SDG: 8304609

Close Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

Tronox LLC, Henderson

SDG: 8304609
Lot #s: D9G010276, D9G020221, and D9G020227

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TestAmerica Laboratories, Inc.

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July 23, 2009

Case Narrative
SDG 8304609

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

Two samples were received under chain of custody at a temperature of 3.4°C on July 1, 2009, and were logged under lot D9G010276. Three samples were received under chain of custody at a temperature of 2.7°C on July 2, 2009, and were logged under lot D9G020221. Three samples were received under chain of custody at temperatures of 2.7°C and 1.3°C on July 2, 2009, and were logged under lot D9G020227. Sample times were not originally listed on the Chain of Custody and were therefore obtained from the sample bottle labels. The client was informed via email on July 2, 2009 and the client sent amended Chain of Custody forms with the sample times on July 6, 2009. These lots are reported here under SDG 8304609.

GC Semivolatiles / Organophosphorus Pesticides – SW846 Method 8141A

The method required MS/MSD could not be performed for QC batch 9182412 due to insufficient sample volume submitted by the client. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data.

The Continuing Calibration Verification (CCV) standard(s) associated with the samples in QC batch 9182412 exhibited %Difference (%D) values out of range for several compounds. The overall mean %D was within control limits; therefore, method criteria were met and corrective action was deemed unnecessary. In addition, none of the compounds were detected in the associated samples.

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, Total Selenium, Dissolved Arsenic or Dissolved 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 9187169 using sample D9G020221-001 (M-110AB) and all results were in control.

The method required MS/MSD was performed for Dissolved Metals QC batch 9187175 using sample D9G020227-003 (M-12ABDISS) and exhibited MS and MSD recoveries for

Selenium above the upper control limit. Also, due to the high concentration of Arsenic in the parent sample, the MS and MSD percent recoveries were outside the control limits. 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

8304609 : D9G010276

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-111AB 06/29/09 09:55 001				
Arsenic	120	50	ug/L	SW846 6020

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

8304609 : D9G020221

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-110AB 07/01/09 09:00 001				
Arsenic	150	50	ug/L	SW846 6020
M-110ABDISS 07/01/09 09:00 002				
Arsenic - DISSOLVED	150	50	ug/L	SW846 6020
I-ARB 07/01/09 11:50 003				
Arsenic	100	50	ug/L	SW846 6020
Selenium	8.0 B	50	ug/L	SW846 6020

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EXECUTIVE SUMMARY - Detection Highlights

8304609 : D9G020227

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-25B 06/30/09 07:45 001				
Arsenic	100	50	ug/L	SW846 6020
M-12AB 06/30/09 10:10 002				
Arsenic	760	50	ug/L	SW846 6020
Selenium	7.7 B	50	ug/L	SW846 6020
M-12ABDISS 06/30/09 10:10 003				
Arsenic - DISSOLVED	750	50	ug/L	SW846 6020

METHODS SUMMARY

8304609

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

8304609

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

8304609 : D9G010276

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LFX9W	001	M-111AB	06/29/09	09:55
LFX90	002	EB062909-GW	06/29/09	11:25

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.

(Continued on next page)

SAMPLE SUMMARY

8304609 : D9G020221

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LF1T1	001	M-110AB	07/01/09	09:00
LF1T5	002	M-110ABDISS	07/01/09	09:00
LF1T6	003	I-ARB	07/01/09	11:50

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.

(Continued on next page)

SAMPLE SUMMARY

8304609 : D9G020227

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LF1VJ	001	M-25B	06/30/09	07:45
LF1V5	002	M-12AB	06/30/09	10:10
LF1WA	003	M-12ABDISS	06/30/09	10:10

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.
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QC DATA ASSOCIATION SUMMARY

D9G010276

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 6020		9187169	9187121
	WATER	SW846 8141A		9182412	
002	WATER	SW846 8141A		9182412	

QC DATA ASSOCIATION SUMMARY

D9G020221

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 6020		9187169	9187121
002	WATER	SW846 6020		9187175	9187122
003	WATER	SW846 6020		9187169	9187121

QC DATA ASSOCIATION SUMMARY

D9G020227

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 6020		9187169	9187121
002	WATER	SW846 6020		9187169	9187121
003	WATER	SW846 6020		9187175	9187122

TestAmerica

Semivolatile GC

CLP-Like Forms

Lot ID: D9G010276

Client: Northgate/Tronox

Method: SW846 8141A

Associated Samples: 001 and 002

Batch: 9182412

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Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-111AB
Lot/SDG Number:	8304609	**Lab Sample ID:**	D9G010276-001
Matrix:	WATER	**Lab WorkOrder:**	LFX9W1AA
% Moisture:	N/A	**Date/Time Collected:**	06/29/09 09:55
Basis:	Wet	**Date/Time Received:**	07/01/09 09:00
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/01/09 15:25
QC Batch ID:	9182412	**Date/Time Analyzed:**	07/08/09 03:59
Sample Aliquot:	1057 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-111AB
Lot/SDG Number:	8304609	**Lab Sample ID:**	D9G010276-001
Matrix:	WATER	**Lab WorkOrder:**	LFX9W1AA
% Moisture:	N/A	**Date/Time Collected:**	06/29/09 09:55
Basis:	Wet	**Date/Time Received:**	07/01/09 09:00
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/01/09 15:25
QC Batch ID:	9182412	**Date/Time Analyzed:**	07/08/09 03:59
Sample Aliquot:	1057 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	60	49	171	

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Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	EB062909-GW
Lot/SDG Number:	8304609	**Lab Sample ID:**	D9G010276-002
Matrix:	WATER	**Lab WorkOrder:**	LFX901AA
% Moisture:	N/A	**Date/Time Collected:**	06/29/09 11:25
Basis:	Wet	**Date/Time Received:**	07/01/09 09:00
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/01/09 15:25
QC Batch ID:	9182412	**Date/Time Analyzed:**	07/08/09 04:27
Sample Aliquot:	1053 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:**	EB062909-GW
Lot/SDG Number:	8304609	**Lab Sample ID:**	D9G010276-002
Matrix:	WATER	**Lab WorkOrder:**	LFX901AA
% Moisture:	N/A	**Date/Time Collected:**	06/29/09 11:25
Basis:	Wet	**Date/Time Received:**	07/01/09 09:00
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/01/09 15:25
QC Batch ID:	9182412	**Date/Time Analyzed:**	07/08/09 04:27
Sample Aliquot:	1053 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	85	60	154	
24934-91-6	Chlormefos	60	49	171	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	8304609	**Lab Sample ID:**	D9G010000-412B
Matrix:	WATER	**Lab WorkOrder:**	LF0FF1AA
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/01/09 15:25
QC Batch ID:	9182412	**Date/Time Analyzed:**	07/08/09 02:37
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:	8304609	**Lab Sample ID:**	D9G010000-412B
Matrix:	WATER	**Lab WorkOrder:**	LF0FF1AA
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/01/09 15:25
QC Batch ID:	9182412	**Date/Time Analyzed:**	07/08/09 02:37
Sample Aliquot:	1000 mL	**Instrument ID:**	D2
Dilution Factor:	1		

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
115-86-6	Triphenyl phosphate	83	60	154	
24934-91-6	Chlormefos	55	49	171	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Surrogate Recovery Summary

Lab Name: TESTAMERICA DENVER **Extraction** I09P29H
Lot/SDG Number: 8304609 **QC Batch ID:** 9182412

Client ID	Work Order	SRG1	SRG2	SRG3	SRG4	SRG5	SRG6	SRG7	SRG8	TOT OUT
INTRA-LAB BLANK	LF0FF1AA	55	83							0
CHECK SAMPLE	LF0FF1AC	81	73							0
DUPLICATE CHECK	LF0FF1AD	115	83							0
EB062909-GW	LFX901AA	60	85							0
M-111AB	LFX9W1AA	60	77							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:	8304609	**Lab Sample ID:**	D9G010000-412C
Matrix:	WATER	**Lab WorkOrder:**	LF0FF1AC
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/01/09 15:25
QC Batch ID:	9182412	**Date/Time Analyzed:**	07/08/09 03:05
Sample Aliquot:	1000 mL	**Instrument ID:**	D2
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Dichlorvos	4.00	3.64	91		40 - 193
Thionazin	4.00	3.05	76		39 - 180
Dimethoate	4.00	2.72	68		33 - 139
Disulfoton	4.00	3.01	75		44 - 139
Ethoprop	4.00	3.35	84		43 - 165
Famphur	8.00	6.25	78		51 - 131
Fensulfothion	4.00	2.52	63		46 - 115
Fenthion	4.00	2.92	73		63 - 128
Malathion	4.00	2.69	67		53 - 137
Methyl parathion	4.00	3.41	85		55 - 131
Azinphos-methyl	4.00	2.95	74		42 - 125
Mevinphos	4.00	2.70	67		39 - 175
Ethyl parathion	4.00	3.10	77		47 - 142
Phorate	4.00	2.49	62		46 - 142
Ronnel	4.00	2.87	72		43 - 115
Sulfotepp	4.00	2.85	71		29 - 166
Trichloronate	4.00	2.80	70		60 - 115
Chlorpyrifos	4.00	3.07	77		60 - 120
Coumaphos	4.00	3.12	78		61 - 115
Diazinon	4.00	2.80	70		47 - 149

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
115-86-6	Triphenyl phosphate	73	60	154	
24934-91-6	Chlormefos	81	49	171	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	8304609	**Lab Sample ID:**	D9G010000-412L
Matrix:	WATER	**Lab WorkOrder:**	LF0FF1AD
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/01/09 15:25
QC Batch ID:	9182412	**Date/Time Analyzed:**	07/08/09 03:32
Sample Aliquot:	1000 mL	**Instrument ID:**	D2
Dilution Factor:	1		

Analyte	True	Found	C	% Rec	Q	RPD	Q	QC Limits	
								% Rec	RPD
Dichlorvos	4.00	5.08		127		33		40 - 193	49
Thionazin	4.00	3.77		94		21		39 - 180	40
Dimethoate	4.00	3.23		81		17		33 - 139	50
Disulfoton	4.00	3.63		91		19		44 - 139	40
Ethoprop	4.00	4.09		102		20		43 - 165	36
Famphur	8.00	6.88		86		9.5		51 - 131	88
Fensulfothion	4.00	3.14		79		22		46 - 115	62
Fenthion	4.00	3.45		86		17		63 - 128	41
Malathion	4.00	3.23		81		18		53 - 137	28
Methyl parathion	4.00	3.80		95		11		55 - 131	30
Azinphos-methyl	4.00	3.46		86		16		42 - 125	36
Mevinphos	4.00	3.76		94		33		39 - 175	40
Ethyl parathion	4.00	3.58		90		15		47 - 142	40
Phorate	4.00	2.85		71		14		46 - 142	40
Ronnel	4.00	3.49		87		20		43 - 115	39
Sulfotepp	4.00	3.43		86		18		29 - 166	40
Trichloronate	4.00	3.36		84		18		60 - 115	38
Chlorpyrifos	4.00	3.51		88		13		60 - 120	34
Coumaphos	4.00	3.47		87		11		61 - 115	43
Diazinon	4.00	3.42		85		20		47 - 149	40

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Method Blank Summary

Lab Name:	TESTAMERICA DENVER	**Lab File ID:**	017F1701.
Lot/SDG Number:	8304609	**Lab Sample ID:**	D9G010000-412B
Matrix:	WATER	**Lab Work Order:**	LF0FF1AA
Analysis Method:	8141A	**Date/Time Extracted:**	07/01/09 15:25
Extraction Method:	I09P29H	**Date/Time Analyzed:**	07/08/09 02:37
QC Batch ID:	9182412	**Instrument ID:**	D2

Client ID	Sample Work Order #	Lab File ID	Date Analyzed	Time Analyzed
CHECK SAMPLE	LF0FF1AC C	017F1701.	07/08/09	03:05
DUPLICATE CHECK	LF0FF1AD L	018F1801.	07/08/09	03:32
EB062909-GW	LFX901AA	020F2001.	07/08/09	04:27
M-111AB	LFX9W1AA	019F1901.	07/08/09	03:59

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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

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 / 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
1 o,o,o-TEPT	3.11591 / 2.77446	2.63737	2.67945	2.89676	2.71623	2.90430	AVRG		2.81778		5.91149
2 Dichlorvos	2.01706 / 1.79032	1.62225	1.58545	1.76366	1.71981	1.74982	AVRG		1.74977		7.99554
3 Mevinphos	1.01774 / 0.94429	0.91295	0.90158	1.01760	0.95159	0.98250	AVRG		0.96118		4.85992
5 Thionazin	2.12707 / 1.93224	1.94606	1.94866	2.08214	1.96051	2.00095	AVRG		1.99966		3.79706

Report Date : 30-Jun-2009 12:45

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						<- 1/x r=0.995
	121152						WLINR	0.09632	0.47378		0.98961	
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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INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
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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	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	

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INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
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Quant Method : ISTD
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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
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

Start Cal Date : 26-JUN-2009 18:28
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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	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

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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	5.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2	
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	294020	WLINR	0.02456	1.11450		0.99317	1/x^2
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	318459	WLINR	-0.07409	1.26388		0.99928	1/x^2
41 Coumaphos	1.00140	0.89806	0.92250	1.01947	1.01017	1.01013	0.99015	AVRG		0.97884		4.92558	
42 Merphos	1.61523	1.45962	1.38820	1.59026	1.52873	1.58626	1.49925	AVRG		1.52393		5.34513	
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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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	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

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/ml	Response
Wt Linear	Amt = b + Rsp/ml	Response
Quad	Amt = b + ml*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

Ccal 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

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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\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

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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	
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	1/X
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

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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	Coefficients m1	Coefficients 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

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INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
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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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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	Coefficients m1	Coefficients m2	%RSD or R^2	
	5.0000 Level 7											
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	

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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\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 / 330448	35826	68186	146012	207459	263604	WLINR	-0.04262	1.00518		0.99785	1/x
38 Famphur	1.45536 / 1.32805	1.20800	1.18770	1.39816	1.20947	1.39569	AVRG		1.31178		8.35158	
39 Azinphos-methyl	1.25589 / 1.19199	1.08970	1.07858	1.30240	1.20427	1.27709	AVRG		1.19999		7.33978	
40 Azinphos-ethyl	1.14013 / 1.12699	1.11628	1.12015	1.18786	1.16269	1.14594	AVRG		1.14286		2.23350	
41 Coumaphos	0.78930 / 0.93653	0.81655	0.85887	0.90448	0.89897	0.94628	AVRG		0.87871		6.77030	
42 Merphos	1.56460 / 1.70275	1.43887	1.64263	1.66880	1.73437	1.91569	AVRG		1.66682		8.85773	
43 Total Demeton	3533 / 244812	23328	47171	100663	168375	213468	WLINR	0.06780	1.63923		0.99469	1/x

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INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
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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

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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\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

Calc 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

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\0707091.B/004F0401.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i Injection Date: 07-JUL-2009 21:09
Lab File ID: 004F0401.D Lab Sample ID: OPP CCV GSV0827
Analysis Type: NONE Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\07

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.3801	4.8	15.0	
2	Dichlorvos	2.5000	2.4145	3.4	15.0	
3	Mevinphos	2.5000	2.4680	1.3	15.0	
4	Chlormefos	2.5000	2.7923	11.7	15.0	
5	Thionazin	2.5000	2.4505	2.0	15.0	
6	Demeton-O	0.8125	0.8579	5.6	15.0	
7	Ethoprop	2.5000	2.7316	9.3	15.0	
8	Naled	2.5000	3.6112	44.4	15.0	<-
9	Sulfotepp	2.5000	2.5992	4.0	15.0	
10	Phorate	2.5000	2.5677	2.7	15.0	
11	Dimethoate	2.5000	2.8221	12.9	15.0	
12	Demeton-S	1.7000	1.7242	1.4	15.0	
13	Simazine	2.5000	2.8153	12.6	15.0	
14	Atrazine	2.5000	2.7425	9.7	15.0	
15	propazine	2.5000	2.5384	1.5	15.0	
17	Disulfoton	2.5000	2.4886	0.5	15.0	
16	Diazinon	2.5000	2.4844	0.6	15.0	
18	Methyl Parathion	2.5000	2.7969	11.9	15.0	
19	Ronnel	2.5000	2.3151	7.4	15.0	
20	Malathion	2.5000	2.5578	2.3	15.0	
21	Fenthion	2.5000	2.5020	0.1	15.0	
22	Parathion	2.5000	2.6951	7.8	15.0	
23	Chlorpyrifos	2.5000	2.5461	1.8	15.0	
24	Trichloronate	2.5000	2.5016	0.1	15.0	
25	Anilazine	2.5000	2.8213	12.9	15.0	
148	Merphos-A (Merphos)	2.5000	2.2859	8.6	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.5382	1.5	15.0	
28	Tokuthion	2.5000	2.5521	2.1	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	3.1859	27.4	999.0	
29	Carbophenothion-methyl	2.5000	2.5256	1.0	15.0	
29	Fensulfothion	2.5000	2.0589	17.6	15.0	<-
30	Bolstar / Famphur	5.0000	4.9826	0.3	15.0	
32	Carbophenothion	2.5000	2.4923	0.3	15.0	
31	Triphenyl phosphate	2.5000	2.5141	0.6	15.0	
34	Phosmet	2.5000	2.6189	4.8	15.0	
32	EPN	2.5000	2.7617	10.5	15.0	
33	Azinphos-methyl	2.5000	2.6484	5.9	15.0	
35	Azinphos-ethyl	2.5000	2.5066	0.3	15.0	
36	Coumaphos	2.5000	2.5503	2.0	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B/004F0401.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 004F0401.D
Analysis Type: NONE

Injection Date: 07-JUL-2009 21:09
Lab Sample ID: OPP CCV GSV0827
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\07

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 Merphos	2.5000	2.4877	0.5	15.0
40 Total Demeton	2.5000	2.5821	3.3	15.0

Average %D = 6.32

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B/004F0401.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 004F0401.D
Analysis Type: NONE

Injection Date: 07-JUL-2009 21:09
Lab Sample ID: OPP CCV GSV0827
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\07

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.4400	2.4	15.0	
2	Dichlorvos	2.5000	2.4117	3.5	15.0	
3	Chlormefos	2.5000	2.4017	3.9	15.0	
4	Mevinphos	2.5000	2.6786	7.1	15.0	
5	Demeton-O	0.8125	0.8298	2.1	15.0	
6	Thionazin	2.5000	2.5529	2.1	15.0	
7	Ethoprop	2.5000	2.4557	1.8	15.0	
8	Phorate	2.5000	2.4980	0.1	15.0	
10	Naled	2.5000	3.1000	24.0	15.0	<-
146	Sulfotepp	2.5000	2.5298	1.2	15.0	
10	Simazine	2.5000	2.3655	5.4	15.0	
12	Diazinon	2.5000	2.5530	2.1	15.0	
150	Atrazine	2.5000	2.6596	6.4	15.0	
13	Propazine	2.5000	2.5633	2.5	15.0	
14	Disulfoton	2.5000	2.5168	0.7	15.0	
15	Demeton-S	1.7000	1.6466	3.1	15.0	
16	Dimethoate	2.5000	2.5157	0.6	15.0	
17	Ronnel	2.5000	2.4456	2.2	15.0	
148	Merphos-A (Merphos)	2.5000	2.3011	8.0	999.0	
18	Chlorpyrifos	2.5000	2.3494	6.0	15.0	
19	Fenthion	2.5000	2.4193	3.2	15.0	
20	Trichloronate	2.5000	2.3667	5.3	15.0	
21	Anilazine	2.5000	3.4591	38.4	15.0	<-
23	Methyl Parathion	2.5000	2.5392	1.6	15.0	
24	Malathion	2.5000	2.4454	2.2	15.0	
25	Tokuthion	2.5000	2.4300	2.8	15.0	
26	Parathion	2.5000	2.7066	8.3	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	3.4149	36.6	999.0	
27	Tetrachlorvinphos (stirophos)	2.5000	2.6254	5.0	15.0	
28	Carbophenothion methyl	2.5000	2.3557	5.8	15.0	
28	Bolstar	2.5000	2.4788	0.8	15.0	
30	Carbophenothion	2.5000	2.5795	3.2	15.0	
29	Triphenyl phosphate	2.5000	2.5189	0.8	15.0	
30	Fensulfothion	2.5000	2.3196	7.2	15.0	
35	Phosmet / EPN	5.0000	5.0440	0.9	15.0	
33	Famphur	2.5000	2.3411	6.4	15.0	
34	Azinphos-methyl	2.5000	2.5077	0.3	15.0	
35	Azinphos-ethyl	2.5000	2.3177	7.3	15.0	
36	Coumaphos	2.5000	2.4326	2.7	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B/004F0401.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i Injection Date: 07-JUL-2009 21:09
Lab File ID: 004F0401.D Lab Sample ID: OPP CCV GSV0827
Analysis Type: NONE Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\07

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
22 Merphos	2.5000	2.5014	0.1	15.0
40 Total Demeton	2.5000	2.4764	0.9	15.0

Average %D = 5.49

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B/021F2101.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i Injection Date: 08-JUL-2009 04:54
Lab File ID: 021F2101.D Lab Sample ID: OPP CCV GSV0827
Analysis Type: NONE Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\07

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.0957	16.2	15.0	<-
2	Dichlorvos	2.5000	2.3485	6.1	15.0	
3	Mevinphos	2.5000	2.2839	8.6	15.0	
4	Chlormefos	2.5000	2.2168	11.3	15.0	
5	Thionazin	2.5000	2.2691	9.2	15.0	
6	Demeton-O	0.8125	0.7832	3.6	15.0	
7	Ethoprop	2.5000	2.5209	0.8	15.0	
8	Naled	2.5000	2.9159	16.6	15.0	<-
9	Sulfotepp	2.5000	2.4689	1.2	15.0	
10	Phorate	2.5000	2.4188	3.2	15.0	
11	Dimethoate	2.5000	2.5569	2.3	15.0	
12	Demeton-S	1.7000	1.6661	2.0	15.0	
13	Simazine	2.5000	2.6529	6.1	15.0	
14	Atrazine	2.5000	2.4986	0.1	15.0	
15	propazine	2.5000	2.3227	7.1	15.0	
17	Disulfoton	2.5000	2.4129	3.5	15.0	
16	Diazinon	2.5000	2.2665	9.3	15.0	
18	Methyl Parathion	2.5000	2.5382	1.5	15.0	
19	Ronnel	2.5000	2.1933	12.3	15.0	
20	Malathion	2.5000	2.4067	3.7	15.0	
21	Fenthion	2.5000	2.2915	8.3	15.0	
22	Parathion	2.5000	2.4513	1.9	15.0	
23	Chlorpyrifos	2.5000	2.3749	5.0	15.0	
24	Trichloronate	2.5000	2.3590	5.6	15.0	
25	Anilazine	2.5000	1.6167	35.3	15.0	<-
148	Merphos-A (Merphos)	2.5000	2.0041	19.8	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.3864	4.5	15.0	
28	Tokuthion	2.5000	2.3038	7.8	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	3.5899	43.6	999.0	
29	Carbophenothion-methyl	2.5000	2.3435	6.3	15.0	
29	Fensulfothion	2.5000	2.1212	15.2	15.0	<-
30	Bolstar / Famphur	5.0000	4.6803	6.4	15.0	
32	Carbophenothion	2.5000	2.5732	2.9	15.0	
31	Triphenyl phosphate	2.5000	2.3296	6.8	15.0	
34	Phosmet	2.5000	2.3603	5.6	15.0	
32	EPN	2.5000	2.4855	0.6	15.0	
33	Azinphos-methyl	2.5000	2.3383	6.5	15.0	
35	Azinphos-ethyl	2.5000	2.3396	6.4	15.0	
36	Coumaphos	2.5000	2.3572	5.7	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B/021F2101.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 021F2101.D
Analysis Type: NONE

Injection Date: 08-JUL-2009 04:54
Lab Sample ID: OPP CCV GSV0827
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\07

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 Merphos	2.5000	2.3511	6.0	15.0
40 Total Demeton	2.5000	2.4493	2.0	15.0

Average %D = 7.98

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B/021F2101.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i Injection Date: 08-JUL-2009 04:54
Lab File ID: 021F2101.D Lab Sample ID: OPP CCV GSV0827
Analysis Type: NONE Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\07

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.3037	7.9	15.0	
2	Dichlorvos	2.5000	2.1228	15.1	15.0	<-
3	Chlormefos	2.5000	2.2394	10.4	15.0	
4	Mevinphos	2.5000	2.4681	1.3	15.0	
5	Demeton-O	0.8125	0.7943	2.2	15.0	
6	Thionazin	2.5000	2.4365	2.5	15.0	
7	Ethoprop	2.5000	2.2272	10.9	15.0	
8	Phorate	2.5000	2.6787	7.1	15.0	
10	Naled	2.5000	2.5277	1.1	15.0	
146	Sulfotepp	2.5000	2.3702	5.2	15.0	
10	Simazine	2.5000	2.0855	16.6	15.0	<-
12	Diazinon	2.5000	2.3382	6.5	15.0	
150	Atrazine	2.5000	2.3968	4.1	15.0	
13	Propazine	2.5000	2.2503	10.0	15.0	
14	Disulfoton	2.5000	2.3697	5.2	15.0	
15	Demeton-S	1.7000	1.5252	10.3	15.0	
16	Dimethoate	2.5000	2.4617	1.5	15.0	
17	Ronnel	2.5000	2.2334	10.7	15.0	
148	Merphos-A (Merphos)	2.5000	1.9678	21.3	999.0	
18	Chlorpyrifos	2.5000	2.3218	7.1	15.0	
19	Fenthion	2.5000	2.2406	10.4	15.0	
20	Trichloronate	2.5000	2.1378	14.5	15.0	
21	Anilazine	2.5000	2.1401	14.4	15.0	
23	Methyl Parathion	2.5000	2.5957	3.8	15.0	
24	Malathion	2.5000	2.6227	4.9	15.0	
25	Tokuthion	2.5000	2.3205	7.2	15.0	
26	Parathion	2.5000	2.5594	2.4	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	3.5261	41.0	999.0	
27	Tetrachlorvinphos (stirophos)	2.5000	2.3986	4.1	15.0	
28	Carbophenothion methyl	2.5000	2.3825	4.7	15.0	
28	Bolstar	2.5000	2.3707	5.2	15.0	
30	Carbophenothion	2.5000	2.6830	7.3	15.0	
29	Triphenyl phosphate	2.5000	2.4182	3.3	15.0	
30	Fensulfothion	2.5000	2.2902	8.4	15.0	
35	Phosmet / EPN	5.0000	4.6533	6.9	15.0	
33	Famphur	2.5000	2.2054	11.8	15.0	
34	Azinphos-methyl	2.5000	2.2190	11.2	15.0	
35	Azinphos-ethyl	2.5000	2.3181	7.3	15.0	
36	Coumaphos	2.5000	2.3598	5.6	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B/021F2101.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 021F2101.D
Analysis Type: NONE

Injection Date: 08-JUL-2009 04:54
Lab Sample ID: OPP CCV GSV0827
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\07

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
22 Merphos	2.5000	2.3257	7.0	15.0
40 Total Demeton	2.5000	2.3195	7.2	15.0

Average %D = 8.43

CE\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

CE\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!

[redacted]CE\070709.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 SS GSV0826				
4	Vial 4	OPP CCV GSV0827				
5	Vial 5	LF0E51AA,MB				
6	Vial 6	LF0E51AC,LCS				
7	Vial 7	LF0E51AD,LCSD				
8	Vial 8	LERN72AF,115-1				
9	Vial 9	LERPQ2AF,115-2				
10	Vial 10	LERPX2AF,115-3				
11	Vial 11	LF0J71AA,MB				
12	Vial 12	LF0J71AC,LCS				
13	Vial 13	LF0J71AD,LCSD				
14	Vial 14	LF0FC1AA,300-1				
15	Vial 15	LF0FE1AA,300-2				
16	Vial 16	LF0FF1AA,MB				
17	Vial 17	LF0FF1AC,LCS				
18	Vial 18	LF0FF1AD,LCSD				
19	Vial 19	LFX9W1AA,276-1				
20	Vial 20	LFX901AA,276-2				
21	Vial 21	OPP CCV GSV0827				
22	Vial 22	LF20F1AA,MB				
23	Vial 23	LF20F1AC,LCS				
24	Vial 24	LF20F1AD,LCSD				
25	Vial 25	LF1JG1CX,189-1				
26	Vial 26	LF1KV1C1,189-3				
27	Vial 27	LF1K51C1,189-5				
28	Vial 28	LF1LC1C1,189-7				
29	Vial 29	LF1LF1C1,189-9				
30	Vial 30	LF1LK1C1,189-11				
31	Vial 31	LF1LN1C1,189-13				
32	Vial 32	LF1LT1C1,189-15				
33	Vial 33	LF1LW1C1,189-17				
34	Vial 34	OPP CCV GSV0827				
35	Vial 2	HEXANE/ACETONE				

Sequence Table (Back Injector):

No entries - empty table!

TestAmerica

Total Metals

CLP-Like Forms

Lot ID: D9G010276

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 001

TestAmerica

Total Metals Analysis

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9G010276

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

SOW No.: _____

Sample ID.	Lab Sample No.
M-111AB	D9G010276-001

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: Janice Collins Name: Janice Collins

Date: 7/13/09 Title: Metals Analyst

COVER PAGE - IN

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-111AB
Lot/SDG Number:	D9G010276	**Lab Sample ID:**	D9G010276-001
Matrix:	WATER	**Lab WorkOrder:**	LFX9W
% Moisture:	N/A	**Date/Time Collected:**	06/29/09 09:55
Basis:	Wet	**Date/Time Received:**	07/01/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:31
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 Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G010276

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	50.0	100.0	49.4	98.8	M
Selenium	40.0	39.4	98.5	50.0	51.3	102.6	48.6	97.2	M

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

Total Metals Analysis
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G010276

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	48.3	96.6	49.3	98.6	M
Selenium				50.0	47.2	94.4	51.2	102.4	M

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

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

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9G010276

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	1.007	100.7		
Selenium				2.00			1.708	85.4

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:	D9G010276	**Lab Sample ID:**	D9G060000-169B
Matrix:	WATER	**Lab WorkOrder:**	LF3X8
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:25
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 Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G010276

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:

TestAmerica

Total Metals Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G010276

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			0.700	U								M

Comments:

Form III - IN

TestAmerica

Total Metals Analysis

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G010276

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	101.20	101.2			
Selenium	0.0	100.0	-0.20	111.30	111.3			

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:	D9G010276	**MS Lab Sample ID:**	D9G020221-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LF1T1
% Moisture:	N/A	**Date/Time Collected:**	07/01/09 09:00
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:50
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	150		191		111		85 - 117
Selenium	40.0	7.0	U	48.0		116		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:	D9G010276	**MSD Lab Sample ID:**	D9G020221-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LF1T1
% Moisture:	N/A	**Date/Time Collected:**	07/01/09 09:00
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:53
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	150		189		106		1.0		85 - 117	20
Selenium	40.0	7.0	U	50.3		122		4.6		77 - 122	20

TestAmerica

Total Metals Analysis
-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.: D9G010276

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	208.700		14.620		200.00	97.0		M
Selenium	75 - 125	192.400		0.700	U	200.00	96.2		M

Comments: _____

Form V (PART 2) - IN

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:	D9G010276	**Lab Sample ID:**	D9G060000-169C
Matrix:	WATER	**Lab WorkOrder:**	LF3X8
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:28
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	38.5	96		85 - 117
Selenium	40.0	40.0	100		77 - 122

Form 7 LCS Analysis Data Sheet Equivalent

Total Metals Analysis

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

INTRA-LAB QC SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G010276

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	14.620		14.565	B	0.4		M
Selenium	0.700	U	3.500	U			M

Comments: _____

Total Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G010276

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 Analysis
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G010276

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

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

Comments: _____

Form XII - IN

Total Metals Analysis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G010276

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-111AB	7/7/2009	50.0	50.0
INTRA-LAB QC	7/7/2009	50.0	50.0
LAB MS/MSD MS	7/7/2009	50.0	50.0
LAB MS/MSD MSD	7/7/2009	50.0	50.0
MB9187169	7/7/2009	50.0	50.0
Check Sample	7/7/2009	50.0	50.0

Comments:

Total Metals Analysis
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9G010276

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/7/2009 End Date: 7/8/2009

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	18:32				X															X						
100 PPB	1.00	18:35				X															X						
ICV	1.00	18:38				X															X						
ICB	1.00	18:43				X															X						
RL STD	1.00	18:46				X																					
ALTSE	1.00	18:51																			X						
ICSA	1.00	18:54				X															X						
ICSAB	1.00	18:57				X															X						
RINSE	1.00	18:59				X															X						
LR	1.00	19:02				X															X						
RINSE	1.00	19:05				X															X						
CCV	1.00	19:08				X															X						
CCB	1.00	19:10				X															X						
CAL BLANK	1.00	03:11				X															X						
100 PPB	1.00	03:14				X															X						
CCV	1.00	03:17				X															X						
CCB	1.00	03:20				X															X						
MB9187169	1.00	03:25				X															X						
Check Sample	1.00	03:28				X															X						
M-111AB	10.00	03:31				X															X						
INTRA-LAB QC	10.00	03:33				X															X						
INTRA-LAB QC SER	50.00	03:36				X															X						
INTRA-LAB QC PDS	1.00	03:39				X															X						
CCV	1.00	03:42				X															X						
CCB	1.00	03:44				X															X						
LAB MS/MSD MS	10.00	03:50				X															X						
LAB MS/MSD MSD	10.00	03:53				X															X						
CCV	1.00	04:04				X															X						
CCB	1.00	04:07				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: D9G020221

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 001 and 003

TestAmerica

Total Metals Analysis

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9G020221

Lab Code: Case No.: SAS No.:

SOW No.:

Sample ID.	Lab Sample No.
I-ARB	D9G020221-003
M-110AB	D9G020221-001
M-110AB MS	D9G020221-001S
M-110AB MSD	D9G020221-001SD

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: Janice Collins Name: Janice Collins

Date: 7/13/09 Title: Metals Analyst

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-110AB
Lot/SDG Number:	D9G020221	**Lab Sample ID:**	D9G020221-001
Matrix:	WATER	**Lab WorkOrder:**	LF1T1
% Moisture:	N/A	**Date/Time Collected:**	07/01/09 09:00
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:33
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**150**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

Form 1 Analysis Data Sheet Equivalent

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	I-ARB
Lot/SDG Number:	D9G020221	**Lab Sample ID:**	D9G020221-003
Matrix:	WATER	**Lab WorkOrder:**	LF1T6
% Moisture:	N/A	**Date/Time Collected:**	07/01/09 11:50
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:56
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	**8.0**	7.0	50	B

Total Metals Analysis
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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	50.0	100.0	49.4	98.8	M
Selenium	40.0	39.4	98.5	50.0	51.3	102.6	48.6	97.2	M

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

Total Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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	48.3	96.6	49.3	98.6	M
Selenium				50.0	47.2	94.4	51.2	102.4	M

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

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

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9G020221

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	1.007	100.7		
Selenium				2.00			1.708	85.4

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:	D9G020221	**Lab Sample ID:**	D9G060000-169B
Matrix:	WATER	**Lab WorkOrder:**	LF3X8
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:25
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 Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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:

TestAmerica

Total Metals Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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			0.700	U							M

Comments:

TestAmerica

Total Metals Analysis

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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	101.20	101.2			
Selenium	0.0	100.0	-0.20	111.30	111.3			

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-110AB
Lot/SDG Number:	D9G020221	**MS Lab Sample ID:**	D9G020221-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LF1T1
% Moisture:	N/A	**Date/Time Collected:**	07/01/09 09:00
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:50
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	150		191		111		85 - 117
Selenium	40.0	7.0	U	48.0		116		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-110AB
Lot/SDG Number:	D9G020221	**MSD Lab Sample ID:**	D9G020221-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LF1T1
% Moisture:	N/A	**Date/Time Collected:**	07/01/09 09:00
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:53
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	150		189		106		1.0		85 - 117	20
Selenium	40.0	7.0	U	50.3		122		4.6		77 - 122	20

Total Metals Analysis
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.: M-110AB PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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	208.700		14.620		200.00	97.0		M
Selenium	75 - 125	192.400		0.700	U	200.00	96.2		M

Comments: _____

Form V (PART 2) - IN

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:	D9G020221	**Lab Sample ID:**	D9G060000-169C
Matrix:	WATER	**Lab WorkOrder:**	LF3X8
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:28
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	38.5	96		85 - 117
Selenium	40.0	40.0	100		77 - 122

Total Metals Analysis

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

M-110AB SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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	14.620		14.565	B	0.4		M
Selenium	0.700	U	3.500	U			M

Comments: _____

TestAmerica

Total Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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 Analysis
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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

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

Comments: _____

Form XII - IN

Total Metals Analysis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-110AB	7/7/2009	50.0	50.0
M-110AB MS	7/7/2009	50.0	50.0
M-110AB MSD	7/7/2009	50.0	50.0
I-ARB	7/7/2009	50.0	50.0
MB9187169	7/7/2009	50.0	50.0
Check Sample	7/7/2009	50.0	50.0

Comments:

Total Metals Analysis

-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9G020221

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/7/2009 End Date: 7/8/2009

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	18:32				X															X						
100 PPB	1.00	18:35				X															X						
ICV	1.00	18:38				X															X						
ICB	1.00	18:43				X															X						
RL STD	1.00	18:46				X																					
ALTSE	1.00	18:51																			X						
ICSA	1.00	18:54				X															X						
ICSAB	1.00	18:57				X															X						
RINSE	1.00	18:59				X															X						
LR	1.00	19:02				X															X						
RINSE	1.00	19:05				X															X						
CCV	1.00	19:08				X															X						
CCB	1.00	19:10				X															X						
CAL BLANK	1.00	03:11				X															X						
100 PPB	1.00	03:14				X															X						
CCV	1.00	03:17				X															X						
CCB	1.00	03:20				X															X						
MB9187169	1.00	03:25				X															X						
Check Sample	1.00	03:28				X															X						
M-110AB	10.00	03:33				X															X						
M-110AB SER	50.00	03:36				X															X						
M-110AB PDS	1.00	03:39				X															X						
CCV	1.00	03:42				X															X						
CCB	1.00	03:44				X															X						
M-110AB MS	10.00	03:50				X															X						
M-110AB MSD	10.00	03:53				X															X						
I-ARB	10.00	03:56				X															X						
CCV	1.00	04:04				X															X						
CCB	1.00	04:07				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: D9G020221

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 002

TestAmerica

Dissolved Metals Analysis

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9G020221

Lab Code: Case No.: SAS No.:

SOW No.:

Sample ID.	Lab Sample No.
M-110ABDISS	D9G020221-002

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: Janice Collins Name: Janice Collins

Date: 7/13/09 Title: Metals Analyst

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-110ABDISS
Lot/SDG Number:	D9G020221	**Lab Sample ID:**	D9G020221-002
Matrix:	WATER	**Lab WorkOrder:**	LF1T5
% Moisture:	N/A	**Date/Time Collected:**	07/01/09 09:00
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187175	**Date/Time Analyzed:**	07/08/09 02:27
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**150**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

Dissolved Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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	50.0	100.0	49.6	99.2	M
Selenium	40.0	39.4	98.5	50.0	51.3	102.6	48.7	97.4	M

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

Dissolved Metals Analysis
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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	51.1	102.2	48.6	97.2	M
Selenium				50.0	47.3	94.6	48.7	97.4	M

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

TestAmerica

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

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9G020221

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	1.007	100.7		
Selenium				2.00			1.708	85.4

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:	D9G020221	**Lab Sample ID:**	D9G060000-175B
Matrix:	WATER	**Lab WorkOrder:**	LF30G
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187175	**Date/Time Analyzed:**	07/08/09 02:22
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 Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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:

TestAmerica

Dissolved Metals Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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			-0.761	B							M

Comments:

TestAmerica

Dissolved Metals Analysis

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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	101.20	101.2			
Selenium	0.0	100.0	-0.20	111.30	111.3			

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:	D9G020221	**MS Lab Sample ID:**	D9G020227-003S
Matrix:	WATER	**MS Lab WorkOrder:**	LF1WA
% Moisture:	N/A	**Date/Time Collected:**	06/30/09 10:10
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187175	**Date/Time Analyzed:**	07/08/09 02:38
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	750		756	MSB	17	N	85 - 117
Selenium	40.0	7.0	U	51.8		130	N	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:	D9G020221	**MSD Lab Sample ID:**	D9G020227-003D
Matrix:	WATER	**MSD Lab WorkOrder:**	LF1WA
% Moisture:	N/A	**Date/Time Collected:**	06/30/09 10:10
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187175	**Date/Time Analyzed:**	07/08/09 02:41
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	750		755	MSB	16	N	0.090		85 - 117	20
Selenium	40.0	7.0	U	52.0		130	N	0.25		77 - 122	20

Dissolved Metals Analysis
-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.: D9G020221

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	269.100		74.860		200.00	97.1		M
Selenium	75 - 125	205.600		0.700	U	200.00	102.8		M

Comments: _____

Form V (PART 2) - IN

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:	D9G020221	**Lab Sample ID:**	D9G060000-175C
Matrix:	WATER	**Lab WorkOrder:**	LF30G
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187175	**Date/Time Analyzed:**	07/08/09 02:25
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	42.5	106		85 - 117
Selenium	40.0	44.1	110		77 - 122

Dissolved Metals Analysis

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

INTRA-LAB QC SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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	74.860		71.400		4.6		M
Selenium	0.700	U	3.500	U			M

Comments: _____

TestAmerica

Dissolved Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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 Analysis
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

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

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

Comments: _____

Form XII - IN

TestAmerica

Dissolved Metals Analysis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020221

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-110ABDISS	7/7/2009	50.0	50.0
INTRA-LAB QC	7/7/2009	50.0	50.0
LAB MS/MSD MS	7/7/2009	50.0	50.0
LAB MS/MSD MSD	7/7/2009	50.0	50.0
MB9187175	7/7/2009	50.0	50.0
Check Sample	7/7/2009	50.0	50.0

Comments:

Dissolved Metals Analysis

-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9G020221

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/7/2009 End Date: 7/8/2009

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	18:32				X															X						
100 PPB	1.00	18:35				X															X						
ICV	1.00	18:38				X															X						
ICB	1.00	18:43				X															X						
RL STD	1.00	18:46				X																					
ALTSE	1.00	18:51																			X						
ICSA	1.00	18:54				X															X						
ICSAB	1.00	18:57				X															X						
RINSE	1.00	18:59				X															X						
LR	1.00	19:02				X															X						
RINSE	1.00	19:05				X															X						
CCV	1.00	19:08				X															X						
CCB	1.00	19:10				X															X						
CAL BLANK	1.00	00:34				X															X						
100 PPB	1.00	00:37				X															X						
CCV	1.00	00:39				X															X						
CCB	1.00	00:42				X															X						
CCV	1.00	02:13				X															X						
CCB	1.00	02:16				X															X						
MB9187175	1.00	02:22				X															X						
Check Sample	1.00	02:25				X															X						
M-110ABDISS	10.00	02:27				X															X						
INTRA-LAB QC	10.00	02:30				X															X						
INTRA-LAB QC SER	50.00	02:33				X															X						
INTRA-LAB QC PDS	1.00	02:36				X															X						
LAB MS/MSD MS	10.00	02:38				X															X						
LAB MS/MSD MSD	10.00	02:41				X															X						
CCV	1.00	02:44				X															X						
CCB	1.00	02:47				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: D9G020227

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 001 and 002

TestAmerica

Total Metals Analysis

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9G020227

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

SOW No.: _____

Sample ID.	Lab Sample No.
M-12AB	D9G020227-002
M-25B	D9G020227-001

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: Janice Collins Name: Janice Collins

Date: 7/13/09 Title: Metals Analyst

COVER PAGE - IN

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-25B
Lot/SDG Number:	D9G020227	**Lab Sample ID:**	D9G020227-001
Matrix:	WATER	**Lab WorkOrder:**	LF1VJ
% Moisture:	N/A	**Date/Time Collected:**	06/30/09 07:45
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:58
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-12AB
Lot/SDG Number:	D9G020227	**Lab Sample ID:**	D9G020227-002
Matrix:	WATER	**Lab WorkOrder:**	LF1V5
% Moisture:	N/A	**Date/Time Collected:**	06/30/09 10:10
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 04:01
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**760**	2.1	50	
7782-49-2	Selenium	**7.7**	7.0	50	B

Total Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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	50.0	100.0	49.4	98.8	M
Selenium	40.0	39.4	98.5	50.0	51.3	102.6	48.6	97.2	M

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

Total Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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	48.3	96.6	49.3	98.6	M
Selenium				50.0	47.2	94.4	51.2	102.4	M

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

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

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9G020227

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	1.007	100.7		
Selenium				2.00			1.708	85.4

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:	D9G020227	**Lab Sample ID:**	D9G060000-169B
Matrix:	WATER	**Lab WorkOrder:**	LF3X8
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:25
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 Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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:

TestAmerica

Total Metals Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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			0.700	U							M

Comments:

TestAmerica

Total Metals Analysis

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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	101.20	101.2			
Selenium	0.0	100.0	-0.20	111.30	111.3			

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:	D9G020227	**MS Lab Sample ID:**	D9G020221-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LF1T1
% Moisture:	N/A	**Date/Time Collected:**	07/01/09 09:00
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:50
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	150		191		111		85 - 117
Selenium	40.0	7.0	U	48.0		116		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:	D9G020227	**MSD Lab Sample ID:**	D9G020221-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LF1T1
% Moisture:	N/A	**Date/Time Collected:**	07/01/09 09:00
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:53
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	150		189		106		1.0		85 - 117	20
Selenium	40.0	7.0	U	50.3		122		4.6		77 - 122	20

Total Metals Analysis
-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.: D9G020227

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	208.700		14.620		200.00	97.0		M
Selenium	75 - 125	192.400		0.700	U	200.00	96.2		M

Comments: _____

Form V (PART 2) - IN

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:	D9G020227	**Lab Sample ID:**	D9G060000-169C
Matrix:	WATER	**Lab WorkOrder:**	LF3X8
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187169	**Date/Time Analyzed:**	07/08/09 03:28
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	38.5	96		85 - 117
Selenium	40.0	40.0	100		77 - 122

Total Metals Analysis

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

INTRA-LAB QC SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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	14.620		14.565	B	0.4		M
Selenium	0.700	U	3.500	U			M

Comments: _____

TestAmerica

Total Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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 Analysis
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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

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

Comments: _____

Form XII - IN

Total Metals Analysis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
INTRA-LAB QC	7/7/2009	50.0	50.0
LAB MS/MSD MS	7/7/2009	50.0	50.0
LAB MS/MSD MSD	7/7/2009	50.0	50.0
M-25B	7/7/2009	50.0	50.0
M-12AB	7/7/2009	50.0	50.0
MB9187169	7/7/2009	50.0	50.0
Check Sample	7/7/2009	50.0	50.0

Comments:

Total Metals Analysis

-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9G020227

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/7/2009 End Date: 7/8/2009

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	18:32				X															X						
100 PPB	1.00	18:35				X															X						
ICV	1.00	18:38				X															X						
ICB	1.00	18:43				X															X						
RL STD	1.00	18:46				X																					
ALTSE	1.00	18:51																			X						
ICSA	1.00	18:54				X															X						
ICSAB	1.00	18:57				X															X						
RINSE	1.00	18:59				X															X						
LR	1.00	19:02				X															X						
RINSE	1.00	19:05				X															X						
CCV	1.00	19:08				X															X						
CCB	1.00	19:10				X															X						
CAL BLANK	1.00	03:11				X															X						
100 PPB	1.00	03:14				X															X						
CCV	1.00	03:17				X															X						
CCB	1.00	03:20				X															X						
MB9187169	1.00	03:25				X															X						
Check Sample	1.00	03:28				X															X						
INTRA-LAB QC	10.00	03:33				X															X						
INTRA-LAB QC SER	50.00	03:36				X															X						
INTRA-LAB QC PDS	1.00	03:39				X															X						
CCV	1.00	03:42				X															X						
CCB	1.00	03:44				X															X						
LAB MS/MSD MS	10.00	03:50				X															X						
LAB MS/MSD MSD	10.00	03:53				X															X						
M-25B	10.00	03:58				X															X						
M-12AB	10.00	04:01				X															X						
CCV	1.00	04:04				X															X						
CCB	1.00	04:07				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: D9G020227

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 003

TestAmerica

Dissolved Metals Analysis

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9G020227

Lab Code: Case No.: SAS No.:

SOW No.:

Sample ID.	Lab Sample No.
M-12ABDISS	D9G020227-003
M-12ABDISS MS	D9G020227-003S
M-12ABDISS MSD	D9G020227-003SD

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: Janice Collins Name: Janice Collins

Date: 7/13/09 Title: Metals Analyst

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-12ABDISS
Lot/SDG Number:	D9G020227	**Lab Sample ID:**	D9G020227-003
Matrix:	WATER	**Lab WorkOrder:**	LF1WA
% Moisture:	N/A	**Date/Time Collected:**	06/30/09 10:10
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187175	**Date/Time Analyzed:**	07/08/09 02:30
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**750**	2.1	50	
7782-49-2	Selenium	7.0	7.0	50	U

Dissolved Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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	50.0	100.0	49.6	99.2	M
Selenium	40.0	39.4	98.5	50.0	51.3	102.6	48.7	97.4	M

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

Dissolved Metals Analysis
-2A-
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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	51.1	102.2	48.6	97.2	M
Selenium				50.0	47.3	94.6	48.7	97.4	M

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

TestAmerica

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

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9G020227

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	1.007	100.7		
Selenium				2.00			1.708	85.4

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:	D9G020227	**Lab Sample ID:**	D9G060000-175B
Matrix:	WATER	**Lab WorkOrder:**	LF30G
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187175	**Date/Time Analyzed:**	07/08/09 02:22
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 Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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:

TestAmerica

Dissolved Metals Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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			-0.761	B								M

Comments:

Dissolved Metals Analysis

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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	101.20	101.2			
Selenium	0.0	100.0	-0.20	111.30	111.3			

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-12ABDISS
Lot/SDG Number:	D9G020227	**MS Lab Sample ID:**	D9G020227-003S
Matrix:	WATER	**MS Lab WorkOrder:**	LF1WA
% Moisture:	N/A	**Date/Time Collected:**	06/30/09 10:10
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187175	**Date/Time Analyzed:**	07/08/09 02:38
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	750		756	MSB	17	N	85 - 117
Selenium	40.0	7.0	U	51.8		130	N	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-12ABDISS
Lot/SDG Number:	D9G020227	**MSD Lab Sample ID:**	D9G020227-003D
Matrix:	WATER	**MSD Lab WorkOrder:**	LF1WA
% Moisture:	N/A	**Date/Time Collected:**	06/30/09 10:10
Basis:	Wet	**Date/Time Received:**	07/02/09 09:00
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187175	**Date/Time Analyzed:**	07/08/09 02:41
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	750		755	MSB	16	N	0.090		85 - 117	20
Selenium	40.0	7.0	U	52.0		130	N	0.25		77 - 122	20

TestAmerica

Dissolved Metals Analysis
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

M-12ABDISS PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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	269.100		74.860		200.00	97.1		M
Selenium	75 - 125	205.600		0.700	U	200.00	102.8		M

Comments: _____

Form V (PART 2) - IN

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:	D9G020227	**Lab Sample ID:**	D9G060000-175C
Matrix:	WATER	**Lab WorkOrder:**	LF30G
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	07/07/09 06:00
QC Batch ID:	9187175	**Date/Time Analyzed:**	07/08/09 02:25
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	42.5	106		85 - 117
Selenium	40.0	44.1	110		77 - 122

Dissolved Metals Analysis

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ICP SERIAL DILUTIONS

SAMPLE NO.

M-12ABDISS SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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	74.860		71.400		4.6		M
Selenium	0.700	U	3.500	U			M

Comments: _____

Dissolved Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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 Analysis
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

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

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

Comments: _____

Form XII - IN

Dissolved Metals Analysis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9G020227

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-12ABDISS	7/7/2009	50.0	50.0
M-12ABDISS MS	7/7/2009	50.0	50.0
M-12ABDISS MSD	7/7/2009	50.0	50.0
MB9187175	7/7/2009	50.0	50.0
Check Sample	7/7/2009	50.0	50.0

Comments:

Dissolved Metals Analysis

-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9G020227

Instrument ID Number: Agilent 7500 Method: M

Start Date: 7/7/2009 End Date: 7/8/2009

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	18:32				X															X						
100 PPB	1.00	18:35				X															X						
ICV	1.00	18:38				X															X						
ICB	1.00	18:43				X															X						
RL STD	1.00	18:46				X																					
ALTSE	1.00	18:51																			X						
ICSA	1.00	18:54				X															X						
ICSAB	1.00	18:57				X															X						
RINSE	1.00	18:59				X															X						
LR	1.00	19:02				X															X						
RINSE	1.00	19:05				X															X						
CCV	1.00	19:08				X															X						
CCB	1.00	19:10				X															X						
CAL BLANK	1.00	00:34				X															X						
100 PPB	1.00	00:37				X															X						
CCV	1.00	00:39				X															X						
CCB	1.00	00:42				X															X						
CCV	1.00	02:13				X															X						
CCB	1.00	02:16				X															X						
MB9187175	1.00	02:22				X															X						
Check Sample	1.00	02:25				X															X						
M-12ABDISS	10.00	02:30				X															X						
M-12ABDISS SER	50.00	02:33				X															X						
M-12ABDISS PDS	1.00	02:36				X															X						
M-12ABDISS MS	10.00	02:38				X															X						
M-12ABDISS MSD	10.00	02:41				X															X						
CCV	1.00	02:44				X															X						
CCB	1.00	02:47				X															X						

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

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AG 07/1/9
IRI

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. 2027.001.00159
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?	
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 — 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; MATRIX — 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-111AB	WG	G	6/29/2009	9:55	1	N			X						X		500 ml Plastic
2	M-111AB	WG	G	6/29/2009	9:55	2	N	X									X	1-L Amber Glass
3	EB062909-GW	WG	G	6/29/2009	11:25	2	N	X									X	1-L Amber Glass
4																		
5																		
6																		
7																		
8																		
9	DRB																	
10	6-29-09																	
11																		
12																		

A5/56

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
[illegible] NGEM	6/29	15:00	[illegible]	6/29	1500
[illegible]	6/29	1600	[illegible]	6/29/09	1600
[illegible]	6/30	800	[illegible]	6/30	850
[illegible]	6/30	1630	[illegible]	7/1/9	0900

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

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Dana Brown
SIGNATURE of SAMPLER: [illegible]
DATE Signed: 6/29/09 Time: 15:00

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

TestAmerica Denver

Sample Receiving Checklist

Lot #: 590010276 Date/Time Received: 7/1/9 0900

Company Name & Sampling Site: Tronox - Northgate

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

Quote #: 83016

Special Instructions:

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

Unpacking Checks:

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

Temperatures (°C): 3.4 _____ _____ _____ _____ _____ _____ _____

N/A	*Yes*	*No*		*Initials*
☐	☑	☐	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	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 # D9G010276

Login Checks:

Initials: AG

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: CHK

☑	☐	☐	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).

2.7°C LC
7/2/09
IRI

163

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. 2027.001.00170
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?	
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; 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-110AB	WG	G	7/1/2009	9:00	1	N			X						X		500 ml Plastic
2	M-110ABDISS	WG	G	7/1/2009	9:00	1	Y			X						X		500 ml Plastic
3	I-ARB	WG	G	7/1/2009	11:50	1	N			X						X		500 ml Plastic
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

DRB
7-1-09

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	7/1	15:30		7/1	1530
GPS	7/1	1435	ICES	7/1	1435
ICES	7/1	1510		7/1	1510
	7/1	1630		7/2/9	0900

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 7/1/09 Time: 15:30

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

Temp in °C | Samples on Ice? | Sample intact? | Trip Blank?

TestAmerica

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TestAmerica Denver

Sample Receiving Checklist

Lot #: D9G020221 Date/Time Received: 7/2/9 0900

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): _____ _____ _____ _____ _____ _____ _____ _____

Temperatures (°C): 2.7°C _____ _____ _____ _____ _____ _____ _____

N/A	*Yes*	*No*		*Initials*
☐	☑	☐	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	AC
	☑	☐	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 # D960202021

Login Checks:

Initials AG

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 CHK

☑	☐	☐	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).

2.7
1.3
AG
IR1
7/2/09

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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. 2027.001.00169
Page: 1 of 1
Cooler # 1 of 1

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	TAT: Standard 30 day	X Rush — Mark One
Address:	4955 Yarrow Street	Project #	2027.001	Address:	PO Box 55	If Rush, Date due	
	Arvada, CO 80002	Site Address	560 W. Lake Mead Drive	City/State	Henderson, NV 89009	Phone #: (949)260-9293	QC level Required: Standard / Special — EPA Stage 4 — Mark one
Lab PM:	Michael P. Phillips	City	Henderson	State	NV	Reimbursement project? X	Non-reimbursement project? — Mark one	NJ Reduced Deliverable Package?	
Phone/Fax:	303-736-0157	Site PM Name	Derrick Willis	Send EDD to	Frank Hagar Northgate Environmental Management, Inc frank.hagar@ngem.com	MA MCP Cert?	CT RCP Cert? — Mark One
Lab PM email	michael.phillips@testamericainc.com	Phone/Fax:	949-375-7004	CC Hardcopy report to	PDF Electronic Version Only	Lab Project ID (lab use)	
Applicable Lab Quote #:		Site PM Email:	derrick.willis@ngem.com	CC Hardcopy report to	see additional comments below		

Valid Matrix Codes: MATRIX — 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 WK; 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-25B	WG	G	6/30/2009		1	N			X						X		500 ml Plastic
2	M-12AB	WG	G	6/30/2009		1	N			X						X		500 ml Plastic
3	M-12ABDISS	WG	G	6/30/2009		1	Y			X						X		500 ml Plastic
4																		
5																		
6																		
7																		
8																		
9	DRB																	
10	6-30-09																	
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.
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
	6/30	13.45		6/30	1345
	6/30			6/30	1345
	7/1	1520		7/1/09	1520
	7/1/09	1600		7/2/09	0900

Sample Receipt Conditions: Temp In OC | Samples on Ice? Y/N | Sample Intact? Y/N | Bottles Intact? 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 6/30/09 Time: 13.45

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TestAmerica Irvine

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

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7/2/9

CHAIN-OF-CUSTODY / Analytical Request Document

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

COC No. 2027.001.00169
Page: 1 of 1
Cooler # 1 of 1

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	TAT: Standard 30 day X	Rush / Mark One
Address:	4955 Yarrow Street	Project #	2027.001	Address:	PO Box 55	If Rush, Date due	
	Arvada, CO 80002	Site Address	560 W. Lake Mead Drive	City/State	Henderson, NV 89009; Phone #: (949)260-9293	QC level Required: Standard	Special / EPA Stage 4 / Mark one
Lab PM:	Michael P. Phillips	City	Henderson; State NV	Reimbursement project?	X; Non-reimbursement project? Mark one	NJ Reduced Deliverable Package?	
Phone/Fax:	303-736-0157	Site PM Name	Derrick Willis	Send EDD to	Frank Hagar Northgate Environmental Management, Inc. frank.hagar@ngem.com	MA MCP Cert?	CT RCP Cert? Mark One
Lab PM email	michael.phillips@testamericainc.com	Phone/Fax:	949-375-7004	CC Hardcopy report to	PDF Electronic Version Only	Lab Project ID (lab use)	
Applicable Lab Quote #:		Site PM Email:	derrick.willis@ngem.com	CC Hardcopy report to	see additional comments below		

SAMPLE ID: One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	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 314A CPP Peat	Comments/Lab Sample I.D.
1	M-25B	WG	G	6/30/2009	0740	1	N			X						X		500 ml Plastic
2	M-12AB	WG	G	6/30/2009	1610	1	N			X						X		500 ml Plastic
3	M-12ABDISS	WG	G	6/30/2009	1610	1	Y			X						X		500 ml Plastic
4																		
5																		
6																		
7																		
8																		
9	DRB																	
10	6-30-09																	
11																		
12																		

Valid Matrix Codes: MATRIX — DRINKING WATER DW, GROUND WATER WG, WASTEWATER WW, PRODUCT P, SOIL SL, OIL OL, WIPE WP, AIR AR, OTHER OT, TISSUE TS

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	Temp in °C	Samples on Ice?	Sample Intact?	Trip Blank?
[signature]	6/30	13:45	[signature]	6/30	1345		Y/N	Y/N	Y/N
[signature]	6/30	[illegible]	[signature] / TAEO	6/30	1845		Y/N	Y/N	Y/N
[signature] / TAEO	7/1	1620	[signature]	7/1/09	1020		Y/N	Y/N	Y/N
[signature]	7/1/09	1625	T [signature]	7/2/09	0900		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: [signature]; DATE Signed: 6/30/09; Time: 13:45

TestAmerica Denver

Sample Receiving Checklist

Lot #: D9G020227 Date/Time Received: 07/2/9 0900

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): 1.3

Temperatures (°C): 2.7°C 3.1°C

21 July 09 MPP 7/22/09

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

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

☐ ☑ ☐ 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. LC 7/2/09 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 # D960202 27

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

CHK

☑	☐	☐	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).

Phillips, Michael

From:	Howard, Matt
Sent:	Wednesday, July 08, 2009 11:37 AM
To:	Middleditch, Eric; Phillips, Michael
Subject:	FW: SCR/COC for D9G020227 - Tronox Henderson
Attachments:	TA CoC 2027.001.00169 amended.pdf; D9G020227.pdf

FYI See below.

From: Victoria Hansen [mailto:Victoria.Hansen@gesnevada.com]
Sent: Wednesday, July 08, 2009 11:22 AM
To: frank.hagar@ngem.com; Cindy.Arnold@ngem.com; Howard, Matt
Cc: Derrick Willis; Vivian Willis; Dana.Brown@ngem.com
Subject: FW: SCR/COC for D9G020227 - Tronox Henderson

Hi Frank,

Regarding D9G020227.pdf, I sent this out Monday, July 06, 2009 5:56 AM; then again Tuesday, July 07, 2009 5:13 AM (please see attached emails below), and now for a third time. Other than Matt Howard, who else receives the CoC??

-Victoria Hansen-
GES - Geotechnical & Environmental Services, Inc.
Environmental Staff Scientist
Office: 702.365.1001
Cell: 702.275.8386
Fax: 702.341.7120
Email: victoria.hansen@gesnevada.com
www.gesnevada.com

We make the ground work for you...[SM]

From: Victoria Hansen
Sent: Tuesday, July 07, 2009 5:13 AM
To: 'frank.hagar@ngem.com'; Dana.Brown@ngem.com
Cc: 'Derrick Willis'
Subject: FW: SCR/COC for D9G020227 - Tronox Henderson

Frank,

Dana mentioned there was a chain amendment needed for a CoC from last week. I sent this to everyone yesterday morning, if there is another requiring correction please let me know.

Thank you, Frank.

-Victoria Hansen-
GES - Geotechnical & Environmental Services, Inc.
Environmental Staff Scientist
Office: 702.365.1001
Cell: 702.275.8386
Fax: 702.341.7120
Email: victoria.hansen@gesnevada.com
www.gesnevada.com

We make the ground work for you...[SM]

From: Victoria Hansen
Sent: Monday, July 06, 2009 5:56 AM
To: 'frank.hagar@ngem.com'; Dana.Brown@ngem.com
Cc: 'Derrick Willis'; 'Cindy Arnold'; 'Vivian Willis'; matt.howard@testamericainc.com
Subject: RE: SCR/COC for D9G020227 - Tronox Henderson

Hello,

Here is the amended Coc, TA CoC 2027.001.00169.

-Victoria Hansen-
GES - Geotechnical & Environmental Services, Inc.
Environmental Staff Scientist
Office: 702.365.1001
Cell: 702.275.8386
Fax: 702.341.7120
Email: victoria.hansen@gesnevada.com
www.gesnevada.com

We make the ground work for you...[SM]

From: frank.hagar@ngem.com [mailto:frank.hagar@ngem.com]
Sent: Thursday, July 02, 2009 2:16 PM
To: Dana.Brown@ngem.com; Victoria Hansen
Cc: 'Derrick Willis'; 'Cindy Arnold'; 'Vivian Willis'; matt.howard@testamericainc.com
Subject: FW: SCR/COC for D9G020227 - Tronox Henderson

Dana

Can you correct this COC and send it back to TestAmerica please

Thanks

Frank

From: Howard, Matt [mailto:Matt.Howard@testamericainc.com]
Sent: Thursday, July 02, 2009 2:59 PM
To: cindy.arnold@ngem.com; frank.hagar@ngem.com
Cc: Phillips, Michael; Middleditch, Eric
Subject: SCR/COC for D9G020227 - Tronox Henderson

RECEIPT DISCREPANCIES:

Sampling times were logged per the sample container labels, as this information was not present on the chain-of-custody.

<<D9G020227.pdf>>

MATTHEW F. HOWARD

Project Manager Assistant

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

4955 Yarrow St

Arvada, CO 80002

Tel 303.736.0126 | Fax 303.431.7171

www.testamericainc.com

TestAmerica Denver will be closed on Friday, July 3rd and Saturday, July 4th and will not be accepting samples.

Phillips, Michael

From: Howard, Matt
Sent: Thursday, July 02, 2009 4:47 PM
To: Cindy Arnold; cindy.arnold@ngem.com; frank.hagar@ngem.com
Cc: Phillips, Michael; Middleditch, Eric; derrick.willis@ngem.com
Subject: RE: SCR/COC for D9G020227 - Tronox Henderson

Sample M-25B -- Time = 07:45
Samples M-12AB and M-12ABDISS – Time = 10:10

From: Cindy Arnold [mailto:carnold@ngem.com]
Sent: Thursday, July 02, 2009 4:42 PM
To: Howard, Matt; cindy.arnold@ngem.com; frank.hagar@ngem.com
Cc: Phillips, Michael; Middleditch, Eric; derrick.willis@ngem.com
Subject: RE: SCR/COC for D9G020227 - Tronox Henderson

Matt, Please send us the sampling times listed on the bottles and we will have the COC amended.
Thanks, Cindy

------- Original Message ------- On 7/2/2009 9:58 PM Howard, Matt wrote:
SCR/COC for D9G020227 - Tronox Henderson

RECEIPT DISCREPANCIES:

Sampling times were logged per the sample container labels, as this information was not present on the chain-of-custody.

<>

MATTHEW F. HOWARD

Project Manager Assistant

TestAmerica

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Semivolatile GC

Supporting Documentation

Sample Sequence, Chromatograms

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9G010276

Client: Northgate

Method: 8141

Associated Samples: 1, 2

Batch #(s): 9182412

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

Signature/Date: 7/10/09

GC SEMIVOLATILE ORGANIC EXTRACTION LOG SHEETS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 7/02/09
Time: 16:27:41

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

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

Extractionist: 007795 Koley Hall

Concentrationist: 002074 Cheyana Cokley
007375 Kimberly M. Fleischli

Reviewer/Date: FLEISCHK / 7/02/09

QC BATCH: 9182412

PREP DATE: 7/01/09 15:25
COMP DATE: 7/02/09 12:00

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
7/06/09	7/13/09	D9G010276-001 **LFX9W-1-AA**	DR	09	P2	WATER	**1057mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0675 06/04/09
COMMENTS:															
7/06/09	7/13/09	D9G010276-002 **LFX90-1-AA**	DR	09	P2	WATER	**1053mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0675 06/04/09
COMMENTS:															
7/06/09	0/00/00	D9G010000-412 **LF0FF-1-AA**B		09	P2	WATER	**1000mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0675 06/04/09
COMMENTS:															
7/06/09	0/00/00	D9G010000-412 **LF0FF-1-AC**C		09	P2	WATER	**1000mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0753 06/24/09 1ML GSV0675 06/04/09
COMMENTS:															
7/06/09	0/00/00	D9G010000-412 **LF0FF-1-AD**L	R	09	P2	WATER	**1000mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0753 06/24/09 1ML GSV0675 06/04/09
COMMENTS:															

DV-OP-0006/7 BAL:M27995 H2O:ELGA+NACL:G47616 NA2SO4:G45627 MECL2:H22J00
S/S:KH-E W:CRC SHARE QC:9182442 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

...CE\070709.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 SS GSV0826				
4	Vial 4	OPP CCV GSV0827				
5	Vial 5	LF0E51AA,MB				
6	Vial 6	LF0E51AC,LCS				
7	Vial 7	LF0E51AD,LCSD				
8	Vial 8	LERN72AF,115-1				
9	Vial 9	LERPQ2AF,115-2				
10	Vial 10	LERPX2AF,115-3				
11	Vial 11	LF0J71AA,MB				
12	Vial 12	LF0J71AC,LCS				
13	Vial 13	LF0J71AD,LCSD				
14	Vial 14	LF0FC1AA,300-1				
15	Vial 15	LF0FE1AA,300-2				
16	Vial 16	LF0FF1AA,MB				
17	Vial 17	LF0FF1AC,LCS				
18	Vial 18	LF0FF1AD,LCSD				
19	Vial 19	LFX9W1AA,276-1				
20	Vial 20	LFX901AA,276-2				
21	Vial 21	OPP CCV GSV0827				
22	Vial 22	LF20F1AA,MB				
23	Vial 23	LF20F1AC,LCS				
24	Vial 24	LF20F1AD,LCSD				
25	Vial 25	LF1JG1CX,189-1				
26	Vial 26	LF1KV1C1,189-3				
27	Vial 27	LF1K51C1,189-5				
28	Vial 28	LF1LC1C1,189-7				
29	Vial 29	LF1LF1C1,189-9				
30	Vial 30	LF1LK1C1,189-11				
31	Vial 31	LF1LN1C1,189-13				
32	Vial 32	LF1LT1C1,189-15				
33	Vial 33	LF1LW1C1,189-17				
34	Vial 34	OPP CCV GSV0827				
35	Vial 2	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\0707091.B/004F0401.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Injection Date: 07-JUL-2009 21:09
Lab File ID: 004F0401.D
Lab Sample ID: OPP CCV GSV0827
Analysis Type: NONE
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.3801	4.8	15.0	
2	Dichlorvos	2.5000	2.4145	3.4	15.0	
3	Mevinphos	2.5000	2.4680	1.3	15.0	
4	Chlormefos	2.5000	2.7923	11.7	15.0	
5	Thionazin	2.5000	2.4505	2.0	15.0	
6	Demeton-O	0.8125	0.8579	5.6	15.0	
7	Ethoprop	2.5000	2.7316	9.3	15.0	
8	Naled	2.5000	3.6112	44.4	15.0	<-
9	Sulfotepp	2.5000	2.5992	4.0	15.0	
10	Phorate	2.5000	2.5677	2.7	15.0	
11	Dimethoate	2.5000	2.8221	12.9	15.0	
12	Demeton-S	1.7000	1.7242	1.4	15.0	
13	Simazine	2.5000	2.8153	12.6	15.0	
14	Atrazine	2.5000	2.7425	9.7	15.0	
15	propazine	2.5000	2.5384	1.5	15.0	
17	Disulfoton	2.5000	2.4886	0.5	15.0	
16	Diazinon	2.5000	2.4844	0.6	15.0	
18	Methyl Parathion	2.5000	2.7969	11.9	15.0	
19	Ronnel	2.5000	2.3151	7.4	15.0	
20	Malathion	2.5000	2.5578	2.3	15.0	
21	Fenthion	2.5000	2.5020	0.1	15.0	
22	Parathion	2.5000	2.6951	7.8	15.0	
23	Chlorpyrifos	2.5000	2.5461	1.8	15.0	
24	Trichloronate	2.5000	2.5016	0.1	15.0	
25	Anilazine	2.5000	2.8213	12.9	15.0	
148	Merphos-A (Merphos)	2.5000	2.2859	8.6	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.5382	1.5	15.0	
28	Tokuthion	2.5000	2.5521	2.1	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	3.1859	27.4	999.0	
29	Carbophenothion-methyl	2.5000	2.5256	1.0	15.0	
29	Fensulfothion	2.5000	2.0589	17.6	15.0	<-
30	Bolstar / Famphur	5.0000	4.9826	0.3	15.0	
32	Carbophenothion	2.5000	2.4923	0.3	15.0	
31	Triphenyl phosphate	2.5000	2.5141	0.6	15.0	
34	Phosmet	2.5000	2.6189	4.8	15.0	
32	EPN	2.5000	2.7617	10.5	15.0	
33	Azinphos-methyl	2.5000	2.6484	5.9	15.0	
35	Azinphos-ethyl	2.5000	2.5066	0.3	15.0	
36	Coumaphos	2.5000	2.5503	2.0	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B/004F0401.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 004F0401.D
Analysis Type: NONE

Injection Date: 07-JUL-2009 21:09
Lab Sample ID: OPP CCV GSV0827
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 Merphos	2.5000	2.4877	0.5	15.0
40 Total Demeton	2.5000	2.5821	3.3	15.0

Average %D = 6.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\004F0401.D
Lab Smp Id: OPP CCV GSV0827 Client Smp ID: OPP CCV GSV0827
Inj Date : 07-JUL-2009 21:09
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP CCV GSV0827
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Meth Date : 08-Jul-2009 18:19 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 4 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	3.255	3.254	(0.183)	321016	2.50000	2.380
	2 Dichlorvos	4.072	4.074	(0.228)	202226	2.50000	2.414
	3 Mevinphos	5.742	5.739	(0.322)	113549	2.50000	2.468
$	4 Chlormefos	5.828	5.836	(0.327)	292861	2.50000	2.792
	5 Thionazin	7.500	7.507	(0.421)	234553	2.50000	2.450
	6 Demeton-O	7.640	7.649	(0.428)	78602	0.81250	0.8579
	7 Ethoprop	7.845	7.852	(0.440)	229122	2.50000	2.732
	8 Naled	8.052	8.057	(0.452)	77527	2.50000	3.611
*	9 Tributylphosphate	8.140	8.187	(1.000)	186566	2.00000	
	10 Sulfotepp	8.430	8.442	(0.473)	311259	2.50000	2.599
	11 Phorate	8.522	8.532	(0.478)	223047	2.50000	2.568
	12 Dimethoate	8.652	8.652	(0.485)	284776	2.50000	2.822
	13 Demeton-S	8.843	8.846	(0.496)	126167	1.70000	1.724
	14 Simazine	8.912	8.924	(0.500)	95771	2.50000	2.815
	15 Atrazine	9.082	9.094	(0.509)	107309	2.50000	2.742
	16 propazine	9.228	9.241	(0.518)	91643	2.50000	2.538
	17 Disulfoton	9.855	9.869	(0.553)	146269	2.50000	2.489
	18 Diazinon	9.892	9.902	(0.555)	231824	2.50000	2.484
	19 Methyl Parathion	10.703	10.717	(0.600)	165516	2.50000	2.797
	20 Ronnel	11.227	11.241	(0.630)	141621	2.50000	2.315
	21 Malathion	11.790	11.804	(0.661)	142369	2.50000	2.558
	22 Fenthion	11.917	11.932	(0.668)	150509	2.50000	2.502
	23 Parathion	12.005	12.019	(0.673)	172546	2.50000	2.695
	24 Chlorpyrifos	12.055	12.067	(0.676)	197212	2.50000	2.546
	25 Trichloronate	12.480	12.496	(0.700)	173177	2.50000	2.502
	26 Anilazine	12.802	12.817	(0.718)	17558	2.50000	2.821
	27 Merphos-A (Merphos)	13.183	13.199	(0.739)	132026	2.50000	2.286
	28 Tetrachlorvinphos (Stirophos)	13.808	13.824	(0.774)	97432	2.50000	2.538
	29 Tokuthion	14.430	14.449	(0.809)	169363	2.50000	2.552
	30 Merphos-B (Merphos Oxone)	14.638	14.651	(0.821)	49439	2.50000	3.186
	31 Carbophenothion-methyl	15.215	15.239	(0.853)	128828	2.50000	2.526
	32 Fensulfothion	15.353	15.361	(0.861)	111657	2.50000	2.059
	33 Bolstar / Famphur	16.038	16.053	(0.899)	316324	5.00000	4.982

		Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34	Carbophenothion	16.182	16.197	(0.907)	158736	2.50000	2.492
$	35	Triphenyl phosphate	16.698	16.712	(0.936)	121685	2.50000	2.514(A)
	36	Phosmet	16.950	16.963	(0.951)	142769	2.50000	2.619
	37	EPN	17.137	17.151	(0.961)	144706	2.50000	2.762
	38	Azinphos-methyl	17.467	17.480	(0.980)	153846	2.50000	2.648
*	39	TOCP	17.832	17.846	(1.000)	95733	2.00000	
	40	Azinphos-ethyl	17.912	17.926	(1.004)	160610	2.50000	2.507
	41	Coumaphos	18.352	18.366	(1.029)	119493	2.50000	2.550
S	42	Merphos				181465	2.50000	2.488
M	43	Total Demeton				204769	2.50000	2.582

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

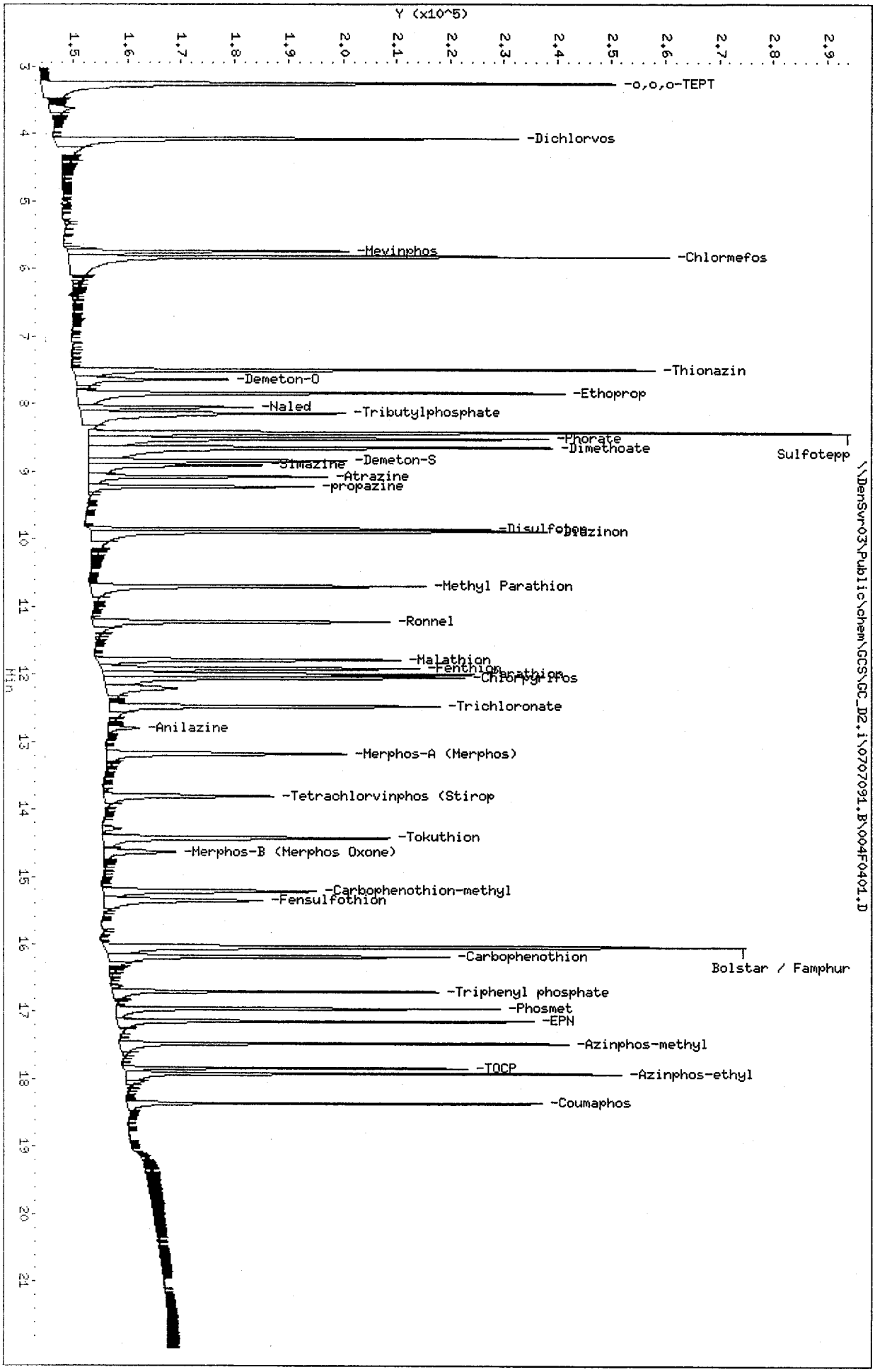
Instrument ID: GC_D2.i
Lab File ID: 004F0401.D
Lab Smp Id: OPP CCV GSV0827
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 07-JUL-2009
Calibration Time: 20:42
Client Smp ID: OPP CCV GSV0827
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	219201	109601	438402	186566	-14.89
39 TOCP	118472	59236	236944	95733	-19.19

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.14	7.64	8.64	8.14	-0.00
39 TOCP	17.83	17.33	18.33	17.83	-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\0707091.B\004F0401.D
Date : 07-JUL-2009 21:09
Client ID: OPP CCV GSV0827
Sample Info: OPP CCV GSV0827
Column phase: RTx-1MS
Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B/004F0401.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 004F0401.D
Analysis Type: NONE

Injection Date: 07-JUL-2009 21:09
Lab Sample ID: OPP CCV GSV0827
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.4400	2.4	15.0	
2	Dichlorvos	2.5000	2.4117	3.5	15.0	
3	Chlormefos	2.5000	2.4017	3.9	15.0	
4	Mevinphos	2.5000	2.6786	7.1	15.0	
5	Demeton-O	0.8125	0.8298	2.1	15.0	
6	Thionazin	2.5000	2.5529	2.1	15.0	
7	Ethoprop	2.5000	2.4557	1.8	15.0	
8	Phorate	2.5000	2.4980	0.1	15.0	
10	Naled	2.5000	3.1000	24.0	15.0	<-
146	Sulfotepp	2.5000	2.5298	1.2	15.0	
10	Simazine	2.5000	2.3655	5.4	15.0	
12	Diazinon	2.5000	2.5530	2.1	15.0	
150	Atrazine	2.5000	2.6596	6.4	15.0	
13	Propazine	2.5000	2.5633	2.5	15.0	
14	Disulfoton	2.5000	2.5168	0.7	15.0	
15	Demeton-S	1.7000	1.6466	3.1	15.0	
16	Dimethoate	2.5000	2.5157	0.6	15.0	
17	Ronnel	2.5000	2.4456	2.2	15.0	
148	Merphos-A (Merphos)	2.5000	2.3011	8.0	999.0	
18	Chlorpyrifos	2.5000	2.3494	6.0	15.0	
19	Fenthion	2.5000	2.4193	3.2	15.0	
20	Trichloronate	2.5000	2.3667	5.3	15.0	
21	Anilazine	2.5000	3.4591	38.4	15.0	<-
23	Methyl Parathion	2.5000	2.5392	1.6	15.0	
24	Malathion	2.5000	2.4454	2.2	15.0	
25	Tokuthion	2.5000	2.4300	2.8	15.0	
26	Parathion	2.5000	2.7066	8.3	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	3.4149	36.6	999.0	
27	Tetrachlorvinphos (stirophos)	2.5000	2.6254	5.0	15.0	
28	Carbophenothion methyl	2.5000	2.3557	5.8	15.0	
28	Bolstar	2.5000	2.4788	0.8	15.0	
30	Carbophenothion	2.5000	2.5795	3.2	15.0	
29	Triphenyl phosphate	2.5000	2.5189	0.8	15.0	
30	Fensulfothion	2.5000	2.3196	7.2	15.0	
35	Phosmet / EPN	5.0000	5.0440	0.9	15.0	
33	Famphur	2.5000	2.3411	6.4	15.0	
34	Azinphos-methyl	2.5000	2.5077	0.3	15.0	
35	Azinphos-ethyl	2.5000	2.3177	7.3	15.0	
36	Coumaphos	2.5000	2.4326	2.7	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B/004F0401.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Injection Date: 07-JUL-2009 21:09
Lab File ID: 004F0401.D
Lab Sample ID: OPP CCV GSV0827
Analysis Type: NONE
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
22 Merphos	2.5000	2.5014	0.1	15.0
40 Total Demeton	2.5000	2.4764	0.9	15.0

Average %D = 5.49

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\004F0401.D
Lab Smp Id: OPP CCV GSV0827 Client Smp ID: OPP CCV GSV0827
Inj Date : 07-JUL-2009 21:09
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP CCV GSV0827
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Meth Date : 08-Jul-2009 18:30 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 4 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	4.730	4.731	(0.252)	275992	2.50000	2.440
	2 Dichlorvos	6.547	6.546	(0.348)	213003	2.50000	2.412
$	3 Chlormefos	7.382	7.384	(0.392)	213533	2.50000	2.402
	4 Mevinphos	9.234	9.234	(0.491)	159366	2.50000	2.679
	5 Demeton-O	9.732	9.734	(0.517)	47046	0.81250	0.8298
	6 Thionazin	9.982	9.984	(0.531)	227132	2.50000	2.553
	7 Ethoprop	10.497	10.499	(0.558)	163255	2.50000	2.456
	8 Phorate	10.534	10.539	(0.560)	192579	2.50000	2.498
	9 Naled	10.937	10.939	(0.581)	60759	2.50000	3.100
	10 Sulfotepp	11.014	11.017	(0.586)	294153	2.50000	2.530(A)
*	11 Tributylphosphate	11.125	11.116	(1.000)	150069	2.00000	
	12 Simazine	11.397	11.399	(0.606)	39394	2.50000	2.366(A)
	13 Diazinon	11.537	11.541	(0.613)	159407	2.50000	2.553
	14 Atrazine	11.579	11.584	(0.616)	88507	2.50000	2.660(A)
	15 Propazine	11.742	11.747	(0.624)	74538	2.50000	2.563
	16 Disulfoton	12.044	12.049	(0.640)	154327	2.50000	2.517
	17 Demeton-S	12.125	12.124	(0.645)	118091	1.70000	1.647
	18 Dimethoate	13.277	13.282	(0.706)	206749	2.50000	2.516
	19 Ronnel	13.580	13.587	(0.722)	135284	2.50000	2.446
	20 Merphos-A (Merphos)	13.682	13.689	(1.230)	125130	2.50000	2.301(A)
	21 Chlorpyrifos	14.402	14.409	(0.766)	131817	2.50000	2.349
	22 Fenthion	14.652	14.662	(0.779)	125899	2.50000	2.419
	23 Trichloronate	14.700	14.711	(0.782)	171920	2.50000	2.367
	24 Anilazine	15.204	15.216	(0.808)	16611	2.50000	3.459
	25 Methyl Parathion	15.510	15.519	(0.825)	142655	2.50000	2.539(A)
	26 Malathion	15.717	15.724	(0.836)	128707	2.50000	2.445
	27 Tokuthion	16.337	16.344	(0.869)	149742	2.50000	2.430
	28 Parathion	16.487	16.494	(0.877)	149839	2.50000	2.707(M)
	29 Merphos-B (Merphos Oxone)	16.509	16.517	(1.484)	57178	2.50000	3.415(AM)
	30 Tetrachlorvinphos (stirophos)	16.970	16.977	(0.902)	94021	2.50000	2.625
	31 Carbophenothion methyl	17.074	17.082	(0.908)	120915	2.50000	2.356
	32 Bolstar	17.434	17.440	(0.927)	134023	2.50000	2.479
	33 Carbophenothion	17.515	17.524	(0.931)	137142	2.50000	2.579(A)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34 Triphenyl phosphate	18.274	18.281	(0.972)	109896	2.50000	2.519
	35 Fensulfothion	18.552	18.559	(0.986)	92919	2.50000	2.320
*	36 TOCP	18.809	18.816	(1.000)	87450	2.00000	
	37 Phosmet / EPN	18.902	18.909	(1.005)	225438	5.00000	5.044(A)
	38 Famphur	19.004	19.011	(1.010)	134277	2.50000	2.341
	39 Azinphos-methyl	19.139	19.147	(1.018)	131579	2.50000	2.508
	40 Azinphos-ethyl	19.357	19.366	(1.029)	115818	2.50000	2.318
	41 Coumaphos	20.337	20.347	(1.081)	93466	2.50000	2.433
S	42 Merphos				182308	2.50000	2.501(A)
M	43 Total Demeton				165137	2.50000	2.476

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

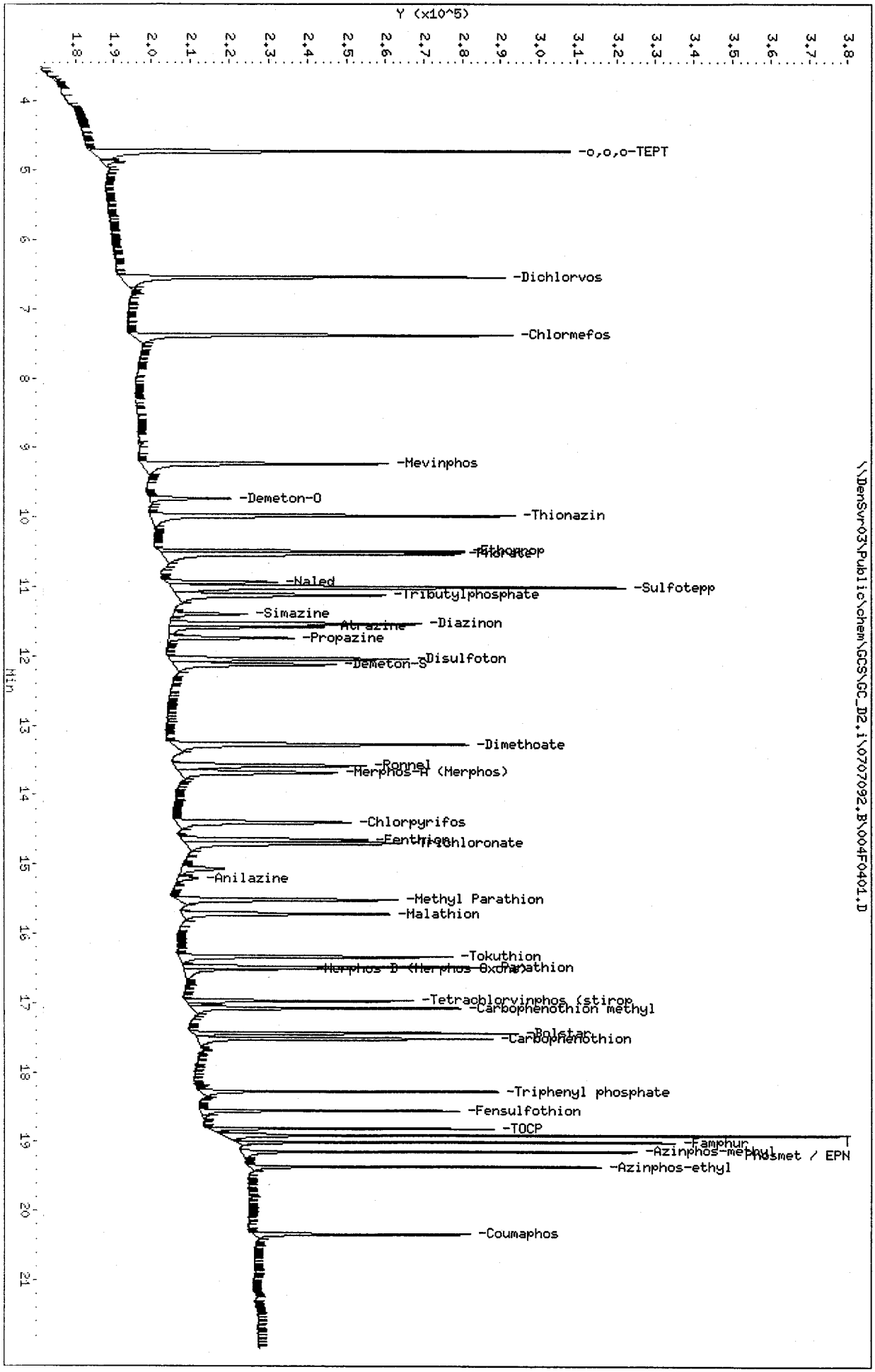
Instrument ID: GC_D2.i
Lab File ID: 004F0401.D
Lab Smp Id: OPP CCV GSV0827
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Misc Info:

Calibration Date: 07-JUL-2009
Calibration Time: 20:42
Client Smp ID: OPP CCV GSV0827
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	184655	92328	369310	150069	-18.73
36 TOCP	113858	56929	227716	87450	-23.19

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.13	10.63	11.63	11.13	-0.00
36 TOCP	18.81	18.31	19.31	18.81	-0.00

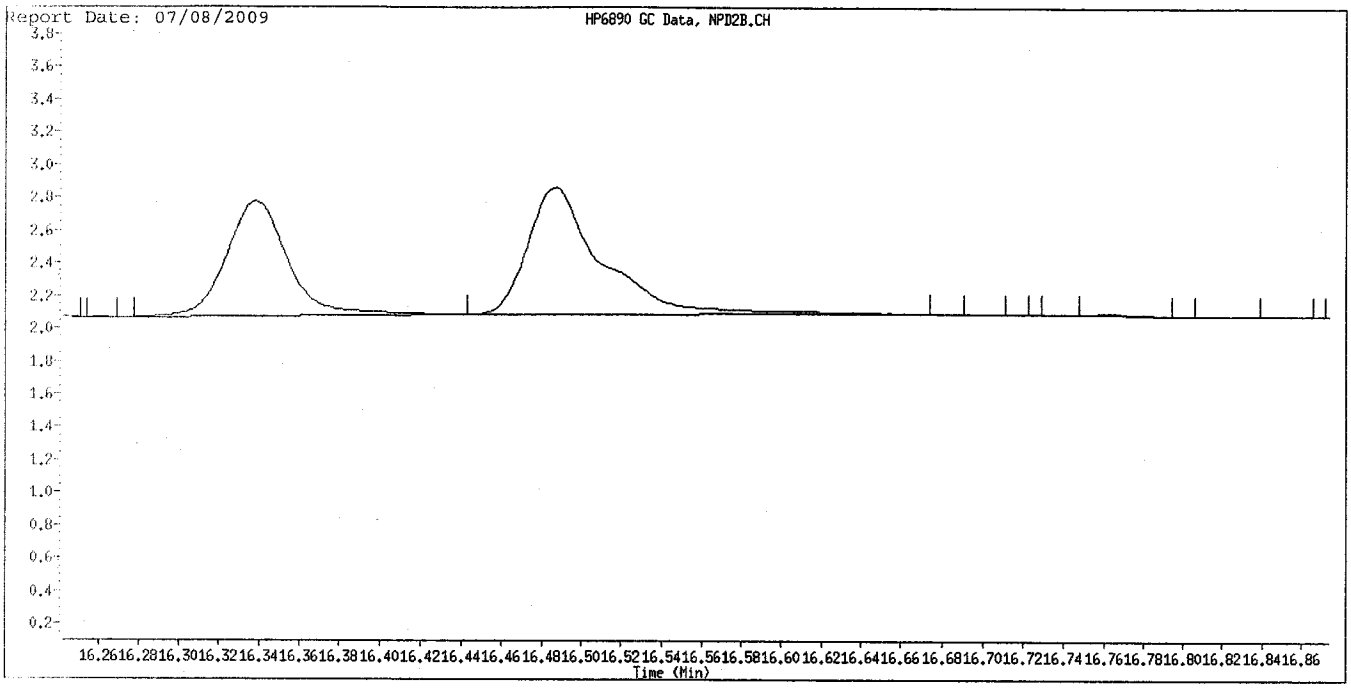
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



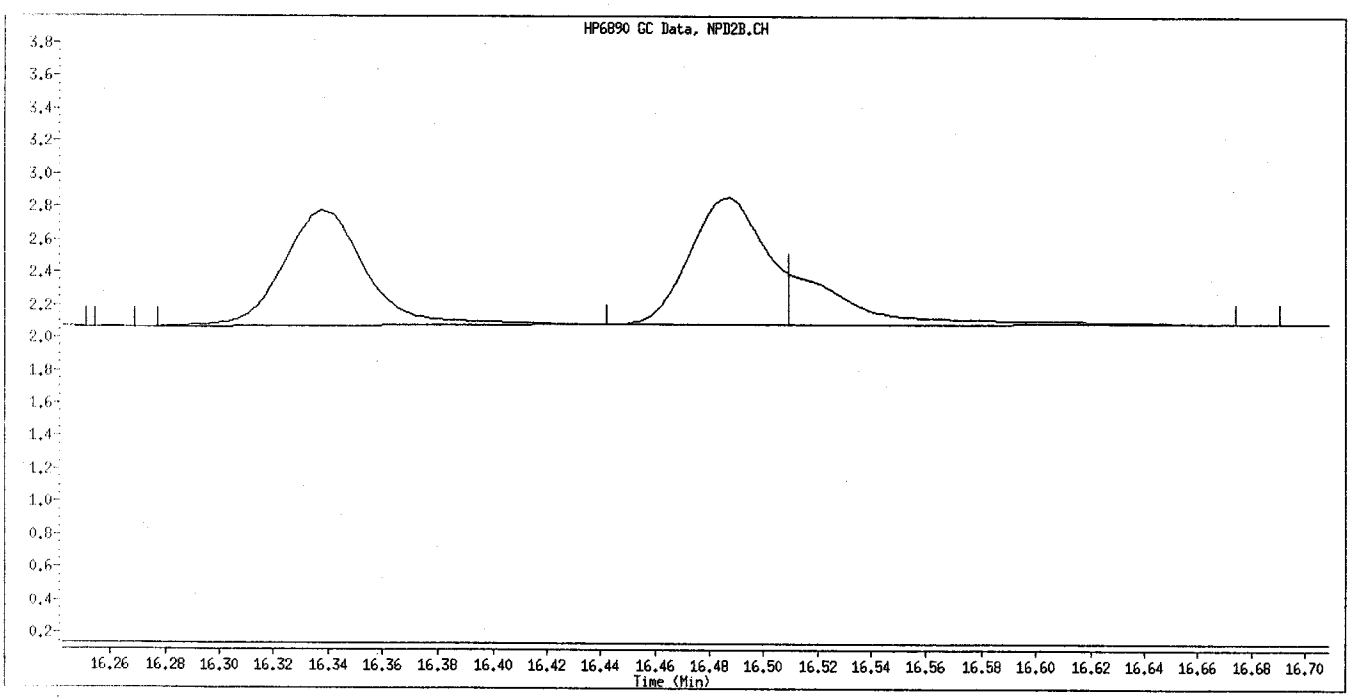
Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\070702,B\004F0401.D
Date : 07-JUL-2009 21:09
Client ID: OPP CCV GSV0827
Sample Info: OPP CCV GSV0827
Column phase: RTx-OPPest

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

Data File Name: 004F0401.D
Inj. Date and Time: 07-JUL-2009 21:09
Instrument ID: GC_D2.i
Client ID: OPP CCV GSV0827
Compound Name: Parathion
CAS #:



