppb	2.53	1.00	
75 As	72	1	-0.005	ppb	132.20	1.00	
78 Se	72	1	-0.720	ppb	35.52	1.00	
95 Mo	72	1	-0.013	ppb	142.24	1.00	
107 Ag	115	1	0.008	ppb	27.05	1.00	
111 Cd	115	1	-0.003	ppb	543.13	1.00	
118 Sn	115	1	0.102	ppb	22.69	1.00	
121 Sb	115	1	0.047	ppb	18.87	1.00	
137 Ba	115	1	0.000	ppb	4026.80	1.00	
205 Tl	165	1	0.016	ppb	2.35	1.00	
208 Pb	165	1	0.008	ppb	19.84	1.00	
232 Th	165	1	0.841	ppb	14.70	1.00	
238 U	165	1	0.010	ppb	25.57	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	175614	0.76	143876	122.1	30 - 120	ISFail
45 Sc	1	476307	0.24	425742	111.9	30 - 120	
72 Ge	1	274779	0.61	252182	109.0	30 - 120	
115 In	1	948257	0.77	871760	108.8	30 - 120	
165 Ho	1	2044042	0.66	1876593	108.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\206WASH.D\206WASH.D#
Date Acquired: Jul 3 2009 04:58 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 02:46 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.035 ppb	9.59	1.30	
51 V	72	1	5.015 ppb	1.22	6.50	
52 Cr	72	1	2.138 ppb	3.59	2.60	
55 Mn	72	1	1.002 ppb	7.78	1.30	
59 Co	72	1	1.075 ppb	3.08	1.30	
60 Ni	72	1	2.033 ppb	3.06	2.60	
63 Cu	72	1	1.947 ppb	3.38	2.60	
66 Zn	72	1	10.600 ppb	0.97	13.00	
75 As	72	1	4.988 ppb	2.42	6.50	
78 Se	72	1	4.972 ppb	12.48	6.50	
95 Mo	72	1	2.035 ppb	7.36	2.60	
107 Ag	115	1	5.253 ppb	2.91	6.50	
111 Cd	115	1	0.948 ppb	2.22	1.30	
118 Sn	115	1	10.270 ppb	1.38	13.00	
121 Sb	115	1	1.932 ppb	1.88	2.60	
137 Ba	115	1	0.993 ppb	4.52	1.30	
205 Tl	165	1	1.065 ppb	0.69	1.30	
208 Pb	165	1	1.045 ppb	2.08	1.30	
232 Th	165	1	2.176 ppb	0.57	2.60	
238 U	165	1	1.035 ppb	0.63	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	175383	1.22	143876	121.9	30 - 120	IS Fail
45 Sc	1	477637	0.65	425742	112.2	30 - 120	
72 Ge	1	277547	0.43	252182	110.1	30 - 120	
115 In	1	950658	0.57	871760	109.1	30 - 120	
165 Ho	1	2062718	0.80	1876593	109.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\166CALB.D\166CALB.D#

0 :Element Failures
1 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Reslope Before Continuing Analytical Run

Corrective action was taken as stated in method 6020 section 7.8

…"During the course of an analytical run, the instrument may be "resloped" or recalibrated to correct for instrument drift. A recalibration must then be followed immediately by a new analysis of a CCV and CCB before any further samples are analyzed."

Analyst: _____

Date: 7/6/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#
Date Acquired:	Jul 3 2009 05:25 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	Cal Blank
Misc Info:	
Vial Number:	2101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 03 2009 05:22 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	27	97.88
52	Cr	72	1	760	14.80
55	Mn	72	1	63	19.21
59	Co	72	1	3	173.19
60	Ni	72	1	27	22.60
63	Cu	72	1	140	24.46
66	Zn	72	1	61	4.33
75	As	72	1	17	29.39
78	Se	72	1	73	30.27
95	Mo	72	1	110	41.96
107	Ag	115	1	10	173.20
111	Cd	115	1	11	103.54
118	Sn	115	1	313	13.37
121	Sb	115	1	16	66.10
137	Ba	115	1	4	43.03
205	Tl	165	1	20	27.29
208	Pb	165	1	99	15.53
232	Th	165	1	163	37.50
238	U	165	1	28	17.10

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	170358	0.63
45	Sc	1	473040	0.38
72	Ge	1	273279	1.44
115	In	1	937855	0.66
165	Ho	1	2015364	2.02

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\215ICAL.D\215ICAL.D#
Date Acquired: Jul 3 2009 05:28 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: 100 ppb
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 03 2009 05:26 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	21126	2.38
51	V	72	1	328011	0.78
52	Cr	72	1	369104	1.34
55	Mn	72	1	350375	1.50
59	Co	72	1	534048	0.74
60	Ni	72	1	126131	0.64
63	Cu	72	1	317329	1.23
66	Zn	72	1	55499	1.24
75	As	72	1	39306	1.20
78	Se	72	1	6095	4.28
95	Mo	72	1	154896	2.28
107	Ag	115	1	517369	0.23
111	Cd	115	1	86570	0.12
118	Sn	115	1	232927	0.45
121	Sb	115	1	241780	0.78
137	Ba	115	1	108520	0.76
205	Tl	165	1	1178851	1.11
208	Pb	165	1	1607350	1.30
232	Th	165	1	1627260	1.85
238	U	165	1	1838564	0.49

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	171063	0.11	170358	100.4	30 - 120	
45	Sc	1	462328	0.46	473040	97.7	30 - 120	
72	Ge	1	268656	0.22	273279	98.3	30 - 120	
115	In	1	914728	0.46	937855	97.5	30 - 120	
165	Ho	1	1999942	0.49	2015364	99.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\216 CCV.D\216 CCV.D#
Date Acquired:	Jul 3 2009 05:32 am
Operator:	TEL
Sample Name:	CCV
Misc Info:	
Vial Number:	1107
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 05:29 am
Sample Type:	CCV
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.44	ppb	1.98	50	100.9	90 - 110	
51 V	72	1	50.20	ppb	2.24	50	100.4	90 - 110	
52 Cr	72	1	50.57	ppb	1.61	50	101.1	90 - 110	
55 Mn	72	1	50.25	ppb	1.47	50	100.5	90 - 110	
59 Co	72	1	50.26	ppb	0.72	50	100.5	90 - 110	
60 Ni	72	1	51.20	ppb	1.25	50	102.4	90 - 110	
63 Cu	72	1	49.78	ppb	1.11	50	99.6	90 - 110	
66 Zn	72	1	52.90	ppb	0.51	50	105.8	90 - 110	
75 As	72	1	49.98	ppb	1.40	50	100.0	90 - 110	
78 Se	72	1	50.26	ppb	5.38	50	100.5	90 - 110	
95 Mo	72	1	51.60	ppb	2.10	50	103.2	90 - 110	
107 Ag	115	1	50.07	ppb	1.25	50	100.1	90 - 110	
111 Cd	115	1	50.52	ppb	1.97	50	101.0	90 - 110	
118 Sn	115	1	49.52	ppb	0.58	50	99.0	90 - 110	
121 Sb	115	1	49.94	ppb	1.34	50	99.9	90 - 110	
137 Ba	115	1	50.09	ppb	0.55	50	100.2	90 - 110	
205 Tl	165	1	49.97	ppb	0.37	50	99.9	90 - 110	
208 Pb	165	1	49.67	ppb	1.08	50	99.3	90 - 110	
232 Th	165	1	51.31	ppb	1.02	50	102.6	90 - 110	
238 U	165	1	50.61	ppb	1.19	50	101.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	168836	0.51	170358	99.1	30 - 120	
45 Sc	1	460117	0.48	473040	97.3	30 - 120	
72 Ge	1	267551	0.91	273279	97.9	30 - 120	
115 In	1	914828	0.23	937855	97.5	30 - 120	
165 Ho	1	2024982	0.50	2015364	100.5	30 - 120	