Original Integration

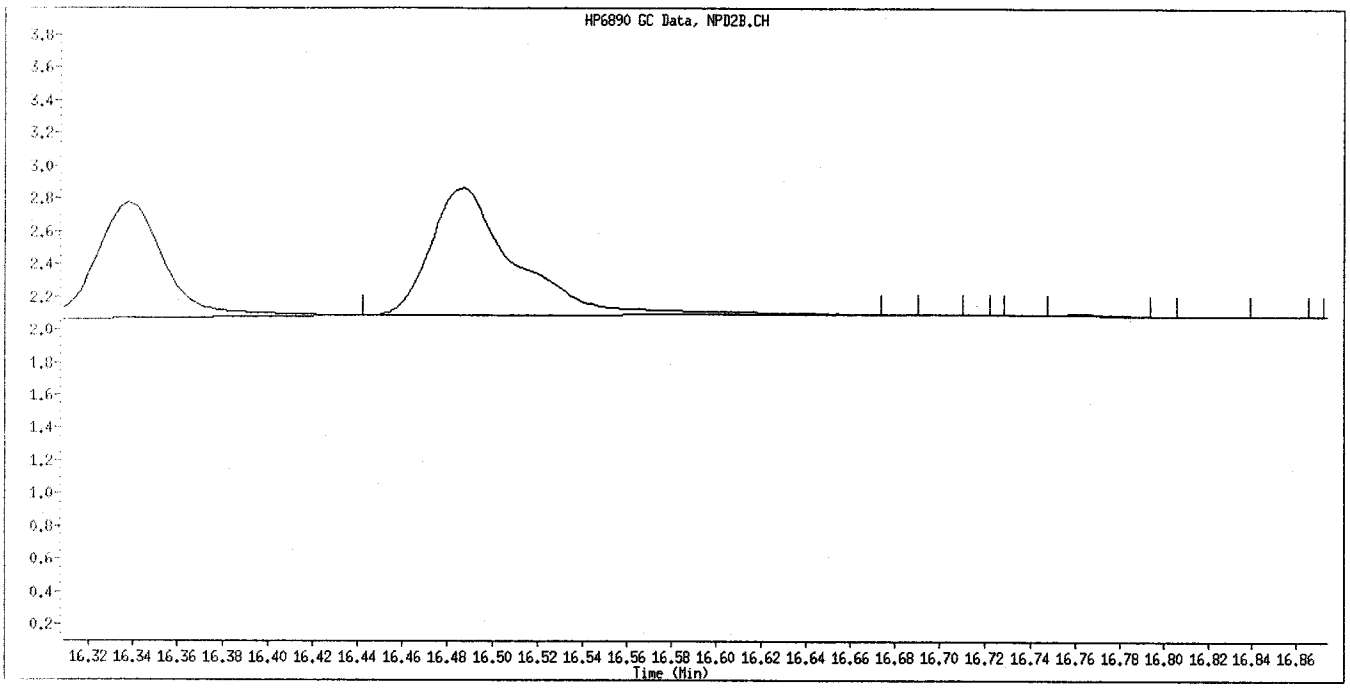


Manual Integration

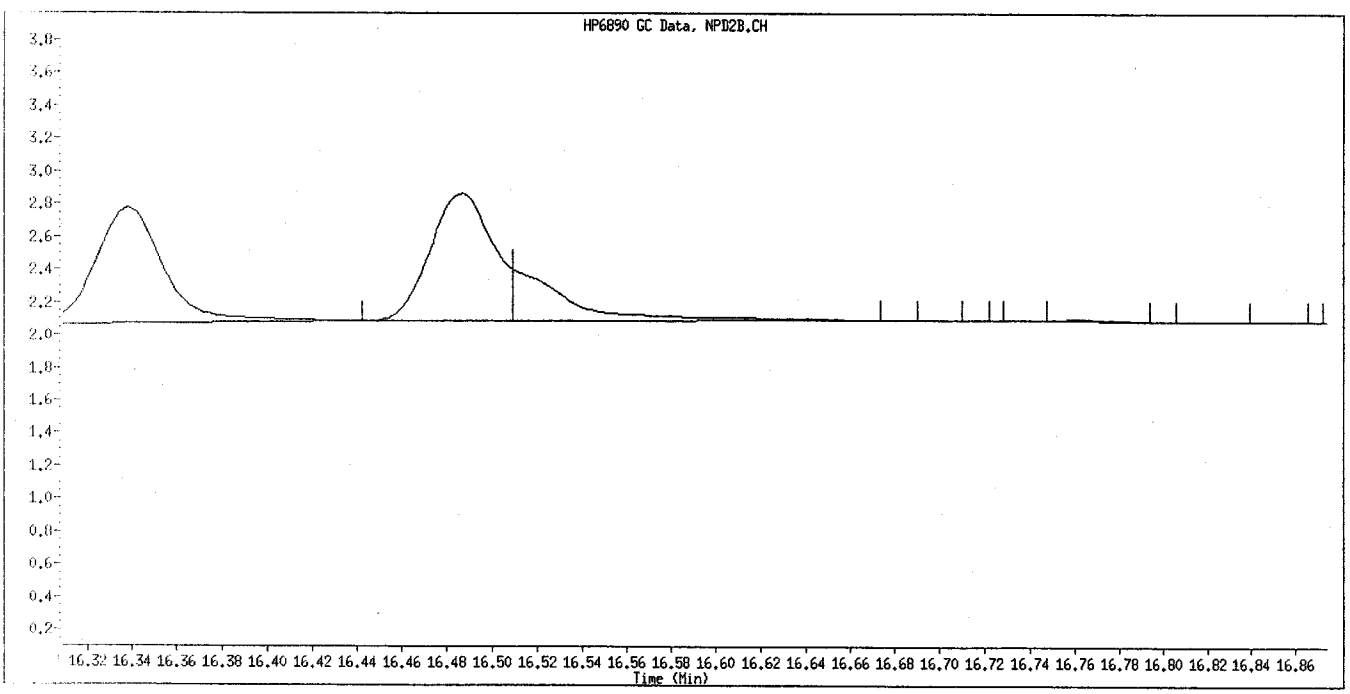
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

7/9/09

Data File Name: 004F0401.D
Inj. Date and Time: 07-JUL-2009 21:09
Instrument ID: GC_D2.i
Client ID: OPP CCV GSV0827
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 07/08/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

7/9/09

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B/021F2101.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Injection Date: 08-JUL-2009 04:54
Lab File ID: 021F2101.D
Lab Sample ID: OPP CCV GSV0827
Analysis Type: NONE
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.0957	16.2	15.0	<-
2	Dichlorvos	2.5000	2.3485	6.1	15.0	
3	Mevinphos	2.5000	2.2839	8.6	15.0	
4	Chlormefos	2.5000	2.2168	11.3	15.0	
5	Thionazin	2.5000	2.2691	9.2	15.0	
6	Demeton-O	0.8125	0.7832	3.6	15.0	
7	Ethoprop	2.5000	2.5209	0.8	15.0	
8	Naled	2.5000	2.9159	16.6	15.0	<-
9	Sulfotepp	2.5000	2.4689	1.2	15.0	
10	Phorate	2.5000	2.4188	3.2	15.0	
11	Dimethoate	2.5000	2.5569	2.3	15.0	
12	Demeton-S	1.7000	1.6661	2.0	15.0	
13	Simazine	2.5000	2.6529	6.1	15.0	
14	Atrazine	2.5000	2.4986	0.1	15.0	
15	propazine	2.5000	2.3227	7.1	15.0	
17	Disulfoton	2.5000	2.4129	3.5	15.0	
16	Diazinon	2.5000	2.2665	9.3	15.0	
18	Methyl Parathion	2.5000	2.5382	1.5	15.0	
19	Ronnel	2.5000	2.1933	12.3	15.0	
20	Malathion	2.5000	2.4067	3.7	15.0	
21	Fenthion	2.5000	2.2915	8.3	15.0	
22	Parathion	2.5000	2.4513	1.9	15.0	
23	Chlorpyrifos	2.5000	2.3749	5.0	15.0	
24	Trichloronate	2.5000	2.3590	5.6	15.0	
25	Anilazine	2.5000	1.6167	35.3	15.0	<-
148	Merphos-A (Merphos)	2.5000	2.0041	19.8	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.3864	4.5	15.0	
28	Tokuthion	2.5000	2.3038	7.8	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	3.5899	43.6	999.0	
29	Carbophenothion-methyl	2.5000	2.3435	6.3	15.0	
29	Fensulfothion	2.5000	2.1212	15.2	15.0	<-
30	Bolstar / Famphur	5.0000	4.6803	6.4	15.0	
32	Carbophenothion	2.5000	2.5732	2.9	15.0	
31	Triphenyl phosphate	2.5000	2.3296	6.8	15.0	
34	Phosmet	2.5000	2.3603	5.6	15.0	
32	EPN	2.5000	2.4855	0.6	15.0	
33	Azinphos-methyl	2.5000	2.3383	6.5	15.0	
35	Azinphos-ethyl	2.5000	2.3396	6.4	15.0	
36	Coumaphos	2.5000	2.3572	5.7	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B/021F2101.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 021F2101.D
Analysis Type: NONE

Injection Date: 08-JUL-2009 04:54
Lab Sample ID: OPP CCV GSV0827
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 Merphos	2.5000	2.3511	6.0	15.0
40 Total Demeton	2.5000	2.4493	2.0	15.0

Average %D = 7.98

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\021F2101.D
Lab Smp Id: OPP CCV GSV0827 Client Smp ID: OPP CCV GSV0827
Inj Date : 08-JUL-2009 04:54
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP CCV GSV0827
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Meth Date : 08-Jul-2009 18:19 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 21 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	3.253	3.254	(0.182)	301186	2.50000	2.096
	2 Dichlorvos	4.072	4.074	(0.228)	209591	2.50000	2.348
	3 Mevinphos	5.740	5.739	(0.322)	111965	2.50000	2.284
$	4 Chlormefos	5.830	5.836	(0.327)	247738	2.50000	2.217
	5 Thionazin	7.500	7.507	(0.421)	231428	2.50000	2.269
	6 Demeton-O	7.642	7.649	(0.429)	76676	0.81250	0.7832
	7 Ethoprop	7.845	7.852	(0.440)	225306	2.50000	2.521
	8 Naled	8.052	8.057	(0.452)	65806	2.50000	2.916
*	9 Tributylphosphate	Compound Not Detected.					
	10 Sulfotepp	8.432	8.442	(0.473)	315467	2.50000	2.469
	11 Phorate	8.523	8.532	(0.478)	223887	2.50000	2.419
	12 Dimethoate	8.650	8.652	(0.485)	274930	2.50000	2.557
	13 Demeton-S	8.840	8.846	(0.496)	129900	1.70000	1.666
	14 Simazine	8.912	8.924	(0.500)	95990	2.50000	2.653
	15 Atrazine	9.082	9.094	(0.509)	104170	2.50000	2.498
	16 propazine	9.228	9.241	(0.518)	89352	2.50000	2.323
	17 Disulfoton	9.857	9.869	(0.553)	151184	2.50000	2.413
	18 Diazinon	9.890	9.902	(0.555)	225349	2.50000	2.266
	19 Methyl Parathion	10.705	10.717	(0.600)	160050	2.50000	2.538
	20 Ronnel	11.227	11.241	(0.630)	142957	2.50000	2.193
	21 Malathion	11.790	11.804	(0.661)	142884	2.50000	2.407
	22 Fenthion	11.918	11.932	(0.668)	146882	2.50000	2.292
	23 Parathion	12.005	12.019	(0.673)	167217	2.50000	2.451
	24 Chlorpyrifos	12.053	12.067	(0.676)	196004	2.50000	2.375
	25 Trichloronate	12.480	12.496	(0.700)	174007	2.50000	2.359
	26 Anilazine	12.800	12.817	(0.718)	9620	2.50000	1.617
	27 Merphos-A (Merphos)	13.182	13.199	(0.739)	123340	2.50000	2.004
	28 Tetrachlorvinphos (Stirophos)	13.808	13.824	(0.774)	97608	2.50000	2.386
	29 Tokuthion	14.432	14.449	(0.809)	162903	2.50000	2.304
	30 Merphos-B (Merphos Oxone)	14.635	14.651	(0.821)	59404	2.50000	3.590
	31 Carbophenothion-methyl	15.218	15.239	(0.853)	127631	2.50000	2.344
	32 Fensulfothion	15.350	15.361	(0.861)	122745	2.50000	2.121
	33 Bolstar / Famphur	16.038	16.053	(0.899)	316608	5.00000	4.680

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	16.182	16.197	(0.907)	174632	2.50000	2.573
$	35 Triphenyl phosphate	16.698	16.712	(0.936)	120143	2.50000	2.330(A)
	36 Phosmet	16.952	16.963	(0.951)	137106	2.50000	2.360
	37 EPN	17.137	17.151	(0.961)	138489	2.50000	2.485
	38 Azinphos-methyl	17.467	17.480	(0.980)	144737	2.50000	2.338
*	39 TOCP	17.832	17.846	(1.000)	102007	2.00000	
	40 Azinphos-ethyl	17.912	17.926	(1.004)	160366	2.50000	2.340
	41 Coumaphos	18.353	18.366	(1.029)	117684	2.50000	2.357
S	42 Merphos				182744	2.50000	2.351
M	43 Total Demeton				206576	2.50000	2.449

QC Flag Legend

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

TestAmerica

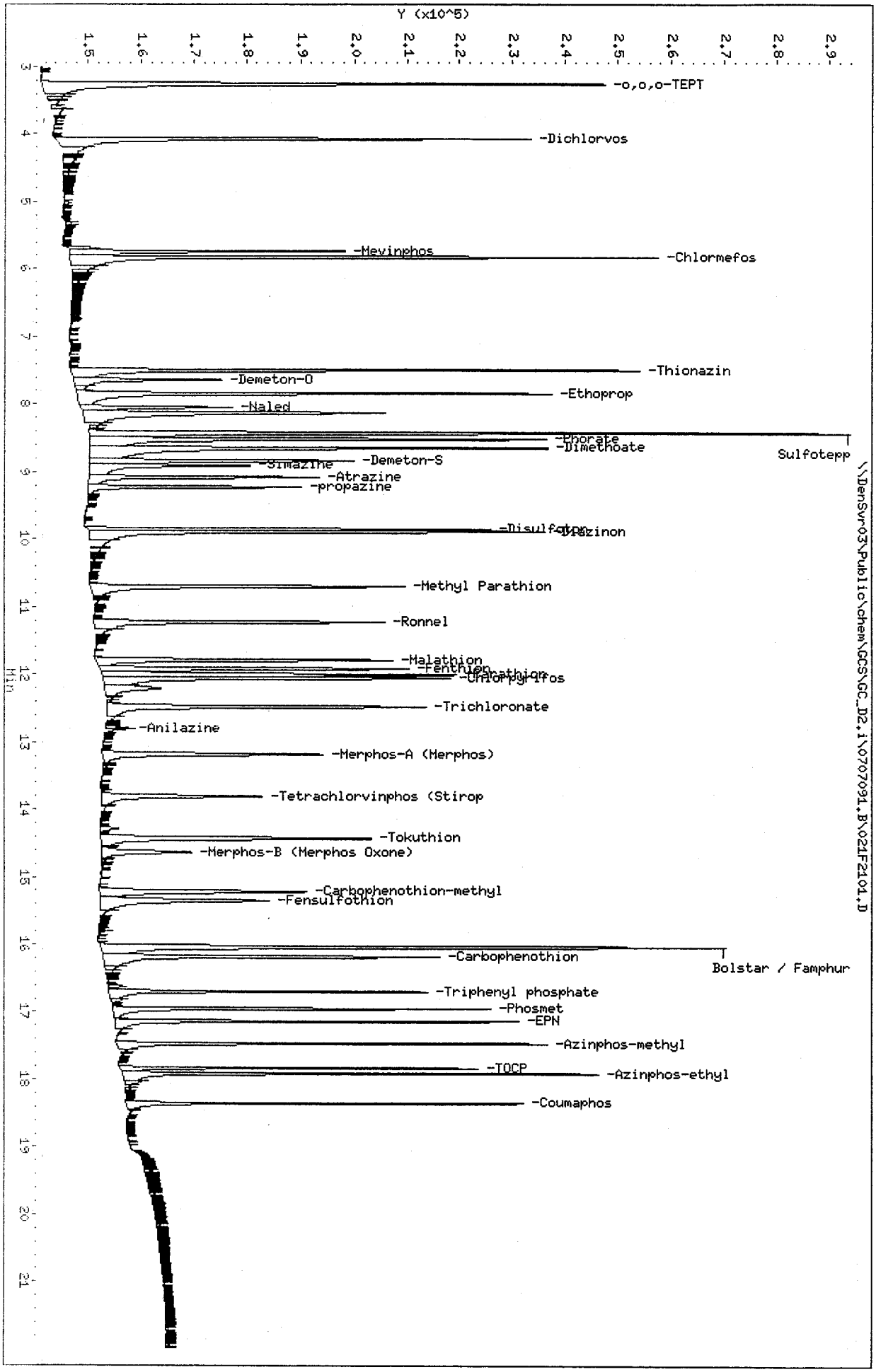
INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D2.i
Lab File ID: 021F2101.D
Lab Smp Id: OPP CCV GSV0827
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: OPP CCV GSV0827
Level:
Sample Type:
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	190357	95179	380714	0	-100.00
39 TOCP	95733	47867	191466	102007	6.55

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.19	7.69	8.69	0.00	-100.00
39 TOCP	17.83	17.33	18.33	17.83	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\0707091.B\021F2101.D
Date : 08-JUL-2009 04:54
Client ID: OPP CCV GSV0827
Sample Info: OPP CCV GSV0827
Column phase: RTx-1MS

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

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B/021F2101.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Injection Date: 08-JUL-2009 04:54
Lab File ID: 021F2101.D
Lab Sample ID: OPP CCV GSV0827
Analysis Type: NONE
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.3037	7.9	15.0	
2	Dichlorvos	2.5000	2.1228	15.1	15.0	<-
3	Chlormefos	2.5000	2.2394	10.4	15.0	
4	Mevinphos	2.5000	2.4681	1.3	15.0	
5	Demeton-O	0.8125	0.7943	2.2	15.0	
6	Thionazin	2.5000	2.4365	2.5	15.0	
7	Ethoprop	2.5000	2.2272	10.9	15.0	
8	Phorate	2.5000	2.6787	7.1	15.0	
10	Naled	2.5000	2.5277	1.1	15.0	
146	Sulfotepp	2.5000	2.3702	5.2	15.0	
10	Simazine	2.5000	2.0855	16.6	15.0	<-
12	Diazinon	2.5000	2.3382	6.5	15.0	
150	Atrazine	2.5000	2.3968	4.1	15.0	
13	Propazine	2.5000	2.2503	10.0	15.0	
14	Disulfoton	2.5000	2.3697	5.2	15.0	
15	Demeton-S	1.7000	1.5252	10.3	15.0	
16	Dimethoate	2.5000	2.4617	1.5	15.0	
17	Ronnel	2.5000	2.2334	10.7	15.0	
148	Merphos-A (Merphos)	2.5000	1.9678	21.3	999.0	
18	Chlorpyrifos	2.5000	2.3218	7.1	15.0	
19	Fenthion	2.5000	2.2406	10.4	15.0	
20	Trichloronate	2.5000	2.1378	14.5	15.0	
21	Anilazine	2.5000	2.1401	14.4	15.0	
23	Methyl Parathion	2.5000	2.5957	3.8	15.0	
24	Malathion	2.5000	2.6227	4.9	15.0	
25	Tokuthion	2.5000	2.3205	7.2	15.0	
26	Parathion	2.5000	2.5594	2.4	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	3.5261	41.0	999.0	
27	Tetrachlorvinphos (stirophos)	2.5000	2.3986	4.1	15.0	
28	Carbophenothion methyl	2.5000	2.3825	4.7	15.0	
28	Bolstar	2.5000	2.3707	5.2	15.0	
30	Carbophenothion	2.5000	2.6830	7.3	15.0	
29	Triphenyl phosphate	2.5000	2.4182	3.3	15.0	
30	Fensulfothion	2.5000	2.2902	8.4	15.0	
35	Phosmet / EPN	5.0000	4.6533	6.9	15.0	
33	Famphur	2.5000	2.2054	11.8	15.0	
34	Azinphos-methyl	2.5000	2.2190	11.2	15.0	
35	Azinphos-ethyl	2.5000	2.3181	7.3	15.0	
36	Coumaphos	2.5000	2.3598	5.6	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B/021F2101.D
Report Date: 07/08/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D2.i
Lab File ID: 021F2101.D
Analysis Type: NONE

Injection Date: 08-JUL-2009 04:54
Lab Sample ID: OPP CCV GSV0827
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
22 Merphos	2.5000	2.3257	7.0	15.0
40 Total Demeton	2.5000	2.3195	7.2	15.0

Average %D = 8.43

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\021F2101.D
Lab Smp Id: OPP CCV GSV0827 Client Smp ID: OPP CCV GSV0827
Inj Date : 08-JUL-2009 04:54
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : OPP CCV GSV0827
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Meth Date : 08-Jul-2009 18:31 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 21 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	4.730	4.731	(0.252)	266954	2.50000	2.304
	2 Dichlorvos	6.547	6.546	(0.348)	192079	2.50000	2.123
$	3 Chlormefos	7.384	7.384	(0.393)	203983	2.50000	2.239
	4 Mevinphos	9.235	9.234	(0.491)	150433	2.50000	2.468
	5 Demeton-O	9.732	9.734	(0.517)	46134	0.81250	0.7943
	6 Thionazin	9.982	9.984	(0.531)	222089	2.50000	2.436
	7 Ethoprop	10.499	10.499	(0.558)	151695	2.50000	2.227
	8 Phorate	10.535	10.539	(0.560)	211571	2.50000	2.679
	9 Naled	10.939	10.939	(0.582)	49664	2.50000	2.528
	10 Sulfotepp	11.014	11.017	(0.586)	282345	2.50000	2.370(A)
*	11 Tributylphosphate	11.124	11.116	(1.000)	156990	2.00000	
	12 Simazine	11.399	11.399	(0.606)	35581	2.50000	2.086(A)
	13 Diazinon	11.539	11.541	(0.613)	149413	2.50000	2.338
	14 Atrazine	11.580	11.584	(0.616)	80856	2.50000	2.397(A)
	15 Propazine	11.742	11.747	(0.624)	66822	2.50000	2.250
	16 Disulfoton	12.045	12.049	(0.640)	148867	2.50000	2.370
	17 Demeton-S	12.124	12.124	(0.645)	111367	1.70000	1.525
	18 Dimethoate	13.277	13.282	(0.706)	207266	2.50000	2.462
	19 Ronnel	13.582	13.587	(0.722)	126571	2.50000	2.233
	20 Merphos-A (Merphos)	13.684	13.689	(1.230)	111943	2.50000	1.968(A)
	21 Chlorpyrifos	14.404	14.409	(0.766)	133459	2.50000	2.322
	22 Fenthion	14.654	14.662	(0.779)	119456	2.50000	2.241
	23 Trichloronate	14.702	14.711	(0.782)	158297	2.50000	2.138
	24 Anilazine	15.210	15.216	(0.809)	10531	2.50000	2.140(M)
	25 Methyl Parathion	15.512	15.519	(0.825)	149401	2.50000	2.596(A)
	26 Malathion	15.719	15.724	(0.836)	141418	2.50000	2.623
	27 Tokuthion	16.339	16.344	(0.869)	146498	2.50000	2.320
	28 Parathion	16.485	16.494	(0.876)	145157	2.50000	2.559(M)
	29 Merphos-B (Merphos Oxone)	16.509	16.517	(1.484)	61705	2.50000	3.526(AM)
	30 Tetrachlorvinphos (stirophos)	16.970	16.977	(0.902)	88000	2.50000	2.398
	31 Carbophenothion methyl	17.075	17.082	(0.908)	125288	2.50000	2.382
	32 Bolstar	17.434	17.440	(0.927)	131316	2.50000	2.371
	33 Carbophenothion	17.515	17.524	(0.931)	146137	2.50000	2.683(A)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	34 Triphenyl phosphate	18.274	18.281	(0.972)	108087	2.50000	2.418
	35 Fensulfothion	18.552	18.559	(0.986)	93989	2.50000	2.290
*	36 TOCP	18.809	18.816	(1.000)	89591	2.00000	
	37 Phosmet / EPN	18.900	18.909	(1.005)	213365	5.00000	4.653
	38 Famphur	19.002	19.011	(1.010)	129594	2.50000	2.205
	39 Azinphos-methyl	19.137	19.147	(1.017)	119280	2.50000	2.219
	40 Azinphos-ethyl	19.357	19.366	(1.029)	118674	2.50000	2.318
	41 Coumaphos	20.335	20.347	(1.081)	92888	2.50000	2.360
S	42 Merphos				173648	2.50000	2.326(A)
M	43 Total Demeton				157501	2.50000	2.320

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

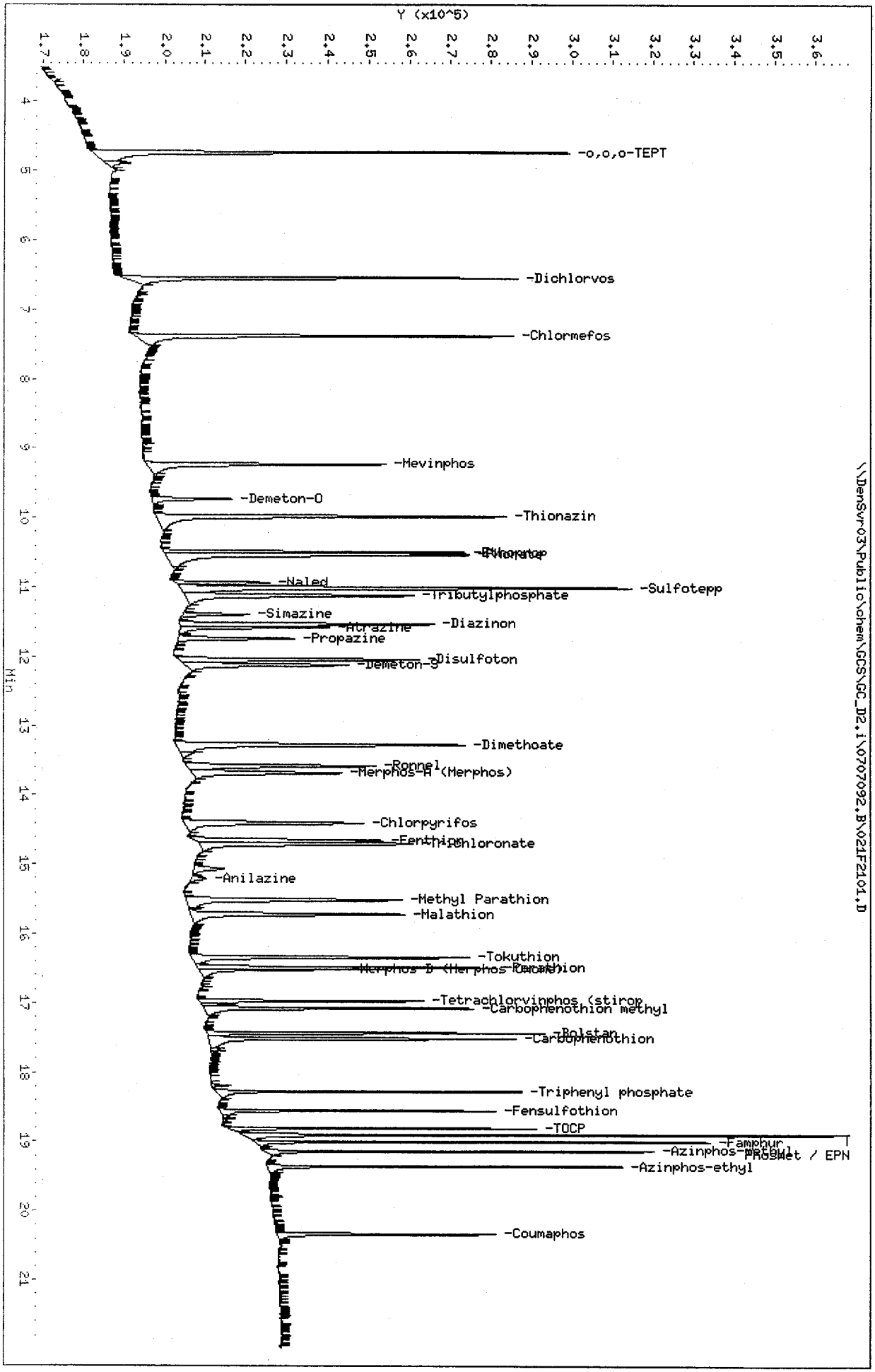
Instrument ID: GC_D2.i
Lab File ID: 021F2101.D
Lab Smp Id: OPP CCV GSV0827
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Misc Info:

Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: OPP CCV GSV0827
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	150069	75035	300138	156990	4.61
36 TOCP	87450	43725	174900	89591	2.45

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.13	10.63	11.63	11.12	-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.

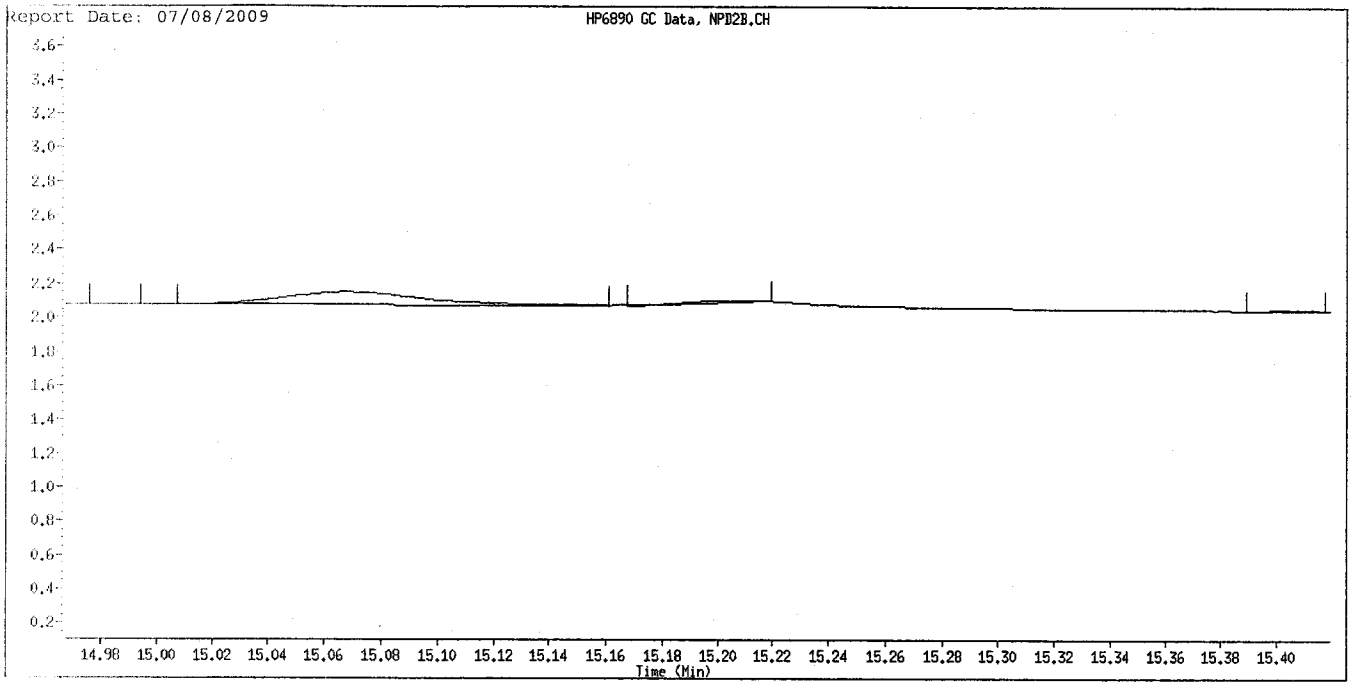


Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\021F2101.D
Date : 08-JUL-2009 04:54
Client ID: OPP CCV GSV0827
Sample Info: OPP CCV GSV0827
Column phase: RTx-OPPest

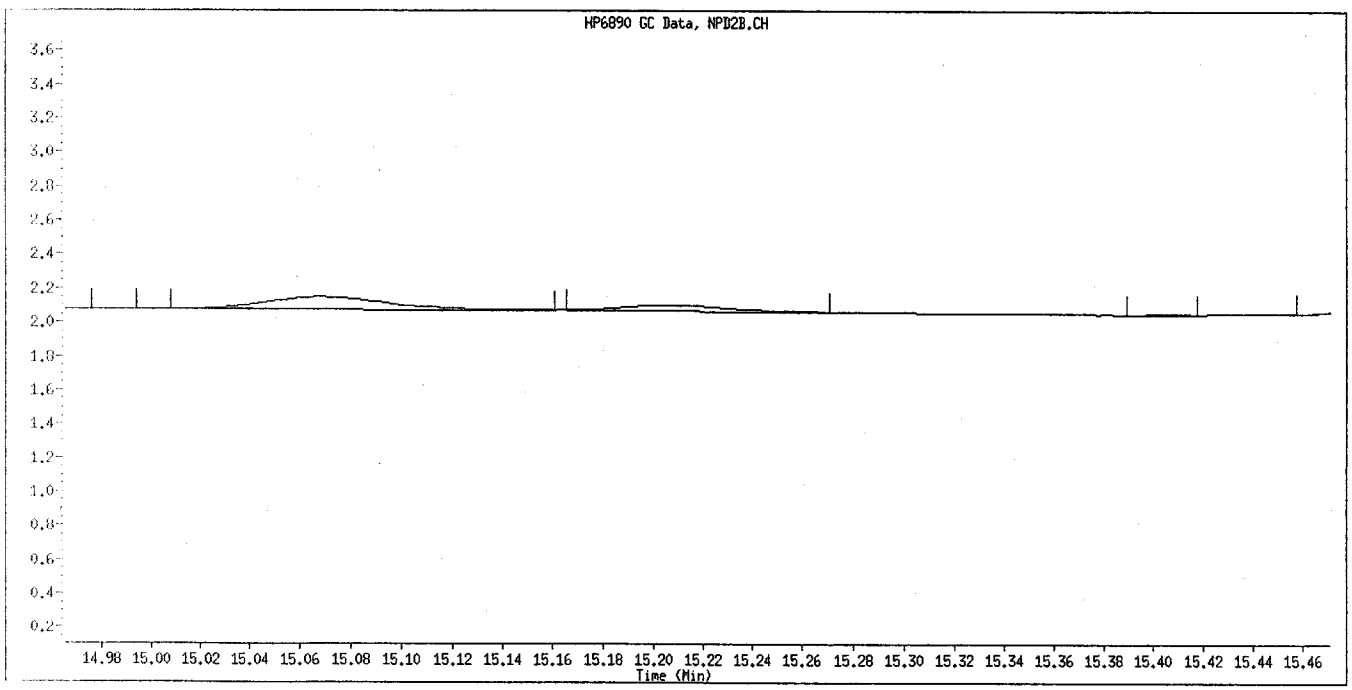
\\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\021F2101.D

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

Data File Name: 021F2101.D
Inj. Date and Time: 08-JUL-2009 04:54
Instrument ID: GC_D2.i
Client ID: OPP CCV GSV0827
Compound Name: Anilazine
CAS #:
Report Date: 07/08/2009



Original Integration

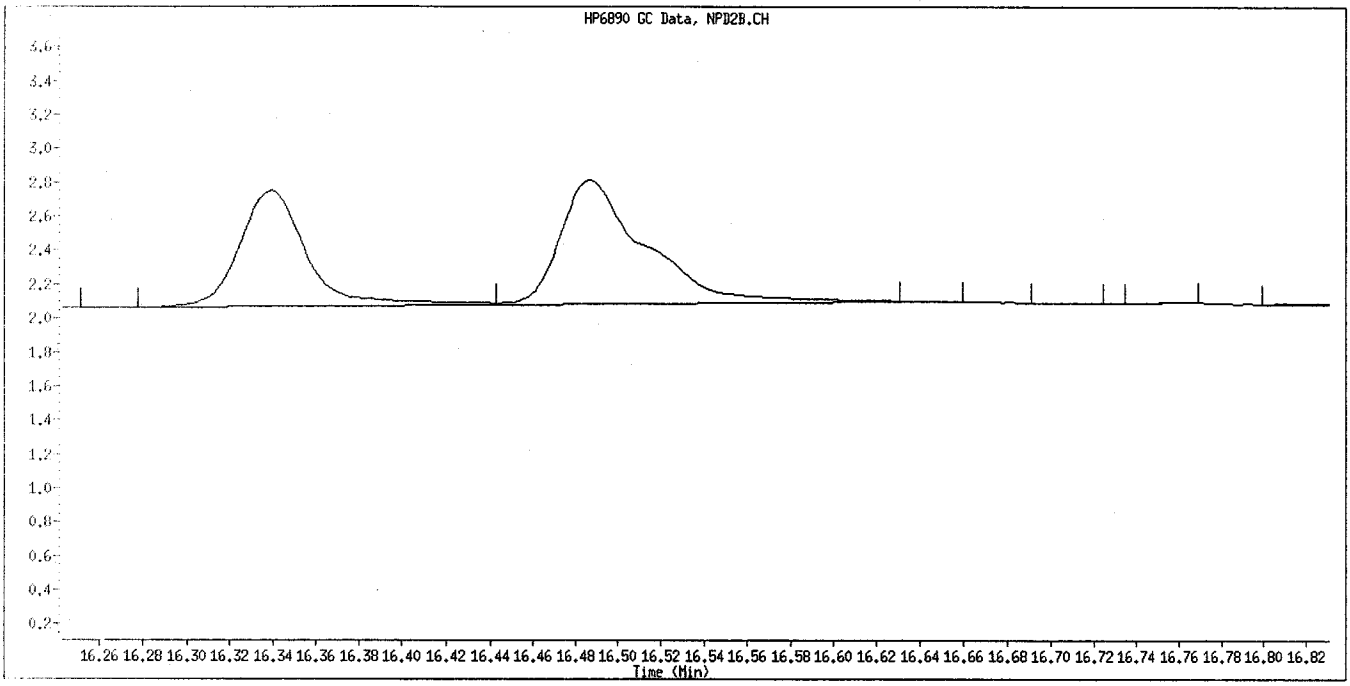


Manual Integration

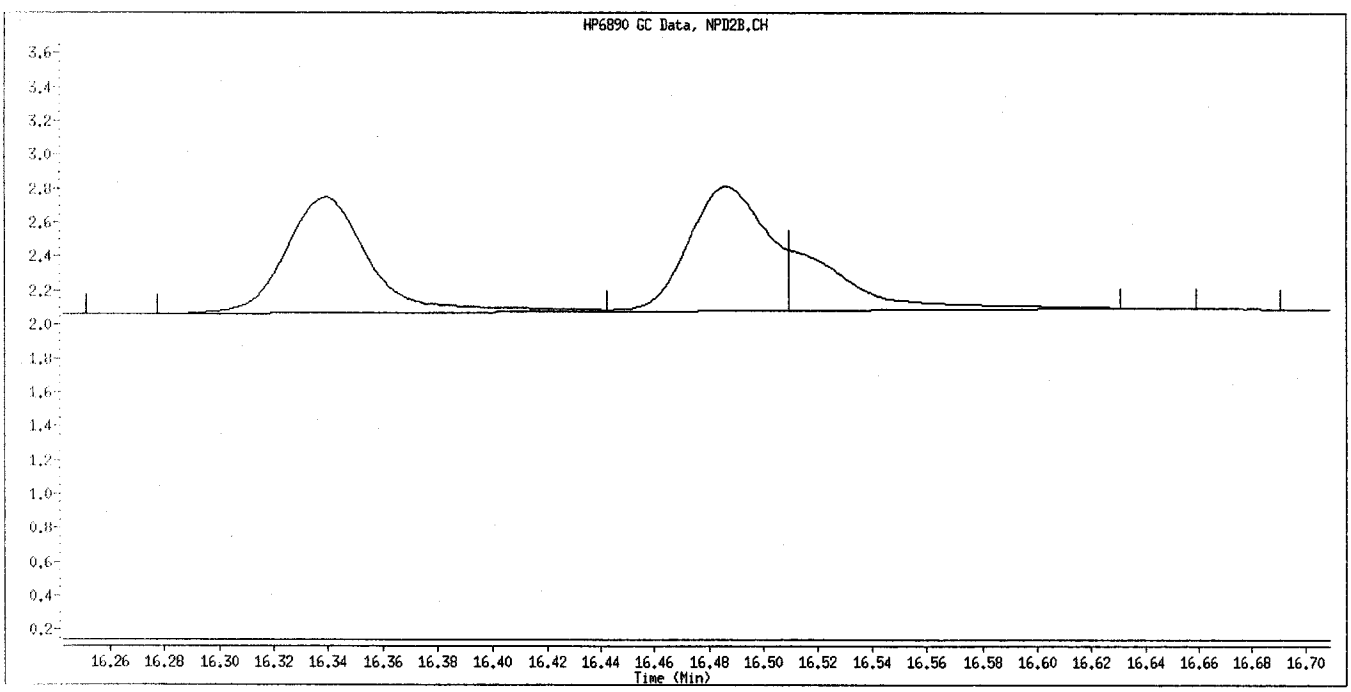
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

7/9/09

Data File Name: 021F2101.D
Inj. Date and Time: 08-JUL-2009 04:54
Instrument ID: GC_D2.i
Client ID: OPP CCV GSV0827
Compound Name: Parathion
CAS #:
Report Date: 07/08/2009



Original Integration

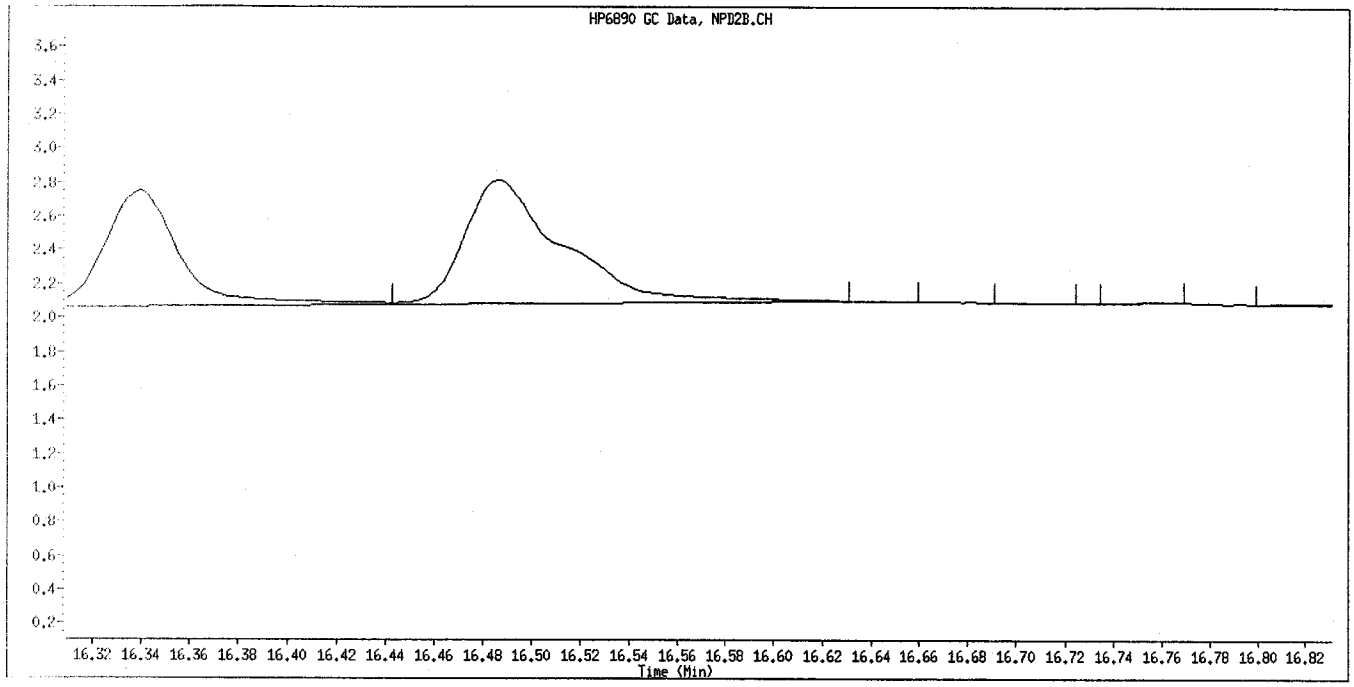


Manual Integration

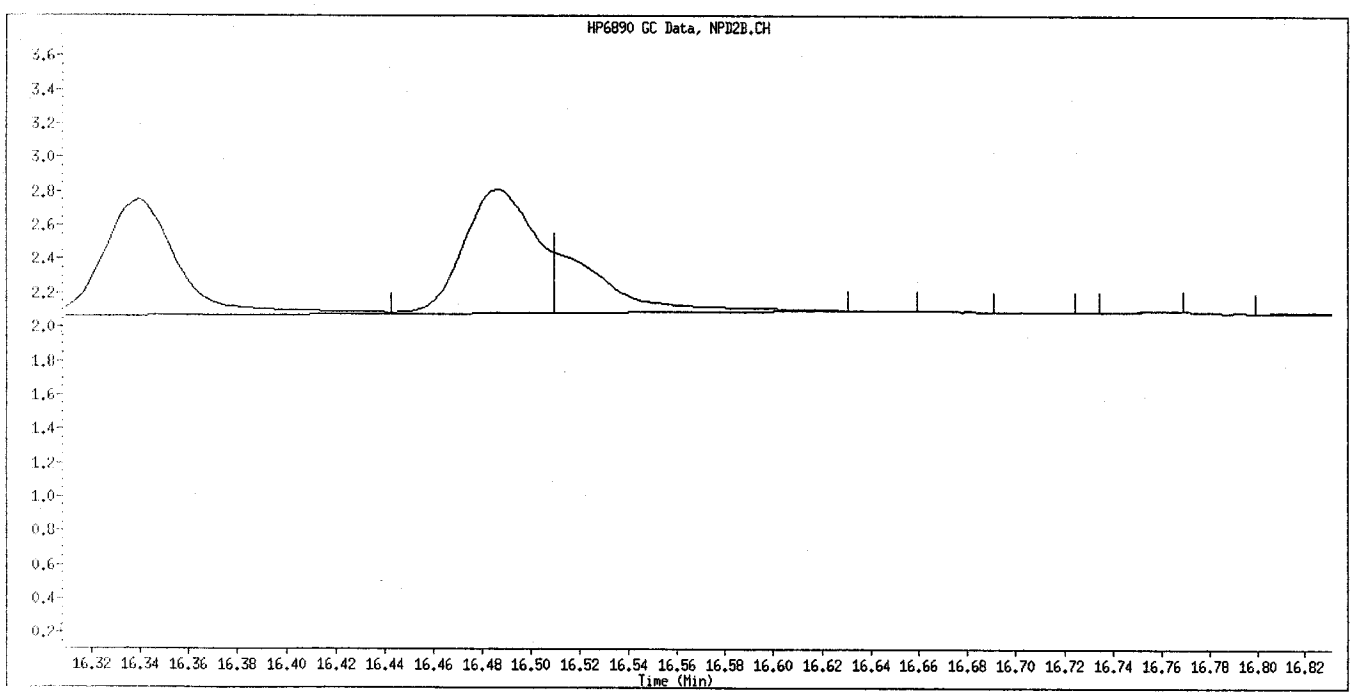
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

7/9/09

Data File Name: 021F2101.D
Inj. Date and Time: 08-JUL-2009 04:54
Instrument ID: GC_D2.i
Client ID: OPP CCV GSV0827
Compound Name: Merphos-B (Merphos Oxone)
CAS #:
Report Date: 07/08/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

7/9/09

GC SEMIVOLATILE SAMPLE DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\016F1601.D
Lab Smp Id: LF0FF1AA Client Smp ID: BLANK
Inj Date : 08-JUL-2009 02:37
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LF0FF1AA,MB
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Meth Date : 08-Jul-2009 18:19 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 16 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	5.830	5.836	(0.327)	72644	0.54596	1.092
5	Thionazin	Compound Not Detected.					
6	Demeton-O	Compound Not Detected.					
7	Ethoprop	Compound Not Detected.					
8	Naled	8.070	8.057	(0.453)	62	0.19480	0.3896 NOT a peak
* 9	Tributylphosphate	8.147	8.187	(1.000)	181613	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	12.053	12.067	(0.676)	159	0.00162	0.003236(a)
	25	Trichloronate	Compound Not Detected.					
	26	Anilazine	Compound Not Detected.					
	27	Merphos-A (Merphos)	13.187	13.199	(0.740)	256	0.00349	0.006988
	28	Tetrachlorvinphos (Stirophos)	13.847	13.824	(0.777)	172	0.00353	0.007064
	29	Tokuthion	Compound Not Detected.					
	30	Merphos-B (Merphos Oxone)	14.613	14.651	(0.820)	138	0.02785	0.05570
	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	16.700	16.712	(0.937)	51208	0.83396	1.668
	36	Phosmet	Compound Not Detected.					
	37	EPN	Compound Not Detected.					
	38	Azinphos-methyl	Compound Not Detected.					
*	39	TOCP	17.832	17.846	(1.000)	121451	2.00000	
	40	Azinphos-ethyl	Compound Not Detected.					
	41	Coumaphos	Compound Not Detected.					
S	42	Merphos				394	0.00426	0.008515
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: 016F1601.D
Lab Smp Id: LF0FF1AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: BLANK
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	186566	93283	373132	181613	-2.65
39 TOCP	95733	47867	191466	121451	26.86

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.14	7.64	8.64	8.15	0.08
39 TOCP	17.83	17.33	18.33	17.83	-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: D9G010000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LF0FF1AA 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\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

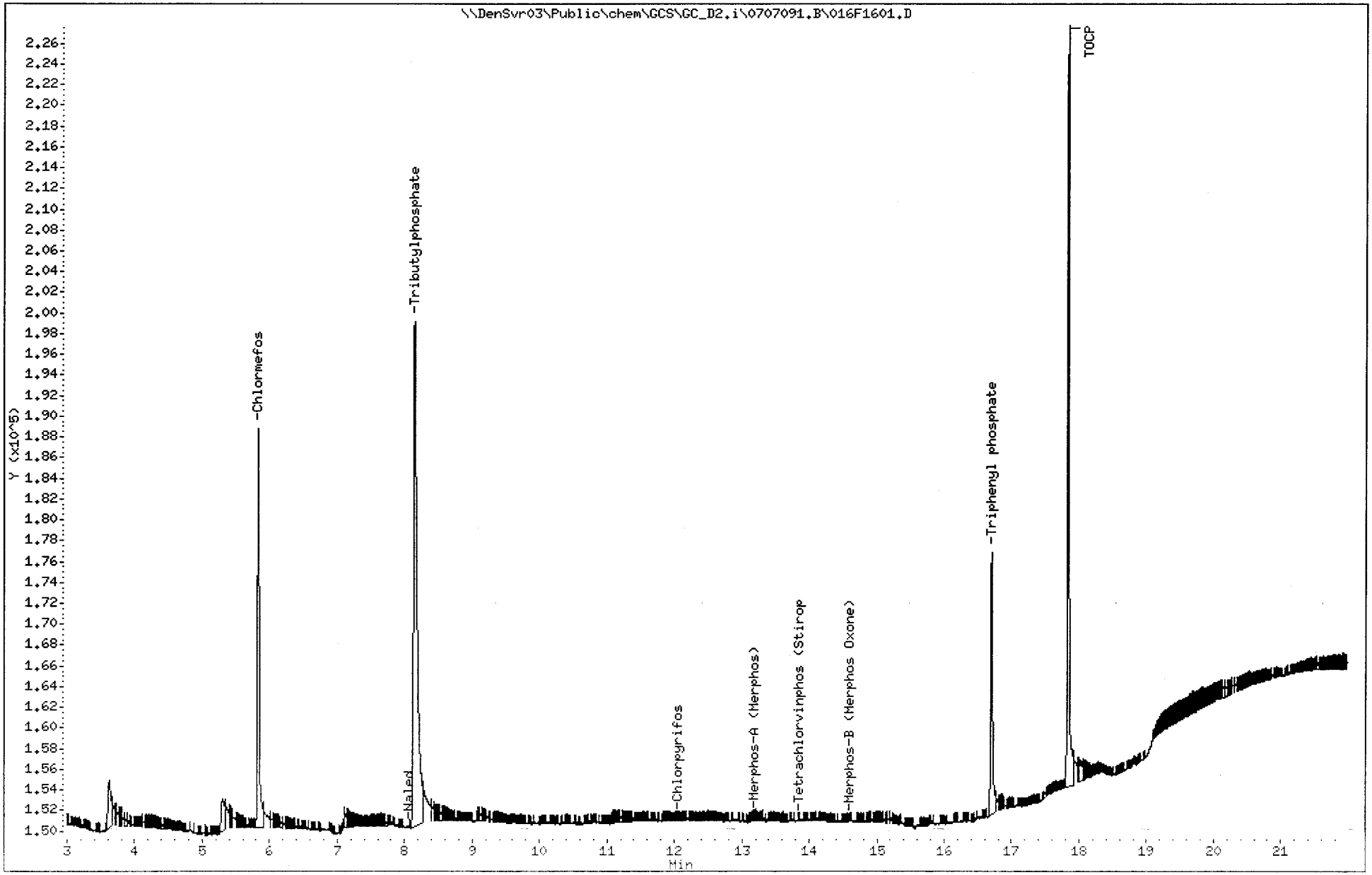
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	2.000	1.092	54.60	48-114
$ 35 Triphenyl phosphat	2.000	1.668	83.40	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\016F1601.D
Date : 08-JUL-2009 02:37
Client ID: BLANK
Sample Info: LF0FF1AA,MB

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\0707092.B\016F1601.D
Lab Smp Id: LF0FF1AA Client Smp ID: BLANK
Inj Date : 08-JUL-2009 02:37
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LF0FF1AA,MB
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Meth Date : 08-Jul-2009 18:30 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 16 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	7.382	7.384	(0.392)	69921	0.67174	1.343
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	10.952	10.939	(0.582)	52	0.27080	0.5416
10	Sulfotepp	11.020	11.017	(0.586)	116	9e-004	0.001704(aA)
* 11	Tributylphosphate	11.127	11.116	(1.000)	167250	2.00000	
12	Simazine	11.425	11.399	(0.607)	70	0.00359	0.007181(aA)
13	Diazinon	Compound Not Detected.					
14	Atrazine	11.572	11.584	(0.615)	58	0.23377	0.4675(aA)
15	Propazine	Compound Not Detected.					
16	Disulfoton	Compound Not Detected.					
17	Demeton-S	12.112	12.124	(0.644)	81	0.11998	0.2400
18	Dimethoate	Compound Not Detected.					
19	Ronnel	Compound Not Detected.					
20	Merphos-A (Merphos)	13.722	13.689	(1.233)	50	8e-004	0.001650(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	14.697	14.711	(0.781)	90	0.10627	0.2125
	24 Anilazine	Compound Not Detected.					
	25 Methyl Parathion	Compound Not Detected.					
	26 Malathion	15.732	15.724	(0.836)	79	0.00128	0.002564(a)
	27 Tokuthion	Compound Not Detected.					
	28 Parathion	16.494	16.494	(0.877)	53	8e-004	0.001636(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	18.274	18.281	(0.972)	43273	0.84722	1.694
	35 Fensulfothion	Compound Not Detected.					
*	36 TOCP	18.809	18.816	(1.000)	102379	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				81	0.11998	0.2400

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: 016F1601.D
Lab Smp Id: LF0FF1AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Misc Info:

Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: BLANK
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
11 Tributylphosphate	150069	75035	300138	167250	11.45
36 TOCP	87450	43725	174900	102379	17.07

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.13	10.63	11.63	11.13	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: Client SDG: D9G010000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LF0FF1AA 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\0707092.B\8141A-2.m
Misc Info:

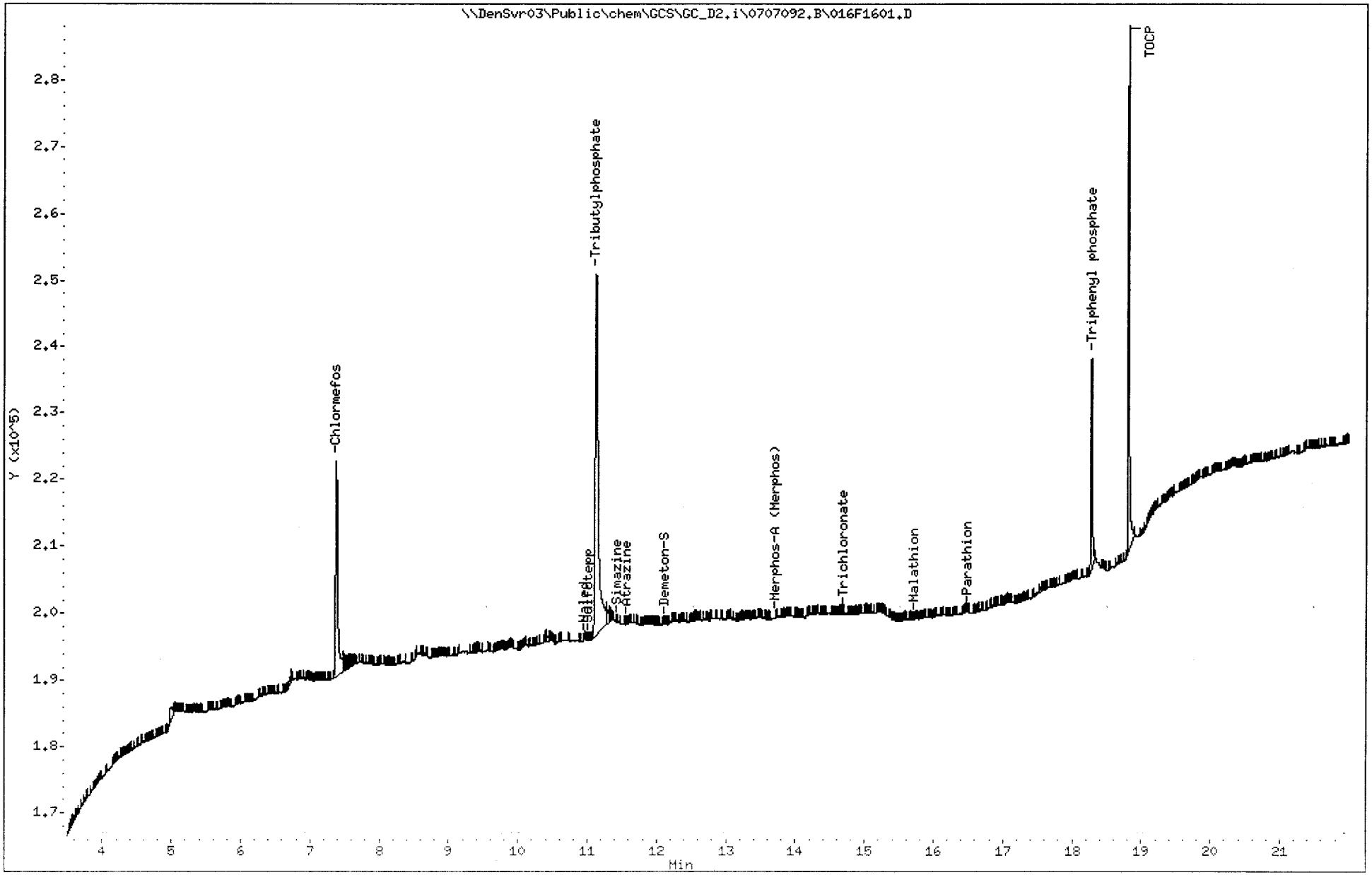
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	2.000	1.343	67.17	48-114
$ 34 Triphenyl phosphat	2.000	1.694	84.72	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\016F1601.D
Date : 08-JUL-2009 02:37
Client ID: BLANK
Sample Info: LF0FF1AA,MB

Instrument: GC_D2.i

Operator: MPK/TLW
Column diameter: 0.32

Column phase: RTx-OPPest



TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\017F1701.D
Lab Smp Id: LF0FF1AC Client Smp ID: LCS
Inj Date : 08-JUL-2009 03:05
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LF0FF1AC,LCS
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Meth Date : 08-Jul-2009 18:19 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 17 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	3.257	3.254	(0.183)	231452	1.46813	2.936
	2 Dichlorvos	4.077	4.074	(0.229)	178002	1.81826	3.636
	3 Mevinphos	5.747	5.739	(0.322)	72484	1.34788	2.696
$	4 Chlormefos	5.830	5.836	(0.327)	98929	0.80698	1.614
	5 Thionazin	7.502	7.507	(0.421)	170669	1.52549	3.051
	6 Demeton-O	7.642	7.649	(0.429)	133384	1.25714	2.514
	7 Ethoprop	7.847	7.852	(0.440)	164364	1.67648	3.353
	8 Naled	8.055	8.057	(0.452)	49086	2.04444	4.089
*	9 Tributylphosphate	8.138	8.187	(1.000)	203815	2.00000	
	10 Sulfotepp	8.432	8.442	(0.473)	203720	1.42492	2.850
	11 Phorate	8.523	8.532	(0.478)	126518	1.24607	2.492
	12 Dimethoate	8.655	8.652	(0.485)	160594	1.36157	2.723
	13 Demeton-S	8.857	8.846	(0.497)	9042	0.10572	0.2114
	14 Simazine	8.913	8.924	(0.500)	59775	1.54050	3.081
	15 Atrazine	9.083	9.094	(0.509)	67491	1.47572	2.951
	16 propazine	9.230	9.241	(0.518)	60236	1.42744	2.855
	17 Disulfoton	9.857	9.869	(0.553)	104369	1.50419	3.008
	18 Diazinon	9.893	9.902	(0.555)	152648	1.39958	2.799
	19 Methyl Parathion	10.705	10.717	(0.600)	117958	1.70535	3.411
	20 Ronnel	11.228	11.241	(0.630)	102521	1.43386	2.868
	21 Malathion	11.792	11.804	(0.661)	88680	1.34375	2.688
	22 Fenthion	11.918	11.932	(0.668)	102640	1.45977	2.920

		Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23	Parathion	12.005	12.019	(0.673)	115805	1.54756	3.095
	24	Chlorpyrifos	12.057	12.067	(0.676)	138935	1.53460	3.069
	25	Trichloronate	12.480	12.496	(0.700)	113121	1.39802	2.796
	26	Anilazine	12.802	12.817	(0.718)	13670	2.02291	4.046
	27	Merphos-A (Merphos)	13.190	13.199	(0.740)	278	0.00412	0.008236
	28	Tetrachlorvinphos (Stirophos)	13.807	13.824	(0.774)	70667	1.57500	3.150
	29	Tokuthion	14.430	14.449	(0.809)	116800	1.50581	3.012
	30	Merphos-B (Merphos Oxone)	14.633	14.651	(0.821)	118340	6.50237	13.00(A)
	31	Carbophenothion-methyl	15.218	15.239	(0.853)	90608	1.49303	2.986
	32	Fensulfothion	15.353	15.361	(0.861)	77609	1.26268	2.525
	33	Bolstar / Famphur	16.038	16.053	(0.899)	231978	3.12615	6.252
	34	Carbophenothion	16.180	16.197	(0.907)	112573	1.51217	3.024
$	35	Triphenyl phosphate	16.697	16.712	(0.936)	41516	0.73385	1.468
	36	Phosmet	16.950	16.963	(0.951)	103758	1.62835	3.257
	37	EPN	17.137	17.151	(0.961)	98975	1.63643	3.273
	38	Azinphos-methyl	17.467	17.480	(0.980)	100105	1.47432	2.949
*	39	TOCP	17.832	17.846	(1.000)	111897	2.00000	
	40	Azinphos-ethyl	17.912	17.926	(1.004)	113501	1.45692	2.914
	41	Coumaphos	18.352	18.366	(1.029)	85342	1.55834	3.117
S	42	Merphos				118618	1.39122	2.782
M	43	Total Demeton				142426	1.36286	2.726

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: 017F1701.D
Lab Smp Id: LF0FF1AC
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: LCS
Level: LOW
Sample Type: WATER
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	186566	93283	373132	203815	9.25
39 TOCP	95733	47867	191466	111897	16.88

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.14	7.64	8.64	8.14	-0.02
39 TOCP	17.83	17.33	18.33	17.83	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: D9G010000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LF0FF1AC 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\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

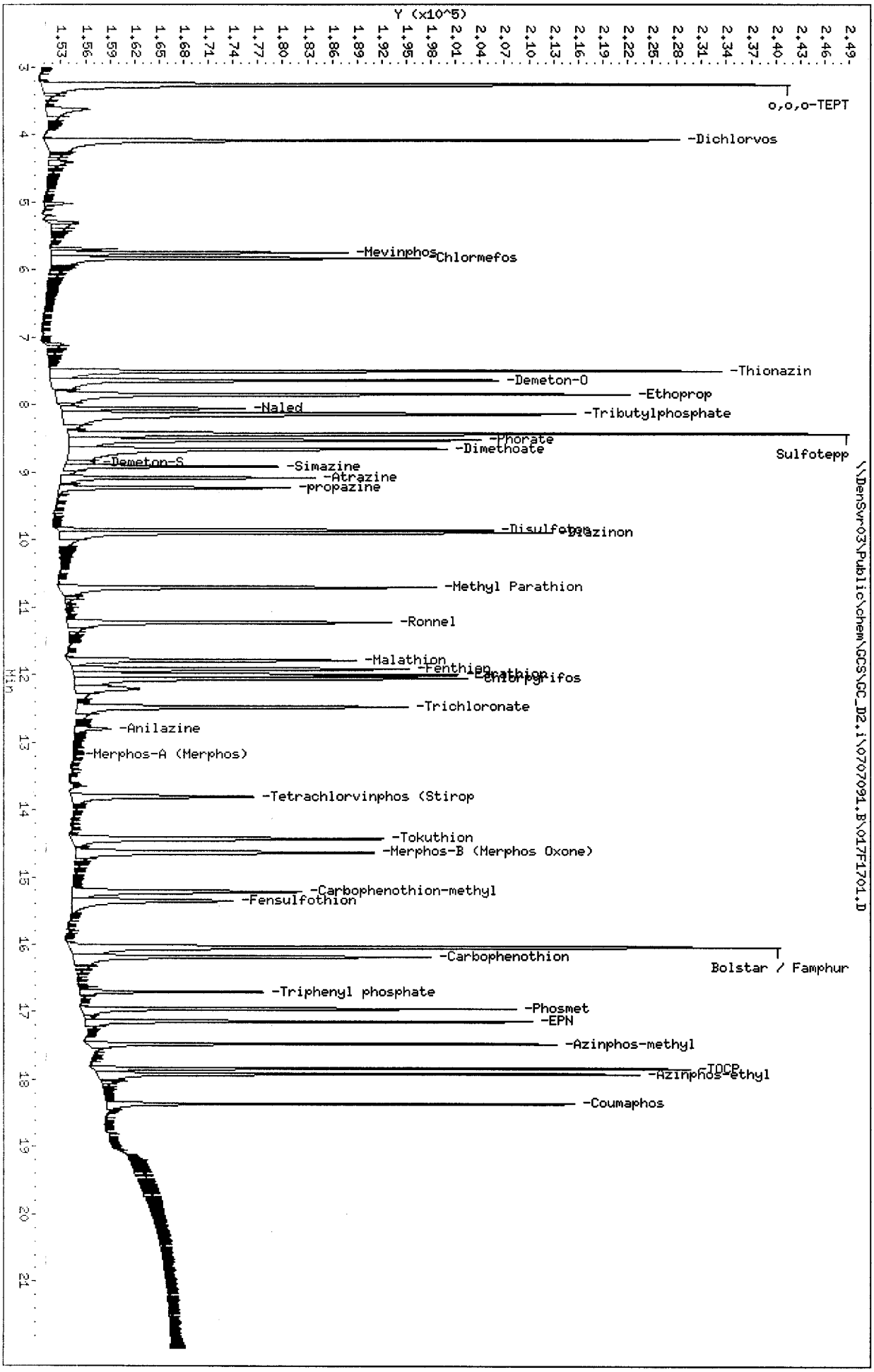
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	4.000	2.936	73.41	36-119
	2	Dichlorvos	4.000	3.636	90.91	50-120
	3	Mevinphos	4.000	2.696	67.39	35-108
$	4	Chlormefos	2.000	1.614	80.70	48-114
	5	Thionazin	4.000	3.051	76.27	65-116
	7	Ethoprop	4.000	3.353	83.82	65-108
	8	Naled	4.000	4.089	102.22	36-119
	10	Sulfotepp	4.000	2.850	71.25	69-103
	11	Phorate	4.000	2.492	62.30	62-104
	12	Dimethoate	4.000	2.723	68.08	28-115
	14	Simazine	4.000	3.081	77.03	47-109
	15	Atrazine	4.000	2.951	73.79	36-119
	16	propazine	4.000	2.855	71.37	36-119
	17	Disulfoton	4.000	3.008	75.21	36-119
	18	Diazinon	4.000	2.799	69.98	36-119
	19	Methyl Parathion	4.000	3.411	85.27	68-119
	20	Ronnel	4.000	2.868	71.69	62-115
	21	Malathion	4.000	2.688	67.19	67-115
	22	Fenthion	4.000	2.920	72.99	36-119
	23	Parathion	4.000	3.095	77.38	36-119
	24	Chlorpyrifos	4.000	3.069	76.73	36-119
	25	Trichloronate	4.000	2.796	69.90	36-119
	26	Anilazine	4.000	4.046	101.15	47-115
	28	Tetrachlorvinphos	4.000	3.150	78.75	36-119
	29	Tokuthion	4.000	3.012	75.29	36-119
	31	Carbophenothion-me	4.000	2.986	74.65	36-119
	32	Fensulfothion	4.000	2.525	63.13	61-115
	33	Bolstar / Famphur	8.000	6.252	78.15	36-119
	34	Carbophenothion	4.000	3.024	75.61	36-119
$	35	Triphenyl phosphat	2.000	1.468	73.38	50-150
	36	Phosmet	4.000	3.257	81.42	36-119
	37	EPN	4.000	3.273	81.82	36-119
	38	Azinphos-methyl	4.000	2.949	73.72	55-115
	40	Azinphos-ethyl	4.000	2.914	72.85	36-119
	41	Coumaphos	4.000	3.117	77.92	62-115
S	42	Merphos	4.000	2.782	69.56	36-119
M	43	Total Demeton	4.000	2.726	68.14	47-115

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9G010000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LF0FF1AC 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\0707091.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	1.614	80.70	48-114
$ 35 Triphenyl phosphat	2.000	1.468	73.38	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\070701.B\017F1701.D
Date : 08-JUL-2009 03:05
Client ID: LCS
Sample Info: LF0FF1AC,LCS
Column phase: RTx-1MS

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

\\DenSvr03\Public\chem\GCS\GC_D2.i\070701.B\017F1701.D

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\017F1701.D
Lab Smp Id: LF0FF1AC Client Smp ID: LCS
Inj Date : 08-JUL-2009 03:05
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LF0FF1AC,LCS
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Meth Date : 08-Jul-2009 18:30 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 17 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	4.730	4.731	(0.252)	191127	1.47758	2.955
	2 Dichlorvos	6.549	6.546	(0.348)	153823	1.52296	3.046
$	3 Chlormefos	7.384	7.384	(0.393)	65111	0.64038	1.281
	4 Mevinphos	9.235	9.234	(0.491)	95787	1.40786	2.816
	5 Demeton-O	9.732	9.734	(0.517)	98216	1.51492	3.030
	6 Thionazin	9.982	9.984	(0.531)	142023	1.39588	2.792
	7 Ethoprop	10.497	10.499	(0.558)	115906	1.52456	3.049
	8 Phorate	10.534	10.539	(0.560)	96420	1.09367	2.187
	9 Naled	10.939	10.939	(0.582)	38523	1.83845	3.677
	10 Sulfotepp	11.014	11.017	(0.586)	178391	1.34161	2.683(A)
*	11 Tributylphosphate	11.124	11.116	(1.000)	161791	2.00000	
	12 Simazine	11.397	11.399	(0.606)	36471	1.91507	3.830(A)
	13 Diazinon	11.537	11.541	(0.613)	101474	1.43405	2.868
	14 Atrazine	11.579	11.584	(0.616)	49338	1.41558	2.831(A)
	15 Propazine	11.744	11.747	(0.624)	42694	1.31293	2.626
	16 Disulfoton	12.044	12.049	(0.640)	116106	1.65575	3.311
	17 Demeton-S	12.130	12.124	(0.645)	7550	0.20448	0.4090(R)
	18 Dimethoate	13.277	13.282	(0.706)	115995	1.23422	2.468
	19 Ronnel	13.582	13.587	(0.722)	97648	1.54361	3.087
	20 Merphos-A (Merphos)	13.697	13.689	(1.231)	547	0.00933	0.01866(aA)
	21 Chlorpyrifos	14.402	14.409	(0.766)	97905	1.52589	3.052
	22 Fenthion	14.652	14.662	(0.779)	83700	1.40646	2.813

		Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23	Trichloronate	14.702	14.711	(0.782)	110326	1.37431	2.749
	24	Anilazine	15.209	15.216	(0.809)	12155	2.21297	4.426
	25	Methyl Parathion	15.512	15.519	(0.825)	105144	1.63654	3.273
	26	Malathion	15.717	15.724	(0.836)	74929	1.24493	2.490
	27	Tokuthion	16.337	16.344	(0.869)	102418	1.45335	2.907
	28	Parathion	16.487	16.494	(0.877)	88660	1.40045	2.801
	29	Merphos-B (Merphos Oxone)	16.514	16.517	(1.485)	134699	7.58440	15.17(A)
	30	Tetrachlorvinphos (stirophos)	16.970	16.977	(0.902)	65050	1.58841	3.177
	31	Carbophenothion methyl	17.074	17.082	(0.908)	80242	1.36701	2.734
	32	Bolstar	17.434	17.440	(0.927)	98914	1.59975	3.200
	33	Carbophenothion	17.515	17.524	(0.931)	90326	1.48563	2.971(A)
$	34	Triphenyl phosphate	18.274	18.281	(0.972)	41541	0.83262	1.665
	35	Fensulfothion	18.552	18.559	(0.986)	58972	1.28732	2.575
*	36	TOCP	18.809	18.816	(1.000)	100005	2.00000	
	37	Phosmet / EPN	18.900	18.909	(1.005)	165681	3.21115	6.422
	38	Famphur	19.002	19.011	(1.010)	93661	1.42793	2.856
	39	Azinphos-methyl	19.139	19.147	(1.018)	85832	1.43047	2.861
	40	Azinphos-ethyl	19.357	19.366	(1.029)	76652	1.34133	2.683
	41	Coumaphos	20.335	20.347	(1.081)	71243	1.62145	3.243
S	42	Merphos				135246	1.62273	3.245
M	43	Total Demeton				105766	1.71941	3.439

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: 017F1701.D
Lab Smp Id: LF0FF1AC
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Misc Info:

Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: LCS
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	150069	75035	300138	161791	7.81
36 TOCP	87450	43725	174900	100005	14.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.13	10.63	11.63	11.12	-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: Client SDG: D9G010000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LF0FF1AC 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\0707092.B\8141A-2.m
Misc Info:

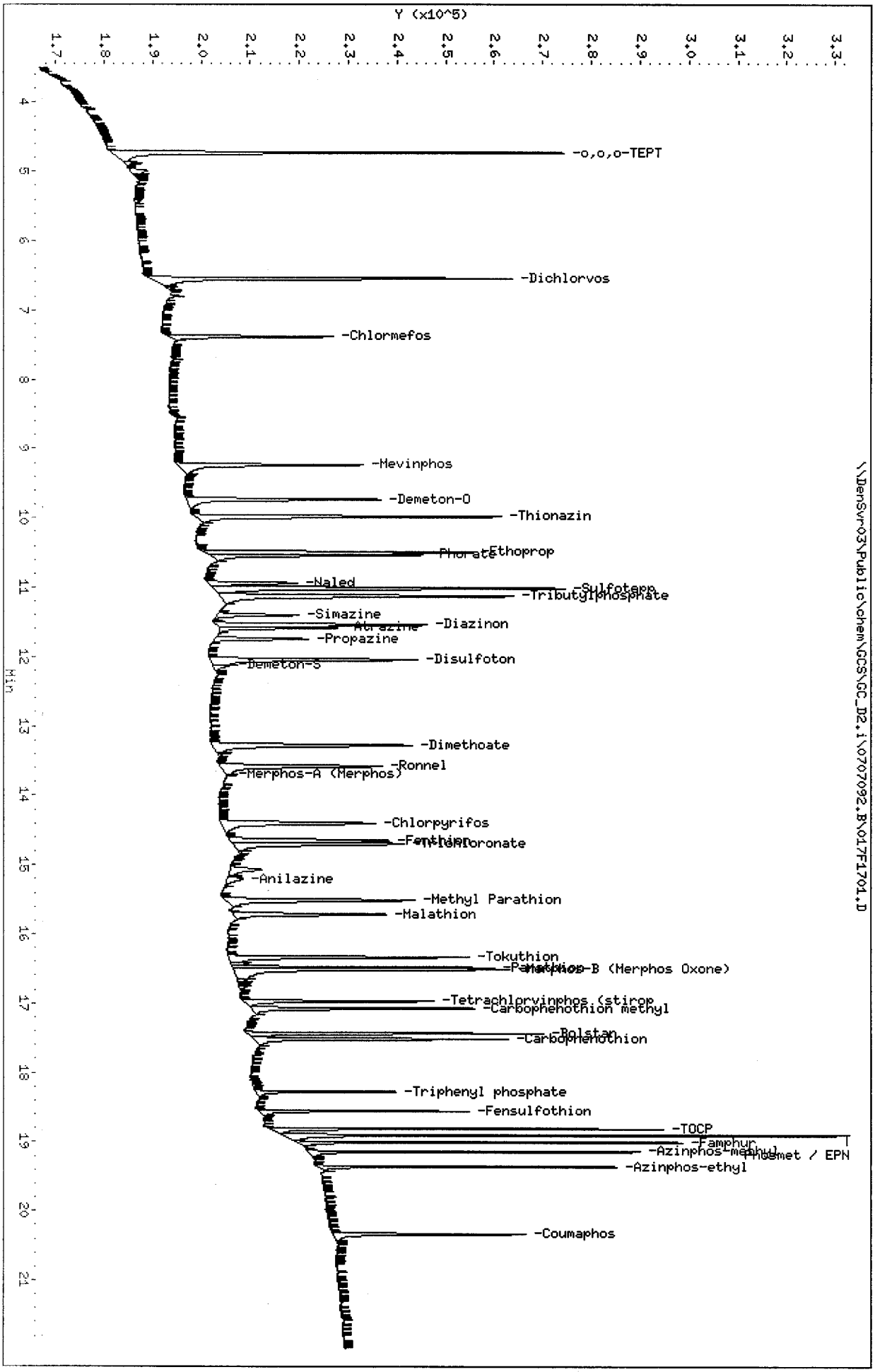
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	4.000	2.955	73.88	36-119
	2	Dichlorvos	4.000	3.046	76.15	50-120
$	3	Chlormefos	2.000	1.281	64.04	58-114
	4	Mevinphos	4.000	2.816	70.39	35-108
	5	Demeton-O	2.800	3.030	108.21	36-119
	6	Thionazin	4.000	2.792	69.79	65-116
	7	Ethoprop	4.000	3.049	76.23	36-119
	8	Phorate	4.000	2.187	54.68	36-119
	9	Naled	4.000	3.677	91.92	36-119
	10	Sulfotepp	4.000	2.683	67.08	36-119
	12	Simazine	4.000	3.830	95.75	36-119
	13	Diazinon	4.000	2.868	71.70	36-119
	14	Atrazine	4.000	2.831	70.78	36-119
	15	Propazine	4.000	2.626	65.65	36-119
	16	Disulfoton	4.000	3.311	82.79	61-103
	17	Demeton-S	1.200	0.4090	34.08*	36-119
	18	Dimethoate	4.000	2.468	61.71	28-82
	19	Ronnel	4.000	3.087	77.18	62-99
	21	Chlorpyrifos	4.000	3.052	76.29	66-101
	22	Fenthion	4.000	2.813	70.32	36-119
	23	Trichloronate	4.000	2.749	68.72	36-119
	24	Anilazine	4.000	4.426	110.65	36-119
	25	Methyl Parathion	4.000	3.273	81.83	36-119
	26	Malathion	4.000	2.490	62.25	36-119
	27	Tokuthion	4.000	2.907	72.67	36-119
	28	Parathion	4.000	2.801	70.02	36-119
	30	Tetrachlorvinphos	4.000	3.177	79.42	36-119
	31	Carbophenothion me	4.000	2.734	68.35	36-119
	32	Bolstar	4.000	3.200	79.99	36-119
	33	Carbophenothion	4.000	2.971	74.28	36-119
$	34	Triphenyl phosphat	2.000	1.665	83.26	36-119
	35	Fensulfothion	4.000	2.575	64.37	20-105
	37	Phosmet / EPN	8.000	6.422	80.28	36-119
	38	Famphur	4.000	2.856	71.40	61-108
	39	Azinphos-methyl	4.000	2.861	71.52	55-103
	40	Azinphos-ethyl	4.000	2.683	67.07	36-119
	41	Coumaphos	4.000	3.243	81.07	36-119
S	42	Merphos	4.000	3.245	81.14	36-119
M	43	Total Demeton	4.000	3.439	85.97	47-100

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9G010000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LF0FF1AC 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\0707092.B\8141A-2.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	2.000	1.281	64.04	48-114
$ 34 Triphenyl phosphat	2.000	1.665	83.26	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\017F1701.D
Date : 08-JUL-2009 03:05
Client ID: LCS
Sample Info: LF0FF1AC.LCS
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\0707091.B\018F1801.D
Lab Smp Id: LF0FF1AD Client Smp ID: LCSD
Inj Date : 08-JUL-2009 03:32
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LF0FF1AD,LCSD
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Meth Date : 08-Jul-2009 18:19 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 18 QC Sample: LCSD
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	3.256	3.254	(0.183)	304217	2.20888	4.418
	2 Dichlorvos	4.076	4.074	(0.229)	217362	2.54155	5.083(R)
	3 Mevinphos	5.745	5.739	(0.322)	88274	1.87899	3.758
$	4 Chlormefos	5.830	5.836	(0.327)	122729	1.14597	2.292(RR)
	5 Thionazin	7.501	7.507	(0.421)	184343	1.88610	3.772
	6 Demeton-O	7.641	7.649	(0.429)	141177	1.52855	3.057
	7 Ethoprop	7.846	7.852	(0.440)	175158	2.04505	4.090
	8 Naled	8.053	8.057	(0.452)	51595	2.42070	4.841(R)
*	9 Tributylphosphate	8.138	8.187	(1.000)	188780	2.00000	
	10 Sulfotepp	8.431	8.442	(0.473)	212516	1.71497	3.430
	11 Phorate	8.523	8.532	(0.478)	126568	1.42692	2.854
	12 Dimethoate	8.653	8.652	(0.485)	166498	1.61586	3.232
	13 Demeton-S	8.858	8.846	(0.497)	8677	0.11613	0.2323
	14 Simazine	8.913	8.924	(0.500)	62958	1.84088	3.682
	15 Atrazine	9.083	9.094	(0.509)	70797	1.77197	3.544
	16 propazine	9.230	9.241	(0.518)	63555	1.72399	3.448
	17 Disulfoton	9.856	9.869	(0.553)	109489	1.81403	3.628
	18 Diazinon	9.893	9.902	(0.555)	162810	1.70872	3.417
	19 Methyl Parathion	10.705	10.717	(0.600)	114928	1.90194	3.804
	20 Ronnel	11.228	11.241	(0.630)	109098	1.74661	3.493
	21 Malathion	11.790	11.804	(0.661)	92536	1.61309	3.226
	22 Fenthion	11.918	11.932	(0.668)	105998	1.72563	3.451

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	12.005	12.019	(0.673)	117191	1.79266	3.585
	24 Chlorpyrifos	12.056	12.067	(0.676)	138877	1.75589	3.512
	25 Trichloronate	12.480	12.496	(0.700)	118920	1.68232	3.365
	26 Anilazine	12.803	12.817	(0.718)	10844	1.86235	3.725
	27 Merphos-A (Merphos)	13.193	13.199	(0.740)	158	0.00268	0.005358
	28 Tetrachlorvinphos (Stirophos)	13.806	13.824	(0.774)	71330	1.81978	3.640
	29 Tokuthion	14.431	14.449	(0.809)	116911	1.72530	3.451
	30 Merphos-B (Merphos Oxone)	14.633	14.651	(0.821)	122297	7.68819	15.38(A)
	31 Carbophenothion-methyl	15.218	15.239	(0.853)	90222	1.71113	3.422
	32 Fensulfothion	15.350	15.361	(0.861)	85728	1.57156	3.143
	33 Bolstar / Famphur	16.038	16.053	(0.899)	222836	3.43742	6.875
	34 Carbophenothion	16.181	16.197	(0.907)	97134	1.49355	2.987
$	35 Triphenyl phosphate	16.698	16.712	(0.936)	41208	0.83379	1.668
	36 Phosmet	16.950	16.963	(0.951)	103123	1.85253	3.705
	37 EPN	17.136	17.151	(0.961)	98682	1.86070	3.721
	38 Azinphos-methyl	17.466	17.480	(0.980)	102570	1.72918	3.458
*	39 TOCP	17.831	17.846	(1.000)	97754	2.00000	
	40 Azinphos-ethyl	17.911	17.926	(1.004)	109133	1.61844	3.237
	41 Coumaphos	18.353	18.366	(1.029)	83022	1.73531	3.471
S	42 Merphos				122455	1.64401	3.288
M	43 Total Demeton				149854	1.64468	3.289

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: 018F1801.D
Lab Smp Id: LF0FF1AD
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: LCSD
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	186566	93283	373132	188780	1.19
39 TOCP	95733	47867	191466	97754	2.11

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.14	7.64	8.64	8.14	-0.02
39 TOCP	17.83	17.33	18.33	17.83	-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: D9G010000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LF0FF1AD Client Smp ID: LCSD
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: LCSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

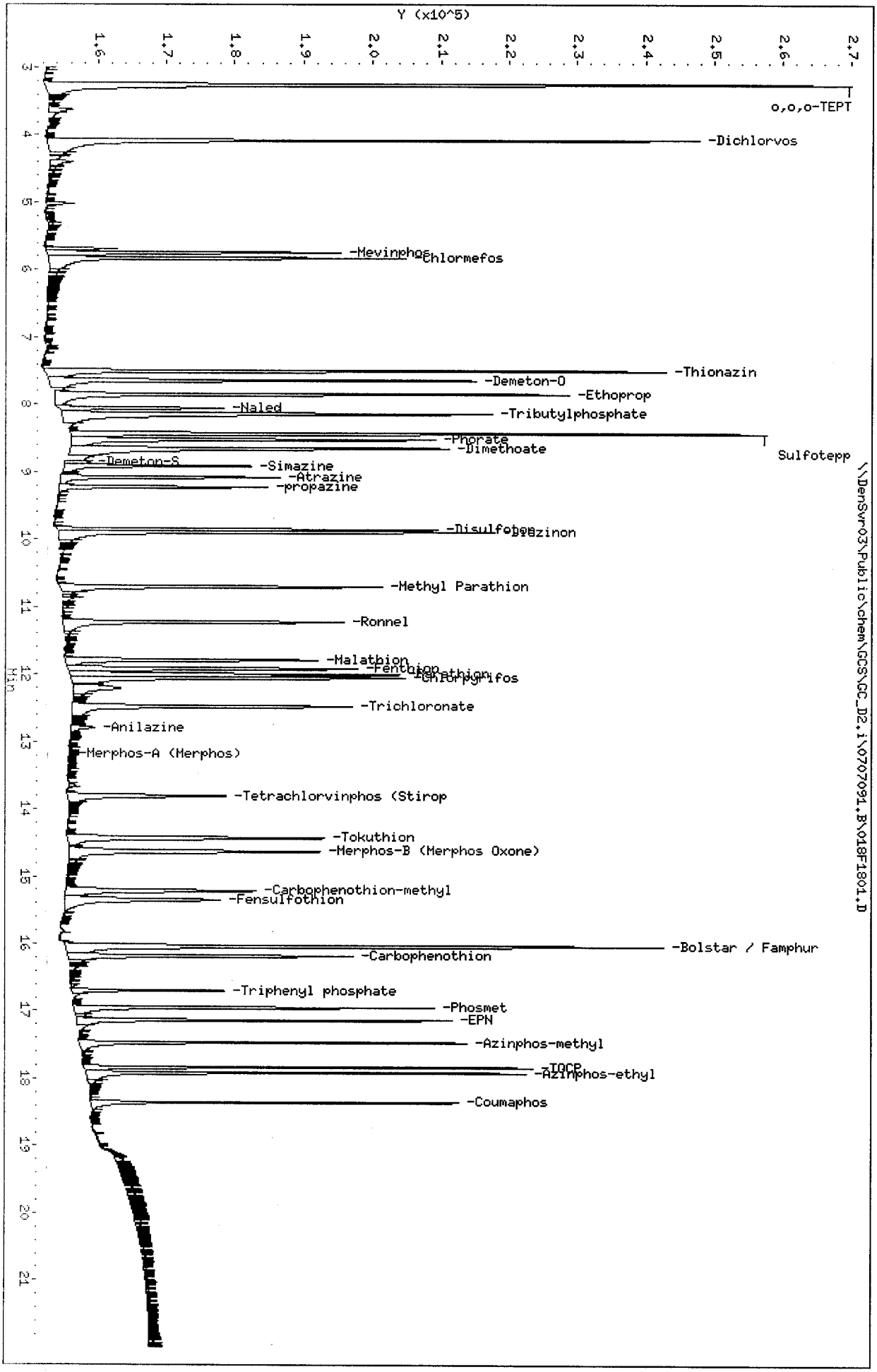
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	4.000	4.418	110.44	36-119
	2	Dichlorvos	4.000	5.083	127.08*	50-120
	3	Mevinphos	4.000	3.758	93.95	35-108
$	4	Chlormefos	2.000	2.292	114.60*	48-114
	5	Thionazin	4.000	3.772	94.31	65-116
	7	Ethoprop	4.000	4.090	102.25	65-108
	8	Naled	4.000	4.841	121.04*	36-119
	10	Sulfotepp	4.000	3.430	85.75	69-103
	11	Phorate	4.000	2.854	71.35	62-104
	12	Dimethoate	4.000	3.232	80.79	28-115
	14	Simazine	4.000	3.682	92.04	47-109
	15	Atrazine	4.000	3.544	88.60	36-119
	16	propazine	4.000	3.448	86.20	36-119
	17	Disulfoton	4.000	3.628	90.70	36-119
	18	Diazinon	4.000	3.417	85.44	36-119
	19	Methyl Parathion	4.000	3.804	95.10	68-119
	20	Ronnel	4.000	3.493	87.33	62-115
	21	Malathion	4.000	3.226	80.65	67-115
	22	Fenthion	4.000	3.451	86.28	36-119
	23	Parathion	4.000	3.585	89.63	36-119
	24	Chlorpyrifos	4.000	3.512	87.79	36-119
	25	Trichloronate	4.000	3.365	84.12	36-119
	26	Anilazine	4.000	3.725	93.12	47-115
	28	Tetrachlorvinphos	4.000	3.640	90.99	36-119
	29	Tokuthion	4.000	3.451	86.27	36-119
	31	Carbophenothion-me	4.000	3.422	85.56	36-119
	32	Fensulfothion	4.000	3.143	78.58	61-115
	33	Bolstar / Famphur	8.000	6.875	85.94	36-119
	34	Carbophenothion	4.000	2.987	74.68	36-119
$	35	Triphenyl phosphat	2.000	1.668	83.38	50-150
	36	Phosmet	4.000	3.705	92.63	36-119
	37	EPN	4.000	3.721	93.03	36-119
	38	Azinphos-methyl	4.000	3.458	86.46	55-115
	40	Azinphos-ethyl	4.000	3.237	80.92	36-119
	41	Coumaphos	4.000	3.471	86.77	62-115
S	42	Merphos	4.000	3.288	82.20	36-119
M	43	Total Demeton	4.000	3.289	82.23	47-115

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9G010000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LF0FF1AD Client Smp ID: LCSD
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: LCSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.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	2.292	114.60*	48-114
$ 35 Triphenyl phosphat	2.000	1.668	83.38	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\0707091,B\018F1801.D
Date : 08-JUL-2009 03:32
Client ID: LCSD
Sample Info: LF0FF1AD,LCSD
Column phase: RTx-1MS

\\DenSvr03\Public\chem\GCS\GC_D2,i\0707091,B\018F1801.D

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

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\018F1801.D
Lab Smp Id: LF0FF1AD Client Smp ID: LCSD
Inj Date : 08-JUL-2009 03:32
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LF0FF1AD,LCSD
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Meth Date : 08-Jul-2009 18:30 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 18 QC Sample: LCSD
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	4.730	4.731	(0.252)	223303	1.95783	3.916
2	Dichlorvos	6.548	6.546	(0.348)	184806	2.07508	4.150
$ 3	Chlormefos	7.383	7.384	(0.393)	83339	0.92957	1.859
4	Mevinphos	9.235	9.234	(0.491)	106418	1.77387	3.548
5	Demeton-O	9.732	9.734	(0.517)	106629	1.86524	3.730(R)
6	Thionazin	9.983	9.984	(0.531)	152817	1.70338	3.407
7	Ethoprop	10.498	10.499	(0.558)	125884	1.87785	3.756
8	Phorate	10.533	10.539	(0.560)	107656	1.38487	2.770
9	Naled	10.938	10.939	(0.582)	41811	2.20090	4.402
10	Sulfotepp	11.013	11.017	(0.586)	195483	1.66730	3.334(A)
* 11	Tributylphosphate	11.125	11.116	(1.000)	167317	2.00000	
12	Simazine	11.398	11.399	(0.606)	38910	2.31713	4.634(A)
13	Diazinon	11.538	11.541	(0.613)	108937	1.73963	3.479
14	Atrazine	11.580	11.584	(0.616)	53442	1.68586	3.372(A)
15	Propazine	11.743	11.747	(0.624)	46376	1.60391	3.208
16	Disulfoton	12.045	12.049	(0.640)	105785	1.71086	3.422
17	Demeton-S	12.125	12.124	(0.645)	880	0.13037	0.2607(R)
18	Dimethoate	13.277	13.282	(0.706)	139536	1.68380	3.368(R)
19	Ronnel	13.582	13.587	(0.722)	105072	1.88371	3.767
20	Merphos-A (Merphos)	13.720	13.689	(1.233)	497	0.00820	0.01639(aA)
21	Chlorpyrifos	14.403	14.409	(0.766)	90993	1.60834	3.217
22	Fenthion	14.653	14.662	(0.779)	86520	1.64881	3.298

		Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23	Trichloronate	14.702	14.711	(0.782)	103996	1.46192	2.924
	24	Anilazine	Compound Not Detected.					
	25	Methyl Parathion	15.512	15.519	(0.825)	114699	2.02467	4.049(A)
	26	Malathion	15.718	15.724	(0.836)	87172	1.64256	3.285
	27	Tokuthion	16.338	16.344	(0.869)	94153	1.51524	3.030
	28	Parathion	16.487	16.494	(0.877)	85566	1.53283	3.066
	29	Merphos-B (Merphos Oxone)	16.515	16.517	(1.484)	101536	5.50027	11.00(A)
	30	Tetrachlorvinphos (stirophos)	16.970	16.977	(0.902)	69399	1.92186	3.844
	31	Carbophenothion methyl	17.075	17.082	(0.908)	87592	1.69234	3.385
	32	Bolstar	17.433	17.440	(0.927)	96782	1.77518	3.550
	33	Carbophenothion	17.517	17.524	(0.931)	93880	1.75115	3.502(A)
$	34	Triphenyl phosphate	18.273	18.281	(0.972)	35850	0.81491	1.630
	35	Fensulfothion	18.552	18.559	(0.986)	65861	1.63050	3.261
*	36	TOCP	18.808	18.816	(1.000)	88180	2.00000	
	37	Phosmet / EPN	18.902	18.909	(1.005)	159957	3.52404	7.048
	38	Famphur	19.003	19.011	(1.010)	89895	1.55430	3.109
	39	Azinphos-methyl	19.138	19.147	(1.018)	84525	1.59760	3.195
	40	Azinphos-ethyl	19.357	19.366	(1.029)	79667	1.58104	3.162
	41	Coumaphos	20.335	20.347	(1.081)	66266	1.71043	3.421
S	42	Merphos				102033	1.38839	2.777
M	43	Total Demeton				107509	1.99562	3.991

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: 018F1801.D
Lab Smp Id: LF0FF1AD
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Misc Info:

Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: LCSD
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	150069	75035	300138	167317	11.49
36 TOCP	87450	43725	174900	88180	0.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.13	10.63	11.63	11.13	-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: D9G010000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LF0FF1AD Client Smp ID: LCSD
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: LCSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Misc Info:

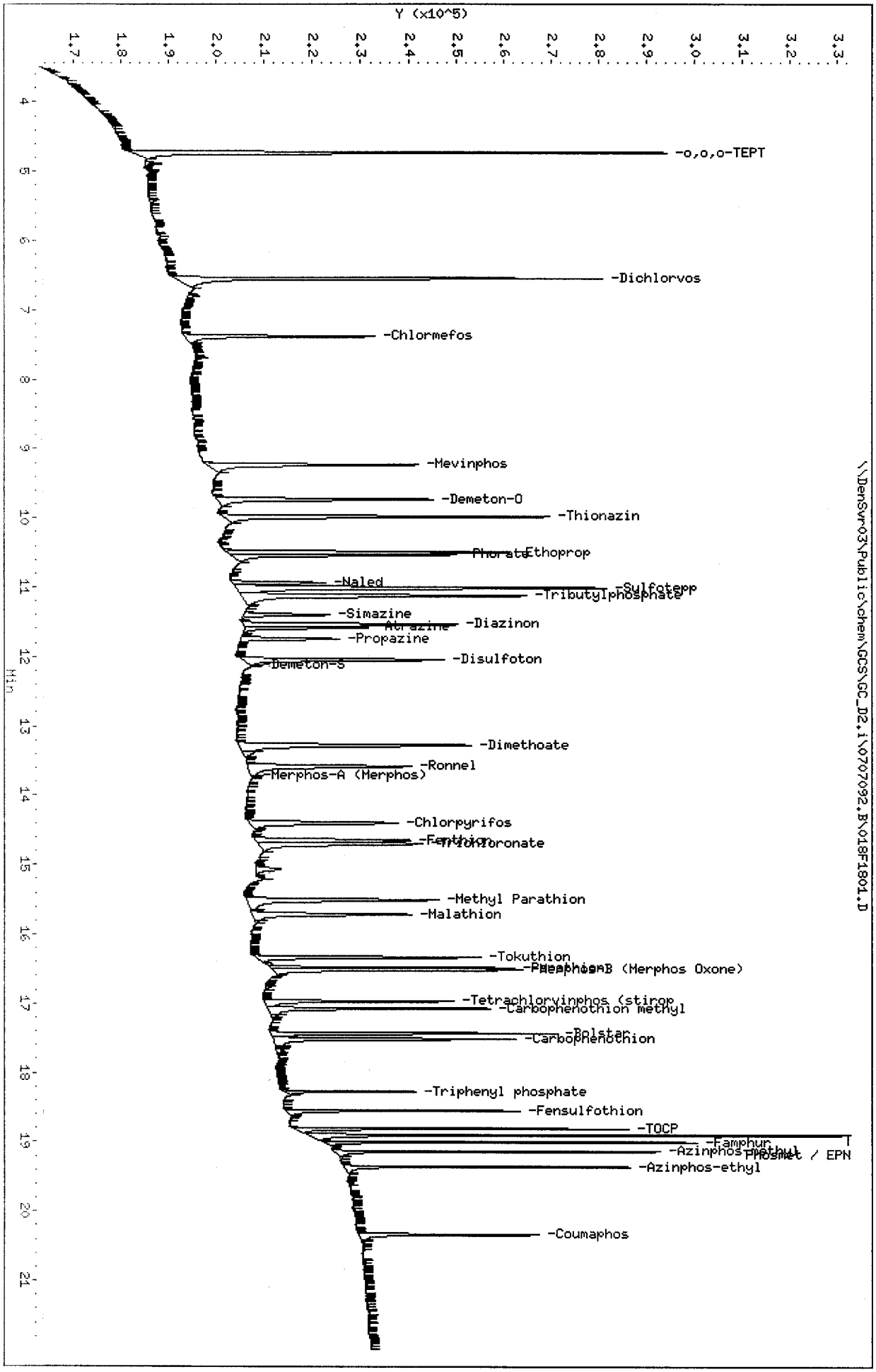
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	4.000	3.916	97.89	36-119
	2	Dichlorvos	4.000	4.150	103.75	50-120
$	3	Chlormefos	2.000	1.859	92.96	58-114
	4	Mevinphos	4.000	3.548	88.69	35-108
	5	Demeton-O	2.800	3.730	133.23*	36-119
	6	Thionazin	4.000	3.407	85.17	65-116
	7	Ethoprop	4.000	3.756	93.89	36-119
	8	Phorate	4.000	2.770	69.24	36-119
	9	Naled	4.000	4.402	110.04	36-119
	10	Sulfotepp	4.000	3.334	83.36	36-119
	12	Simazine	4.000	4.634	115.86	36-119
	13	Diazinon	4.000	3.479	86.98	36-119
	14	Atrazine	4.000	3.372	84.29	36-119
	15	Propazine	4.000	3.208	80.20	36-119
	16	Disulfoton	4.000	3.422	85.54	61-103
	17	Demeton-S	1.200	0.2607	21.73*	36-119
	18	Dimethoate	4.000	3.368	84.19*	28-82
	19	Ronnel	4.000	3.767	94.19	62-99
	21	Chlorpyrifos	4.000	3.217	80.42	66-101
	22	Fenthion	4.000	3.298	82.44	36-119
	23	Trichloronate	4.000	2.924	73.10	36-119
	24	Anilazine	4.000	0.0000	*	36-119
	25	Methyl Parathion	4.000	4.049	101.23	36-119
	26	Malathion	4.000	3.285	82.13	36-119
	27	Tokuthion	4.000	3.030	75.76	36-119
	28	Parathion	4.000	3.066	76.64	36-119
	30	Tetrachlorvinphos	4.000	3.844	96.09	36-119
	31	Carbophenothion me	4.000	3.385	84.62	36-119
	32	Bolstar	4.000	3.550	88.76	36-119
	33	Carbophenothion	4.000	3.502	87.56	36-119
$	34	Triphenyl phosphat	2.000	1.630	81.49	36-119
	35	Fensulfothion	4.000	3.261	81.52	20-105
	37	Phosmet / EPN	8.000	7.048	88.10	36-119
	38	Famphur	4.000	3.109	77.72	61-108
	39	Azinphos-methyl	4.000	3.195	79.88	55-103
	40	Azinphos-ethyl	4.000	3.162	79.05	36-119
	41	Coumaphos	4.000	3.421	85.52	36-119
S	42	Merphos	4.000	2.777	69.42	36-119
M	43	Total Demeton	4.000	3.991	99.78	47-100

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9G010000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LF0FF1AD Client Smp ID: LCSD
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: LCSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	2.000	1.859	92.96	48-114
$ 34 Triphenyl phosphat	2.000	1.630	81.49	50-150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-o,o,o-TEPT
-Dichlorvos
-Chlormefos
-Mevinphos
-Demeton-O
-Thionazin
Phorate
Ethoprop
-Naled
-Sulfotepp
-Tributylphosphate
-Simazine
Atrazine
-Diazinon
-Propazine
Demeton-S
-Disulfoton
-Dimethoate
-Ronnel
Merphos-A (Merphos)
-Chlorpyrifos
-Fenthion
-Trichloronate
-Methyl Parathion
-Malathion
-Tokuthion
Merphos-B (Merphos Oxone)
-Tetrachlorvinphos (stirop
-Carbophenothion methyl
-Bolstar
-Carbophenothion
-Triphenyl phosphate
-Fensulfothion
-TOCP
-Famphur
-Azinphos-methyl
Phosmet / EPN
-Azinphos-ethyl
-Coumaphos
\\DenSvr03\Public\chem\GCS\GC_D2.i\070702.B\018F1801.D
Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\070702.B\018F1801.D
Date : 08-JUL-2009 03:32
Client ID: LCSD
Sample Info: LF0FF1AD,LCSD
Column phase: RTx-OPPest
Instrument: GC_D2.i
Operator: MPK/TLW
Column diameter: 0.32
Page 6

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\019F1901.D
Lab Smp Id: LFX9W1AA Client Smp ID: M-111AB
Inj Date : 08-JUL-2009 03:59
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFX9W1AA,276-1
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Meth Date : 08-Jul-2009 18:19 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 19
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	1057.000	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	5.829	5.836	(0.327)	82305	0.60353	1.142
5	Thionazin	Compound Not Detected.					
6	Demeton-O	Compound Not Detected.					
7	Ethoprop	Compound Not Detected.					
8	Naled	8.057	8.057	(0.452)	86	0.19557	0.370 Not a real
* 9	Tributylphosphate	8.141	8.187	(1.000)	196859	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	12.056	12.067	(0.676)	56	6e-004	0.001052(a)
	25	Trichloronate	Compound Not Detected.					
	26	Anilazine	Compound Not Detected.					
	27	Merphos-A (Merphos)	13.199	13.199	(0.740)	252	0.00336	0.006349
	28	Tetrachlorvinphos (Stirophos)	13.806	13.824	(0.774)	77	0.00154	0.002919
	29	Tokuthion	Compound Not Detected.					
	30	Merphos-B (Merphos Oxone)	14.646	14.651	(0.821)	289	0.03512	0.06644
	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	16.699	16.712	(0.936)	48263	0.76690	1.451
	36	Phosmet	Compound Not Detected.					
	37	EPN	Compound Not Detected.					
	38	Azinphos-methyl	Compound Not Detected.					
*	39	TOCP	17.832	17.846	(1.000)	124476	2.00000	
	40	Azinphos-ethyl	Compound Not Detected.					
	41	Coumaphos	Compound Not Detected.					
S	42	Merphos				541	0.00570	0.01079
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: LFX9W1AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: M-111AB
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	186566	93283	373132	196859	5.52
39 TOCP	95733	47867	191466	124476	30.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.14	7.64	8.64	8.14	0.01
39 TOCP	17.83	17.33	18.33	17.83	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

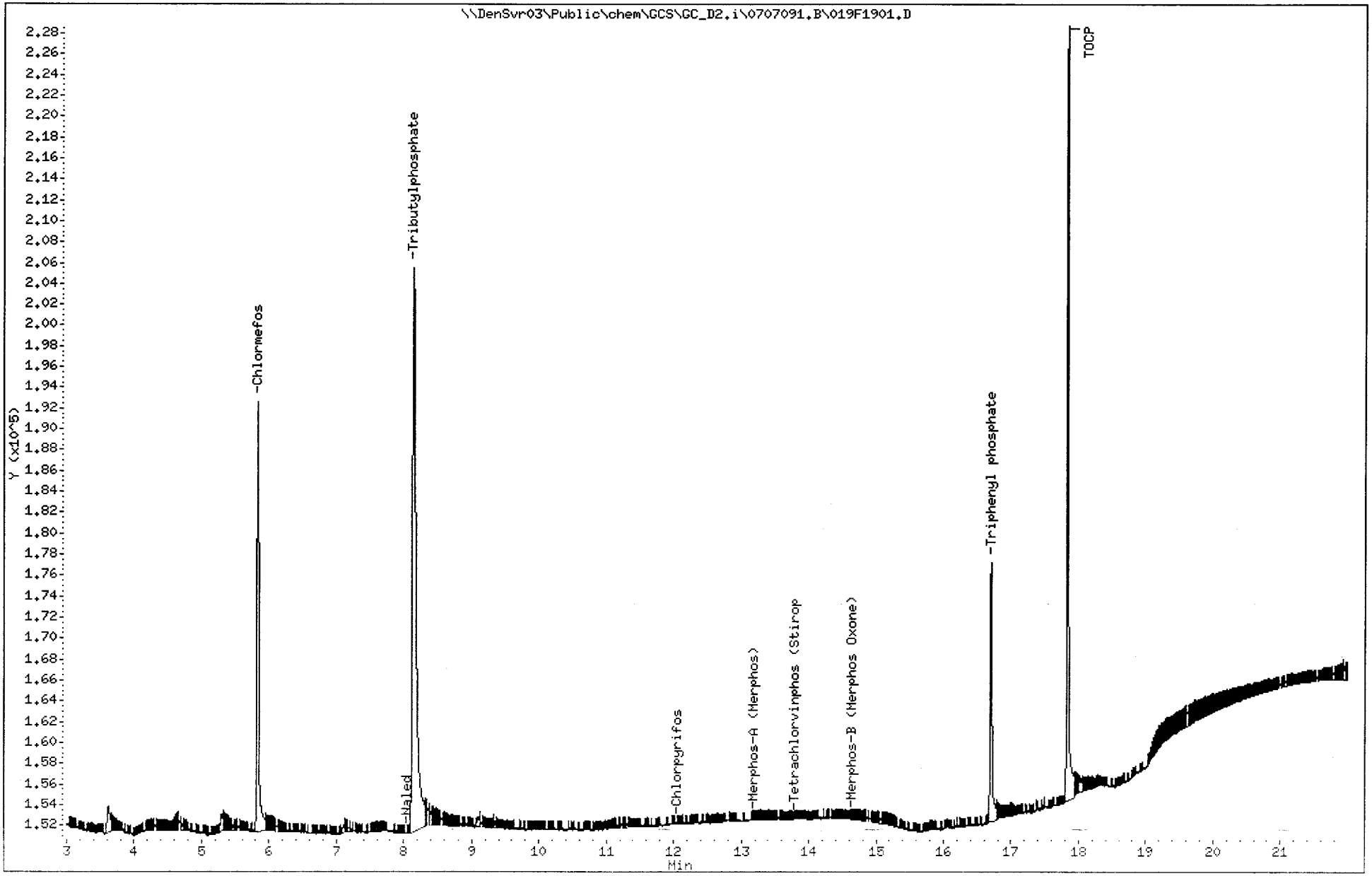
Client Name: Northgate Environmen01-JUL-2009 00:00 Client SDG: 8304609
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFX9W1AA Client Smp ID: M-111AB
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: SAMPLE
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	1.892	1.142	60.35	48-114
$ 35 Triphenyl phosphat	1.892	1.451	76.69	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\019F1901.D
Date : 08-JUL-2009 03:59
Client ID: M-111AB
Sample Info: LFX9W1AA,276-1

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\0707092.B\019F1901.D
Lab Smp Id: LFX9W1AA Client Smp ID: M-111AB
Inj Date : 08-JUL-2009 03:59
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFX9W1AA,276-1
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Meth Date : 08-Jul-2009 18:30 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 19
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	1057.000	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	7.383	7.384	(0.393)	70664	0.63886	1.209
	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	10.986	10.939	(0.584)	76	0.27158	0.5139
	10	Sulfotepp	11.034	11.017	(0.587)	89	6e-004	0.001164(aA)
*	11	Tributylphosphate	11.124	11.116	(1.000)	158567	2.00000	
	12	Simazine	11.391	11.399	(0.606)	73	0.00352	0.006667(aA)
	13	Diazinon	Compound Not Detected.					
	14	Atrazine	11.581	11.584	(0.616)	63	0.23380	0.4424(aA)
	15	Propazine	Compound Not Detected.					
	16	Disulfoton	Compound Not Detected.					
	17	Demeton-S	12.111	12.124	(0.644)	236	0.12154	0.2300
	18	Dimethoate	Compound Not Detected.					
	19	Ronnel	Compound Not Detected.					
	20	Merphos-A (Merphos)	13.693	13.689	(1.231)	58	0.00101	0.001910(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	14.689	14.711	(0.781)	83	0.10614	0.2008
	24	Anilazine	Compound Not Detected.					
	25	Methyl Parathion	Compound Not Detected.					
	26	Malathion	15.728	15.724	(0.836)	68	0.00104	0.001965(a)
	27	Tokuthion	Compound Not Detected.					
	28	Parathion	16.489	16.494	(0.877)	83	0.00121	0.002280(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	18.274	18.281	(0.972)	41926	0.77246	1.462
	35	Fensulfothion	Compound Not Detected.					
*	36	TOCP	18.809	18.816	(1.000)	108792	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				236	0.12154	0.2300

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: LFX9W1AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Misc Info:

Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: M-111AB
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	150069	75035	300138	158567	5.66
36 TOCP	87450	43725	174900	108792	24.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.13	10.63	11.63	11.12	-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 Environmen01-JUL-2009 00:00 Client SDG: 8304609
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFX9W1AA Client Smp ID: M-111AB
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\0707092.B\8141A-2.m
Misc Info:

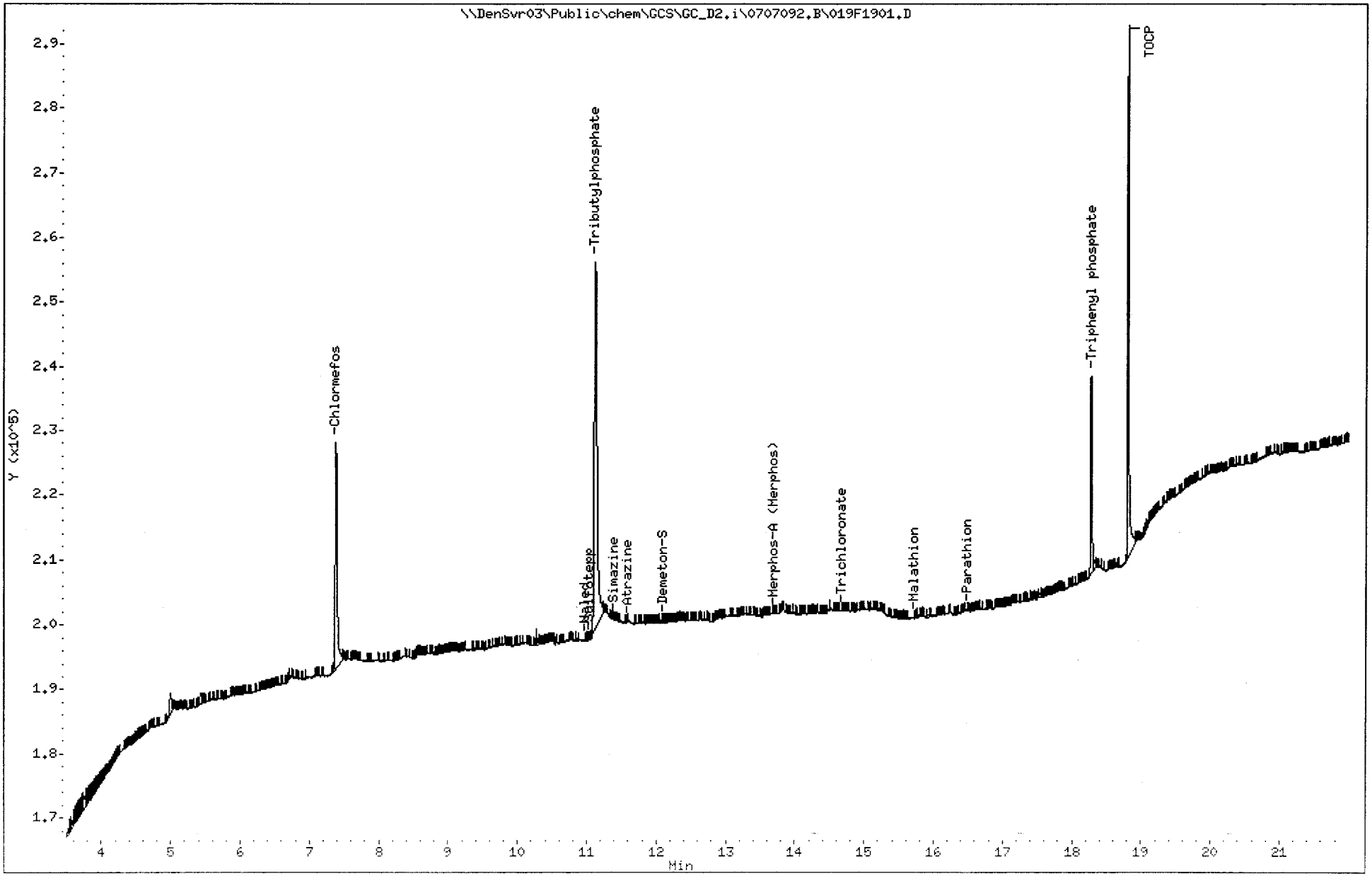
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	1.892	1.209	63.89	48-114
$ 34 Triphenyl phosphat	1.892	1.462	77.25	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\019F1901.D
Date : 08-JUL-2009 03:59
Client ID: M-111AB
Sample Info: LFX9W1AA,276-1

Instrument: GC_D2.i

Operator: MPK/TLW
Column diameter: 0.32

Column phase: RTx-OPPest



TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\020F2001.D
Lab Smp Id: LFX901AA Client Smp ID: EB062909-GW
Inj Date : 08-JUL-2009 04:27
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFX901AA,276-2
Misc Info : IS - GSV0633-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Meth Date : 08-Jul-2009 18:19 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 20
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	1053.000	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	5.830	5.836	(0.327)	76959	0.60384	1.147
5	Thionazin	Compound Not Detected.					
6	Demeton-O	Compound Not Detected.					
7	Ethoprop	Compound Not Detected.					
8	Naled	8.067	8.057	(0.452)	67	0.19508	0.3705
* 9	Tributylphosphate	Compound Not Detected.					
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.					

not a peak

		Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23	Parathion	Compound Not Detected.					
	24	Chlorpyrifos	12.060	12.067	(0.676)	83	9e-004	0.001675(a)
	25	Trichloronate	Compound Not Detected.					
	26	Anilazine	Compound Not Detected.					
	27	Merphos-A (Merphos)	13.195	13.199	(0.740)	160	0.00228	0.004330
	28	Tetrachlorvinphos (Stirophos)	13.852	13.824	(0.777)	57	0.00122	0.002321
	29	Tokuthion	Compound Not Detected.					
	30	Merphos-B (Merphos Oxone)	14.633	14.651	(0.821)	121	0.02726	0.05178
	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	16.700	16.712	(0.937)	49818	0.84702	1.609
	36	Phosmet	Compound Not Detected.					
	37	EPN	Compound Not Detected.					
	38	Azinphos-methyl	Compound Not Detected.					
*	39	TOCP	17.832	17.846	(1.000)	116332	2.00000	
	40	Azinphos-ethyl	Compound Not Detected.					
	41	Coumaphos	Compound Not Detected.					
S	42	Merphos				281	0.00317	0.006021
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: 020F2001.D
Lab Smp Id: LFX901AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: EB062909-GW
Level: LOW
Sample Type: WATER
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	186566	93283	373132	0	-100.00
39 TOCP	95733	47867	191466	116332	21.52

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	8.14	7.64	8.64	0.00	-100.00
39 TOCP	17.83	17.33	18.33	17.83	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 Environmen01-JUL-2009 00:00 Client SDG: 8304609
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFX901AA Client Smp ID: EB062909-GW
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\0707091.B\8141A-1.m
Misc Info: IS - GSV0633-09

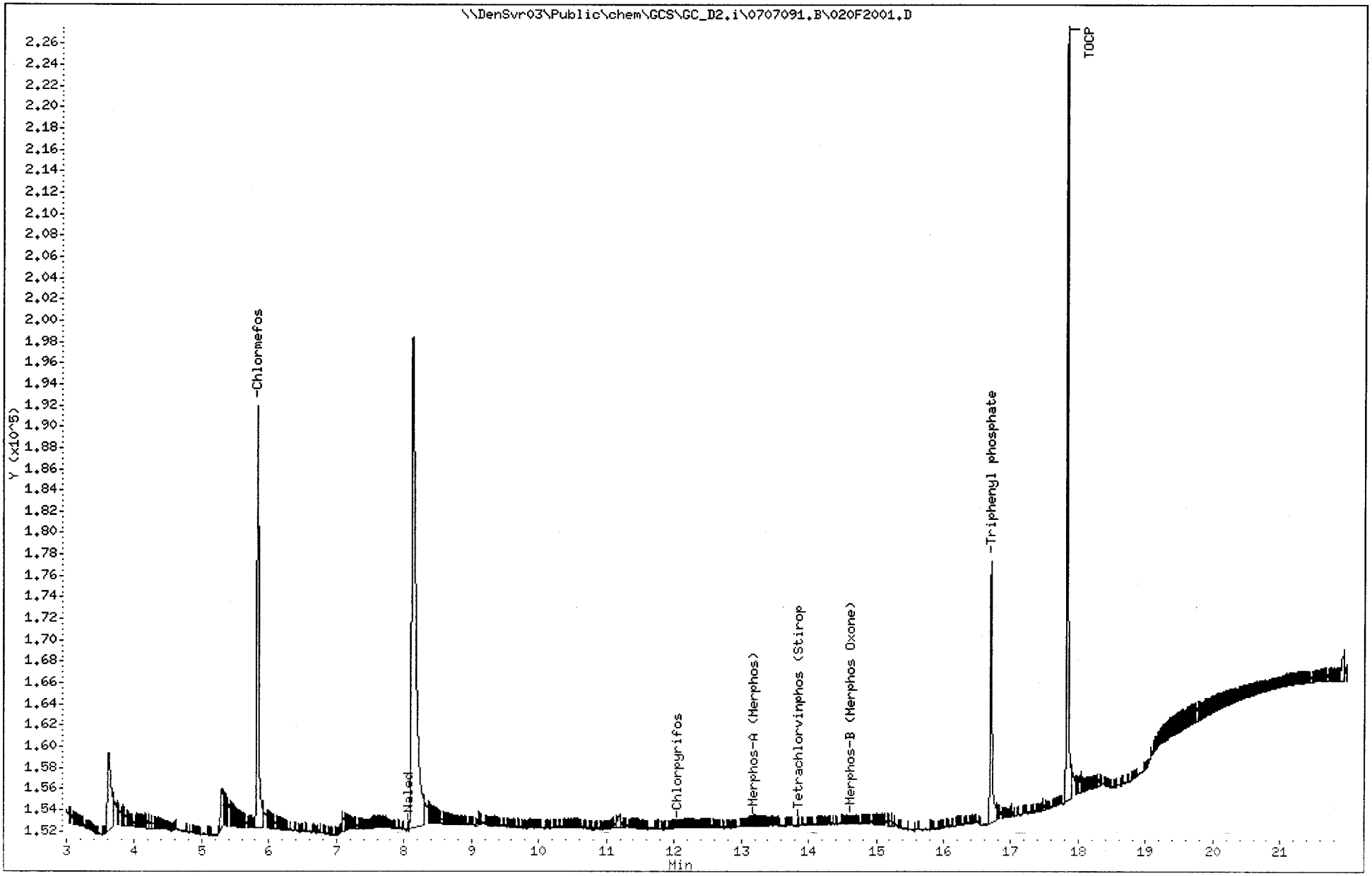
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	1.899	1.147	60.38	48-114
$ 35 Triphenyl phosphat	1.899	1.609	84.70	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707091.B\020F2001.D
Date : 08-JUL-2009 04:27
Client ID: EB062909-GW
Sample Info: LFX901AA,276-2

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\0707092.B\020F2001.D
Lab Smp Id: LFX901AA Client Smp ID: EB062909-GW
Inj Date : 08-JUL-2009 04:27
Operator : MPK/TLW Inst ID: GC_D2.i
Smp Info : LFX901AA,276-2
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Meth Date : 08-Jul-2009 18:30 GC_D2.i Quant Type: ISTD
Cal Date : 26-JUN-2009 21:13 Cal File: 009F0901.D
Als bottle: 20
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	1053.000	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	7.384	7.384	(0.393)	63106	0.58490	1.111
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	10.912	10.939	(0.580)	111	0.27299	0.5185
10	Sulfotepp	10.995	11.017	(0.585)	122	9e-004	0.001642(aA)
* 11	Tributylphosphate	11.122	11.116	(1.000)	169698	2.00000	
12	Simazine	11.400	11.399	(0.606)	238	0.01178	0.02237(aA)
13	Diazinon	Compound Not Detected.					
14	Atrazine	11.557	11.584	(0.614)	143	0.23564	0.4476(aA)
15	Propazine	Compound Not Detected.					
16	Disulfoton	Compound Not Detected.					
17	Demeton-S	12.140	12.124	(0.645)	134	0.12051	0.2289
18	Dimethoate	Compound Not Detected.					
19	Ronnel	Compound Not Detected.					
20	Merphos-A (Merphos)	13.682	13.689	(1.230)	109	0.00177	0.003367(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	14.715	14.711	(0.782)	85	0.10618	0.2017
	24	Anilazine	Compound Not Detected.					
	25	Methyl Parathion	Compound Not Detected.					
	26	Malathion	15.737	15.724	(0.837)	170	0.00266	0.005056(a)
	27	Tokuthion	Compound Not Detected.					
	28	Parathion	16.490	16.494	(0.877)	71	0.00106	0.002007(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	18.274	18.281	(0.972)	43603	0.82360	1.564
	35	Fensulfothion	Compound Not Detected.					
*	36	TOCP	18.809	18.816	(1.000)	106119	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				134	0.12051	0.2289

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: 020F2001.D
Lab Smp Id: LFX901AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\8141A-2.m
Misc Info:

Calibration Date: 07-JUL-2009
Calibration Time: 21:09
Client Smp ID: EB062909-GW
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
11 Tributylphosphate	150069	75035	300138	169698	13.08
36 TOCP	87450	43725	174900	106119	21.35

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.13	10.63	11.63	11.12	-0.03
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 Environmen01-JUL-2009 00:00 Client SDG: 8304609
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LFX901AA Client Smp ID: EB062909-GW
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\0707092.B\8141A-2.m
Misc Info:

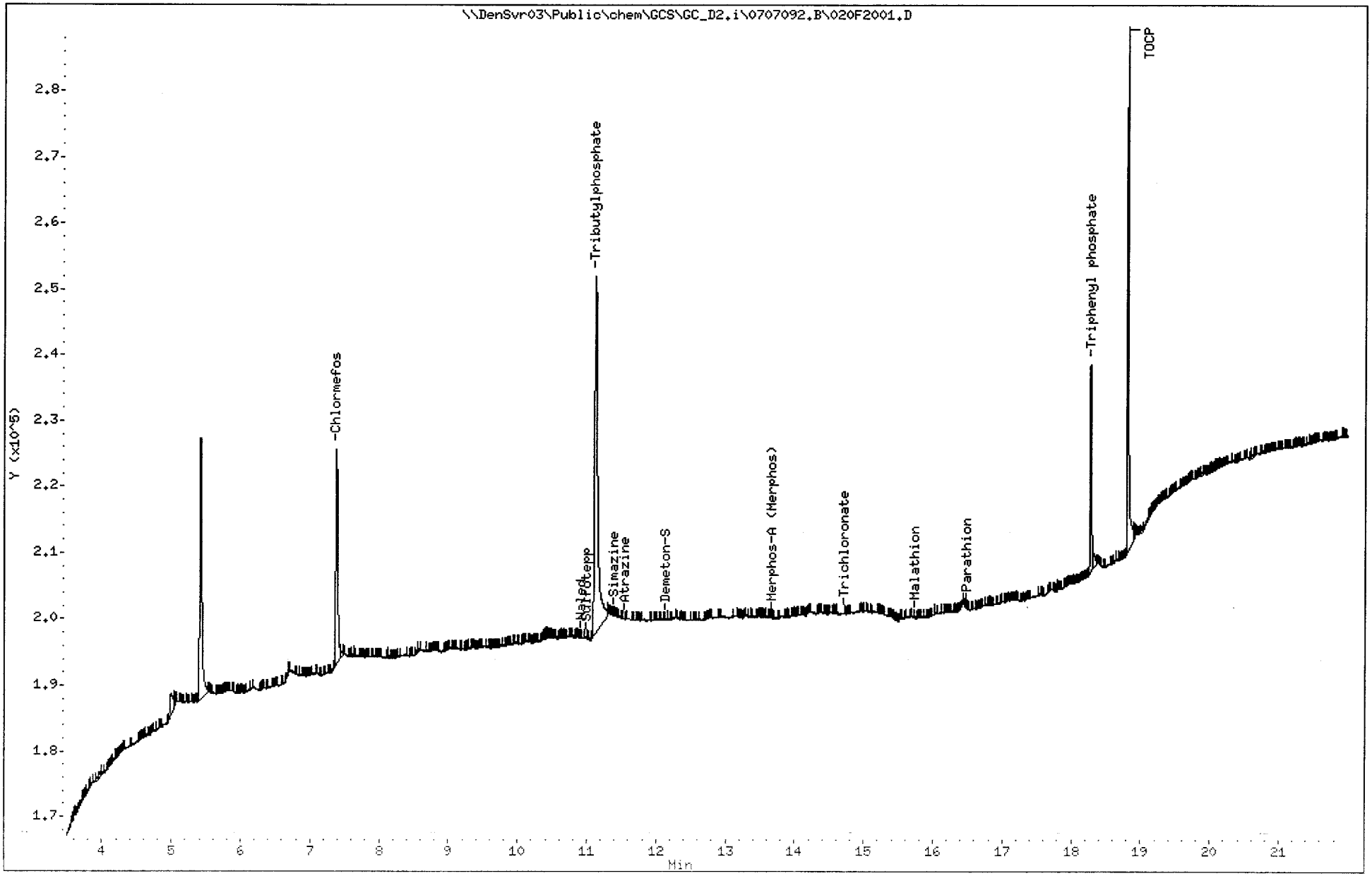
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	1.899	1.111	58.49	48-114
$ 34 Triphenyl phosphat	1.899	1.564	82.36	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0707092.B\020F2001.D
Date : 08-JUL-2009 04:27
Client ID: EB062909-GW
Sample Info: LFX901AA,276-2

Instrument: GC_D2.i

Operator: MPK/TLW
Column diameter: 0.32

Column phase: RTx-OPPest



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	✗	✓		✓	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

CE\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

CE\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 / 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
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

Table of Contents

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											
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	

Table of Contents

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											
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	

Table of Contents

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										
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

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											
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						1/x
	266724						WLINR	-0.03349	1.03813		0.99979	
32 Fensulfothion	8319	23000	51304	104440	185778	229856						1/x
	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	

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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											
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	
42 Merphos	1.61523	1.45962	1.38820	1.59026	1.52873	1.58626						
	1.49925						AVRG		1.52393		5.34513	
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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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

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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

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-Jul-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

Seal 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

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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\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
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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	m1	m2	%RSD or R^2	
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	1/x
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

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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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INITIAL CALIBRATION DATA

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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
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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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\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											
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	

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INITIAL CALIBRATION DATA

Start Cal Date : 26-JUN-2009 18:28
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Quant Method : ISTD
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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											
37 Phosmet / EPN	19707	35826	68186	146012	207459	263604						
	330448						WLINR	-0.04262	1.00518		0.99785	1/x
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	
42 Merphos	1.56460	1.43887	1.64263	1.66880	1.73437	1.91569						
	1.70275						AVRG		1.66682		8.85773	
43 Total Demeton	3533	23328	47171	100663	168375	213468						
	244812						WLINR	0.06780	1.63923		0.99469	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

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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

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

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
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	
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

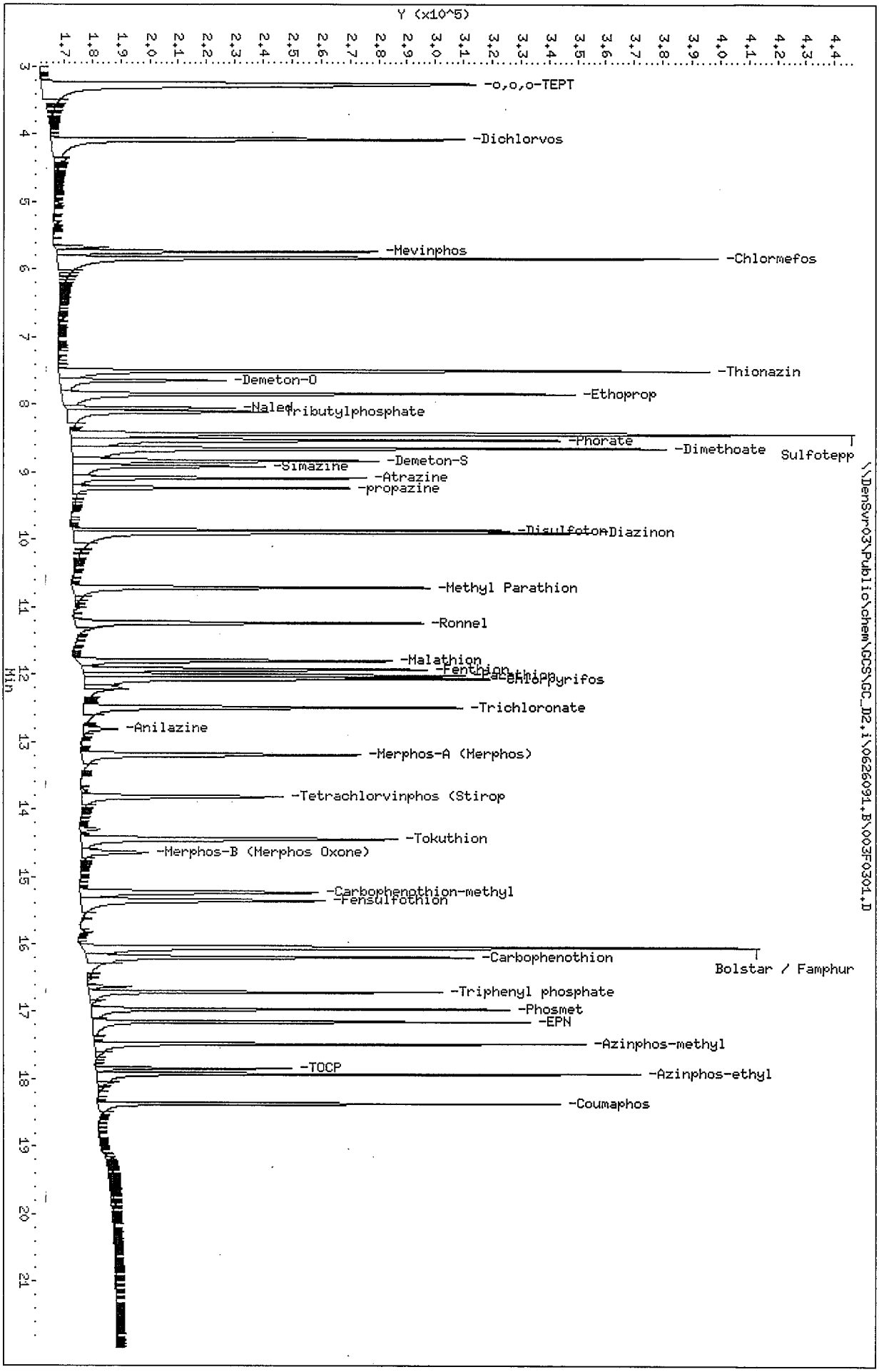
Instrument ID: GC_D2.i
Lab File ID: 003F0301.D
Lab Smp Id: OPP L7 GSV0634
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

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

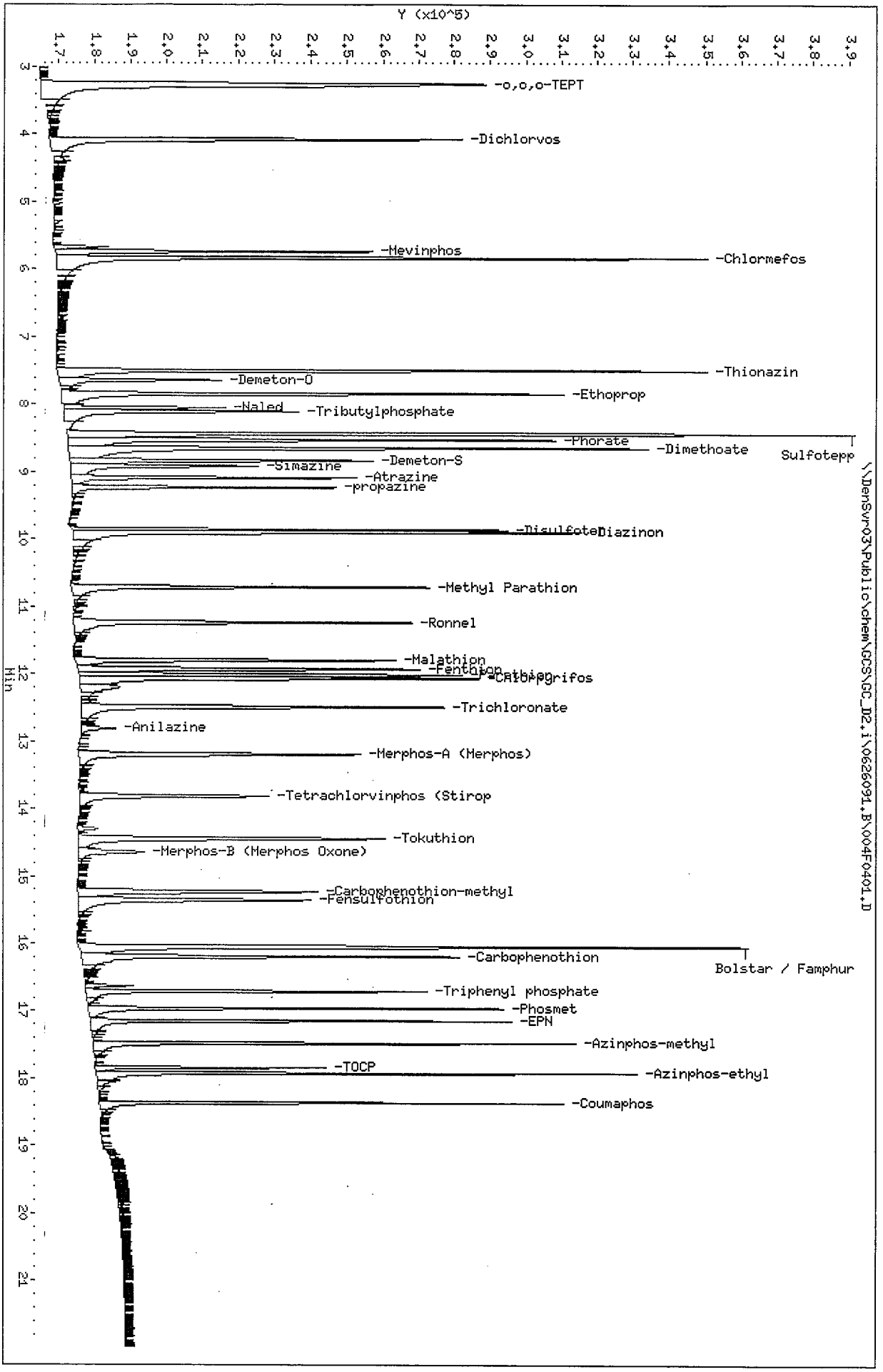
Instrument ID: GC_D2.i
Lab File ID: 004F0401.D
Lab Smp Id: OPP L6 GSV0637
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 21:40
Client Smp ID: OPP L6 GSV0637
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	166572	83286	333144	190710	14.49
39 TOCP	99647	49824	199294	96406	-3.25

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\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

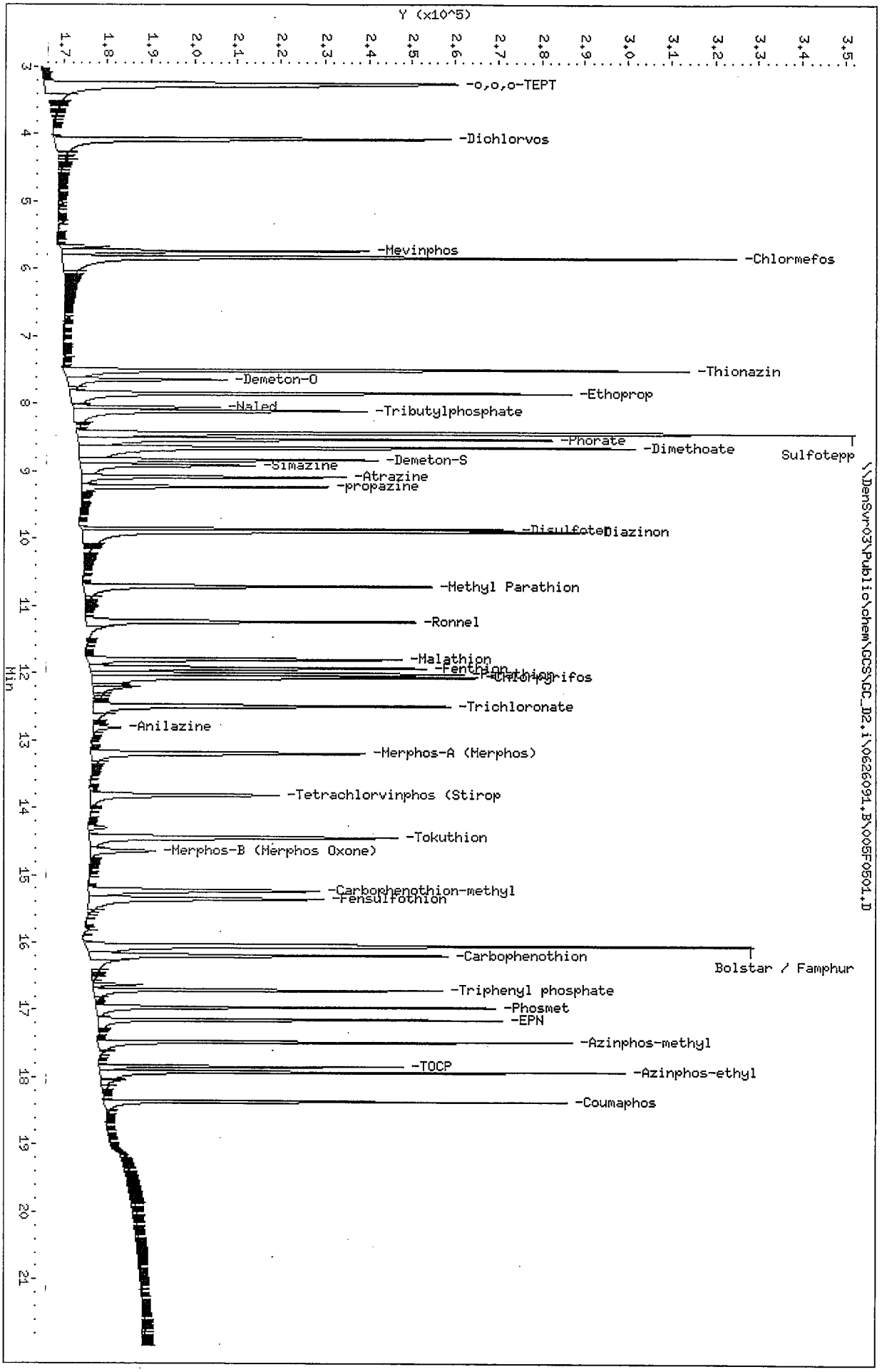
Instrument ID: GC_D2.i
Lab File ID: 005F0501.D
Lab Smp Id: OPP L5 GSV0635
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

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-1MS

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

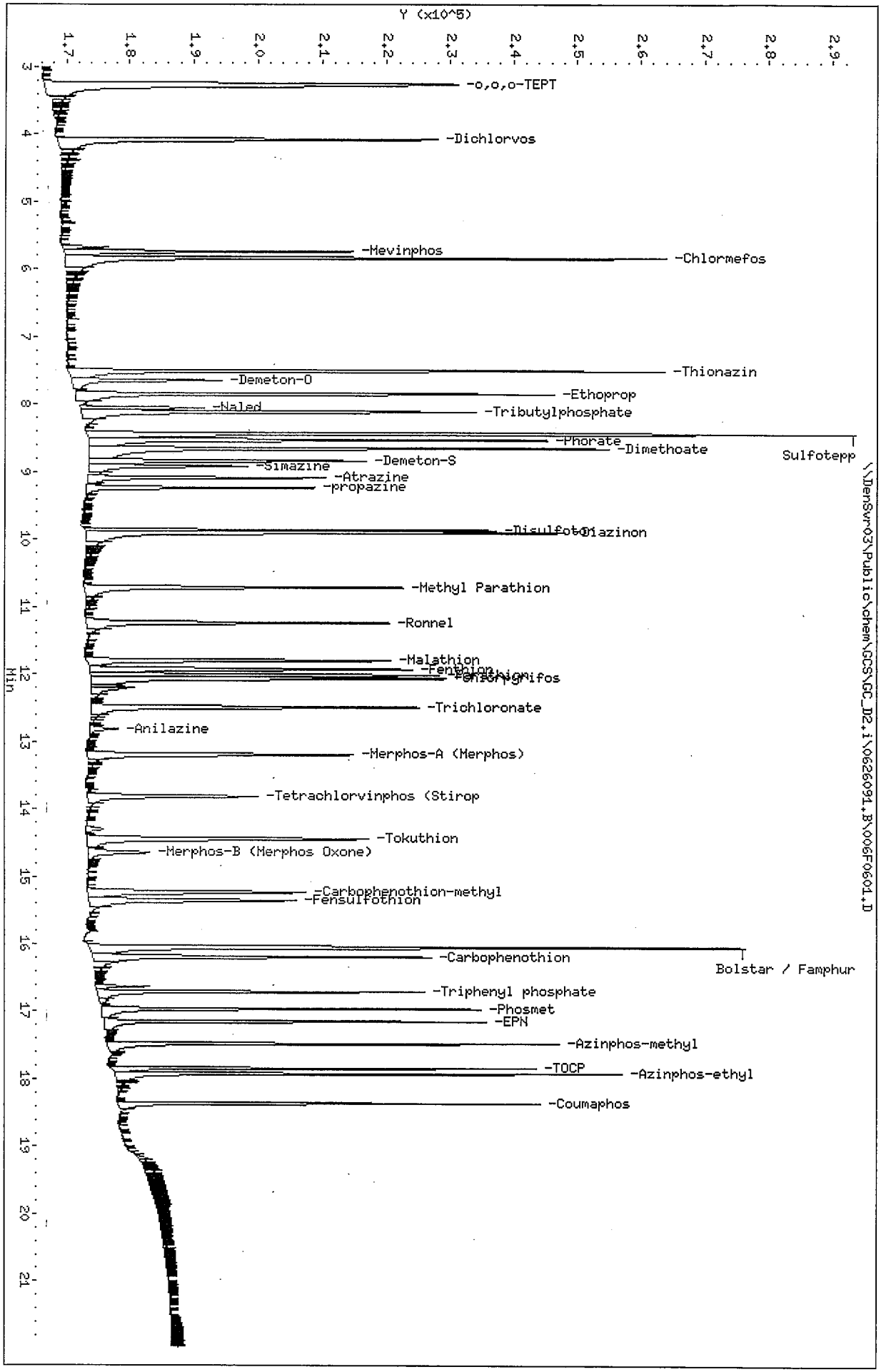
Instrument ID: GC_D2.i
Lab File ID: 006F0601.D
Lab Smp Id: OPP L4 GSV0638
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L4 GSV0638
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	160310	80155	320620	160310	0.00
39 TOCP	97363	48682	194726	97363	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT 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\0626091.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

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(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

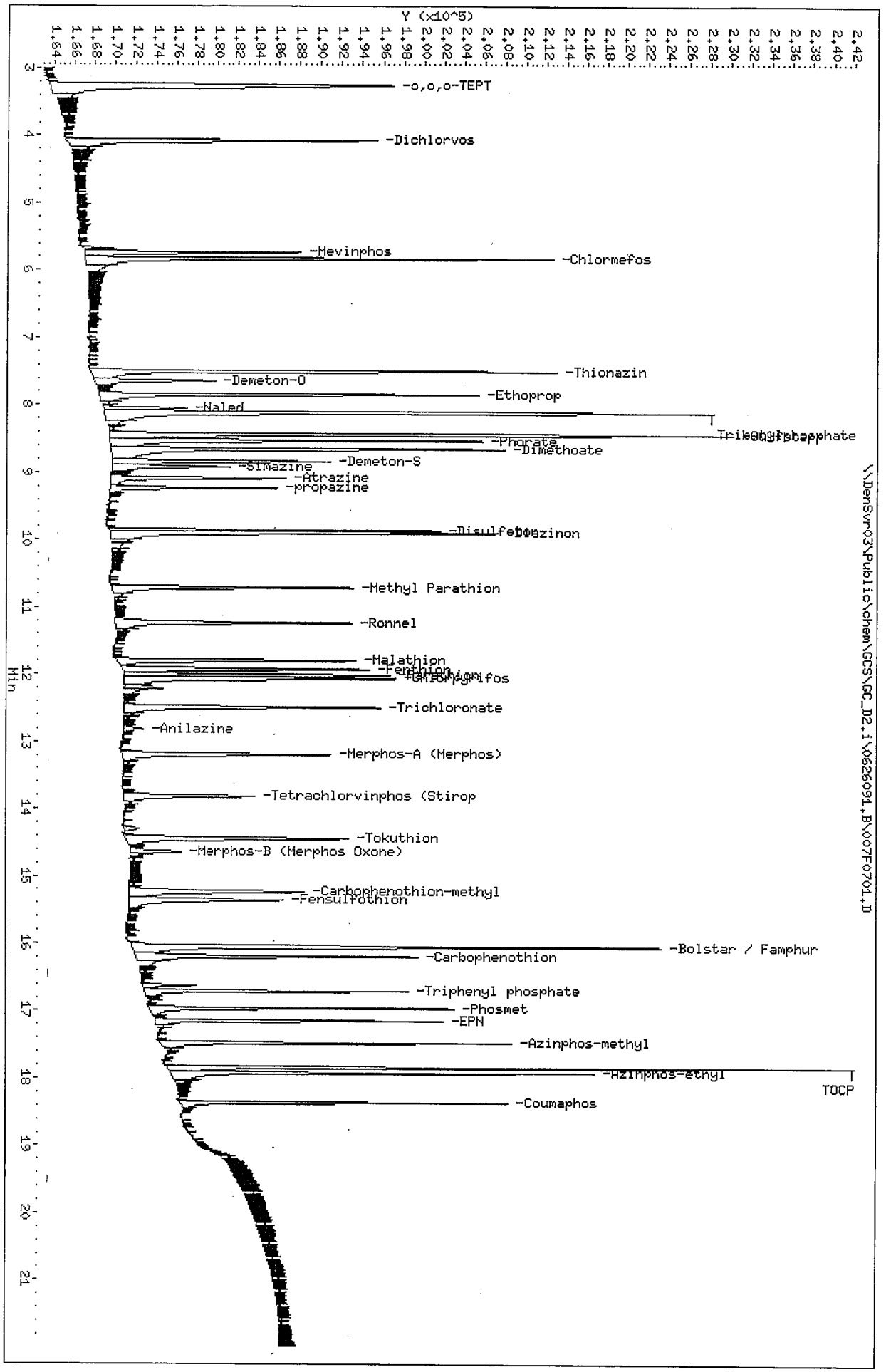
Instrument ID: GC_D2.i
Lab File ID: 007F0701.D
Lab Smp Id: OPP L3 GSV0639
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L3 GSV0639
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	160310	80155	320620	156624	-2.30
39 TOCP	97363	48682	194726	102183	4.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT 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

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

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(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

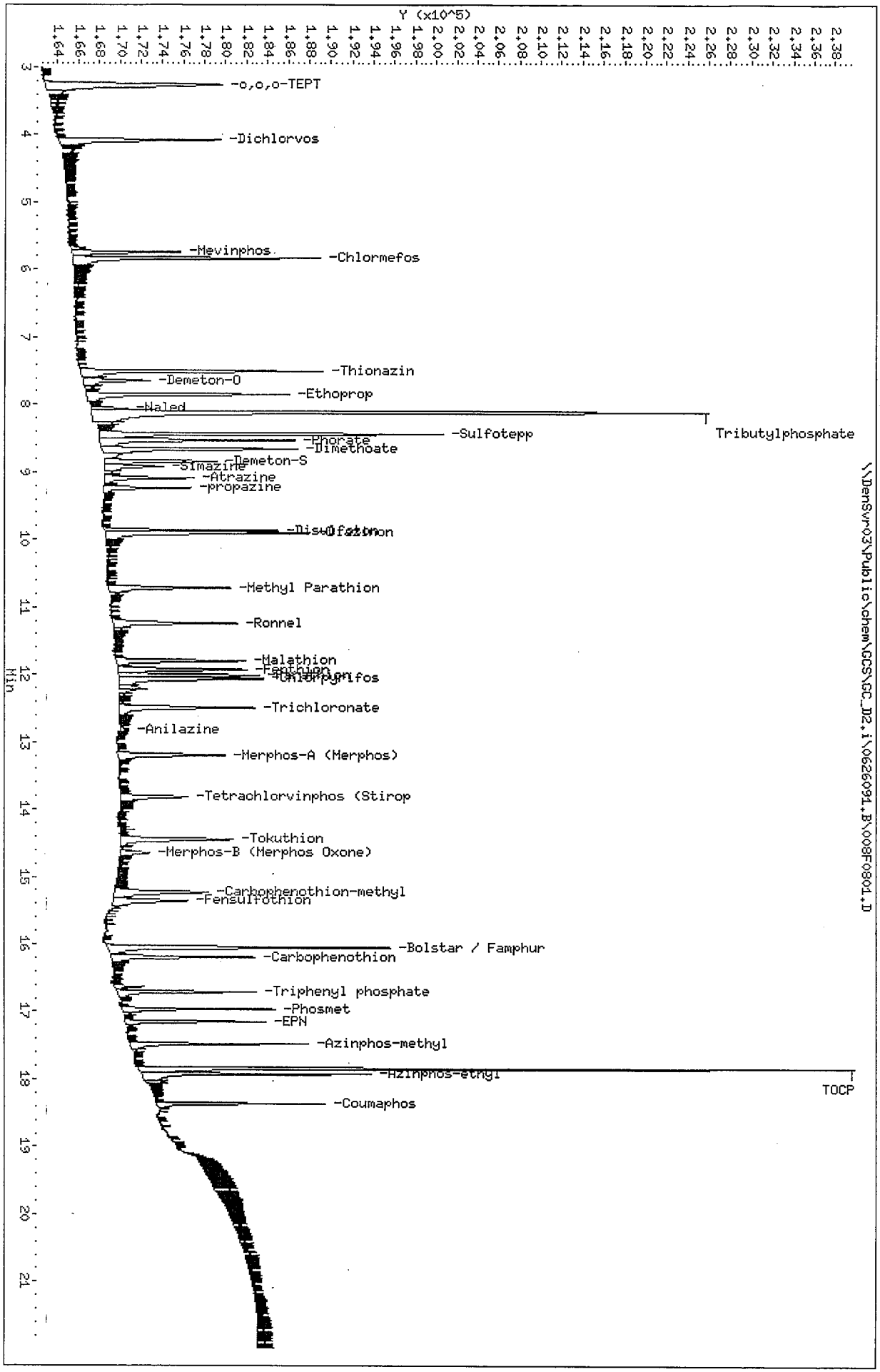
Instrument ID: GC_D2.i
Lab File ID: 008F0801.D
Lab Smp Id: OPP L2 GSV0640
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L2 GSV0640
Level:
Sample Type:

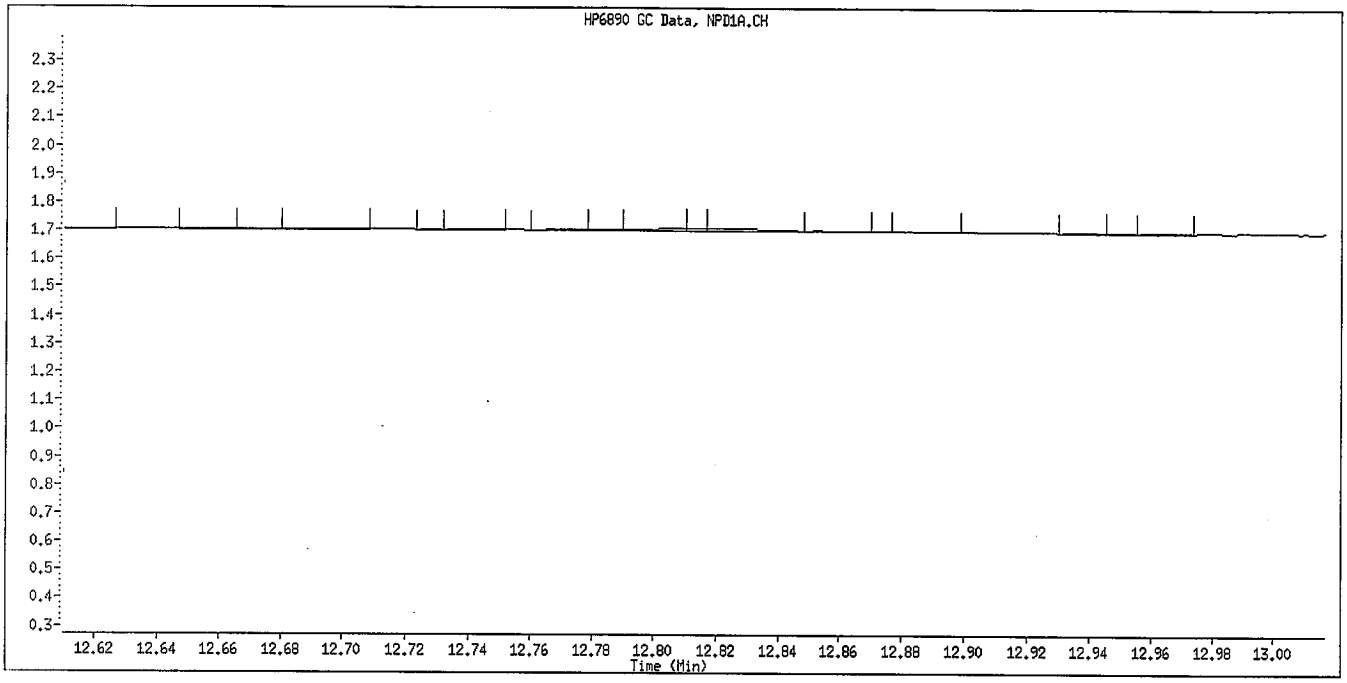
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	160310	80155	320620	165852	3.46
39 TOCP	97363	48682	194726	104260	7.08

		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

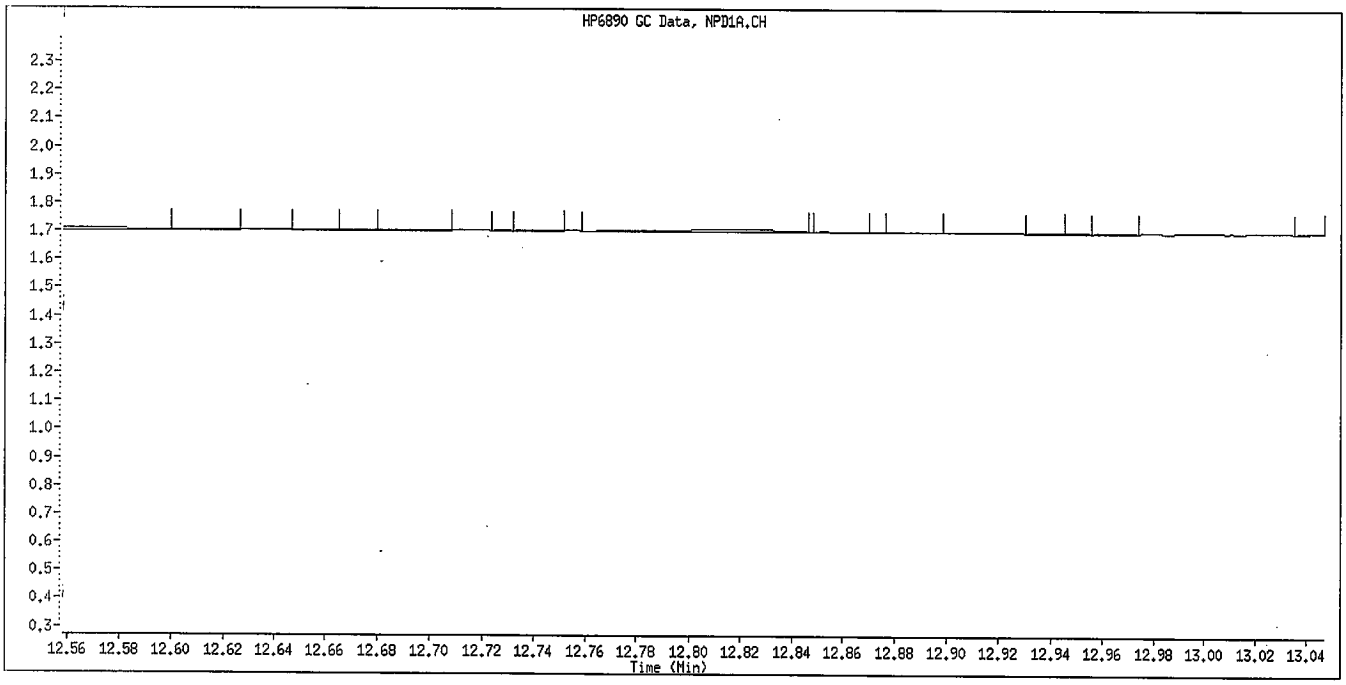
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\0626091,B\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

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

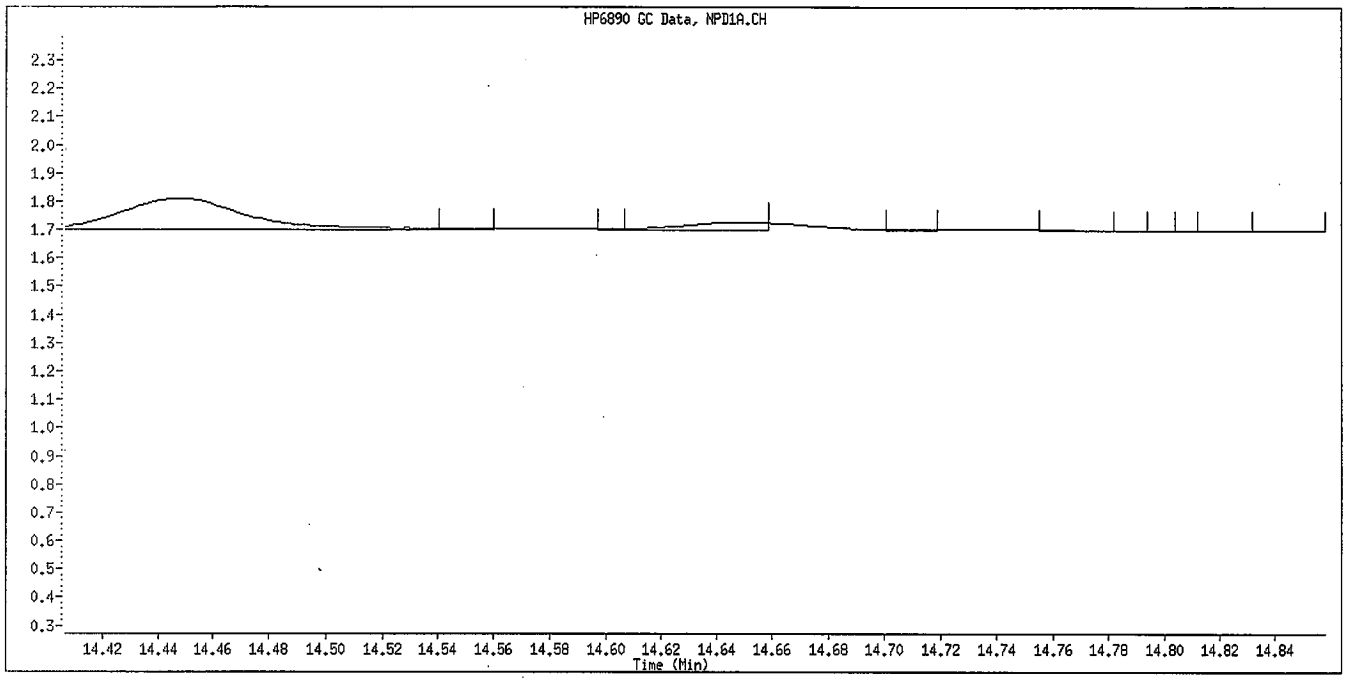


Manual Integration

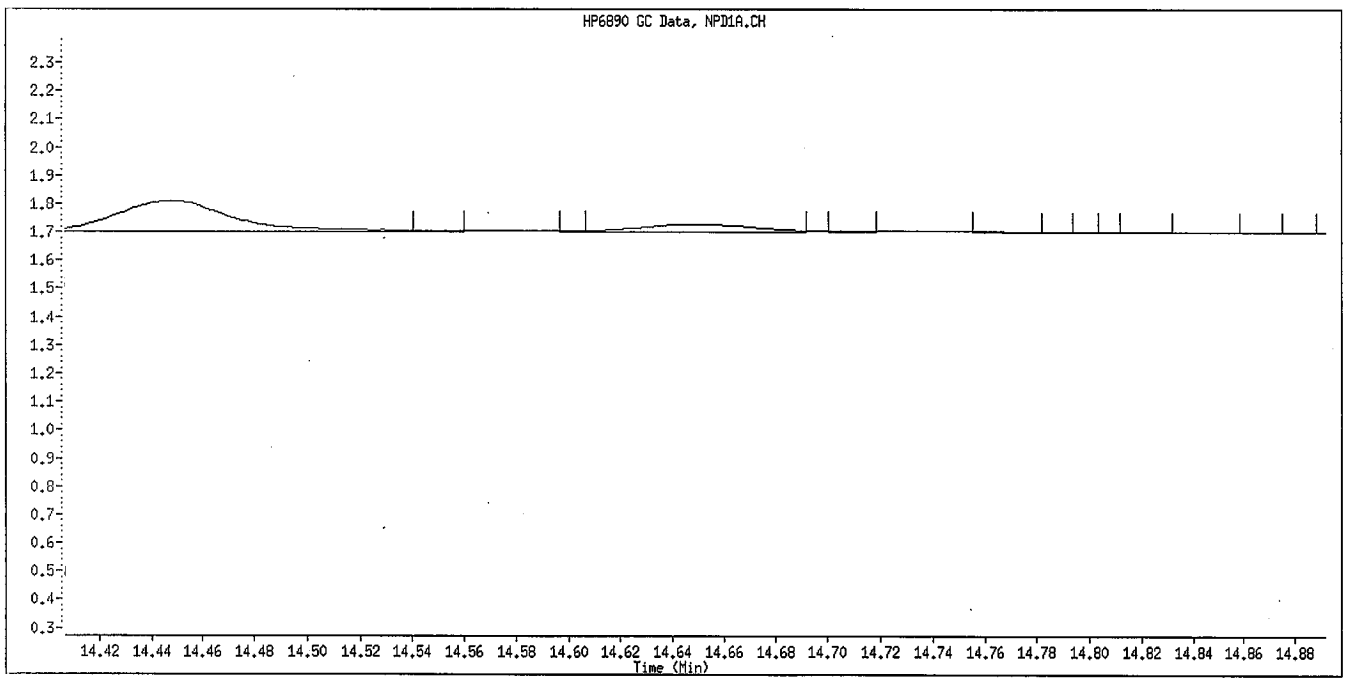
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

Data File Name: 060706001.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:

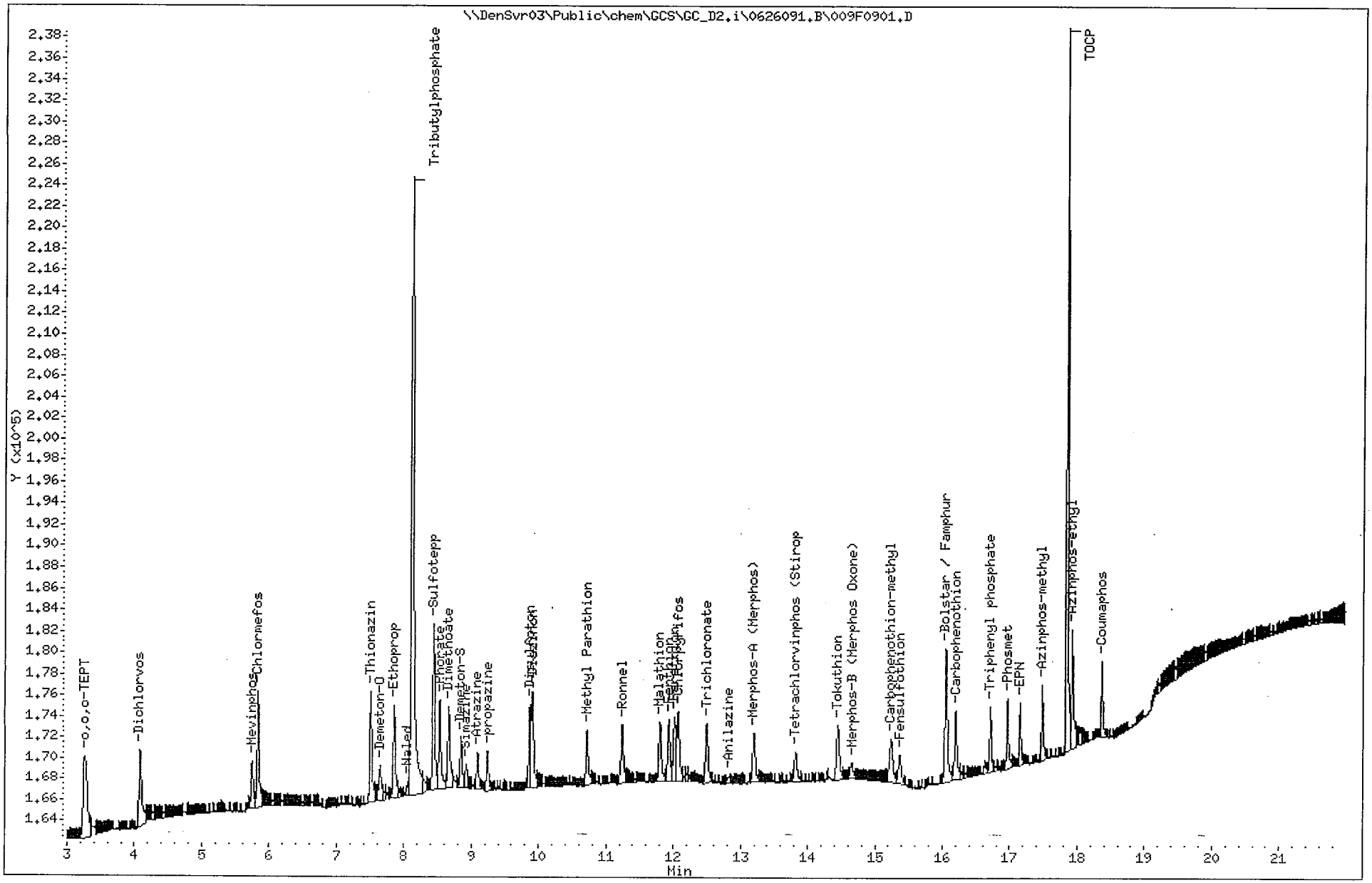
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	160310	80155	320620	165799	3.42
39 TOCP	97363	48682	194726	105892	8.76

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

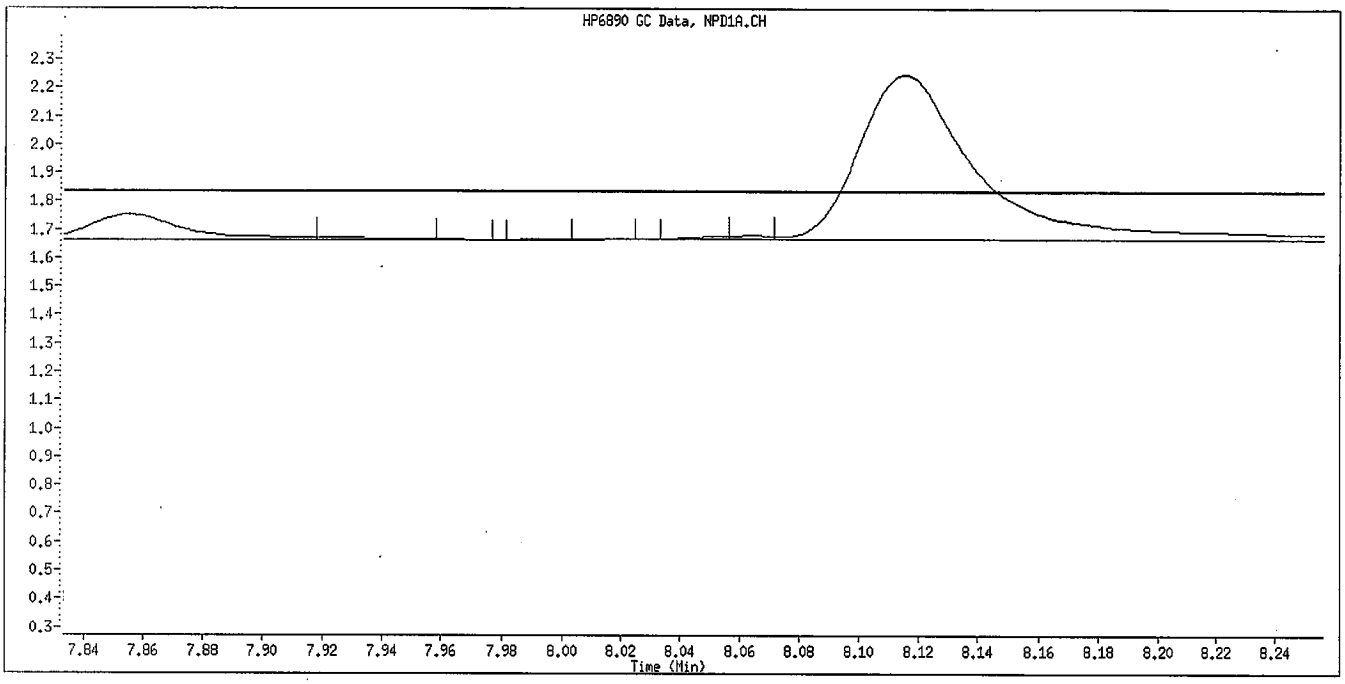
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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

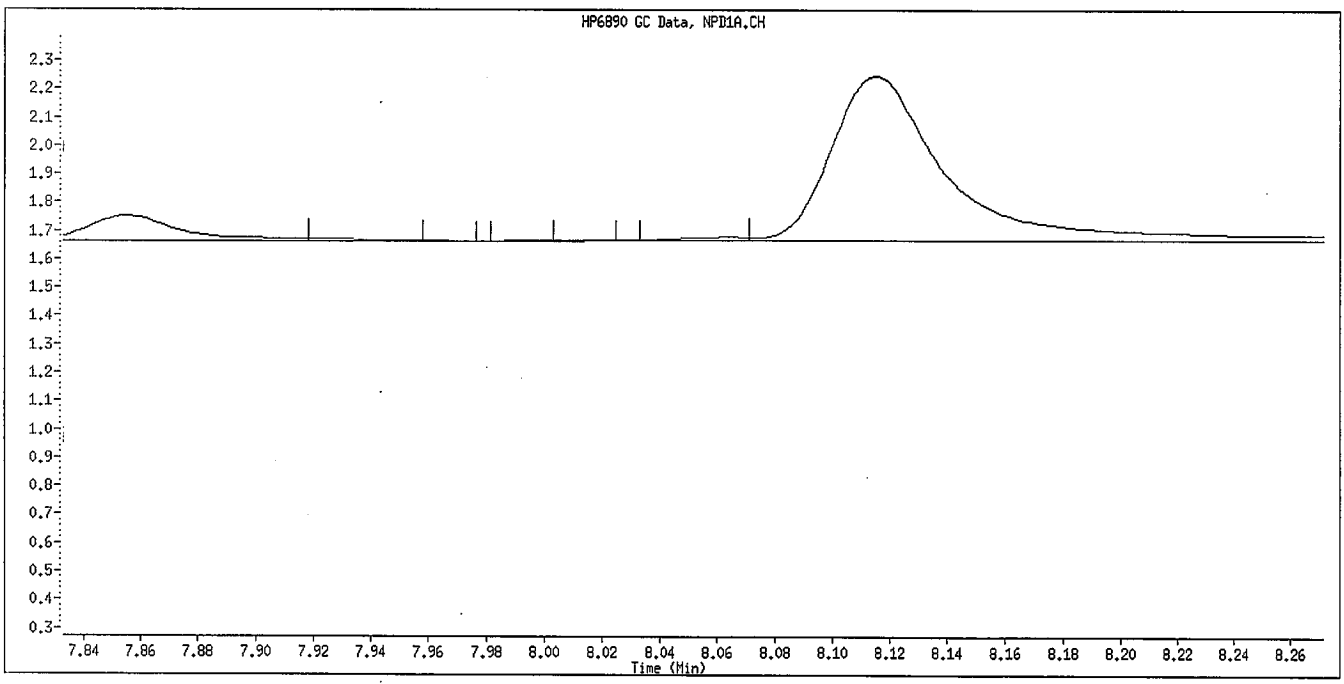
Instrument: GC_D2.i
Operator: MPK/TLW
Column phase: RTx-1MS
Column diameter: 0.32



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

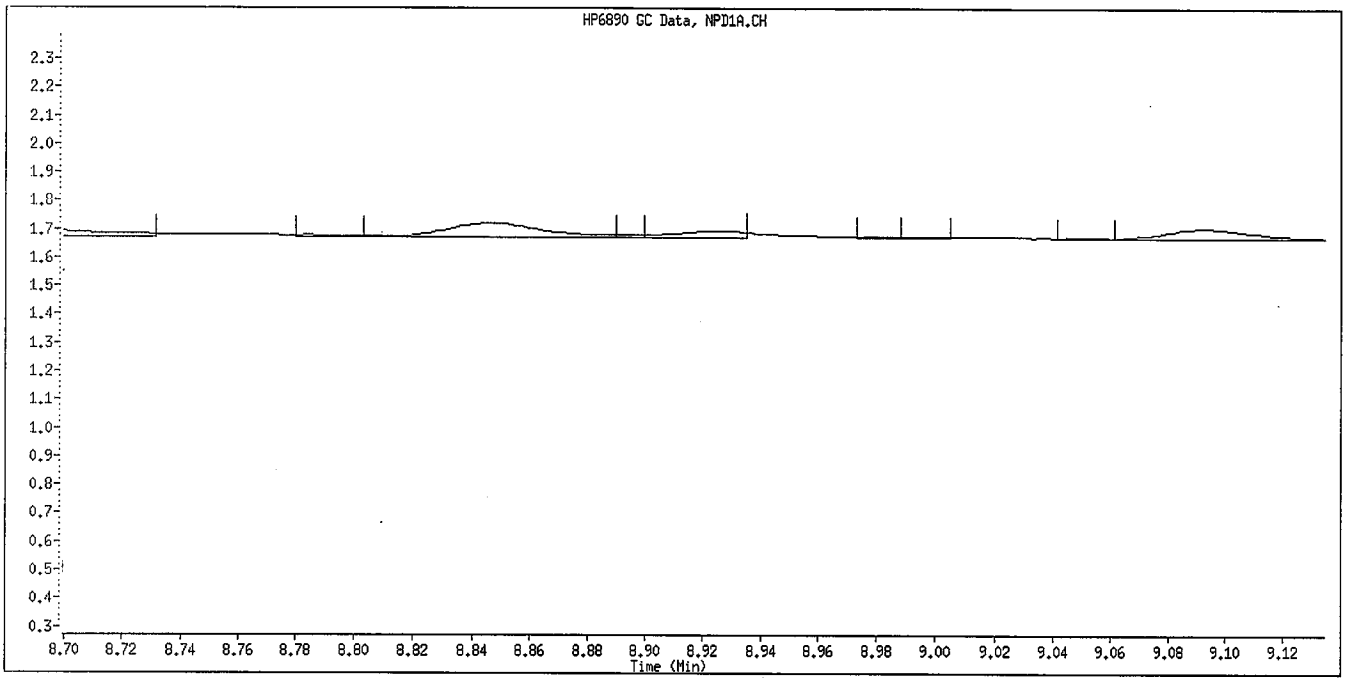


Manual Integration

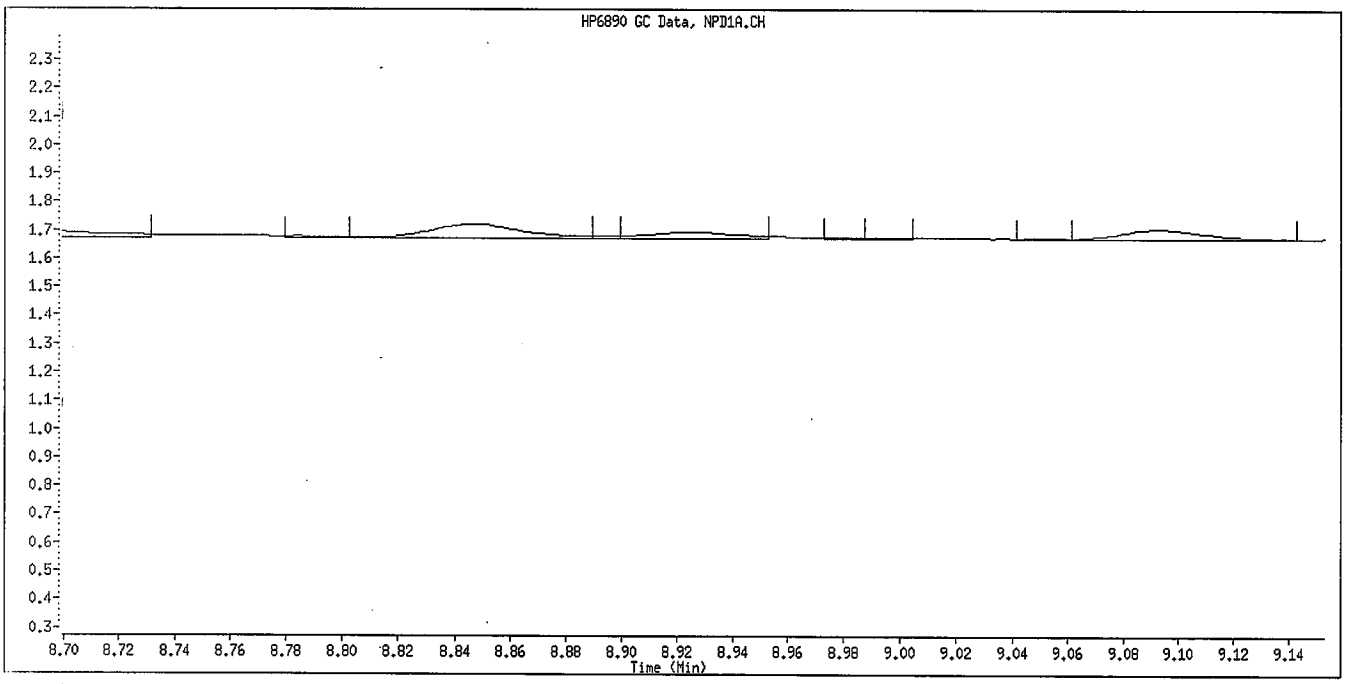
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

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

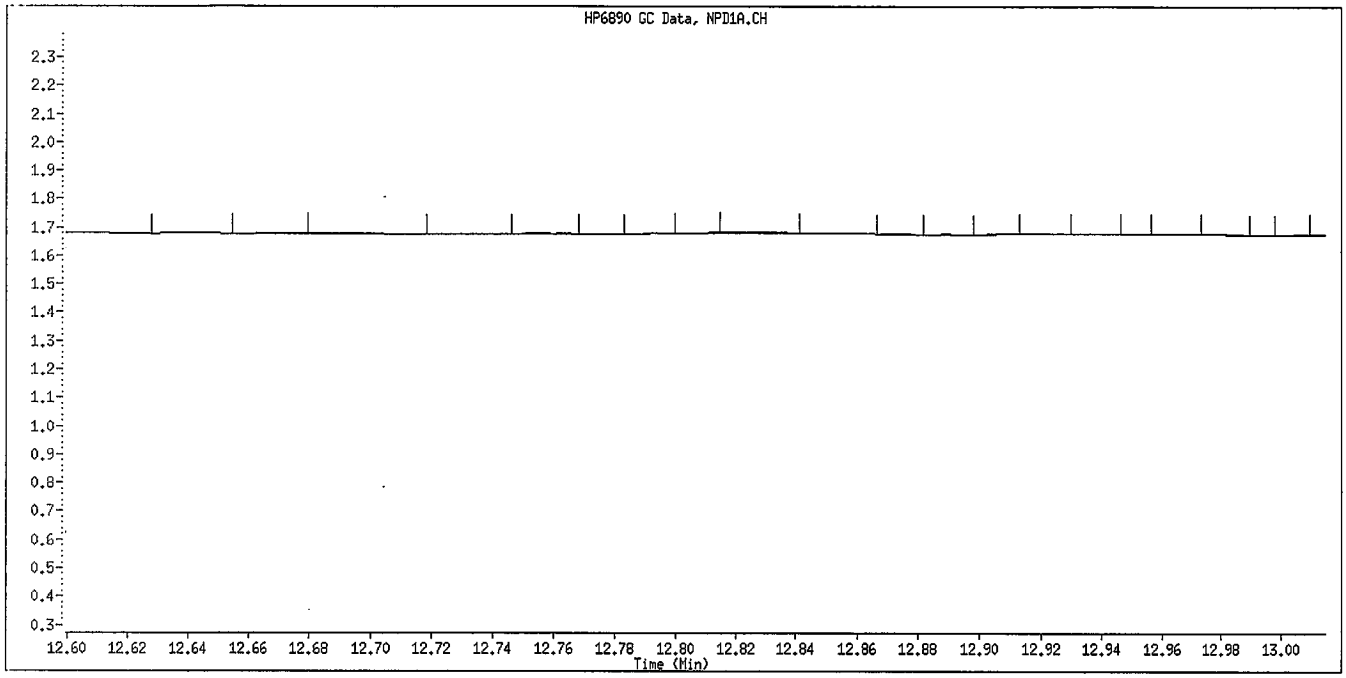


Manual Integration

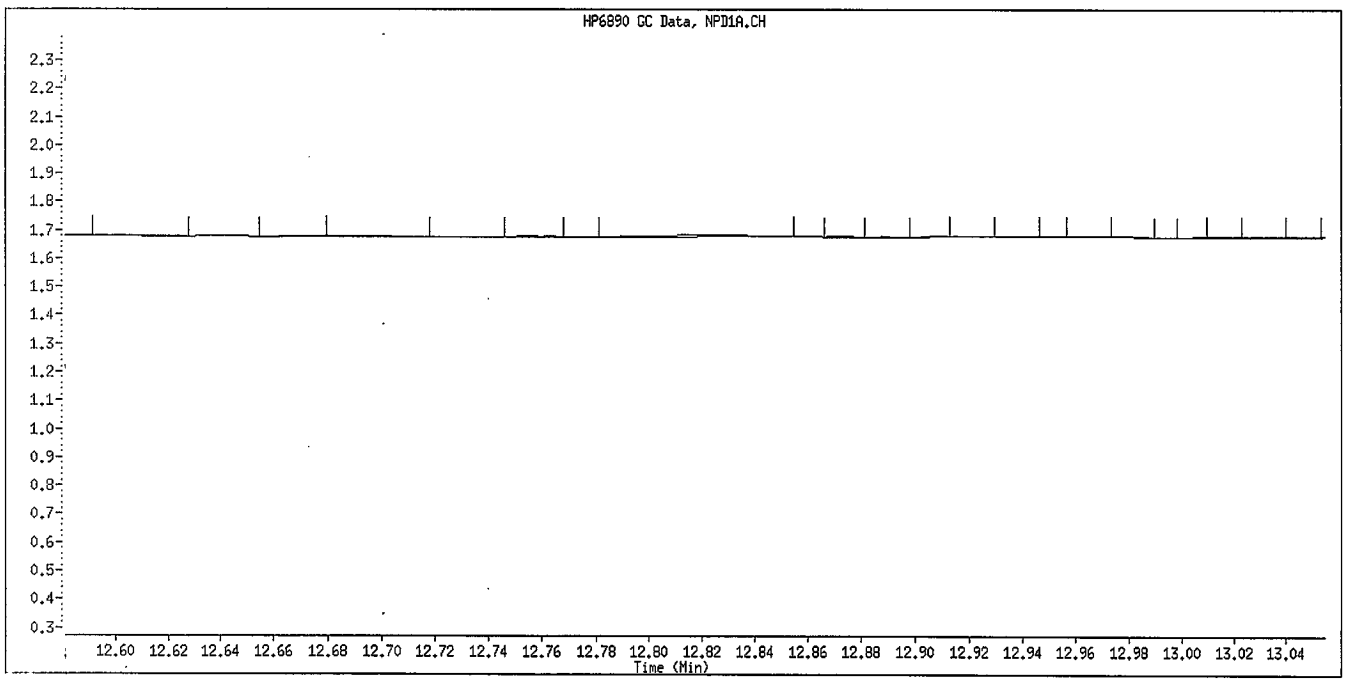
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

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

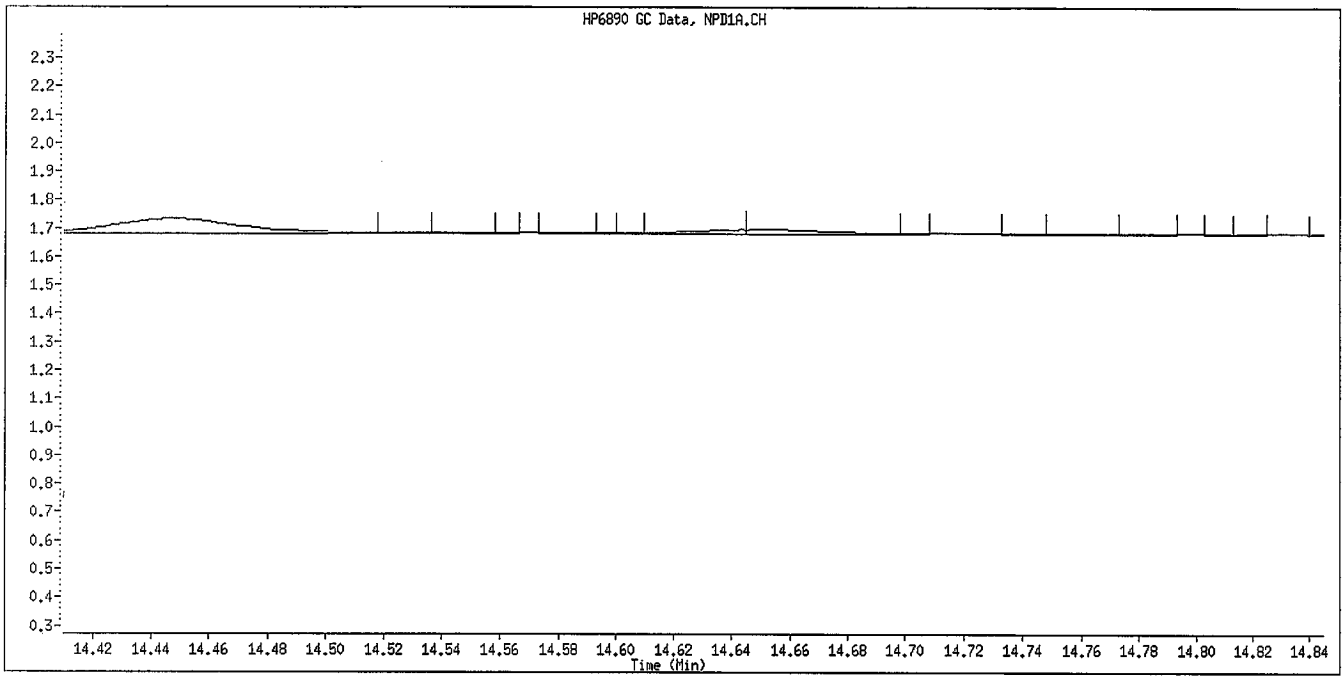


Manual Integration

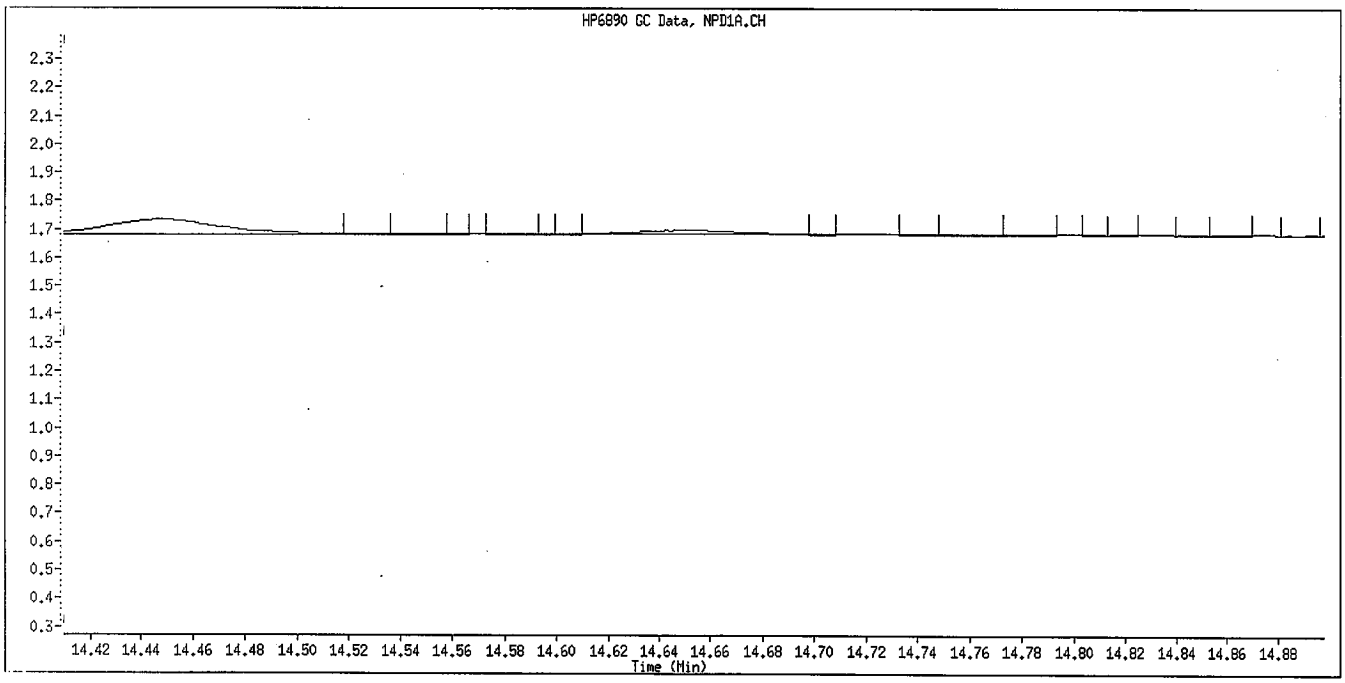
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

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

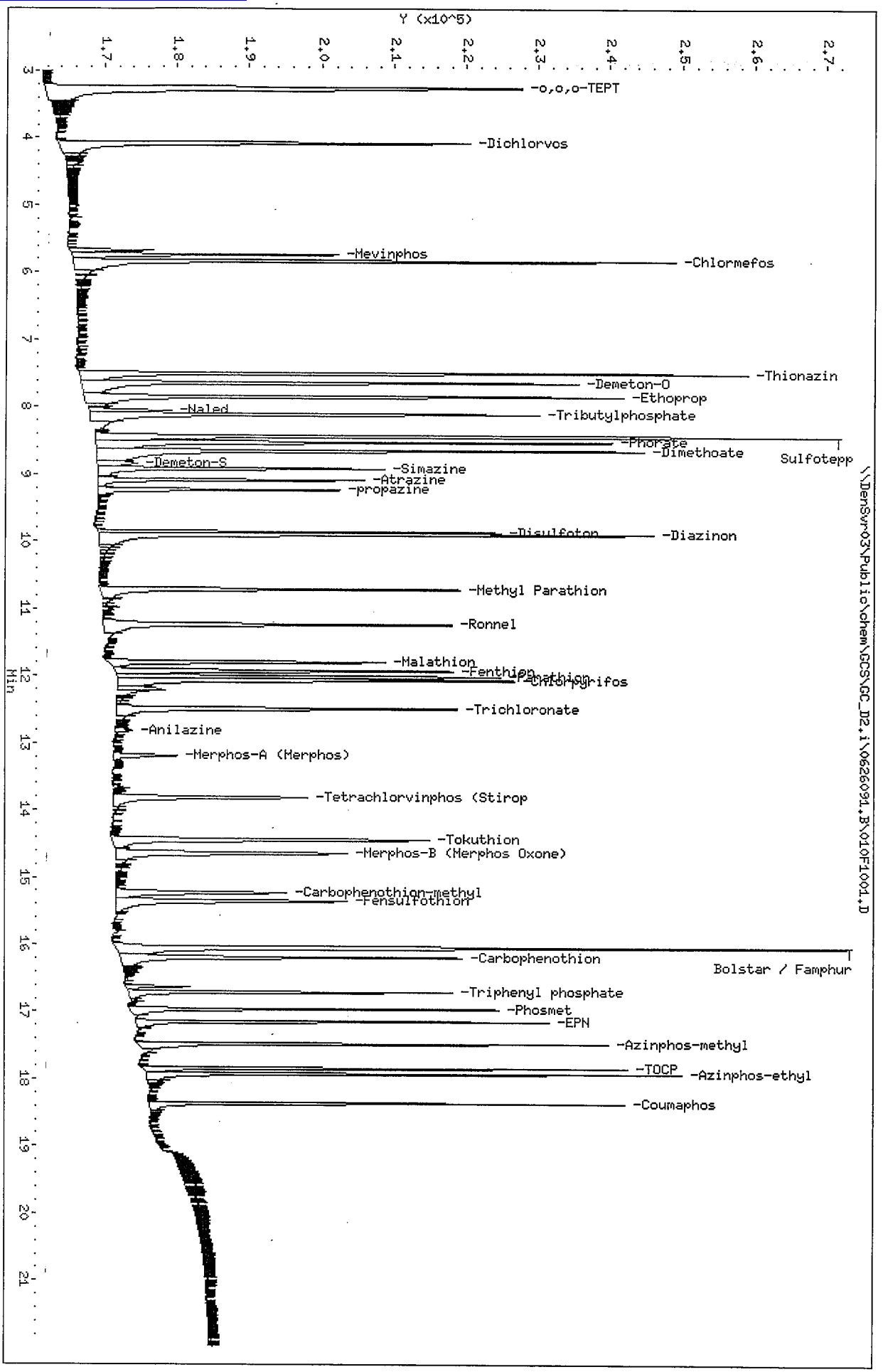
Instrument ID: GC_D2.i
Lab File ID: 010F1001.D
Lab Smp Id: OPP SS GSV0633
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626091.B\8141A-1.m
Misc Info: IS - GSV0633-09

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

						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)	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

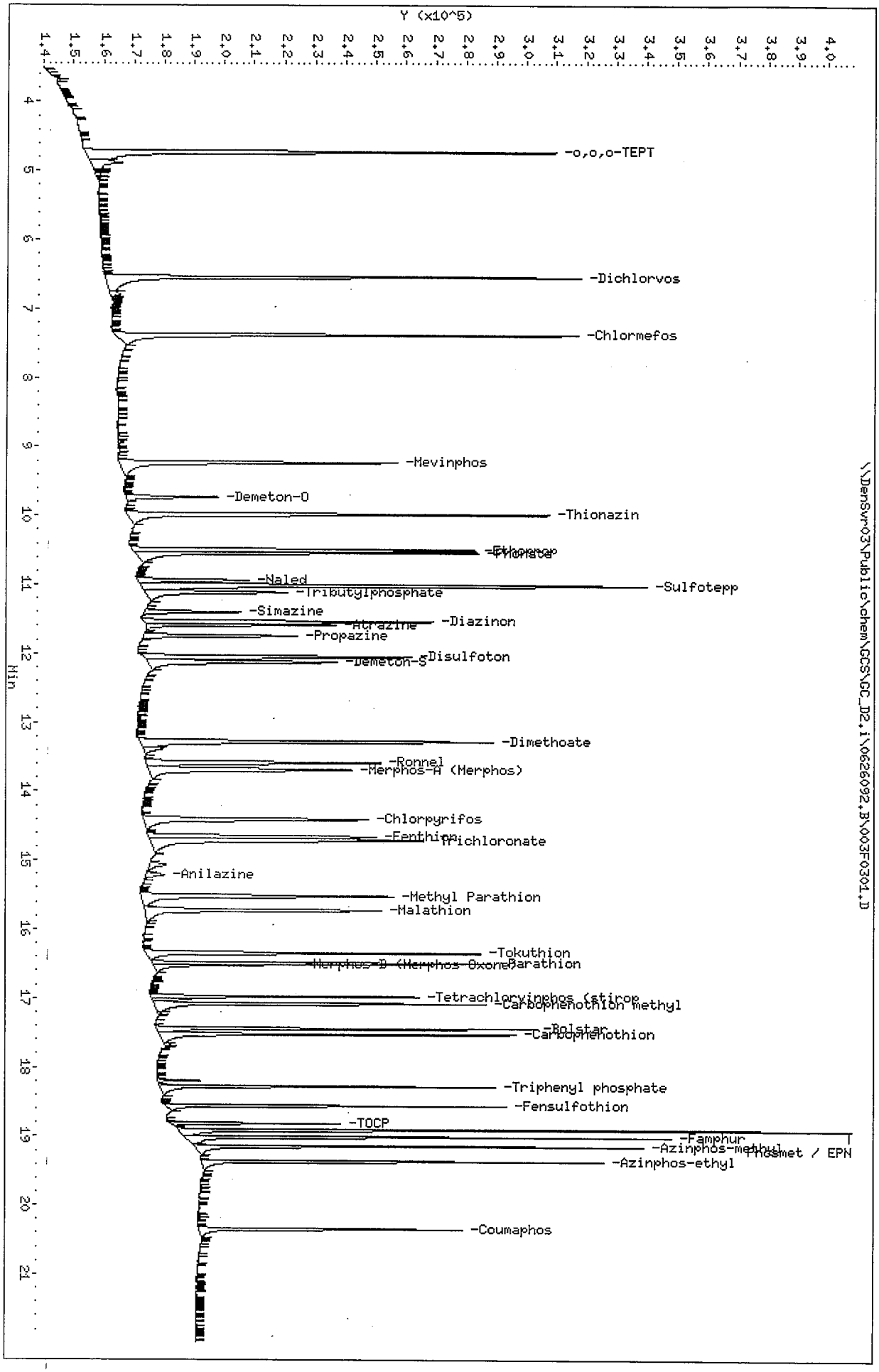
Instrument ID: GC_D2.i
Lab File ID: 003F0301.D
Lab Smp Id: OPP L7 GSV0634
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

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

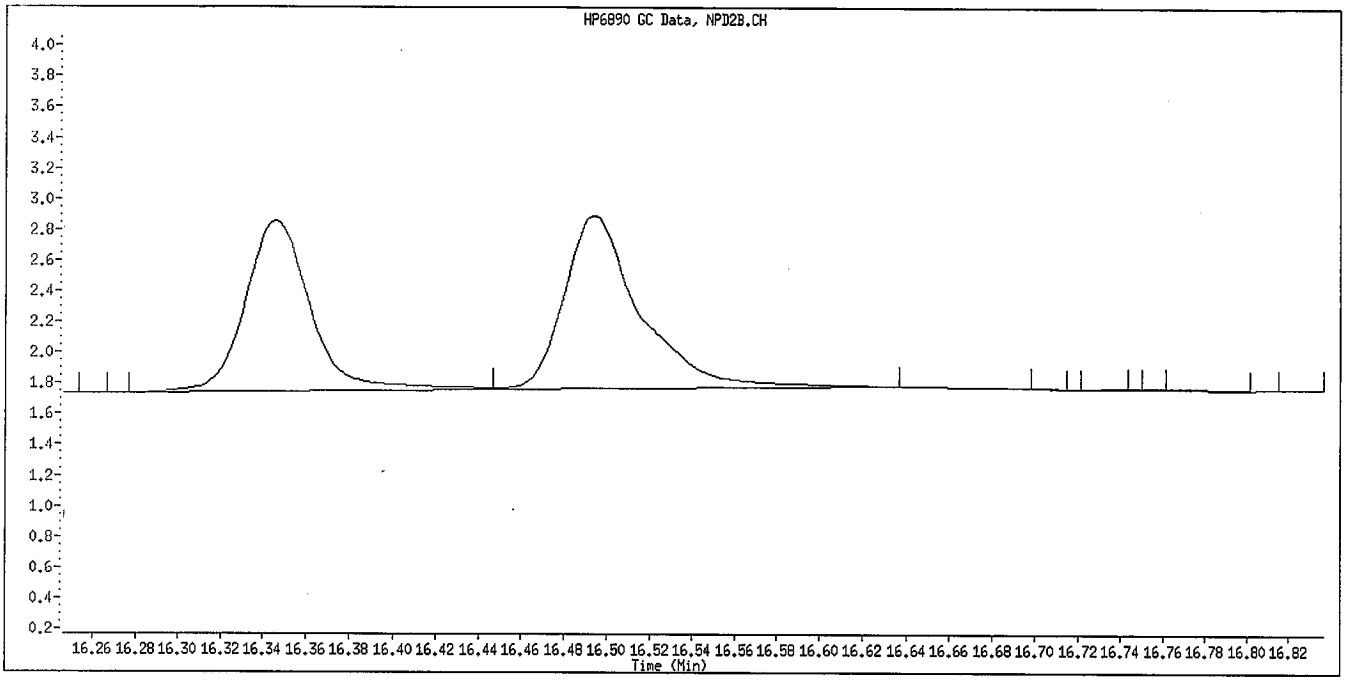
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



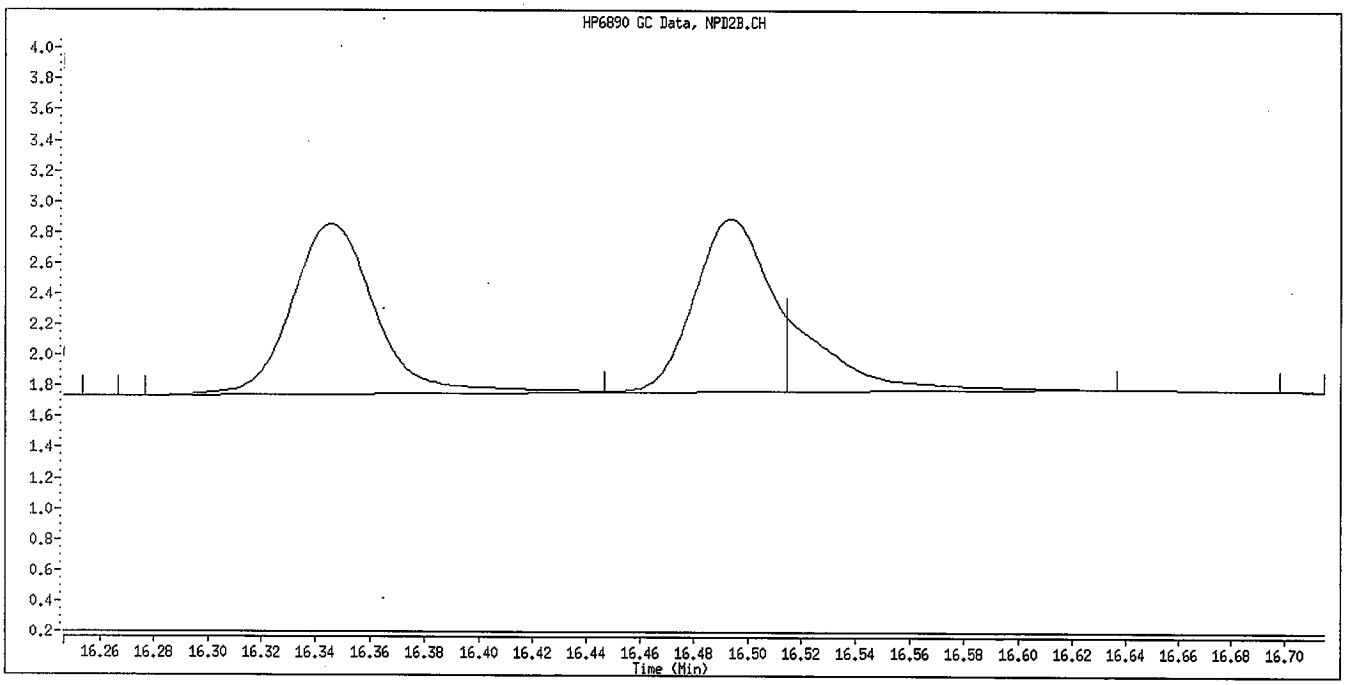
Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\003F0304.D
Date : 26-JUN-2009 18:28
Client ID: QPP L7 GSV0634
Sample Info: QPP L7 GSV0634
Column phase: RTx-OPPest

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

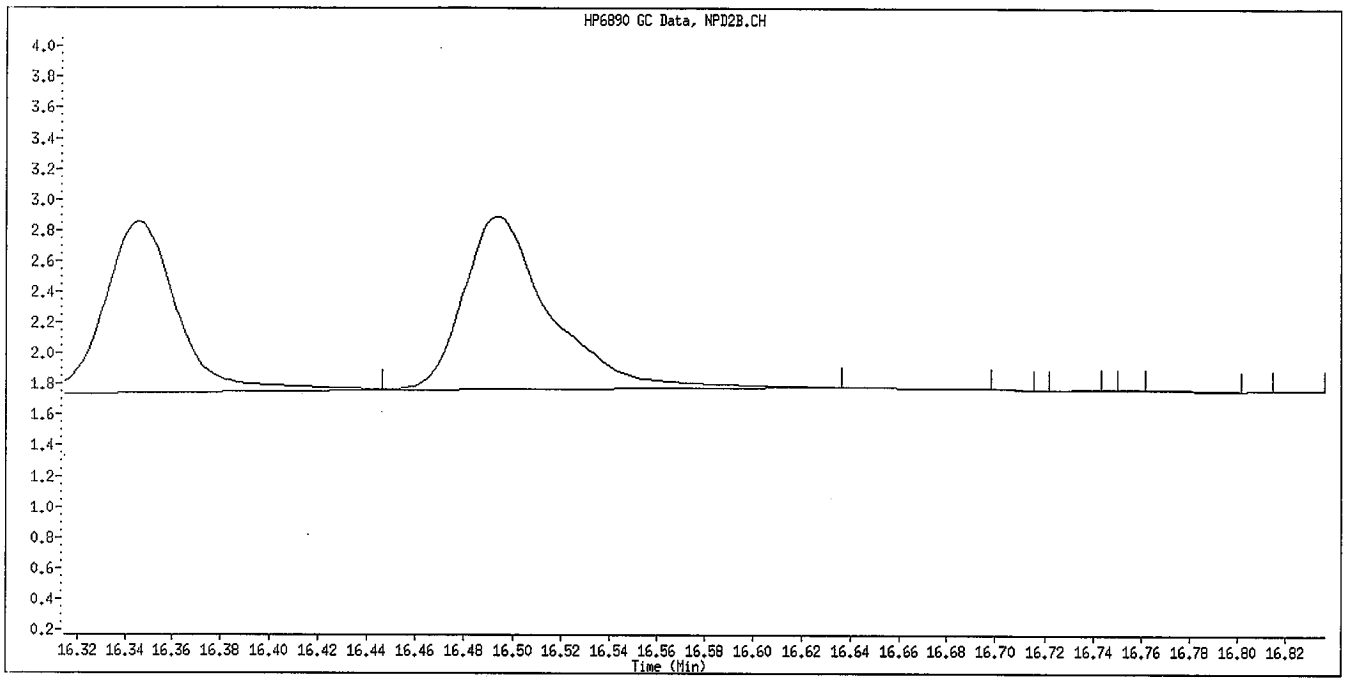


Manual Integration

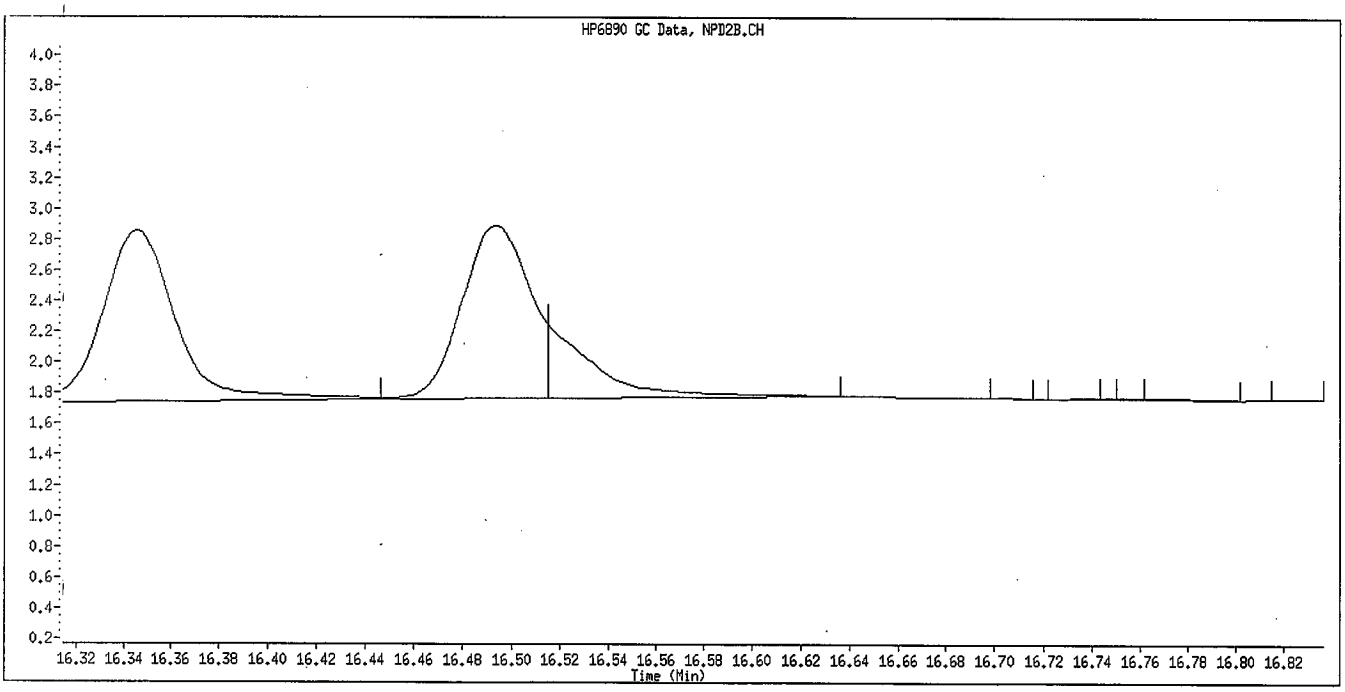
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

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

	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)	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

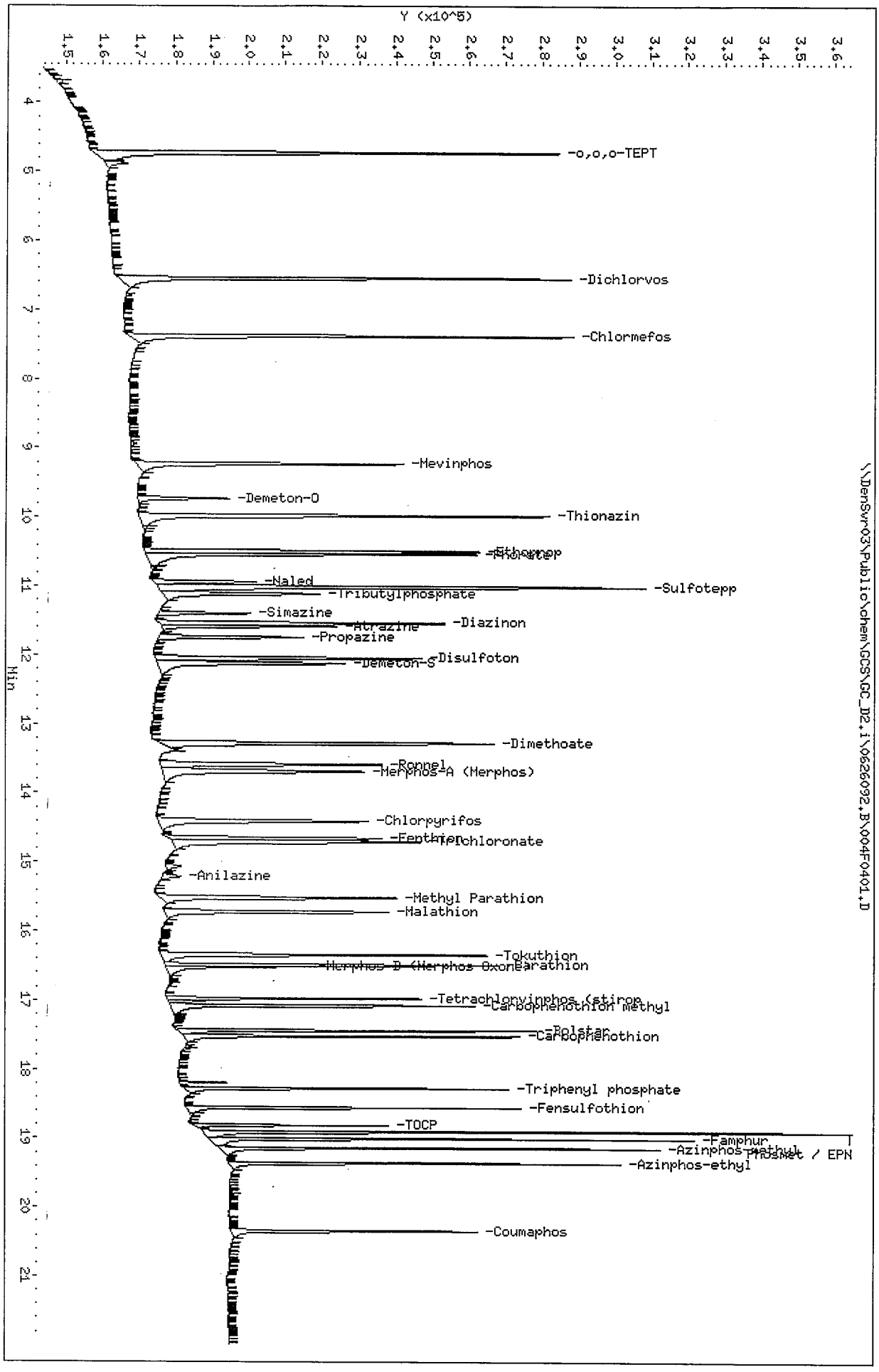
Instrument ID: GC_D2.i
Lab File ID: 004F0401.D
Lab Smp Id: OPP L6 GSV0637
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

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.



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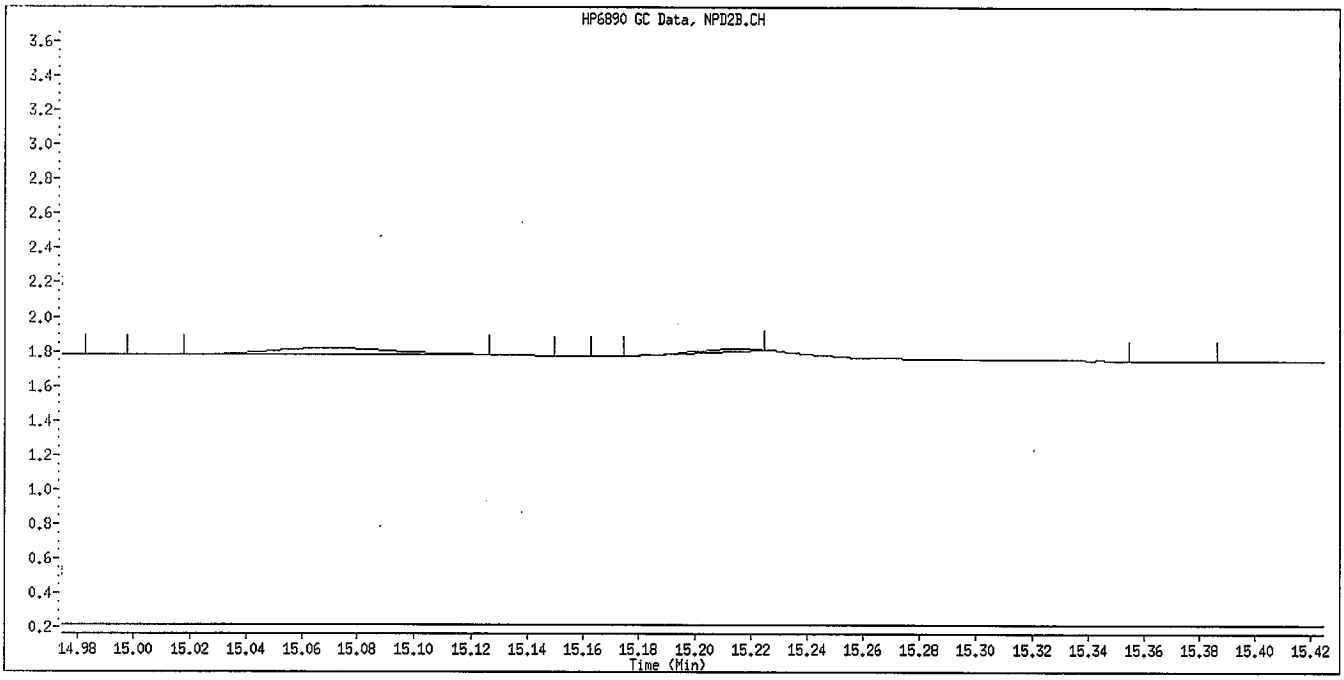
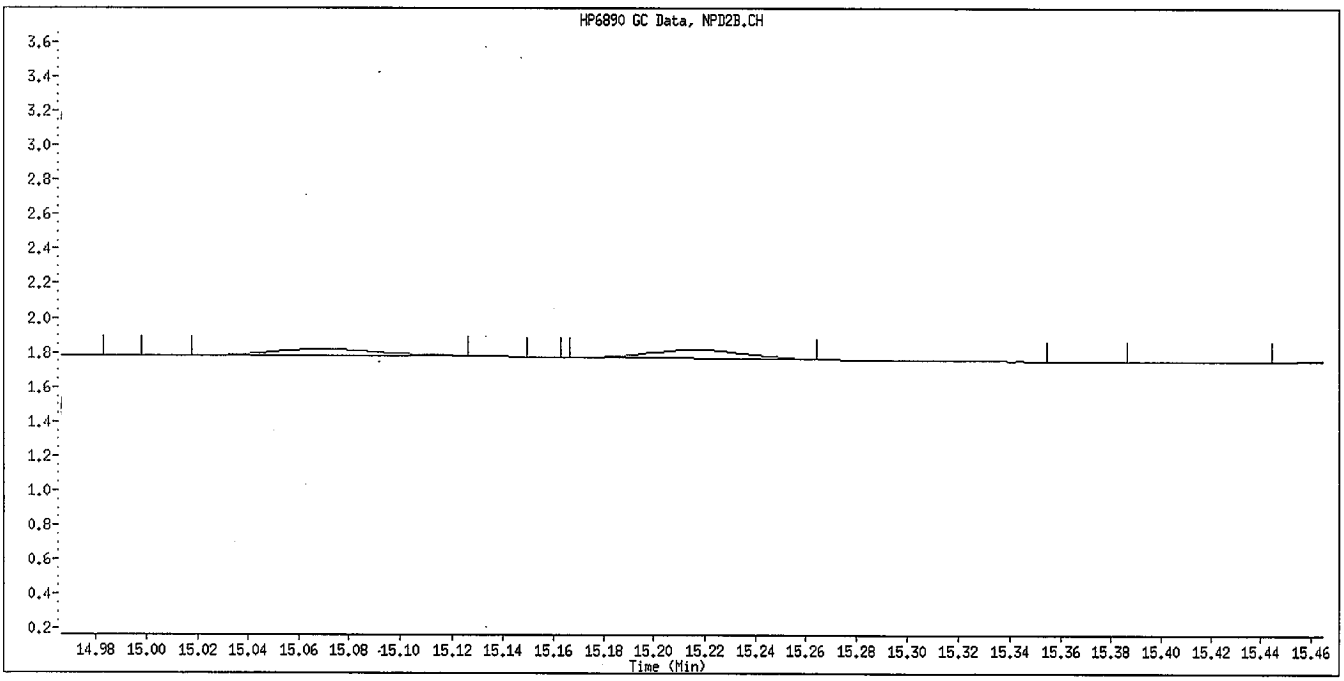
Date : 26-JUN-2009 18:55
Client ID: OPP L6 GSV0637
Sample Info: OPP L6 GSV0637
Column phase: RTx-OPPest

Instrument: GC_D2.i
Operator: MPK/TLW
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

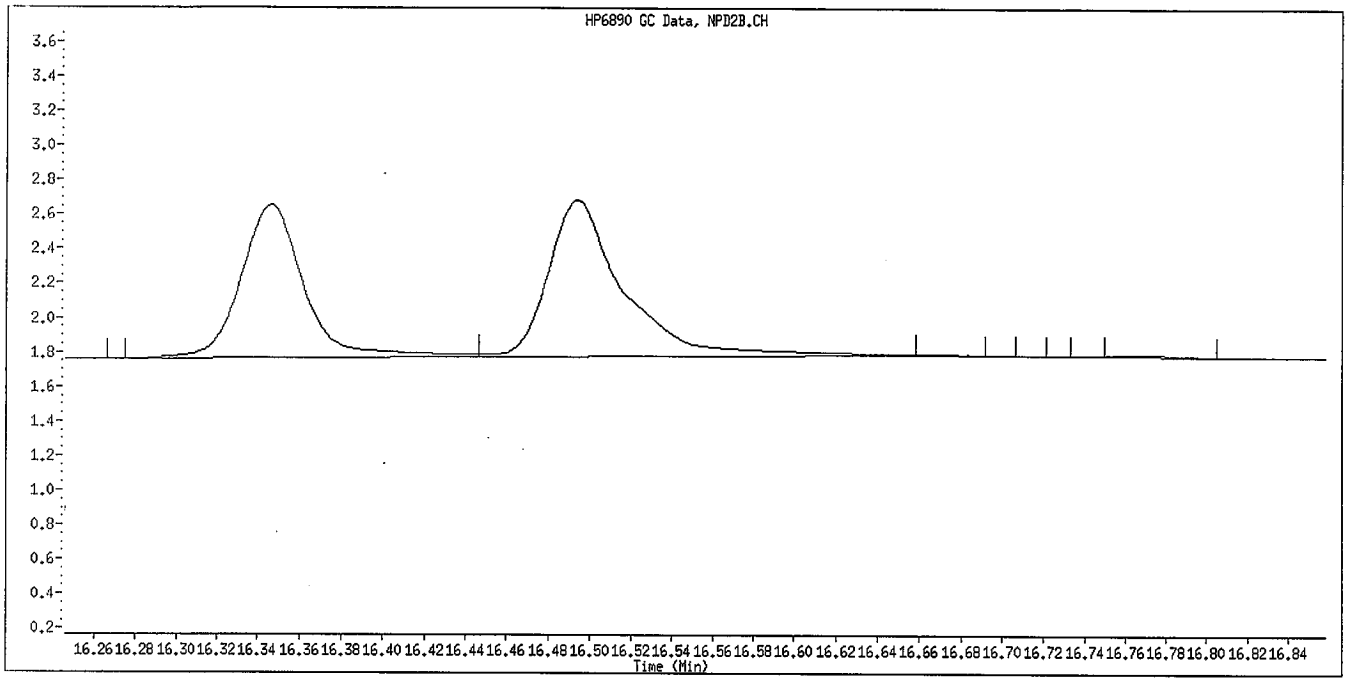


Manual Integration

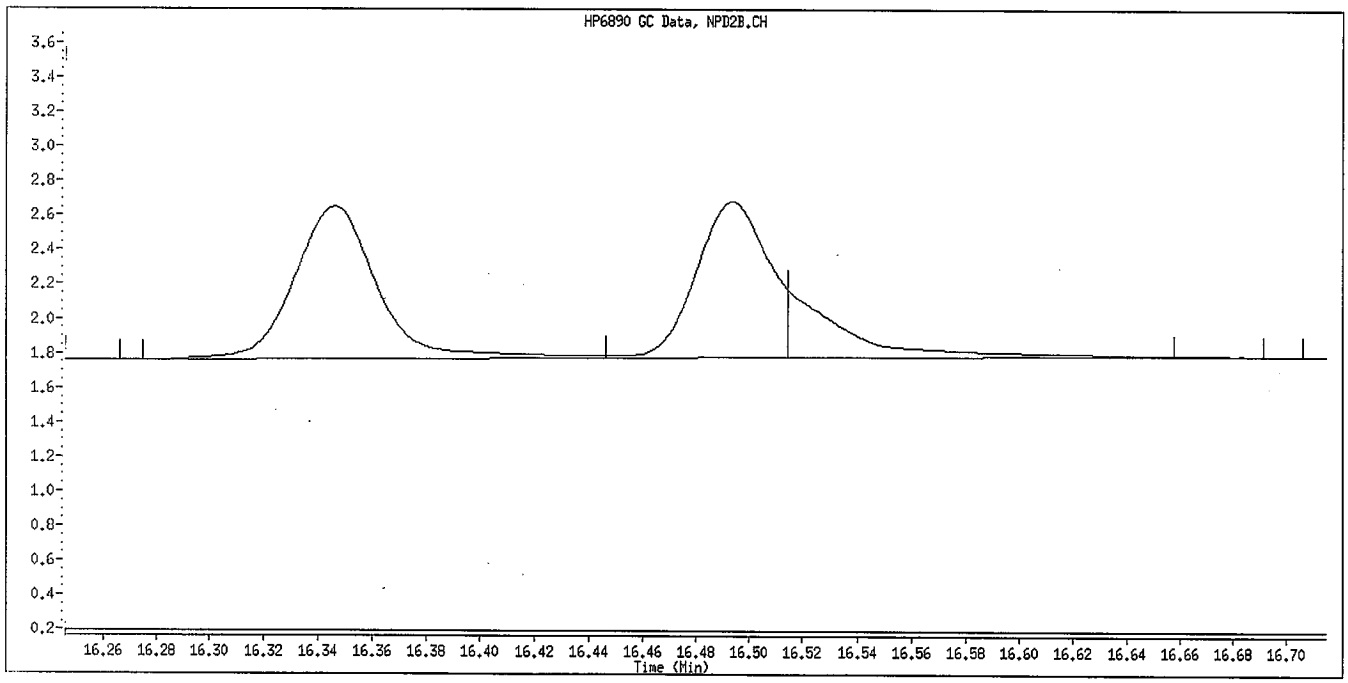
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

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

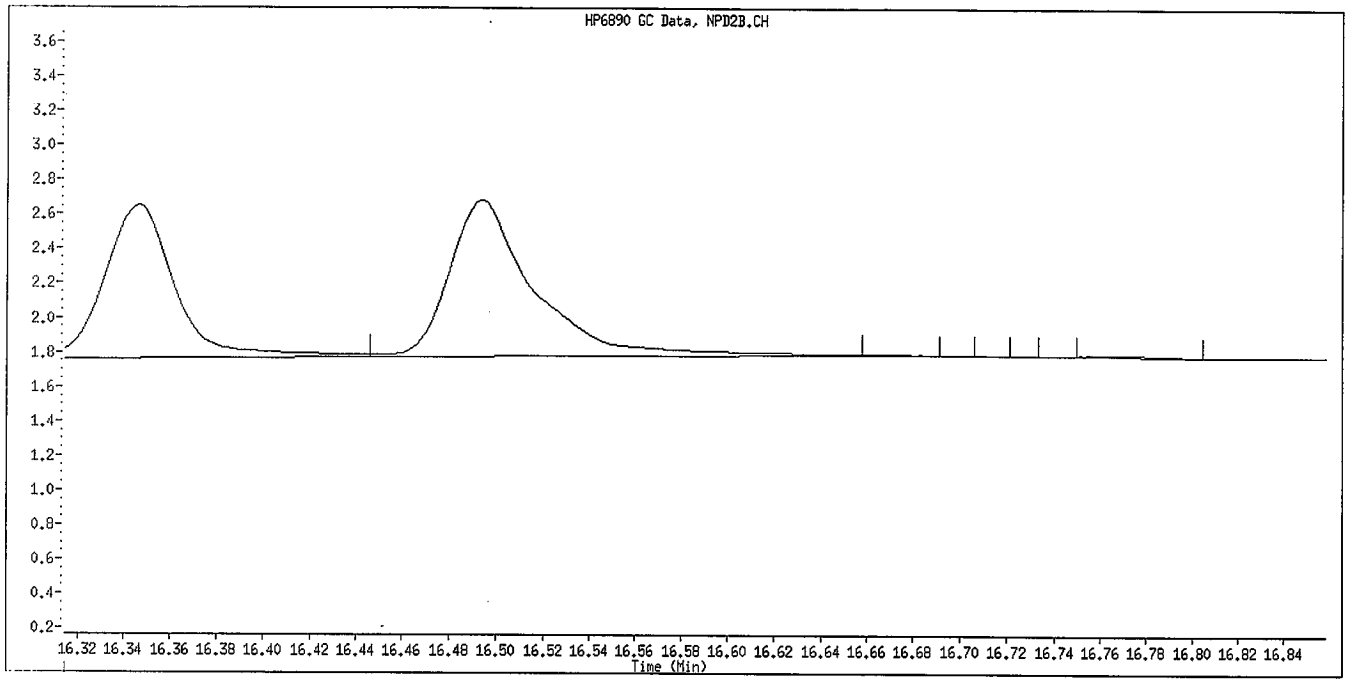


Manual Integration

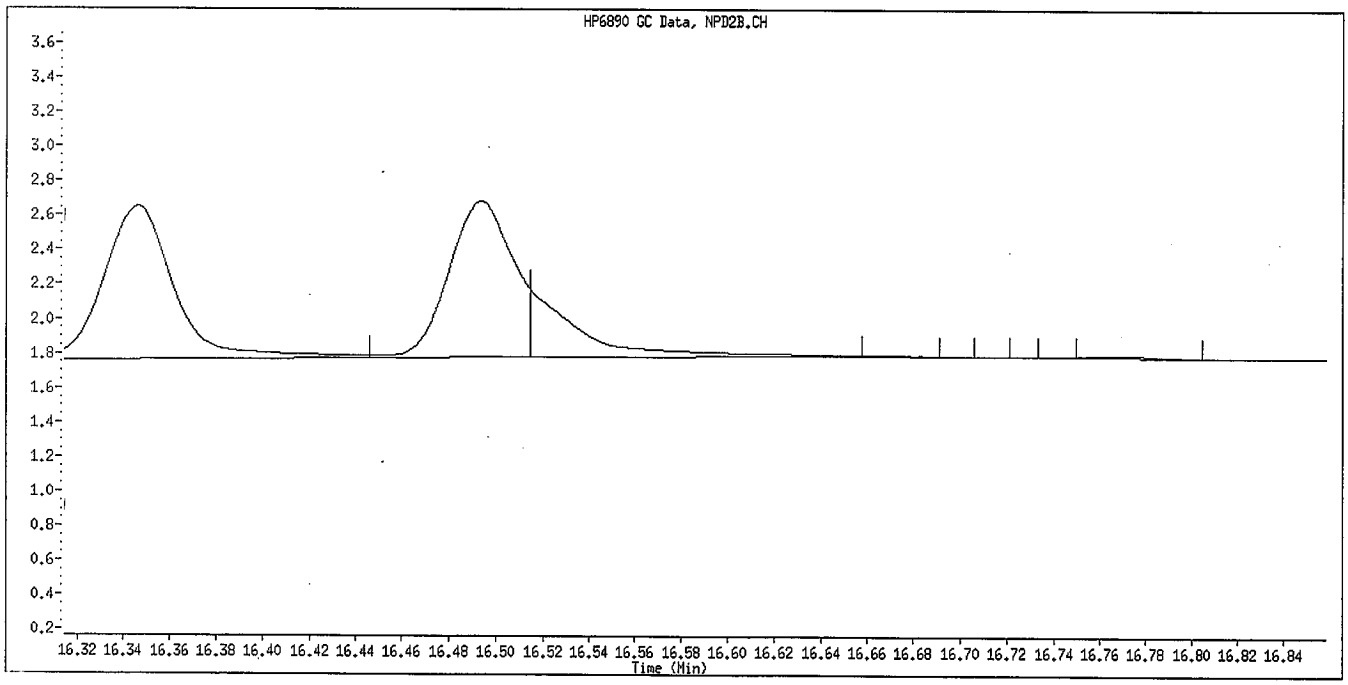
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

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)

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(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

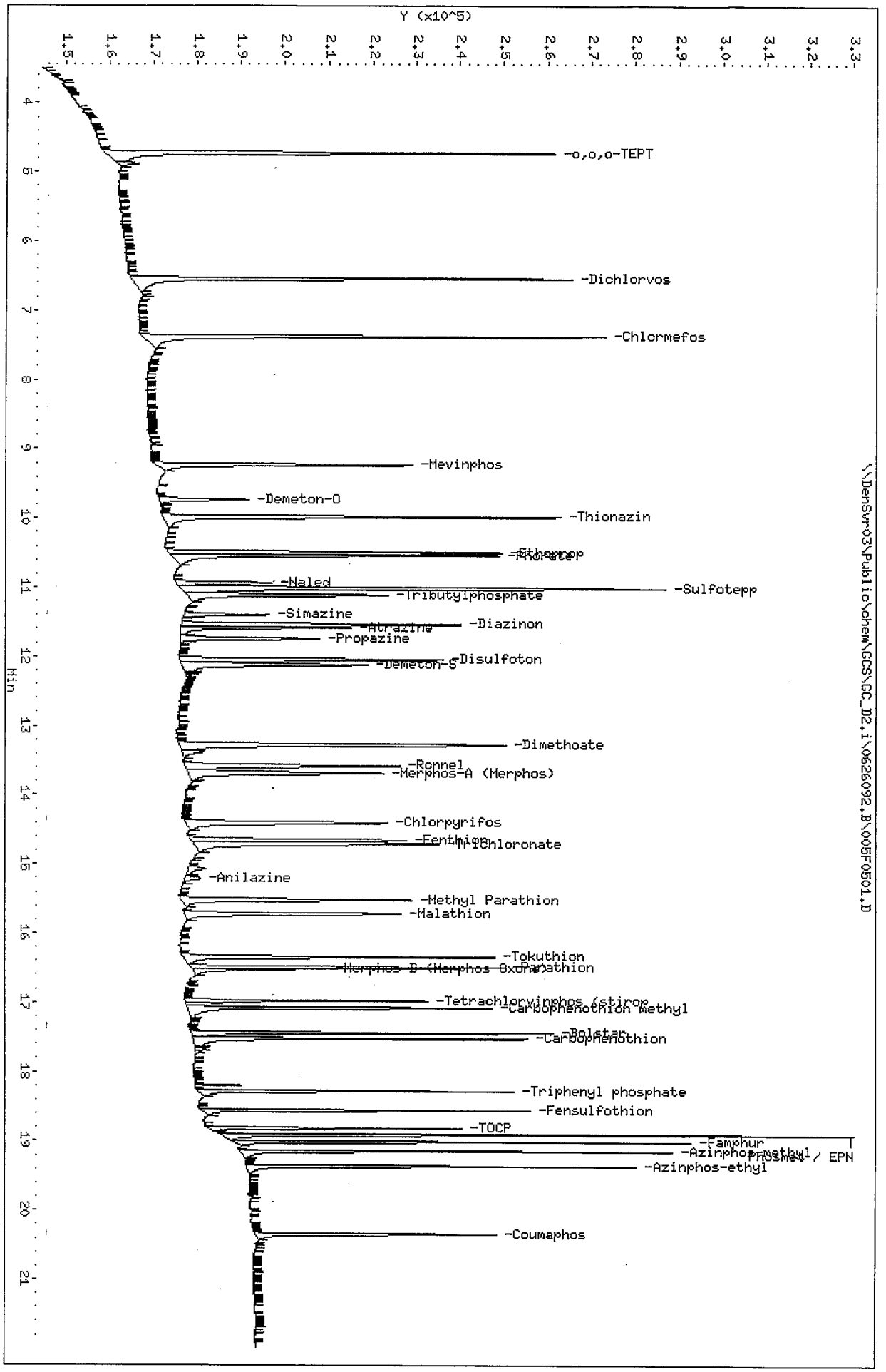
Instrument ID: GC_D2.i
Lab File ID: 005F0501.D
Lab Smp Id: OPP L5 GSV0635
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

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

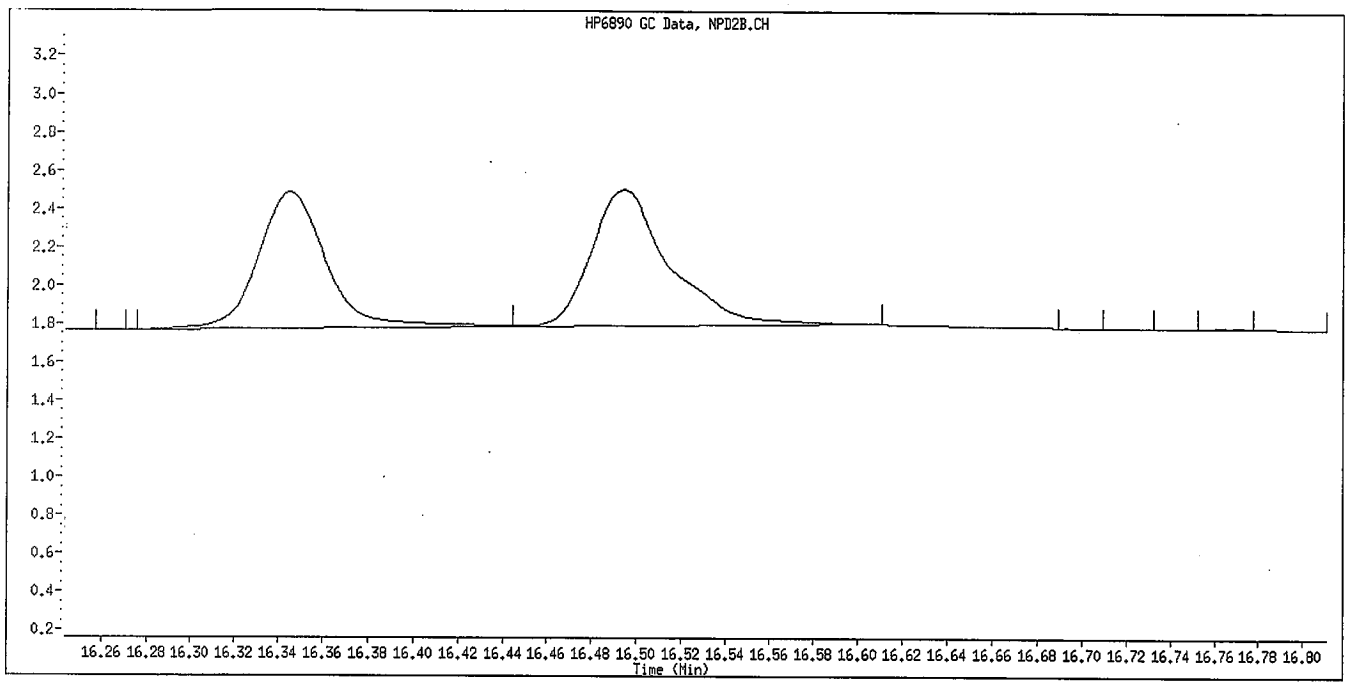
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



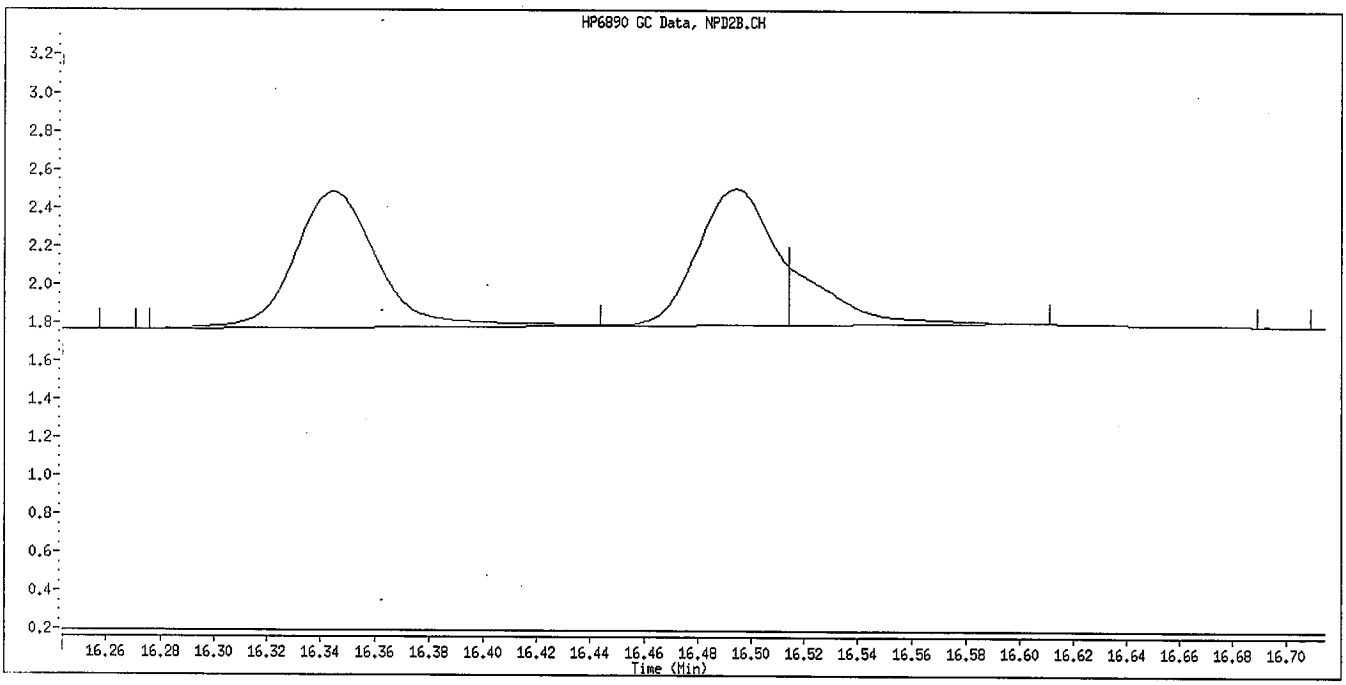
Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\0626092,B\005F0501,D
Date : 26-JUN-2009 19:23
Client ID: OPP L5 GSV0635
Sample Info: OPP L5 GSV0635
Column phase: RTx-OPPest

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

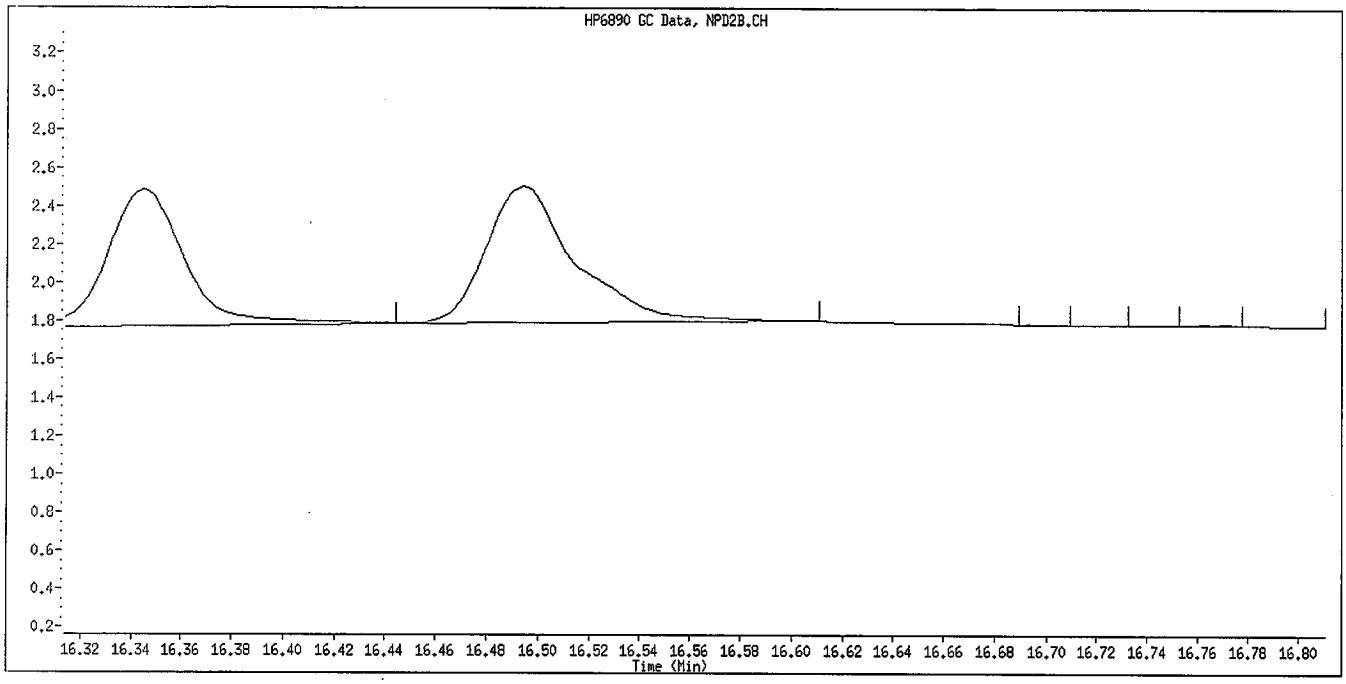


Manual Integration

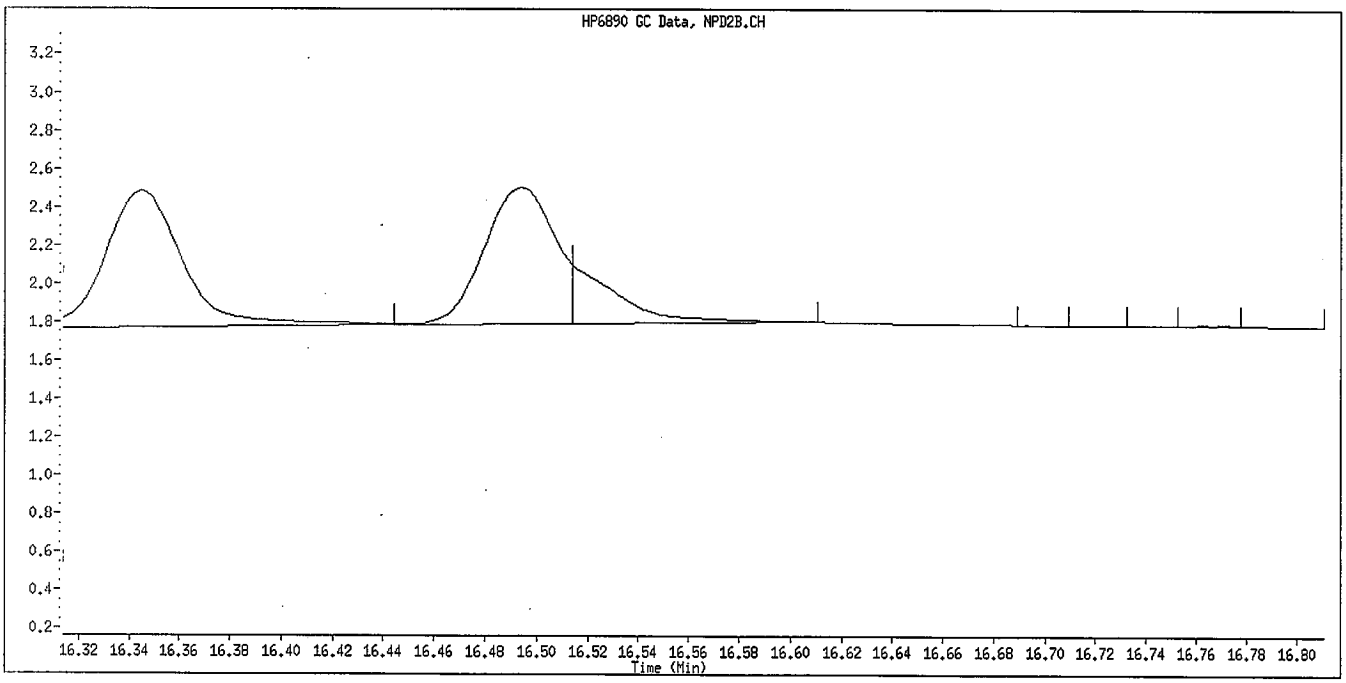
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

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

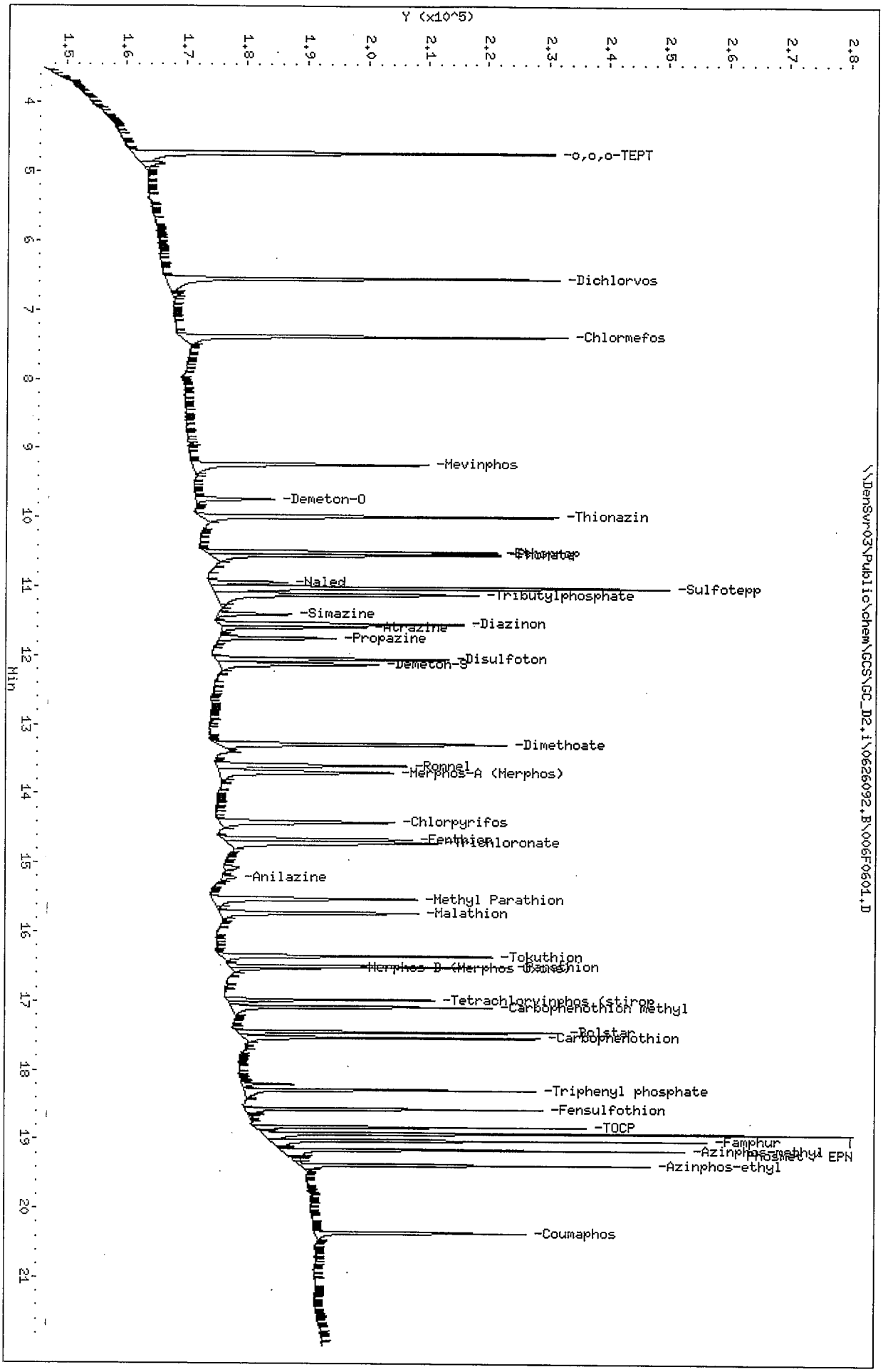
Instrument ID: GC_D2.i
Lab File ID: 006F0601.D
Lab Smp Id: OPP L4 GSV0638
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

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

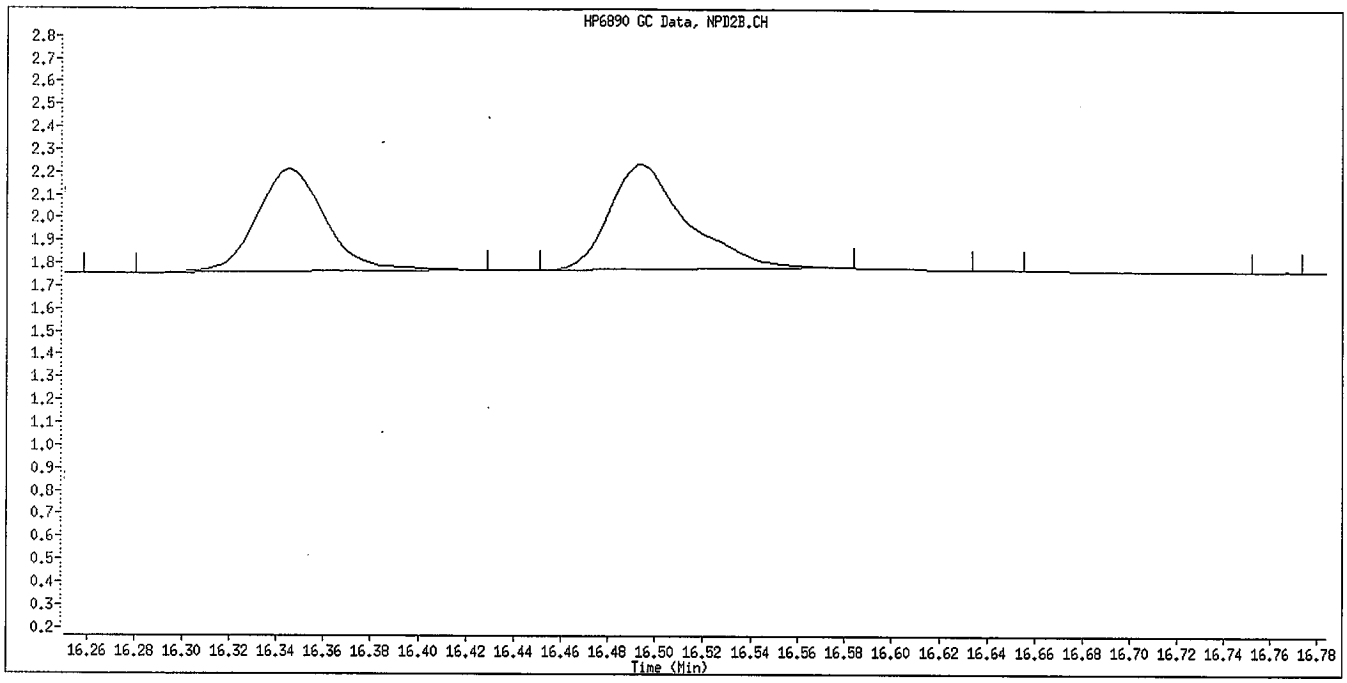
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



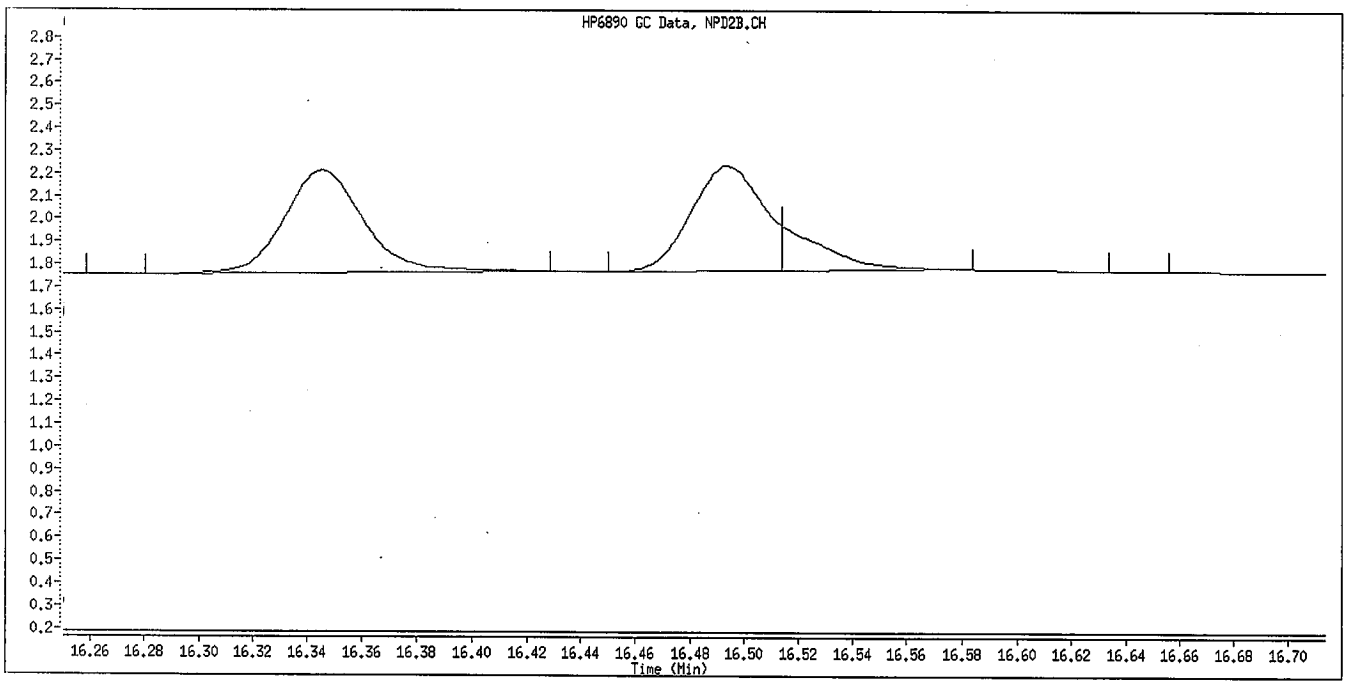
Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\006F0604.D
Date : 26-JUN-2009 19:50
Client ID: OPP L4 GSV0638
Sample Info: OPP L4 GSV0638
Column phase: RTx-OPPest

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

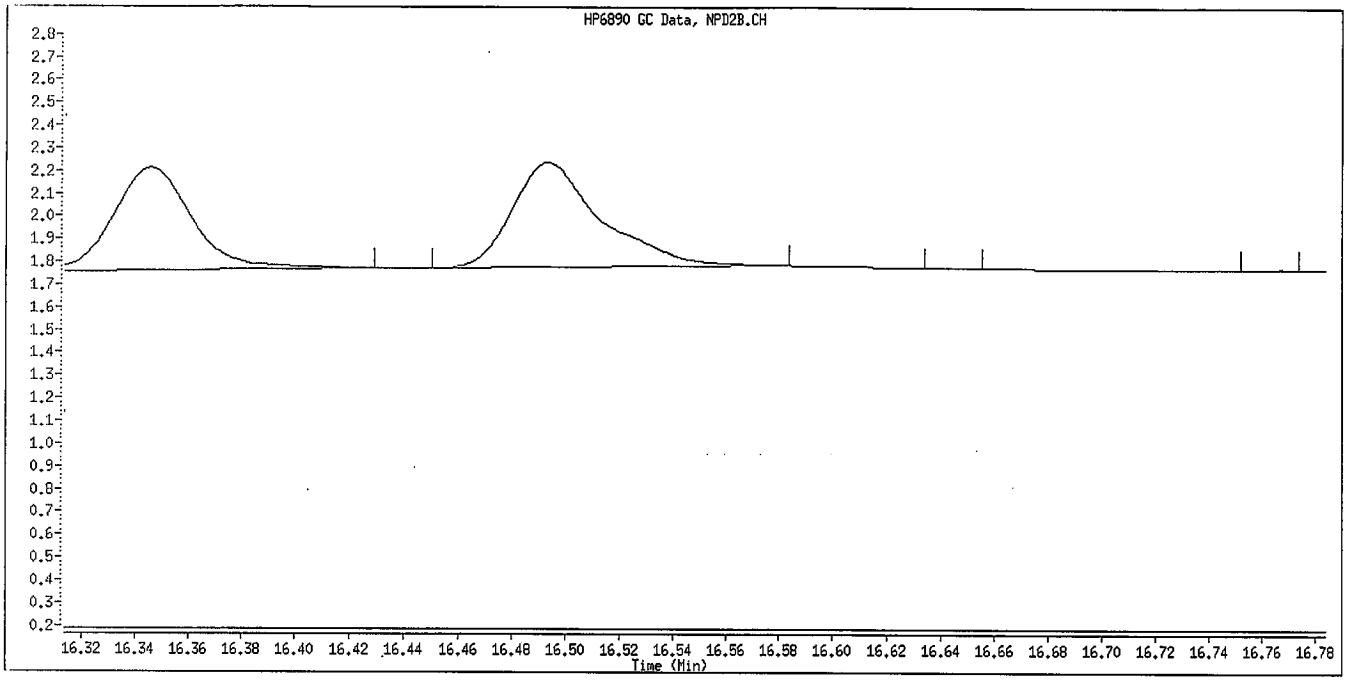


Manual Integration

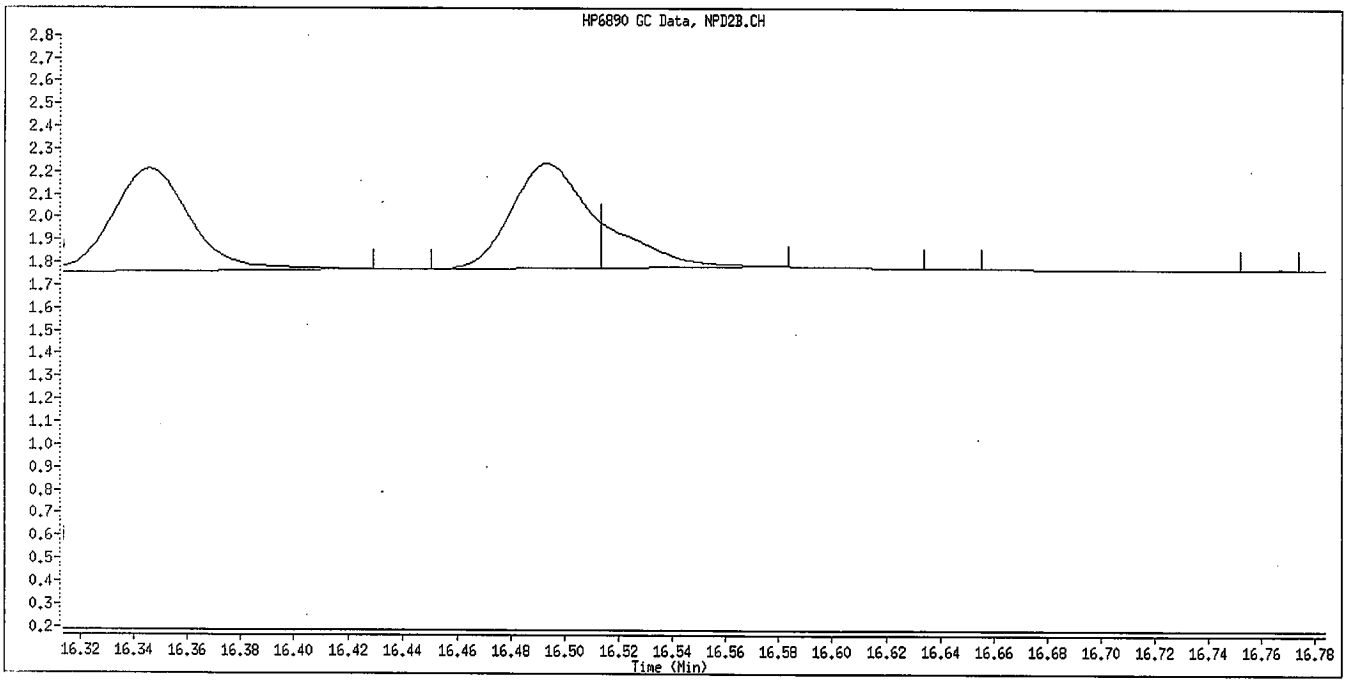
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

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	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(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

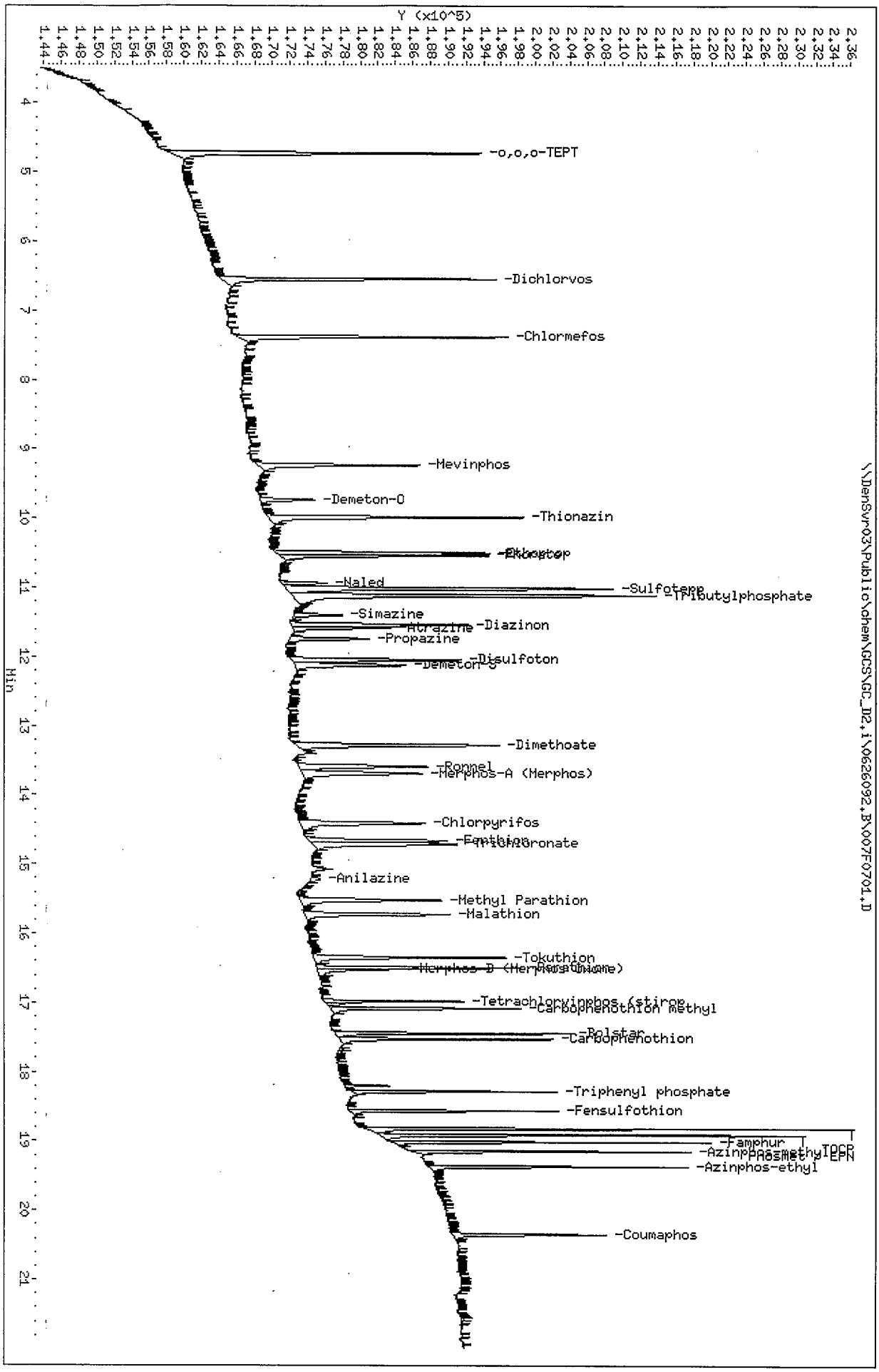
Instrument ID: GC_D2.i
Lab File ID: 007F0701.D
Lab Smp Id: OPP L3 GSV0639
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L3 GSV0639
Level:
Sample Type:

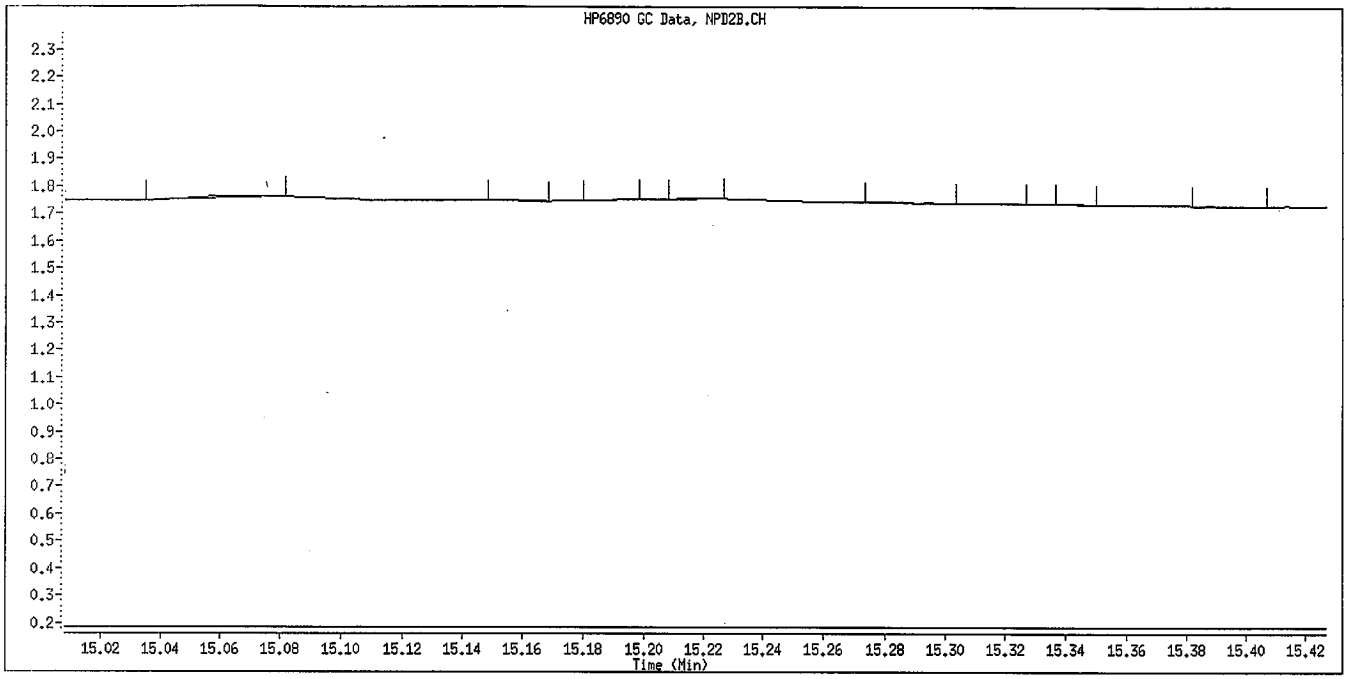
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	126959	63480	253918	109941	-13.40
36 TOCP	68161	34081	136322	69519	1.99

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

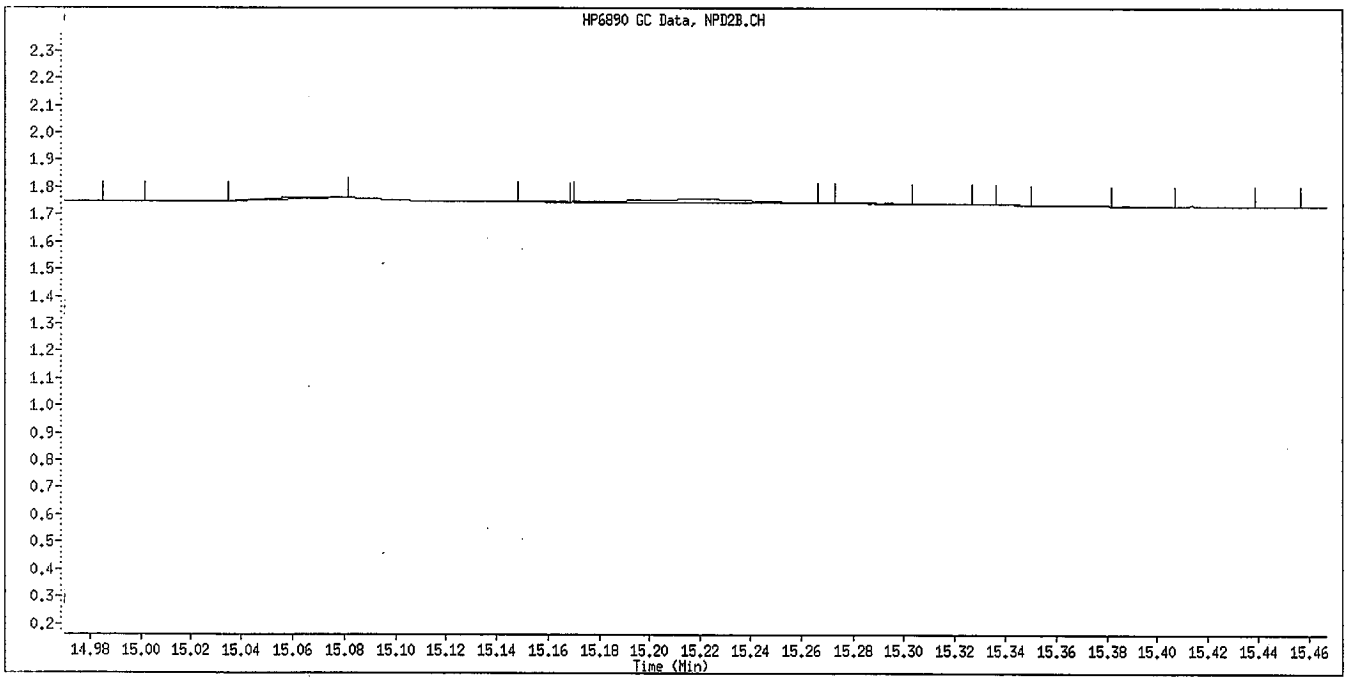
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\0626092,B\007F0701.D
Date : 26-JUN-2009 20:18
Client ID: OPP L3 GSV0639
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
-Atrazine
-Diazinon
-Propazine
-Disulfoton
-Dimethoate
-Ronnel
-Merphos-A (Merphos)
-Chlorpyrifos
-Fonofos
-Trichloronate
-Anilazine
-Methyl Parathion
-Malathion
-Tokuthion
-Merphos-B (Merphos Oxone)
-Tetrachlorvinphos (Stirofos)
-Carbophenothion methyl
-Bolstar
-Carbophenothion
-Triphenyl phosphate
-Fensulfothion
-Famphur
-Azinphos-methyl
-EPN
-Azinphos-ethyl
-Coumaphos
Page 4

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

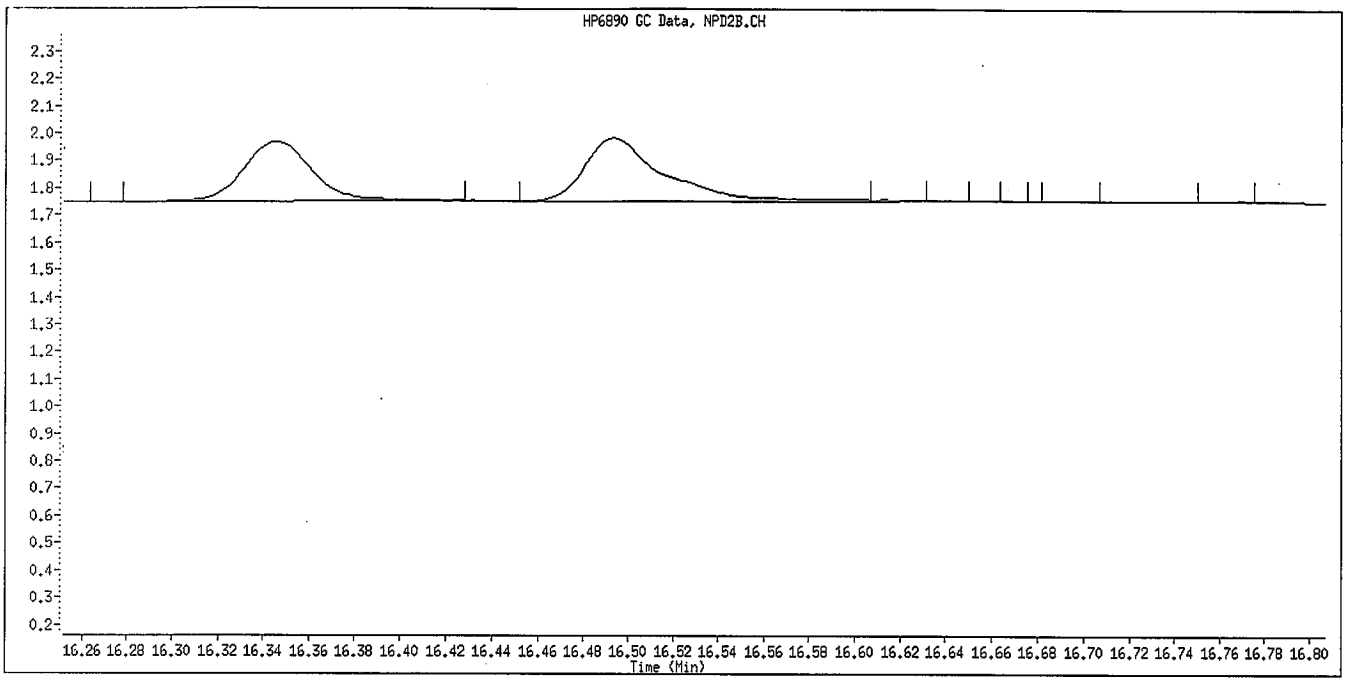


Manual Integration

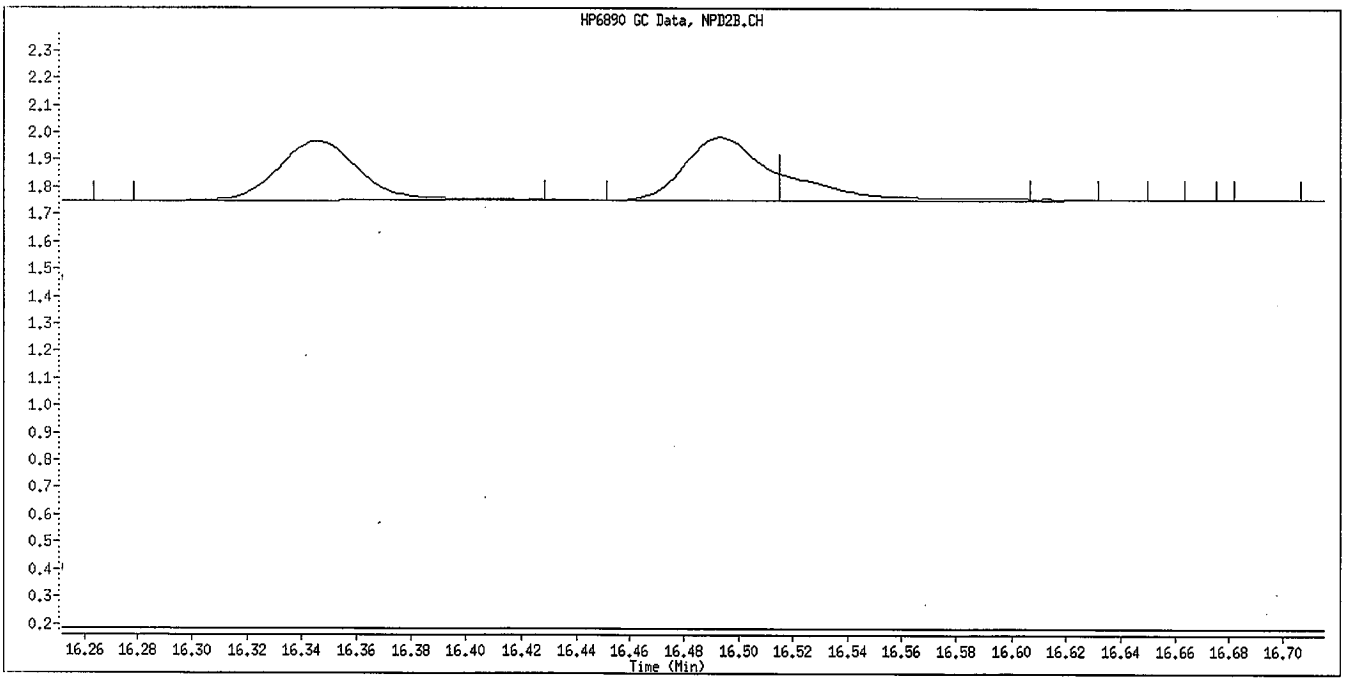
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

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

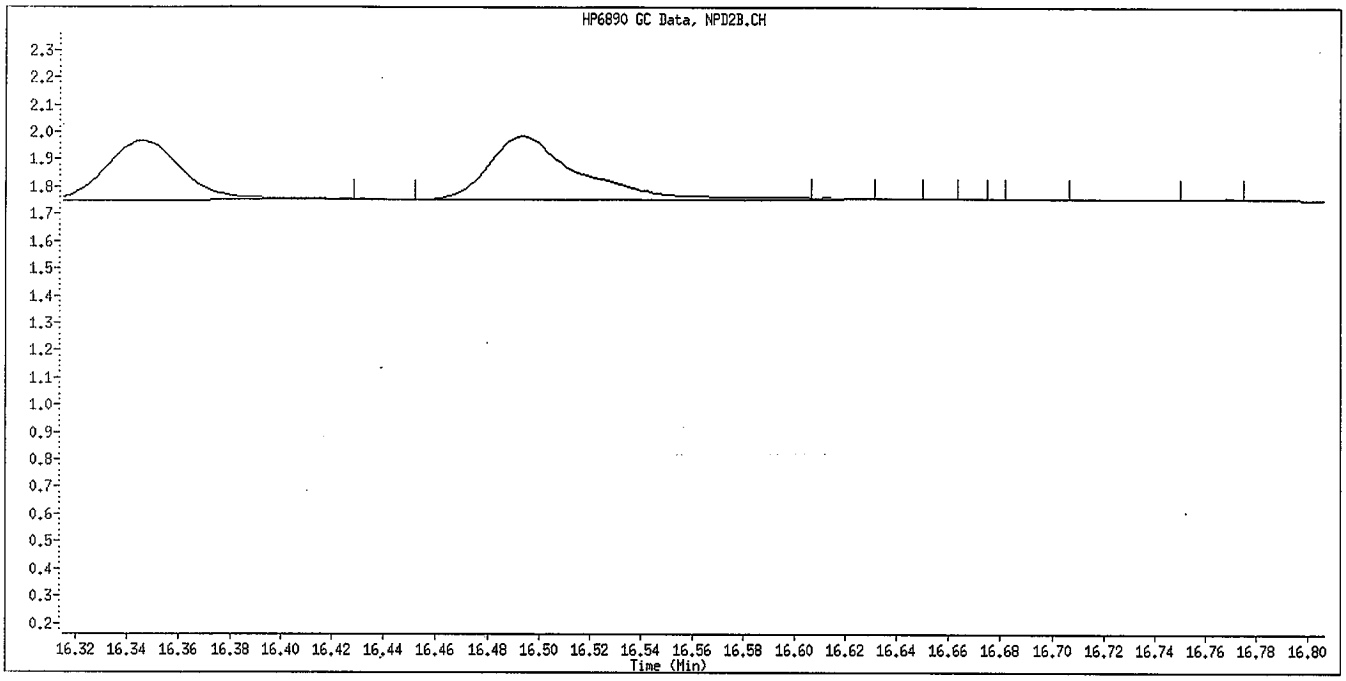


Manual Integration

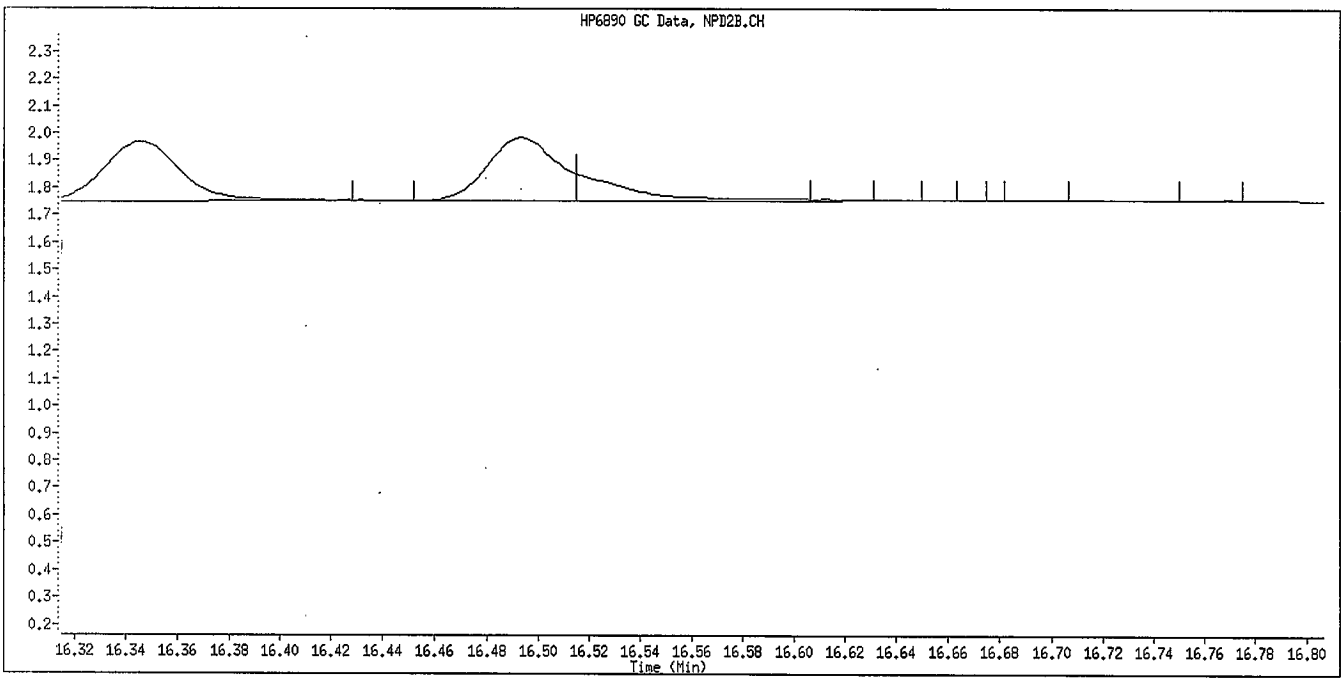
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

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

						AMOUNTS	
	Compounds	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	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

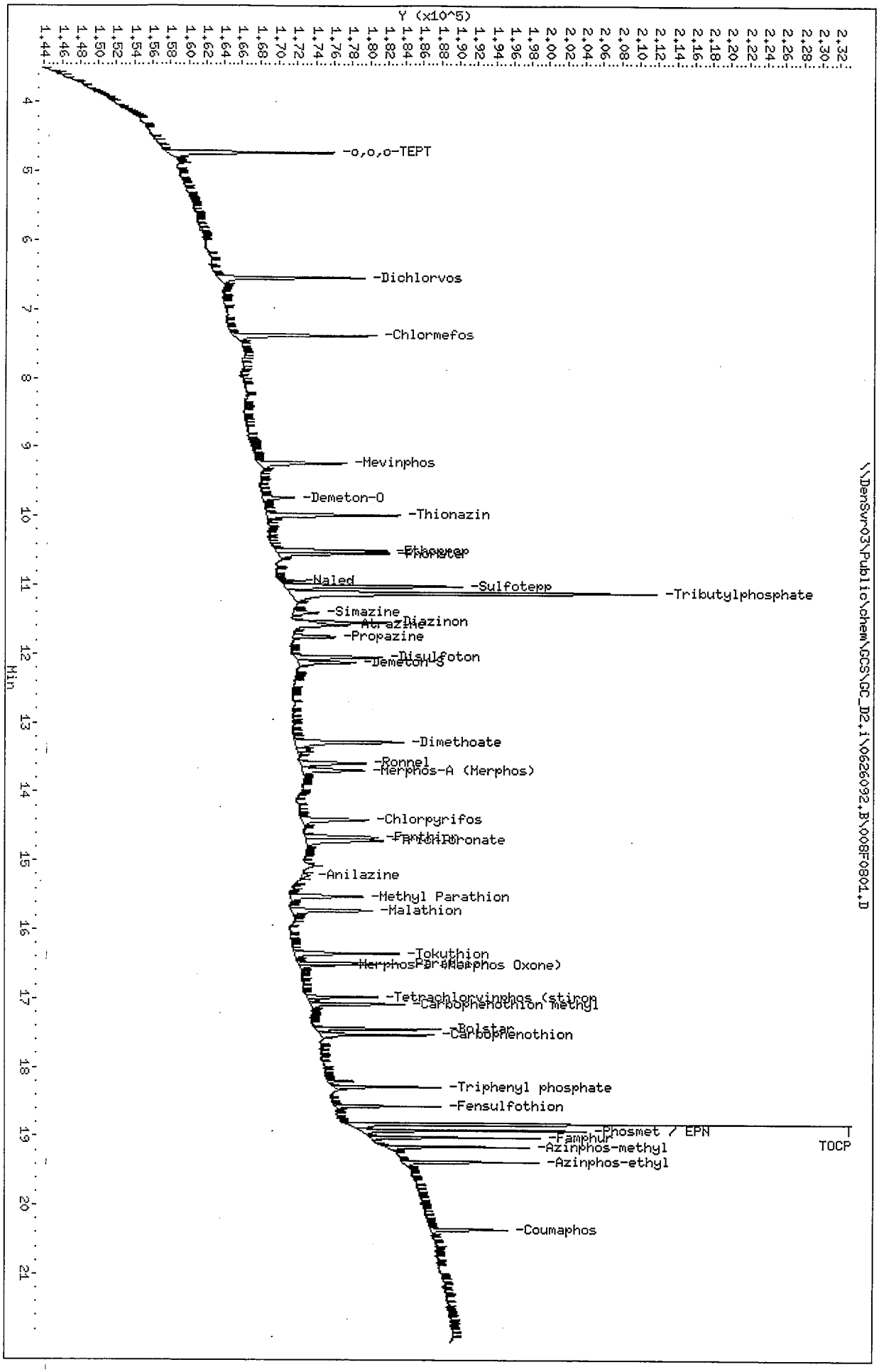
Instrument ID: GC_D2.i
Lab File ID: 008F0801.D
Lab Smp Id: OPP L2 GSV0640
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

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

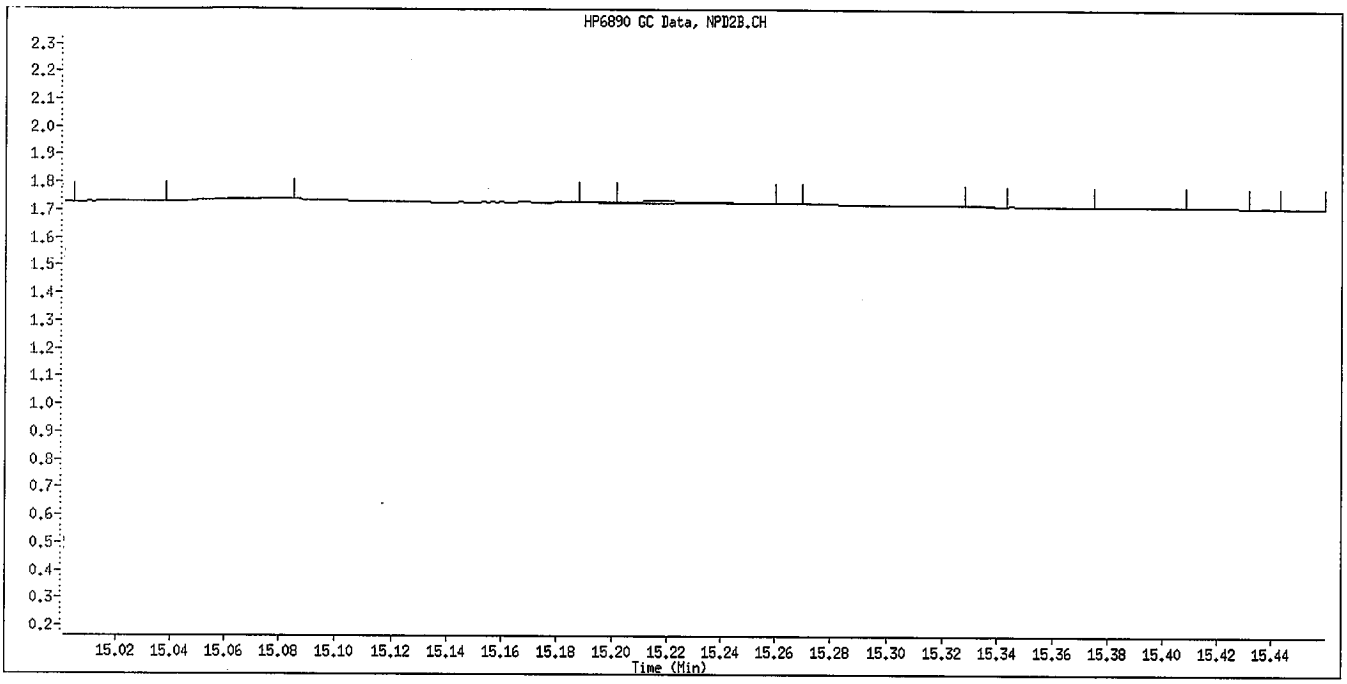
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	11.12	10.62	11.62	11.12	0.02
36 TOCP	18.82	18.32	19.32	18.81	-0.00

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.

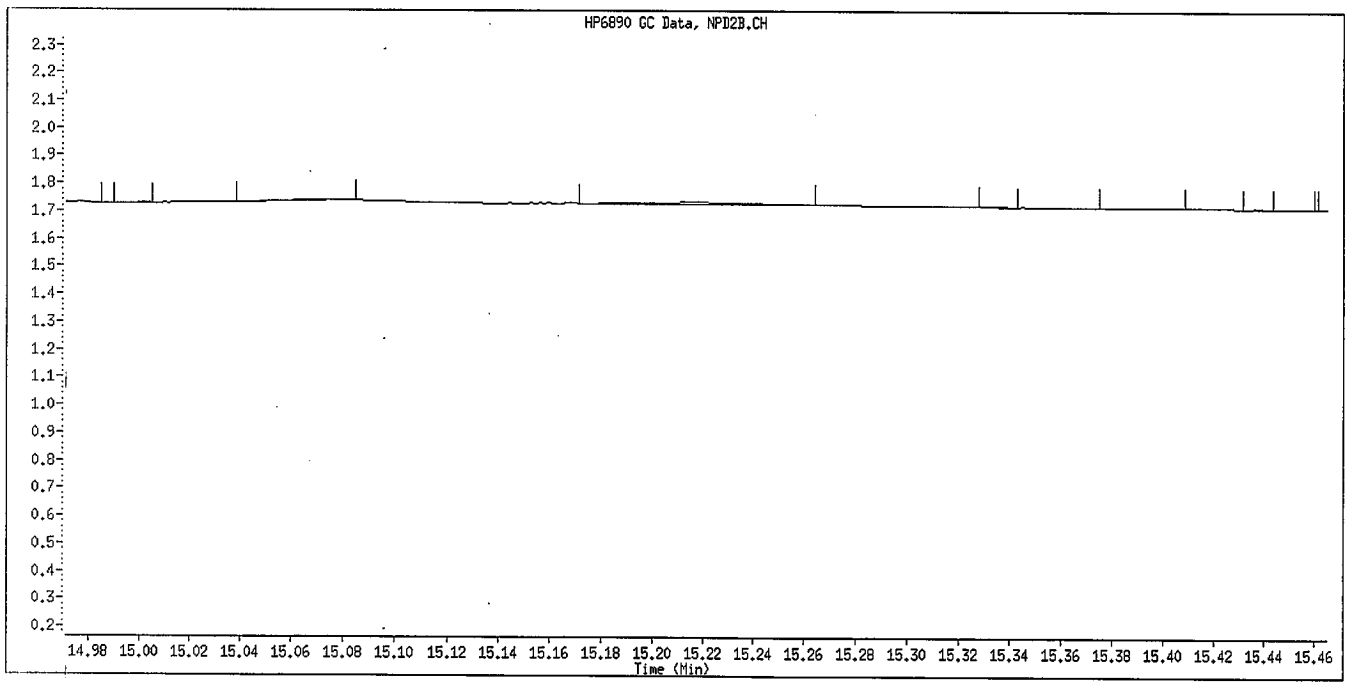


Data File: \\DenSvr03\Public\chem\GCS\GC_D2,i\0626092,B\008F0801,D
Date : 26-JUN-2009 20:45
Client ID: OPP L2 GSV0640
Sample Info: OPP L2 GSV0640
Column phase: RTx-OPPest
Instrument: GC_D2,i
Operator: MPK/TLW
Column diameter: 0.32

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

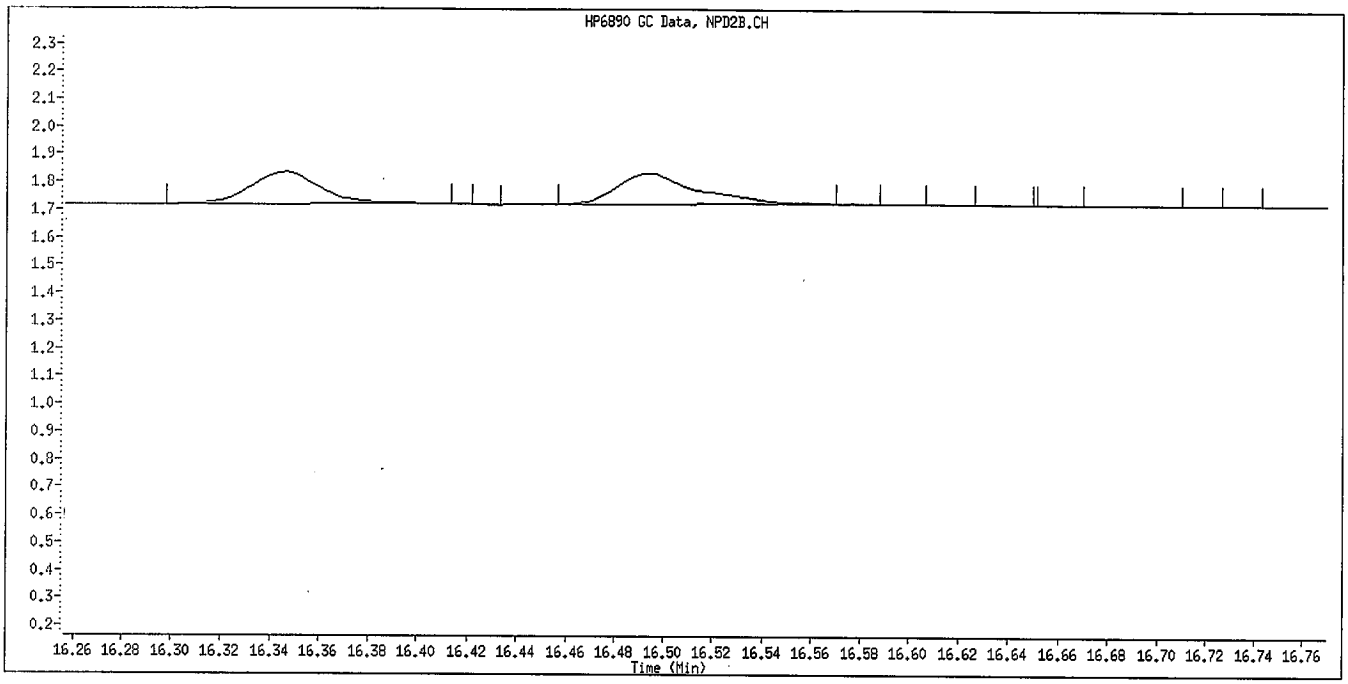


Manual Integration

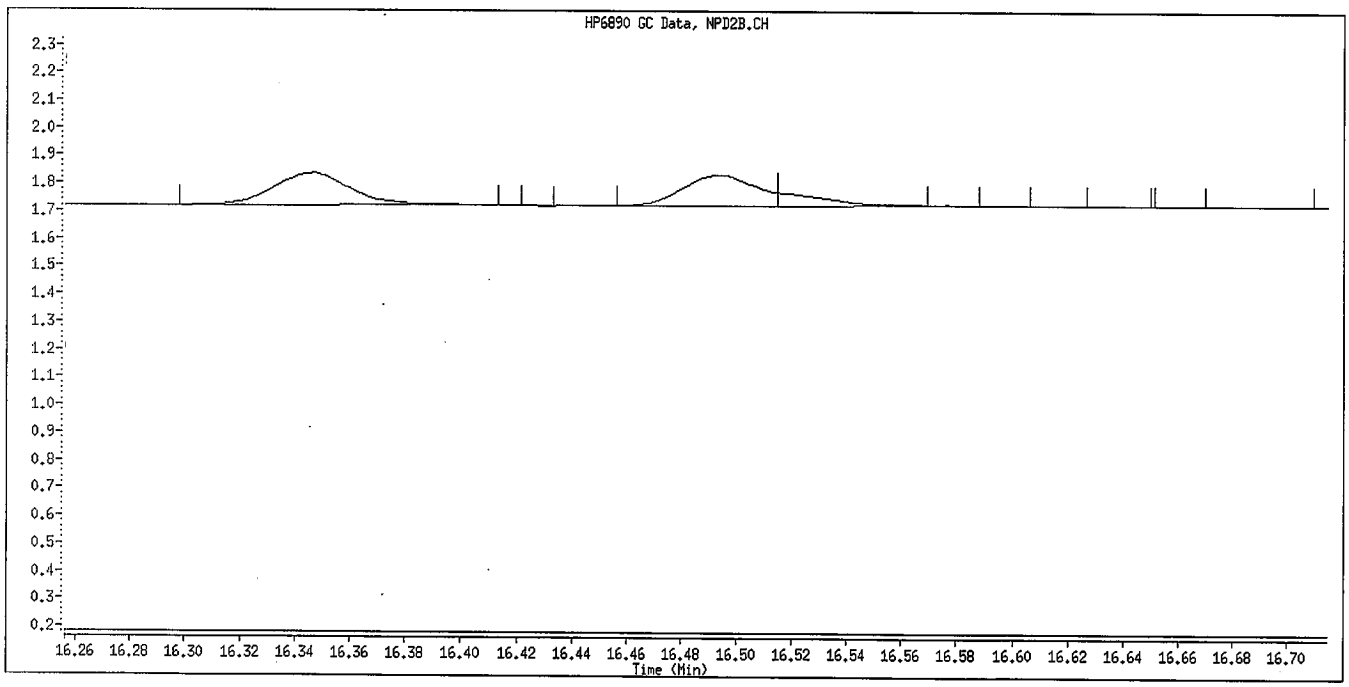
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

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

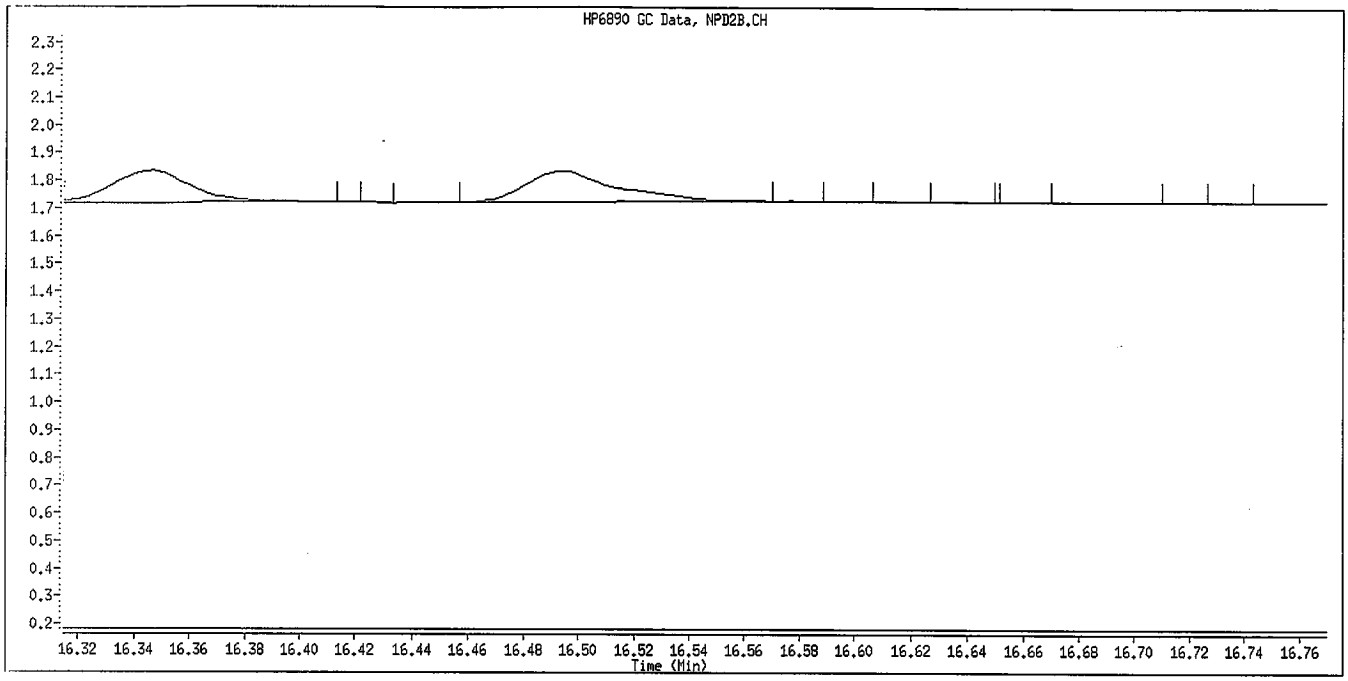


Manual Integration

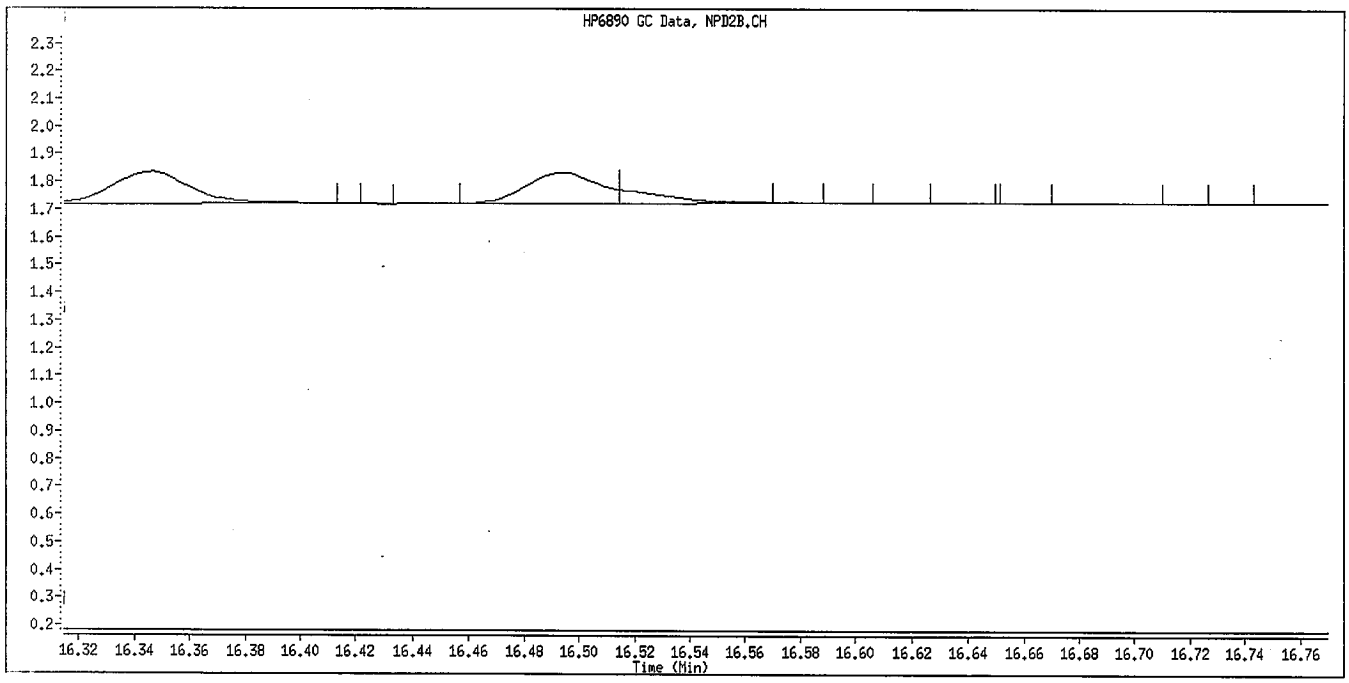
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

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

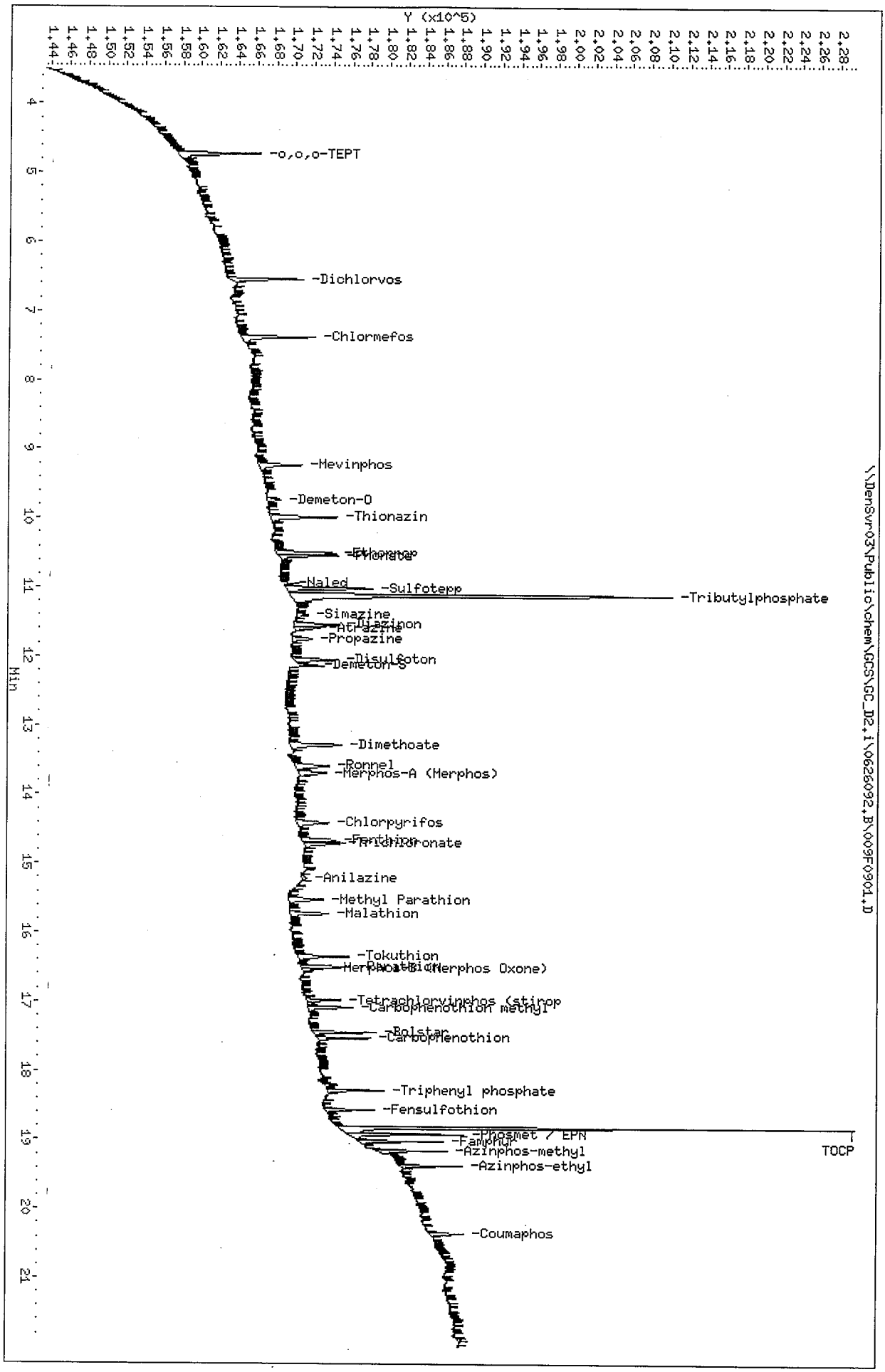
Instrument ID: GC_D2.i
Lab File ID: 009F0901.D
Lab Smp Id: OPP L1 GSV0641
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

Calibration Date: 26-JUN-2009
Calibration Time: 19:50
Client Smp ID: OPP L1 GSV0641
Level:
Sample Type:

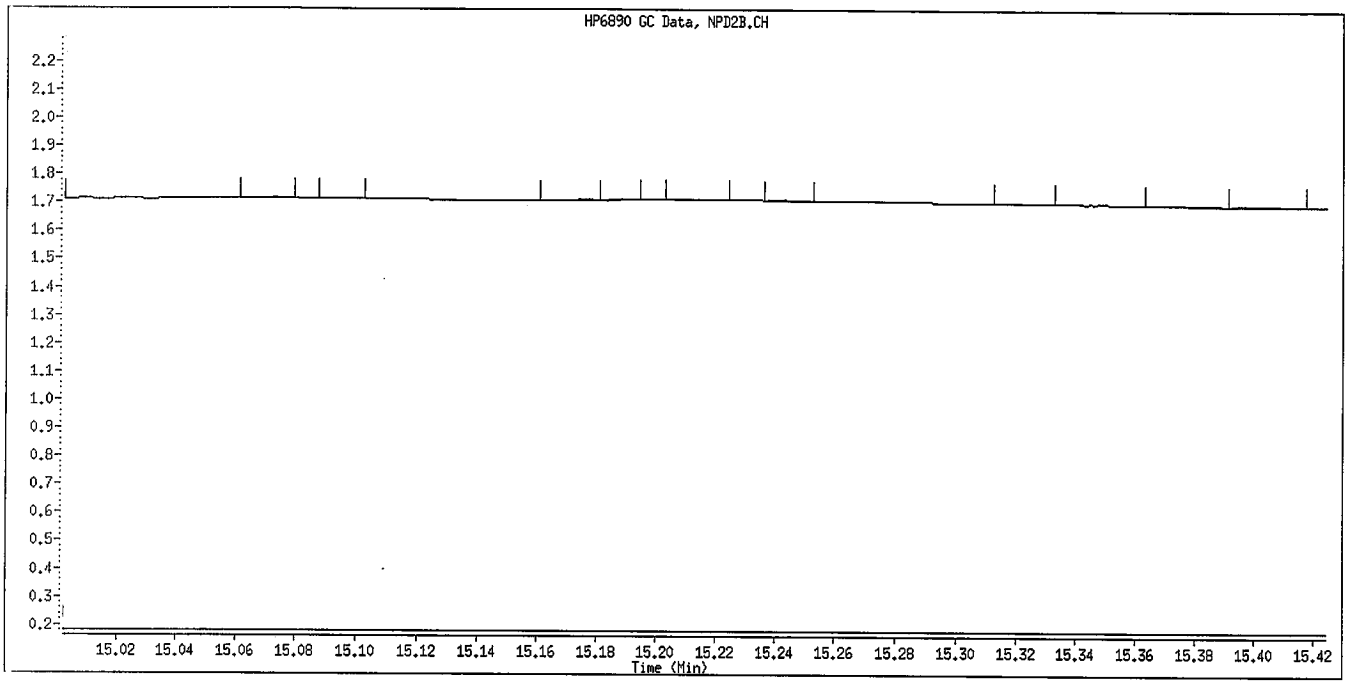
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
11 Tributylphosphate	126959	63480	253918	104756	-17.49
36 TOCP	68161	34081	136322	73597	7.98

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

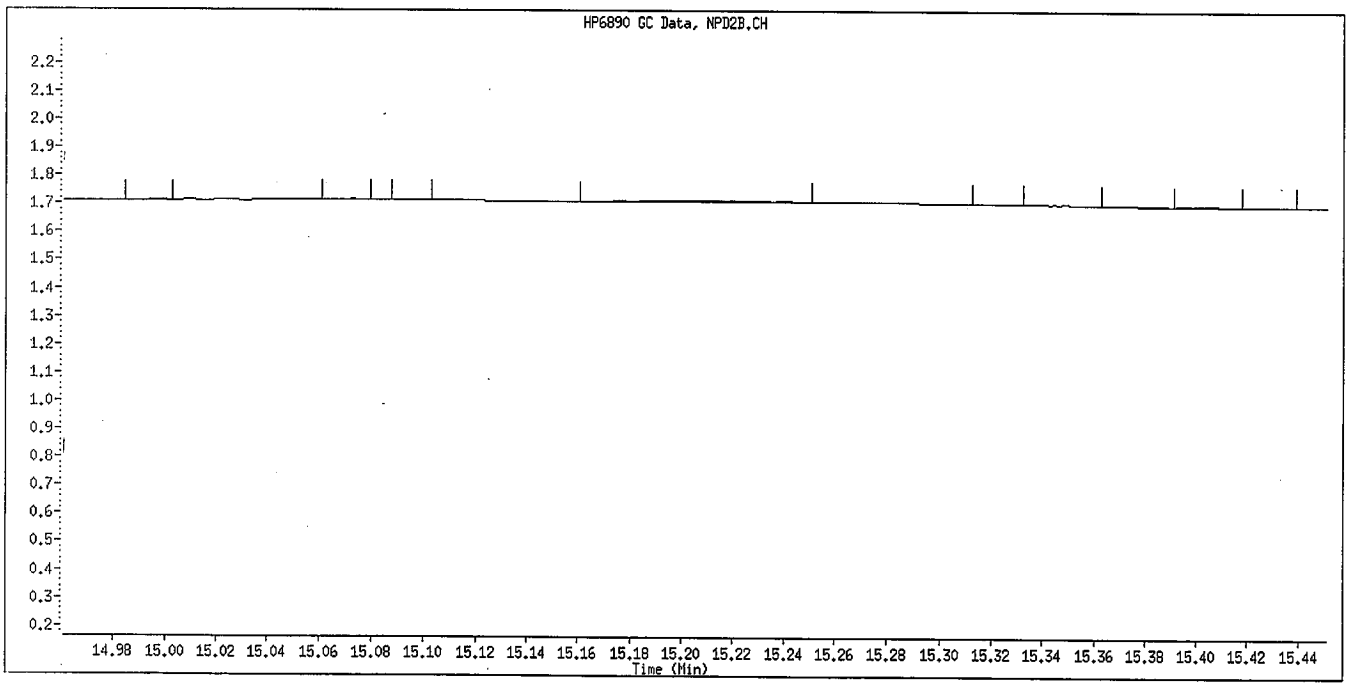
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


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
-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 (stirpp
-Carbophenothion methyl
-Bolstar
-Carbophenothion
-Triphenyl phosphate
-Fensulfothion
-Phosmet / EPN
-Famphur
-Azinphos-methyl
-Azinphos-ethyl
TOCP
-Coumaphos

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

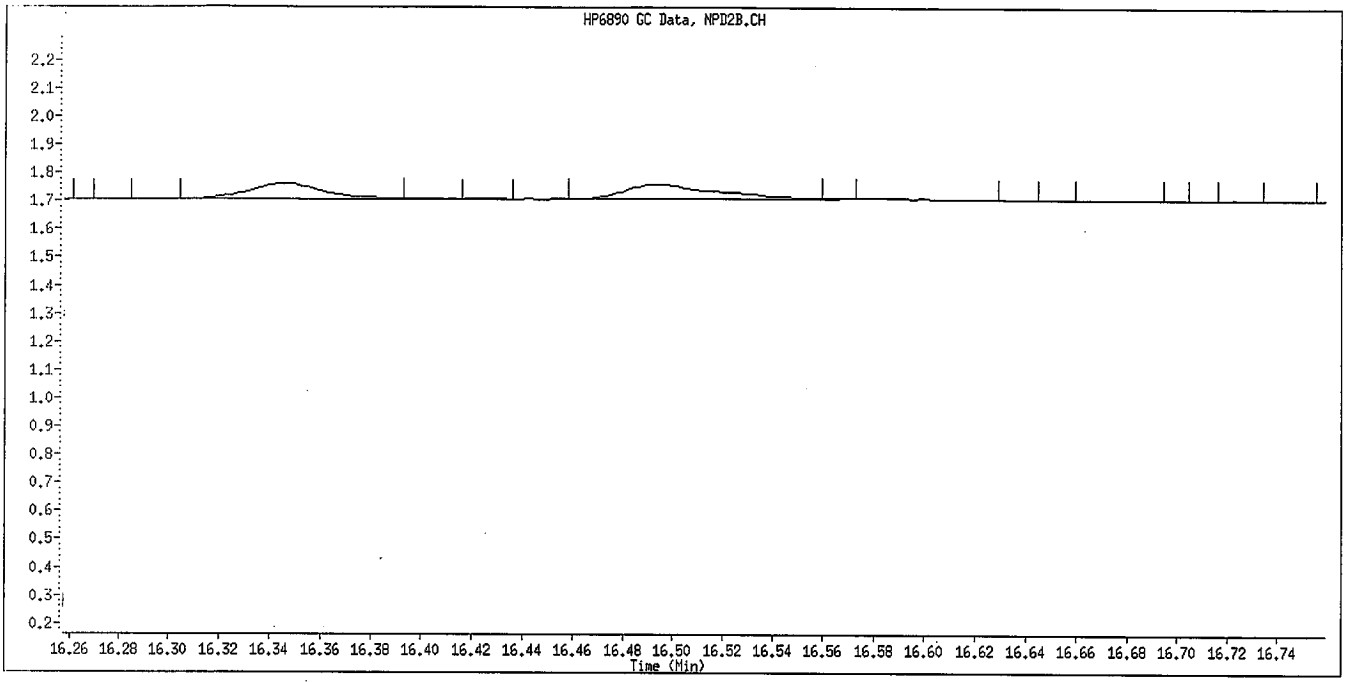


Manual Integration

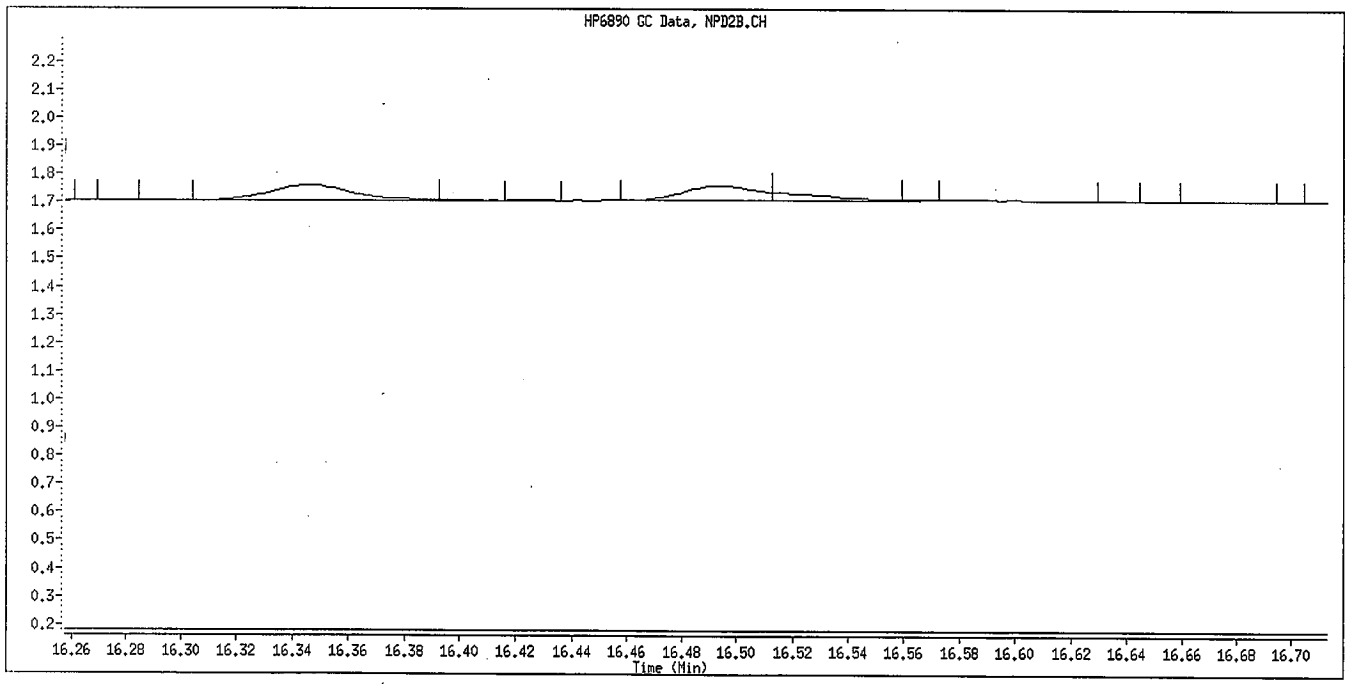
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

6/30/09

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

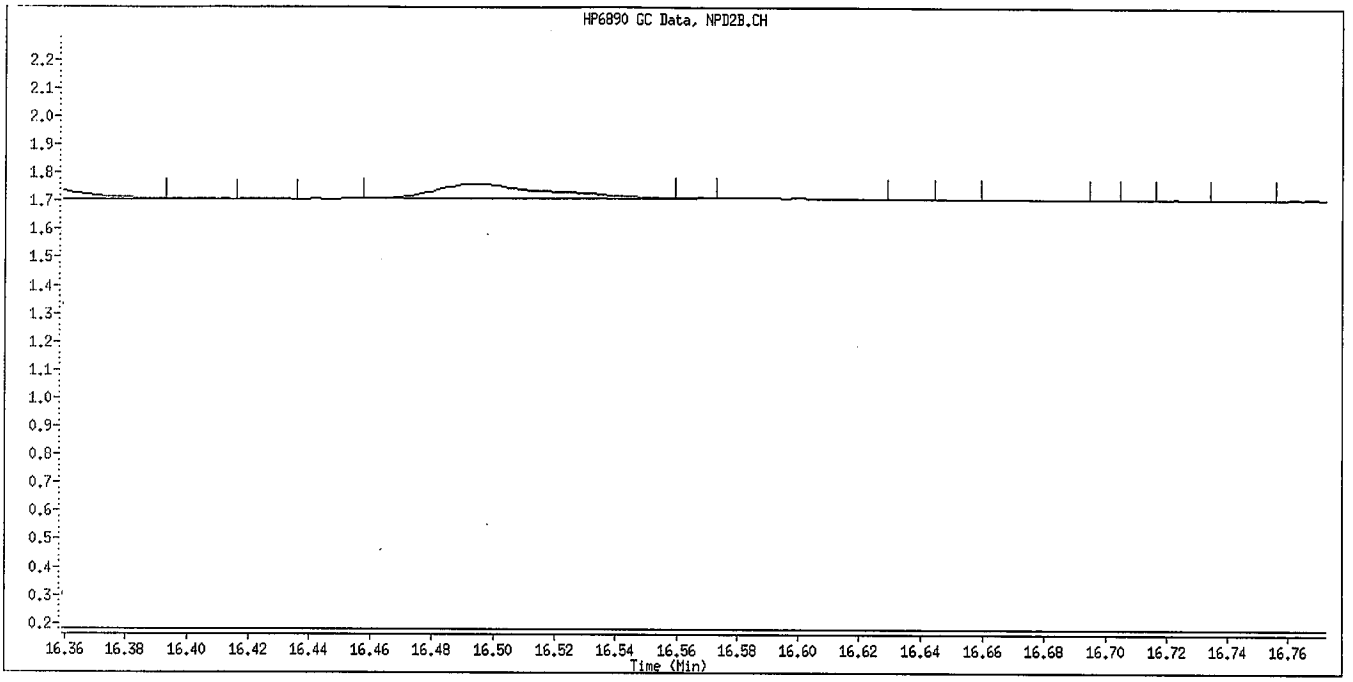


Manual Integration

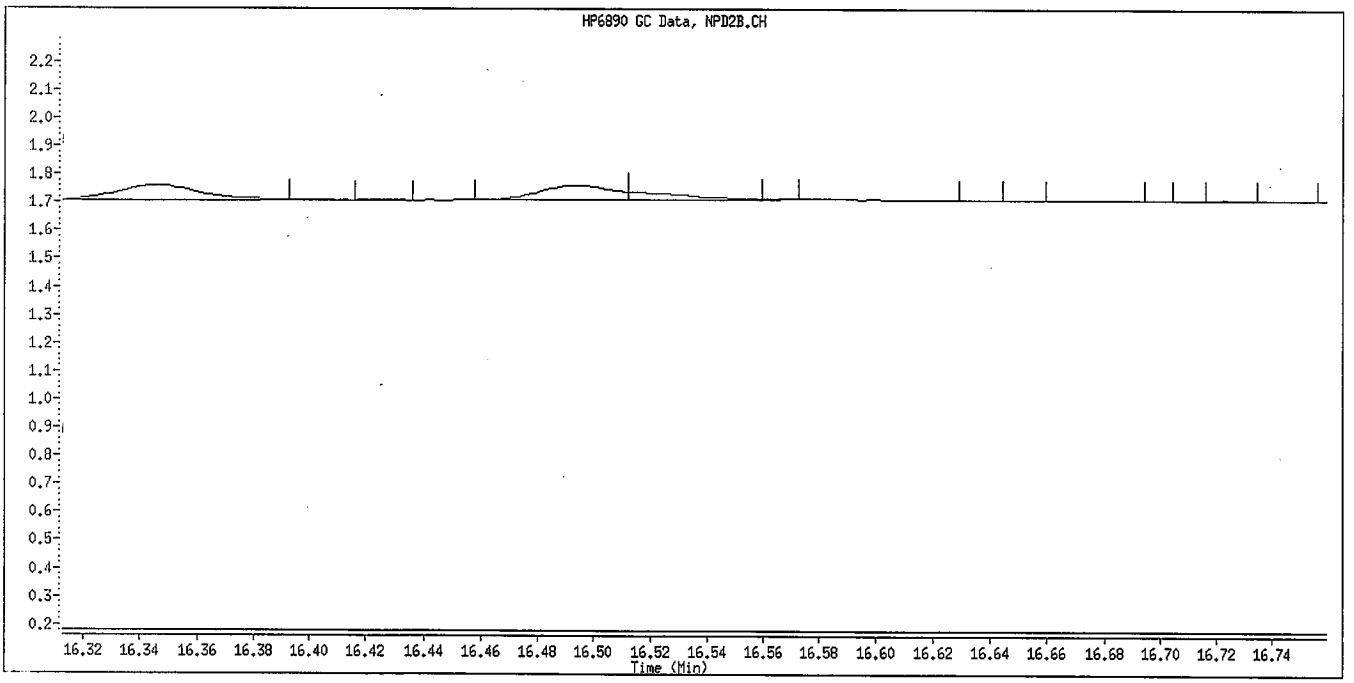
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

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

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS 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

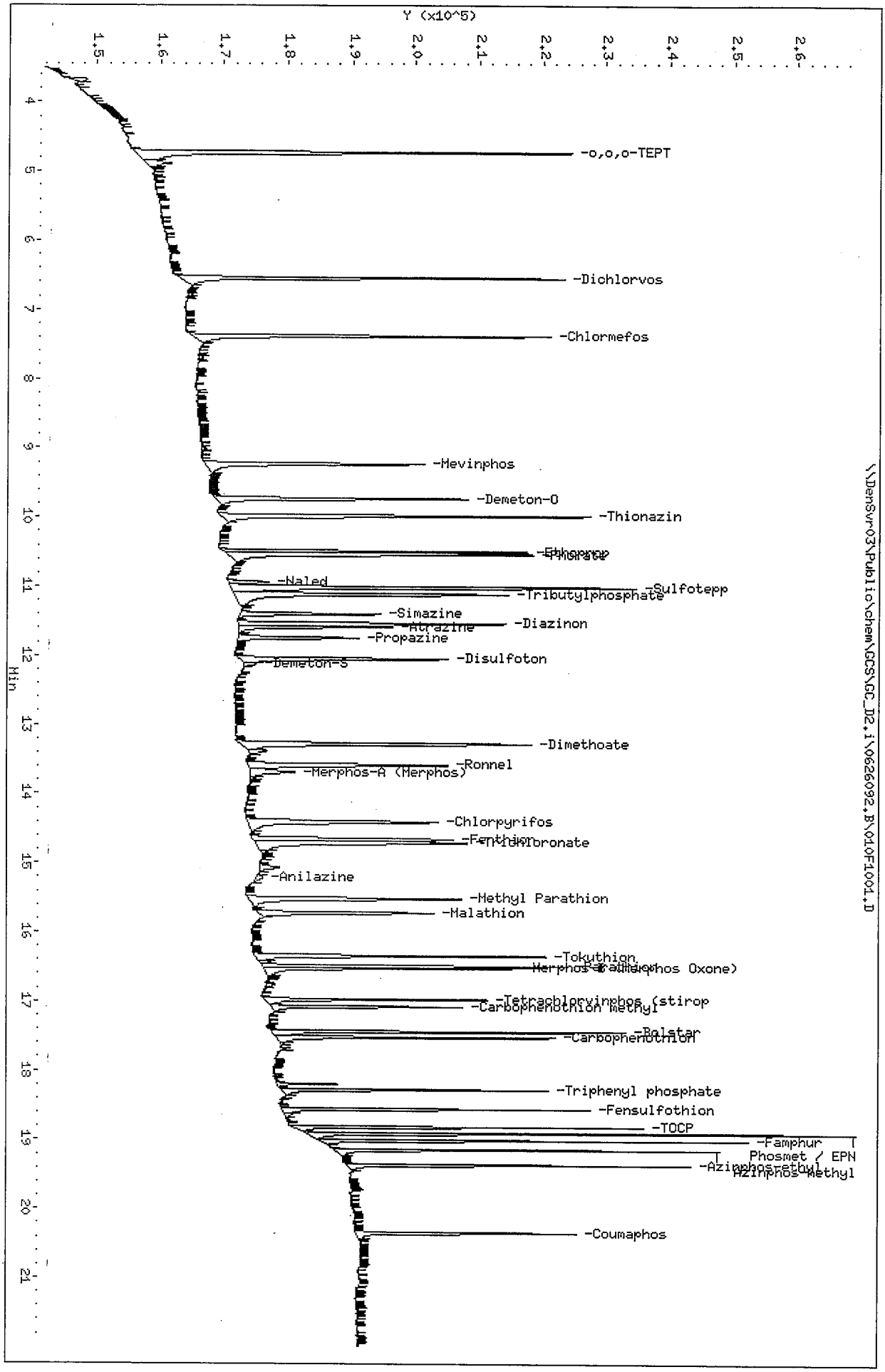
Instrument ID: GC_D2.i
Lab File ID: 010F1001.D
Lab Smp Id: OPP SS GSV0633
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\8141A-2.m
Misc Info:

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

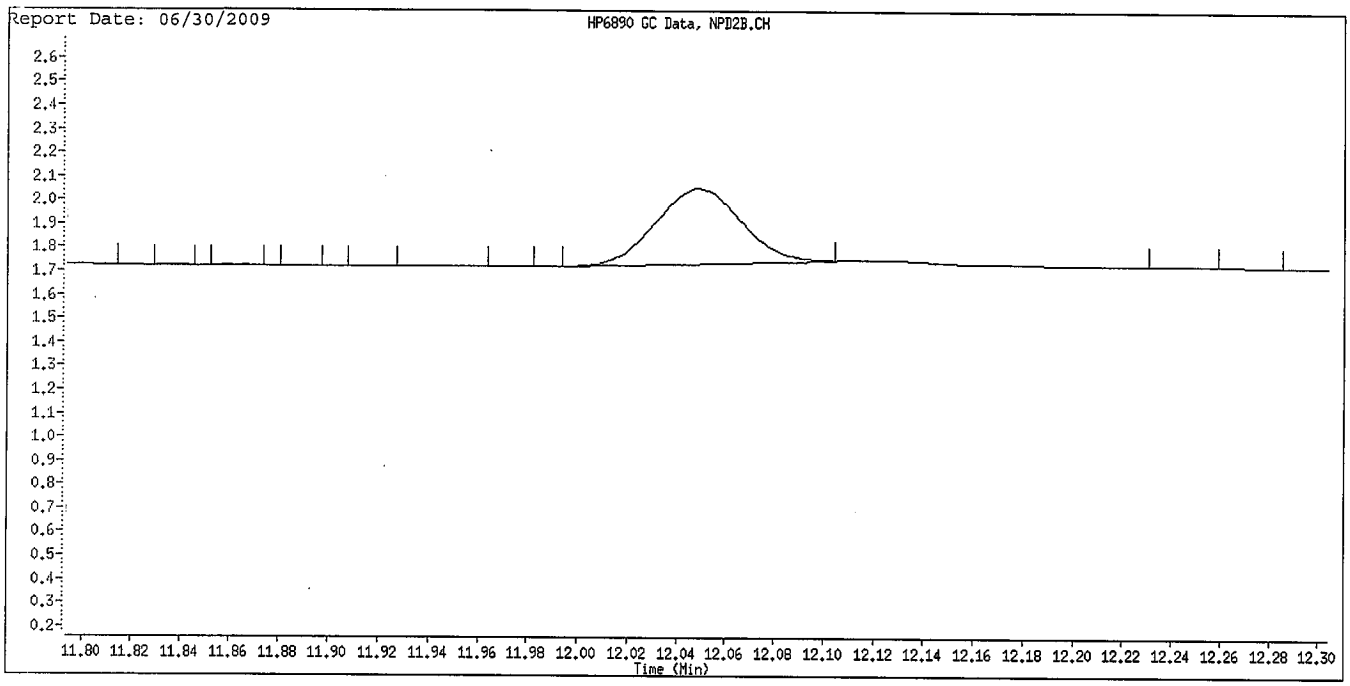
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



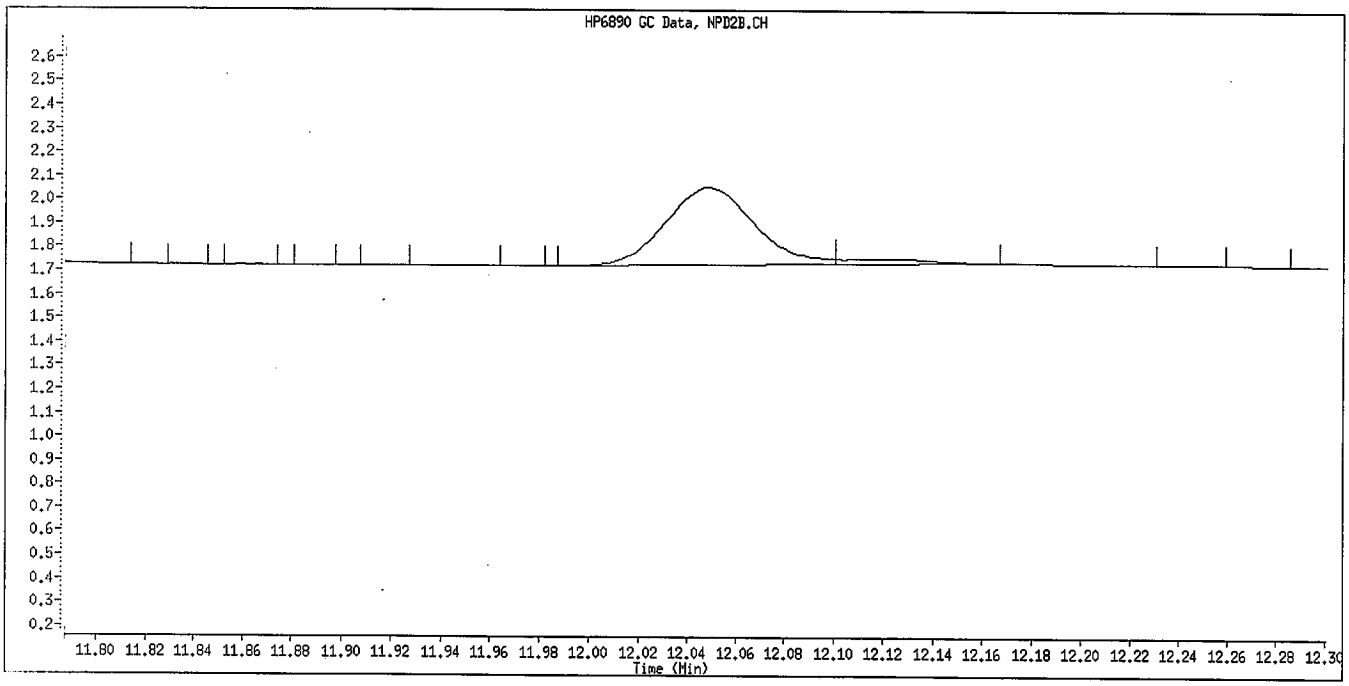
Data File: \\DenSvr03\Public\chem\GCS\GC_D2.i\0626092.B\010F1001.D
Date : 26-JUN-2009 21:40
Client ID: OPP SS GSV0633
Sample Info: OPP SS GSV0633
Column phase: RTx-OPPest

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



Original Integration

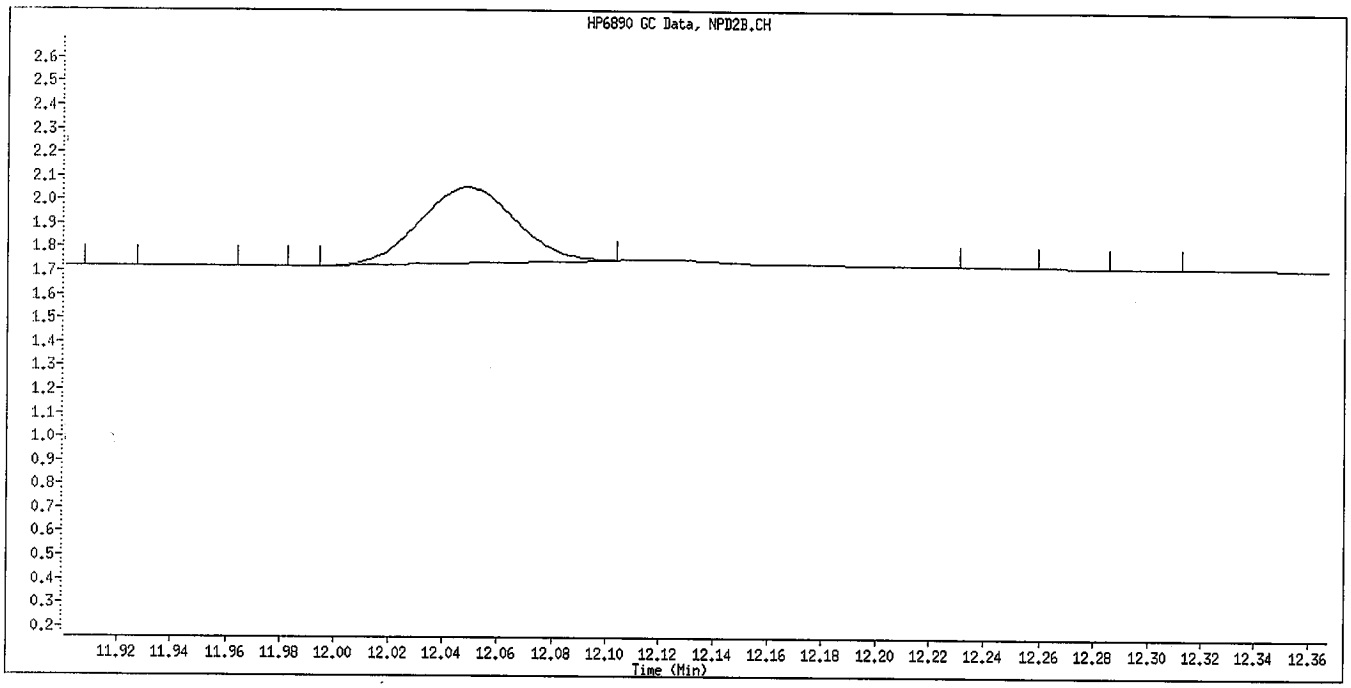


Manual Integration

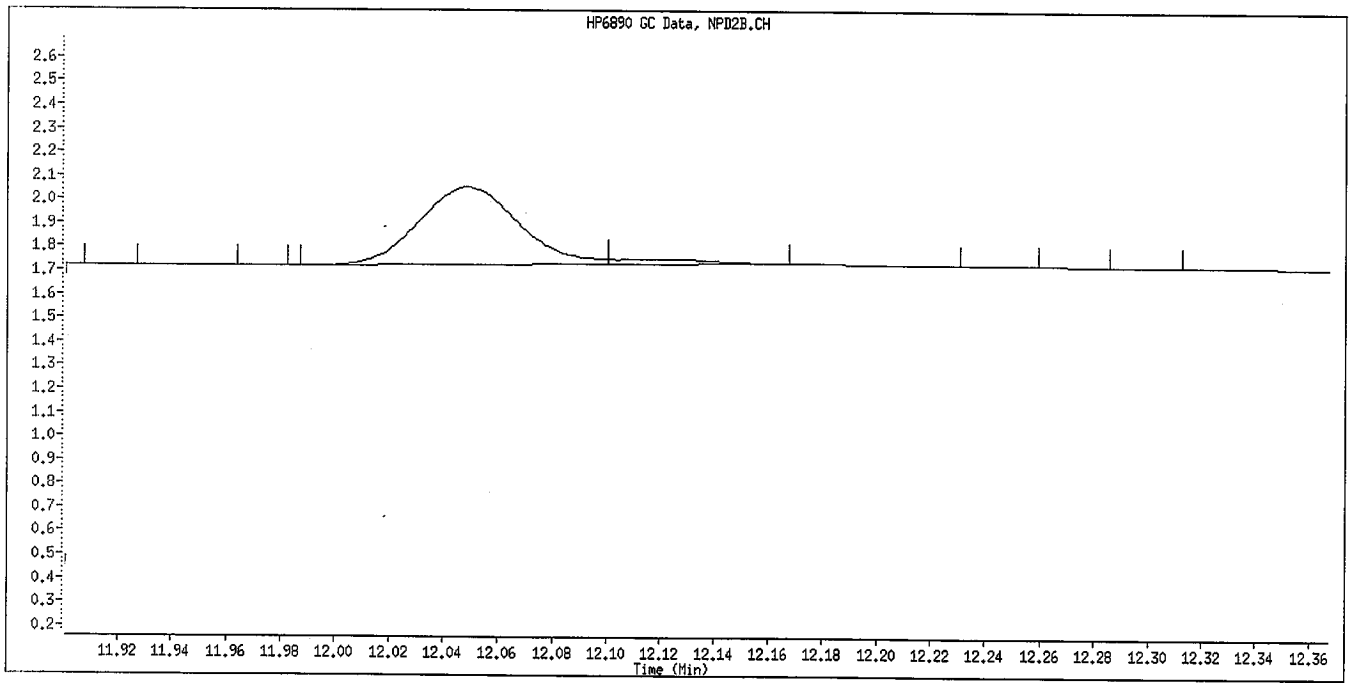
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

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

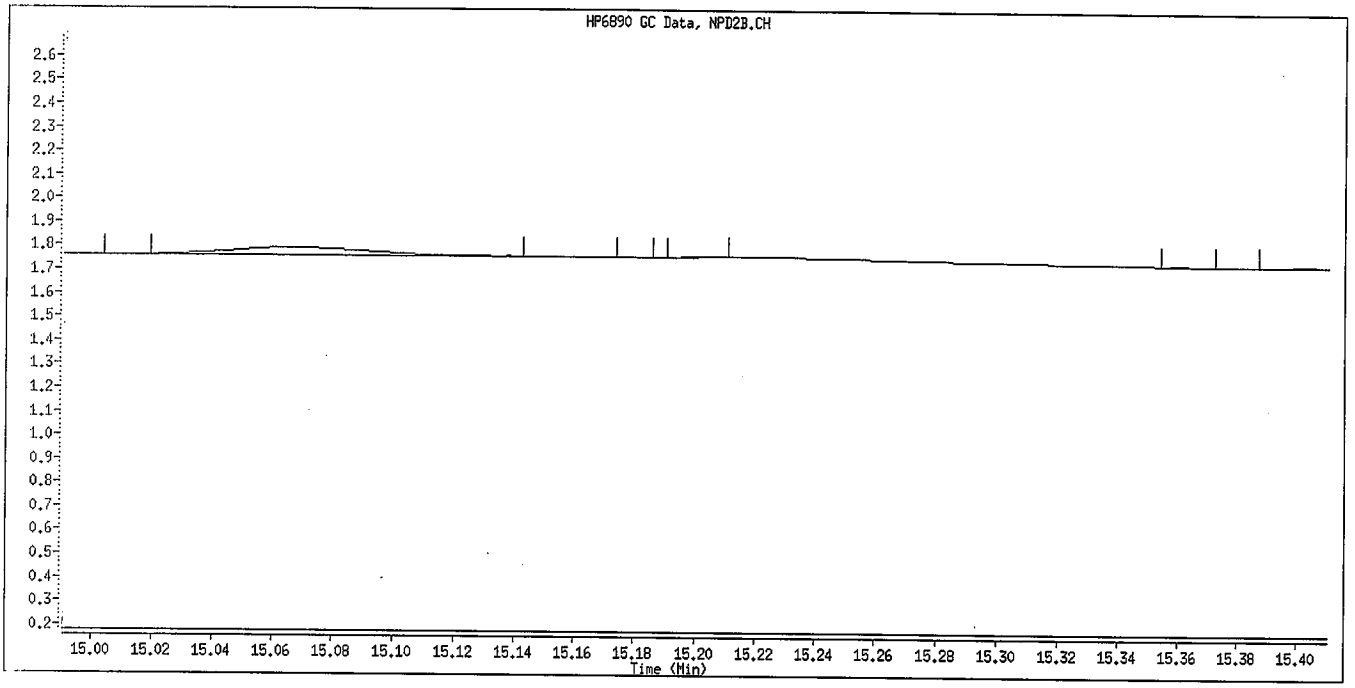


Manual Integration

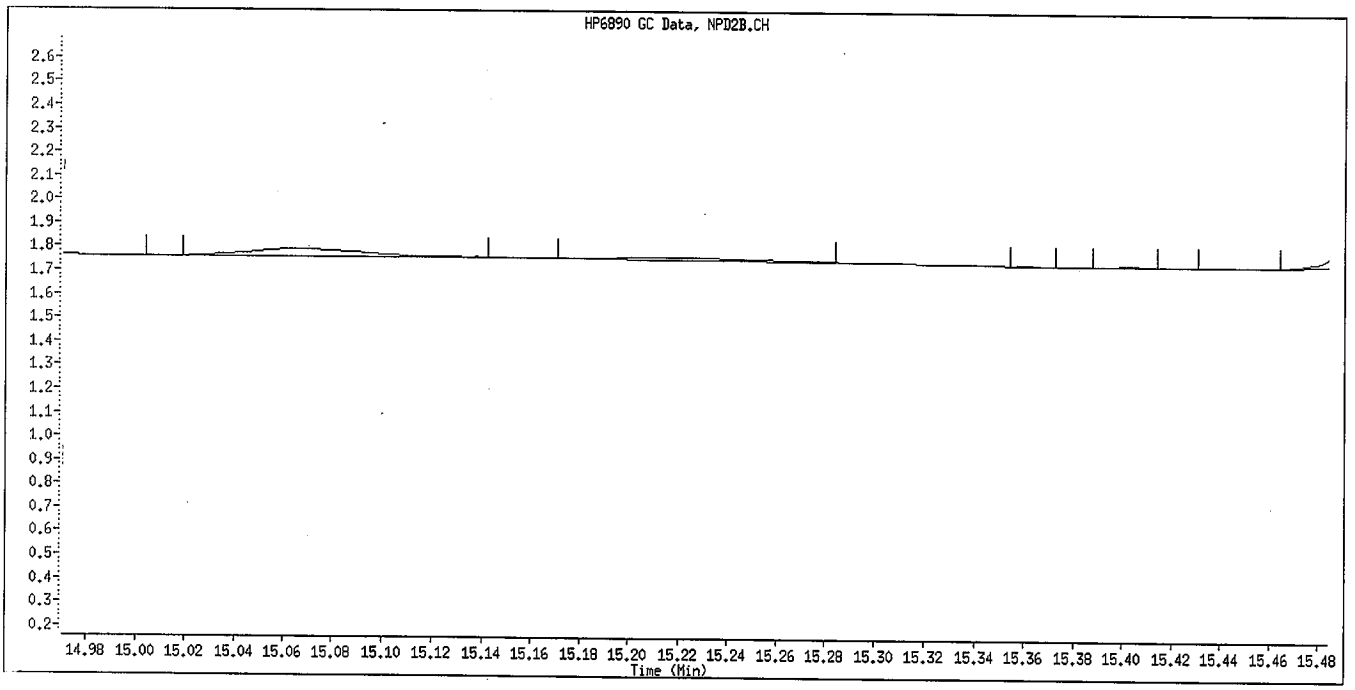
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

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

YG 6/30/09

Metals

Supporting Documentation

Sample Sequence, Instrument Printouts

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9G010276

Client: Northgate Environmental

Batch(es) #: 9187169

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: 7/8/09

Metals Raw Data RoadMap

LotID		*Metal*	*WorkOrder*	*Anal Date*	*TestDesc*	*Batch*	*File Id*	*Instr*
D9G010276	1	SE	LFX9W1AD	20090708	6020TOTA	9187169	AG070709B	024
D9G010276	1	AS	LFX9W1AC	20090708	6020TOTA	9187169	AG070709B	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9187169**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 07/07/09
Due Date: 07/13/09

Lot	Work Order			Initial Weight/Volume
D9G060000 Water	**LF3X8**	B	Due Date: SDG:	50 mL
D9G060000 Water	**LF3X8**	C	Due Date: SDG:	50 mL
D9G010276 Water	**LFX9W** Total		Due Date: 07/13/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T1** Total		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T1** Total	S	Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T1** Total	D	Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T6** Total		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1VJ** Total		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1V5** Total		Due Date: 07/14/09 SDG: 8304609	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 7/7/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH #	9187169	**ALLIQUOTTED BY:**	JRW
PREP DATE:	7/7/2009	**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: 25894 Block & Cup # : 2, 9

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	6:00	91	10:20	92
HNO3	10:30	92	11:00	91
HNO3				

Samples and QC revolumed to: 50 mL Analyst's Initials JKH

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kri Hare ***Date:*** 7/7/09

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-07-2009

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

STD3847-09, ICP-MS ICSA

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 06-25-2009
Date Expires(1): 07-25-2009 (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

STD4008-09, ICP-MS (024) INT STD BRC-HIGH

Analyst: LILLT

Solvent: 5% HNO3 Lot No.: H12022

Volume (ml): 250.00

Date Prep./Opened: 07-02-2009
Date Expires(1): 11-10-2009 (1 Year)
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

STD4039-09, ICP-MS BLANK

Analyst: DIAZL

Solvent: Water

Volume (ml): 1,000.0

Date Prep./Opened: 07-07-2009
Date Expires(1): 08-07-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD4040-09, NITRIC ACID

Aliquot Amount (ml): 50.000

Component	Initial Conc (%)	Final Conc (%)
HNO3	100.00	5.0000

STD4041-09, ICP-MS 10 ppm Sn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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

STD4042-09, ICP-MS 100 ppb cal

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (1 Day)
Date Expires(2): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4043-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 100.00
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	50.000

STD4044-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4042-09, ICP-MS 100 ppb cal Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 07-08-2009

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

STD4045-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (2 Days)
pipettes: Met 20 and Met 8

Parent Std No.: STD4044-09, 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

STD4046-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4047-09, ICPMS LR STD 1000 ppb Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	1,000.0

STD4048-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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

STD4049-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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

STD4050-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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 07/07/2009

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
2	Cal Blank				1.0	07/07/09 18:29		☐
3	Cal Blank				1.0	07/07/09 18:32		☐
4	100 ppb				1.0	07/07/09 18:35		☐
5	ICV				1.0	07/07/09 18:38		☐
6	RLIV				1.0	07/07/09 18:40		☐
7	ICB				1.0	07/07/09 18:43		☐
8	RL STD				1.0	07/07/09 18:46		☐
9	AFCEE RL				1.0	07/07/09 18:49		☐
10	ALTSe				1.0	07/07/09 18:51		☐
11	ICSA				1.0	07/07/09 18:54		☐
12	ICSAB				1.0	07/07/09 18:57		☐
13	RINSE				1.0	07/07/09 18:59		☐
14	LR				1.0	07/07/09 19:02		☐
15	RINSE				1.0	07/07/09 19:05		☐
16	CCV				1.0	07/07/09 19:08		☐
17	CCB				1.0	07/07/09 19:10		☐
18	RLCV				1.0	07/07/09 19:13		☐
19	IDL 1				1.0	07/07/09 19:16		☐
20	IDL 2				1.0	07/07/09 19:19		☐
21	IDL 3				1.0	07/07/09 19:21		☐
22	IDL 4				1.0	07/07/09 19:24		☐
23	IDL 5				1.0	07/07/09 19:27		☐
24	IDL 6				1.0	07/07/09 19:30		☐
25	IDL 7				1.0	07/07/09 19:32		☐
26	CCV				1.0	07/07/09 19:35		☐
27	CCB				1.0	07/07/09 19:38		☐
28	RLCV				1.0	07/07/09 19:41		☐
29	~~LR STD 1~~				~~1.0~~	~~07/07/09 19:43~~		☐
30	RINSE				1.0	07/07/09 19:46		☐
31	LR STD 2				1.0	07/07/09 19:49		☐
32	RINSE				1.0	07/07/09 19:52		☐
33	LR STD 3				1.0	07/07/09 19:54		☐
34	RINSE				1.0	07/07/09 19:57		☐
35	LR STD 4				1.0	07/07/09 20:00		☐
36	RINSE				1.0	07/07/09 20:02		☐
37	LR STD Mn				1.0	07/07/09 20:05		☐
38	RINSE				1.0	07/07/09 20:08		☐
39	LF0EDB	D9G010000	9182405	46	1.0	07/07/09 20:10		☐
40	LF0EDC	D9G010000	9182405	46	1.0	07/07/09 20:13		☐
41	LFNQ3	D9F260154-1	9182405	46	1.0	07/07/09 20:16		☐
42	~~LFNTW~~	~~D9F260154-2~~	~~9182405~~	~~46~~	~~1.0~~	~~07/07/09 20:19~~	VT 7/8/09 Did not use.	☐
43	CCV				1.0	07/07/09 20:21		☐
44	CCB				1.0	07/07/09 20:24		☐
45	RLCV				1.0	07/07/09 20:27		☐
46	LR STD 1				1.0	07/07/09 20:30		☐
47	RINSE				1.0	07/07/09 20:32		☐

Denver RUN SUMMARY

Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
48	LR STD 2				1.0	07/07/09 20:35		☐
49	RINSE				1.0	07/07/09 20:38		☐
50	LR STD 3				1.0	07/07/09 20:41		☐
51	RINSE				1.0	07/07/09 20:43		☐
52	LR STD 4				1.0	07/07/09 20:46		☐
53	RINSE				1.0	07/07/09 20:48		☐
54	LR STD Mn				1.0	07/07/09 20:51		☐
55	RINSE				1.0	07/07/09 20:54		☐
56	CCV				1.0	07/07/09 20:57		☐
57	CCB				1.0	07/07/09 20:59		☐
58	RLCV				1.0	07/07/09 21:02		☐
59	~~LF0EDB~~	~~D9G010000~~	~~9182405~~	~~46~~	~~1.0~~	~~07/07/09 21:05~~		☐
60	~~LF0EDC~~	~~D9G010000~~	~~9182405~~	~~46~~	~~1.0~~	~~07/07/09 21:08~~	KK 7/8/09 Did not use.	☐
61	LF0EDB	D9G010000	9182405	46	1.0	07/07/09 21:13		☐
62	LF0EDC	D9G010000	9182405	46	1.0	07/07/09 21:15		☐
63	LFNQ3	D9F260154-1	9182405	46	1.0	07/07/09 21:18		☐
64	LFNTW	D9F260154-2	9182405	46	1.0	07/07/09 21:21		☐
65	LFNT5	D9F260154-3	9182405	46	1.0	07/07/09 21:24		☐
66	LFNT7	D9F260154-4	9182405	46	1.0	07/07/09 21:26		☐
67	LFNVD	D9F260154-5	9182405	46	1.0	07/07/09 21:29		☐
68	LFNVM	D9F260154-6	9182405	46	1.0	07/07/09 21:32		☐
69	CCV				1.0	07/07/09 21:35		☐
70	CCB				1.0	07/07/09 21:37		☐
71	RLCV				1.0	07/07/09 21:40		☐
72	LFNVT	D9F260154-7	9182405	46	1.0	07/07/09 21:43		☐
73	LFNVW	D9F260154-8	9182405	46	1.0	07/07/09 21:46		☐
74	LFV0G	D9F300202-1	9182405	46	1.0	07/07/09 21:48		☐
75	LFV05	D9F300202-3	9182405	46	1.0	07/07/09 21:51		☐
76	LFV1G	D9F300202-4	9182405	46	1.0	07/07/09 21:54		☐
77	LFV1GP5	D9F300202	9182405		5.0	07/07/09 21:57		☐
78	LFV1GZ	D9F300202-4	9182405		1.0	07/07/09 21:59		☐
79	LFV1GS	D9F300202-4	9182405	46	1.0	07/07/09 22:02		☐
80	LFV1GD	D9F300202-4	9182405	46	1.0	07/07/09 22:05		☐
81	LFV13	D9F300202-5	9182405	46	1.0	07/07/09 22:07		☐
82	CCV				1.0	07/07/09 22:10		☐
83	CCB				1.0	07/07/09 22:13		☐
84	RLCV				1.0	07/07/09 22:16		☐
85	LF1RVB	D9G020000	9183315	MS	1.0	07/07/09 22:19		☐
86	LF1RVC	D9G020000	9183315	MS	1.0	07/07/09 22:21		☐
87	LFXPK 2X	D9G010186-16	9183315	MS	2.0	07/07/09 22:24		☐
88	LFXPKP10	D9G010186	9183315		10.0	07/07/09 22:27		☐
89	LFXPKZ	D9G010186-16	9183315		1.0	07/07/09 22:30		☐
90	LFXPKS 2X	D9G010186-16	9183315	MS	2.0	07/07/09 22:32		☐
91	CCV				1.0	07/07/09 22:35		☐
92	CCB				1.0	07/07/09 22:38		☐
93	RLCV				1.0	07/07/09 22:41		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
94	LFXPKD 2X	D9G010186-16	9183315	MS	2.0	07/07/09 22:43		☐
95	LFXPL 2X	D9G010186-17	9183315	MS	2.0	07/07/09 22:46		☐
96	LFXPM 2X	D9G010186-18	9183315	MS	2.0	07/07/09 22:49		☐
97	LFXPN 2X	D9G010186-19	9183315	MS	2.0	07/07/09 22:52		☐
98	LFXPP 2X	D9G010186-20	9183315	MS	2.0	07/07/09 22:55		☐
99	LFXPQ 2X	D9G010186-21	9183315	MS	2.0	07/07/09 22:57		☐
100	CCV				1.0	07/07/09 23:00		☐
101	CCB				1.0	07/07/09 23:03		☐
102	RLCV				1.0	07/07/09 23:06		☐
103	LF3W3B	D9G060000	9187133	MS	1.0	07/07/09 23:08		☐
104	LF3W3C	D9G060000	9187133	MS	1.0	07/07/09 23:11		☐
105	LF1JL	D9G020188-1	9187133	MS	1.0	07/07/09 23:14		☐
106	LF1KR	D9G020188-2	9187133	MS	1.0	07/07/09 23:17	-Take all but Mn. 7/8/09	☐
107	LF1KT	D9G020188-3	9187133	MS	1.0	07/07/09 23:19		☐
108	LF1KW	D9G020188-4	9187133	MS	1.0	07/07/09 23:22		☐
109	LF1KX	D9G020188-5	9187133	MS	1.0	07/07/09 23:25		☐
110	LF1K1	D9G020188-6	9187133	MS	1.0	07/07/09 23:28		☐
111	LF1K2	D9G020188-7	9187133	MS	1.0	07/07/09 23:30		☐
112	CCV				1.0	07/07/09 23:33		☐
113	CCB				1.0	07/07/09 23:36		☐
114	RLCV				1.0	07/07/09 23:39		☐
115	~~LF1K3~~	~~D9G020188-8~~	~~9187133~~	~~MS~~	~~1.0~~	~~07/07/09 23:42~~		☐
116	LF1K6	D9G020188-9	9187133	MS	1.0	07/07/09 23:44		☐
117	LF1NP	D9G020199-1	9187133	MS	1.0	07/07/09 23:47		☐
118	LF1NPP5	D9G020199	9187133		5.0	07/07/09 23:50		☐
119	LF1NPZ	D9G020199-1	9187133		1.0	07/07/09 23:53		☐
120	LF1NPS	D9G020199-1	9187133	MS	1.0	07/07/09 23:55		☐
121	LF1NPD	D9G020199-1	9187133	MS	1.0	07/07/09 23:58		☐
122	LF165	D9G020272-1	9187133	MS	1.0	07/08/09 00:01		☐
123	LF18E	D9G020272-2	9187133	MS	1.0	07/08/09 00:04		☐
124	CCV				1.0	07/08/09 00:07		☐
125	CCB				1.0	07/08/09 00:09		☐
126	RLCV				1.0	07/08/09 00:12		☐
127	RINSE				1.0	07/08/09 00:15		☐
128	RINSE				1.0	07/08/09 00:18		☐
129	RINSE				1.0	07/08/09 00:20		☐
130	RINSE				1.0	07/08/09 00:23		☐
131	RINSE				1.0	07/08/09 00:26		☐
132	RINSE				1.0	07/08/09 00:28		☐
133	~~Cal Blank~~				~~1.0~~	~~07/08/09 00:31~~	7/8/09 Did not use.	☐
134	Cal Blank				1.0	07/08/09 00:34		☐
135	100 ppb				1.0	07/08/09 00:37		☐
136	CCV				1.0	07/08/09 00:39		☐
137	CCB				1.0	07/08/09 00:42		☐
138	RLCV				1.0	07/08/09 00:45		☐
139	LF3WAB	D9G060000	9187106	04	1.0	07/08/09 00:48		☐

Denver RUN SUMMARY

Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
140	LF3WAC	D9G060000	9187106	04	1.0	07/08/09 00:51		☐
141	LFXTT	D9G010202-1	9187106	04	1.0	07/08/09 00:53		☐
142	LF1JG	D9G020189-1	9187106	04	1.0	07/08/09 00:56		☐
143	LF1KV	D9G020189-3	9187106	04	1.0	07/08/09 00:59		☐
144	LF1K5	D9G020189-5	9187106	04	1.0	07/08/09 01:02		☐
145	LF1LC	D9G020189-7	9187106	04	1.0	07/08/09 01:04		☐
146	LF1LF	D9G020189-9	9187106	04	1.0	07/08/09 01:07		☐
147	CCV				1.0	07/08/09 01:10		☐
148	CCB				1.0	07/08/09 01:13		☐
149	RLCV				1.0	07/08/09 01:16		☐
150	LF1LK	D9G020189-11	9187106	04	1.0	07/08/09 01:18		☐
151	LF1LN	D9G020189-13	9187106	04	1.0	07/08/09 01:21		☐
152	LF1LNP5	D9G020189	9187106		5.0	07/08/09 01:24		☐
153	LF1LNZ	D9G020189-13	9187106		1.0	07/08/09 01:27		☐
154	LF1LNS	D9G020189-13	9187106	04	1.0	07/08/09 01:29		☐
155	LF1LND	D9G020189-13	9187106	04	1.0	07/08/09 01:32		☐
156	LF1LT	D9G020189-15	9187106	04	1.0	07/08/09 01:35		☐
157	LF1LW	D9G020189-17	9187106	04	1.0	07/08/09 01:38		☐
158	CCV				1.0	07/08/09 01:40		☐
159	CCB				1.0	07/08/09 01:43		☐
160	RLCV				1.0	07/08/09 01:46		☐
161	LF315BF	D9G060000	9187204	MD	1.0	07/08/09 01:49		☐
162	LF315CF	D9G060000	9187204	MD	1.0	07/08/09 01:51		☐
163	LF1XCF	D9G020230-9	9187204	MD	1.0	07/08/09 01:54		☐
164	LF1XFF	D9G020230-10	9187204	MD	1.0	07/08/09 01:57		☐
165	LF1XHF	D9G020230-11	9187204	MD	1.0	07/08/09 02:00		☐
166	LF1XHP5F	D9G020230	9187204		5.0	07/08/09 02:02		☐
167	LF1XHZF	D9G020230-11	9187204		1.0	07/08/09 02:05		☐
168	LF1XHSF	D9G020230-11	9187204	MD	1.0	07/08/09 02:08		☐
169	LF1XHDF	D9G020230-11	9187204	MD	1.0	07/08/09 02:11		☐
170	CCV				1.0	07/08/09 02:13		☐
171	CCB				1.0	07/08/09 02:16		☐
172	RLCV				1.0	07/08/09 02:19		☐
173	LF30GBF	D9G060000	9187175	MD	1.0	07/08/09 02:22		☐
174	LF30GCF	D9G060000	9187175	MD	1.0	07/08/09 02:25		☐
175	LF1T5F 10X	D9G020221-2	9187175	MD	10.0	07/08/09 02:27		☐
176	LF1WAF 10X	D9G020227-3	9187175	MD	10.0	07/08/09 02:30		☐
177	LF1WAP50F	D9G020227	9187175		50.0	07/08/09 02:33		☐
178	LF1WAZF	D9G020227-3	9187175		1.0	07/08/09 02:36		☐
179	LF1WASF 10	D9G020227-3	9187175	MD	10.0	07/08/09 02:38		☐
180	LF1WADF 10	D9G020227-3	9187175	MD	10.0	07/08/09 02:41		☐
181	CCV				1.0	07/08/09 02:44		☐
182	CCB				1.0	07/08/09 02:47		☐
183	RLCV				1.0	07/08/09 02:49		☐
184	~~RINSE~~				~~1.0~~	~~07/08/09 02:52~~		☐
185	RINSE				~~1.0~~	~~07/08/09 02:55~~	7/8/09	☐

Denver RUN SUMMARY

Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
186	~~RINSE~~				~~1.0~~	~~07/08/09 02:58~~		
187	RINSE				1.0	07/08/09 03:00		
188	RINSE				1.0	07/08/09 03:03		
189	RINSE				1.0	07/08/09 03:06		
190	~~Cal Blank~~				~~1.0~~	~~07/08/09 03:09~~	WF 7/8/09	
191	Cal Blank				1.0	07/08/09 03:11		
192	100 ppb				1.0	07/08/09 03:14		
193	CCV				1.0	07/08/09 03:17		
194	CCB				1.0	07/08/09 03:20		
195	RLCV				1.0	07/08/09 03:22		
196	LF3X8B	D9G060000	9187169	MS	1.0	07/08/09 03:25		
197	LF3X8C	D9G060000	9187169	MS	1.0	07/08/09 03:28		
198	LFX9W 10X	D9G010276-1	9187169	MS	10.0	07/08/09 03:31		
199	LF1T1 10X	D9G020221-1	9187169	MS	10.0	07/08/09 03:33		
200	LF1T1P50	D9G020221	9187169		50.0	07/08/09 03:36		
201	LF1T1Z	D9G020221-1	9187169		1.0	07/08/09 03:39		
202	CCV				1.0	07/08/09 03:42		
203	CCB				1.0	07/08/09 03:44		
204	RLCV				1.0	07/08/09 03:47		
205	LF1T1S 10X	D9G020221-1	9187169	MS	10.0	07/08/09 03:50		
206	LF1T1D 10X	D9G020221-1	9187169	MS	10.0	07/08/09 03:53		
207	LF1T6 10X	D9G020221-3	9187169	MS	10.0	07/08/09 03:56		
208	LF1VJ 10X	D9G020227-1	9187169	MS	10.0	07/08/09 03:58		
209	LF1V5 10X	D9G020227-2	9187169	MS	10.0	07/08/09 04:01		
210	CCV				1.0	07/08/09 04:04		
211	CCB				1.0	07/08/09 04:07		
212	RLCV				1.0	07/08/09 04:09		
213	~~RINSE~~				~~1.0~~	~~07/08/09 04:12~~		
214	RINSE				1.0	07/08/09 04:15		
215	RINSE				1.0	07/08/09 04:18		
216	RINSE				1.0	07/08/09 04:20		
217	RINSE				1.0	07/08/09 04:23		
218	RINSE				1.0	07/08/09 04:26		
219	~~Cal Blank~~				1.0	07/08/09 04:29	WF 7/8/09	
220	Cal Blank				1.0	07/08/09 04:31		
221	100 ppb				1.0	07/08/09 04:34		
222	CCV				1.0	07/08/09 04:37		
223	CCB				1.0	07/08/09 04:40		
224	RLCV				1.0	07/08/09 04:42		
225	LF31NB	D9G060000	9187199	46	1.0	07/08/09 04:45		
226	LF31NC	D9G060000	9187199	46	1.0	07/08/09 04:48		
227	LF0NV	D9G010332-7	9187199	46	1.0	07/08/09 04:51		
228	LF0NVP5	D9G010332	9187199		5.0	07/08/09 04:54		
229	LF0NVZ	D9G010332-7	9187199		1.0	07/08/09 04:56		
230	LF0NVS	D9G010332-7	9187199	46	1.0	07/08/09 04:59		
231	LF0NVD	D9G010332-7	9187199	46	1.0	07/08/09 05:02		

Denver RUN SUMMARY

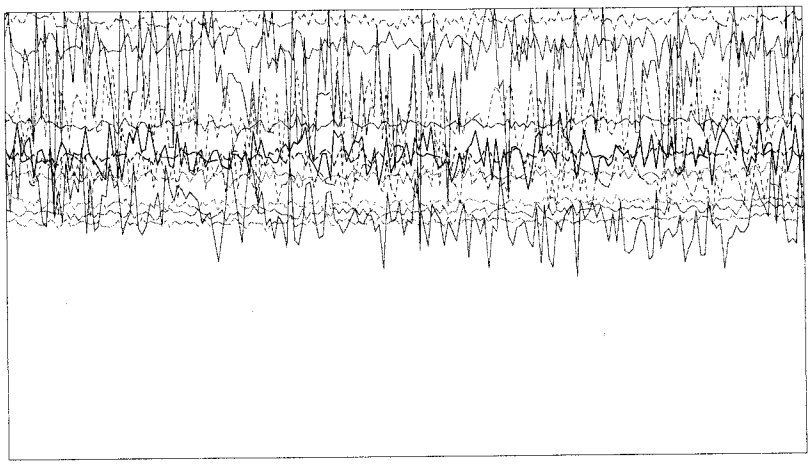
Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
232	CCV				1.0	07/08/09 05:05		☐
233	CCB				1.0	07/08/09 05:07		☐
234	RLCV				1.0	07/08/09 05:10		☐
235	LF31XB	D9G060000	9187202	46	1.0	07/08/09 05:13		☐
236	LF31XC	D9G060000	9187202	46	1.0	07/08/09 05:16		☐
237	LF2FT	D9G020311-1	9187202	46	1.0	07/08/09 05:19		☐
238	LF2FTP5	D9G020311	9187202		5.0	07/08/09 05:21		☐
239	LF2FTZ	D9G020311-1	9187202		1.0	07/08/09 05:24	Take all but Ni. 7/8/09	☐
240	LF2FTS	D9G020311-1	9187202	46	1.0	07/08/09 05:27		☐
241	LF2FTD	D9G020311-1	9187202	46	1.0	07/08/09 05:30		☐
242	CCV				1.0	07/08/09 05:33		☐
243	CCB				1.0	07/08/09 05:35		☐
244	RLCV				1.0	07/08/09 05:38		☐
245	LF2JL	D9G020311-2	9187202	46	1.0	07/08/09 05:41		☐
246	LF2JQ	D9G020311-3	9187202	46	1.0	07/08/09 05:44		☐
247	LF2J3	D9G020311-4	9187202	46	1.0	07/08/09 05:46		☐
248	LF2J5	D9G020311-5	9187202	46	1.0	07/08/09 05:49		☐
249	LF2KJ	D9G020311-6	9187202	46	1.0	07/08/09 05:52		☐
250	LF2KN	D9G020311-7	9187202	46	1.0	07/08/09 05:55		☐
251	LF2KT	D9G020311-8	9187202	46	1.0	07/08/09 05:58		☐
252	CCV				1.0	07/08/09 06:00		☐
253	CCB				1.0	07/08/09 06:03		☐
254	RLCV				1.0	07/08/09 06:06		☐
255	~~LF2FT~~	~~D9G020311-1~~	~~9187202~~	~~46~~	~~1.0~~	~~07/08/09 06:09~~		☐
256	LF2FTS	D9G020311-1	9187202	46	1.0	07/08/09 06:12		☐
257	LF2FTD	D9G020311-1	9187202	46	1.0	07/08/09 06:14		☐
258	CCV				1.0	07/08/09 06:17		☐
259	CCB				1.0	07/08/09 06:20		☐
260	~~RLCV~~				~~1.0~~	~~07/08/09 06:23~~	7/8/09 Did not use.	☐

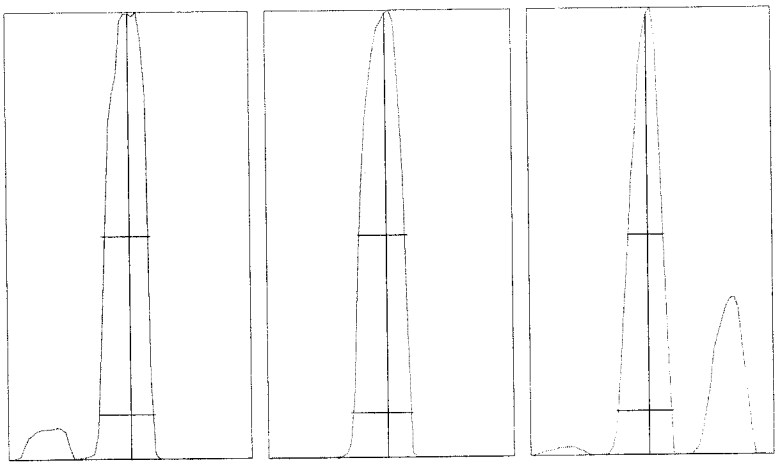
Tune Report

Tune File : NORM.U
Comment :



Integration Time: 0.1000 sec
Sampling Period: 1.5300 sec
n: 200
Oxide: 156/140 2.082%
Doubly Charged: 70/140 1.123%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1889.0	1841.3	2.59	0.60
7	50,000	27559.0	27403.0	1.40	0.60
59	50,000	33030.0	31479.0	1.53	0.50
63	200	87.0	107.9	11.91	0.30
70	1,000	686.0	677.4	4.99	0.70
75	50	31.0	42.9	16.22	0.60
78	500	280.0	313.4	6.24	0.30
89	100,000	51516.0	52575.3	1.19	0.70
115	100,000	57158.0	56755.0	1.31	0.70
118	200	162.0	152.3	8.33	0.70
137	10,000	6656.0	6727.9	1.69	1.00
205	50,000	48630.0	48760.9	1.18	2.00
238	100,000	74601.0	74494.1	1.21	2.10
156/140	5	2.193%	2.125%	4.06	
70/140	2	1.184%	1.169%	5.10	



m/z:	7	89	205
Height:	27,543	52,894	49,644
Axis:	7.05	89.00	205.00
W-50%:	0.60	0.60	0.45
W-10%:	0.700	0.7500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Jul 07, 2009 16:01:30
Printed : Jul 07, 2009 16:01:33

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	7.5 mm
Torch-H	:	-0.8 mm
Torch-V	:	-0.3 mm
Carrier Gas	:	0.83 L/min
Makeup Gas	:	0.2 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-175 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	-0.2 V
Cell Entrance	:	-30 V
QP Focus	:	5 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	180 V
OctP Bias	:	-18 V

===Q-Pole Parameters===

AMU Gain	:	133
AMU Offset	:	123
Axis Gain	:	1.0005
Axis Offset	:	-0.01
QP Bias	:	-10 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1720 V
Pulse HV	:	1390 V

===Reaction Cell===

Reaction Mode	:	OFF					
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	: --- %

Generated : Jul 07, 2009 16:01:30
Printed : Jul 07, 2009 16:01:36

P/A Factor Tuning Report

Acquired:Jul 7 2009 04:18 pm

Mass[amu]	Element	P/A Factor
6	Li	0.060118
7	(Li)	Sensitivity too low
9	Be	0.068010
45	Sc	0.082686
51	V	0.084596
52	Cr	0.087721
53	(Cr)	Sensitivity too low
55	Mn	0.089784
59	Co	0.093112
60	Ni	0.095012
63	Cu	0.097299
66	Zn	0.097070
72	Ge	0.095471
75	As	0.094654
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
95	Mo	0.095555
98	(Mo)	0.095635
99	(Mo)	0.097324
106	(Cd)	0.101627
107	Ag	Sensitivity too low
108	(Cd)	0.102086
111	Cd	0.102705
114	Cd	0.102655
115	In	0.101852
118	Sn	0.101508
121	Sb	0.101313
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
205	Tl	0.111470
206	(Pb)	0.110400
207	(Pb)	0.110479
208	Pb	0.110219
232	Th	0.108817
238	U	0.108862

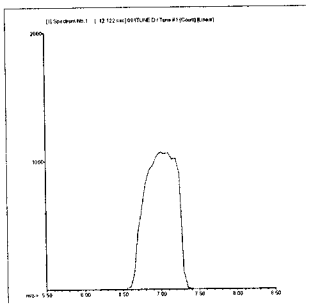
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1720 V
Pulse HV: 1390 V

200.8 QC Tune Report

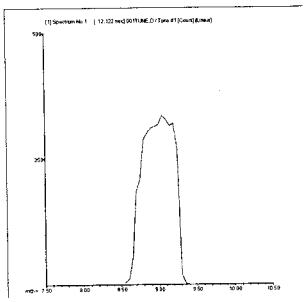
Data File: C:\ICPCHEM\1\DATA\AG070709B.B\001TUNE.D
Date Acquired: Jul 7 2009 06:26 pm
Acq. Method: tun_isis.M
Operator: TEL
Sample Name: 200.8 TUNE
Misc Info:
Vial Number: 4
Current Method: C:\ICPCHEM\1\METHODS\tun_isis.M

RSD (%)

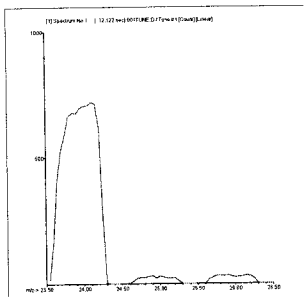
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
7 Li	22453	22562	22678	22654	22339	22032	**2.26**	5.00	
9 Be	2557	2614	2568	2613	2528	2458	**3.87**	5.00	
24 Mg	10195	10333	10161	10163	10347	9970	**1.30**	5.00	
59 Co	66238	66281	66746	66790	66601	64770	**3.53**	5.00	
115 In	958916	951553	962857	960080	958978	961111	**0.77**	5.00	
208 Pb	77867	78896	77667	77197	77617	77956	**1.00**	5.00	
238 U	160452	162185	164035	161529	160468	154041	**1.94**	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required 0.90
Flag:

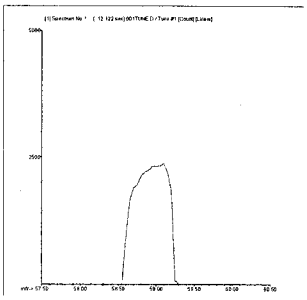


9 Be
Mass Calib.
Actual: 9.10
Required:8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required:0.90
Flag:



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\AG070709B.B\001TUNE.D



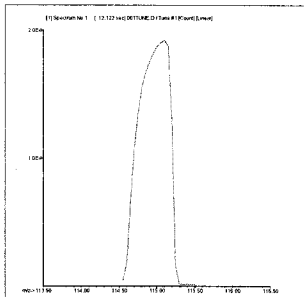
59 Co

Mass Calib.

Actual:	59.00		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.60		
Required:	0.90		
Flag:			



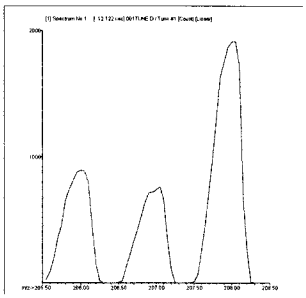
115 In

Mass Calib.

Actual:	115.05		
Required:	114.90	-	115.10
Flag:			

Peak Width

Actual:	0.55		
Required:	0.90		
Flag:			



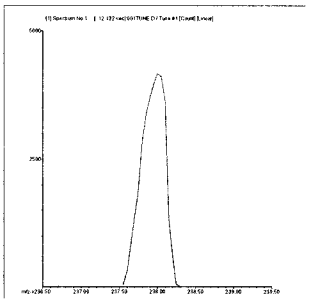
208 Pb

Mass Calib.

Actual:	208.00		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.60		
Required:	0.90		
Flag:			



238 U

Mass Calib.

Actual:	238.00		
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\AG070709B.B\002CALB.D\002CALB.D#
Date Acquired: Jul 7 2009 06:29 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 07 2009 06:30 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-61	307.06
52	Cr	72	1	1703	4.99
55	Mn	72	1	127	24.12
59	Co	72	1	27	94.37
60	Ni	72	1	10	100.00
63	Cu	72	1	207	16.99
66	Zn	72	1	281	13.82
75	As	72	1	29	24.50
78	Se	72	1	57	36.74
95	Mo	72	1	10	100.00
107	Ag	115	1	7	86.60
111	Cd	115	1	5	136.25
118	Sn	115	1	157	13.29
121	Sb	115	1	13	66.14
137	Ba	115	1	16	53.93
205	Tl	165	1	142	24.84
208	Pb	165	1	238	8.45
232	Th	165	1	167	24.98
238	U	165	1	100	12.02

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	400758	1.34
45	Sc	1	936208	0.95
72	Ge	1	542425	0.31
115	In	1	1772725	1.04
165	Ho	1	4029283	0.79

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\AG070709B.B\003CALB.D\003CALB.D#
Date Acquired: Jul 7 2009 06:32 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 07 2009 06:30 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	124	45.09
52	Cr	72	1	1643	7.31
55	Mn	72	1	140	21.43
59	Co	72	1	13	43.30
60	Ni	72	1	37	31.49
63	Cu	72	1	283	14.26
66	Zn	72	1	173	16.69
75	As	72	1	24	22.05
78	Se	72	1	57	26.96
95	Mo	72	1	13	43.30
107	Ag	115	1	10	100.00
111	Cd	115	1	8	89.21
118	Sn	115	1	187	27.49
121	Sb	115	1	13	66.14
137	Ba	115	1	17	52.92
205	Tl	165	1	96	12.25
208	Pb	165	1	224	8.95
232	Th	165	1	143	28.20
238	U	165	1	19	73.47

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	399164	0.09
45	Sc	1	940817	0.93
72	Ge	1	543541	0.91
115	In	1	1769666	0.69
165	Ho	1	4052095	0.70

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\AG070709B.B\004ICAL.D\004ICAL.D#
Date Acquired: Jul 7 2009 06:35 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 07 2009 06:33 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	45057	2.44
51	V	72	1	635517	1.35
52	Cr	72	1	740365	0.51
55	Mn	72	1	696026	0.68
59	Co	72	1	1072796	0.30
60	Ni	72	1	253152	0.72
63	Cu	72	1	623666	0.91
66	Zn	72	1	116172	1.28
75	As	72	1	70648	0.92
78	Se	72	1	10825	1.36
95	Mo	72	1	298414	1.62
107	Ag	115	1	1006118	0.15
111	Cd	115	1	173188	0.75
118	Sn	115	1	439651	0.54
121	Sb	115	1	464508	0.62
137	Ba	115	1	189823	0.35
205	Tl	165	1	2375887	1.05
208	Pb	165	1	3257719	0.92
232	Th	165	1	3073849	2.20
238	U	165	1	3744584	1.20

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	382426	1.59	399164	95.8	30 - 120	
45	Sc	1	907089	1.38	940817	96.4	30 - 120	
72	Ge	1	520511	0.60	543541	95.8	30 - 120	
115	In	1	1740539	0.58	1769666	98.4	30 - 120	
165	Ho	1	4011984	1.19	4052095	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\AG070709B.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\AG070709B.B\005 ICV.D\005 ICV.D#
Date Acquired: Jul 7 2009 06:38 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 07 2009 06:35 pm
Sample Type: ICV
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	38.73	ppb	2.14	40	96.8	90 - 110	
51 V	72	1	39.83	ppb	1.86	40	99.6	90 - 110	
52 Cr	72	1	40.55	ppb	1.29	40	101.4	90 - 110	
55 Mn	72	1	40.32	ppb	1.65	40	100.8	90 - 110	
59 Co	72	1	39.47	ppb	0.43	40	98.7	90 - 110	
60 Ni	72	1	41.03	ppb	0.27	40	102.6	90 - 110	
63 Cu	72	1	40.32	ppb	0.60	40	100.8	90 - 110	
66 Zn	72	1	40.30	ppb	0.46	40	100.8	90 - 110	
75 As	72	1	39.90	ppb	1.04	40	99.8	90 - 110	
78 Se	72	1	39.38	ppb	6.26	40	98.5	90 - 110	
95 Mo	72	1	40.14	ppb	0.13	40	100.4	90 - 110	
107 Ag	115	1	39.43	ppb	0.35	40	98.6	90 - 110	
111 Cd	115	1	40.26	ppb	0.38	40	100.7	90 - 110	
118 Sn	115	1	39.20	ppb	0.85	40	98.0	90 - 110	
121 Sb	115	1	38.07	ppb	0.76	40	95.2	90 - 110	
137 Ba	115	1	39.65	ppb	1.27	40	99.1	90 - 110	
205 Tl	165	1	40.61	ppb	1.35	40	101.5	90 - 110	
208 Pb	165	1	40.53	ppb	1.09	40	101.3	90 - 110	
232 Th	165	1	45.82	ppb	0.29	40	114.6	90 - 110	Fail
238 U	165	1	41.02	ppb	0.38	40	102.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	380889	0.43	399164	95.4	30 - 120	
45 Sc	1	897908	0.41	940817	95.4	30 - 120	
72 Ge	1	510491	0.99	543541	93.9	30 - 120	
115 In	1	1725161	0.55	1769666	97.5	30 - 120	
165 Ho	1	3965758	0.76	4052095	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\AG070709B.B\003CALB.D\003CALB.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\AG070709B.B\006WASH.D\006WASH.D#
Date Acquired: Jul 7 2009 06:40 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 07 2009 06:35 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	1.089 ppb	17.74	1.30	
51 V	72	1	5.159 ppb	1.25	6.50	
52 Cr	72	1	2.056 ppb	4.36	2.60	
55 Mn	72	1	0.996 ppb	5.33	1.30	
59 Co	72	1	0.986 ppb	5.16	1.30	
60 Ni	72	1	2.089 ppb	5.01	2.60	
63 Cu	72	1	2.053 ppb	2.76	2.60	
66 Zn	72	1	10.520 ppb	1.83	13.00	
75 As	72	1	5.027 ppb	1.20	6.50	
78 Se	72	1	4.447 ppb	23.34	6.50	
95 Mo	72	1	2.089 ppb	0.78	2.60	
107 Ag	115	1	5.193 ppb	1.84	6.50	
111 Cd	115	1	1.042 ppb	3.41	1.30	
118 Sn	115	1	10.480 ppb	0.85	13.00	
121 Sb	115	1	2.185 ppb	1.55	2.60	
137 Ba	115	1	1.068 ppb	5.38	1.30	
205 Tl	165	1	1.176 ppb	2.26	1.30	
208 Pb	165	1	1.073 ppb	0.23	1.30	
232 Th	165	1	3.179 ppb	4.03	2.60	
238 U	165	1	1.102 ppb	1.37	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379446	0.32	399164	95.1	30 - 120	
45 Sc	1	894440	1.04	940817	95.1	30 - 120	
72 Ge	1	517374	0.11	543541	95.2	30 - 120	
115 In	1	1715545	0.68	1769666	96.9	30 - 120	
165 Ho	1	3947602	0.56	4052095	97.4	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\AG070709B.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\AG070709B.B\007 ICB.D\007 ICB.D#
Date Acquired:	Jul 7 2009 06:43 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 07 2009 06:35 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	-0.01	ppb	278.49	1.00	
52 Cr	72	1	0.01	ppb	361.44	1.00	
55 Mn	72	1	-0.01	ppb	36.80	1.00	
59 Co	72	1	0.00	ppb	359.57	1.00	
60 Ni	72	1	0.00	ppb	857.45	1.00	
63 Cu	72	1	0.00	ppb	170.49	1.00	
66 Zn	72	1	0.00	ppb	285.00	1.00	
75 As	72	1	0.01	ppb	88.24	1.00	
78 Se	72	1	0.02	ppb	872.43	1.00	
95 Mo	72	1	0.01	ppb	14.64	1.00	
107 Ag	115	1	0.00	ppb	129.33	1.00	
111 Cd	115	1	0.00	ppb	333.20	1.00	
118 Sn	115	1	0.09	ppb	12.11	1.00	
121 Sb	115	1	0.08	ppb	3.49	1.00	
137 Ba	115	1	0.00	ppb	216.96	1.00	
205 Tl	165	1	0.07	ppb	7.69	1.00	
208 Pb	165	1	0.00	ppb	101.76	1.00	
232 Th	165	1	0.33	ppb	6.92	1.00	
238 U	165	1	0.00	ppb	13.68	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382408	0.87	399164	95.8	30 - 120	
45 Sc	1	907229	0.95	940817	96.4	30 - 120	
72 Ge	1	521075	0.30	543541	95.9	30 - 120	
115 In	1	1702190	0.54	1769666	96.2	30 - 120	
165 Ho	1	3975956	0.45	4052095	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\AG070709B.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\AG070709B.B\008RLST.D\008RLST.D#
Date Acquired: Jul 7 2009 06:46 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 07 2009 06:35 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	1.04	ppb	12.32	1	103.7	50 - 150	
51 V	72	1	1.01	ppb	9.81	1	100.5	50 - 150	
52 Cr	72	1	0.99	ppb	5.47	1	99.4	50 - 150	
55 Mn	72	1	0.98	ppb	4.30	1	98.4	50 - 150	
59 Co	72	1	0.98	ppb	4.26	1	98.4	50 - 150	
60 Ni	72	1	0.98	ppb	3.81	1	98.5	50 - 150	
63 Cu	72	1	0.96	ppb	4.85	1	96.3	50 - 150	
66 Zn	72	1	10.22	ppb	0.29	10	102.2	50 - 150	
75 As	72	1	1.01	ppb	2.72	1	100.7	50 - 150	
78 Se	72	1	0.79	ppb	53.55	1	78.9	50 - 150	
95 Mo	72	1	1.07	ppb	4.00	1	107.1	50 - 150	
107 Ag	115	1	0.99	ppb	3.27	1	99.3	50 - 150	
111 Cd	115	1	1.03	ppb	1.34	1	103.2	50 - 150	
118 Sn	115	1	10.17	ppb	1.04	10	101.7	50 - 150	
121 Sb	115	1	1.03	ppb	5.66	1	102.9	50 - 150	
137 Ba	115	1	1.04	ppb	2.53	1	103.6	50 - 150	
205 Tl	165	1	1.06	ppb	0.83	1	106.2	50 - 150	
208 Pb	165	1	1.01	ppb	1.71	1	101.3	50 - 150	
232 Th	165	1	1.16	ppb	1.52	1	115.9	50 - 150	
238 U	165	1	1.06	ppb	1.52	1	105.6	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381752	0.66	399164	95.6	30 - 120	
45 Sc	1	908450	0.62	940817	96.6	30 - 120	
72 Ge	1	523170	0.29	543541	96.3	30 - 120	
115 In	1	1727746	0.37	1769666	97.6	30 - 120	
165 Ho	1	3986580	0.86	4052095	98.4	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\AG070709B.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\AG070709B.B\009AFCE.D\009AFCE.D#
Date Acquired: Jul 7 2009 06:49 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 07 2009 06:35 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	36.20	0	88.9	80 - 120	
51 V	72	1	0.15	ppb	7.13	0	73.5	80 - 120	
52 Cr	72	1	0.18	ppb	3.37	0	88.4	80 - 120	
55 Mn	72	1	0.20	ppb	12.94	0	101.5	80 - 120	
59 Co	72	1	0.20	ppb	5.47	0	100.2	80 - 120	
60 Ni	72	1	0.19	ppb	8.01	0	94.7	80 - 120	
63 Cu	72	1	0.20	ppb	4.43	0	102.8	80 - 120	
66 Zn	72	1	2.02	ppb	0.83	2	98.9	80 - 120	
75 As	72	1	0.21	ppb	14.22	0	101.8	80 - 120	
78 Se	72	1	0.11	ppb	92.40	0	70.8	80 - 120	
95 Mo	72	1	0.21	ppb	12.83	0	96.0	80 - 120	
107 Ag	115	1	0.19	ppb	14.07	0	93.7	80 - 120	
111 Cd	115	1	0.20	ppb	13.72	0	98.7	80 - 120	
118 Sn	115	1	2.10	ppb	1.98	2	103.2	80 - 120	
121 Sb	115	1	0.21	ppb	3.22	0	103.6	80 - 120	
137 Ba	115	1	0.19	ppb	8.30	0	92.8	80 - 120	
205 Tl	165	1	0.23	ppb	2.69	0	107.3	80 - 120	
208 Pb	165	1	0.21	ppb	2.25	0	102.4	80 - 120	
232 Th	165	1	0.30	ppb	1.72	0	130.8	80 - 120	
238 U	165	1	0.21	ppb	1.37	0	97.8	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	383219	0.57	399164	96.0	30 - 120	
45 Sc	1	910744	0.99	940817	96.8	30 - 120	
72 Ge	1	523238	0.51	543541	96.3	30 - 120	
115 In	1	1749677	0.22	1769666	98.9	30 - 120	
165 Ho	1	3982865	0.61	4052095	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\AG070709B.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\AG070709B.B\010SMPL.D\010SMPL.D#
Date Acquired: Jul 7 2009 06:51 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 07 2009 06:35 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	-0.01	-0.01	ppb	147.72	3600	
52 Cr	72	1	0.00	0.00	ppb	1241.60	3600	
55 Mn	72	1	0.00	0.00	ppb	472.13	3600	
59 Co	72	1	0.00	0.00	ppb	369.37	3600	
60 Ni	72	1	0.01	0.01	ppb	136.71	3600	
63 Cu	72	1	-0.01	-0.01	ppb	86.24	3600	
66 Zn	72	1	0.10	0.10	ppb	20.02	3600	
75 As	72	1	0.00	0.00	ppb	488.01	3600	
78 Se	72	1	1.71	1.71	ppb	19.19	3600	
95 Mo	72	1	0.00	0.00	ppb	42.52	3600	
107 Ag	115	1	0.00	0.00	ppb	89.97	3600	
111 Cd	115	1	0.00	0.00	ppb	483.30	3600	
118 Sn	115	1	0.44	0.44	ppb	3.98	3600	
121 Sb	115	1	0.01	0.01	ppb	51.24	3600	
137 Ba	115	1	0.00	0.00	ppb	2235.70	3600	
205 Tl	165	1	0.02	0.02	ppb	13.37	3600	
208 Pb	165	1	0.00	0.00	ppb	155.70	3600	
232 Th	165	1	0.05	0.05	ppb	11.74	1000	
238 U	165	1	0.00	0.00	ppb	34.75	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381988	0.77	399164	95.7	30 - 120	
45 Sc	1	909120	0.30	940817	96.6	30 - 120	
72 Ge	1	524636	0.43	543541	96.5	30 - 120	
115 In	1	1729729	0.54	1769666	97.7	30 - 120	
165 Ho	1	3992746	0.71	4052095	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\AG070709B.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\AG070709B.B\011ICSA.D\011ICSA.D#
Date Acquired: Jul 7 2009 06:54 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 07 2009 06:35 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	0.01 ppb	173.19	1.00	
51 V	72	1	-0.12 ppb	145.18	1.00	
52 Cr	72	1	1.00 ppb	3.09	1.00	
55 Mn	72	1	2.15 ppb	3.13	1.00	
59 Co	72	1	0.05 ppb	8.09	1.00	
60 Ni	72	1	0.76 ppb	3.84	1.00	
63 Cu	72	1	0.31 ppb	8.08	1.00	
66 Zn	72	1	2.84 ppb	2.36	10.00	
75 As	72	1	0.16 ppb	4.86	1.00	
78 Se	72	1	-0.20 ppb	83.63	1.00	
95 Mo	72	1	2043.00 ppb	1.61	2000.00	
107 Ag	115	1	0.06 ppb	1.56	1.00	
111 Cd	115	1	0.46 ppb	24.91	1.00	
118 Sn	115	1	0.20 ppb	17.21	10.00	
121 Sb	115	1	0.24 ppb	6.95	1.00	
137 Ba	115	1	1.57 ppb	4.74	1.00	
205 Tl	165	1	0.05 ppb	32.86	1.00	
208 Pb	165	1	0.12 ppb	5.36	1.00	
232 Th	165	1	0.10 ppb	10.63	1.00	
238 U	165	1	0.02 ppb	3.23	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	365243	0.79	399164	91.5	30 - 120	
45 Sc	1	788222	0.65	940817	83.8	30 - 120	
72 Ge	1	427827	0.97	543541	78.7	30 - 120	
115 In	1	1437454	0.58	1769666	81.2	30 - 120	
165 Ho	1	3581671	0.93	4052095	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\AG070709B.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\AG070709B.B\012ICSB.D\012ICSB.D#
Date Acquired: Jul 7 2009 06:57 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 07 2009 06:35 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	95.41	1.50	100	95.4	80 - 120	
51 V	72	1	103.80	1.00	100	103.8	80 - 120	
52 Cr	72	1	103.20	0.47	100	103.2	80 - 120	
55 Mn	72	1	103.00	0.69	100	103.0	80 - 120	
59 Co	72	1	95.34	0.69	100	95.3	80 - 120	
60 Ni	72	1	92.36	1.58	100	92.4	80 - 120	
63 Cu	72	1	89.22	0.72	100	89.2	80 - 120	
66 Zn	72	1	101.20	0.80	100	101.2	80 - 120	
75 As	72	1	101.20	0.94	100	101.2	80 - 120	
78 Se	72	1	111.30	2.75	100	111.3	80 - 120	
95 Mo	72	1	2173.00	1.31	2100	103.5	80 - 120	
107 Ag	115	1	85.76	1.92	100	85.8	80 - 120	
111 Cd	115	1	96.48	1.43	100	96.5	80 - 120	
118 Sn	115	1	103.80	1.68	100	103.8	80 - 120	
121 Sb	115	1	103.90	1.74	100	103.9	80 - 120	
137 Ba	115	1	106.00	2.12	100	106.0	80 - 120	
205 Tl	165	1	94.99	0.53	100	95.0	80 - 120	
208 Pb	165	1	94.09	0.42	100	94.1	80 - 120	
232 Th	165	1	111.20	1.41	100	111.2	80 - 120	
238 U	165	1	103.30	0.40	100	103.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	363601	0.94	399164	91.1	30 - 120	
45 Sc	1	745518	1.62	940817	79.2	30 - 120	
72 Ge	1	408166	0.77	543541	75.1	30 - 120	
115 In	1	1402003	0.59	1769666	79.2	30 - 120	
165 Ho	1	3568659	0.29	4052095	88.1	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\AG070709B.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\AG070709B.B\013SMPL.D\013SMPL.D#
Date Acquired: Jul 7 2009 06:59 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 07 2009 06:35 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	173.16	3600	
51 V	72	1	-0.07	-0.07	ppb	35.08	3600	
52 Cr	72	1	0.00	0.00	ppb	168.71	3600	
55 Mn	72	1	0.01	0.01	ppb	62.67	3600	
59 Co	72	1	0.01	0.01	ppb	53.27	3600	
60 Ni	72	1	0.02	0.02	ppb	71.92	3600	
63 Cu	72	1	0.01	0.01	ppb	25.23	3600	
66 Zn	72	1	0.08	0.08	ppb	9.50	3600	
75 As	72	1	0.04	0.04	ppb	24.44	3600	
78 Se	72	1	0.02	0.02	ppb	1280.40	3600	
95 Mo	72	1	1.48	1.48	ppb	11.41	3600	
107 Ag	115	1	0.01	0.01	ppb	57.64	3600	
111 Cd	115	1	0.01	0.01	ppb	88.95	3600	
118 Sn	115	1	0.07	0.07	ppb	39.85	3600	
121 Sb	115	1	0.05	0.05	ppb	18.44	3600	
137 Ba	115	1	0.01	0.01	ppb	59.77	3600	
205 Tl	165	1	0.01	0.01	ppb	15.32	3600	
208 Pb	165	1	0.01	0.01	ppb	36.06	3600	
232 Th	165	1	0.85	0.85	ppb	23.15	1000	
238 U	165	1	0.02	0.02	ppb	9.73	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	392230	1.00	399164	98.3	30 - 120	
45 Sc	1	847933	1.38	940817	90.1	30 - 120	
72 Ge	1	494469	0.21	543541	91.0	30 - 120	
115 In	1	1662200	1.03	1769666	93.9	30 - 120	
165 Ho	1	4011358	1.54	4052095	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\AG070709B.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\AG070709B.B\014 LR.D\014 LR.D#
Date Acquired: Jul 7 2009 07:02 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 07 2009 06:35 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	983.40 ppb	1.01	1000	98.3	90 - 110	
51 V	72	1	947.80 ppb	1.93	1000	94.8	90 - 110	
52 Cr	72	1	970.60 ppb	1.54	1000	97.1	90 - 110	
55 Mn	72	1	980.00 ppb	1.74	1000	98.0	90 - 110	
59 Co	72	1	949.60 ppb	1.88	1000	95.0	90 - 110	
60 Ni	72	1	987.80 ppb	1.07	1000	98.8	90 - 110	
63 Cu	72	1	955.00 ppb	1.51	1000	95.5	90 - 110	
66 Zn	72	1	1033.00 ppb	1.84	1000	103.3	90 - 110	
75 As	72	1	994.00 ppb	0.73	1000	99.4	90 - 110	
78 Se	72	1	1029.00 ppb	2.04	1000	102.9	90 - 110	
95 Mo	72	1	1009.00 ppb	1.74	1000	100.9	90 - 110	
107 Ag	115	1	964.50 ppb	1.98	1000	96.5	90 - 110	
111 Cd	115	1	1029.00 ppb	1.52	1000	102.9	90 - 110	
118 Sn	115	1	1005.00 ppb	0.95	1000	100.5	90 - 110	
121 Sb	115	1	998.10 ppb	1.44	1000	99.8	90 - 110	
137 Ba	115	1	1023.00 ppb	0.46	1000	102.3	90 - 110	
205 Tl	165	1	972.10 ppb	0.66	1000	97.2	90 - 110	
208 Pb	165	1	965.00 ppb	0.85	1000	96.5	90 - 110	
232 Th	165	1	1087.00 ppb	2.42	1000	108.7	90 - 110	
238 U	165	1	1004.00 ppb	0.93	1000	100.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	374397	1.09	399164	93.8	30 - 120	
45 Sc	1	839630	1.54	940817	89.2	30 - 120	
72 Ge	1	487501	1.32	543541	89.7	30 - 120	
115 In	1	1652784	1.56	1769666	93.4	30 - 120	
165 Ho	1	4011589	1.51	4052095	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\AG070709B.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\AG070709B.B\015SMPL.D\015SMPL.D#
Date Acquired: Jul 7 2009 07:05 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 07 2009 06:35 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	0.10	0.10	ppb	44.89	3600	
51 V	72	1	0.04	0.04	ppb	13.03	3600	
52 Cr	72	1	0.06	0.06	ppb	24.31	3600	
55 Mn	72	1	0.06	0.06	ppb	39.96	3600	
59 Co	72	1	0.08	0.08	ppb	29.64	3600	
60 Ni	72	1	0.07	0.07	ppb	35.89	3600	
63 Cu	72	1	0.07	0.07	ppb	26.63	3600	
66 Zn	72	1	0.17	0.17	ppb	20.43	3600	
75 As	72	1	0.10	0.10	ppb	31.17	3600	
78 Se	72	1	0.20	0.20	ppb	197.18	3600	
95 Mo	72	1	0.78	0.78	ppb	8.80	3600	
107 Ag	115	1	0.05	0.05	ppb	29.15	3600	
111 Cd	115	1	0.08	0.08	ppb	11.89	3600	
118 Sn	115	1	1.34	1.34	ppb	4.00	3600	
121 Sb	115	1	0.53	0.53	ppb	4.95	3600	
137 Ba	115	1	0.06	0.06	ppb	16.69	3600	
205 Tl	165	1	0.14	0.14	ppb	16.45	3600	
208 Pb	165	1	0.08	0.08	ppb	29.48	3600	
232 Th	165	1	5.32	5.32	ppb	21.32	1000	
238 U	165	1	0.15	0.15	ppb	8.24	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379584	0.33	399164	95.1	30 - 120	
45 Sc	1	873362	0.60	940817	92.8	30 - 120	
72 Ge	1	506731	0.43	543541	93.2	30 - 120	
115 In	1	1692278	0.36	1769666	95.6	30 - 120	
165 Ho	1	4003631	0.89	4052095	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\AG070709B.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\AG070709B.B\016 CCV.D\016 CCV.D#
Date Acquired: Jul 7 2009 07:08 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 07 2009 06:35 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	49.62	ppb	3.63	50	99.2	90 - 110	
51 V	72	1	49.33	ppb	0.48	50	98.7	90 - 110	
52 Cr	72	1	49.99	ppb	0.15	50	100.0	90 - 110	
55 Mn	72	1	50.16	ppb	0.63	50	100.3	90 - 110	
59 Co	72	1	49.28	ppb	0.34	50	98.6	90 - 110	
60 Ni	72	1	49.82	ppb	0.86	50	99.6	90 - 110	
63 Cu	72	1	50.32	ppb	0.27	50	100.6	90 - 110	
66 Zn	72	1	51.12	ppb	0.39	50	102.2	90 - 110	
75 As	72	1	50.01	ppb	0.76	50	100.0	90 - 110	
78 Se	72	1	51.33	ppb	1.78	50	102.7	90 - 110	
95 Mo	72	1	51.04	ppb	0.26	50	102.1	90 - 110	
107 Ag	115	1	50.64	ppb	2.48	50	101.3	90 - 110	
111 Cd	115	1	51.08	ppb	3.26	50	102.2	90 - 110	
118 Sn	115	1	51.20	ppb	2.24	50	102.4	90 - 110	
121 Sb	115	1	50.97	ppb	2.72	50	101.9	90 - 110	
137 Ba	115	1	50.72	ppb	2.33	50	101.4	90 - 110	
205 Tl	165	1	51.22	ppb	0.82	50	102.4	90 - 110	
208 Pb	165	1	50.99	ppb	0.59	50	102.0	90 - 110	
232 Th	165	1	52.84	ppb	2.82	50	105.7	90 - 110	
238 U	165	1	52.33	ppb	1.04	50	104.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	376555	0.66	399164	94.3	30 - 120	
45 Sc	1	876739	1.55	940817	93.2	30 - 120	
72 Ge	1	505139	0.71	543541	92.9	30 - 120	
115 In	1	1690240	2.01	1769666	95.5	30 - 120	
165 Ho	1	3974864	0.42	4052095	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\AG070709B.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\AG070709B.B\017 CCB.D\017 CCB.D#
Date Acquired: Jul 7 2009 07:10 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 07 2009 06:35 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	0.015	ppb	86.59	1.00	
51 V	72	1	0.001	ppb	2310.60	1.00	
52 Cr	72	1	0.015	ppb	77.74	1.00	
55 Mn	72	1	0.007	ppb	71.46	1.00	
59 Co	72	1	0.007	ppb	43.33	1.00	
60 Ni	72	1	0.005	ppb	124.14	1.00	
63 Cu	72	1	0.008	ppb	32.43	1.00	
66 Zn	72	1	-0.004	ppb	189.55	1.00	
75 As	72	1	0.039	ppb	52.57	1.00	
78 Se	72	1	0.034	ppb	988.42	1.00	
95 Mo	72	1	0.152	ppb	12.74	1.00	
107 Ag	115	1	0.008	ppb	0.82	1.00	
111 Cd	115	1	0.001	ppb	1452.00	1.00	
118 Sn	115	1	0.279	ppb	24.24	1.00	
121 Sb	115	1	0.108	ppb	14.18	1.00	
137 Ba	115	1	0.007	ppb	63.36	1.00	
205 Tl	165	1	0.063	ppb	13.43	1.00	
208 Pb	165	1	0.005	ppb	37.30	1.00	
232 Th	165	1	1.413	ppb	14.76	1.00	Fail
238 U	165	1	0.015	ppb	3.77	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	376366	0.39	399164	94.3	30 - 120	
45 Sc	1	871292	1.51	940817	92.6	30 - 120	
72 Ge	1	509432	0.21	543541	93.7	30 - 120	
115 In	1	1694548	0.74	1769666	95.8	30 - 120	
165 Ho	1	3930648	0.63	4052095	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\AG070709B.B\003CALB.D\003CALB.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\AG070709B.B\018WASH.D\018WASH.D#
Date Acquired: Jul 7 2009 07:13 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 07 2009 06:35 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	0.950 ppb	34.59	1.30	
51 V	72	1	5.092 ppb	2.34	6.50	
52 Cr	72	1	2.116 ppb	1.95	2.60	
55 Mn	72	1	1.041 ppb	3.33	1.30	
59 Co	72	1	0.977 ppb	1.97	1.30	
60 Ni	72	1	2.082 ppb	1.15	2.60	
63 Cu	72	1	2.096 ppb	0.80	2.60	
66 Zn	72	1	10.630 ppb	0.64	13.00	
75 As	72	1	5.058 ppb	3.38	6.50	
78 Se	72	1	5.432 ppb	1.49	6.50	
95 Mo	72	1	2.180 ppb	2.74	2.60	
107 Ag	115	1	5.324 ppb	0.74	6.50	
111 Cd	115	1	1.066 ppb	6.36	1.30	
118 Sn	115	1	10.810 ppb	0.98	13.00	
121 Sb	115	1	2.023 ppb	2.76	2.60	
137 Ba	115	1	1.068 ppb	2.92	1.30	
205 Tl	165	1	1.140 ppb	1.37	1.30	
208 Pb	165	1	1.064 ppb	2.30	1.30	
232 Th	165	1	2.562 ppb	0.69	2.60	
238 U	165	1	1.114 ppb	1.20	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	375609	0.51	399164	94.1	30 - 120	
45 Sc	1	888298	1.26	940817	94.4	30 - 120	
72 Ge	1	513002	0.31	543541	94.4	30 - 120	
115 In	1	1688757	0.59	1769666	95.4	30 - 120	
165 Ho	1	3965900	1.10	4052095	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\AG070709B.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\AG070709B.B\019SMPL.D\019SMPL.D#
Date Acquired:	Jul 7 2009 07:16 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	IDL 1
Misc Info:	IDL 1
Vial Number:	2201
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 07 2009 06:35 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	-0.04	-0.04	ppb	68.44	3600	
52 Cr	72	1	0.04	0.04	ppb	29.24	3600	
55 Mn	72	1	0.00	0.00	ppb	256.13	3600	
59 Co	72	1	0.00	0.00	ppb	382.70	3600	
60 Ni	72	1	0.01	0.01	ppb	49.38	3600	
63 Cu	72	1	0.01	0.01	ppb	55.64	3600	
66 Zn	72	1	0.14	0.14	ppb	21.68	3600	
75 As	72	1	0.01	0.01	ppb	203.55	3600	
78 Se	72	1	-0.13	-0.13	ppb	125.58	3600	
95 Mo	72	1	0.05	0.05	ppb	16.98	3600	
107 Ag	115	1	0.00	0.00	ppb	52.68	3600	
111 Cd	115	1	0.00	0.00	ppb	214.07	3600	
118 Sn	115	1	0.15	0.15	ppb	19.57	3600	
121 Sb	115	1	0.06	0.06	ppb	6.05	3600	
137 Ba	115	1	0.00	0.00	ppb	349.53	3600	
205 Tl	165	1	0.12	0.12	ppb	50.04	3600	
208 Pb	165	1	0.00	0.00	ppb	22.86	3600	
232 Th	165	1	0.34	0.34	ppb	17.39	1000	
238 U	165	1	0.00	0.00	ppb	16.51	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379285	0.19	399164	95.0	30 - 120	
45 Sc	1	892144	1.83	940817	94.8	30 - 120	
72 Ge	1	515237	0.27	543541	94.8	30 - 120	
115 In	1	1718488	1.06	1769666	97.1	30 - 120	
165 Ho	1	3986789	1.41	4052095	98.4	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\AG070709B.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\AG070709B.B\020SMPL.D\020SMPL.D#
Date Acquired: Jul 7 2009 07:19 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 2
Misc Info: IDL 2
Vial Number: 2202
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	377.77	3600	
52 Cr	72	1	0.10	0.10	ppb	6.96	3600	
55 Mn	72	1	0.01	0.01	ppb	45.86	3600	
59 Co	72	1	0.00	0.00	ppb	145.74	3600	
60 Ni	72	1	0.00	0.00	ppb	1196.50	3600	
63 Cu	72	1	0.01	0.01	ppb	103.69	3600	
66 Zn	72	1	0.18	0.18	ppb	23.83	3600	
75 As	72	1	0.02	0.02	ppb	70.21	3600	
78 Se	72	1	-0.01	-0.01	ppb	2560.20	3600	
95 Mo	72	1	0.05	0.05	ppb	46.21	3600	
107 Ag	115	1	0.00	0.00	ppb	49.01	3600	
111 Cd	115	1	0.00	0.00	ppb	135.26	3600	
118 Sn	115	1	0.10	0.10	ppb	15.66	3600	
121 Sb	115	1	0.03	0.03	ppb	4.43	3600	
137 Ba	115	1	0.00	0.00	ppb	232.64	3600	
205 Tl	165	1	0.02	0.02	ppb	15.52	3600	
208 Pb	165	1	0.00	0.00	ppb	48.86	3600	
232 Th	165	1	0.15	0.15	ppb	8.53	1000	
238 U	165	1	0.00	0.00	ppb	25.79	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	380373	0.78	399164	95.3	30 - 120	
45 Sc	1	911770	1.04	940817	96.9	30 - 120	
72 Ge	1	519249	0.73	543541	95.5	30 - 120	
115 In	1	1724932	1.14	1769666	97.5	30 - 120	
165 Ho	1	4028099	0.29	4052095	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\AG070709B.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\AG070709B.B\021SMPL.D\021SMPL.D#
Date Acquired: Jul 7 2009 07:21 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 3
Misc Info: IDL 3
Vial Number: 2203
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	36.00	3600	
52 Cr	72	1	0.07	0.07	ppb	28.56	3600	
55 Mn	72	1	0.01	0.01	ppb	52.10	3600	
59 Co	72	1	0.00	0.00	ppb	355.28	3600	
60 Ni	72	1	0.01	0.01	ppb	40.66	3600	
63 Cu	72	1	0.02	0.02	ppb	44.24	3600	
66 Zn	72	1	0.26	0.26	ppb	8.74	3600	
75 As	72	1	0.01	0.01	ppb	60.02	3600	
78 Se	72	1	-0.04	-0.04	ppb	585.23	3600	
95 Mo	72	1	0.03	0.03	ppb	22.63	3600	
107 Ag	115	1	0.00	0.00	ppb	178.94	3600	
111 Cd	115	1	0.00	0.00	ppb	352.78	3600	
118 Sn	115	1	0.08	0.08	ppb	24.98	3600	
121 Sb	115	1	0.03	0.03	ppb	8.44	3600	
137 Ba	115	1	0.00	0.00	ppb	67.24	3600	
205 Tl	165	1	0.01	0.01	ppb	19.44	3600	
208 Pb	165	1	0.01	0.01	ppb	13.68	3600	
232 Th	165	1	0.08	0.08	ppb	3.77	1000	
238 U	165	1	0.00	0.00	ppb	12.12	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382171	0.47	399164	95.7	30 - 120	
45 Sc	1	913266	0.67	940817	97.1	30 - 120	
72 Ge	1	522994	0.15	543541	96.2	30 - 120	
115 In	1	1746978	0.26	1769666	98.7	30 - 120	
165 Ho	1	4035614	0.63	4052095	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\AG070709B.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\AG070709B.B\022SMPL.D\022SMPL.D#
Date Acquired:	Jul 7 2009 07:24 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	IDL 4
Misc Info:	IDL 4
Vial Number:	2204
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 07 2009 06:35 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	0.02	0.02	ppb	152.96	3600	
52 Cr	72	1	0.06	0.06	ppb	24.25	3600	
55 Mn	72	1	0.00	0.00	ppb	144.92	3600	
59 Co	72	1	0.00	0.00	ppb	1117.00	3600	
60 Ni	72	1	0.01	0.01	ppb	53.84	3600	
63 Cu	72	1	0.01	0.01	ppb	130.03	3600	
66 Zn	72	1	0.16	0.16	ppb	19.17	3600	
75 As	72	1	0.01	0.01	ppb	137.11	3600	
78 Se	72	1	0.08	0.08	ppb	286.30	3600	
95 Mo	72	1	0.03	0.03	ppb	66.91	3600	
107 Ag	115	1	0.04	0.04	ppb	167.18	3600	
111 Cd	115	1	0.00	0.00	ppb	1323.30	3600	
118 Sn	115	1	0.07	0.07	ppb	30.62	3600	
121 Sb	115	1	0.02	0.02	ppb	25.73	3600	
137 Ba	115	1	0.00	0.00	ppb	126.77	3600	
205 Tl	165	1	0.00	0.00	ppb	17.01	3600	
208 Pb	165	1	0.01	0.01	ppb	11.23	3600	
232 Th	165	1	0.05	0.05	ppb	3.48	1000	
238 U	165	1	0.00	0.00	ppb	41.01	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	380990	0.19	399164	95.4	30 - 120	
45 Sc	1	921642	0.31	940817	98.0	30 - 120	
72 Ge	1	522994	0.54	543541	96.2	30 - 120	
115 In	1	1746663	0.41	1769666	98.7	30 - 120	
165 Ho	1	4031298	0.35	4052095	99.5	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\AG070709B.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\AG070709B.B\023SMPL.D\023SMPL.D#
Date Acquired: Jul 7 2009 07:27 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 5
Misc Info: IDL 5
Vial Number: 2205
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	69.22	3600	
52 Cr	72	1	0.06	0.06	ppb	39.69	3600	
55 Mn	72	1	0.01	0.01	ppb	116.00	3600	
59 Co	72	1	0.00	0.00	ppb	153.25	3600	
60 Ni	72	1	0.01	0.01	ppb	36.95	3600	
63 Cu	72	1	0.03	0.03	ppb	48.62	3600	
66 Zn	72	1	0.38	0.38	ppb	10.97	3600	
75 As	72	1	0.01	0.01	ppb	58.58	3600	
78 Se	72	1	0.14	0.14	ppb	113.36	3600	
95 Mo	72	1	0.02	0.02	ppb	9.44	3600	
107 Ag	115	1	0.00	0.00	ppb	49.32	3600	
111 Cd	115	1	0.00	0.00	ppb	66.69	3600	
118 Sn	115	1	0.05	0.05	ppb	18.47	3600	
121 Sb	115	1	0.01	0.01	ppb	39.88	3600	
137 Ba	115	1	0.04	0.04	ppb	25.01	3600	
205 Tl	165	1	0.00	0.00	ppb	42.60	3600	
208 Pb	165	1	0.00	0.00	ppb	11.74	3600	
232 Th	165	1	0.03	0.03	ppb	10.68	1000	
238 U	165	1	0.00	0.00	ppb	43.23	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381108	1.08	399164	95.5	30 - 120	
45 Sc	1	917609	0.68	940817	97.5	30 - 120	
72 Ge	1	526581	0.40	543541	96.9	30 - 120	
115 In	1	1753078	0.65	1769666	99.1	30 - 120	
165 Ho	1	4051353	0.90	4052095	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\AG070709B.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\AG070709B.B\024SMPL.D\024SMPL.D#
Date Acquired:	Jul 7 2009 07:30 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	IDL 6
Misc Info:	IDL 6
Vial Number:	2206
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 07 2009 06:35 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	46.47	3600	
52 Cr	72	1	0.04	0.04	ppb	30.72	3600	
55 Mn	72	1	0.01	0.01	ppb	69.39	3600	
59 Co	72	1	0.00	0.00	ppb	147.86	3600	
60 Ni	72	1	0.00	0.00	ppb	209.95	3600	
63 Cu	72	1	0.00	0.00	ppb	636.32	3600	
66 Zn	72	1	0.12	0.12	ppb	19.15	3600	
75 As	72	1	0.01	0.01	ppb	57.82	3600	
78 Se	72	1	-0.14	-0.14	ppb	174.84	3600	
95 Mo	72	1	0.02	0.02	ppb	42.62	3600	
107 Ag	115	1	0.00	0.00	ppb	112.75	3600	
111 Cd	115	1	0.00	0.00	ppb	155.48	3600	
118 Sn	115	1	0.03	0.03	ppb	40.76	3600	
121 Sb	115	1	0.01	0.01	ppb	30.69	3600	
137 Ba	115	1	0.00	0.00	ppb	630.14	3600	
205 Tl	165	1	0.00	0.00	ppb	28.37	3600	
208 Pb	165	1	0.01	0.01	ppb	14.13	3600	
232 Th	165	1	0.02	0.02	ppb	13.98	1000	
238 U	165	1	0.00	0.00	ppb	61.03	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379484	0.58	399164	95.1	30 - 120	
45 Sc	1	919710	0.59	940817	97.8	30 - 120	
72 Ge	1	529558	0.14	543541	97.4	30 - 120	
115 In	1	1740330	0.31	1769666	98.3	30 - 120	
165 Ho	1	4028294	0.54	4052095	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\AG070709B.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\AG070709B.B\025SMPL.D\025SMPL.D#
Date Acquired: Jul 7 2009 07:32 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 7
Misc Info: IDL 7
Vial Number: 2207
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	-0.02	-0.02	ppb	66.88	3600	
52 Cr	72	1	0.09	0.09	ppb	22.46	3600	
55 Mn	72	1	0.01	0.01	ppb	119.57	3600	
59 Co	72	1	0.00	0.00	ppb	26.53	3600	
60 Ni	72	1	0.01	0.01	ppb	81.48	3600	
63 Cu	72	1	0.01	0.01	ppb	162.49	3600	
66 Zn	72	1	0.46	0.46	ppb	7.54	3600	
75 As	72	1	0.00	0.00	ppb	826.57	3600	
78 Se	72	1	0.10	0.10	ppb	199.05	3600	
95 Mo	72	1	0.03	0.03	ppb	36.36	3600	
107 Ag	115	1	0.00	0.00	ppb	86.85	3600	
111 Cd	115	1	0.00	0.00	ppb	439.55	3600	
118 Sn	115	1	0.07	0.07	ppb	34.83	3600	
121 Sb	115	1	0.01	0.01	ppb	25.15	3600	
137 Ba	115	1	0.01	0.01	ppb	107.25	3600	
205 Tl	165	1	0.00	0.00	ppb	136.49	3600	
208 Pb	165	1	0.00	0.00	ppb	56.94	3600	
232 Th	165	1	0.02	0.02	ppb	11.50	1000	
238 U	165	1	0.00	0.00	ppb	52.38	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382232	0.33	399164	95.8	30 - 120	
45 Sc	1	914289	2.86	940817	97.2	30 - 120	
72 Ge	1	528909	0.57	543541	97.3	30 - 120	
115 In	1	1760439	0.96	1769666	99.5	30 - 120	
165 Ho	1	4061949	1.79	4052095	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\AG070709B.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\AG070709B.B\026 CCV.D\026 CCV.D#
Date Acquired: Jul 7 2009 07:35 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 07 2009 06:35 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	49.11	ppb	1.59	50	98.2	90 - 110	
51 V	72	1	49.65	ppb	0.84	50	99.3	90 - 110	
52 Cr	72	1	49.85	ppb	0.52	50	99.7	90 - 110	
55 Mn	72	1	50.18	ppb	0.98	50	100.4	90 - 110	
59 Co	72	1	49.63	ppb	0.79	50	99.3	90 - 110	
60 Ni	72	1	50.44	ppb	0.39	50	100.9	90 - 110	
63 Cu	72	1	49.99	ppb	0.78	50	100.0	90 - 110	
66 Zn	72	1	50.56	ppb	0.39	50	101.1	90 - 110	
75 As	72	1	50.04	ppb	0.28	50	100.1	90 - 110	
78 Se	72	1	51.86	ppb	3.17	50	103.7	90 - 110	
95 Mo	72	1	50.35	ppb	0.60	50	100.7	90 - 110	
107 Ag	115	1	50.41	ppb	1.84	50	100.8	90 - 110	
111 Cd	115	1	50.40	ppb	1.73	50	100.8	90 - 110	
118 Sn	115	1	50.13	ppb	1.43	50	100.3	90 - 110	
121 Sb	115	1	50.25	ppb	1.11	50	100.5	90 - 110	
137 Ba	115	1	50.69	ppb	1.75	50	101.4	90 - 110	
205 Tl	165	1	50.76	ppb	0.57	50	101.5	90 - 110	
208 Pb	165	1	50.43	ppb	0.52	50	100.9	90 - 110	
232 Th	165	1	50.82	ppb	2.31	50	101.6	90 - 110	
238 U	165	1	51.44	ppb	0.54	50	102.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	371672	0.71	399164	93.1	30 - 120	
45 Sc	1	912752	0.78	940817	97.0	30 - 120	
72 Ge	1	522215	0.41	543541	96.1	30 - 120	
115 In	1	1743103	0.73	1769666	98.5	30 - 120	
165 Ho	1	4005312	0.25	4052095	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\AG070709B.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\AG070709B.B\027 CCB.D\027 CCB.D#
Date Acquired: Jul 7 2009 07:38 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 07 2009 06:35 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	0.015	ppb	86.57	1.00	
51 V	72	1	0.000	ppb	19711.00	1.00	
52 Cr	72	1	-0.001	ppb	6169.20	1.00	
55 Mn	72	1	0.001	ppb	190.49	1.00	
59 Co	72	1	0.008	ppb	39.18	1.00	
60 Ni	72	1	0.019	ppb	96.35	1.00	
63 Cu	72	1	-0.005	ppb	50.33	1.00	
66 Zn	72	1	0.021	ppb	90.07	1.00	
75 As	72	1	0.019	ppb	36.03	1.00	
78 Se	72	1	0.143	ppb	130.86	1.00	
95 Mo	72	1	0.058	ppb	40.81	1.00	
107 Ag	115	1	0.007	ppb	31.96	1.00	
111 Cd	115	1	0.005	ppb	147.19	1.00	
118 Sn	115	1	0.092	ppb	9.40	1.00	
121 Sb	115	1	0.047	ppb	17.39	1.00	
137 Ba	115	1	0.007	ppb	25.78	1.00	
205 Tl	165	1	0.027	ppb	8.32	1.00	
208 Pb	165	1	0.004	ppb	29.24	1.00	
232 Th	165	1	1.122	ppb	18.47	1.00	Fail
238 U	165	1	0.009	ppb	11.87	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	372423	1.23	399164	93.3	30 - 120	
45 Sc	1	912447	0.67	940817	97.0	30 - 120	
72 Ge	1	523888	0.45	543541	96.4	30 - 120	
115 In	1	1734442	0.69	1769666	98.0	30 - 120	
165 Ho	1	3981000	0.53	4052095	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\AG070709B.B\003CALB.D\003CALB.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\AG070709B.B\028WASH.D\028WASH.D#
Date Acquired: Jul 7 2009 07:41 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 07 2009 06:35 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	1.085 ppb	15.68	1.30	
51 V	72	1	5.132 ppb	0.96	6.50	
52 Cr	72	1	2.054 ppb	3.48	2.60	
55 Mn	72	1	1.017 ppb	4.38	1.30	
59 Co	72	1	1.024 ppb	2.60	1.30	
60 Ni	72	1	2.076 ppb	8.39	2.60	
63 Cu	72	1	2.034 ppb	0.60	2.60	
66 Zn	72	1	10.510 ppb	1.39	13.00	
75 As	72	1	5.147 ppb	1.98	6.50	
78 Se	72	1	4.531 ppb	13.79	6.50	
95 Mo	72	1	2.009 ppb	2.89	2.60	
107 Ag	115	1	5.317 ppb	1.44	6.50	
111 Cd	115	1	1.104 ppb	9.81	1.30	
118 Sn	115	1	10.490 ppb	2.91	13.00	
121 Sb	115	1	1.965 ppb	2.52	2.60	
137 Ba	115	1	1.095 ppb	3.49	1.30	
205 Tl	165	1	1.097 ppb	0.49	1.30	
208 Pb	165	1	1.060 ppb	0.29	1.30	
232 Th	165	1	2.347 ppb	1.47	2.60	
238 U	165	1	1.092 ppb	1.22	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	372721	0.46	399164	93.4	30 - 120	
45 Sc	1	900076	1.60	940817	95.7	30 - 120	
72 Ge	1	524566	0.72	543541	96.5	30 - 120	
115 In	1	1735347	1.19	1769666	98.1	30 - 120	
165 Ho	1	4009833	0.10	4052095	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\AG070709B.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: 7/8/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\134CALB.D\134CALB.D#
Date Acquired:	Jul 8 2009 12:34 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 08 2009 12:32 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-108	246.57
52	Cr	72	1	1653	5.08
55	Mn	72	1	180	17.07
59	Co	72	1	53	59.97
60	Ni	72	1	60	49.96
63	Cu	72	1	533	20.71
66	Zn	72	1	196	14.00
75	As	72	1	38	45.31
78	Se	72	1	217	11.91
95	Mo	72	1	320	5.86
107	Ag	115	1	27	57.06
111	Cd	115	1	9	94.56
118	Sn	115	1	363	7.25
121	Sb	115	1	31	53.98
137	Ba	115	1	28	24.75
205	Tl	165	1	36	19.54
208	Pb	165	1	318	9.95
232	Th	165	1	933	10.49
238	U	165	1	32	6.43

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	359710	0.64
45	Sc	1	999296	0.68
72	Ge	1	590607	0.42
115	In	1	1756110	0.38
165	Ho	1	3599124	0.59

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\AG070709B.B\135ICAL.D\135ICAL.D#
Date Acquired: Jul 8 2009 12:37 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 08 2009 12:35 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	42456	0.79
51	V	72	1	677901	0.51
52	Cr	72	1	771532	0.97
55	Mn	72	1	701977	0.22
59	Co	72	1	1096247	1.62
60	Ni	72	1	262850	0.23
63	Cu	72	1	658157	0.06
66	Zn	72	1	119936	0.74
75	As	72	1	80646	0.43
78	Se	72	1	11832	3.06
95	Mo	72	1	303504	0.38
107	Ag	115	1	975217	1.48
111	Cd	115	1	166334	0.80
118	Sn	115	1	422146	0.57
121	Sb	115	1	468819	1.26
137	Ba	115	1	186995	0.82
205	Tl	165	1	1941640	2.52
208	Pb	165	1	2617843	1.23
232	Th	165	1	2474288	4.07
238	U	165	1	2935507	0.82

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	357075	1.18	359710	99.3	30 - 120	
45	Sc	1	1009477	1.71	999296	101.0	30 - 120	
72	Ge	1	575763	0.70	590607	97.5	30 - 120	
115	In	1	1747144	0.55	1756110	99.5	30 - 120	
165	Ho	1	3577226	0.83	3599124	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\AG070709B.B\134CALB.D\134CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070709B.B\136 CCV.D\136 CCV.D#
Date Acquired: Jul 8 2009 12:39 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 08 2009 12:37 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	50.03	ppb	0.56	50	100.1	90 - 110	
51 V	72	1	49.80	ppb	0.84	50	99.6	90 - 110	
52 Cr	72	1	48.81	ppb	0.12	50	97.6	90 - 110	
55 Mn	72	1	49.22	ppb	0.79	50	98.4	90 - 110	
59 Co	72	1	48.81	ppb	0.80	50	97.6	90 - 110	
60 Ni	72	1	49.71	ppb	0.88	50	99.4	90 - 110	
63 Cu	72	1	49.20	ppb	0.30	50	98.4	90 - 110	
66 Zn	72	1	50.04	ppb	1.12	50	100.1	90 - 110	
75 As	72	1	49.55	ppb	0.66	50	99.1	90 - 110	
78 Se	72	1	48.70	ppb	7.53	50	97.4	90 - 110	
95 Mo	72	1	49.10	ppb	0.65	50	98.2	90 - 110	
107 Ag	115	1	49.02	ppb	1.24	50	98.0	90 - 110	
111 Cd	115	1	48.83	ppb	0.79	50	97.7	90 - 110	
118 Sn	115	1	49.21	ppb	0.47	50	98.4	90 - 110	
121 Sb	115	1	48.89	ppb	1.07	50	97.8	90 - 110	
137 Ba	115	1	49.18	ppb	0.88	50	98.4	90 - 110	
205 Tl	165	1	49.43	ppb	0.66	50	98.9	90 - 110	
208 Pb	165	1	49.64	ppb	0.67	50	99.3	90 - 110	
232 Th	165	1	51.45	ppb	2.27	50	102.9	90 - 110	
238 U	165	1	49.34	ppb	1.31	50	98.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	348155	0.34	359710	96.8	30 - 120	
45 Sc	1	976535	2.40	999296	97.7	30 - 120	
72 Ge	1	566977	0.68	590607	96.0	30 - 120	
115 In	1	1731189	0.46	1756110	98.6	30 - 120	
165 Ho	1	3536295	0.16	3599124	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\137 CCB.D\137 CCB.D#
Date Acquired: Jul 8 2009 12:42 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 08 2009 12:37 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	0.024	ppb	99.58	1.00	
51 V	72	1	0.018	ppb	61.07	1.00	
52 Cr	72	1	0.001	ppb	352.73	1.00	
55 Mn	72	1	0.009	ppb	40.91	1.00	
59 Co	72	1	0.004	ppb	59.53	1.00	
60 Ni	72	1	0.011	ppb	122.18	1.00	
63 Cu	72	1	-0.021	ppb	21.33	1.00	
66 Zn	72	1	0.001	ppb	4545.90	1.00	
75 As	72	1	0.007	ppb	98.54	1.00	
78 Se	72	1	-0.199	ppb	427.62	1.00	
95 Mo	72	1	-0.036	ppb	15.25	1.00	
107 Ag	115	1	0.005	ppb	44.75	1.00	
111 Cd	115	1	0.002	ppb	424.36	1.00	
118 Sn	115	1	0.109	ppb	9.40	1.00	
121 Sb	115	1	0.074	ppb	8.54	1.00	
137 Ba	115	1	0.002	ppb	210.19	1.00	
205 Tl	165	1	0.040	ppb	5.51	1.00	
208 Pb	165	1	0.004	ppb	85.66	1.00	
232 Th	165	1	1.629	ppb	17.97	1.00	Fail
238 U	165	1	0.015	ppb	10.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	350828	0.66	359710	97.5	30 - 120	
45 Sc	1	973486	2.25	999296	97.4	30 - 120	
72 Ge	1	570555	0.38	590607	96.6	30 - 120	
115 In	1	1720156	0.91	1756110	98.0	30 - 120	
165 Ho	1	3509645	0.62	3599124	97.5	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\138WASH.D\138WASH.D#
Date Acquired: Jul 8 2009 12:45 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 08 2009 12:37 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	0.979 ppb	34.30	1.30	
51 V	72	1	5.068 ppb	3.72	6.50	
52 Cr	72	1	2.018 ppb	2.07	2.60	
55 Mn	72	1	1.014 ppb	4.96	1.30	
59 Co	72	1	0.964 ppb	1.37	1.30	
60 Ni	72	1	2.014 ppb	1.39	2.60	
63 Cu	72	1	1.962 ppb	1.29	2.60	
66 Zn	72	1	10.290 ppb	2.60	13.00	
75 As	72	1	4.998 ppb	2.58	6.50	
78 Se	72	1	5.245 ppb	9.66	6.50	
95 Mo	72	1	1.966 ppb	4.66	2.60	
107 Ag	115	1	5.162 ppb	1.02	6.50	
111 Cd	115	1	1.074 ppb	10.21	1.30	
118 Sn	115	1	10.220 ppb	1.85	13.00	
121 Sb	115	1	1.873 ppb	2.04	2.60	
137 Ba	115	1	1.017 ppb	3.52	1.30	
205 Tl	165	1	1.072 ppb	1.31	1.30	
208 Pb	165	1	1.039 ppb	0.84	1.30	
232 Th	165	1	2.457 ppb	2.48	2.60	
238 U	165	1	1.060 ppb	0.72	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	352388	0.22	359710	98.0	30 - 120	
45 Sc	1	974978	1.17	999296	97.6	30 - 120	
72 Ge	1	572889	0.46	590607	97.0	30 - 120	
115 In	1	1728325	1.17	1756110	98.4	30 - 120	
165 Ho	1	3531685	0.46	3599124	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\AG070709B.B\134CALB.D\134CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 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: 7/8/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\191CALB.D\191CALB.D#
Date Acquired:	Jul 8 2009 03:11 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 08 2009 03:09 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	47	12.40
51	V	72	1	787	32.57
52	Cr	72	1	2124	8.83
55	Mn	72	1	710	12.00
59	Co	72	1	793	13.54
60	Ni	72	1	193	12.58
63	Cu	72	1	983	2.95
66	Zn	72	1	233	6.23
75	As	72	1	80	6.77
78	Se	72	1	123	41.18
95	Mo	72	1	393	12.48
107	Ag	115	1	520	5.05
111	Cd	115	1	120	31.74
118	Sn	115	1	470	10.83
121	Sb	115	1	266	8.80
137	Ba	115	1	160	12.69
205	Tl	165	1	1422	3.79
208	Pb	165	1	2148	3.03
232	Th	165	1	2184	2.94
238	U	165	1	2117	5.20

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	329497	0.51
45	Sc	1	923934	1.74
72	Ge	1	537691	0.69
115	In	1	1636252	0.19
165	Ho	1	3317690	0.70

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\AG070709B.B\192ICAL.D\192ICAL.D#
Date Acquired: Jul 8 2009 03:14 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 08 2009 03:12 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	37983	0.96
51	V	72	1	590758	0.60
52	Cr	72	1	673559	0.37
55	Mn	72	1	620805	0.16
59	Co	72	1	967031	2.23
60	Ni	72	1	227670	1.37
63	Cu	72	1	571687	0.80
66	Zn	72	1	106169	0.59
75	As	72	1	72411	0.33
78	Se	72	1	10728	2.94
95	Mo	72	1	270653	0.50
107	Ag	115	1	869708	0.62
111	Cd	115	1	148986	0.81
118	Sn	115	1	379638	0.60
121	Sb	115	1	426526	0.88
137	Ba	115	1	171103	0.67
205	Tl	165	1	1790669	1.13
208	Pb	165	1	2428403	1.42
232	Th	165	1	2283140	3.94
238	U	165	1	2703171	1.85

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	320799	1.12	329497	97.4	30 - 120	
45	Sc	1	893683	1.39	923934	96.7	30 - 120	
72	Ge	1	515008	0.49	537691	95.8	30 - 120	
115	In	1	1607003	0.57	1636252	98.2	30 - 120	
165	Ho	1	3289965	1.41	3317690	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\AG070709B.B\191CALB.D\191CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\193 CCV.D\193 CCV.D#
Date Acquired:	Jul 8 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 08 2009 03:15 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	51.37	ppb	1.18	50	102.7	90 - 110	
51 V	72	1	49.40	ppb	0.29	50	98.8	90 - 110	
52 Cr	72	1	49.31	ppb	0.30	50	98.6	90 - 110	
55 Mn	72	1	49.21	ppb	0.48	50	98.4	90 - 110	
59 Co	72	1	48.56	ppb	0.78	50	97.1	90 - 110	
60 Ni	72	1	49.78	ppb	0.43	50	99.6	90 - 110	
63 Cu	72	1	49.47	ppb	0.77	50	98.9	90 - 110	
66 Zn	72	1	50.01	ppb	1.68	50	100.0	90 - 110	
75 As	72	1	49.44	ppb	0.35	50	98.9	90 - 110	
78 Se	72	1	48.63	ppb	2.94	50	97.3	90 - 110	
95 Mo	72	1	48.81	ppb	1.21	50	97.6	90 - 110	
107 Ag	115	1	48.99	ppb	0.59	50	98.0	90 - 110	
111 Cd	115	1	49.48	ppb	1.23	50	99.0	90 - 110	
118 Sn	115	1	49.38	ppb	0.49	50	98.8	90 - 110	
121 Sb	115	1	49.15	ppb	0.49	50	98.3	90 - 110	
137 Ba	115	1	49.39	ppb	0.43	50	98.8	90 - 110	
205 Tl	165	1	49.73	ppb	0.25	50	99.5	90 - 110	
208 Pb	165	1	49.61	ppb	0.24	50	99.2	90 - 110	
232 Th	165	1	52.01	ppb	3.77	50	104.0	90 - 110	
238 U	165	1	50.63	ppb	2.22	50	101.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	312657	0.23	329497	94.9	30 - 120	
45 Sc	1	867791	0.16	923934	93.9	30 - 120	
72 Ge	1	507091	0.42	537691	94.3	30 - 120	
115 In	1	1598177	0.57	1636252	97.7	30 - 120	
165 Ho	1	3265322	0.69	3317690	98.4	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\194 CCB.D\194 CCB.D#
Date Acquired: Jul 8 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 08 2009 03:15 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	-0.084	ppb	18.39	1.00	
51 V	72	1	-0.120	ppb	38.41	1.00	
52 Cr	72	1	-0.087	ppb	16.03	1.00	
55 Mn	72	1	-0.075	ppb	5.53	1.00	
59 Co	72	1	-0.070	ppb	4.75	1.00	
60 Ni	72	1	-0.049	ppb	22.79	1.00	
63 Cu	72	1	-0.104	ppb	7.77	1.00	
66 Zn	72	1	-0.042	ppb	50.42	1.00	
75 As	72	1	-0.052	ppb	34.22	1.00	
78 Se	72	1	0.406	ppb	70.84	1.00	
95 Mo	72	1	-0.035	ppb	27.06	1.00	
107 Ag	115	1	-0.049	ppb	7.23	1.00	
111 Cd	115	1	-0.064	ppb	15.98	1.00	
118 Sn	115	1	0.104	ppb	9.70	1.00	
121 Sb	115	1	0.027	ppb	34.63	1.00	
137 Ba	115	1	-0.070	ppb	20.68	1.00	
205 Tl	165	1	-0.039	ppb	2.30	1.00	
208 Pb	165	1	-0.071	ppb	0.34	1.00	
232 Th	165	1	1.621	ppb	15.08	1.00	Fail
238 U	165	1	-0.059	ppb	2.23	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	314922	1.32	329497	95.6	30 - 120	
45 Sc	1	871707	1.17	923934	94.3	30 - 120	
72 Ge	1	510835	0.37	537691	95.0	30 - 120	
115 In	1	1597977	0.22	1636252	97.7	30 - 120	
165 Ho	1	3242965	0.51	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\195WASH.D\195WASH.D#
Date Acquired: Jul 8 2009 03:22 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 08 2009 03:15 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	0.890 ppb	14.75	1.30	
51 V	72	1	4.897 ppb	2.77	6.50	
52 Cr	72	1	1.911 ppb	3.39	2.60	
55 Mn	72	1	0.949 ppb	2.25	1.30	
59 Co	72	1	0.903 ppb	4.78	1.30	
60 Ni	72	1	2.026 ppb	4.41	2.60	
63 Cu	72	1	1.955 ppb	4.91	2.60	
66 Zn	72	1	10.300 ppb	0.93	13.00	
75 As	72	1	4.965 ppb	1.73	6.50	
78 Se	72	1	4.916 ppb	5.07	6.50	
95 Mo	72	1	1.920 ppb	6.90	2.60	
107 Ag	115	1	5.018 ppb	2.30	6.50	
111 Cd	115	1	0.983 ppb	5.18	1.30	
118 Sn	115	1	10.270 ppb	2.27	13.00	
121 Sb	115	1	1.861 ppb	3.73	2.60	
137 Ba	115	1	0.993 ppb	1.75	1.30	
205 Tl	165	1	0.996 ppb	0.64	1.30	
208 Pb	165	1	0.959 ppb	1.63	1.30	
232 Th	165	1	2.396 ppb	0.80	2.60	
238 U	165	1	0.989 ppb	0.61	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	315380	0.22	329497	95.7	30 - 120	
45 Sc	1	870144	1.46	923934	94.2	30 - 120	
72 Ge	1	515151	0.12	537691	95.8	30 - 120	
115 In	1	1604946	1.44	1636252	98.1	30 - 120	
165 Ho	1	3272545	0.17	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\196 BLK.D\196 BLK.D#
Date Acquired:	Jul 8 2009 03:25 am
Operator:	TEL
Sample Name:	LF3X8B
Misc Info:	BLANK 9187169 6020
Vial Number:	3503
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 08 2009 03:15 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	-0.111 ppb	14.37	2.00	
51 V	72	1	-0.143 ppb	22.14	2.00	
52 Cr	72	1	0.088 ppb	25.46	2.00	
55 Mn	72	1	0.022 ppb	72.49	2.00	
59 Co	72	1	-0.073 ppb	1.68	2.00	
60 Ni	72	1	-0.048 ppb	47.35	2.00	
63 Cu	72	1	-0.075 ppb	17.97	2.00	
66 Zn	72	1	0.343 ppb	6.48	2.00	
75 As	72	1	-0.065 ppb	10.25	2.00	
78 Se	72	1	0.073 ppb	198.06	2.00	
95 Mo	72	1	-0.093 ppb	14.21	2.00	
107 Ag	115	1	-0.056 ppb	4.86	2.00	
111 Cd	115	1	-0.069 ppb	7.37	2.00	
118 Sn	115	1	0.028 ppb	29.66	2.00	
121 Sb	115	1	-0.022 ppb	12.73	2.00	
137 Ba	115	1	0.049 ppb	34.11	2.00	
205 Tl	165	1	-0.048 ppb	14.71	2.00	
208 Pb	165	1	-0.072 ppb	4.45	2.00	
232 Th	165	1	0.357 ppb	15.29	2.00	
238 U	165	1	-0.073 ppb	0.85	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308912	0.48	329497	93.8	30 - 120	
45 Sc	1	855299	0.36	923934	92.6	30 - 120	
72 Ge	1	504085	0.32	537691	93.7	30 - 120	
115 In	1	1565996	0.39	1636252	95.7	30 - 120	
165 Ho	1	3239289	0.59	3317690	97.6	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\197 LCS.D\197 LCS.D#
Date Acquired:	Jul 8 2009 03:28 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF3X8C
Misc Info:	LCS
Vial Number:	3504
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	38.86	1.75	40	97.2	80 - 120	
51 V	72	1	39.63	0.49	40	99.1	80 - 120	
52 Cr	72	1	40.02	0.68	40	100.1	80 - 120	
55 Mn	72	1	40.62	0.35	40	101.6	80 - 120	
59 Co	72	1	39.25	1.08	40	98.1	80 - 120	
60 Ni	72	1	39.95	1.18	40	99.9	80 - 120	
63 Cu	72	1	40.14	1.29	40	100.4	80 - 120	
66 Zn	72	1	40.71	1.59	40	101.8	80 - 120	
75 As	72	1	38.49	1.93	40	96.2	80 - 120	
78 Se	72	1	40.01	5.25	40	100.0	80 - 120	
95 Mo	72	1	39.16	1.42	40	97.9	80 - 120	
107 Ag	115	1	39.55	0.32	40	98.9	80 - 120	
111 Cd	115	1	39.19	0.84	40	98.0	80 - 120	
118 Sn	115	1	0.02	139.60	40	0.1	80 - 120	
121 Sb	115	1	38.95	0.64	40	97.4	80 - 120	
137 Ba	115	1	40.06	0.36	40	100.2	80 - 120	
205 Tl	165	1	40.26	0.62	40	100.7	80 - 120	
208 Pb	165	1	40.13	0.65	40	100.3	80 - 120	
232 Th	165	1	42.28	2.59	40	105.7	80 - 120	
238 U	165	1	40.83	2.22	40	102.1	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	309475	0.68	329497	93.9	30 - 120	
45 Sc	1	847752	1.13	923934	91.8	30 - 120	
72 Ge	1	491519	0.71	537691	91.4	30 - 120	
115 In	1	1562031	0.44	1636252	95.5	30 - 120	
165 Ho	1	3240093	0.07	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\198SMPL.D\198SMPL.D#
Date Acquired:	Jul 8 2009 03:31 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFX9W 10X
Misc Info:	D9G010276
Vial Number:	3505
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.01	-0.10	ppb	16.17	3600	
51 V	72	1	61.18	6.12	ppb	1.67	3600	
52 Cr	72	1	63.45	6.35	ppb	1.27	3600	
55 Mn	72	1	50.25	5.03	ppb	0.75	3600	
59 Co	72	1	-0.09	-0.01	ppb	147.90	3600	
60 Ni	72	1	5.70	0.57	ppb	1.70	3600	
63 Cu	72	1	0.71	0.07	ppb	15.94	3600	
66 Zn	72	1	3.77	0.38	ppb	12.56	3600	
75 As	72	1	122.60	12.26	ppb	2.27	3600	
78 Se	72	1	2.11	0.21	ppb	143.15	3600	
95 Mo	72	1	38.17	3.82	ppb	1.52	3600	
107 Ag	115	1	-0.49	-0.05	ppb	11.51	3600	
111 Cd	115	1	-0.23	-0.02	ppb	115.49	3600	
118 Sn	115	1	-0.15	-0.02	ppb	88.84	3600	
121 Sb	115	1	0.18	0.02	ppb	24.20	3600	
137 Ba	115	1	36.07	3.61	ppb	1.17	3600	
205 Tl	165	1	-0.14	-0.01	ppb	67.32	3600	
208 Pb	165	1	-0.53	-0.05	ppb	7.58	3600	
232 Th	165	1	10.00	1.00	ppb	19.72	1000	
238 U	165	1	31.50	3.15	ppb	1.87	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298817	0.21	329497	90.7	30 - 120	
45 Sc	1	813176	1.09	923934	88.0	30 - 120	
72 Ge	1	476045	0.77	537691	88.5	30 - 120	
115 In	1	1460770	1.60	1636252	89.3	30 - 120	
165 Ho	1	3099895	1.11	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\199AREF.D\199AREF.D#
Date Acquired:	Jul 8 2009 03:33 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1T1 10X
Misc Info:	D9G020221
Vial Number:	3506
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.10	-0.11	ppb	14.58	3600	
51 V	72	1	26.83	2.68	ppb	5.07	3600	
52 Cr	72	1	35.13	3.51	ppb	5.16	3600	
55 Mn	72	1	21.07	2.11	ppb	3.46	3600	
59 Co	72	1	-0.22	-0.02	ppb	17.03	3600	
60 Ni	72	1	2.83	0.28	ppb	3.65	3600	
63 Cu	72	1	-0.57	-0.06	ppb	4.46	3600	
66 Zn	72	1	4.00	0.40	ppb	14.70	3600	
75 As	72	1	146.20	14.62	ppb	0.84	3600	
78 Se	72	1	1.49	0.15	ppb	173.83	3600	
95 Mo	72	1	28.76	2.88	ppb	1.48	3600	
107 Ag	115	1	-0.52	-0.05	ppb	3.71	3600	
111 Cd	115	1	-0.73	-0.07	ppb	11.57	3600	
118 Sn	115	1	-0.15	-0.02	ppb	80.22	3600	
121 Sb	115	1	-0.20	-0.02	ppb	46.22	3600	
137 Ba	115	1	35.77	3.58	ppb	3.81	3600	
205 Tl	165	1	-0.26	-0.03	ppb	5.20	3600	
208 Pb	165	1	-0.34	-0.03	ppb	6.60	3600	
232 Th	165	1	2.33	0.23	ppb	11.27	1000	
238 U	165	1	51.74	5.17	ppb	0.84	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	302264	0.35	329497	91.7	30 - 120	
45 Sc	1	828840	0.29	923934	89.7	30 - 120	
72 Ge	1	473915	0.52	537691	88.1	30 - 120	
115 In	1	1472330	0.26	1636252	90.0	30 - 120	
165 Ho	1	3122477	0.43	3317690	94.1	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\200SDIL.D\200SDIL.D#
Date Acquired: Jul 8 2009 03:36 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1T1P50
Misc Info: SERIAL DILUTION
Vial Number: 3507
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 03:15 am
Sample Type: SDIL
Dilution Factor: 10.00

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070709B.B\199AREF.D\199AREF.D#

QC Summary:
Analytes: Pass
ISTD: Pass

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	-0.12	ppb	0.00	-0.02	542.1	90 - 110	
51 V	72	1	0.43	ppb	22.54	0.54	80.8	90 - 110	
52 Cr	72	1	0.77	ppb	2.96	0.70	110.0	90 - 110	
55 Mn	72	1	0.41	ppb	7.95	0.42	96.3	90 - 110	
59 Co	72	1	-0.06	ppb	12.54	0.00	1445.1	90 - 110	
60 Ni	72	1	0.14	ppb	10.79	0.06	239.0	90 - 110	
63 Cu	72	1	-0.09	ppb	8.69	-0.01	769.3	90 - 110	
66 Zn	72	1	0.06	ppb	12.53	0.08	69.5	90 - 110	
75 As	72	1	2.91	ppb	1.88	2.92	99.6	90 - 110	
78 Se	72	1	0.18	ppb	93.39	0.03	604.0	90 - 110	
95 Mo	72	1	0.51	ppb	14.47	0.58	88.1	90 - 110	
107 Ag	115	1	-0.06	ppb	2.15	-0.01	556.9	90 - 110	
111 Cd	115	1	-0.07	ppb	7.09	-0.01	494.4	90 - 110	
118 Sn	115	1	-0.04	ppb	26.17	0.00	1459.1	90 - 110	
121 Sb	115	1	-0.04	ppb	2.06	0.00	1060.0	90 - 110	
137 Ba	115	1	0.66	ppb	3.84	0.72	91.7	90 - 110	
205 Tl	165	1	-0.07	ppb	1.98	-0.01	1246.5	90 - 110	
208 Pb	165	1	-0.07	ppb	1.76	-0.01	1003.2	90 - 110	
232 Th	165	1	0.02	ppb	32.04	0.05	44.4	90 - 110	
238 U	165	1	1.01	ppb	1.78	1.03	97.1	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	306409	0.97	329497	93.0	30 - 120	
45 Sc	1	817720	1.55	923934	88.5	30 - 120	
72 Ge	1	487420	0.68	537691	90.7	30 - 120	
115 In	1	1501254	0.50	1636252	91.7	30 - 120	
165 Ho	1	3122338	0.78	3317690	94.1	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\AG070709B.B\191CALB.D\191CALB.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: 07/08/09 09:50:47

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LF1T1P50** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070709B # 200 | Method 6020_
Acquired: 07/08/2009 03:36:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/08/2009 03:11:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9		-5.9850	-1.1040			*	
7440-62-2	Vanadium	51	3138	21.690	26.830	19.2		*	
7440-47-3	Chromium	52	6839	38.655	35.130	10.0		*	
7439-96-5	Manganese	55	3024	20.280	21.070	3.75		*	
7440-48-4	Cobalt	59	137	-3.1835	-0.22030			*	
7440-02-0	Nickel	60	467	6.7700	2.8330	139		*	
7440-50-8	Copper	63	417	-4.3940	-0.57120			*	
7440-66-6	Zinc	66	267	2.7800	3.9980	30.5		*	
7440-38-2	Arsenic	75	2067	145.65	146.20	0.376	0.21	NC	☑
7782-49-2	Selenium	78	130	9.0000	1.4900	504	0.70	NC	☑
7439-98-7	Molybdenum	95	1653	25.350	28.760	11.9		*	
7440-22-4	Silver	107	10	-2.8760	-0.51640			*	
7440-43-9	Cadmium	111	10	-3.6020	-0.72860			*	
7440-31-5	Tin	118	273	-2.2280	-0.15270			*	
7440-36-0	Antimony	121	76	-2.1105	-0.19910			*	
7440-39-3	Barium	137	1195	32.805	35.770	8.29		*	
7440-28-0	Thallium	205	229	-3.2670	-0.26210			*	
7439-92-1	Lead	208	436	-3.4430	-0.34320			*	
7440-61-1	Uranium	238	27759	50.250	51.740	2.88		*	
7440-29-1	Thorium	232	2504	1.0345	2.3280	55.6		*	
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: 7/8/09

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070709B.B\201PDS.D\201PDS.D#
Date Acquired: Jul 8 2009 03:39 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1T1Z
Misc Info: POST DIGESTION SPIKE
Vial Number: 3508
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 03:15 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	195.00	-0.11	ppb	1.02	200	97.6	75 - 125	
51 V	72	1	206.10	2.68	ppb	0.66	200	101.7	75 - 125	
52 Cr	72	1	202.40	3.51	ppb	1.34	200	99.5	75 - 125	
55 Mn	72	1	201.50	2.11	ppb	1.74	200	99.7	75 - 125	
59 Co	72	1	186.40	-0.02	ppb	1.81	200	93.2	75 - 125	
60 Ni	72	1	180.40	0.28	ppb	0.96	200	90.1	75 - 125	
63 Cu	72	1	179.90	-0.06	ppb	0.07	200	90.0	75 - 125	
66 Zn	72	1	189.50	0.40	ppb	0.35	200	94.6	75 - 125	
75 As	72	1	208.70	14.62	ppb	0.45	200	97.2	75 - 125	
78 Se	72	1	192.40	0.15	ppb	2.03	200	96.1	75 - 125	
95 Mo	72	1	201.50	2.88	ppb	0.53	200	99.3	75 - 125	
107 Ag	115	1	44.66	-0.05	ppb	1.40	50	89.4	75 - 125	
111 Cd	115	1	190.00	-0.07	ppb	1.02	200	95.0	75 - 125	
118 Sn	115	1	174.80	-0.02	ppb	1.29	200	87.4	75 - 125	
121 Sb	115	1	193.50	-0.02	ppb	1.11	200	96.8	75 - 125	
137 Ba	115	1	195.30	3.58	ppb	1.09	200	95.9	75 - 125	
205 Tl	165	1	183.40	-0.03	ppb	0.91	200	91.7	75 - 125	
208 Pb	165	1	183.10	-0.03	ppb	0.56	200	91.6	75 - 125	
232 Th	165	1	0.04	0.23	ppb	25.36	200	0.0	75 - 125	
238 U	165	1	195.00	5.17	ppb	0.71	200	95.0	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	295099	0.92	329497	89.6	30 - 120	
45 Sc	1	798746	0.54	923934	86.5	30 - 120	
72 Ge	1	458704	0.57	537691	85.3	30 - 120	
115 In	1	1449786	0.98	1636252	88.6	30 - 120	
165 Ho	1	3084504	0.31	3317690	93.0	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\AG070709B.B\191CALB.D\191CALB.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: 07/08/09 09:50:52

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LF1T1Z** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070709B # 201 | Method 6020_
Acquired: 07/08/2009 03:39:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/08/2009 03:11:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	68089	195.00	-0.11040	97.5	200		☑
7440-62-2	Vanadium	51	1083840	206.10	2.6830	102	200		☐
7440-47-3	Chromium	52	1212510	202.40	3.5130	99.4	200		☑
7439-96-5	Manganese	55	1113340	201.50	2.1070	99.7	200		☑
7440-48-4	Cobalt	59	1605230	186.40	-0.02203	93.2	200		☐
7440-02-0	Nickel	60	365567	180.40	0.28330	90.1	200		☑
7440-50-8	Copper	63	915406	179.90	-0.05712	89.9	200		☐
7440-66-6	Zinc	66	179019	189.50	0.39980	94.6	200		☐
7440-38-2	Arsenic	75	134530	208.70	14.620	97.0	200		☑
7782-49-2	Selenium	78	18293	192.40	0.14900	96.1	200		☑
7439-98-7	Molybdenum	95	485366	201.50	2.8760	99.3	200		☐
7440-22-4	Silver	107	350636	44.660	-0.05164	89.3	50.0		☑
7440-43-9	Cadmium	111	255254	190.00	-0.07286	95.0	200		☑
7440-31-5	Tin	118	598539	174.80	-0.01527	87.4	200		☐
7440-36-0	Antimony	121	744129	193.50	-0.01991	96.8	200		☑
7440-39-3	Barium	137	301297	195.30	3.5770	95.9	200		☑
7440-28-0	Thallium	205	3077580	183.40	-0.02621	91.7	200		☑
7439-92-1	Lead	208	4167550	183.10	-0.03432	91.6	200		☑
7440-61-1	Uranium	238	4940350	195.00	5.1740	94.9	200		☐
7440-29-1	Thorium	232	2814	0.03664	0.23280				
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: 7/8/09

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070709B.B\202 CCV.D\202 CCV.D#
Date Acquired: Jul 8 2009 03:42 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 08 2009 03:15 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	47.32	ppb	4.45	50	94.6	90 - 110	
51 V	72	1	48.56	ppb	2.15	50	97.1	90 - 110	
52 Cr	72	1	48.47	ppb	1.10	50	96.9	90 - 110	
55 Mn	72	1	48.67	ppb	1.05	50	97.3	90 - 110	
59 Co	72	1	47.81	ppb	0.57	50	95.6	90 - 110	
60 Ni	72	1	48.91	ppb	2.39	50	97.8	90 - 110	
63 Cu	72	1	48.60	ppb	0.23	50	97.2	90 - 110	
66 Zn	72	1	49.34	ppb	0.33	50	98.7	90 - 110	
75 As	72	1	48.30	ppb	0.91	50	96.6	90 - 110	
78 Se	72	1	47.24	ppb	3.83	50	94.5	90 - 110	
95 Mo	72	1	48.94	ppb	0.93	50	97.9	90 - 110	
107 Ag	115	1	48.30	ppb	1.69	50	96.6	90 - 110	
111 Cd	115	1	48.40	ppb	0.91	50	96.8	90 - 110	
118 Sn	115	1	49.12	ppb	1.53	50	98.2	90 - 110	
121 Sb	115	1	48.80	ppb	0.84	50	97.6	90 - 110	
137 Ba	115	1	49.06	ppb	1.12	50	98.1	90 - 110	
205 Tl	165	1	49.87	ppb	0.87	50	99.7	90 - 110	
208 Pb	165	1	49.89	ppb	0.70	50	99.8	90 - 110	
232 Th	165	1	49.03	ppb	4.45	50	98.1	90 - 110	
238 U	165	1	50.92	ppb	0.04	50	101.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300696	0.39	329497	91.3	30 - 120	
45 Sc	1	800121	0.63	923934	86.6	30 - 120	
72 Ge	1	474172	0.25	537691	88.2	30 - 120	
115 In	1	1518112	0.41	1636252	92.8	30 - 120	
165 Ho	1	3159432	0.87	3317690	95.2	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\203 CCB.D\203 CCB.D#
Date Acquired: Jul 8 2009 03:44 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 08 2009 03:15 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	-0.073	ppb	22.56	1.00	
51 V	72	1	-0.148	ppb	13.57	1.00	
52 Cr	72	1	-0.089	ppb	20.09	1.00	
55 Mn	72	1	-0.080	ppb	7.45	1.00	
59 Co	72	1	-0.066	ppb	7.61	1.00	
60 Ni	72	1	-0.058	ppb	13.80	1.00	
63 Cu	72	1	-0.087	ppb	11.82	1.00	
66 Zn	72	1	-0.044	ppb	19.48	1.00	
75 As	72	1	-0.050	ppb	50.18	1.00	
78 Se	72	1	0.148	ppb	196.07	1.00	
95 Mo	72	1	-0.064	ppb	34.61	1.00	
107 Ag	115	1	-0.046	ppb	7.97	1.00	
111 Cd	115	1	-0.062	ppb	4.81	1.00	
118 Sn	115	1	0.151	ppb	2.16	1.00	
121 Sb	115	1	0.041	ppb	24.96	1.00	
137 Ba	115	1	-0.069	ppb	2.93	1.00	
205 Tl	165	1	-0.047	ppb	4.47	1.00	
208 Pb	165	1	-0.069	ppb	2.47	1.00	
232 Th	165	1	1.189	ppb	15.23	1.00	Fail
238 U	165	1	-0.059	ppb	2.72	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300372	0.94	329497	91.2	30 - 120	
45 Sc	1	824755	0.34	923934	89.3	30 - 120	
72 Ge	1	487346	0.22	537691	90.6	30 - 120	
115 In	1	1530334	0.08	1636252	93.5	30 - 120	
165 Ho	1	3250949	0.58	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\204WASH.D\204WASH.D#
Date Acquired:	Jul 8 2009 03:47 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 08 2009 03:15 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	0.887 ppb	13.84	1.30	
51 V	72	1	4.966 ppb	1.32	6.50	
52 Cr	72	1	1.952 ppb	4.40	2.60	
55 Mn	72	1	0.945 ppb	4.12	1.30	
59 Co	72	1	0.923 ppb	1.79	1.30	
60 Ni	72	1	1.869 ppb	6.37	2.60	
63 Cu	72	1	1.957 ppb	3.56	2.60	
66 Zn	72	1	10.410 ppb	1.14	13.00	
75 As	72	1	4.964 ppb	3.35	6.50	
78 Se	72	1	4.239 ppb	29.58	6.50	
95 Mo	72	1	1.941 ppb	1.48	2.60	
107 Ag	115	1	5.096 ppb	0.81	6.50	
111 Cd	115	1	0.983 ppb	4.20	1.30	
118 Sn	115	1	10.320 ppb	1.14	13.00	
121 Sb	115	1	1.875 ppb	1.91	2.60	
137 Ba	115	1	0.954 ppb	4.91	1.30	
205 Tl	165	1	1.003 ppb	1.63	1.30	
208 Pb	165	1	0.988 ppb	1.52	1.30	
232 Th	165	1	2.372 ppb	1.00	2.60	
238 U	165	1	1.026 ppb	1.50	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	296961	0.40	329497	90.1	30 - 120	
45 Sc	1	804867	0.71	923934	87.1	30 - 120	
72 Ge	1	480975	0.57	537691	89.5	30 - 120	
115 In	1	1508499	0.40	1636252	92.2	30 - 120	
165 Ho	1	3156976	0.99	3317690	95.2	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\AG070709B.B\191CALB.D\191CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Spiked Sample (MS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\205_MS.D\205_MS.D#
Date Acquired:	Jul 8 2009 03:50 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1T1S 10X
Misc Info:	MATRIX SPIKE
Vial Number:	3509
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	3.75	-0.11	ppb	4.17	40	9.4	50 - 150	
51 V	72	1	6.95	2.68	ppb	4.03	40	16.3	50 - 150	
52 Cr	72	1	7.67	3.51	ppb	1.78	40	17.6	50 - 150	
55 Mn	72	1	6.18	2.11	ppb	1.38	40	14.7	50 - 150	
59 Co	72	1	3.84	-0.02	ppb	1.21	40	9.6	50 - 150	
60 Ni	72	1	4.04	0.28	ppb	3.33	40	10.0	50 - 150	
63 Cu	72	1	3.74	-0.06	ppb	0.63	40	9.4	50 - 150	
66 Zn	72	1	4.77	0.40	ppb	2.06	40	11.8	50 - 150	
75 As	72	1	19.07	14.62	ppb	1.00	40	34.9	50 - 150	
78 Se	72	1	4.80	0.15	ppb	15.90	40	12.0	50 - 150	
95 Mo	72	1	6.83	2.88	ppb	2.62	40	15.9	50 - 150	
107 Ag	115	1	3.76	-0.05	ppb	4.01	40	9.4	50 - 150	
111 Cd	115	1	3.95	-0.07	ppb	0.84	40	9.9	50 - 150	
118 Sn	115	1	0.04	-0.02	ppb	46.43	40	0.1	50 - 150	
121 Sb	115	1	4.16	-0.02	ppb	1.15	40	10.4	50 - 150	
137 Ba	115	1	7.82	3.58	ppb	1.25	40	17.9	50 - 150	
205 Tl	165	1	4.00	-0.03	ppb	1.75	40	10.0	50 - 150	
208 Pb	165	1	3.90	-0.03	ppb	0.41	40	9.7	50 - 150	
232 Th	165	1	4.37	0.23	ppb	1.58	40	10.9	50 - 150	
238 U	165	1	9.47	5.17	ppb	0.53	40	21.0	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	291491	1.20	329497	88.5	30 - 120	
45 Sc	1	807321	0.80	923934	87.4	30 - 120	
72 Ge	1	464643	0.54	537691	86.4	30 - 120	
115 In	1	1450544	1.06	1636252	88.7	30 - 120	
165 Ho	1	3126884	0.81	3317690	94.2	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\206 MSD.D\206 MSD.D#
Date Acquired: Jul 8 2009 03:53 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1T1D 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3510
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 03:15 am
Sample Type: MSD
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070709B.B\205 MS.D\205 MS.D#

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	3.96	ppb	5.95	3.75	5.37	20	
51 V	72	1	6.72	ppb	1.77	6.95	3.38	20	
52 Cr	72	1	7.43	ppb	0.96	7.67	3.13	20	
55 Mn	72	1	6.04	ppb	1.66	6.18	2.23	20	
59 Co	72	1	3.82	ppb	1.52	3.84	0.50	20	
60 Ni	72	1	4.01	ppb	3.51	4.04	0.87	20	
63 Cu	72	1	3.60	ppb	1.79	3.74	3.68	20	
66 Zn	72	1	4.45	ppb	2.73	4.76	6.93	20	
75 As	72	1	18.88	ppb	0.50	19.07	1.00	20	
78 Se	72	1	5.03	ppb	3.39	4.80	4.64	20	
95 Mo	72	1	6.94	ppb	1.78	6.83	1.58	20	
107 Ag	115	1	3.78	ppb	2.01	3.76	0.61	20	
111 Cd	115	1	3.99	ppb	0.62	3.95	0.91	20	
118 Sn	115	1	-0.01	ppb	50.03	0.04	390.80	20	
121 Sb	115	1	4.12	ppb	2.27	4.16	0.97	20	
137 Ba	115	1	7.61	ppb	0.56	7.82	2.66	20	
205 Tl	165	1	3.93	ppb	0.97	4.00	1.94	20	
208 Pb	165	1	3.92	ppb	1.72	3.90	0.67	20	
232 Th	165	1	4.29	ppb	1.48	4.37	1.85	20	
238 U	165	1	9.40	ppb	1.00	9.47	0.70	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	295331	0.98	329497	89.6	30 - 120	
45 Sc	1	812994	0.19	923934	88.0	30 - 120	
72 Ge	1	471214	0.24	537691	87.6	30 - 120	
115 In	1	1474525	0.10	1636252	90.1	30 - 120	
165 Ho	1	3150130	0.66	3317690	94.9	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\207SMPL.D\207SMPL.D#
Date Acquired:	Jul 8 2009 03:56 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1T6 10X
Misc Info:	D9G020221
Vial Number:	3511
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.10	-0.11	ppb	14.76	3600	
51 V	72	1	-10.24	-1.02	ppb	48.40	3600	
52 Cr	72	1	1,146.00	114.60	ppb	1.16	3600	
55 Mn	72	1	13.07	1.31	ppb	2.67	3600	
59 Co	72	1	-0.30	-0.03	ppb	34.55	3600	
60 Ni	72	1	2.50	0.25	ppb	18.96	3600	
63 Cu	72	1	-0.67	-0.07	ppb	36.84	3600	
66 Zn	72	1	25.23	2.52	ppb	2.67	3600	
75 As	72	1	103.70	10.37	ppb	2.32	3600	
78 Se	72	1	8.03	0.80	ppb	86.08	3600	
95 Mo	72	1	25.07	2.51	ppb	3.73	3600	
107 Ag	115	1	-0.52	-0.05	ppb	9.10	3600	
111 Cd	115	1	-0.80	-0.08	ppb	11.66	3600	
118 Sn	115	1	-0.09	-0.01	ppb	370.24	3600	
121 Sb	115	1	-0.32	-0.03	ppb	11.33	3600	
137 Ba	115	1	37.49	3.75	ppb	3.03	3600	
205 Tl	165	1	-0.06	-0.01	ppb	153.28	3600	
208 Pb	165	1	-0.69	-0.07	ppb	3.12	3600	
232 Th	165	1	1.49	0.15	ppb	14.85	1000	
238 U	165	1	36.87	3.69	ppb	2.59	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299657	0.37	329497	90.9	30 - 120	
45 Sc	1	842209	2.69	923934	91.2	30 - 120	
72 Ge	1	488819	0.90	537691	90.9	30 - 120	
115 In	1	1505724	1.38	1636252	92.0	30 - 120	
165 Ho	1	3258359	1.30	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\208SMPL.D\208SMPL.D#
Date Acquired:	Jul 8 2009 03:58 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1VJ 10X
Misc Info:	D9G020227
Vial Number:	3512
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.10	-0.11	ppb	15.22	3600	
51 V	72	1	-427.80	-42.78	ppb	7.41	3600	
52 Cr	72	1	11,230.00	1123.00	ppb	0.84	3600	
55 Mn	72	1	21.53	2.15	ppb	4.11	3600	
59 Co	72	1	-0.31	-0.03	ppb	7.40	3600	
60 Ni	72	1	3.02	0.30	ppb	6.37	3600	
63 Cu	72	1	-0.52	-0.05	ppb	22.39	3600	
66 Zn	72	1	1.37	0.14	ppb	23.30	3600	
75 As	72	1	103.60	10.36	ppb	0.84	3600	
78 Se	72	1	6.32	0.63	ppb	86.78	3600	
95 Mo	72	1	15.81	1.58	ppb	5.44	3600	
107 Ag	115	1	-0.52	-0.05	ppb	6.45	3600	
111 Cd	115	1	-0.47	-0.05	ppb	26.18	3600	
118 Sn	115	1	-0.15	-0.02	ppb	120.07	3600	
121 Sb	115	1	-0.26	-0.03	ppb	25.25	3600	
137 Ba	115	1	34.45	3.45	ppb	2.28	3600	
205 Tl	165	1	-0.50	-0.05	ppb	2.50	3600	
208 Pb	165	1	-0.68	-0.07	ppb	3.22	3600	
232 Th	165	1	-0.02	0.00	ppb	286.46	1000	
238 U	165	1	45.31	4.53	ppb	0.22	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291984	0.51	329497	88.6	30 - 120	
45 Sc	1	815966	1.80	923934	88.3	30 - 120	
72 Ge	1	472962	0.83	537691	88.0	30 - 120	
115 In	1	1433448	0.71	1636252	87.6	30 - 120	
165 Ho	1	3081614	0.18	3317690	92.9	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\209SMPL.D\209SMPL.D#
Date Acquired:	Jul 8 2009 04:01 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1V5 10X
Misc Info:	D9G020227
Vial Number:	4101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-0.62	-0.06	ppb	0.57	3600	
51 V	72	1	-216.50	-21.65	ppb	9.09	3600	
52 Cr	72	1	10,330.00	1033.00	ppb	0.77	3600	
55 Mn	72	1	691.40	69.14	ppb	1.09	3600	
59 Co	72	1	6.06	0.61	ppb	3.72	3600	
60 Ni	72	1	5.38	0.54	ppb	6.96	3600	
63 Cu	72	1	5.00	0.50	ppb	7.24	3600	
66 Zn	72	1	12.79	1.28	ppb	0.55	3600	
75 As	72	1	757.00	75.70	ppb	0.81	3600	
78 Se	72	1	7.69	0.77	ppb	139.98	3600	
95 Mo	72	1	46.91	4.69	ppb	5.34	3600	
107 Ag	115	1	0.04	0.00	ppb	353.81	3600	
111 Cd	115	1	-0.33	-0.03	ppb	93.08	3600	
118 Sn	115	1	-0.21	-0.02	ppb	58.27	3600	
121 Sb	115	1	0.07	0.01	ppb	57.53	3600	
137 Ba	115	1	42.06	4.21	ppb	2.69	3600	
205 Tl	165	1	-0.55	-0.06	ppb	4.17	3600	
208 Pb	165	1	4.01	0.40	ppb	2.47	3600	
232 Th	165	1	4.96	0.50	ppb	1.87	1000	
238 U	165	1	35.55	3.56	ppb	1.34	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291934	0.60	329497	88.6	30 - 120	
45 Sc	1	828690	2.38	923934	89.7	30 - 120	
72 Ge	1	480972	0.44	537691	89.5	30 - 120	
115 In	1	1454738	0.51	1636252	88.9	30 - 120	
165 Ho	1	3140633	0.74	3317690	94.7	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\210 CCV.D\210 CCV.D#
Date Acquired:	Jul 8 2009 04:04 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 08 2009 03:15 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	50.82	ppb	1.57	50	101.6	90 - 110	
51 V	72	1	49.34	ppb	0.26	50	98.7	90 - 110	
52 Cr	72	1	49.37	ppb	0.73	50	98.7	90 - 110	
55 Mn	72	1	50.56	ppb	1.15	50	101.1	90 - 110	
59 Co	72	1	48.48	ppb	0.89	50	97.0	90 - 110	
60 Ni	72	1	49.80	ppb	0.71	50	99.6	90 - 110	
63 Cu	72	1	49.25	ppb	0.53	50	98.5	90 - 110	
66 Zn	72	1	50.70	ppb	0.24	50	101.4	90 - 110	
75 As	72	1	49.26	ppb	0.85	50	98.5	90 - 110	
78 Se	72	1	51.19	ppb	1.61	50	102.4	90 - 110	
95 Mo	72	1	50.57	ppb	1.21	50	101.1	90 - 110	
107 Ag	115	1	49.35	ppb	1.30	50	98.7	90 - 110	
111 Cd	115	1	50.91	ppb	0.42	50	101.8	90 - 110	
118 Sn	115	1	49.92	ppb	1.35	50	99.8	90 - 110	
121 Sb	115	1	49.57	ppb	1.16	50	99.1	90 - 110	
137 Ba	115	1	50.10	ppb	1.48	50	100.2	90 - 110	
205 Tl	165	1	51.01	ppb	1.27	50	102.0	90 - 110	
208 Pb	165	1	51.01	ppb	1.29	50	102.0	90 - 110	
232 Th	165	1	51.10	ppb	2.12	50	102.2	90 - 110	
238 U	165	1	52.44	ppb	1.67	50	104.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	290919	0.87	329497	88.3	30 - 120	
45 Sc	1	797863	1.14	923934	86.4	30 - 120	
72 Ge	1	473414	0.73	537691	88.0	30 - 120	
115 In	1	1534632	0.69	1636252	93.8	30 - 120	
165 Ho	1	3241962	0.77	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\211 CCB.D\211 CCB.D#
Date Acquired: Jul 8 2009 04:07 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 08 2009 03:15 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	-0.120	ppb	0.00	1.00	
51 V	72	1	-0.121	ppb	15.11	1.00	
52 Cr	72	1	-0.037	ppb	24.93	1.00	
55 Mn	72	1	-0.073	ppb	10.41	1.00	
59 Co	72	1	-0.062	ppb	2.00	1.00	
60 Ni	72	1	-0.053	ppb	35.25	1.00	
63 Cu	72	1	-0.091	ppb	18.75	1.00	
66 Zn	72	1	-0.021	ppb	122.48	1.00	
75 As	72	1	-0.049	ppb	17.16	1.00	
78 Se	72	1	0.122	ppb	169.07	1.00	
95 Mo	72	1	-0.076	ppb	31.52	1.00	
107 Ag	115	1	-0.046	ppb	3.98	1.00	
111 Cd	115	1	-0.065	ppb	10.94	1.00	
118 Sn	115	1	0.058	ppb	18.79	1.00	
121 Sb	115	1	0.008	ppb	61.48	1.00	
137 Ba	115	1	-0.070	ppb	10.54	1.00	
205 Tl	165	1	-0.047	ppb	3.11	1.00	
208 Pb	165	1	-0.070	ppb	3.70	1.00	
232 Th	165	1	1.201	ppb	19.06	1.00	
238 U	165	1	-0.060	ppb	1.69	1.00	Fail

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	292571	0.74	329497	88.8	30 - 120	
45 Sc	1	820202	1.06	923934	88.8	30 - 120	
72 Ge	1	484175	0.35	537691	90.0	30 - 120	
115 In	1	1551306	0.26	1636252	94.8	30 - 120	
165 Ho	1	3263240	0.37	3317690	98.4	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\212WASH.D\212WASH.D#
Date Acquired: Jul 8 2009 04:09 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 08 2009 03:15 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	1.102 ppb	18.90	1.30	
51 V	72	1	4.865 ppb	2.31	6.50	
52 Cr	72	1	1.920 ppb	1.31	2.60	
55 Mn	72	1	0.925 ppb	5.60	1.30	
59 Co	72	1	0.937 ppb	4.37	1.30	
60 Ni	72	1	2.066 ppb	9.04	2.60	
63 Cu	72	1	1.864 ppb	2.35	2.60	
66 Zn	72	1	10.360 ppb	1.59	13.00	
75 As	72	1	4.955 ppb	2.38	6.50	
78 Se	72	1	5.032 ppb	13.31	6.50	
95 Mo	72	1	1.911 ppb	2.92	2.60	
107 Ag	115	1	4.974 ppb	1.05	6.50	
111 Cd	115	1	1.018 ppb	3.35	1.30	
118 Sn	115	1	10.310 ppb	0.54	13.00	
121 Sb	115	1	1.864 ppb	1.05	2.60	
137 Ba	115	1	0.974 ppb	2.37	1.30	
205 Tl	165	1	1.015 ppb	1.27	1.30	
208 Pb	165	1	0.991 ppb	0.79	1.30	
232 Th	165	1	2.366 ppb	1.17	2.60	
238 U	165	1	1.019 ppb	1.46	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	290814	0.85	329497	88.3	30 - 120	
45 Sc	1	819634	0.45	923934	88.7	30 - 120	
72 Ge	1	487158	0.50	537691	90.6	30 - 120	
115 In	1	1561344	0.94	1636252	95.4	30 - 120	
165 Ho	1	3289382	0.12	3317690	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\AG070709B.B\191CALB.D\191CALB.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: D9G020221

Client: Northgate Environmental

Batch(es) #: 9187175, 9187169

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: 7/8/09

Metals Raw Data RoadMap

LotID		*Metal*	*WorkOrder*	*Anal Date*	*TestDesc*	*Batch*	*File Id*	*Instr*
D9G020221	1 D	SE	LF1T11AH	20090708	6020TOTA	9187169	AG070709B	024
D9G020221	1 S	SE	LF1T11AG	20090708	6020TOTA	9187169	AG070709B	024
D9G020221	1 D	AS	LF1T11AF	20090708	6020TOTA	9187169	AG070709B	024
D9G020221	1 S	AS	LF1T11AE	20090708	6020TOTA	9187169	AG070709B	024
D9G020221	1	SE	LF1T11AC	20090708	6020TOTA	9187169	AG070709B	024
D9G020221	1	AS	LF1T11AA	20090708	6020TOTA	9187169	AG070709B	024
D9G020221	2	SE	LF1T51AC	20090708	6020DSVD	9187175	AG070709B	024
D9G020221	2	AS	LF1T51AA	20090708	6020DSVD	9187175	AG070709B	024
D9G020221	3	SE	LF1T61AC	20090708	6020TOTA	9187169	AG070709B	024
D9G020221	3	AS	LF1T61AA	20090708	6020TOTA	9187169	AG070709B	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: 9187175

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 07/07/09
Due Date: 07/14/09

Lot	Work Order			Initial Weight/Volume
D9G060000 Water	**LF30G**	B	Due Date: SDG:	50 mL
D9G060000 Water	**LF30G**	C	Due Date: SDG:	50 mL
D9G020221 Water	**LF1T5** Dissolved		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1WA** Dissolved		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1WA** Dissolved	S	Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1WA** Dissolved	D	Due Date: 07/14/09 SDG: 8304609	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

VV checked 7/7/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

DISSOLVED WATER DIGESTION FOR ICPMS (Prep code MD)

BATCH #	9187175	**ALLIQUOTTED BY:**	JRW
PREP DATE:	7/7/2009	**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: 482 Block & Cup # : 4,8

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3/HCl	6:00	92	11:00	94

Samples and QC revolumed to: 50 mL Analyst's Initials KS

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kris Hamm ***Date:*** 7/7/09

Batch Number: **9187169**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 07/07/09
Due Date: 07/13/09

Lot	Work Order			Initial Weight/Volume
D9G060000 Water	**LF3X8**	B	Due Date: SDG:	50 mL
D9G060000 Water	**LF3X8**	C	Due Date: SDG:	50 mL
D9G010276 Water	**LFX9W** Total		Due Date: 07/13/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T1** Total		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T1** Total	S	Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T1** Total	D	Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T6** Total		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1VJ** Total		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1V5** Total		Due Date: 07/14/09 SDG: 8304609	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 7/7/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH # 9187169 **ALLIQUOTTED BY:** JRW
PREP DATE: 7/7/2009 **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: 25894 Block & Cup # : 2, 9

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	6:00	91	10:20	92
HNO3	10:30	92	11:00	91
HNO3				

Samples and QC revolumed to: 50 mL Analyst's Initials JKH

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kri Hare ***Date:*** 7/7/09

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-07-2009

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

STD3847-09, ICP-MS ICSA — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 06-25-2009
Date Expires(1): 07-25-2009 (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

STD4008-09, ICP-MS (024) INT STD BRC-HIGH

Analyst: LILLT

Solvent: 5% HNO3 Lot No.: H12022
Volume (ml): 250.00
Date Prep./Opened: 07-02-2009
Date Expires(1): 11-10-2009 (1 Year)
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

STD4039-09, ICP-MS BLANK

Analyst: DIAZL

Solvent: Water
Volume (ml): 1,000.0
Date Prep./Opened: 07-07-2009
Date Expires(1): 08-07-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD4040-09, NITRIC ACID
Aliquot Amount (ml): 50.000

Component	Initial Conc (%)	Final Conc (%)
HNO3	100.00	5.0000

STD4041-09, ICP-MS 10 ppm Sn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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

STD4042-09, ICP-MS 100 ppb cal

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (1 Day)
Date Expires(2): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4043-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 100.00
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	50.000

STD4044-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4042-09, ICP-MS 100 ppb cal — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 07-08-2009

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

STD4045-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (2 Days)
pipettes: Met 20 and Met 8

Parent Std No.: STD4044-09, 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

STD4046-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4047-09, ICPMS LR STD 1000 ppb Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	1,000.0

STD4048-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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

STD4049-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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

STD4050-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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 07/07/2009

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
2	Cal Blank				1.0	07/07/09 18:29		☐
3	Cal Blank				1.0	07/07/09 18:32		☐
4	100 ppb				1.0	07/07/09 18:35		☐
5	ICV				1.0	07/07/09 18:38		☐
6	RLIV				1.0	07/07/09 18:40		☐
7	ICB				1.0	07/07/09 18:43		☐
8	RL STD				1.0	07/07/09 18:46		☐
9	AFCEE RL				1.0	07/07/09 18:49		☐
10	ALTSe				1.0	07/07/09 18:51		☐
11	ICSA				1.0	07/07/09 18:54		☐
12	ICSAB				1.0	07/07/09 18:57		☐
13	RINSE				1.0	07/07/09 18:59		☐
14	LR				1.0	07/07/09 19:02		☐
15	RINSE				1.0	07/07/09 19:05		☐
16	CCV				1.0	07/07/09 19:08		☐
17	CCB				1.0	07/07/09 19:10		☐
18	RLCV				1.0	07/07/09 19:13		☐
19	IDL 1				1.0	07/07/09 19:16		☐
20	IDL 2				1.0	07/07/09 19:19		☐
21	IDL 3				1.0	07/07/09 19:21		☐
22	IDL 4				1.0	07/07/09 19:24		☐
23	IDL 5				1.0	07/07/09 19:27		☐
24	IDL 6				1.0	07/07/09 19:30		☐
25	IDL 7				1.0	07/07/09 19:32		☐
26	CCV				1.0	07/07/09 19:35		☐
27	CCB				1.0	07/07/09 19:38		☐
28	RLCV				1.0	07/07/09 19:41		☐
29	~~LR STD 1~~				~~1.0~~	~~07/07/09 19:43~~		☐
30	RINSE				1.0	07/07/09 19:46		☐
31	LR STD 2				1.0	07/07/09 19:49		☐
32	RINSE				1.0	07/07/09 19:52		☐
33	LR STD 3				1.0	07/07/09 19:54		☐
34	RINSE				1.0	07/07/09 19:57		☐
35	LR STD 4				1.0	07/07/09 20:00		☐
36	RINSE				1.0	07/07/09 20:02		☐
37	LR STD Mn				1.0	07/07/09 20:05		☐
38	RINSE				1.0	07/07/09 20:08		☐
39	LF0EDB	D9G010000	9182405	46	1.0	07/07/09 20:10		☐
40	LF0EDC	D9G010000	9182405	46	1.0	07/07/09 20:13		☐
41	LFNQ3	D9F260154-1	9182405	46	1.0	07/07/09 20:16		☐
42	~~LFNTW~~	~~D9F260154-2~~	~~9182405~~	~~46~~	~~1.0~~	~~07/07/09 20:19~~	VT 7/8/09 Did not use.	☐
43	CCV				1.0	07/07/09 20:21		☐
44	CCB				1.0	07/07/09 20:24		☐
45	RLCV				1.0	07/07/09 20:27		☐
46	LR STD 1				1.0	07/07/09 20:30		☐
47	RINSE				1.0	07/07/09 20:32		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
48	LR STD 2				1.0	07/07/09 20:35		☐
49	RINSE				1.0	07/07/09 20:38		☐
50	LR STD 3				1.0	07/07/09 20:41		☐
51	RINSE				1.0	07/07/09 20:43		☐
52	LR STD 4				1.0	07/07/09 20:46		☐
53	RINSE				1.0	07/07/09 20:48		☐
54	LR STD Mn				1.0	07/07/09 20:51		☐
55	RINSE				1.0	07/07/09 20:54		☐
56	CCV				1.0	07/07/09 20:57		☐
57	CCB				1.0	07/07/09 20:59		☐
58	RLCV				1.0	07/07/09 21:02		☐
59	~~LF0EDB~~	~~D9G010000~~	~~9182405~~	~~46~~	~~1.0~~	~~07/07/09 21:05~~		☐
60	~~LF0EDC~~	~~D9G010000~~	~~9182405~~	~~46~~	~~1.0~~	~~07/07/09 21:08~~	KK 7/8/09 Did not use.	☐
61	LF0EDB	D9G010000	9182405	46	1.0	07/07/09 21:13		☐
62	LF0EDC	D9G010000	9182405	46	1.0	07/07/09 21:15		☐
63	LFNQ3	D9F260154-1	9182405	46	1.0	07/07/09 21:18		☐
64	LFNTW	D9F260154-2	9182405	46	1.0	07/07/09 21:21		☐
65	LFNT5	D9F260154-3	9182405	46	1.0	07/07/09 21:24		☐
66	LFNT7	D9F260154-4	9182405	46	1.0	07/07/09 21:26		☐
67	LFNVD	D9F260154-5	9182405	46	1.0	07/07/09 21:29		☐
68	LFNVM	D9F260154-6	9182405	46	1.0	07/07/09 21:32		☐
69	CCV				1.0	07/07/09 21:35		☐
70	CCB				1.0	07/07/09 21:37		☐
71	RLCV				1.0	07/07/09 21:40		☐
72	LFNVT	D9F260154-7	9182405	46	1.0	07/07/09 21:43		☐
73	LFNVW	D9F260154-8	9182405	46	1.0	07/07/09 21:46		☐
74	LFV0G	D9F300202-1	9182405	46	1.0	07/07/09 21:48		☐
75	LFV05	D9F300202-3	9182405	46	1.0	07/07/09 21:51		☐
76	LFV1G	D9F300202-4	9182405	46	1.0	07/07/09 21:54		☐
77	LFV1GP5	D9F300202	9182405		5.0	07/07/09 21:57		☐
78	LFV1GZ	D9F300202-4	9182405		1.0	07/07/09 21:59		☐
79	LFV1GS	D9F300202-4	9182405	46	1.0	07/07/09 22:02		☐
80	LFV1GD	D9F300202-4	9182405	46	1.0	07/07/09 22:05		☐
81	LFV13	D9F300202-5	9182405	46	1.0	07/07/09 22:07		☐
82	CCV				1.0	07/07/09 22:10		☐
83	CCB				1.0	07/07/09 22:13		☐
84	RLCV				1.0	07/07/09 22:16		☐
85	LF1RVB	D9G020000	9183315	MS	1.0	07/07/09 22:19		☐
86	LF1RVC	D9G020000	9183315	MS	1.0	07/07/09 22:21		☐
87	LFXPK 2X	D9G010186-16	9183315	MS	2.0	07/07/09 22:24		☐
88	LFXPKP10	D9G010186	9183315		10.0	07/07/09 22:27		☐
89	LFXPKZ	D9G010186-16	9183315		1.0	07/07/09 22:30		☐
90	LFXPKS 2X	D9G010186-16	9183315	MS	2.0	07/07/09 22:32		☐
91	CCV				1.0	07/07/09 22:35		☐
92	CCB				1.0	07/07/09 22:38		☐
93	RLCV				1.0	07/07/09 22:41		☐

Denver RUN SUMMARY

Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
94	LFXPKD 2X	D9G010186-16	9183315	MS	2.0	07/07/09 22:43		☐
95	LFXPL 2X	D9G010186-17	9183315	MS	2.0	07/07/09 22:46		☐
96	LFXPM 2X	D9G010186-18	9183315	MS	2.0	07/07/09 22:49		☐
97	LFXPN 2X	D9G010186-19	9183315	MS	2.0	07/07/09 22:52		☐
98	LFXPP 2X	D9G010186-20	9183315	MS	2.0	07/07/09 22:55		☐
99	LFXPQ 2X	D9G010186-21	9183315	MS	2.0	07/07/09 22:57		☐
100	CCV				1.0	07/07/09 23:00		☐
101	CCB				1.0	07/07/09 23:03		☐
102	RLCV				1.0	07/07/09 23:06		☐
103	LF3W3B	D9G060000	9187133	MS	1.0	07/07/09 23:08		☐
104	LF3W3C	D9G060000	9187133	MS	1.0	07/07/09 23:11		☐
105	LF1JL	D9G020188-1	9187133	MS	1.0	07/07/09 23:14		☐
106	LF1KR	D9G020188-2	9187133	MS	1.0	07/07/09 23:17	-Take all but Mn. 7/8/09	☐
107	LF1KT	D9G020188-3	9187133	MS	1.0	07/07/09 23:19		☐
108	LF1KW	D9G020188-4	9187133	MS	1.0	07/07/09 23:22		☐
109	LF1KX	D9G020188-5	9187133	MS	1.0	07/07/09 23:25		☐
110	LF1K1	D9G020188-6	9187133	MS	1.0	07/07/09 23:28		☐
111	LF1K2	D9G020188-7	9187133	MS	1.0	07/07/09 23:30		☐
112	CCV				1.0	07/07/09 23:33		☐
113	CCB				1.0	07/07/09 23:36		☐
114	RLCV				1.0	07/07/09 23:39		☐
115	~~LF1K3~~	~~D9G020188-8~~	~~9187133~~	~~MS~~	~~1.0~~	~~07/07/09 23:42~~		☐
116	LF1K6	D9G020188-9	9187133	MS	1.0	07/07/09 23:44		☐
117	LF1NP	D9G020199-1	9187133	MS	1.0	07/07/09 23:47		☐
118	LF1NPP5	D9G020199	9187133		5.0	07/07/09 23:50		☐
119	LF1NPZ	D9G020199-1	9187133		1.0	07/07/09 23:53		☐
120	LF1NPS	D9G020199-1	9187133	MS	1.0	07/07/09 23:55		☐
121	LF1NPD	D9G020199-1	9187133	MS	1.0	07/07/09 23:58		☐
122	LF165	D9G020272-1	9187133	MS	1.0	07/08/09 00:01		☐
123	LF18E	D9G020272-2	9187133	MS	1.0	07/08/09 00:04		☐
124	CCV				1.0	07/08/09 00:07		☐
125	CCB				1.0	07/08/09 00:09		☐
126	RLCV				1.0	07/08/09 00:12		☐
127	RINSE				1.0	07/08/09 00:15		☐
128	RINSE				1.0	07/08/09 00:18		☐
129	RINSE				1.0	07/08/09 00:20		☐
130	RINSE				1.0	07/08/09 00:23		☐
131	RINSE				1.0	07/08/09 00:26		☐
132	RINSE				1.0	07/08/09 00:28		☐
133	~~Cal Blank~~				~~1.0~~	~~07/08/09 00:31~~	7/8/09 Did not use.	☐
134	Cal Blank				1.0	07/08/09 00:34		☐
135	100 ppb				1.0	07/08/09 00:37		☐
136	CCV				1.0	07/08/09 00:39		☐
137	CCB				1.0	07/08/09 00:42		☐
138	RLCV				1.0	07/08/09 00:45		☐
139	LF3WAB	D9G060000	9187106	04	1.0	07/08/09 00:48		☐

Denver RUN SUMMARY

Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
140	LF3WAC	D9G060000	9187106	04	1.0	07/08/09 00:51		☐
141	LFXTT	D9G010202-1	9187106	04	1.0	07/08/09 00:53		☐
142	LF1JG	D9G020189-1	9187106	04	1.0	07/08/09 00:56		☐
143	LF1KV	D9G020189-3	9187106	04	1.0	07/08/09 00:59		☐
144	LF1K5	D9G020189-5	9187106	04	1.0	07/08/09 01:02		☐
145	LF1LC	D9G020189-7	9187106	04	1.0	07/08/09 01:04		☐
146	LF1LF	D9G020189-9	9187106	04	1.0	07/08/09 01:07		☐
147	CCV				1.0	07/08/09 01:10		☐
148	CCB				1.0	07/08/09 01:13		☐
149	RLCV				1.0	07/08/09 01:16		☐
150	LF1LK	D9G020189-11	9187106	04	1.0	07/08/09 01:18		☐
151	LF1LN	D9G020189-13	9187106	04	1.0	07/08/09 01:21		☐
152	LF1LNP5	D9G020189	9187106		5.0	07/08/09 01:24		☐
153	LF1LNZ	D9G020189-13	9187106		1.0	07/08/09 01:27		☐
154	LF1LNS	D9G020189-13	9187106	04	1.0	07/08/09 01:29		☐
155	LF1LND	D9G020189-13	9187106	04	1.0	07/08/09 01:32		☐
156	LF1LT	D9G020189-15	9187106	04	1.0	07/08/09 01:35		☐
157	LF1LW	D9G020189-17	9187106	04	1.0	07/08/09 01:38		☐
158	CCV				1.0	07/08/09 01:40		☐
159	CCB				1.0	07/08/09 01:43		☐
160	RLCV				1.0	07/08/09 01:46		☐
161	LF315BF	D9G060000	9187204	MD	1.0	07/08/09 01:49		☐
162	LF315CF	D9G060000	9187204	MD	1.0	07/08/09 01:51		☐
163	LF1XCF	D9G020230-9	9187204	MD	1.0	07/08/09 01:54		☐
164	LF1XFF	D9G020230-10	9187204	MD	1.0	07/08/09 01:57		☐
165	LF1XHF	D9G020230-11	9187204	MD	1.0	07/08/09 02:00		☐
166	LF1XHP5F	D9G020230	9187204		5.0	07/08/09 02:02		☐
167	LF1XHZF	D9G020230-11	9187204		1.0	07/08/09 02:05		☐
168	LF1XHSF	D9G020230-11	9187204	MD	1.0	07/08/09 02:08		☐
169	LF1XHDF	D9G020230-11	9187204	MD	1.0	07/08/09 02:11		☐
170	CCV				1.0	07/08/09 02:13		☐
171	CCB				1.0	07/08/09 02:16		☐
172	RLCV				1.0	07/08/09 02:19		☐
173	LF30GBF	D9G060000	9187175	MD	1.0	07/08/09 02:22		☐
174	LF30GCF	D9G060000	9187175	MD	1.0	07/08/09 02:25		☐
175	LF1T5F 10X	D9G020221-2	9187175	MD	10.0	07/08/09 02:27		☐
176	LF1WAF 10X	D9G020227-3	9187175	MD	10.0	07/08/09 02:30		☐
177	LF1WAP50F	D9G020227	9187175		50.0	07/08/09 02:33		☐
178	LF1WAZF	D9G020227-3	9187175		1.0	07/08/09 02:36		☐
179	LF1WASF 10	D9G020227-3	9187175	MD	10.0	07/08/09 02:38		☐
180	LF1WADF 10	D9G020227-3	9187175	MD	10.0	07/08/09 02:41		☐
181	CCV				1.0	07/08/09 02:44		☐
182	CCB				1.0	07/08/09 02:47		☐
183	RLCV				1.0	07/08/09 02:49		☐
184	~~RINSE~~				~~1.0~~	~~07/08/09 02:52~~		☐
185	RINSE				~~1.0~~	~~07/08/09 02:55~~	7/8/09	☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
186	~~RINSE~~				~~1.0~~	~~07/08/09 02:58~~		
187	RINSE				1.0	07/08/09 03:00		
188	RINSE				1.0	07/08/09 03:03		
189	RINSE				1.0	07/08/09 03:06		
190	~~Cal Blank~~				~~1.0~~	~~07/08/09 03:09~~	WF 7/8/09	
191	Cal Blank				1.0	07/08/09 03:11		
192	100 ppb				1.0	07/08/09 03:14		
193	CCV				1.0	07/08/09 03:17		
194	CCB				1.0	07/08/09 03:20		
195	RLCV				1.0	07/08/09 03:22		
196	LF3X8B	D9G060000	9187169	MS	1.0	07/08/09 03:25		
197	LF3X8C	D9G060000	9187169	MS	1.0	07/08/09 03:28		
198	LFX9W 10X	D9G010276-1	9187169	MS	10.0	07/08/09 03:31		
199	LF1T1 10X	D9G020221-1	9187169	MS	10.0	07/08/09 03:33		
200	LF1T1P50	D9G020221	9187169		50.0	07/08/09 03:36		
201	LF1T1Z	D9G020221-1	9187169		1.0	07/08/09 03:39		
202	CCV				1.0	07/08/09 03:42		
203	CCB				1.0	07/08/09 03:44		
204	RLCV				1.0	07/08/09 03:47		
205	LF1T1S 10X	D9G020221-1	9187169	MS	10.0	07/08/09 03:50		
206	LF1T1D 10X	D9G020221-1	9187169	MS	10.0	07/08/09 03:53		
207	LF1T6 10X	D9G020221-3	9187169	MS	10.0	07/08/09 03:56		
208	LF1VJ 10X	D9G020227-1	9187169	MS	10.0	07/08/09 03:58		
209	LF1V5 10X	D9G020227-2	9187169	MS	10.0	07/08/09 04:01		
210	CCV				1.0	07/08/09 04:04		
211	CCB				1.0	07/08/09 04:07		
212	RLCV				1.0	07/08/09 04:09		
213	~~RINSE~~				~~1.0~~	~~07/08/09 04:12~~		
214	RINSE				1.0	07/08/09 04:15		
215	RINSE				1.0	07/08/09 04:18		
216	RINSE				1.0	07/08/09 04:20		
217	RINSE				1.0	07/08/09 04:23		
218	RINSE				1.0	07/08/09 04:26		
219	~~Cal Blank~~				~~1.0~~	~~07/08/09 04:29~~	WF 7/8/09	
220	Cal Blank				1.0	07/08/09 04:31		
221	100 ppb				1.0	07/08/09 04:34		
222	CCV				1.0	07/08/09 04:37		
223	CCB				1.0	07/08/09 04:40		
224	RLCV				1.0	07/08/09 04:42		
225	LF31NB	D9G060000	9187199	46	1.0	07/08/09 04:45		
226	LF31NC	D9G060000	9187199	46	1.0	07/08/09 04:48		
227	LF0NV	D9G010332-7	9187199	46	1.0	07/08/09 04:51		
228	LF0NVP5	D9G010332	9187199		5.0	07/08/09 04:54		
229	LF0NVZ	D9G010332-7	9187199		1.0	07/08/09 04:56		
230	LF0NVS	D9G010332-7	9187199	46	1.0	07/08/09 04:59		
231	LF0NVD	D9G010332-7	9187199	46	1.0	07/08/09 05:02		

Denver RUN SUMMARY

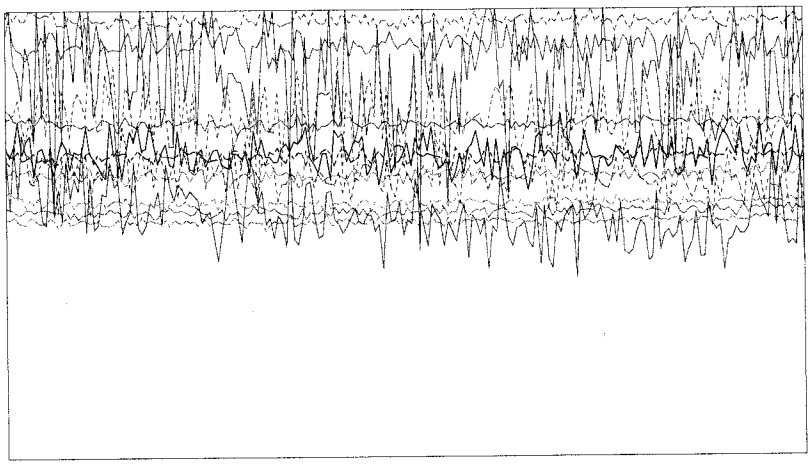
Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
232	CCV				1.0	07/08/09 05:05		☐
233	CCB				1.0	07/08/09 05:07		☐
234	RLCV				1.0	07/08/09 05:10		☐
235	LF31XB	D9G060000	9187202	46	1.0	07/08/09 05:13		☐
236	LF31XC	D9G060000	9187202	46	1.0	07/08/09 05:16		☐
237	LF2FT	D9G020311-1	9187202	46	1.0	07/08/09 05:19		☐
238	LF2FTP5	D9G020311	9187202		5.0	07/08/09 05:21		☐
239	LF2FTZ	D9G020311-1	9187202		1.0	07/08/09 05:24	Take all but Ni. 7/8/09	☐
240	LF2FTS	D9G020311-1	9187202	46	1.0	07/08/09 05:27		☐
241	LF2FTD	D9G020311-1	9187202	46	1.0	07/08/09 05:30		☐
242	CCV				1.0	07/08/09 05:33		☐
243	CCB				1.0	07/08/09 05:35		☐
244	RLCV				1.0	07/08/09 05:38		☐
245	LF2JL	D9G020311-2	9187202	46	1.0	07/08/09 05:41		☐
246	LF2JQ	D9G020311-3	9187202	46	1.0	07/08/09 05:44		☐
247	LF2J3	D9G020311-4	9187202	46	1.0	07/08/09 05:46		☐
248	LF2J5	D9G020311-5	9187202	46	1.0	07/08/09 05:49		☐
249	LF2KJ	D9G020311-6	9187202	46	1.0	07/08/09 05:52		☐
250	LF2KN	D9G020311-7	9187202	46	1.0	07/08/09 05:55		☐
251	LF2KT	D9G020311-8	9187202	46	1.0	07/08/09 05:58		☐
252	CCV				1.0	07/08/09 06:00		☐
253	CCB				1.0	07/08/09 06:03		☐
254	RLCV				1.0	07/08/09 06:06		☐
255	~~LF2FT~~	~~D9G020311-1~~	~~9187202~~	~~46~~	~~1.0~~	~~07/08/09 06:09~~		☐
256	LF2FTS	D9G020311-1	9187202	46	1.0	07/08/09 06:12		☐
257	LF2FTD	D9G020311-1	9187202	46	1.0	07/08/09 06:14		☐
258	CCV				1.0	07/08/09 06:17		☐
259	CCB				1.0	07/08/09 06:20		☐
260	~~RLCV~~				~~1.0~~	~~07/08/09 06:23~~	7/8/09 Did not use.	☐

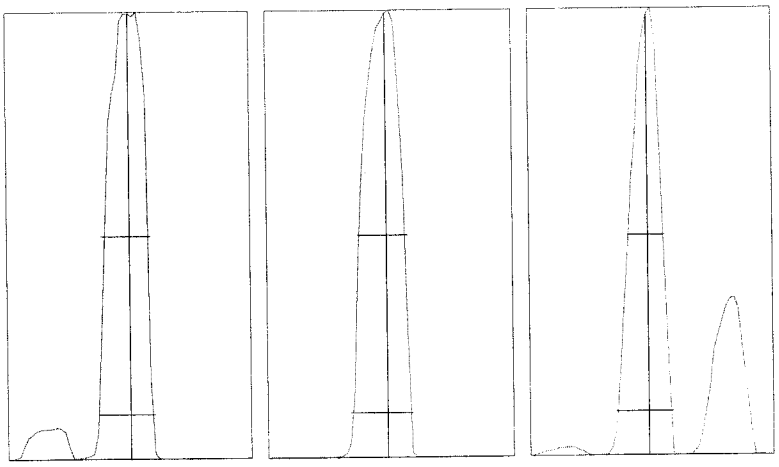
Tune Report

Tune File : NORM.U
Comment :



Integration Time: 0.1000 sec
Sampling Period: 1.5300 sec
n: 200
Oxide: 156/140 2.082%
Doubly Charged: 70/140 1.123%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1889.0	1841.3	2.59	0.60
7	50,000	27559.0	27403.0	1.40	0.60
59	50,000	33030.0	31479.0	1.53	0.50
63	200	87.0	107.9	11.91	0.30
70	1,000	686.0	677.4	4.99	0.70
75	50	31.0	42.9	16.22	0.60
78	500	280.0	313.4	6.24	0.30
89	100,000	51516.0	52575.3	1.19	0.70
115	100,000	57158.0	56755.0	1.31	0.70
118	200	162.0	152.3	8.33	0.70
137	10,000	6656.0	6727.9	1.69	1.00
205	50,000	48630.0	48760.9	1.18	2.00
238	100,000	74601.0	74494.1	1.21	2.10
156/140	5	2.193%	2.125%	4.06	
70/140	2	1.184%	1.169%	5.10	



m/z:	7	89	205
Height:	27,543	52,894	49,644
Axis:	7.05	89.00	205.00
W-50%:	0.60	0.60	0.45
W-10%:	0.700	0.7500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Jul 07, 2009 16:01:30
Printed : Jul 07, 2009 16:01:33

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	7.5 mm
Torch-H	:	-0.8 mm
Torch-V	:	-0.3 mm
Carrier Gas	:	0.83 L/min
Makeup Gas	:	0.2 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-175 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	-0.2 V
Cell Entrance	:	-30 V
QP Focus	:	5 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	180 V
OctP Bias	:	-18 V

===Q-Pole Parameters===

AMU Gain	:	133
AMU Offset	:	123
Axis Gain	:	1.0005
Axis Offset	:	-0.01
QP Bias	:	-10 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1720 V
Pulse HV	:	1390 V

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Generated : Jul 07, 2009 16:01:30
Printed : Jul 07, 2009 16:01:36

P/A Factor Tuning Report

Acquired:Jul 7 2009 04:18 pm

Mass[amu]	Element	P/A Factor
6	Li	0.060118
7	(Li)	Sensitivity too low
9	Be	0.068010
45	Sc	0.082686
51	V	0.084596
52	Cr	0.087721
53	(Cr)	Sensitivity too low
55	Mn	0.089784
59	Co	0.093112
60	Ni	0.095012
63	Cu	0.097299
66	Zn	0.097070
72	Ge	0.095471
75	As	0.094654
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
95	Mo	0.095555
98	(Mo)	0.095635
99	(Mo)	0.097324
106	(Cd)	0.101627
107	Ag	Sensitivity too low
108	(Cd)	0.102086
111	Cd	0.102705
114	Cd	0.102655
115	In	0.101852
118	Sn	0.101508
121	Sb	0.101313
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
205	Tl	0.111470
206	(Pb)	0.110400
207	(Pb)	0.110479
208	Pb	0.110219
232	Th	0.108817
238	U	0.108862

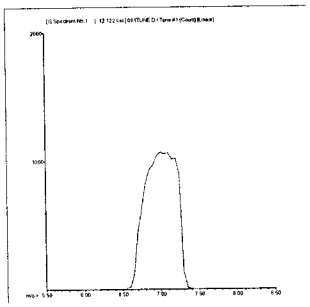
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1720 V
Pulse HV: 1390 V

200.8 QC Tune Report

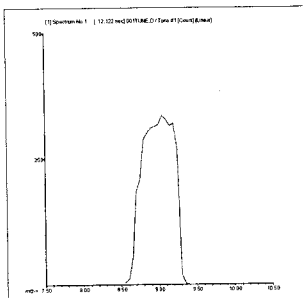
Data File: C:\ICPCHEM\1\DATA\AG070709B.B\001TUNE.D
Date Acquired: Jul 7 2009 06:26 pm
Acq. Method: tun_isis.M
Operator: TEL
Sample Name: 200.8 TUNE
Misc Info:
Vial Number: 4
Current Method: C:\ICPCHEM\1\METHODS\tun_isis.M

RSD (%)

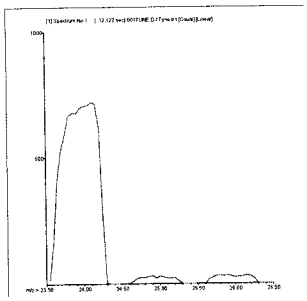
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
7 Li	22453	22562	22678	22654	22339	22032	**2.26**	5.00	
9 Be	2557	2614	2568	2613	2528	2458	**3.87**	5.00	
24 Mg	10195	10333	10161	10163	10347	9970	**1.30**	5.00	
59 Co	66238	66281	66746	66790	66601	64770	**3.53**	5.00	
115 In	958916	951553	962857	960080	958978	961111	**0.77**	5.00	
208 Pb	77867	78896	77667	77197	77617	77956	**1.00**	5.00	
238 U	160452	162185	164035	161529	160468	154041	**1.94**	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required 0.90
Flag:

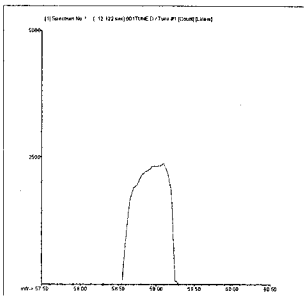


9 Be
Mass Calib.
Actual: 9.10
Required:8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required:0.90
Flag:



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\AG070709B.B\001TUNE.D



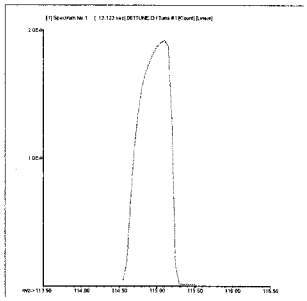
59 Co

Mass Calib.

Actual:	59.00		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



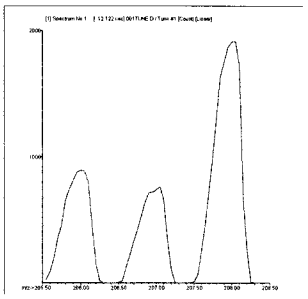
115 In

Mass Calib.

Actual:	115.05		
Required:	114.90	-	115.10
Flag:			

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



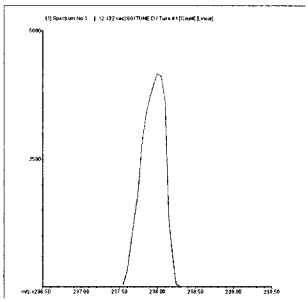
208 Pb

Mass Calib.

Actual:	208.00		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



238 U

Mass Calib.

Actual:	238.00		
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\AG070709B.B\002CALB.D\002CALB.D#
Date Acquired: Jul 7 2009 06:29 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 07 2009 06:30 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-61	307.06
52	Cr	72	1	1703	4.99
55	Mn	72	1	127	24.12
59	Co	72	1	27	94.37
60	Ni	72	1	10	100.00
63	Cu	72	1	207	16.99
66	Zn	72	1	281	13.82
75	As	72	1	29	24.50
78	Se	72	1	57	36.74
95	Mo	72	1	10	100.00
107	Ag	115	1	7	86.60
111	Cd	115	1	5	136.25
118	Sn	115	1	157	13.29
121	Sb	115	1	13	66.14
137	Ba	115	1	16	53.93
205	Tl	165	1	142	24.84
208	Pb	165	1	238	8.45
232	Th	165	1	167	24.98
238	U	165	1	100	12.02

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	400758	1.34
45	Sc	1	936208	0.95
72	Ge	1	542425	0.31
115	In	1	1772725	1.04
165	Ho	1	4029283	0.79

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\AG070709B.B\003CALB.D\003CALB.D#
Date Acquired: Jul 7 2009 06:32 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 07 2009 06:30 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	124	45.09
52	Cr	72	1	1643	7.31
55	Mn	72	1	140	21.43
59	Co	72	1	13	43.30
60	Ni	72	1	37	31.49
63	Cu	72	1	283	14.26
66	Zn	72	1	173	16.69
75	As	72	1	24	22.05
78	Se	72	1	57	26.96
95	Mo	72	1	13	43.30
107	Ag	115	1	10	100.00
111	Cd	115	1	8	89.21
118	Sn	115	1	187	27.49
121	Sb	115	1	13	66.14
137	Ba	115	1	17	52.92
205	Tl	165	1	96	12.25
208	Pb	165	1	224	8.95
232	Th	165	1	143	28.20
238	U	165	1	19	73.47

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	399164	0.09
45	Sc	1	940817	0.93
72	Ge	1	543541	0.91
115	In	1	1769666	0.69
165	Ho	1	4052095	0.70

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\AG070709B.B\004ICAL.D\004ICAL.D#
Date Acquired: Jul 7 2009 06:35 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 07 2009 06:33 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	45057	2.44
51	V	72	1	635517	1.35
52	Cr	72	1	740365	0.51
55	Mn	72	1	696026	0.68
59	Co	72	1	1072796	0.30
60	Ni	72	1	253152	0.72
63	Cu	72	1	623666	0.91
66	Zn	72	1	116172	1.28
75	As	72	1	70648	0.92
78	Se	72	1	10825	1.36
95	Mo	72	1	298414	1.62
107	Ag	115	1	1006118	0.15
111	Cd	115	1	173188	0.75
118	Sn	115	1	439651	0.54
121	Sb	115	1	464508	0.62
137	Ba	115	1	189823	0.35
205	Tl	165	1	2375887	1.05
208	Pb	165	1	3257719	0.92
232	Th	165	1	3073849	2.20
238	U	165	1	3744584	1.20

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	382426	1.59	399164	95.8	30 - 120	
45	Sc	1	907089	1.38	940817	96.4	30 - 120	
72	Ge	1	520511	0.60	543541	95.8	30 - 120	
115	In	1	1740539	0.58	1769666	98.4	30 - 120	
165	Ho	1	4011984	1.19	4052095	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\AG070709B.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\AG070709B.B\005 ICV.D\005 ICV.D#
Date Acquired: Jul 7 2009 06:38 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 07 2009 06:35 pm
Sample Type: ICV
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	38.73	ppb	2.14	40	96.8	90 - 110	
51 V	72	1	39.83	ppb	1.86	40	99.6	90 - 110	
52 Cr	72	1	40.55	ppb	1.29	40	101.4	90 - 110	
55 Mn	72	1	40.32	ppb	1.65	40	100.8	90 - 110	
59 Co	72	1	39.47	ppb	0.43	40	98.7	90 - 110	
60 Ni	72	1	41.03	ppb	0.27	40	102.6	90 - 110	
63 Cu	72	1	40.32	ppb	0.60	40	100.8	90 - 110	
66 Zn	72	1	40.30	ppb	0.46	40	100.8	90 - 110	
75 As	72	1	39.90	ppb	1.04	40	99.8	90 - 110	
78 Se	72	1	39.38	ppb	6.26	40	98.5	90 - 110	
95 Mo	72	1	40.14	ppb	0.13	40	100.4	90 - 110	
107 Ag	115	1	39.43	ppb	0.35	40	98.6	90 - 110	
111 Cd	115	1	40.26	ppb	0.38	40	100.7	90 - 110	
118 Sn	115	1	39.20	ppb	0.85	40	98.0	90 - 110	
121 Sb	115	1	38.07	ppb	0.76	40	95.2	90 - 110	
137 Ba	115	1	39.65	ppb	1.27	40	99.1	90 - 110	
205 Tl	165	1	40.61	ppb	1.35	40	101.5	90 - 110	
208 Pb	165	1	40.53	ppb	1.09	40	101.3	90 - 110	
232 Th	165	1	45.82	ppb	0.29	40	114.6	90 - 110	Fail
238 U	165	1	41.02	ppb	0.38	40	102.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	380889	0.43	399164	95.4	30 - 120	
45 Sc	1	897908	0.41	940817	95.4	30 - 120	
72 Ge	1	510491	0.99	543541	93.9	30 - 120	
115 In	1	1725161	0.55	1769666	97.5	30 - 120	
165 Ho	1	3965758	0.76	4052095	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\AG070709B.B\003CALB.D\003CALB.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\AG070709B.B\006WASH.D\006WASH.D#
Date Acquired: Jul 7 2009 06:40 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 07 2009 06:35 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	1.089 ppb	17.74	1.30	
51 V	72	1	5.159 ppb	1.25	6.50	
52 Cr	72	1	2.056 ppb	4.36	2.60	
55 Mn	72	1	0.996 ppb	5.33	1.30	
59 Co	72	1	0.986 ppb	5.16	1.30	
60 Ni	72	1	2.089 ppb	5.01	2.60	
63 Cu	72	1	2.053 ppb	2.76	2.60	
66 Zn	72	1	10.520 ppb	1.83	13.00	
75 As	72	1	5.027 ppb	1.20	6.50	
78 Se	72	1	4.447 ppb	23.34	6.50	
95 Mo	72	1	2.089 ppb	0.78	2.60	
107 Ag	115	1	5.193 ppb	1.84	6.50	
111 Cd	115	1	1.042 ppb	3.41	1.30	
118 Sn	115	1	10.480 ppb	0.85	13.00	
121 Sb	115	1	2.185 ppb	1.55	2.60	
137 Ba	115	1	1.068 ppb	5.38	1.30	
205 Tl	165	1	1.176 ppb	2.26	1.30	
208 Pb	165	1	1.073 ppb	0.23	1.30	
232 Th	165	1	3.179 ppb	4.03	2.60	
238 U	165	1	1.102 ppb	1.37	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379446	0.32	399164	95.1	30 - 120	
45 Sc	1	894440	1.04	940817	95.1	30 - 120	
72 Ge	1	517374	0.11	543541	95.2	30 - 120	
115 In	1	1715545	0.68	1769666	96.9	30 - 120	
165 Ho	1	3947602	0.56	4052095	97.4	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\AG070709B.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\AG070709B.B\007 ICB.D\007 ICB.D#
Date Acquired:	Jul 7 2009 06:43 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 07 2009 06:35 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	-0.01	ppb	278.49	1.00	
52 Cr	72	1	0.01	ppb	361.44	1.00	
55 Mn	72	1	-0.01	ppb	36.80	1.00	
59 Co	72	1	0.00	ppb	359.57	1.00	
60 Ni	72	1	0.00	ppb	857.45	1.00	
63 Cu	72	1	0.00	ppb	170.49	1.00	
66 Zn	72	1	0.00	ppb	285.00	1.00	
75 As	72	1	0.01	ppb	88.24	1.00	
78 Se	72	1	0.02	ppb	872.43	1.00	
95 Mo	72	1	0.01	ppb	14.64	1.00	
107 Ag	115	1	0.00	ppb	129.33	1.00	
111 Cd	115	1	0.00	ppb	333.20	1.00	
118 Sn	115	1	0.09	ppb	12.11	1.00	
121 Sb	115	1	0.08	ppb	3.49	1.00	
137 Ba	115	1	0.00	ppb	216.96	1.00	
205 Tl	165	1	0.07	ppb	7.69	1.00	
208 Pb	165	1	0.00	ppb	101.76	1.00	
232 Th	165	1	0.33	ppb	6.92	1.00	
238 U	165	1	0.00	ppb	13.68	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382408	0.87	399164	95.8	30 - 120	
45 Sc	1	907229	0.95	940817	96.4	30 - 120	
72 Ge	1	521075	0.30	543541	95.9	30 - 120	
115 In	1	1702190	0.54	1769666	96.2	30 - 120	
165 Ho	1	3975956	0.45	4052095	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\AG070709B.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\AG070709B.B\008RLST.D\008RLST.D#
Date Acquired: Jul 7 2009 06:46 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 07 2009 06:35 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	1.04	ppb	12.32	1	103.7	50 - 150	
51 V	72	1	1.01	ppb	9.81	1	100.5	50 - 150	
52 Cr	72	1	0.99	ppb	5.47	1	99.4	50 - 150	
55 Mn	72	1	0.98	ppb	4.30	1	98.4	50 - 150	
59 Co	72	1	0.98	ppb	4.26	1	98.4	50 - 150	
60 Ni	72	1	0.98	ppb	3.81	1	98.5	50 - 150	
63 Cu	72	1	0.96	ppb	4.85	1	96.3	50 - 150	
66 Zn	72	1	10.22	ppb	0.29	10	102.2	50 - 150	
75 As	72	1	1.01	ppb	2.72	1	100.7	50 - 150	
78 Se	72	1	0.79	ppb	53.55	1	78.9	50 - 150	
95 Mo	72	1	1.07	ppb	4.00	1	107.1	50 - 150	
107 Ag	115	1	0.99	ppb	3.27	1	99.3	50 - 150	
111 Cd	115	1	1.03	ppb	1.34	1	103.2	50 - 150	
118 Sn	115	1	10.17	ppb	1.04	10	101.7	50 - 150	
121 Sb	115	1	1.03	ppb	5.66	1	102.9	50 - 150	
137 Ba	115	1	1.04	ppb	2.53	1	103.6	50 - 150	
205 Tl	165	1	1.06	ppb	0.83	1	106.2	50 - 150	
208 Pb	165	1	1.01	ppb	1.71	1	101.3	50 - 150	
232 Th	165	1	1.16	ppb	1.52	1	115.9	50 - 150	
238 U	165	1	1.06	ppb	1.52	1	105.6	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381752	0.66	399164	95.6	30 - 120	
45 Sc	1	908450	0.62	940817	96.6	30 - 120	
72 Ge	1	523170	0.29	543541	96.3	30 - 120	
115 In	1	1727746	0.37	1769666	97.6	30 - 120	
165 Ho	1	3986580	0.86	4052095	98.4	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\AG070709B.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\AG070709B.B\009AFCE.D\009AFCE.D#
Date Acquired: Jul 7 2009 06:49 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 07 2009 06:35 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	36.20	0	88.9	80 - 120	
51 V	72	1	0.15	ppb	7.13	0	73.5	80 - 120	
52 Cr	72	1	0.18	ppb	3.37	0	88.4	80 - 120	
55 Mn	72	1	0.20	ppb	12.94	0	101.5	80 - 120	
59 Co	72	1	0.20	ppb	5.47	0	100.2	80 - 120	
60 Ni	72	1	0.19	ppb	8.01	0	94.7	80 - 120	
63 Cu	72	1	0.20	ppb	4.43	0	102.8	80 - 120	
66 Zn	72	1	2.02	ppb	0.83	2	98.9	80 - 120	
75 As	72	1	0.21	ppb	14.22	0	101.8	80 - 120	
78 Se	72	1	0.11	ppb	92.40	0	70.8	80 - 120	
95 Mo	72	1	0.21	ppb	12.83	0	96.0	80 - 120	
107 Ag	115	1	0.19	ppb	14.07	0	93.7	80 - 120	
111 Cd	115	1	0.20	ppb	13.72	0	98.7	80 - 120	
118 Sn	115	1	2.10	ppb	1.98	2	103.2	80 - 120	
121 Sb	115	1	0.21	ppb	3.22	0	103.6	80 - 120	
137 Ba	115	1	0.19	ppb	8.30	0	92.8	80 - 120	
205 Tl	165	1	0.23	ppb	2.69	0	107.3	80 - 120	
208 Pb	165	1	0.21	ppb	2.25	0	102.4	80 - 120	
232 Th	165	1	0.30	ppb	1.72	0	130.8	80 - 120	
238 U	165	1	0.21	ppb	1.37	0	97.8	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	383219	0.57	399164	96.0	30 - 120	
45 Sc	1	910744	0.99	940817	96.8	30 - 120	
72 Ge	1	523238	0.51	543541	96.3	30 - 120	
115 In	1	1749677	0.22	1769666	98.9	30 - 120	
165 Ho	1	3982865	0.61	4052095	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\AG070709B.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\AG070709B.B\010SMPL.D\010SMPL.D#
Date Acquired: Jul 7 2009 06:51 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 07 2009 06:35 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	-0.01	-0.01	ppb	147.72	3600	
52 Cr	72	1	0.00	0.00	ppb	1241.60	3600	
55 Mn	72	1	0.00	0.00	ppb	472.13	3600	
59 Co	72	1	0.00	0.00	ppb	369.37	3600	
60 Ni	72	1	0.01	0.01	ppb	136.71	3600	
63 Cu	72	1	-0.01	-0.01	ppb	86.24	3600	
66 Zn	72	1	0.10	0.10	ppb	20.02	3600	
75 As	72	1	0.00	0.00	ppb	488.01	3600	
78 Se	72	1	1.71	1.71	ppb	19.19	3600	
95 Mo	72	1	0.00	0.00	ppb	42.52	3600	
107 Ag	115	1	0.00	0.00	ppb	89.97	3600	
111 Cd	115	1	0.00	0.00	ppb	483.30	3600	
118 Sn	115	1	0.44	0.44	ppb	3.98	3600	
121 Sb	115	1	0.01	0.01	ppb	51.24	3600	
137 Ba	115	1	0.00	0.00	ppb	2235.70	3600	
205 Tl	165	1	0.02	0.02	ppb	13.37	3600	
208 Pb	165	1	0.00	0.00	ppb	155.70	3600	
232 Th	165	1	0.05	0.05	ppb	11.74	1000	
238 U	165	1	0.00	0.00	ppb	34.75	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381988	0.77	399164	95.7	30 - 120	
45 Sc	1	909120	0.30	940817	96.6	30 - 120	
72 Ge	1	524636	0.43	543541	96.5	30 - 120	
115 In	1	1729729	0.54	1769666	97.7	30 - 120	
165 Ho	1	3992746	0.71	4052095	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\AG070709B.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\AG070709B.B\011ICSA.D\011ICSA.D#
Date Acquired: Jul 7 2009 06:54 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 07 2009 06:35 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	0.01 ppb	173.19	1.00	
51 V	72	1	-0.12 ppb	145.18	1.00	
52 Cr	72	1	1.00 ppb	3.09	1.00	
55 Mn	72	1	2.15 ppb	3.13	1.00	
59 Co	72	1	0.05 ppb	8.09	1.00	
60 Ni	72	1	0.76 ppb	3.84	1.00	
63 Cu	72	1	0.31 ppb	8.08	1.00	
66 Zn	72	1	2.84 ppb	2.36	10.00	
75 As	72	1	0.16 ppb	4.86	1.00	
78 Se	72	1	-0.20 ppb	83.63	1.00	
95 Mo	72	1	2043.00 ppb	1.61	2000.00	
107 Ag	115	1	0.06 ppb	1.56	1.00	
111 Cd	115	1	0.46 ppb	24.91	1.00	
118 Sn	115	1	0.20 ppb	17.21	10.00	
121 Sb	115	1	0.24 ppb	6.95	1.00	
137 Ba	115	1	1.57 ppb	4.74	1.00	
205 Tl	165	1	0.05 ppb	32.86	1.00	
208 Pb	165	1	0.12 ppb	5.36	1.00	
232 Th	165	1	0.10 ppb	10.63	1.00	
238 U	165	1	0.02 ppb	3.23	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	365243	0.79	399164	91.5	30 - 120	
45 Sc	1	788222	0.65	940817	83.8	30 - 120	
72 Ge	1	427827	0.97	543541	78.7	30 - 120	
115 In	1	1437454	0.58	1769666	81.2	30 - 120	
165 Ho	1	3581671	0.93	4052095	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\AG070709B.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\AG070709B.B\012ICSB.D\012ICSB.D#
Date Acquired: Jul 7 2009 06:57 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 07 2009 06:35 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	95.41	1.50	100	95.4	80 - 120	
51 V	72	1	103.80	1.00	100	103.8	80 - 120	
52 Cr	72	1	103.20	0.47	100	103.2	80 - 120	
55 Mn	72	1	103.00	0.69	100	103.0	80 - 120	
59 Co	72	1	95.34	0.69	100	95.3	80 - 120	
60 Ni	72	1	92.36	1.58	100	92.4	80 - 120	
63 Cu	72	1	89.22	0.72	100	89.2	80 - 120	
66 Zn	72	1	101.20	0.80	100	101.2	80 - 120	
75 As	72	1	101.20	0.94	100	101.2	80 - 120	
78 Se	72	1	111.30	2.75	100	111.3	80 - 120	
95 Mo	72	1	2173.00	1.31	2100	103.5	80 - 120	
107 Ag	115	1	85.76	1.92	100	85.8	80 - 120	
111 Cd	115	1	96.48	1.43	100	96.5	80 - 120	
118 Sn	115	1	103.80	1.68	100	103.8	80 - 120	
121 Sb	115	1	103.90	1.74	100	103.9	80 - 120	
137 Ba	115	1	106.00	2.12	100	106.0	80 - 120	
205 Tl	165	1	94.99	0.53	100	95.0	80 - 120	
208 Pb	165	1	94.09	0.42	100	94.1	80 - 120	
232 Th	165	1	111.20	1.41	100	111.2	80 - 120	
238 U	165	1	103.30	0.40	100	103.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	363601	0.94	399164	91.1	30 - 120	
45 Sc	1	745518	1.62	940817	79.2	30 - 120	
72 Ge	1	408166	0.77	543541	75.1	30 - 120	
115 In	1	1402003	0.59	1769666	79.2	30 - 120	
165 Ho	1	3568659	0.29	4052095	88.1	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\AG070709B.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\AG070709B.B\013SMPL.D\013SMPL.D#
Date Acquired: Jul 7 2009 06:59 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 07 2009 06:35 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	173.16	3600	
51 V	72	1	-0.07	-0.07	ppb	35.08	3600	
52 Cr	72	1	0.00	0.00	ppb	168.71	3600	
55 Mn	72	1	0.01	0.01	ppb	62.67	3600	
59 Co	72	1	0.01	0.01	ppb	53.27	3600	
60 Ni	72	1	0.02	0.02	ppb	71.92	3600	
63 Cu	72	1	0.01	0.01	ppb	25.23	3600	
66 Zn	72	1	0.08	0.08	ppb	9.50	3600	
75 As	72	1	0.04	0.04	ppb	24.44	3600	
78 Se	72	1	0.02	0.02	ppb	1280.40	3600	
95 Mo	72	1	1.48	1.48	ppb	11.41	3600	
107 Ag	115	1	0.01	0.01	ppb	57.64	3600	
111 Cd	115	1	0.01	0.01	ppb	88.95	3600	
118 Sn	115	1	0.07	0.07	ppb	39.85	3600	
121 Sb	115	1	0.05	0.05	ppb	18.44	3600	
137 Ba	115	1	0.01	0.01	ppb	59.77	3600	
205 Tl	165	1	0.01	0.01	ppb	15.32	3600	
208 Pb	165	1	0.01	0.01	ppb	36.06	3600	
232 Th	165	1	0.85	0.85	ppb	23.15	1000	
238 U	165	1	0.02	0.02	ppb	9.73	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	392230	1.00	399164	98.3	30 - 120	
45 Sc	1	847933	1.38	940817	90.1	30 - 120	
72 Ge	1	494469	0.21	543541	91.0	30 - 120	
115 In	1	1662200	1.03	1769666	93.9	30 - 120	
165 Ho	1	4011358	1.54	4052095	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\AG070709B.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\AG070709B.B\014 LR.D\014 LR.D#
Date Acquired: Jul 7 2009 07:02 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 07 2009 06:35 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	983.40 ppb	1.01	1000	98.3	90 - 110	
51 V	72	1	947.80 ppb	1.93	1000	94.8	90 - 110	
52 Cr	72	1	970.60 ppb	1.54	1000	97.1	90 - 110	
55 Mn	72	1	980.00 ppb	1.74	1000	98.0	90 - 110	
59 Co	72	1	949.60 ppb	1.88	1000	95.0	90 - 110	
60 Ni	72	1	987.80 ppb	1.07	1000	98.8	90 - 110	
63 Cu	72	1	955.00 ppb	1.51	1000	95.5	90 - 110	
66 Zn	72	1	1033.00 ppb	1.84	1000	103.3	90 - 110	
75 As	72	1	994.00 ppb	0.73	1000	99.4	90 - 110	
78 Se	72	1	1029.00 ppb	2.04	1000	102.9	90 - 110	
95 Mo	72	1	1009.00 ppb	1.74	1000	100.9	90 - 110	
107 Ag	115	1	964.50 ppb	1.98	1000	96.5	90 - 110	
111 Cd	115	1	1029.00 ppb	1.52	1000	102.9	90 - 110	
118 Sn	115	1	1005.00 ppb	0.95	1000	100.5	90 - 110	
121 Sb	115	1	998.10 ppb	1.44	1000	99.8	90 - 110	
137 Ba	115	1	1023.00 ppb	0.46	1000	102.3	90 - 110	
205 Tl	165	1	972.10 ppb	0.66	1000	97.2	90 - 110	
208 Pb	165	1	965.00 ppb	0.85	1000	96.5	90 - 110	
232 Th	165	1	1087.00 ppb	2.42	1000	108.7	90 - 110	
238 U	165	1	1004.00 ppb	0.93	1000	100.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	374397	1.09	399164	93.8	30 - 120	
45 Sc	1	839630	1.54	940817	89.2	30 - 120	
72 Ge	1	487501	1.32	543541	89.7	30 - 120	
115 In	1	1652784	1.56	1769666	93.4	30 - 120	
165 Ho	1	4011589	1.51	4052095	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\AG070709B.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\AG070709B.B\015SMPL.D\015SMPL.D#
Date Acquired:	Jul 7 2009 07:05 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 07 2009 06:35 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	0.10	0.10	ppb	44.89	3600	
51 V	72	1	0.04	0.04	ppb	13.03	3600	
52 Cr	72	1	0.06	0.06	ppb	24.31	3600	
55 Mn	72	1	0.06	0.06	ppb	39.96	3600	
59 Co	72	1	0.08	0.08	ppb	29.64	3600	
60 Ni	72	1	0.07	0.07	ppb	35.89	3600	
63 Cu	72	1	0.07	0.07	ppb	26.63	3600	
66 Zn	72	1	0.17	0.17	ppb	20.43	3600	
75 As	72	1	0.10	0.10	ppb	31.17	3600	
78 Se	72	1	0.20	0.20	ppb	197.18	3600	
95 Mo	72	1	0.78	0.78	ppb	8.80	3600	
107 Ag	115	1	0.05	0.05	ppb	29.15	3600	
111 Cd	115	1	0.08	0.08	ppb	11.89	3600	
118 Sn	115	1	1.34	1.34	ppb	4.00	3600	
121 Sb	115	1	0.53	0.53	ppb	4.95	3600	
137 Ba	115	1	0.06	0.06	ppb	16.69	3600	
205 Tl	165	1	0.14	0.14	ppb	16.45	3600	
208 Pb	165	1	0.08	0.08	ppb	29.48	3600	
232 Th	165	1	5.32	5.32	ppb	21.32	1000	
238 U	165	1	0.15	0.15	ppb	8.24	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379584	0.33	399164	95.1	30 - 120	
45 Sc	1	873362	0.60	940817	92.8	30 - 120	
72 Ge	1	506731	0.43	543541	93.2	30 - 120	
115 In	1	1692278	0.36	1769666	95.6	30 - 120	
165 Ho	1	4003631	0.89	4052095	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\AG070709B.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\AG070709B.B\016 CCV.D\016 CCV.D#
Date Acquired: Jul 7 2009 07:08 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 07 2009 06:35 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	49.62	ppb	3.63	50	99.2	90 - 110	
51 V	72	1	49.33	ppb	0.48	50	98.7	90 - 110	
52 Cr	72	1	49.99	ppb	0.15	50	100.0	90 - 110	
55 Mn	72	1	50.16	ppb	0.63	50	100.3	90 - 110	
59 Co	72	1	49.28	ppb	0.34	50	98.6	90 - 110	
60 Ni	72	1	49.82	ppb	0.86	50	99.6	90 - 110	
63 Cu	72	1	50.32	ppb	0.27	50	100.6	90 - 110	
66 Zn	72	1	51.12	ppb	0.39	50	102.2	90 - 110	
75 As	72	1	50.01	ppb	0.76	50	100.0	90 - 110	
78 Se	72	1	51.33	ppb	1.78	50	102.7	90 - 110	
95 Mo	72	1	51.04	ppb	0.26	50	102.1	90 - 110	
107 Ag	115	1	50.64	ppb	2.48	50	101.3	90 - 110	
111 Cd	115	1	51.08	ppb	3.26	50	102.2	90 - 110	
118 Sn	115	1	51.20	ppb	2.24	50	102.4	90 - 110	
121 Sb	115	1	50.97	ppb	2.72	50	101.9	90 - 110	
137 Ba	115	1	50.72	ppb	2.33	50	101.4	90 - 110	
205 Tl	165	1	51.22	ppb	0.82	50	102.4	90 - 110	
208 Pb	165	1	50.99	ppb	0.59	50	102.0	90 - 110	
232 Th	165	1	52.84	ppb	2.82	50	105.7	90 - 110	
238 U	165	1	52.33	ppb	1.04	50	104.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	376555	0.66	399164	94.3	30 - 120	
45 Sc	1	876739	1.55	940817	93.2	30 - 120	
72 Ge	1	505139	0.71	543541	92.9	30 - 120	
115 In	1	1690240	2.01	1769666	95.5	30 - 120	
165 Ho	1	3974864	0.42	4052095	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\AG070709B.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\AG070709B.B\017 CCB.D\017 CCB.D#
Date Acquired: Jul 7 2009 07:10 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 07 2009 06:35 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	0.015	ppb	86.59	1.00	
51 V	72	1	0.001	ppb	2310.60	1.00	
52 Cr	72	1	0.015	ppb	77.74	1.00	
55 Mn	72	1	0.007	ppb	71.46	1.00	
59 Co	72	1	0.007	ppb	43.33	1.00	
60 Ni	72	1	0.005	ppb	124.14	1.00	
63 Cu	72	1	0.008	ppb	32.43	1.00	
66 Zn	72	1	-0.004	ppb	189.55	1.00	
75 As	72	1	0.039	ppb	52.57	1.00	
78 Se	72	1	0.034	ppb	988.42	1.00	
95 Mo	72	1	0.152	ppb	12.74	1.00	
107 Ag	115	1	0.008	ppb	0.82	1.00	
111 Cd	115	1	0.001	ppb	1452.00	1.00	
118 Sn	115	1	0.279	ppb	24.24	1.00	
121 Sb	115	1	0.108	ppb	14.18	1.00	
137 Ba	115	1	0.007	ppb	63.36	1.00	
205 Tl	165	1	0.063	ppb	13.43	1.00	
208 Pb	165	1	0.005	ppb	37.30	1.00	
232 Th	165	1	1.413	ppb	14.76	1.00	Fail
238 U	165	1	0.015	ppb	3.77	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	376366	0.39	399164	94.3	30 - 120	
45 Sc	1	871292	1.51	940817	92.6	30 - 120	
72 Ge	1	509432	0.21	543541	93.7	30 - 120	
115 In	1	1694548	0.74	1769666	95.8	30 - 120	
165 Ho	1	3930648	0.63	4052095	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\AG070709B.B\003CALB.D\003CALB.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\AG070709B.B\018WASH.D\018WASH.D#
Date Acquired: Jul 7 2009 07:13 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 07 2009 06:35 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	0.950 ppb	34.59	1.30	
51 V	72	1	5.092 ppb	2.34	6.50	
52 Cr	72	1	2.116 ppb	1.95	2.60	
55 Mn	72	1	1.041 ppb	3.33	1.30	
59 Co	72	1	0.977 ppb	1.97	1.30	
60 Ni	72	1	2.082 ppb	1.15	2.60	
63 Cu	72	1	2.096 ppb	0.80	2.60	
66 Zn	72	1	10.630 ppb	0.64	13.00	
75 As	72	1	5.058 ppb	3.38	6.50	
78 Se	72	1	5.432 ppb	1.49	6.50	
95 Mo	72	1	2.180 ppb	2.74	2.60	
107 Ag	115	1	5.324 ppb	0.74	6.50	
111 Cd	115	1	1.066 ppb	6.36	1.30	
118 Sn	115	1	10.810 ppb	0.98	13.00	
121 Sb	115	1	2.023 ppb	2.76	2.60	
137 Ba	115	1	1.068 ppb	2.92	1.30	
205 Tl	165	1	1.140 ppb	1.37	1.30	
208 Pb	165	1	1.064 ppb	2.30	1.30	
232 Th	165	1	2.562 ppb	0.69	2.60	
238 U	165	1	1.114 ppb	1.20	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	375609	0.51	399164	94.1	30 - 120	
45 Sc	1	888298	1.26	940817	94.4	30 - 120	
72 Ge	1	513002	0.31	543541	94.4	30 - 120	
115 In	1	1688757	0.59	1769666	95.4	30 - 120	
165 Ho	1	3965900	1.10	4052095	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\AG070709B.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\AG070709B.B\019SMPL.D\019SMPL.D#
Date Acquired:	Jul 7 2009 07:16 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	IDL 1
Misc Info:	IDL 1
Vial Number:	2201
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 07 2009 06:35 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	-0.04	-0.04	ppb	68.44	3600	
52 Cr	72	1	0.04	0.04	ppb	29.24	3600	
55 Mn	72	1	0.00	0.00	ppb	256.13	3600	
59 Co	72	1	0.00	0.00	ppb	382.70	3600	
60 Ni	72	1	0.01	0.01	ppb	49.38	3600	
63 Cu	72	1	0.01	0.01	ppb	55.64	3600	
66 Zn	72	1	0.14	0.14	ppb	21.68	3600	
75 As	72	1	0.01	0.01	ppb	203.55	3600	
78 Se	72	1	-0.13	-0.13	ppb	125.58	3600	
95 Mo	72	1	0.05	0.05	ppb	16.98	3600	
107 Ag	115	1	0.00	0.00	ppb	52.68	3600	
111 Cd	115	1	0.00	0.00	ppb	214.07	3600	
118 Sn	115	1	0.15	0.15	ppb	19.57	3600	
121 Sb	115	1	0.06	0.06	ppb	6.05	3600	
137 Ba	115	1	0.00	0.00	ppb	349.53	3600	
205 Tl	165	1	0.12	0.12	ppb	50.04	3600	
208 Pb	165	1	0.00	0.00	ppb	22.86	3600	
232 Th	165	1	0.34	0.34	ppb	17.39	1000	
238 U	165	1	0.00	0.00	ppb	16.51	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379285	0.19	399164	95.0	30 - 120	
45 Sc	1	892144	1.83	940817	94.8	30 - 120	
72 Ge	1	515237	0.27	543541	94.8	30 - 120	
115 In	1	1718488	1.06	1769666	97.1	30 - 120	
165 Ho	1	3986789	1.41	4052095	98.4	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\AG070709B.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\AG070709B.B\020SMPL.D\020SMPL.D#
Date Acquired: Jul 7 2009 07:19 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 2
Misc Info: IDL 2
Vial Number: 2202
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	377.77	3600	
52 Cr	72	1	0.10	0.10	ppb	6.96	3600	
55 Mn	72	1	0.01	0.01	ppb	45.86	3600	
59 Co	72	1	0.00	0.00	ppb	145.74	3600	
60 Ni	72	1	0.00	0.00	ppb	1196.50	3600	
63 Cu	72	1	0.01	0.01	ppb	103.69	3600	
66 Zn	72	1	0.18	0.18	ppb	23.83	3600	
75 As	72	1	0.02	0.02	ppb	70.21	3600	
78 Se	72	1	-0.01	-0.01	ppb	2560.20	3600	
95 Mo	72	1	0.05	0.05	ppb	46.21	3600	
107 Ag	115	1	0.00	0.00	ppb	49.01	3600	
111 Cd	115	1	0.00	0.00	ppb	135.26	3600	
118 Sn	115	1	0.10	0.10	ppb	15.66	3600	
121 Sb	115	1	0.03	0.03	ppb	4.43	3600	
137 Ba	115	1	0.00	0.00	ppb	232.64	3600	
205 Tl	165	1	0.02	0.02	ppb	15.52	3600	
208 Pb	165	1	0.00	0.00	ppb	48.86	3600	
232 Th	165	1	0.15	0.15	ppb	8.53	1000	
238 U	165	1	0.00	0.00	ppb	25.79	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	380373	0.78	399164	95.3	30 - 120	
45 Sc	1	911770	1.04	940817	96.9	30 - 120	
72 Ge	1	519249	0.73	543541	95.5	30 - 120	
115 In	1	1724932	1.14	1769666	97.5	30 - 120	
165 Ho	1	4028099	0.29	4052095	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\AG070709B.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\AG070709B.B\021SMPL.D\021SMPL.D#
Date Acquired: Jul 7 2009 07:21 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 3
Misc Info: IDL 3
Vial Number: 2203
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	36.00	3600	
52 Cr	72	1	0.07	0.07	ppb	28.56	3600	
55 Mn	72	1	0.01	0.01	ppb	52.10	3600	
59 Co	72	1	0.00	0.00	ppb	355.28	3600	
60 Ni	72	1	0.01	0.01	ppb	40.66	3600	
63 Cu	72	1	0.02	0.02	ppb	44.24	3600	
66 Zn	72	1	0.26	0.26	ppb	8.74	3600	
75 As	72	1	0.01	0.01	ppb	60.02	3600	
78 Se	72	1	-0.04	-0.04	ppb	585.23	3600	
95 Mo	72	1	0.03	0.03	ppb	22.63	3600	
107 Ag	115	1	0.00	0.00	ppb	178.94	3600	
111 Cd	115	1	0.00	0.00	ppb	352.78	3600	
118 Sn	115	1	0.08	0.08	ppb	24.98	3600	
121 Sb	115	1	0.03	0.03	ppb	8.44	3600	
137 Ba	115	1	0.00	0.00	ppb	67.24	3600	
205 Tl	165	1	0.01	0.01	ppb	19.44	3600	
208 Pb	165	1	0.01	0.01	ppb	13.68	3600	
232 Th	165	1	0.08	0.08	ppb	3.77	1000	
238 U	165	1	0.00	0.00	ppb	12.12	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382171	0.47	399164	95.7	30 - 120	
45 Sc	1	913266	0.67	940817	97.1	30 - 120	
72 Ge	1	522994	0.15	543541	96.2	30 - 120	
115 In	1	1746978	0.26	1769666	98.7	30 - 120	
165 Ho	1	4035614	0.63	4052095	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\AG070709B.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\AG070709B.B\022SMPL.D\022SMPL.D#
Date Acquired:	Jul 7 2009 07:24 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	IDL 4
Misc Info:	IDL 4
Vial Number:	2204
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 07 2009 06:35 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	0.02	0.02	ppb	152.96	3600	
52 Cr	72	1	0.06	0.06	ppb	24.25	3600	
55 Mn	72	1	0.00	0.00	ppb	144.92	3600	
59 Co	72	1	0.00	0.00	ppb	1117.00	3600	
60 Ni	72	1	0.01	0.01	ppb	53.84	3600	
63 Cu	72	1	0.01	0.01	ppb	130.03	3600	
66 Zn	72	1	0.16	0.16	ppb	19.17	3600	
75 As	72	1	0.01	0.01	ppb	137.11	3600	
78 Se	72	1	0.08	0.08	ppb	286.30	3600	
95 Mo	72	1	0.03	0.03	ppb	66.91	3600	
107 Ag	115	1	0.04	0.04	ppb	167.18	3600	
111 Cd	115	1	0.00	0.00	ppb	1323.30	3600	
118 Sn	115	1	0.07	0.07	ppb	30.62	3600	
121 Sb	115	1	0.02	0.02	ppb	25.73	3600	
137 Ba	115	1	0.00	0.00	ppb	126.77	3600	
205 Tl	165	1	0.00	0.00	ppb	17.01	3600	
208 Pb	165	1	0.01	0.01	ppb	11.23	3600	
232 Th	165	1	0.05	0.05	ppb	3.48	1000	
238 U	165	1	0.00	0.00	ppb	41.01	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	380990	0.19	399164	95.4	30 - 120	
45 Sc	1	921642	0.31	940817	98.0	30 - 120	
72 Ge	1	522994	0.54	543541	96.2	30 - 120	
115 In	1	1746663	0.41	1769666	98.7	30 - 120	
165 Ho	1	4031298	0.35	4052095	99.5	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\AG070709B.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\AG070709B.B\023SMPL.D\023SMPL.D#
Date Acquired: Jul 7 2009 07:27 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 5
Misc Info: IDL 5
Vial Number: 2205
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	69.22	3600	
52 Cr	72	1	0.06	0.06	ppb	39.69	3600	
55 Mn	72	1	0.01	0.01	ppb	116.00	3600	
59 Co	72	1	0.00	0.00	ppb	153.25	3600	
60 Ni	72	1	0.01	0.01	ppb	36.95	3600	
63 Cu	72	1	0.03	0.03	ppb	48.62	3600	
66 Zn	72	1	0.38	0.38	ppb	10.97	3600	
75 As	72	1	0.01	0.01	ppb	58.58	3600	
78 Se	72	1	0.14	0.14	ppb	113.36	3600	
95 Mo	72	1	0.02	0.02	ppb	9.44	3600	
107 Ag	115	1	0.00	0.00	ppb	49.32	3600	
111 Cd	115	1	0.00	0.00	ppb	66.69	3600	
118 Sn	115	1	0.05	0.05	ppb	18.47	3600	
121 Sb	115	1	0.01	0.01	ppb	39.88	3600	
137 Ba	115	1	0.04	0.04	ppb	25.01	3600	
205 Tl	165	1	0.00	0.00	ppb	42.60	3600	
208 Pb	165	1	0.00	0.00	ppb	11.74	3600	
232 Th	165	1	0.03	0.03	ppb	10.68	1000	
238 U	165	1	0.00	0.00	ppb	43.23	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381108	1.08	399164	95.5	30 - 120	
45 Sc	1	917609	0.68	940817	97.5	30 - 120	
72 Ge	1	526581	0.40	543541	96.9	30 - 120	
115 In	1	1753078	0.65	1769666	99.1	30 - 120	
165 Ho	1	4051353	0.90	4052095	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\AG070709B.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\AG070709B.B\024SMPL.D\024SMPL.D#
Date Acquired:	Jul 7 2009 07:30 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	IDL 6
Misc Info:	IDL 6
Vial Number:	2206
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 07 2009 06:35 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	46.47	3600	
52 Cr	72	1	0.04	0.04	ppb	30.72	3600	
55 Mn	72	1	0.01	0.01	ppb	69.39	3600	
59 Co	72	1	0.00	0.00	ppb	147.86	3600	
60 Ni	72	1	0.00	0.00	ppb	209.95	3600	
63 Cu	72	1	0.00	0.00	ppb	636.32	3600	
66 Zn	72	1	0.12	0.12	ppb	19.15	3600	
75 As	72	1	0.01	0.01	ppb	57.82	3600	
78 Se	72	1	-0.14	-0.14	ppb	174.84	3600	
95 Mo	72	1	0.02	0.02	ppb	42.62	3600	
107 Ag	115	1	0.00	0.00	ppb	112.75	3600	
111 Cd	115	1	0.00	0.00	ppb	155.48	3600	
118 Sn	115	1	0.03	0.03	ppb	40.76	3600	
121 Sb	115	1	0.01	0.01	ppb	30.69	3600	
137 Ba	115	1	0.00	0.00	ppb	630.14	3600	
205 Tl	165	1	0.00	0.00	ppb	28.37	3600	
208 Pb	165	1	0.01	0.01	ppb	14.13	3600	
232 Th	165	1	0.02	0.02	ppb	13.98	1000	
238 U	165	1	0.00	0.00	ppb	61.03	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379484	0.58	399164	95.1	30 - 120	
45 Sc	1	919710	0.59	940817	97.8	30 - 120	
72 Ge	1	529558	0.14	543541	97.4	30 - 120	
115 In	1	1740330	0.31	1769666	98.3	30 - 120	
165 Ho	1	4028294	0.54	4052095	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\AG070709B.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\AG070709B.B\025SMPL.D\025SMPL.D#
Date Acquired: Jul 7 2009 07:32 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 7
Misc Info: IDL 7
Vial Number: 2207
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	-0.02	-0.02	ppb	66.88	3600	
52 Cr	72	1	0.09	0.09	ppb	22.46	3600	
55 Mn	72	1	0.01	0.01	ppb	119.57	3600	
59 Co	72	1	0.00	0.00	ppb	26.53	3600	
60 Ni	72	1	0.01	0.01	ppb	81.48	3600	
63 Cu	72	1	0.01	0.01	ppb	162.49	3600	
66 Zn	72	1	0.46	0.46	ppb	7.54	3600	
75 As	72	1	0.00	0.00	ppb	826.57	3600	
78 Se	72	1	0.10	0.10	ppb	199.05	3600	
95 Mo	72	1	0.03	0.03	ppb	36.36	3600	
107 Ag	115	1	0.00	0.00	ppb	86.85	3600	
111 Cd	115	1	0.00	0.00	ppb	439.55	3600	
118 Sn	115	1	0.07	0.07	ppb	34.83	3600	
121 Sb	115	1	0.01	0.01	ppb	25.15	3600	
137 Ba	115	1	0.01	0.01	ppb	107.25	3600	
205 Tl	165	1	0.00	0.00	ppb	136.49	3600	
208 Pb	165	1	0.00	0.00	ppb	56.94	3600	
232 Th	165	1	0.02	0.02	ppb	11.50	1000	
238 U	165	1	0.00	0.00	ppb	52.38	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382232	0.33	399164	95.8	30 - 120	
45 Sc	1	914289	2.86	940817	97.2	30 - 120	
72 Ge	1	528909	0.57	543541	97.3	30 - 120	
115 In	1	1760439	0.96	1769666	99.5	30 - 120	
165 Ho	1	4061949	1.79	4052095	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\AG070709B.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\AG070709B.B\026 CCV.D\026 CCV.D#
Date Acquired: Jul 7 2009 07:35 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 07 2009 06:35 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	49.11	ppb	1.59	50	98.2	90 - 110	
51 V	72	1	49.65	ppb	0.84	50	99.3	90 - 110	
52 Cr	72	1	49.85	ppb	0.52	50	99.7	90 - 110	
55 Mn	72	1	50.18	ppb	0.98	50	100.4	90 - 110	
59 Co	72	1	49.63	ppb	0.79	50	99.3	90 - 110	
60 Ni	72	1	50.44	ppb	0.39	50	100.9	90 - 110	
63 Cu	72	1	49.99	ppb	0.78	50	100.0	90 - 110	
66 Zn	72	1	50.56	ppb	0.39	50	101.1	90 - 110	
75 As	72	1	50.04	ppb	0.28	50	100.1	90 - 110	
78 Se	72	1	51.86	ppb	3.17	50	103.7	90 - 110	
95 Mo	72	1	50.35	ppb	0.60	50	100.7	90 - 110	
107 Ag	115	1	50.41	ppb	1.84	50	100.8	90 - 110	
111 Cd	115	1	50.40	ppb	1.73	50	100.8	90 - 110	
118 Sn	115	1	50.13	ppb	1.43	50	100.3	90 - 110	
121 Sb	115	1	50.25	ppb	1.11	50	100.5	90 - 110	
137 Ba	115	1	50.69	ppb	1.75	50	101.4	90 - 110	
205 Tl	165	1	50.76	ppb	0.57	50	101.5	90 - 110	
208 Pb	165	1	50.43	ppb	0.52	50	100.9	90 - 110	
232 Th	165	1	50.82	ppb	2.31	50	101.6	90 - 110	
238 U	165	1	51.44	ppb	0.54	50	102.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	371672	0.71	399164	93.1	30 - 120	
45 Sc	1	912752	0.78	940817	97.0	30 - 120	
72 Ge	1	522215	0.41	543541	96.1	30 - 120	
115 In	1	1743103	0.73	1769666	98.5	30 - 120	
165 Ho	1	4005312	0.25	4052095	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\AG070709B.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\AG070709B.B\027 CCB.D\027 CCB.D#
Date Acquired: Jul 7 2009 07:38 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 07 2009 06:35 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	0.015	ppb	86.57	1.00	
51 V	72	1	0.000	ppb	19711.00	1.00	
52 Cr	72	1	-0.001	ppb	6169.20	1.00	
55 Mn	72	1	0.001	ppb	190.49	1.00	
59 Co	72	1	0.008	ppb	39.18	1.00	
60 Ni	72	1	0.019	ppb	96.35	1.00	
63 Cu	72	1	-0.005	ppb	50.33	1.00	
66 Zn	72	1	0.021	ppb	90.07	1.00	
75 As	72	1	0.019	ppb	36.03	1.00	
78 Se	72	1	0.143	ppb	130.86	1.00	
95 Mo	72	1	0.058	ppb	40.81	1.00	
107 Ag	115	1	0.007	ppb	31.96	1.00	
111 Cd	115	1	0.005	ppb	147.19	1.00	
118 Sn	115	1	0.092	ppb	9.40	1.00	
121 Sb	115	1	0.047	ppb	17.39	1.00	
137 Ba	115	1	0.007	ppb	25.78	1.00	
205 Tl	165	1	0.027	ppb	8.32	1.00	
208 Pb	165	1	0.004	ppb	29.24	1.00	
232 Th	165	1	1.122	ppb	18.47	1.00	Fail
238 U	165	1	0.009	ppb	11.87	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	372423	1.23	399164	93.3	30 - 120	
45 Sc	1	912447	0.67	940817	97.0	30 - 120	
72 Ge	1	523888	0.45	543541	96.4	30 - 120	
115 In	1	1734442	0.69	1769666	98.0	30 - 120	
165 Ho	1	3981000	0.53	4052095	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\AG070709B.B\003CALB.D\003CALB.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\AG070709B.B\028WASH.D\028WASH.D#
Date Acquired: Jul 7 2009 07:41 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 07 2009 06:35 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	1.085 ppb	15.68	1.30	
51 V	72	1	5.132 ppb	0.96	6.50	
52 Cr	72	1	2.054 ppb	3.48	2.60	
55 Mn	72	1	1.017 ppb	4.38	1.30	
59 Co	72	1	1.024 ppb	2.60	1.30	
60 Ni	72	1	2.076 ppb	8.39	2.60	
63 Cu	72	1	2.034 ppb	0.60	2.60	
66 Zn	72	1	10.510 ppb	1.39	13.00	
75 As	72	1	5.147 ppb	1.98	6.50	
78 Se	72	1	4.531 ppb	13.79	6.50	
95 Mo	72	1	2.009 ppb	2.89	2.60	
107 Ag	115	1	5.317 ppb	1.44	6.50	
111 Cd	115	1	1.104 ppb	9.81	1.30	
118 Sn	115	1	10.490 ppb	2.91	13.00	
121 Sb	115	1	1.965 ppb	2.52	2.60	
137 Ba	115	1	1.095 ppb	3.49	1.30	
205 Tl	165	1	1.097 ppb	0.49	1.30	
208 Pb	165	1	1.060 ppb	0.29	1.30	
232 Th	165	1	2.347 ppb	1.47	2.60	
238 U	165	1	1.092 ppb	1.22	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	372721	0.46	399164	93.4	30 - 120	
45 Sc	1	900076	1.60	940817	95.7	30 - 120	
72 Ge	1	524566	0.72	543541	96.5	30 - 120	
115 In	1	1735347	1.19	1769666	98.1	30 - 120	
165 Ho	1	4009833	0.10	4052095	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\AG070709B.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: 7/8/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\134CALB.D\134CALB.D#
Date Acquired:	Jul 8 2009 12:34 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 08 2009 12:32 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-108	246.57
52	Cr	72	1	1653	5.08
55	Mn	72	1	180	17.07
59	Co	72	1	53	59.97
60	Ni	72	1	60	49.96
63	Cu	72	1	533	20.71
66	Zn	72	1	196	14.00
75	As	72	1	38	45.31
78	Se	72	1	217	11.91
95	Mo	72	1	320	5.86
107	Ag	115	1	27	57.06
111	Cd	115	1	9	94.56
118	Sn	115	1	363	7.25
121	Sb	115	1	31	53.98
137	Ba	115	1	28	24.75
205	Tl	165	1	36	19.54
208	Pb	165	1	318	9.95
232	Th	165	1	933	10.49
238	U	165	1	32	6.43

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	359710	0.64
45	Sc	1	999296	0.68
72	Ge	1	590607	0.42
115	In	1	1756110	0.38
165	Ho	1	3599124	0.59

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\AG070709B.B\135ICAL.D\135ICAL.D#
Date Acquired: Jul 8 2009 12:37 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 08 2009 12:35 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	42456	0.79
51	V	72	1	677901	0.51
52	Cr	72	1	771532	0.97
55	Mn	72	1	701977	0.22
59	Co	72	1	1096247	1.62
60	Ni	72	1	262850	0.23
63	Cu	72	1	658157	0.06
66	Zn	72	1	119936	0.74
75	As	72	1	80646	0.43
78	Se	72	1	11832	3.06
95	Mo	72	1	303504	0.38
107	Ag	115	1	975217	1.48
111	Cd	115	1	166334	0.80
118	Sn	115	1	422146	0.57
121	Sb	115	1	468819	1.26
137	Ba	115	1	186995	0.82
205	Tl	165	1	1941640	2.52
208	Pb	165	1	2617843	1.23
232	Th	165	1	2474288	4.07
238	U	165	1	2935507	0.82

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	357075	1.18	359710	99.3	30 - 120	
45	Sc	1	1009477	1.71	999296	101.0	30 - 120	
72	Ge	1	575763	0.70	590607	97.5	30 - 120	
115	In	1	1747144	0.55	1756110	99.5	30 - 120	
165	Ho	1	3577226	0.83	3599124	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\AG070709B.B\134CALB.D\134CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070709B.B\136 CCV.D\136 CCV.D#
Date Acquired: Jul 8 2009 12:39 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 08 2009 12:37 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	50.03	ppb	0.56	50	100.1	90 - 110	
51 V	72	1	49.80	ppb	0.84	50	99.6	90 - 110	
52 Cr	72	1	48.81	ppb	0.12	50	97.6	90 - 110	
55 Mn	72	1	49.22	ppb	0.79	50	98.4	90 - 110	
59 Co	72	1	48.81	ppb	0.80	50	97.6	90 - 110	
60 Ni	72	1	49.71	ppb	0.88	50	99.4	90 - 110	
63 Cu	72	1	49.20	ppb	0.30	50	98.4	90 - 110	
66 Zn	72	1	50.04	ppb	1.12	50	100.1	90 - 110	
75 As	72	1	49.55	ppb	0.66	50	99.1	90 - 110	
78 Se	72	1	48.70	ppb	7.53	50	97.4	90 - 110	
95 Mo	72	1	49.10	ppb	0.65	50	98.2	90 - 110	
107 Ag	115	1	49.02	ppb	1.24	50	98.0	90 - 110	
111 Cd	115	1	48.83	ppb	0.79	50	97.7	90 - 110	
118 Sn	115	1	49.21	ppb	0.47	50	98.4	90 - 110	
121 Sb	115	1	48.89	ppb	1.07	50	97.8	90 - 110	
137 Ba	115	1	49.18	ppb	0.88	50	98.4	90 - 110	
205 Tl	165	1	49.43	ppb	0.66	50	98.9	90 - 110	
208 Pb	165	1	49.64	ppb	0.67	50	99.3	90 - 110	
232 Th	165	1	51.45	ppb	2.27	50	102.9	90 - 110	
238 U	165	1	49.34	ppb	1.31	50	98.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	348155	0.34	359710	96.8	30 - 120	
45 Sc	1	976535	2.40	999296	97.7	30 - 120	
72 Ge	1	566977	0.68	590607	96.0	30 - 120	
115 In	1	1731189	0.46	1756110	98.6	30 - 120	
165 Ho	1	3536295	0.16	3599124	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\137 CCB.D\137 CCB.D#
Date Acquired: Jul 8 2009 12:42 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 08 2009 12:37 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	0.024	ppb	99.58	1.00	
51 V	72	1	0.018	ppb	61.07	1.00	
52 Cr	72	1	0.001	ppb	352.73	1.00	
55 Mn	72	1	0.009	ppb	40.91	1.00	
59 Co	72	1	0.004	ppb	59.53	1.00	
60 Ni	72	1	0.011	ppb	122.18	1.00	
63 Cu	72	1	-0.021	ppb	21.33	1.00	
66 Zn	72	1	0.001	ppb	4545.90	1.00	
75 As	72	1	0.007	ppb	98.54	1.00	
78 Se	72	1	-0.199	ppb	427.62	1.00	
95 Mo	72	1	-0.036	ppb	15.25	1.00	
107 Ag	115	1	0.005	ppb	44.75	1.00	
111 Cd	115	1	0.002	ppb	424.36	1.00	
118 Sn	115	1	0.109	ppb	9.40	1.00	
121 Sb	115	1	0.074	ppb	8.54	1.00	
137 Ba	115	1	0.002	ppb	210.19	1.00	
205 Tl	165	1	0.040	ppb	5.51	1.00	
208 Pb	165	1	0.004	ppb	85.66	1.00	
232 Th	165	1	1.629	ppb	17.97	1.00	Fail
238 U	165	1	0.015	ppb	10.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	350828	0.66	359710	97.5	30 - 120	
45 Sc	1	973486	2.25	999296	97.4	30 - 120	
72 Ge	1	570555	0.38	590607	96.6	30 - 120	
115 In	1	1720156	0.91	1756110	98.0	30 - 120	
165 Ho	1	3509645	0.62	3599124	97.5	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\138WASH.D\138WASH.D#
Date Acquired: Jul 8 2009 12:45 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 08 2009 12:37 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	0.979 ppb	34.30	1.30	
51 V	72	1	5.068 ppb	3.72	6.50	
52 Cr	72	1	2.018 ppb	2.07	2.60	
55 Mn	72	1	1.014 ppb	4.96	1.30	
59 Co	72	1	0.964 ppb	1.37	1.30	
60 Ni	72	1	2.014 ppb	1.39	2.60	
63 Cu	72	1	1.962 ppb	1.29	2.60	
66 Zn	72	1	10.290 ppb	2.60	13.00	
75 As	72	1	4.998 ppb	2.58	6.50	
78 Se	72	1	5.245 ppb	9.66	6.50	
95 Mo	72	1	1.966 ppb	4.66	2.60	
107 Ag	115	1	5.162 ppb	1.02	6.50	
111 Cd	115	1	1.074 ppb	10.21	1.30	
118 Sn	115	1	10.220 ppb	1.85	13.00	
121 Sb	115	1	1.873 ppb	2.04	2.60	
137 Ba	115	1	1.017 ppb	3.52	1.30	
205 Tl	165	1	1.072 ppb	1.31	1.30	
208 Pb	165	1	1.039 ppb	0.84	1.30	
232 Th	165	1	2.457 ppb	2.48	2.60	
238 U	165	1	1.060 ppb	0.72	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	352388	0.22	359710	98.0	30 - 120	
45 Sc	1	974978	1.17	999296	97.6	30 - 120	
72 Ge	1	572889	0.46	590607	97.0	30 - 120	
115 In	1	1728325	1.17	1756110	98.4	30 - 120	
165 Ho	1	3531685	0.46	3599124	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\170 CCV.D\170 CCV.D#
Date Acquired: Jul 8 2009 02:13 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 08 2009 12:37 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	52.25	ppb	2.31	50	104.5	90 - 110	
51 V	72	1	48.28	ppb	0.15	50	96.6	90 - 110	
52 Cr	72	1	47.98	ppb	0.91	50	96.0	90 - 110	
55 Mn	72	1	48.02	ppb	0.49	50	96.0	90 - 110	
59 Co	72	1	47.40	ppb	0.99	50	94.8	90 - 110	
60 Ni	72	1	48.09	ppb	0.72	50	96.2	90 - 110	
63 Cu	72	1	48.41	ppb	0.48	50	96.8	90 - 110	
66 Zn	72	1	51.25	ppb	0.79	50	102.5	90 - 110	
75 As	72	1	51.11	ppb	0.68	50	102.2	90 - 110	
78 Se	72	1	47.31	ppb	1.42	50	94.6	90 - 110	
95 Mo	72	1	49.09	ppb	0.32	50	98.2	90 - 110	
107 Ag	115	1	49.14	ppb	1.32	50	98.3	90 - 110	
111 Cd	115	1	50.26	ppb	0.53	50	100.5	90 - 110	
118 Sn	115	1	50.08	ppb	0.55	50	100.2	90 - 110	
121 Sb	115	1	52.86	ppb	0.74	50	105.7	90 - 110	
137 Ba	115	1	50.79	ppb	0.56	50	101.6	90 - 110	
205 Tl	165	1	49.91	ppb	1.62	50	99.8	90 - 110	
208 Pb	165	1	50.25	ppb	1.06	50	100.5	90 - 110	
232 Th	165	1	52.19	ppb	2.46	50	104.4	90 - 110	
238 U	165	1	50.74	ppb	1.41	50	101.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	297820	1.09	359710	82.8	30 - 120	
45 Sc	1	821190	0.56	999296	82.2	30 - 120	
72 Ge	1	496911	0.76	590607	84.1	30 - 120	
115 In	1	1472311	0.13	1756110	83.8	30 - 120	
165 Ho	1	3081621	0.70	3599124	85.6	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\171 CCB.D\171 CCB.D#
Date Acquired: Jul 8 2009 02:16 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 08 2009 12:37 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	173.25	1.00	
51 V	72	1	-0.013	ppb	179.76	1.00	
52 Cr	72	1	0.003	ppb	753.01	1.00	
55 Mn	72	1	0.022	ppb	41.71	1.00	
59 Co	72	1	0.005	ppb	45.50	1.00	
60 Ni	72	1	0.003	ppb	613.52	1.00	
63 Cu	72	1	-0.010	ppb	29.29	1.00	
66 Zn	72	1	0.013	ppb	30.26	1.00	
75 As	72	1	0.000	ppb	1972.40	1.00	
78 Se	72	1	0.083	ppb	601.56	1.00	
95 Mo	72	1	-0.048	ppb	23.13	1.00	
107 Ag	115	1	0.006	ppb	71.17	1.00	
111 Cd	115	1	0.020	ppb	73.98	1.00	
118 Sn	115	1	0.082	ppb	37.20	1.00	
121 Sb	115	1	0.080	ppb	18.41	1.00	
137 Ba	115	1	0.002	ppb	137.02	1.00	
205 Tl	165	1	0.029	ppb	15.84	1.00	
208 Pb	165	1	0.004	ppb	61.81	1.00	
232 Th	165	1	1.587	ppb	15.59	1.00	Fail
238 U	165	1	0.015	ppb	17.02	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	311145	0.41	359710	86.5	30 - 120	
45 Sc	1	865887	2.51	999296	86.6	30 - 120	
72 Ge	1	521021	0.41	590607	88.2	30 - 120	
115 In	1	1566375	1.62	1756110	89.2	30 - 120	
165 Ho	1	3235774	0.99	3599124	89.9	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\172WASH.D\172WASH.D#
Date Acquired:	Jul 8 2009 02:19 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 08 2009 12:37 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	1.108 ppb	11.14	1.30	
51 V	72	1	4.987 ppb	2.20	6.50	
52 Cr	72	1	2.019 ppb	0.87	2.60	
55 Mn	72	1	1.026 ppb	4.94	1.30	
59 Co	72	1	0.990 ppb	1.52	1.30	
60 Ni	72	1	1.993 ppb	4.57	2.60	
63 Cu	72	1	2.003 ppb	0.52	2.60	
66 Zn	72	1	10.600 ppb	0.57	13.00	
75 As	72	1	5.166 ppb	2.10	6.50	
78 Se	72	1	5.617 ppb	6.11	6.50	
95 Mo	72	1	1.915 ppb	2.54	2.60	
107 Ag	115	1	5.106 ppb	0.39	6.50	
111 Cd	115	1	1.021 ppb	4.92	1.30	
118 Sn	115	1	10.420 ppb	0.80	13.00	
121 Sb	115	1	1.987 ppb	4.16	2.60	
137 Ba	115	1	1.085 ppb	5.30	1.30	
205 Tl	165	1	1.081 ppb	1.19	1.30	
208 Pb	165	1	1.061 ppb	1.33	1.30	
232 Th	165	1	2.515 ppb	1.76	2.60	
238 U	165	1	1.093 ppb	1.74	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	316333	0.07	359710	87.9	30 - 120	
45 Sc	1	887198	0.56	999296	88.8	30 - 120	
72 Ge	1	530843	0.48	590607	89.9	30 - 120	
115 In	1	1618138	0.95	1756110	92.1	30 - 120	
165 Ho	1	3373797	0.53	3599124	93.7	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\173 BLK.D\173 BLK.D#
Date Acquired:	Jul 8 2009 02:22 am
Operator:	TEL
Sample Name:	LF30GBF
Misc Info:	BLANK 9187175 6020
Vial Number:	3407
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 08 2009 12:37 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	173.20	2.00	
51 V	72	1	0.016 ppb	193.58	2.00	
52 Cr	72	1	-0.017 ppb	101.97	2.00	
55 Mn	72	1	0.015 ppb	39.29	2.00	
59 Co	72	1	-0.002 ppb	61.70	2.00	
60 Ni	72	1	0.017 ppb	28.07	2.00	
63 Cu	72	1	0.016 ppb	65.20	2.00	
66 Zn	72	1	0.287 ppb	11.22	2.00	
75 As	72	1	0.000 ppb	600.84	2.00	
78 Se	72	1	-0.429 ppb	19.76	2.00	
95 Mo	72	1	-0.082 ppb	4.37	2.00	
107 Ag	115	1	0.002 ppb	2.08	2.00	
111 Cd	115	1	0.002 ppb	233.83	2.00	
118 Sn	115	1	0.041 ppb	43.39	2.00	
121 Sb	115	1	0.037 ppb	22.69	2.00	
137 Ba	115	1	0.008 ppb	21.06	2.00	
205 Tl	165	1	0.018 ppb	19.84	2.00	
208 Pb	165	1	0.070 ppb	8.60	2.00	
232 Th	165	1	0.117 ppb	17.60	2.00	
238 U	165	1	0.002 ppb	24.74	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	312470	0.98	359710	86.9	30 - 120	
45 Sc	1	890718	0.47	999296	89.1	30 - 120	
72 Ge	1	534914	0.67	590607	90.6	30 - 120	
115 In	1	1609641	0.81	1756110	91.7	30 - 120	
165 Ho	1	3377369	1.08	3599124	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\AG070709B.B\134CALB.D\134CALB.D#

0 :Element Failures — 0 :Max. Number of Failures Allowed
0 :ISTD Failures — 0 :Max. Number of ISTD Failures Allowed

Laboratory Control Spike (LCS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\174 LCS.D\174 LCS.D#
Date Acquired:	Jul 8 2009 02:25 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF30GCF
Misc Info:	LCS
Vial Number:	3408
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 12:37 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	43.71	2.91	40	109.3	80 - 120	
51 V	72	1	40.21	0.96	40	100.5	80 - 120	
52 Cr	72	1	40.76	0.52	40	101.9	80 - 120	
55 Mn	72	1	40.91	0.49	40	102.3	80 - 120	
59 Co	72	1	40.46	0.50	40	101.2	80 - 120	
60 Ni	72	1	40.74	0.86	40	101.9	80 - 120	
63 Cu	72	1	41.20	1.05	40	103.0	80 - 120	
66 Zn	72	1	43.82	0.87	40	109.6	80 - 120	
75 As	72	1	42.53	0.80	40	106.3	80 - 120	
78 Se	72	1	44.13	6.30	40	110.3	80 - 120	
95 Mo	72	1	41.94	0.76	40	104.9	80 - 120	
107 Ag	115	1	41.04	0.30	40	102.6	80 - 120	
111 Cd	115	1	41.99	0.31	40	105.0	80 - 120	
118 Sn	115	1	0.09	3.85	40	0.2	80 - 120	
121 Sb	115	1	42.29	0.73	40	105.7	80 - 120	
137 Ba	115	1	42.00	0.38	40	105.0	80 - 120	
205 Tl	165	1	42.77	1.11	40	106.9	80 - 120	
208 Pb	165	1	43.10	1.20	40	107.8	80 - 120	
232 Th	165	1	41.54	2.51	40	103.9	80 - 120	
238 U	165	1	43.86	1.68	40	109.7	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	310470	1.14	359710	86.3	30 - 120	
45 Sc	1	869016	0.47	999296	87.0	30 - 120	
72 Ge	1	515847	0.72	590607	87.3	30 - 120	
115 In	1	1617308	1.07	1756110	92.1	30 - 120	
165 Ho	1	3378777	0.93	3599124	93.9	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\175SMPL.D\175SMPL.D#
Date Acquired: Jul 8 2009 02:27 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1T5F 10X
Misc Info: D9G020221
Vial Number: 3409
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 12:37 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	27.07	2.71	ppb	2.42	3600	
52 Cr	72	1	35.58	3.56	ppb	1.14	3600	
55 Mn	72	1	19.49	1.95	ppb	4.84	3600	
59 Co	72	1	0.64	0.06	ppb	23.42	3600	
60 Ni	72	1	2.82	0.28	ppb	22.12	3600	
63 Cu	72	1	0.50	0.05	ppb	7.45	3600	
66 Zn	72	1	1.07	0.11	ppb	26.36	3600	
75 As	72	1	154.50	15.45	ppb	0.76	3600	
78 Se	72	1	-0.09	-0.01	ppb	4730.40	3600	
95 Mo	72	1	30.17	3.02	ppb	1.71	3600	
107 Ag	115	1	0.06	0.01	ppb	88.96	3600	
111 Cd	115	1	0.08	0.01	ppb	139.88	3600	
118 Sn	115	1	-0.12	-0.01	ppb	38.81	3600	
121 Sb	115	1	0.68	0.07	ppb	7.31	3600	
137 Ba	115	1	34.70	3.47	ppb	2.00	3600	
205 Tl	165	1	0.75	0.08	ppb	6.93	3600	
208 Pb	165	1	0.09	0.01	ppb	16.66	3600	
232 Th	165	1	14.75	1.48	ppb	16.90	1000	
238 U	165	1	53.47	5.35	ppb	1.31	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	305670	1.08	359710	85.0	30 - 120	
45 Sc	1	855518	1.05	999296	85.6	30 - 120	
72 Ge	1	502137	0.59	590607	85.0	30 - 120	
115 In	1	1525563	0.50	1756110	86.9	30 - 120	
165 Ho	1	3233358	1.02	3599124	89.8	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\176AREF.D\176AREF.D#
Date Acquired: Jul 8 2009 02:30 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1WAF 10X
Misc Info: D9G020227
Vial Number: 3410
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 12:37 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	-243.20	-24.32	ppb	14.30	3600	
52 Cr	72	1	10,060.00	1006.00	ppb	1.32	3600	
55 Mn	72	1	2.09	0.21	ppb	11.67	3600	
59 Co	72	1	0.49	0.05	ppb	21.48	3600	
60 Ni	72	1	1.79	0.18	ppb	9.91	3600	
63 Cu	72	1	0.68	0.07	ppb	23.73	3600	
66 Zn	72	1	1.27	0.13	ppb	13.90	3600	
75 As	72	1	748.60	74.86	ppb	0.91	3600	
78 Se	72	1	-0.22	-0.02	ppb	1295.20	3600	
95 Mo	72	1	47.17	4.72	ppb	3.51	3600	
107 Ag	115	1	0.13	0.01	ppb	43.50	3600	
111 Cd	115	1	0.01	0.00	ppb	1569.70	3600	
118 Sn	115	1	-0.04	0.00	ppb	295.47	3600	
121 Sb	115	1	0.68	0.07	ppb	9.26	3600	
137 Ba	115	1	16.07	1.61	ppb	0.97	3600	
205 Tl	165	1	0.19	0.02	ppb	9.45	3600	
208 Pb	165	1	0.05	0.00	ppb	28.89	3600	
232 Th	165	1	4.37	0.44	ppb	11.63	1000	
238 U	165	1	34.87	3.49	ppb	1.20	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	292204	0.60	359710	81.2	30 - 120	
45 Sc	1	798598	0.22	999296	79.9	30 - 120	
72 Ge	1	469323	0.66	590607	79.5	30 - 120	
115 In	1	1402216	0.73	1756110	79.8	30 - 120	
165 Ho	1	3007910	0.68	3599124	83.6	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\177SDIL.D\177SDIL.D#
Date Acquired: Jul 8 2009 02:33 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1WAP50F
Misc Info: SERIAL DILUTION
Vial Number: 3411
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 12:37 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070709B.B\176AREF.D\176AREF.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	-1.38	ppb	52.12	-4.86	28.5	90 - 110	
52 Cr	72	1	206.70	ppb	0.94	201.20	102.7	90 - 110	
55 Mn	72	1	0.07	ppb	21.68	0.04	158.1	90 - 110	
59 Co	72	1	0.01	ppb	44.53	0.01	128.0	90 - 110	
60 Ni	72	1	0.18	ppb	3.53	0.04	507.0	90 - 110	
63 Cu	72	1	0.02	ppb	63.64	0.01	125.0	90 - 110	
66 Zn	72	1	0.09	ppb	5.33	0.03	342.1	90 - 110	
75 As	72	1	14.28	ppb	0.31	14.97	95.4	90 - 110	
78 Se	72	1	-0.57	ppb	89.60	0.00	12705.7	90 - 110	
95 Mo	72	1	0.89	ppb	3.87	0.94	93.9	90 - 110	
107 Ag	115	1	0.00	ppb	60.93	0.00	179.7	90 - 110	
111 Cd	115	1	0.00	ppb	301.38	0.00	-2239.2	90 - 110	
118 Sn	115	1	0.01	ppb	88.94	0.00	-1832.6	90 - 110	
121 Sb	115	1	0.01	ppb	23.30	0.01	108.0	90 - 110	
137 Ba	115	1	0.31	ppb	3.06	0.32	96.8	90 - 110	
205 Tl	165	1	0.01	ppb	12.17	0.00	136.5	90 - 110	
208 Pb	165	1	0.00	ppb	662.23	0.00	41.1	90 - 110	
232 Th	165	1	0.13	ppb	12.39	0.09	145.4	90 - 110	
238 U	165	1	0.70	ppb	1.15	0.70	99.9	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	305980	0.72	359710	85.1	30 - 120	
45 Sc	1	813394	0.50	999296	81.4	30 - 120	
72 Ge	1	488705	0.23	590607	82.7	30 - 120	
115 In	1	1498043	1.32	1756110	85.3	30 - 120	
165 Ho	1	3190430	0.79	3599124	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\AG070709B.B\134CALB.D\134CALB.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: 07/08/09 09:50:33

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LF1WAP50F** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070709B # 177 | Method 6020_
Acquired: 07/08/2009 02:33:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/08/2009 00:34:00 | 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	-8065	-69.200	-243.20			*	
7440-47-3	Chromium	52	1352420	10335	10060	2.73		*	
7439-96-5	Manganese	55	543	3.3095	2.0930	58.1		*	
7440-48-4	Cobalt	59	160	0.62250	0.48650	28.0		*	
7440-02-0	Nickel	60	453	9.0500	1.7850	407		*	
7440-50-8	Copper	63	537	0.85400	0.68310	25.0		*	
7440-66-6	Zinc	66	251	4.3555	1.2730	242		*	
7440-38-2	Arsenic	75	9804	714.00	748.60	4.62	0.21	4.6	☑
7782-49-2	Selenium	78	123	-28.410	-0.22360		0.70	NC	☑
7439-98-7	Molybdenum	95	2544	44.275	47.170	6.14		*	
7440-22-4	Silver	107	63	0.24240	0.13490	79.7		*	
7440-43-9	Cadmium	111	4	-0.12280	0.00548	2340		*	
7440-31-5	Tin	118	363	0.73250	-0.03997			*	
7440-36-0	Antimony	121	86	0.73550	0.68100	8.00		*	
7440-39-3	Barium	137	522	15.550	16.070	3.24		*	
7440-28-0	Thallium	205	123	0.26490	0.19410	36.5		*	
7439-92-1	Lead	208	291	0.01991	0.04846	58.9		*	
7440-61-1	Uranium	238	18272	34.840	34.870	0.0860		*	
7440-29-1	Thorium	232	3631	6.3600	4.3740	45.4		*	
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: 7/8/09

Post Digestion Spiked Sample (PDS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\178PDS.D\178PDS.D#
Date Acquired:	Jul 8 2009 02:36 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1WAZF
Misc Info:	POST DIGESTION SPIKE
Vial Number:	3412
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 12:37 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	201.20	0.00	ppb	0.25	200	100.6	75 - 125	
51 V	72	1	167.50	-24.32	ppb	4.36	200	95.3	75 - 125	
52 Cr	72	1	1158.00	1006.00	ppb	0.96	200	96.0	75 - 125	
55 Mn	72	1	199.00	0.21	ppb	0.53	200	99.4	75 - 125	
59 Co	72	1	189.10	0.05	ppb	1.23	200	94.5	75 - 125	
60 Ni	72	1	181.90	0.18	ppb	0.33	200	90.9	75 - 125	
63 Cu	72	1	181.90	0.07	ppb	0.91	200	90.9	75 - 125	
66 Zn	72	1	193.70	0.13	ppb	0.42	200	96.8	75 - 125	
75 As	72	1	269.10	74.86	ppb	0.55	200	97.9	75 - 125	
78 Se	72	1	205.60	-0.02	ppb	2.08	200	102.8	75 - 125	
95 Mo	72	1	207.00	4.72	ppb	0.30	200	101.1	75 - 125	
107 Ag	115	1	43.59	0.01	ppb	0.43	50	87.2	75 - 125	
111 Cd	115	1	189.70	0.00	ppb	0.73	200	94.8	75 - 125	
118 Sn	115	1	175.70	0.00	ppb	0.85	200	87.9	75 - 125	
121 Sb	115	1	197.20	0.07	ppb	0.38	200	98.6	75 - 125	
137 Ba	115	1	198.70	1.61	ppb	0.32	200	98.6	75 - 125	
205 Tl	165	1	183.30	0.02	ppb	1.60	200	91.6	75 - 125	
208 Pb	165	1	184.40	0.00	ppb	0.94	200	92.2	75 - 125	
232 Th	165	1	0.10	0.44	ppb	16.57	200	0.1	75 - 125	
238 U	165	1	192.90	3.49	ppb	0.88	200	94.8	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	297444	0.90	359710	82.7	30 - 120	
45 Sc	1	818816	0.91	999296	81.9	30 - 120	
72 Ge	1	465209	1.25	590607	78.8	30 - 120	
115 In	1	1448516	1.43	1756110	82.5	30 - 120	
165 Ho	1	3126678	1.34	3599124	86.9	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\AG070709B.B\134CALB.D\134CALB.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: 07/08/09 09:50:37

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LF1WAZF** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG070709B # 178
Acquired: 07/08/2009 02:36:00
Calibrated: 07/08/2009 00:34:00

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	71147	201.20	0	101	200		☑
7440-62-2	Vanadium	51	917399	167.50	-24.320	83.8	200		☐
7440-47-3	Chromium	52	7203880	1158.0	1006.0	76.0	200	*	☐
7439-96-5	Manganese	55	1128500	199.00	0.20930	99.4	200		☑
7440-48-4	Cobalt	59	1674600	189.10	0.04865	94.5	200		☐
7440-02-0	Nickel	60	386226	181.90	0.17850	90.9	200		☑
7440-50-8	Copper	63	966930	181.90	0.06831	90.9	200		☐
7440-66-6	Zinc	66	187534	193.70	0.12730	96.8	200		☐
7440-38-2	Arsenic	75	175287	269.10	74.860	97.1	200		☑
7782-49-2	Selenium	78	19481	205.60	-0.02236	103	200		☑
7439-98-7	Molybdenum	95	507446	207.00	4.7170	101	200		☐
7440-22-4	Silver	107	352504	43.590	0.01349	87.2	50.0		☑
7440-43-9	Cadmium	111	261645	189.70	0.00055	94.8	200		☑
7440-31-5	Tin	118	614805	175.70	-0.00400	87.8	200		☐
7440-36-0	Antimony	121	766415	197.20	0.06810	98.6	200		☑
7440-39-3	Barium	137	308052	198.70	1.6070	98.5	200		☑
7440-28-0	Thallium	205	3110570	183.30	0.01941	91.6	200		☑
7439-92-1	Lead	208	4219680	184.40	0.00485	92.2	200		☑
7440-61-1	Uranium	238	4948960	192.90	3.4870	94.7	200		☐
7440-29-1	Thorium	232	2987	0.10060	0.43740				
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: 7/8/09

Spiked Sample (MS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\179_MS.D\179_MS.D#
Date Acquired:	Jul 8 2009 02:38 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1WASF 10X
Misc Info:	MATRIX SPIKE
Vial Number:	3501
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 12:37 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	3.85	0.00	ppb	10.07	40	9.6	50 - 150	
51 V	72	1	-16.16	-24.32	ppb	25.63	40	-103.1	50 - 150	
52 Cr	72	1	977.90	1006.00	ppb	0.87	40	93.5	50 - 150	
55 Mn	72	1	4.13	0.21	ppb	2.94	40	10.3	50 - 150	
59 Co	72	1	3.88	0.05	ppb	1.59	40	9.7	50 - 150	
60 Ni	72	1	4.13	0.18	ppb	2.80	40	10.3	50 - 150	
63 Cu	72	1	3.84	0.07	ppb	1.54	40	9.6	50 - 150	
66 Zn	72	1	4.09	0.13	ppb	2.91	40	10.2	50 - 150	
75 As	72	1	75.55	74.86	ppb	1.26	40	65.8	50 - 150	
78 Se	72	1	5.18	-0.02	ppb	18.02	40	13.0	50 - 150	
95 Mo	72	1	8.73	4.72	ppb	1.69	40	19.5	50 - 150	
107 Ag	115	1	3.74	0.01	ppb	0.81	40	9.3	50 - 150	
111 Cd	115	1	4.00	0.00	ppb	0.38	40	10.0	50 - 150	
118 Sn	115	1	0.38	0.00	ppb	23.74	40	1.0	50 - 150	
121 Sb	115	1	4.35	0.07	ppb	2.68	40	10.8	50 - 150	
137 Ba	115	1	5.58	1.61	ppb	4.46	40	13.4	50 - 150	
205 Tl	165	1	3.92	0.02	ppb	1.41	40	9.8	50 - 150	
208 Pb	165	1	3.89	0.00	ppb	0.55	40	9.7	50 - 150	
232 Th	165	1	4.08	0.44	ppb	2.39	40	10.1	50 - 150	
238 U	165	1	7.45	3.49	ppb	0.40	40	17.1	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	304405	0.41	359710	84.6	30 - 120	
45 Sc	1	832710	0.88	999296	83.3	30 - 120	
72 Ge	1	474308	0.59	590607	80.3	30 - 120	
115 In	1	1452546	0.74	1756110	82.7	30 - 120	
165 Ho	1	3119868	0.20	3599124	86.7	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\180 MSD.D\180 MSD.D#
Date Acquired: Jul 8 2009 02:41 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1WADF 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3502
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 12:37 am
Sample Type: MSD
Dilution Factor: 10.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070709B.B\179 MS.D\179 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	4.03	ppb	9.92	3.85	4.49	20	
51 V	72	1	-16.74	ppb	16.41	-16.16	-3.53	20	
52 Cr	72	1	974.30	ppb	0.61	977.90	0.37	20	
55 Mn	72	1	4.17	ppb	3.28	4.13	1.04	20	
59 Co	72	1	3.94	ppb	0.45	3.88	1.76	20	
60 Ni	72	1	3.99	ppb	2.75	4.13	3.35	20	
63 Cu	72	1	3.91	ppb	2.16	3.84	1.78	20	
66 Zn	72	1	4.03	ppb	0.40	4.09	1.60	20	
75 As	72	1	75.48	ppb	0.78	75.55	0.09	20	
78 Se	72	1	5.20	ppb	4.58	5.18	0.25	20	
95 Mo	72	1	8.71	ppb	1.88	8.73	0.24	20	
107 Ag	115	1	3.69	ppb	1.68	3.73	1.19	20	
111 Cd	115	1	4.08	ppb	4.07	4.00	1.88	20	
118 Sn	115	1	0.08	ppb	50.39	0.38	131.65	20	
121 Sb	115	1	4.29	ppb	2.60	4.35	1.34	20	
137 Ba	115	1	5.59	ppb	4.46	5.58	0.13	20	
205 Tl	165	1	3.93	ppb	1.29	3.92	0.25	20	
208 Pb	165	1	3.96	ppb	0.31	3.89	1.68	20	
232 Th	165	1	4.29	ppb	2.85	4.08	5.02	20	
238 U	165	1	7.56	ppb	0.86	7.45	1.45	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	304960	0.65	359710	84.8	30 - 120	
45 Sc	1	824410	1.54	999296	82.5	30 - 120	
72 Ge	1	473176	0.55	590607	80.1	30 - 120	
115 In	1	1456082	1.44	1756110	82.9	30 - 120	
165 Ho	1	3134679	0.47	3599124	87.1	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\181 CCV.D\181 CCV.D#
Date Acquired: Jul 8 2009 02:44 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 08 2009 12:37 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	48.16	ppb	3.07	50	96.3	90 - 110	
51 V	72	1	48.18	ppb	0.80	50	96.4	90 - 110	
52 Cr	72	1	47.77	ppb	0.92	50	95.5	90 - 110	
55 Mn	72	1	48.53	ppb	0.91	50	97.1	90 - 110	
59 Co	72	1	47.39	ppb	0.96	50	94.8	90 - 110	
60 Ni	72	1	47.86	ppb	0.70	50	95.7	90 - 110	
63 Cu	72	1	47.47	ppb	1.18	50	94.9	90 - 110	
66 Zn	72	1	49.49	ppb	0.45	50	99.0	90 - 110	
75 As	72	1	48.57	ppb	1.54	50	97.1	90 - 110	
78 Se	72	1	48.70	ppb	5.98	50	97.4	90 - 110	
95 Mo	72	1	49.01	ppb	0.48	50	98.0	90 - 110	
107 Ag	115	1	47.17	ppb	0.50	50	94.3	90 - 110	
111 Cd	115	1	48.30	ppb	1.94	50	96.6	90 - 110	
118 Sn	115	1	48.12	ppb	1.16	50	96.2	90 - 110	
121 Sb	115	1	48.14	ppb	0.35	50	96.3	90 - 110	
137 Ba	115	1	48.90	ppb	0.71	50	97.8	90 - 110	
205 Tl	165	1	49.40	ppb	0.74	50	98.8	90 - 110	
208 Pb	165	1	49.70	ppb	0.94	50	99.4	90 - 110	
232 Th	165	1	49.92	ppb	4.88	50	99.8	90 - 110	
238 U	165	1	50.45	ppb	0.43	50	100.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	312690	0.38	359710	86.9	30 - 120	
45 Sc	1	834535	1.50	999296	83.5	30 - 120	
72 Ge	1	488872	0.27	590607	82.8	30 - 120	
115 In	1	1560860	0.36	1756110	88.9	30 - 120	
165 Ho	1	3285970	0.31	3599124	91.3	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\182 CCB.D\182 CCB.D#
Date Acquired: Jul 8 2009 02:47 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 08 2009 12:37 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	-0.003	ppb	1027.40	1.00	
52 Cr	72	1	0.042	ppb	47.13	1.00	
55 Mn	72	1	0.010	ppb	53.11	1.00	
59 Co	72	1	0.007	ppb	55.97	1.00	
60 Ni	72	1	0.004	ppb	493.27	1.00	
63 Cu	72	1	-0.004	ppb	176.29	1.00	
66 Zn	72	1	0.041	ppb	68.39	1.00	
75 As	72	1	0.009	ppb	63.97	1.00	
78 Se	72	1	-0.761	ppb	66.46	1.00	
95 Mo	72	1	-0.023	ppb	74.18	1.00	
107 Ag	115	1	0.007	ppb	42.91	1.00	
111 Cd	115	1	0.014	ppb	29.55	1.00	
118 Sn	115	1	0.119	ppb	24.58	1.00	
121 Sb	115	1	0.064	ppb	12.71	1.00	
137 Ba	115	1	0.000	ppb	3826.60	1.00	
205 Tl	165	1	0.027	ppb	13.20	1.00	
208 Pb	165	1	0.005	ppb	42.53	1.00	
232 Th	165	1	1.282	ppb	15.40	1.00	Fail
238 U	165	1	0.015	ppb	11.17	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	315065	0.86	359710	87.6	30 - 120	
45 Sc	1	842095	0.82	999296	84.3	30 - 120	
72 Ge	1	499567	0.38	590607	84.6	30 - 120	
115 In	1	1565358	0.48	1756110	89.1	30 - 120	
165 Ho	1	3279903	0.89	3599124	91.1	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\183WASH.D\183WASH.D#
Date Acquired: Jul 8 2009 02:49 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 08 2009 12:37 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	0.997 ppb	30.40	1.30	
51 V	72	1	5.014 ppb	3.16	6.50	
52 Cr	72	1	1.992 ppb	0.95	2.60	
55 Mn	72	1	0.992 ppb	4.21	1.30	
59 Co	72	1	0.973 ppb	2.46	1.30	
60 Ni	72	1	1.951 ppb	4.01	2.60	
63 Cu	72	1	1.976 ppb	1.42	2.60	
66 Zn	72	1	10.220 ppb	1.26	13.00	
75 As	72	1	4.882 ppb	4.79	6.50	
78 Se	72	1	4.697 ppb	25.19	6.50	
95 Mo	72	1	1.978 ppb	8.06	2.60	
107 Ag	115	1	4.923 ppb	1.61	6.50	
111 Cd	115	1	0.992 ppb	5.92	1.30	
118 Sn	115	1	9.899 ppb	1.21	13.00	
121 Sb	115	1	1.882 ppb	5.37	2.60	
137 Ba	115	1	1.003 ppb	2.73	1.30	
205 Tl	165	1	1.056 ppb	1.70	1.30	
208 Pb	165	1	1.034 ppb	1.79	1.30	
232 Th	165	1	2.355 ppb	0.47	2.60	
238 U	165	1	1.066 ppb	1.29	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	314494	0.56	359710	87.4	30 - 120	
45 Sc	1	851256	0.46	999296	85.2	30 - 120	
72 Ge	1	501855	0.60	590607	85.0	30 - 120	
115 In	1	1571422	1.33	1756110	89.5	30 - 120	
165 Ho	1	3292934	0.34	3599124	91.5	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\AG070709B.B\134CALB.D\134CALB.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: 7/8/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\191CALB.D\191CALB.D#
Date Acquired:	Jul 8 2009 03:11 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 08 2009 03:09 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	47	12.40
51	V	72	1	787	32.57
52	Cr	72	1	2124	8.83
55	Mn	72	1	710	12.00
59	Co	72	1	793	13.54
60	Ni	72	1	193	12.58
63	Cu	72	1	983	2.95
66	Zn	72	1	233	6.23
75	As	72	1	80	6.77
78	Se	72	1	123	41.18
95	Mo	72	1	393	12.48
107	Ag	115	1	520	5.05
111	Cd	115	1	120	31.74
118	Sn	115	1	470	10.83
121	Sb	115	1	266	8.80
137	Ba	115	1	160	12.69
205	Tl	165	1	1422	3.79
208	Pb	165	1	2148	3.03
232	Th	165	1	2184	2.94
238	U	165	1	2117	5.20

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	329497	0.51
45	Sc	1	923934	1.74
72	Ge	1	537691	0.69
115	In	1	1636252	0.19
165	Ho	1	3317690	0.70

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\AG070709B.B\192ICAL.D\192ICAL.D#
Date Acquired: Jul 8 2009 03:14 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 08 2009 03:12 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	37983	0.96
51	V	72	1	590758	0.60
52	Cr	72	1	673559	0.37
55	Mn	72	1	620805	0.16
59	Co	72	1	967031	2.23
60	Ni	72	1	227670	1.37
63	Cu	72	1	571687	0.80
66	Zn	72	1	106169	0.59
75	As	72	1	72411	0.33
78	Se	72	1	10728	2.94
95	Mo	72	1	270653	0.50
107	Ag	115	1	869708	0.62
111	Cd	115	1	148986	0.81
118	Sn	115	1	379638	0.60
121	Sb	115	1	426526	0.88
137	Ba	115	1	171103	0.67
205	Tl	165	1	1790669	1.13
208	Pb	165	1	2428403	1.42
232	Th	165	1	2283140	3.94
238	U	165	1	2703171	1.85

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	320799	1.12	329497	97.4	30 - 120	
45	Sc	1	893683	1.39	923934	96.7	30 - 120	
72	Ge	1	515008	0.49	537691	95.8	30 - 120	
115	In	1	1607003	0.57	1636252	98.2	30 - 120	
165	Ho	1	3289965	1.41	3317690	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\AG070709B.B\191CALB.D\191CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\193 CCV.D\193 CCV.D#
Date Acquired:	Jul 8 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 08 2009 03:15 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	51.37	ppb	1.18	50	102.7	90 - 110	
51 V	72	1	49.40	ppb	0.29	50	98.8	90 - 110	
52 Cr	72	1	49.31	ppb	0.30	50	98.6	90 - 110	
55 Mn	72	1	49.21	ppb	0.48	50	98.4	90 - 110	
59 Co	72	1	48.56	ppb	0.78	50	97.1	90 - 110	
60 Ni	72	1	49.78	ppb	0.43	50	99.6	90 - 110	
63 Cu	72	1	49.47	ppb	0.77	50	98.9	90 - 110	
66 Zn	72	1	50.01	ppb	1.68	50	100.0	90 - 110	
75 As	72	1	49.44	ppb	0.35	50	98.9	90 - 110	
78 Se	72	1	48.63	ppb	2.94	50	97.3	90 - 110	
95 Mo	72	1	48.81	ppb	1.21	50	97.6	90 - 110	
107 Ag	115	1	48.99	ppb	0.59	50	98.0	90 - 110	
111 Cd	115	1	49.48	ppb	1.23	50	99.0	90 - 110	
118 Sn	115	1	49.38	ppb	0.49	50	98.8	90 - 110	
121 Sb	115	1	49.15	ppb	0.49	50	98.3	90 - 110	
137 Ba	115	1	49.39	ppb	0.43	50	98.8	90 - 110	
205 Tl	165	1	49.73	ppb	0.25	50	99.5	90 - 110	
208 Pb	165	1	49.61	ppb	0.24	50	99.2	90 - 110	
232 Th	165	1	52.01	ppb	3.77	50	104.0	90 - 110	
238 U	165	1	50.63	ppb	2.22	50	101.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	312657	0.23	329497	94.9	30 - 120	
45 Sc	1	867791	0.16	923934	93.9	30 - 120	
72 Ge	1	507091	0.42	537691	94.3	30 - 120	
115 In	1	1598177	0.57	1636252	97.7	30 - 120	
165 Ho	1	3265322	0.69	3317690	98.4	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\194 CCB.D\194 CCB.D#
Date Acquired: Jul 8 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 08 2009 03:15 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	-0.084	ppb	18.39	1.00	
51 V	72	1	-0.120	ppb	38.41	1.00	
52 Cr	72	1	-0.087	ppb	16.03	1.00	
55 Mn	72	1	-0.075	ppb	5.53	1.00	
59 Co	72	1	-0.070	ppb	4.75	1.00	
60 Ni	72	1	-0.049	ppb	22.79	1.00	
63 Cu	72	1	-0.104	ppb	7.77	1.00	
66 Zn	72	1	-0.042	ppb	50.42	1.00	
75 As	72	1	-0.052	ppb	34.22	1.00	
78 Se	72	1	0.406	ppb	70.84	1.00	
95 Mo	72	1	-0.035	ppb	27.06	1.00	
107 Ag	115	1	-0.049	ppb	7.23	1.00	
111 Cd	115	1	-0.064	ppb	15.98	1.00	
118 Sn	115	1	0.104	ppb	9.70	1.00	
121 Sb	115	1	0.027	ppb	34.63	1.00	
137 Ba	115	1	-0.070	ppb	20.68	1.00	
205 Tl	165	1	-0.039	ppb	2.30	1.00	
208 Pb	165	1	-0.071	ppb	0.34	1.00	
232 Th	165	1	1.621	ppb	15.08	1.00	Fail
238 U	165	1	-0.059	ppb	2.23	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	314922	1.32	329497	95.6	30 - 120	
45 Sc	1	871707	1.17	923934	94.3	30 - 120	
72 Ge	1	510835	0.37	537691	95.0	30 - 120	
115 In	1	1597977	0.22	1636252	97.7	30 - 120	
165 Ho	1	3242965	0.51	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\195WASH.D\195WASH.D#
Date Acquired: Jul 8 2009 03:22 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 08 2009 03:15 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	0.890 ppb	14.75	1.30	
51 V	72	1	4.897 ppb	2.77	6.50	
52 Cr	72	1	1.911 ppb	3.39	2.60	
55 Mn	72	1	0.949 ppb	2.25	1.30	
59 Co	72	1	0.903 ppb	4.78	1.30	
60 Ni	72	1	2.026 ppb	4.41	2.60	
63 Cu	72	1	1.955 ppb	4.91	2.60	
66 Zn	72	1	10.300 ppb	0.93	13.00	
75 As	72	1	4.965 ppb	1.73	6.50	
78 Se	72	1	4.916 ppb	5.07	6.50	
95 Mo	72	1	1.920 ppb	6.90	2.60	
107 Ag	115	1	5.018 ppb	2.30	6.50	
111 Cd	115	1	0.983 ppb	5.18	1.30	
118 Sn	115	1	10.270 ppb	2.27	13.00	
121 Sb	115	1	1.861 ppb	3.73	2.60	
137 Ba	115	1	0.993 ppb	1.75	1.30	
205 Tl	165	1	0.996 ppb	0.64	1.30	
208 Pb	165	1	0.959 ppb	1.63	1.30	
232 Th	165	1	2.396 ppb	0.80	2.60	
238 U	165	1	0.989 ppb	0.61	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	315380	0.22	329497	95.7	30 - 120	
45 Sc	1	870144	1.46	923934	94.2	30 - 120	
72 Ge	1	515151	0.12	537691	95.8	30 - 120	
115 In	1	1604946	1.44	1636252	98.1	30 - 120	
165 Ho	1	3272545	0.17	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\196 BLK.D\196 BLK.D#
Date Acquired:	Jul 8 2009 03:25 am
Operator:	TEL
Sample Name:	LF3X8B
Misc Info:	BLANK 9187169 6020
Vial Number:	3503
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 08 2009 03:15 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	-0.111 ppb	14.37	2.00	
51 V	72	1	-0.143 ppb	22.14	2.00	
52 Cr	72	1	0.088 ppb	25.46	2.00	
55 Mn	72	1	0.022 ppb	72.49	2.00	
59 Co	72	1	-0.073 ppb	1.68	2.00	
60 Ni	72	1	-0.048 ppb	47.35	2.00	
63 Cu	72	1	-0.075 ppb	17.97	2.00	
66 Zn	72	1	0.343 ppb	6.48	2.00	
75 As	72	1	-0.065 ppb	10.25	2.00	
78 Se	72	1	0.073 ppb	198.06	2.00	
95 Mo	72	1	-0.093 ppb	14.21	2.00	
107 Ag	115	1	-0.056 ppb	4.86	2.00	
111 Cd	115	1	-0.069 ppb	7.37	2.00	
118 Sn	115	1	0.028 ppb	29.66	2.00	
121 Sb	115	1	-0.022 ppb	12.73	2.00	
137 Ba	115	1	0.049 ppb	34.11	2.00	
205 Tl	165	1	-0.048 ppb	14.71	2.00	
208 Pb	165	1	-0.072 ppb	4.45	2.00	
232 Th	165	1	0.357 ppb	15.29	2.00	
238 U	165	1	-0.073 ppb	0.85	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308912	0.48	329497	93.8	30 - 120	
45 Sc	1	855299	0.36	923934	92.6	30 - 120	
72 Ge	1	504085	0.32	537691	93.7	30 - 120	
115 In	1	1565996	0.39	1636252	95.7	30 - 120	
165 Ho	1	3239289	0.59	3317690	97.6	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\197 LCS.D\197 LCS.D#
Date Acquired:	Jul 8 2009 03:28 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF3X8C
Misc Info:	LCS
Vial Number:	3504
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	38.86	1.75	40	97.2	80 - 120	
51 V	72	1	39.63	0.49	40	99.1	80 - 120	
52 Cr	72	1	40.02	0.68	40	100.1	80 - 120	
55 Mn	72	1	40.62	0.35	40	101.6	80 - 120	
59 Co	72	1	39.25	1.08	40	98.1	80 - 120	
60 Ni	72	1	39.95	1.18	40	99.9	80 - 120	
63 Cu	72	1	40.14	1.29	40	100.4	80 - 120	
66 Zn	72	1	40.71	1.59	40	101.8	80 - 120	
75 As	72	1	38.49	1.93	40	96.2	80 - 120	
78 Se	72	1	40.01	5.25	40	100.0	80 - 120	
95 Mo	72	1	39.16	1.42	40	97.9	80 - 120	
107 Ag	115	1	39.55	0.32	40	98.9	80 - 120	
111 Cd	115	1	39.19	0.84	40	98.0	80 - 120	
118 Sn	115	1	0.02	139.60	40	0.1	80 - 120	
121 Sb	115	1	38.95	0.64	40	97.4	80 - 120	
137 Ba	115	1	40.06	0.36	40	100.2	80 - 120	
205 Tl	165	1	40.26	0.62	40	100.7	80 - 120	
208 Pb	165	1	40.13	0.65	40	100.3	80 - 120	
232 Th	165	1	42.28	2.59	40	105.7	80 - 120	
238 U	165	1	40.83	2.22	40	102.1	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	309475	0.68	329497	93.9	30 - 120	
45 Sc	1	847752	1.13	923934	91.8	30 - 120	
72 Ge	1	491519	0.71	537691	91.4	30 - 120	
115 In	1	1562031	0.44	1636252	95.5	30 - 120	
165 Ho	1	3240093	0.07	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\198SMPL.D\198SMPL.D#
Date Acquired:	Jul 8 2009 03:31 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFX9W 10X
Misc Info:	D9G010276
Vial Number:	3505
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.01	-0.10	ppb	16.17	3600	
51 V	72	1	61.18	6.12	ppb	1.67	3600	
52 Cr	72	1	63.45	6.35	ppb	1.27	3600	
55 Mn	72	1	50.25	5.03	ppb	0.75	3600	
59 Co	72	1	-0.09	-0.01	ppb	147.90	3600	
60 Ni	72	1	5.70	0.57	ppb	1.70	3600	
63 Cu	72	1	0.71	0.07	ppb	15.94	3600	
66 Zn	72	1	3.77	0.38	ppb	12.56	3600	
75 As	72	1	122.60	12.26	ppb	2.27	3600	
78 Se	72	1	2.11	0.21	ppb	143.15	3600	
95 Mo	72	1	38.17	3.82	ppb	1.52	3600	
107 Ag	115	1	-0.49	-0.05	ppb	11.51	3600	
111 Cd	115	1	-0.23	-0.02	ppb	115.49	3600	
118 Sn	115	1	-0.15	-0.02	ppb	88.84	3600	
121 Sb	115	1	0.18	0.02	ppb	24.20	3600	
137 Ba	115	1	36.07	3.61	ppb	1.17	3600	
205 Tl	165	1	-0.14	-0.01	ppb	67.32	3600	
208 Pb	165	1	-0.53	-0.05	ppb	7.58	3600	
232 Th	165	1	10.00	1.00	ppb	19.72	1000	
238 U	165	1	31.50	3.15	ppb	1.87	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298817	0.21	329497	90.7	30 - 120	
45 Sc	1	813176	1.09	923934	88.0	30 - 120	
72 Ge	1	476045	0.77	537691	88.5	30 - 120	
115 In	1	1460770	1.60	1636252	89.3	30 - 120	
165 Ho	1	3099895	1.11	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\199AREF.D\199AREF.D#
Date Acquired:	Jul 8 2009 03:33 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1T1 10X
Misc Info:	D9G020221
Vial Number:	3506
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.10	-0.11	ppb	14.58	3600	
51 V	72	1	26.83	2.68	ppb	5.07	3600	
52 Cr	72	1	35.13	3.51	ppb	5.16	3600	
55 Mn	72	1	21.07	2.11	ppb	3.46	3600	
59 Co	72	1	-0.22	-0.02	ppb	17.03	3600	
60 Ni	72	1	2.83	0.28	ppb	3.65	3600	
63 Cu	72	1	-0.57	-0.06	ppb	4.46	3600	
66 Zn	72	1	4.00	0.40	ppb	14.70	3600	
75 As	72	1	146.20	14.62	ppb	0.84	3600	
78 Se	72	1	1.49	0.15	ppb	173.83	3600	
95 Mo	72	1	28.76	2.88	ppb	1.48	3600	
107 Ag	115	1	-0.52	-0.05	ppb	3.71	3600	
111 Cd	115	1	-0.73	-0.07	ppb	11.57	3600	
118 Sn	115	1	-0.15	-0.02	ppb	80.22	3600	
121 Sb	115	1	-0.20	-0.02	ppb	46.22	3600	
137 Ba	115	1	35.77	3.58	ppb	3.81	3600	
205 Tl	165	1	-0.26	-0.03	ppb	5.20	3600	
208 Pb	165	1	-0.34	-0.03	ppb	6.60	3600	
232 Th	165	1	2.33	0.23	ppb	11.27	1000	
238 U	165	1	51.74	5.17	ppb	0.84	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	302264	0.35	329497	91.7	30 - 120	
45 Sc	1	828840	0.29	923934	89.7	30 - 120	
72 Ge	1	473915	0.52	537691	88.1	30 - 120	
115 In	1	1472330	0.26	1636252	90.0	30 - 120	
165 Ho	1	3122477	0.43	3317690	94.1	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\200SDIL.D\200SDIL.D#
Date Acquired: Jul 8 2009 03:36 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1T1P50
Misc Info: SERIAL DILUTION
Vial Number: 3507
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 03:15 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070709B.B\199AREF.D\199AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	-0.12	ppb	0.00	-0.02	542.1	90 - 110	
51 V	72	1	0.43	ppb	22.54	0.54	80.8	90 - 110	
52 Cr	72	1	0.77	ppb	2.96	0.70	110.0	90 - 110	
55 Mn	72	1	0.41	ppb	7.95	0.42	96.3	90 - 110	
59 Co	72	1	-0.06	ppb	12.54	0.00	1445.1	90 - 110	
60 Ni	72	1	0.14	ppb	10.79	0.06	239.0	90 - 110	
63 Cu	72	1	-0.09	ppb	8.69	-0.01	769.3	90 - 110	
66 Zn	72	1	0.06	ppb	12.53	0.08	69.5	90 - 110	
75 As	72	1	2.91	ppb	1.88	2.92	99.6	90 - 110	
78 Se	72	1	0.18	ppb	93.39	0.03	604.0	90 - 110	
95 Mo	72	1	0.51	ppb	14.47	0.58	88.1	90 - 110	
107 Ag	115	1	-0.06	ppb	2.15	-0.01	556.9	90 - 110	
111 Cd	115	1	-0.07	ppb	7.09	-0.01	494.4	90 - 110	
118 Sn	115	1	-0.04	ppb	26.17	0.00	1459.1	90 - 110	
121 Sb	115	1	-0.04	ppb	2.06	0.00	1060.0	90 - 110	
137 Ba	115	1	0.66	ppb	3.84	0.72	91.7	90 - 110	
205 Tl	165	1	-0.07	ppb	1.98	-0.01	1246.5	90 - 110	
208 Pb	165	1	-0.07	ppb	1.76	-0.01	1003.2	90 - 110	
232 Th	165	1	0.02	ppb	32.04	0.05	44.4	90 - 110	
238 U	165	1	1.01	ppb	1.78	1.03	97.1	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	306409	0.97	329497	93.0	30 - 120	
45 Sc	1	817720	1.55	923934	88.5	30 - 120	
72 Ge	1	487420	0.68	537691	90.7	30 - 120	
115 In	1	1501254	0.50	1636252	91.7	30 - 120	
165 Ho	1	3122338	0.78	3317690	94.1	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\AG070709B.B\191CALB.D\191CALB.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: 07/08/09 09:50:47

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LF1T1P50** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070709B # 200 | Method 6020_
Acquired: 07/08/2009 03:36:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/08/2009 03:11:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9		-5.9850	-1.1040			*	
7440-62-2	Vanadium	51	3138	21.690	26.830	19.2		*	
7440-47-3	Chromium	52	6839	38.655	35.130	10.0		*	
7439-96-5	Manganese	55	3024	20.280	21.070	3.75		*	
7440-48-4	Cobalt	59	137	-3.1835	-0.22030			*	
7440-02-0	Nickel	60	467	6.7700	2.8330	139		*	
7440-50-8	Copper	63	417	-4.3940	-0.57120			*	
7440-66-6	Zinc	66	267	2.7800	3.9980	30.5		*	
7440-38-2	Arsenic	75	2067	145.65	146.20	0.376	0.21	NC	☑
7782-49-2	Selenium	78	130	9.0000	1.4900	504	0.70	NC	☑
7439-98-7	Molybdenum	95	1653	25.350	28.760	11.9		*	
7440-22-4	Silver	107	10	-2.8760	-0.51640			*	
7440-43-9	Cadmium	111	10	-3.6020	-0.72860			*	
7440-31-5	Tin	118	273	-2.2280	-0.15270			*	
7440-36-0	Antimony	121	76	-2.1105	-0.19910			*	
7440-39-3	Barium	137	1195	32.805	35.770	8.29		*	
7440-28-0	Thallium	205	229	-3.2670	-0.26210			*	
7439-92-1	Lead	208	436	-3.4430	-0.34320			*	
7440-61-1	Uranium	238	27759	50.250	51.740	2.88		*	
7440-29-1	Thorium	232	2504	1.0345	2.3280	55.6		*	
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: 7/8/09

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070709B.B\201PDS.D\201PDS.D#
Date Acquired: Jul 8 2009 03:39 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1T1Z
Misc Info: POST DIGESTION SPIKE
Vial Number: 3508
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 03:15 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	195.00	-0.11	ppb	1.02	200	97.6	75 - 125	
51 V	72	1	206.10	2.68	ppb	0.66	200	101.7	75 - 125	
52 Cr	72	1	202.40	3.51	ppb	1.34	200	99.5	75 - 125	
55 Mn	72	1	201.50	2.11	ppb	1.74	200	99.7	75 - 125	
59 Co	72	1	186.40	-0.02	ppb	1.81	200	93.2	75 - 125	
60 Ni	72	1	180.40	0.28	ppb	0.96	200	90.1	75 - 125	
63 Cu	72	1	179.90	-0.06	ppb	0.07	200	90.0	75 - 125	
66 Zn	72	1	189.50	0.40	ppb	0.35	200	94.6	75 - 125	
75 As	72	1	208.70	14.62	ppb	0.45	200	97.2	75 - 125	
78 Se	72	1	192.40	0.15	ppb	2.03	200	96.1	75 - 125	
95 Mo	72	1	201.50	2.88	ppb	0.53	200	99.3	75 - 125	
107 Ag	115	1	44.66	-0.05	ppb	1.40	50	89.4	75 - 125	
111 Cd	115	1	190.00	-0.07	ppb	1.02	200	95.0	75 - 125	
118 Sn	115	1	174.80	-0.02	ppb	1.29	200	87.4	75 - 125	
121 Sb	115	1	193.50	-0.02	ppb	1.11	200	96.8	75 - 125	
137 Ba	115	1	195.30	3.58	ppb	1.09	200	95.9	75 - 125	
205 Tl	165	1	183.40	-0.03	ppb	0.91	200	91.7	75 - 125	
208 Pb	165	1	183.10	-0.03	ppb	0.56	200	91.6	75 - 125	
232 Th	165	1	0.04	0.23	ppb	25.36	200	0.0	75 - 125	
238 U	165	1	195.00	5.17	ppb	0.71	200	95.0	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	295099	0.92	329497	89.6	30 - 120	
45 Sc	1	798746	0.54	923934	86.5	30 - 120	
72 Ge	1	458704	0.57	537691	85.3	30 - 120	
115 In	1	1449786	0.98	1636252	88.6	30 - 120	
165 Ho	1	3084504	0.31	3317690	93.0	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\AG070709B.B\191CALB.D\191CALB.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: 07/08/09 09:50:52

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LF1T1Z** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070709B # 201 | Method 6020_
Acquired: 07/08/2009 03:39:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/08/2009 03:11:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	68089	195.00	-0.11040	97.5	200		☑
7440-62-2	Vanadium	51	1083840	206.10	2.6830	102	200		☐
7440-47-3	Chromium	52	1212510	202.40	3.5130	99.4	200		☑
7439-96-5	Manganese	55	1113340	201.50	2.1070	99.7	200		☑
7440-48-4	Cobalt	59	1605230	186.40	-0.02203	93.2	200		☐
7440-02-0	Nickel	60	365567	180.40	0.28330	90.1	200		☑
7440-50-8	Copper	63	915406	179.90	-0.05712	89.9	200		☐
7440-66-6	Zinc	66	179019	189.50	0.39980	94.6	200		☐
7440-38-2	Arsenic	75	134530	208.70	14.620	97.0	200		☑
7782-49-2	Selenium	78	18293	192.40	0.14900	96.1	200		☑
7439-98-7	Molybdenum	95	485366	201.50	2.8760	99.3	200		☐
7440-22-4	Silver	107	350636	44.660	-0.05164	89.3	50.0		☑
7440-43-9	Cadmium	111	255254	190.00	-0.07286	95.0	200		☑
7440-31-5	Tin	118	598539	174.80	-0.01527	87.4	200		☐
7440-36-0	Antimony	121	744129	193.50	-0.01991	96.8	200		☑
7440-39-3	Barium	137	301297	195.30	3.5770	95.9	200		☑
7440-28-0	Thallium	205	3077580	183.40	-0.02621	91.7	200		☑
7439-92-1	Lead	208	4167550	183.10	-0.03432	91.6	200		☑
7440-61-1	Uranium	238	4940350	195.00	5.1740	94.9	200		☐
7440-29-1	Thorium	232	2814	0.03664	0.23280				
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: 7/8/09

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070709B.B\202 CCV.D\202 CCV.D#
Date Acquired: Jul 8 2009 03:42 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 08 2009 03:15 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	47.32	ppb	4.45	50	94.6	90 - 110	
51 V	72	1	48.56	ppb	2.15	50	97.1	90 - 110	
52 Cr	72	1	48.47	ppb	1.10	50	96.9	90 - 110	
55 Mn	72	1	48.67	ppb	1.05	50	97.3	90 - 110	
59 Co	72	1	47.81	ppb	0.57	50	95.6	90 - 110	
60 Ni	72	1	48.91	ppb	2.39	50	97.8	90 - 110	
63 Cu	72	1	48.60	ppb	0.23	50	97.2	90 - 110	
66 Zn	72	1	49.34	ppb	0.33	50	98.7	90 - 110	
75 As	72	1	48.30	ppb	0.91	50	96.6	90 - 110	
78 Se	72	1	47.24	ppb	3.83	50	94.5	90 - 110	
95 Mo	72	1	48.94	ppb	0.93	50	97.9	90 - 110	
107 Ag	115	1	48.30	ppb	1.69	50	96.6	90 - 110	
111 Cd	115	1	48.40	ppb	0.91	50	96.8	90 - 110	
118 Sn	115	1	49.12	ppb	1.53	50	98.2	90 - 110	
121 Sb	115	1	48.80	ppb	0.84	50	97.6	90 - 110	
137 Ba	115	1	49.06	ppb	1.12	50	98.1	90 - 110	
205 Tl	165	1	49.87	ppb	0.87	50	99.7	90 - 110	
208 Pb	165	1	49.89	ppb	0.70	50	99.8	90 - 110	
232 Th	165	1	49.03	ppb	4.45	50	98.1	90 - 110	
238 U	165	1	50.92	ppb	0.04	50	101.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300696	0.39	329497	91.3	30 - 120	
45 Sc	1	800121	0.63	923934	86.6	30 - 120	
72 Ge	1	474172	0.25	537691	88.2	30 - 120	
115 In	1	1518112	0.41	1636252	92.8	30 - 120	
165 Ho	1	3159432	0.87	3317690	95.2	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\203 CCB.D\203 CCB.D#
Date Acquired: Jul 8 2009 03:44 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 08 2009 03:15 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	-0.073	ppb	22.56	1.00	
51 V	72	1	-0.148	ppb	13.57	1.00	
52 Cr	72	1	-0.089	ppb	20.09	1.00	
55 Mn	72	1	-0.080	ppb	7.45	1.00	
59 Co	72	1	-0.066	ppb	7.61	1.00	
60 Ni	72	1	-0.058	ppb	13.80	1.00	
63 Cu	72	1	-0.087	ppb	11.82	1.00	
66 Zn	72	1	-0.044	ppb	19.48	1.00	
75 As	72	1	-0.050	ppb	50.18	1.00	
78 Se	72	1	0.148	ppb	196.07	1.00	
95 Mo	72	1	-0.064	ppb	34.61	1.00	
107 Ag	115	1	-0.046	ppb	7.97	1.00	
111 Cd	115	1	-0.062	ppb	4.81	1.00	
118 Sn	115	1	0.151	ppb	2.16	1.00	
121 Sb	115	1	0.041	ppb	24.96	1.00	
137 Ba	115	1	-0.069	ppb	2.93	1.00	
205 Tl	165	1	-0.047	ppb	4.47	1.00	
208 Pb	165	1	-0.069	ppb	2.47	1.00	
232 Th	165	1	1.189	ppb	15.23	1.00	Fail
238 U	165	1	-0.059	ppb	2.72	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300372	0.94	329497	91.2	30 - 120	
45 Sc	1	824755	0.34	923934	89.3	30 - 120	
72 Ge	1	487346	0.22	537691	90.6	30 - 120	
115 In	1	1530334	0.08	1636252	93.5	30 - 120	
165 Ho	1	3250949	0.58	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\204WASH.D\204WASH.D#
Date Acquired:	Jul 8 2009 03:47 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 08 2009 03:15 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	0.887 ppb	13.84	1.30	
51 V	72	1	4.966 ppb	1.32	6.50	
52 Cr	72	1	1.952 ppb	4.40	2.60	
55 Mn	72	1	0.945 ppb	4.12	1.30	
59 Co	72	1	0.923 ppb	1.79	1.30	
60 Ni	72	1	1.869 ppb	6.37	2.60	
63 Cu	72	1	1.957 ppb	3.56	2.60	
66 Zn	72	1	10.410 ppb	1.14	13.00	
75 As	72	1	4.964 ppb	3.35	6.50	
78 Se	72	1	4.239 ppb	29.58	6.50	
95 Mo	72	1	1.941 ppb	1.48	2.60	
107 Ag	115	1	5.096 ppb	0.81	6.50	
111 Cd	115	1	0.983 ppb	4.20	1.30	
118 Sn	115	1	10.320 ppb	1.14	13.00	
121 Sb	115	1	1.875 ppb	1.91	2.60	
137 Ba	115	1	0.954 ppb	4.91	1.30	
205 Tl	165	1	1.003 ppb	1.63	1.30	
208 Pb	165	1	0.988 ppb	1.52	1.30	
232 Th	165	1	2.372 ppb	1.00	2.60	
238 U	165	1	1.026 ppb	1.50	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	296961	0.40	329497	90.1	30 - 120	
45 Sc	1	804867	0.71	923934	87.1	30 - 120	
72 Ge	1	480975	0.57	537691	89.5	30 - 120	
115 In	1	1508499	0.40	1636252	92.2	30 - 120	
165 Ho	1	3156976	0.99	3317690	95.2	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\AG070709B.B\191CALB.D\191CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Spiked Sample (MS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\205_MS.D\205_MS.D#
Date Acquired:	Jul 8 2009 03:50 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1T1S 10X
Misc Info:	MATRIX SPIKE
Vial Number:	3509
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	3.75	-0.11	ppb	4.17	40	9.4	50 - 150	
51 V	72	1	6.95	2.68	ppb	4.03	40	16.3	50 - 150	
52 Cr	72	1	7.67	3.51	ppb	1.78	40	17.6	50 - 150	
55 Mn	72	1	6.18	2.11	ppb	1.38	40	14.7	50 - 150	
59 Co	72	1	3.84	-0.02	ppb	1.21	40	9.6	50 - 150	
60 Ni	72	1	4.04	0.28	ppb	3.33	40	10.0	50 - 150	
63 Cu	72	1	3.74	-0.06	ppb	0.63	40	9.4	50 - 150	
66 Zn	72	1	4.77	0.40	ppb	2.06	40	11.8	50 - 150	
75 As	72	1	19.07	14.62	ppb	1.00	40	34.9	50 - 150	
78 Se	72	1	4.80	0.15	ppb	15.90	40	12.0	50 - 150	
95 Mo	72	1	6.83	2.88	ppb	2.62	40	15.9	50 - 150	
107 Ag	115	1	3.76	-0.05	ppb	4.01	40	9.4	50 - 150	
111 Cd	115	1	3.95	-0.07	ppb	0.84	40	9.9	50 - 150	
118 Sn	115	1	0.04	-0.02	ppb	46.43	40	0.1	50 - 150	
121 Sb	115	1	4.16	-0.02	ppb	1.15	40	10.4	50 - 150	
137 Ba	115	1	7.82	3.58	ppb	1.25	40	17.9	50 - 150	
205 Tl	165	1	4.00	-0.03	ppb	1.75	40	10.0	50 - 150	
208 Pb	165	1	3.90	-0.03	ppb	0.41	40	9.7	50 - 150	
232 Th	165	1	4.37	0.23	ppb	1.58	40	10.9	50 - 150	
238 U	165	1	9.47	5.17	ppb	0.53	40	21.0	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	291491	1.20	329497	88.5	30 - 120	
45 Sc	1	807321	0.80	923934	87.4	30 - 120	
72 Ge	1	464643	0.54	537691	86.4	30 - 120	
115 In	1	1450544	1.06	1636252	88.7	30 - 120	
165 Ho	1	3126884	0.81	3317690	94.2	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\206 MSD.D\206 MSD.D#
Date Acquired: Jul 8 2009 03:53 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1T1D 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3510
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 03:15 am
Sample Type: MSD
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070709B.B\205 MS.D\205 MS.D#

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	3.96	ppb	5.95	3.75	5.37	20	
51 V	72	1	6.72	ppb	1.77	6.95	3.38	20	
52 Cr	72	1	7.43	ppb	0.96	7.67	3.13	20	
55 Mn	72	1	6.04	ppb	1.66	6.18	2.23	20	
59 Co	72	1	3.82	ppb	1.52	3.84	0.50	20	
60 Ni	72	1	4.01	ppb	3.51	4.04	0.87	20	
63 Cu	72	1	3.60	ppb	1.79	3.74	3.68	20	
66 Zn	72	1	4.45	ppb	2.73	4.76	6.93	20	
75 As	72	1	18.88	ppb	0.50	19.07	1.00	20	
78 Se	72	1	5.03	ppb	3.39	4.80	4.64	20	
95 Mo	72	1	6.94	ppb	1.78	6.83	1.58	20	
107 Ag	115	1	3.78	ppb	2.01	3.76	0.61	20	
111 Cd	115	1	3.99	ppb	0.62	3.95	0.91	20	
118 Sn	115	1	-0.01	ppb	50.03	0.04	390.80	20	
121 Sb	115	1	4.12	ppb	2.27	4.16	0.97	20	
137 Ba	115	1	7.61	ppb	0.56	7.82	2.66	20	
205 Tl	165	1	3.93	ppb	0.97	4.00	1.94	20	
208 Pb	165	1	3.92	ppb	1.72	3.90	0.67	20	
232 Th	165	1	4.29	ppb	1.48	4.37	1.85	20	
238 U	165	1	9.40	ppb	1.00	9.47	0.70	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	295331	0.98	329497	89.6	30 - 120	
45 Sc	1	812994	0.19	923934	88.0	30 - 120	
72 Ge	1	471214	0.24	537691	87.6	30 - 120	
115 In	1	1474525	0.10	1636252	90.1	30 - 120	
165 Ho	1	3150130	0.66	3317690	94.9	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\207SMPL.D\207SMPL.D#
Date Acquired:	Jul 8 2009 03:56 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1T6 10X
Misc Info:	D9G020221
Vial Number:	3511
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.10	-0.11	ppb	14.76	3600	
51 V	72	1	-10.24	-1.02	ppb	48.40	3600	
52 Cr	72	1	1,146.00	114.60	ppb	1.16	3600	
55 Mn	72	1	13.07	1.31	ppb	2.67	3600	
59 Co	72	1	-0.30	-0.03	ppb	34.55	3600	
60 Ni	72	1	2.50	0.25	ppb	18.96	3600	
63 Cu	72	1	-0.67	-0.07	ppb	36.84	3600	
66 Zn	72	1	25.23	2.52	ppb	2.67	3600	
75 As	72	1	103.70	10.37	ppb	2.32	3600	
78 Se	72	1	8.03	0.80	ppb	86.08	3600	
95 Mo	72	1	25.07	2.51	ppb	3.73	3600	
107 Ag	115	1	-0.52	-0.05	ppb	9.10	3600	
111 Cd	115	1	-0.80	-0.08	ppb	11.66	3600	
118 Sn	115	1	-0.09	-0.01	ppb	370.24	3600	
121 Sb	115	1	-0.32	-0.03	ppb	11.33	3600	
137 Ba	115	1	37.49	3.75	ppb	3.03	3600	
205 Tl	165	1	-0.06	-0.01	ppb	153.28	3600	
208 Pb	165	1	-0.69	-0.07	ppb	3.12	3600	
232 Th	165	1	1.49	0.15	ppb	14.85	1000	
238 U	165	1	36.87	3.69	ppb	2.59	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299657	0.37	329497	90.9	30 - 120	
45 Sc	1	842209	2.69	923934	91.2	30 - 120	
72 Ge	1	488819	0.90	537691	90.9	30 - 120	
115 In	1	1505724	1.38	1636252	92.0	30 - 120	
165 Ho	1	3258359	1.30	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\208SMPL.D\208SMPL.D#
Date Acquired:	Jul 8 2009 03:58 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1VJ 10X
Misc Info:	D9G020227
Vial Number:	3512
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.10	-0.11	ppb	15.22	3600	
51 V	72	1	-427.80	-42.78	ppb	7.41	3600	
52 Cr	72	1	11,230.00	1123.00	ppb	0.84	3600	
55 Mn	72	1	21.53	2.15	ppb	4.11	3600	
59 Co	72	1	-0.31	-0.03	ppb	7.40	3600	
60 Ni	72	1	3.02	0.30	ppb	6.37	3600	
63 Cu	72	1	-0.52	-0.05	ppb	22.39	3600	
66 Zn	72	1	1.37	0.14	ppb	23.30	3600	
75 As	72	1	103.60	10.36	ppb	0.84	3600	
78 Se	72	1	6.32	0.63	ppb	86.78	3600	
95 Mo	72	1	15.81	1.58	ppb	5.44	3600	
107 Ag	115	1	-0.52	-0.05	ppb	6.45	3600	
111 Cd	115	1	-0.47	-0.05	ppb	26.18	3600	
118 Sn	115	1	-0.15	-0.02	ppb	120.07	3600	
121 Sb	115	1	-0.26	-0.03	ppb	25.25	3600	
137 Ba	115	1	34.45	3.45	ppb	2.28	3600	
205 Tl	165	1	-0.50	-0.05	ppb	2.50	3600	
208 Pb	165	1	-0.68	-0.07	ppb	3.22	3600	
232 Th	165	1	-0.02	0.00	ppb	286.46	1000	
238 U	165	1	45.31	4.53	ppb	0.22	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291984	0.51	329497	88.6	30 - 120	
45 Sc	1	815966	1.80	923934	88.3	30 - 120	
72 Ge	1	472962	0.83	537691	88.0	30 - 120	
115 In	1	1433448	0.71	1636252	87.6	30 - 120	
165 Ho	1	3081614	0.18	3317690	92.9	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\209SMPL.D\209SMPL.D#
Date Acquired:	Jul 8 2009 04:01 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1V5 10X
Misc Info:	D9G020227
Vial Number:	4101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-0.62	-0.06	ppb	0.57	3600	
51 V	72	1	-216.50	-21.65	ppb	9.09	3600	
52 Cr	72	1	10,330.00	1033.00	ppb	0.77	3600	
55 Mn	72	1	691.40	69.14	ppb	1.09	3600	
59 Co	72	1	6.06	0.61	ppb	3.72	3600	
60 Ni	72	1	5.38	0.54	ppb	6.96	3600	
63 Cu	72	1	5.00	0.50	ppb	7.24	3600	
66 Zn	72	1	12.79	1.28	ppb	0.55	3600	
75 As	72	1	757.00	75.70	ppb	0.81	3600	
78 Se	72	1	7.69	0.77	ppb	139.98	3600	
95 Mo	72	1	46.91	4.69	ppb	5.34	3600	
107 Ag	115	1	0.04	0.00	ppb	353.81	3600	
111 Cd	115	1	-0.33	-0.03	ppb	93.08	3600	
118 Sn	115	1	-0.21	-0.02	ppb	58.27	3600	
121 Sb	115	1	0.07	0.01	ppb	57.53	3600	
137 Ba	115	1	42.06	4.21	ppb	2.69	3600	
205 Tl	165	1	-0.55	-0.06	ppb	4.17	3600	
208 Pb	165	1	4.01	0.40	ppb	2.47	3600	
232 Th	165	1	4.96	0.50	ppb	1.87	1000	
238 U	165	1	35.55	3.56	ppb	1.34	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291934	0.60	329497	88.6	30 - 120	
45 Sc	1	828690	2.38	923934	89.7	30 - 120	
72 Ge	1	480972	0.44	537691	89.5	30 - 120	
115 In	1	1454738	0.51	1636252	88.9	30 - 120	
165 Ho	1	3140633	0.74	3317690	94.7	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\210 CCV.D\210 CCV.D#
Date Acquired:	Jul 8 2009 04:04 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 08 2009 03:15 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	50.82	ppb	1.57	50	101.6	90 - 110	
51 V	72	1	49.34	ppb	0.26	50	98.7	90 - 110	
52 Cr	72	1	49.37	ppb	0.73	50	98.7	90 - 110	
55 Mn	72	1	50.56	ppb	1.15	50	101.1	90 - 110	
59 Co	72	1	48.48	ppb	0.89	50	97.0	90 - 110	
60 Ni	72	1	49.80	ppb	0.71	50	99.6	90 - 110	
63 Cu	72	1	49.25	ppb	0.53	50	98.5	90 - 110	
66 Zn	72	1	50.70	ppb	0.24	50	101.4	90 - 110	
75 As	72	1	49.26	ppb	0.85	50	98.5	90 - 110	
78 Se	72	1	51.19	ppb	1.61	50	102.4	90 - 110	
95 Mo	72	1	50.57	ppb	1.21	50	101.1	90 - 110	
107 Ag	115	1	49.35	ppb	1.30	50	98.7	90 - 110	
111 Cd	115	1	50.91	ppb	0.42	50	101.8	90 - 110	
118 Sn	115	1	49.92	ppb	1.35	50	99.8	90 - 110	
121 Sb	115	1	49.57	ppb	1.16	50	99.1	90 - 110	
137 Ba	115	1	50.10	ppb	1.48	50	100.2	90 - 110	
205 Tl	165	1	51.01	ppb	1.27	50	102.0	90 - 110	
208 Pb	165	1	51.01	ppb	1.29	50	102.0	90 - 110	
232 Th	165	1	51.10	ppb	2.12	50	102.2	90 - 110	
238 U	165	1	52.44	ppb	1.67	50	104.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	290919	0.87	329497	88.3	30 - 120	
45 Sc	1	797863	1.14	923934	86.4	30 - 120	
72 Ge	1	473414	0.73	537691	88.0	30 - 120	
115 In	1	1534632	0.69	1636252	93.8	30 - 120	
165 Ho	1	3241962	0.77	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\211 CCB.D\211 CCB.D#
Date Acquired: Jul 8 2009 04:07 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 08 2009 03:15 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	-0.120	ppb	0.00	1.00	
51 V	72	1	-0.121	ppb	15.11	1.00	
52 Cr	72	1	-0.037	ppb	24.93	1.00	
55 Mn	72	1	-0.073	ppb	10.41	1.00	
59 Co	72	1	-0.062	ppb	2.00	1.00	
60 Ni	72	1	-0.053	ppb	35.25	1.00	
63 Cu	72	1	-0.091	ppb	18.75	1.00	
66 Zn	72	1	-0.021	ppb	122.48	1.00	
75 As	72	1	-0.049	ppb	17.16	1.00	
78 Se	72	1	0.122	ppb	169.07	1.00	
95 Mo	72	1	-0.076	ppb	31.52	1.00	
107 Ag	115	1	-0.046	ppb	3.98	1.00	
111 Cd	115	1	-0.065	ppb	10.94	1.00	
118 Sn	115	1	0.058	ppb	18.79	1.00	
121 Sb	115	1	0.008	ppb	61.48	1.00	
137 Ba	115	1	-0.070	ppb	10.54	1.00	
205 Tl	165	1	-0.047	ppb	3.11	1.00	
208 Pb	165	1	-0.070	ppb	3.70	1.00	
232 Th	165	1	1.201	ppb	19.06	1.00	
238 U	165	1	-0.060	ppb	1.69	1.00	Fail

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	292571	0.74	329497	88.8	30 - 120	
45 Sc	1	820202	1.06	923934	88.8	30 - 120	
72 Ge	1	484175	0.35	537691	90.0	30 - 120	
115 In	1	1551306	0.26	1636252	94.8	30 - 120	
165 Ho	1	3263240	0.37	3317690	98.4	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\212WASH.D\212WASH.D#
Date Acquired: Jul 8 2009 04:09 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 08 2009 03:15 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	1.102 ppb	18.90	1.30	
51 V	72	1	4.865 ppb	2.31	6.50	
52 Cr	72	1	1.920 ppb	1.31	2.60	
55 Mn	72	1	0.925 ppb	5.60	1.30	
59 Co	72	1	0.937 ppb	4.37	1.30	
60 Ni	72	1	2.066 ppb	9.04	2.60	
63 Cu	72	1	1.864 ppb	2.35	2.60	
66 Zn	72	1	10.360 ppb	1.59	13.00	
75 As	72	1	4.955 ppb	2.38	6.50	
78 Se	72	1	5.032 ppb	13.31	6.50	
95 Mo	72	1	1.911 ppb	2.92	2.60	
107 Ag	115	1	4.974 ppb	1.05	6.50	
111 Cd	115	1	1.018 ppb	3.35	1.30	
118 Sn	115	1	10.310 ppb	0.54	13.00	
121 Sb	115	1	1.864 ppb	1.05	2.60	
137 Ba	115	1	0.974 ppb	2.37	1.30	
205 Tl	165	1	1.015 ppb	1.27	1.30	
208 Pb	165	1	0.991 ppb	0.79	1.30	
232 Th	165	1	2.366 ppb	1.17	2.60	
238 U	165	1	1.019 ppb	1.46	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	290814	0.85	329497	88.3	30 - 120	
45 Sc	1	819634	0.45	923934	88.7	30 - 120	
72 Ge	1	487158	0.50	537691	90.6	30 - 120	
115 In	1	1561344	0.94	1636252	95.4	30 - 120	
165 Ho	1	3289382	0.12	3317690	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\AG070709B.B\191CALB.D\191CALB.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: D9G020227

Client: Northgate Environmental

Batch(es) #: 9187175, 9187169

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: 7/8/09

Metals Raw Data RoadMap

LotID		*Metal*	*WorkOrder*	*Anal Date*	*TestDesc*	*Batch*	*File Id*	*Instr*
D9G020227	1	SE	LF1VJ1AC	20090708	6020TOTA	9187169	AG070709B	024
D9G020227	1	AS	LF1VJ1AA	20090708	6020TOTA	9187169	AG070709B	024
D9G020227	2	SE	LF1V51AC	20090708	6020TOTA	9187169	AG070709B	024
D9G020227	2	AS	LF1V51AA	20090708	6020TOTA	9187169	AG070709B	024
D9G020227	3 D	SE	LF1WA1A	20090708	6020DSVD	9187175	AG070709B	024
D9G020227	3 S	SE	LF1WA1AF	20090708	6020DSVD	9187175	AG070709B	024
D9G020227	3 D	AS	LF1WA1AE	20090708	6020DSVD	9187175	AG070709B	024
D9G020227	3 S	AS	LF1WA1AD	20090708	6020DSVD	9187175	AG070709B	024
D9G020227	3	SE	LF1WA1AC	20090708	6020DSVD	9187175	AG070709B	024
D9G020227	3	AS	LF1WA1AA	20090708	6020DSVD	9187175	AG070709B	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: 9187175

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 07/07/09
Due Date: 07/14/09

Lot	Work Order			Initial Weight/Volume
D9G060000 Water	**LF30G**	B	Due Date: SDG:	50 mL
D9G060000 Water	**LF30G**	C	Due Date: SDG:	50 mL
D9G020221 Water	**LF1T5** Dissolved		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1WA** Dissolved		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1WA** Dissolved	S	Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1WA** Dissolved	D	Due Date: 07/14/09 SDG: 8304609	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

VV checked 7/7/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

DISSOLVED WATER DIGESTION FOR ICPMS (Prep code MD)

BATCH # 9187175 **ALLIQUOTTED BY:** JRW
PREP DATE: 7/7/2009 **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: 282 Block & Cup # : 4,8

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3/HCl	6:00	92	11:00	94

Samples and QC revolumed to: 50 mL Analyst's Initials KS

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kim Hamm ***Date:*** 7/7/09

Batch Number: **9187169**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JON HARRE

Prep Date: 07/07/09
Due Date: 07/13/09

Lot	Work Order			Initial Weight/Volume
D9G060000 Water	**LF3X8**	B	Due Date: SDG:	50 mL
D9G060000 Water	**LF3X8**	C	Due Date: SDG:	50 mL
D9G010276 Water	**LFX9W** Total		Due Date: 07/13/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T1** Total		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T1** Total	S	Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T1** Total	D	Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020221 Water	**LF1T6** Total		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1VJ** Total		Due Date: 07/14/09 SDG: 8304609	50 mL
D9G020227 Water	**LF1V5** Total		Due Date: 07/14/09 SDG: 8304609	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

WT checked 7/7/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH #	9187169	**ALLIQUOTTED BY:**	JRW
PREP DATE:	7/7/2009	**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: 25894 Block & Cup # : 2, 9

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	6:00	91	10:20	92
HNO3	10:30	92	11:00	91
HNO3				

Samples and QC revolumed to: 50 mL Analyst's Initials JKH

COMMENTS:

I certify that all information above is correct and complete.

Signature: Kri Hare ***Date:*** 7/7/09

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-07-2009

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

STD3847-09, ICP-MS ICSA

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 06-25-2009
Date Expires(1): 07-25-2009 (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

STD4008-09, ICP-MS (024) INT STD BRC-HIGH

Analyst: LILLT

Solvent: 5% HNO3 Lot No.: H12022
Volume (ml): 250.00
Date Prep./Opened: 07-02-2009
Date Expires(1): 11-10-2009 (1 Year)
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

STD4039-09, ICP-MS BLANK

Analyst: DIAZL

Solvent: Water
Volume (ml): 1,000.0
Date Prep./Opened: 07-07-2009
Date Expires(1): 08-07-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD4040-09, NITRIC ACID
Aliquot Amount (ml): 50.000

Component	Initial Conc (%)	Final Conc (%)
HNO3	100.00	5.0000

STD4041-09, ICP-MS 10 ppm Sn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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

STD4042-09, ICP-MS 100 ppb cal

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (1 Day)
Date Expires(2): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4043-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 100.00
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	50.000

STD4044-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4042-09, ICP-MS 100 ppb cal Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 07-08-2009

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

STD4045-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (2 Days)
pipettes: Met 20 and Met 8

Parent Std No.: STD4044-09, 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

STD4046-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	100.00

STD4047-09, ICPMS LR STD 1000 ppb Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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.: STD4041-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 07-08-2009 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Sn	10.000	1,000.0

STD4048-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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

STD4049-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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

STD4050-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 07-07-2009
Date Expires(1): 07-08-2009 (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 07/07/2009

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
2	Cal Blank				1.0	07/07/09 18:29		☐
3	Cal Blank				1.0	07/07/09 18:32		☐
4	100 ppb				1.0	07/07/09 18:35		☐
5	ICV				1.0	07/07/09 18:38		☐
6	RLIV				1.0	07/07/09 18:40		☐
7	ICB				1.0	07/07/09 18:43		☐
8	RL STD				1.0	07/07/09 18:46		☐
9	AFCEE RL				1.0	07/07/09 18:49		☐
10	ALTSe				1.0	07/07/09 18:51		☐
11	ICSA				1.0	07/07/09 18:54		☐
12	ICSAB				1.0	07/07/09 18:57		☐
13	RINSE				1.0	07/07/09 18:59		☐
14	LR				1.0	07/07/09 19:02		☐
15	RINSE				1.0	07/07/09 19:05		☐
16	CCV				1.0	07/07/09 19:08		☐
17	CCB				1.0	07/07/09 19:10		☐
18	RLCV				1.0	07/07/09 19:13		☐
19	IDL 1				1.0	07/07/09 19:16		☐
20	IDL 2				1.0	07/07/09 19:19		☐
21	IDL 3				1.0	07/07/09 19:21		☐
22	IDL 4				1.0	07/07/09 19:24		☐
23	IDL 5				1.0	07/07/09 19:27		☐
24	IDL 6				1.0	07/07/09 19:30		☐
25	IDL 7				1.0	07/07/09 19:32		☐
26	CCV				1.0	07/07/09 19:35		☐
27	CCB				1.0	07/07/09 19:38		☐
28	RLCV				1.0	07/07/09 19:41		☐
29	~~LR STD 1~~				~~1.0~~	~~07/07/09 19:43~~		☐
30	RINSE				1.0	07/07/09 19:46		☐
31	LR STD 2				1.0	07/07/09 19:49		☐
32	RINSE				1.0	07/07/09 19:52		☐
33	LR STD 3				1.0	07/07/09 19:54		☐
34	RINSE				1.0	07/07/09 19:57		☐
35	LR STD 4				1.0	07/07/09 20:00		☐
36	RINSE				1.0	07/07/09 20:02		☐
37	LR STD Mn				1.0	07/07/09 20:05		☐
38	RINSE				1.0	07/07/09 20:08		☐
39	LF0EDB	D9G010000	9182405	46	1.0	07/07/09 20:10		☐
40	LF0EDC	D9G010000	9182405	46	1.0	07/07/09 20:13		☐
41	LFNQ3	D9F260154-1	9182405	46	1.0	07/07/09 20:16		☐
42	~~LFNTW~~	~~D9F260154-2~~	~~9182405~~	~~46~~	~~1.0~~	~~07/07/09 20:19~~	VT 7/8/09 Did not use.	☐
43	CCV				1.0	07/07/09 20:21		☐
44	CCB				1.0	07/07/09 20:24		☐
45	RLCV				1.0	07/07/09 20:27		☐
46	LR STD 1				1.0	07/07/09 20:30		☐
47	RINSE				1.0	07/07/09 20:32		☐

Denver RUN SUMMARY

Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
48	LR STD 2				1.0	07/07/09 20:35		☐
49	RINSE				1.0	07/07/09 20:38		☐
50	LR STD 3				1.0	07/07/09 20:41		☐
51	RINSE				1.0	07/07/09 20:43		☐
52	LR STD 4				1.0	07/07/09 20:46		☐
53	RINSE				1.0	07/07/09 20:48		☐
54	LR STD Mn				1.0	07/07/09 20:51		☐
55	RINSE				1.0	07/07/09 20:54		☐
56	CCV				1.0	07/07/09 20:57		☐
57	CCB				1.0	07/07/09 20:59		☐
58	RLCV				1.0	07/07/09 21:02		☐
59	~~LF0EDB~~	~~D9G010000~~	~~9182405~~	~~46~~	~~1.0~~	~~07/07/09 21:05~~		☐
60	~~LF0EDC~~	~~D9G010000~~	~~9182405~~	~~46~~	~~1.0~~	~~07/07/09 21:08~~	KK 7/8/09 Did not use.	☐
61	LF0EDB	D9G010000	9182405	46	1.0	07/07/09 21:13		☐
62	LF0EDC	D9G010000	9182405	46	1.0	07/07/09 21:15		☐
63	LFNQ3	D9F260154-1	9182405	46	1.0	07/07/09 21:18		☐
64	LFNTW	D9F260154-2	9182405	46	1.0	07/07/09 21:21		☐
65	LFNT5	D9F260154-3	9182405	46	1.0	07/07/09 21:24		☐
66	LFNT7	D9F260154-4	9182405	46	1.0	07/07/09 21:26		☐
67	LFNVD	D9F260154-5	9182405	46	1.0	07/07/09 21:29		☐
68	LFNVM	D9F260154-6	9182405	46	1.0	07/07/09 21:32		☐
69	CCV				1.0	07/07/09 21:35		☐
70	CCB				1.0	07/07/09 21:37		☐
71	RLCV				1.0	07/07/09 21:40		☐
72	LFNVT	D9F260154-7	9182405	46	1.0	07/07/09 21:43		☐
73	LFNVW	D9F260154-8	9182405	46	1.0	07/07/09 21:46		☐
74	LFV0G	D9F300202-1	9182405	46	1.0	07/07/09 21:48		☐
75	LFV05	D9F300202-3	9182405	46	1.0	07/07/09 21:51		☐
76	LFV1G	D9F300202-4	9182405	46	1.0	07/07/09 21:54		☐
77	LFV1GP5	D9F300202	9182405		5.0	07/07/09 21:57		☐
78	LFV1GZ	D9F300202-4	9182405		1.0	07/07/09 21:59		☐
79	LFV1GS	D9F300202-4	9182405	46	1.0	07/07/09 22:02		☐
80	LFV1GD	D9F300202-4	9182405	46	1.0	07/07/09 22:05		☐
81	LFV13	D9F300202-5	9182405	46	1.0	07/07/09 22:07		☐
82	CCV				1.0	07/07/09 22:10		☐
83	CCB				1.0	07/07/09 22:13		☐
84	RLCV				1.0	07/07/09 22:16		☐
85	LF1RVB	D9G020000	9183315	MS	1.0	07/07/09 22:19		☐
86	LF1RVC	D9G020000	9183315	MS	1.0	07/07/09 22:21		☐
87	LFXPK 2X	D9G010186-16	9183315	MS	2.0	07/07/09 22:24		☐
88	LFXPKP10	D9G010186	9183315		10.0	07/07/09 22:27		☐
89	LFXPKZ	D9G010186-16	9183315		1.0	07/07/09 22:30		☐
90	LFXPKS 2X	D9G010186-16	9183315	MS	2.0	07/07/09 22:32		☐
91	CCV				1.0	07/07/09 22:35		☐
92	CCB				1.0	07/07/09 22:38		☐
93	RLCV				1.0	07/07/09 22:41		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
94	LFXPKD 2X	D9G010186-16	9183315	MS	2.0	07/07/09 22:43		☐
95	LFXPL 2X	D9G010186-17	9183315	MS	2.0	07/07/09 22:46		☐
96	LFXPM 2X	D9G010186-18	9183315	MS	2.0	07/07/09 22:49		☐
97	LFXPN 2X	D9G010186-19	9183315	MS	2.0	07/07/09 22:52		☐
98	LFXPP 2X	D9G010186-20	9183315	MS	2.0	07/07/09 22:55		☐
99	LFXPQ 2X	D9G010186-21	9183315	MS	2.0	07/07/09 22:57		☐
100	CCV				1.0	07/07/09 23:00		☐
101	CCB				1.0	07/07/09 23:03		☐
102	RLCV				1.0	07/07/09 23:06		☐
103	LF3W3B	D9G060000	9187133	MS	1.0	07/07/09 23:08		☐
104	LF3W3C	D9G060000	9187133	MS	1.0	07/07/09 23:11		☐
105	LF1JL	D9G020188-1	9187133	MS	1.0	07/07/09 23:14		☐
106	LF1KR	D9G020188-2	9187133	MS	1.0	07/07/09 23:17	-Take all but Mn. 7/8/09	☐
107	LF1KT	D9G020188-3	9187133	MS	1.0	07/07/09 23:19		☐
108	LF1KW	D9G020188-4	9187133	MS	1.0	07/07/09 23:22		☐
109	LF1KX	D9G020188-5	9187133	MS	1.0	07/07/09 23:25		☐
110	LF1K1	D9G020188-6	9187133	MS	1.0	07/07/09 23:28		☐
111	LF1K2	D9G020188-7	9187133	MS	1.0	07/07/09 23:30		☐
112	CCV				1.0	07/07/09 23:33		☐
113	CCB				1.0	07/07/09 23:36		☐
114	RLCV				1.0	07/07/09 23:39		☐
115	~~LF1K3~~	~~D9G020188-8~~	~~9187133~~	~~MS~~	~~1.0~~	~~07/07/09 23:42~~		☐
116	LF1K6	D9G020188-9	9187133	MS	1.0	07/07/09 23:44		☐
117	LF1NP	D9G020199-1	9187133	MS	1.0	07/07/09 23:47		☐
118	LF1NPP5	D9G020199	9187133		5.0	07/07/09 23:50		☐
119	LF1NPZ	D9G020199-1	9187133		1.0	07/07/09 23:53		☐
120	LF1NPS	D9G020199-1	9187133	MS	1.0	07/07/09 23:55		☐
121	LF1NPD	D9G020199-1	9187133	MS	1.0	07/07/09 23:58		☐
122	LF165	D9G020272-1	9187133	MS	1.0	07/08/09 00:01		☐
123	LF18E	D9G020272-2	9187133	MS	1.0	07/08/09 00:04		☐
124	CCV				1.0	07/08/09 00:07		☐
125	CCB				1.0	07/08/09 00:09		☐
126	RLCV				1.0	07/08/09 00:12		☐
127	RINSE				1.0	07/08/09 00:15		☐
128	RINSE				1.0	07/08/09 00:18		☐
129	RINSE				1.0	07/08/09 00:20		☐
130	RINSE				1.0	07/08/09 00:23		☐
131	RINSE				1.0	07/08/09 00:26		☐
132	RINSE				1.0	07/08/09 00:28		☐
133	~~Cal Blank~~				~~1.0~~	~~07/08/09 00:31~~	7/8/09 Did not use.	☐
134	Cal Blank				1.0	07/08/09 00:34		☐
135	100 ppb				1.0	07/08/09 00:37		☐
136	CCV				1.0	07/08/09 00:39		☐
137	CCB				1.0	07/08/09 00:42		☐
138	RLCV				1.0	07/08/09 00:45		☐
139	LF3WAB	D9G060000	9187106	04	1.0	07/08/09 00:48		☐

Denver RUN SUMMARY

Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
140	LF3WAC	D9G060000	9187106	04	1.0	07/08/09 00:51		☐
141	LFXTT	D9G010202-1	9187106	04	1.0	07/08/09 00:53		☐
142	LF1JG	D9G020189-1	9187106	04	1.0	07/08/09 00:56		☐
143	LF1KV	D9G020189-3	9187106	04	1.0	07/08/09 00:59		☐
144	LF1K5	D9G020189-5	9187106	04	1.0	07/08/09 01:02		☐
145	LF1LC	D9G020189-7	9187106	04	1.0	07/08/09 01:04		☐
146	LF1LF	D9G020189-9	9187106	04	1.0	07/08/09 01:07		☐
147	CCV				1.0	07/08/09 01:10		☐
148	CCB				1.0	07/08/09 01:13		☐
149	RLCV				1.0	07/08/09 01:16		☐
150	LF1LK	D9G020189-11	9187106	04	1.0	07/08/09 01:18		☐
151	LF1LN	D9G020189-13	9187106	04	1.0	07/08/09 01:21		☐
152	LF1LNP5	D9G020189	9187106		5.0	07/08/09 01:24		☐
153	LF1LNZ	D9G020189-13	9187106		1.0	07/08/09 01:27		☐
154	LF1LNS	D9G020189-13	9187106	04	1.0	07/08/09 01:29		☐
155	LF1LND	D9G020189-13	9187106	04	1.0	07/08/09 01:32		☐
156	LF1LT	D9G020189-15	9187106	04	1.0	07/08/09 01:35		☐
157	LF1LW	D9G020189-17	9187106	04	1.0	07/08/09 01:38		☐
158	CCV				1.0	07/08/09 01:40		☐
159	CCB				1.0	07/08/09 01:43		☐
160	RLCV				1.0	07/08/09 01:46		☐
161	LF315BF	D9G060000	9187204	MD	1.0	07/08/09 01:49		☐
162	LF315CF	D9G060000	9187204	MD	1.0	07/08/09 01:51		☐
163	LF1XCF	D9G020230-9	9187204	MD	1.0	07/08/09 01:54		☐
164	LF1XFF	D9G020230-10	9187204	MD	1.0	07/08/09 01:57		☐
165	LF1XHF	D9G020230-11	9187204	MD	1.0	07/08/09 02:00		☐
166	LF1XHP5F	D9G020230	9187204		5.0	07/08/09 02:02		☐
167	LF1XHZF	D9G020230-11	9187204		1.0	07/08/09 02:05		☐
168	LF1XHSF	D9G020230-11	9187204	MD	1.0	07/08/09 02:08		☐
169	LF1XHDF	D9G020230-11	9187204	MD	1.0	07/08/09 02:11		☐
170	CCV				1.0	07/08/09 02:13		☐
171	CCB				1.0	07/08/09 02:16		☐
172	RLCV				1.0	07/08/09 02:19		☐
173	LF30GBF	D9G060000	9187175	MD	1.0	07/08/09 02:22		☐
174	LF30GCF	D9G060000	9187175	MD	1.0	07/08/09 02:25		☐
175	LF1T5F 10X	D9G020221-2	9187175	MD	10.0	07/08/09 02:27		☐
176	LF1WAF 10X	D9G020227-3	9187175	MD	10.0	07/08/09 02:30		☐
177	LF1WAP50F	D9G020227	9187175		50.0	07/08/09 02:33		☐
178	LF1WAZF	D9G020227-3	9187175		1.0	07/08/09 02:36		☐
179	LF1WASF 10	D9G020227-3	9187175	MD	10.0	07/08/09 02:38		☐
180	LF1WADF 10	D9G020227-3	9187175	MD	10.0	07/08/09 02:41		☐
181	CCV				1.0	07/08/09 02:44		☐
182	CCB				1.0	07/08/09 02:47		☐
183	RLCV				1.0	07/08/09 02:49		☐
184	~~RINSE~~				~~1.0~~	~~07/08/09 02:52~~		☐
185	RINSE				~~1.0~~	~~07/08/09 02:55~~	7/8/09	☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
186	~~RINSE~~				~~1.0~~	~~07/08/09 02:58~~		☐
187	RINSE				1.0	07/08/09 03:00		☐
188	RINSE				1.0	07/08/09 03:03		☐
189	RINSE				1.0	07/08/09 03:06		☐
190	~~Cal Blank~~				~~1.0~~	~~07/08/09 03:09~~	WF 7/8/09	☐
191	Cal Blank				1.0	07/08/09 03:11		☐
192	100 ppb				1.0	07/08/09 03:14		☐
193	CCV				1.0	07/08/09 03:17		☐
194	CCB				1.0	07/08/09 03:20		☐
195	RLCV				1.0	07/08/09 03:22		☐
196	LF3X8B	D9G060000	9187169	MS	1.0	07/08/09 03:25		☐
197	LF3X8C	D9G060000	9187169	MS	1.0	07/08/09 03:28		☐
198	LFX9W 10X	D9G010276-1	9187169	MS	10.0	07/08/09 03:31		☐
199	LF1T1 10X	D9G020221-1	9187169	MS	10.0	07/08/09 03:33		☐
200	LF1T1P50	D9G020221	9187169		50.0	07/08/09 03:36		☐
201	LF1T1Z	D9G020221-1	9187169		1.0	07/08/09 03:39		☐
202	CCV				1.0	07/08/09 03:42		☐
203	CCB				1.0	07/08/09 03:44		☐
204	RLCV				1.0	07/08/09 03:47		☐
205	LF1T1S 10X	D9G020221-1	9187169	MS	10.0	07/08/09 03:50		☐
206	LF1T1D 10X	D9G020221-1	9187169	MS	10.0	07/08/09 03:53		☐
207	LF1T6 10X	D9G020221-3	9187169	MS	10.0	07/08/09 03:56		☐
208	LF1VJ 10X	D9G020227-1	9187169	MS	10.0	07/08/09 03:58		☐
209	LF1V5 10X	D9G020227-2	9187169	MS	10.0	07/08/09 04:01		☐
210	CCV				1.0	07/08/09 04:04		☐
211	CCB				1.0	07/08/09 04:07		☐
212	RLCV				1.0	07/08/09 04:09		☐
213	~~RINSE~~				~~1.0~~	~~07/08/09 04:12~~		☐
214	RINSE				1.0	07/08/09 04:15		☐
215	RINSE				1.0	07/08/09 04:18		☐
216	RINSE				1.0	07/08/09 04:20		☐
217	RINSE				1.0	07/08/09 04:23		☐
218	RINSE				1.0	07/08/09 04:26		☐
219	~~Cal Blank~~				~~1.0~~	~~07/08/09 04:29~~	WF 7/8/09	☐
220	Cal Blank				1.0	07/08/09 04:31		☐
221	100 ppb				1.0	07/08/09 04:34		☐
222	CCV				1.0	07/08/09 04:37		☐
223	CCB				1.0	07/08/09 04:40		☐
224	RLCV				1.0	07/08/09 04:42		☐
225	LF31NB	D9G060000	9187199	46	1.0	07/08/09 04:45		☐
226	LF31NC	D9G060000	9187199	46	1.0	07/08/09 04:48		☐
227	LF0NV	D9G010332-7	9187199	46	1.0	07/08/09 04:51		☐
228	LF0NVP5	D9G010332	9187199		5.0	07/08/09 04:54		☐
229	LF0NVZ	D9G010332-7	9187199		1.0	07/08/09 04:56		☐
230	LF0NVS	D9G010332-7	9187199	46	1.0	07/08/09 04:59		☐
231	LF0NVD	D9G010332-7	9187199	46	1.0	07/08/09 05:02		☐

Denver RUN SUMMARY

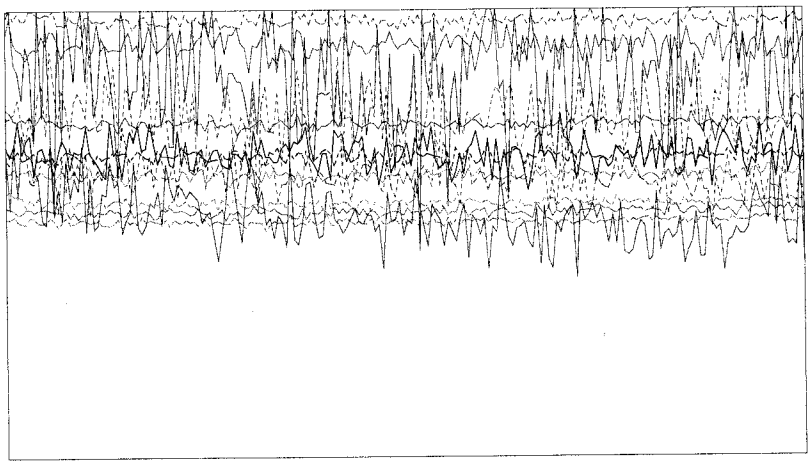
Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 07/08/09 09:49:24

File ID: AG070709B **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
232	CCV				1.0	07/08/09 05:05		☐
233	CCB				1.0	07/08/09 05:07		☐
234	RLCV				1.0	07/08/09 05:10		☐
235	LF31XB	D9G060000	9187202	46	1.0	07/08/09 05:13		☐
236	LF31XC	D9G060000	9187202	46	1.0	07/08/09 05:16		☐
237	LF2FT	D9G020311-1	9187202	46	1.0	07/08/09 05:19		☐
238	LF2FTP5	D9G020311	9187202		5.0	07/08/09 05:21		☐
239	LF2FTZ	D9G020311-1	9187202		1.0	07/08/09 05:24	Take all but Ni. 7/8/09	☐
240	LF2FTS	D9G020311-1	9187202	46	1.0	07/08/09 05:27		☐
241	LF2FTD	D9G020311-1	9187202	46	1.0	07/08/09 05:30		☐
242	CCV				1.0	07/08/09 05:33		☐
243	CCB				1.0	07/08/09 05:35		☐
244	RLCV				1.0	07/08/09 05:38		☐
245	LF2JL	D9G020311-2	9187202	46	1.0	07/08/09 05:41		☐
246	LF2JQ	D9G020311-3	9187202	46	1.0	07/08/09 05:44		☐
247	LF2J3	D9G020311-4	9187202	46	1.0	07/08/09 05:46		☐
248	LF2J5	D9G020311-5	9187202	46	1.0	07/08/09 05:49		☐
249	LF2KJ	D9G020311-6	9187202	46	1.0	07/08/09 05:52		☐
250	LF2KN	D9G020311-7	9187202	46	1.0	07/08/09 05:55		☐
251	LF2KT	D9G020311-8	9187202	46	1.0	07/08/09 05:58		☐
252	CCV				1.0	07/08/09 06:00		☐
253	CCB				1.0	07/08/09 06:03		☐
254	RLCV				1.0	07/08/09 06:06		☐
255	~~LF2FT~~	~~D9G020311-1~~	~~9187202~~	~~46~~	~~1.0~~	~~07/08/09 06:09~~		☐
256	LF2FTS	D9G020311-1	9187202	46	1.0	07/08/09 06:12		☐
257	LF2FTD	D9G020311-1	9187202	46	1.0	07/08/09 06:14		☐
258	CCV				1.0	07/08/09 06:17		☐
259	CCB				1.0	07/08/09 06:20		☐
260	~~RLCV~~				~~1.0~~	~~07/08/09 06:23~~	7/8/09 Did not use.	☐

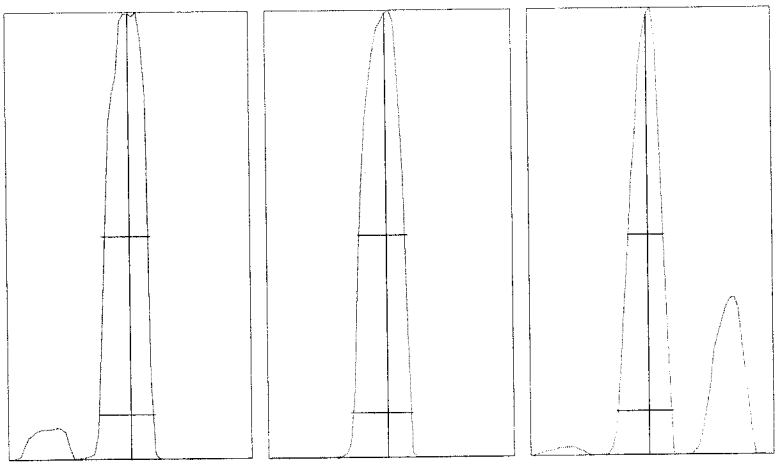
Tune Report

Tune File : NORM.U
Comment :



Integration Time: 0.1000 sec
Sampling Period: 1.5300 sec
n: 200
Oxide: 156/140 2.082%
Doubly Charged: 70/140 1.123%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1889.0	1841.3	2.59	0.60
7	50,000	27559.0	27403.0	1.40	0.60
59	50,000	33030.0	31479.0	1.53	0.50
63	200	87.0	107.9	11.91	0.30
70	1,000	686.0	677.4	4.99	0.70
75	50	31.0	42.9	16.22	0.60
78	500	280.0	313.4	6.24	0.30
89	100,000	51516.0	52575.3	1.19	0.70
115	100,000	57158.0	56755.0	1.31	0.70
118	200	162.0	152.3	8.33	0.70
137	10,000	6656.0	6727.9	1.69	1.00
205	50,000	48630.0	48760.9	1.18	2.00
238	100,000	74601.0	74494.1	1.21	2.10
156/140	5	2.193%	2.125%	4.06	
70/140	2	1.184%	1.169%	5.10	



m/z:	7	89	205
Height:	27,543	52,894	49,644
Axis:	7.05	89.00	205.00
W-50%:	0.60	0.60	0.45
W-10%:	0.700	0.7500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : Jul 07, 2009 16:01:30
Printed : Jul 07, 2009 16:01:33

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===

RF Power	:	1550 W
RF Matching	:	1.7 V
Smpl Depth	:	7.5 mm
Torch-H	:	-0.8 mm
Torch-V	:	-0.3 mm
Carrier Gas	:	0.83 L/min
Makeup Gas	:	0.2 L/min
Optional Gas	:	--- %
Nebulizer Pump	:	0.1 rps
Sample Pump	:	--- rps
S/C Temp	:	2 degC

===Ion Lenses===

Extract 1	:	0 V
Extract 2	:	-175 V
Omega Bias-ce	:	-30 V
Omega Lens-ce	:	-0.2 V
Cell Entrance	:	-30 V
QP Focus	:	5 V
Cell Exit	:	-30 V

===Octopole Parameters===

OctP RF	:	180 V
OctP Bias	:	-18 V

===Q-Pole Parameters===

AMU Gain	:	133
AMU Offset	:	123
Axis Gain	:	1.0005
Axis Offset	:	-0.01
QP Bias	:	-10 V

===Detector Parameters===

Discriminator	:	8 mV
Analog HV	:	1720 V
Pulse HV	:	1390 V

===Reaction Cell===

Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Generated : Jul 07, 2009 16:01:30
Printed : Jul 07, 2009 16:01:36

P/A Factor Tuning Report

Acquired:Jul 7 2009 04:18 pm

Mass[amu]	Element	P/A Factor
6	Li	0.060118
7	(Li)	Sensitivity too low
9	Be	0.068010
45	Sc	0.082686
51	V	0.084596
52	Cr	0.087721
53	(Cr)	Sensitivity too low
55	Mn	0.089784
59	Co	0.093112
60	Ni	0.095012
63	Cu	0.097299
66	Zn	0.097070
72	Ge	0.095471
75	As	0.094654
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
95	Mo	0.095555
98	(Mo)	0.095635
99	(Mo)	0.097324
106	(Cd)	0.101627
107	Ag	Sensitivity too low
108	(Cd)	0.102086
111	Cd	0.102705
114	Cd	0.102655
115	In	0.101852
118	Sn	0.101508
121	Sb	0.101313
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
205	Tl	0.111470
206	(Pb)	0.110400
207	(Pb)	0.110479
208	Pb	0.110219
232	Th	0.108817
238	U	0.108862

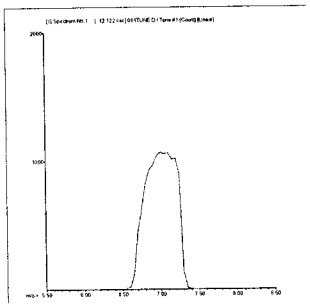
===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1720 V
Pulse HV: 1390 V

200.8 QC Tune Report

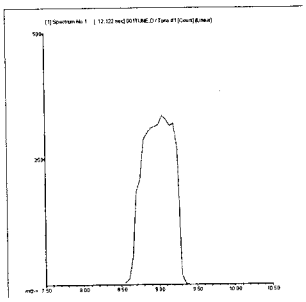
Data File: C:\ICPCHEM\1\DATA\AG070709B.B\001TUNE.D
Date Acquired: Jul 7 2009 06:26 pm
Acq. Method: tun_isis.M
Operator: TEL
Sample Name: 200.8 TUNE
Misc Info:
Vial Number: 4
Current Method: C:\ICPCHEM\1\METHODS\tun_isis.M

RSD (%)

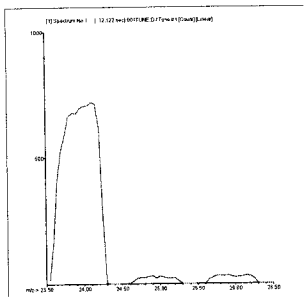
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
7 Li	22453	22562	22678	22654	22339	22032	2.26	5.00	
9 Be	2557	2614	2568	2613	2528	2458	3.87	5.00	
24 Mg	10195	10333	10161	10163	10347	9970	1.30	5.00	
59 Co	66238	66281	66746	66790	66601	64770	3.53	5.00	
115 In	958916	951553	962857	960080	958978	961111	0.77	5.00	
208 Pb	77867	78896	77667	77197	77617	77956	1.00	5.00	
238 U	160452	162185	164035	161529	160468	154041	1.94	5.00	



7 Li
Mass Calib.
Actual: 7.05
Required 6.90 - 7.10
Flag:
Peak Width
Actual: 0.65
Required 0.90
Flag:

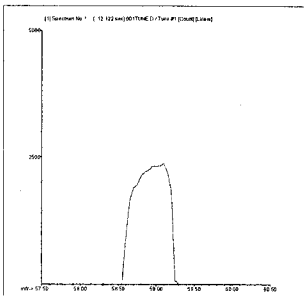


9 Be
Mass Calib.
Actual: 9.10
Required:8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required:0.90
Flag:



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\AG070709B.B\001TUNE.D



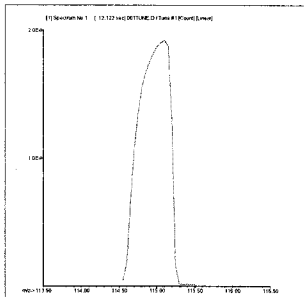
59 Co

Mass Calib.

Actual:	59.00		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



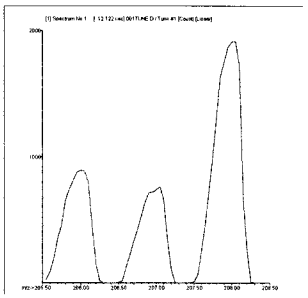
115 In

Mass Calib.

Actual:	115.05		
Required:	114.90	-	115.10
Flag:			

Peak Width

Actual:	0.55
Required:	0.90
Flag:	



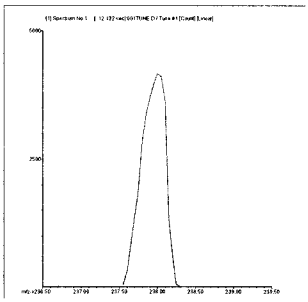
208 Pb

Mass Calib.

Actual:	208.00		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.60
Required:	0.90
Flag:	



238 U

Mass Calib.

Actual:	238.00		
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\AG070709B.B\002CALB.D\002CALB.D#
Date Acquired: Jul 7 2009 06:29 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 07 2009 06:30 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-61	307.06
52	Cr	72	1	1703	4.99
55	Mn	72	1	127	24.12
59	Co	72	1	27	94.37
60	Ni	72	1	10	100.00
63	Cu	72	1	207	16.99
66	Zn	72	1	281	13.82
75	As	72	1	29	24.50
78	Se	72	1	57	36.74
95	Mo	72	1	10	100.00
107	Ag	115	1	7	86.60
111	Cd	115	1	5	136.25
118	Sn	115	1	157	13.29
121	Sb	115	1	13	66.14
137	Ba	115	1	16	53.93
205	Tl	165	1	142	24.84
208	Pb	165	1	238	8.45
232	Th	165	1	167	24.98
238	U	165	1	100	12.02

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	400758	1.34
45	Sc	1	936208	0.95
72	Ge	1	542425	0.31
115	In	1	1772725	1.04
165	Ho	1	4029283	0.79

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\AG070709B.B\003CALB.D\003CALB.D#
Date Acquired:	Jul 7 2009 06:32 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 07 2009 06:30 pm
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	124	45.09
52	Cr	72	1	1643	7.31
55	Mn	72	1	140	21.43
59	Co	72	1	13	43.30
60	Ni	72	1	37	31.49
63	Cu	72	1	283	14.26
66	Zn	72	1	173	16.69
75	As	72	1	24	22.05
78	Se	72	1	57	26.96
95	Mo	72	1	13	43.30
107	Ag	115	1	10	100.00
111	Cd	115	1	8	89.21
118	Sn	115	1	187	27.49
121	Sb	115	1	13	66.14
137	Ba	115	1	17	52.92
205	Tl	165	1	96	12.25
208	Pb	165	1	224	8.95
232	Th	165	1	143	28.20
238	U	165	1	19	73.47

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	399164	0.09
45	Sc	1	940817	0.93
72	Ge	1	543541	0.91
115	In	1	1769666	0.69
165	Ho	1	4052095	0.70

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\AG070709B.B\004ICAL.D\004ICAL.D#
Date Acquired:	Jul 7 2009 06:35 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 07 2009 06:33 pm
Sample Type:	ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	45057	2.44
51	V	72	1	635517	1.35
52	Cr	72	1	740365	0.51
55	Mn	72	1	696026	0.68
59	Co	72	1	1072796	0.30
60	Ni	72	1	253152	0.72
63	Cu	72	1	623666	0.91
66	Zn	72	1	116172	1.28
75	As	72	1	70648	0.92
78	Se	72	1	10825	1.36
95	Mo	72	1	298414	1.62
107	Ag	115	1	1006118	0.15
111	Cd	115	1	173188	0.75
118	Sn	115	1	439651	0.54
121	Sb	115	1	464508	0.62
137	Ba	115	1	189823	0.35
205	Tl	165	1	2375887	1.05
208	Pb	165	1	3257719	0.92
232	Th	165	1	3073849	2.20
238	U	165	1	3744584	1.20

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	382426	1.59	399164	95.8	30 - 120	
45	Sc	1	907089	1.38	940817	96.4	30 - 120	
72	Ge	1	520511	0.60	543541	95.8	30 - 120	
115	In	1	1740539	0.58	1769666	98.4	30 - 120	
165	Ho	1	4011984	1.19	4052095	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\AG070709B.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\AG070709B.B\005 ICV.D\005 ICV.D#
Date Acquired: Jul 7 2009 06:38 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 07 2009 06:35 pm
Sample Type: ICV
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	38.73	ppb	2.14	40	96.8	90 - 110	
51 V	72	1	39.83	ppb	1.86	40	99.6	90 - 110	
52 Cr	72	1	40.55	ppb	1.29	40	101.4	90 - 110	
55 Mn	72	1	40.32	ppb	1.65	40	100.8	90 - 110	
59 Co	72	1	39.47	ppb	0.43	40	98.7	90 - 110	
60 Ni	72	1	41.03	ppb	0.27	40	102.6	90 - 110	
63 Cu	72	1	40.32	ppb	0.60	40	100.8	90 - 110	
66 Zn	72	1	40.30	ppb	0.46	40	100.8	90 - 110	
75 As	72	1	39.90	ppb	1.04	40	99.8	90 - 110	
78 Se	72	1	39.38	ppb	6.26	40	98.5	90 - 110	
95 Mo	72	1	40.14	ppb	0.13	40	100.4	90 - 110	
107 Ag	115	1	39.43	ppb	0.35	40	98.6	90 - 110	
111 Cd	115	1	40.26	ppb	0.38	40	100.7	90 - 110	
118 Sn	115	1	39.20	ppb	0.85	40	98.0	90 - 110	
121 Sb	115	1	38.07	ppb	0.76	40	95.2	90 - 110	
137 Ba	115	1	39.65	ppb	1.27	40	99.1	90 - 110	
205 Tl	165	1	40.61	ppb	1.35	40	101.5	90 - 110	
208 Pb	165	1	40.53	ppb	1.09	40	101.3	90 - 110	
232 Th	165	1	45.82	ppb	0.29	40	114.6	90 - 110	Fail
238 U	165	1	41.02	ppb	0.38	40	102.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	380889	0.43	399164	95.4	30 - 120	
45 Sc	1	897908	0.41	940817	95.4	30 - 120	
72 Ge	1	510491	0.99	543541	93.9	30 - 120	
115 In	1	1725161	0.55	1769666	97.5	30 - 120	
165 Ho	1	3965758	0.76	4052095	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\AG070709B.B\003CALB.D\003CALB.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\AG070709B.B\006WASH.D\006WASH.D#
Date Acquired: Jul 7 2009 06:40 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 07 2009 06:35 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	1.089 ppb	17.74	1.30	
51 V	72	1	5.159 ppb	1.25	6.50	
52 Cr	72	1	2.056 ppb	4.36	2.60	
55 Mn	72	1	0.996 ppb	5.33	1.30	
59 Co	72	1	0.986 ppb	5.16	1.30	
60 Ni	72	1	2.089 ppb	5.01	2.60	
63 Cu	72	1	2.053 ppb	2.76	2.60	
66 Zn	72	1	10.520 ppb	1.83	13.00	
75 As	72	1	5.027 ppb	1.20	6.50	
78 Se	72	1	4.447 ppb	23.34	6.50	
95 Mo	72	1	2.089 ppb	0.78	2.60	
107 Ag	115	1	5.193 ppb	1.84	6.50	
111 Cd	115	1	1.042 ppb	3.41	1.30	
118 Sn	115	1	10.480 ppb	0.85	13.00	
121 Sb	115	1	2.185 ppb	1.55	2.60	
137 Ba	115	1	1.068 ppb	5.38	1.30	
205 Tl	165	1	1.176 ppb	2.26	1.30	
208 Pb	165	1	1.073 ppb	0.23	1.30	
232 Th	165	1	3.179 ppb	4.03	2.60	
238 U	165	1	1.102 ppb	1.37	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379446	0.32	399164	95.1	30 - 120	
45 Sc	1	894440	1.04	940817	95.1	30 - 120	
72 Ge	1	517374	0.11	543541	95.2	30 - 120	
115 In	1	1715545	0.68	1769666	96.9	30 - 120	
165 Ho	1	3947602	0.56	4052095	97.4	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\AG070709B.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\AG070709B.B\007 ICB.D\007 ICB.D#
Date Acquired: Jul 7 2009 06:43 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 07 2009 06:35 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	-0.01	ppb	278.49	1.00	
52 Cr	72	1	0.01	ppb	361.44	1.00	
55 Mn	72	1	-0.01	ppb	36.80	1.00	
59 Co	72	1	0.00	ppb	359.57	1.00	
60 Ni	72	1	0.00	ppb	857.45	1.00	
63 Cu	72	1	0.00	ppb	170.49	1.00	
66 Zn	72	1	0.00	ppb	285.00	1.00	
75 As	72	1	0.01	ppb	88.24	1.00	
78 Se	72	1	0.02	ppb	872.43	1.00	
95 Mo	72	1	0.01	ppb	14.64	1.00	
107 Ag	115	1	0.00	ppb	129.33	1.00	
111 Cd	115	1	0.00	ppb	333.20	1.00	
118 Sn	115	1	0.09	ppb	12.11	1.00	
121 Sb	115	1	0.08	ppb	3.49	1.00	
137 Ba	115	1	0.00	ppb	216.96	1.00	
205 Tl	165	1	0.07	ppb	7.69	1.00	
208 Pb	165	1	0.00	ppb	101.76	1.00	
232 Th	165	1	0.33	ppb	6.92	1.00	
238 U	165	1	0.00	ppb	13.68	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382408	0.87	399164	95.8	30 - 120	
45 Sc	1	907229	0.95	940817	96.4	30 - 120	
72 Ge	1	521075	0.30	543541	95.9	30 - 120	
115 In	1	1702190	0.54	1769666	96.2	30 - 120	
165 Ho	1	3975956	0.45	4052095	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\AG070709B.B\003CALB.D\003CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

RL STD QC Report

Data File: C:\ICPCHEM\1\DATA\AG070709B.B\008RLST.D\008RLST.D#
Date Acquired: Jul 7 2009 06:46 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 07 2009 06:35 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	1.04	ppb	12.32	1	103.7	50 - 150	
51 V	72	1	1.01	ppb	9.81	1	100.5	50 - 150	
52 Cr	72	1	0.99	ppb	5.47	1	99.4	50 - 150	
55 Mn	72	1	0.98	ppb	4.30	1	98.4	50 - 150	
59 Co	72	1	0.98	ppb	4.26	1	98.4	50 - 150	
60 Ni	72	1	0.98	ppb	3.81	1	98.5	50 - 150	
63 Cu	72	1	0.96	ppb	4.85	1	96.3	50 - 150	
66 Zn	72	1	10.22	ppb	