Tune File#	1	c:\icpchem\1\7500\he.u
Tune File#	2	C:\ICPCHEM\1\7500\
Tune File#	3	C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Continuing Calibration Blank (CCB) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070209D.B\217 CCB.D\217 CCB.D#
Date Acquired:	Jul 3 2009 05:35 am
Operator:	TEL
Sample Name:	CCB
Misc Info:	
Vial Number:	1307
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 03 2009 05:29 am
Sample Type:	CCB
Total Dil Factor:	1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.016	ppb	173.19	1.00	
51 V	72	1	-0.041	ppb	75.89	1.00	
52 Cr	72	1	0.026	ppb	76.50	1.00	
55 Mn	72	1	0.015	ppb	101.75	1.00	
59 Co	72	1	0.005	ppb	64.92	1.00	
60 Ni	72	1	0.000	ppb	213130.00	1.00	
63 Cu	72	1	0.015	ppb	119.42	1.00	
66 Zn	72	1	0.222	ppb	13.19	1.00	
75 As	72	1	-0.002	ppb	286.69	1.00	
78 Se	72	1	0.335	ppb	249.21	1.00	
95 Mo	72	1	0.030	ppb	10.00	1.00	
107 Ag	115	1	0.007	ppb	89.38	1.00	
111 Cd	115	1	-0.003	ppb	175.11	1.00	
118 Sn	115	1	0.190	ppb	25.52	1.00	
121 Sb	115	1	0.075	ppb	8.50	1.00	
137 Ba	115	1	0.008	ppb	99.30	1.00	
205 Tl	165	1	0.026	ppb	10.22	1.00	
208 Pb	165	1	0.010	ppb	10.02	1.00	
232 Th	165	1	1.053	ppb	13.26	1.00	Fail
238 U	165	1	0.013	ppb	17.10	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	168547	1.32	170358	98.9	30 - 120	
45 Sc	1	467753	0.16	473040	98.9	30 - 120	
72 Ge	1	273100	0.89	273279	99.9	30 - 120	
115 In	1	938928	0.92	937855	100.1	30 - 120	
165 Ho	1	2019806	1.22	2015364	100.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

1 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG070209D.B\218WASH.D\218WASH.D#
Date Acquired: Jul 3 2009 05:38 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 03 2009 05:29 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.913 ppb	19.40	1.30	
51 V	72	1	5.062 ppb	4.42	6.50	
52 Cr	72	1	2.143 ppb	3.42	2.60	
55 Mn	72	1	1.049 ppb	5.72	1.30	
59 Co	72	1	0.998 ppb	4.65	1.30	
60 Ni	72	1	2.101 ppb	5.70	2.60	
63 Cu	72	1	2.009 ppb	2.99	2.60	
66 Zn	72	1	10.450 ppb	2.21	13.00	
75 As	72	1	4.952 ppb	3.13	6.50	
78 Se	72	1	4.761 ppb	25.92	6.50	
95 Mo	72	1	2.018 ppb	7.18	2.60	
107 Ag	115	1	5.183 ppb	2.25	6.50	
111 Cd	115	1	1.058 ppb	8.62	1.30	
118 Sn	115	1	10.250 ppb	2.04	13.00	
121 Sb	115	1	2.001 ppb	7.44	2.60	
137 Ba	115	1	1.063 ppb	3.17	1.30	
205 Tl	165	1	1.069 ppb	1.63	1.30	
208 Pb	165	1	1.066 ppb	1.56	1.30	
232 Th	165	1	2.330 ppb	4.05	2.60	
238 U	165	1	1.071 ppb	3.26	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	168734	2.17	170358	99.0	30 - 120	
45 Sc	1	467881	1.14	473040	98.9	30 - 120	
72 Ge	1	272164	0.56	273279	99.6	30 - 120	
115 In	1	938479	0.85	937855	100.1	30 - 120	
165 Ho	1	2036153	1.57	2015364	101.0	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG070209D.B\214CALB.D\214CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed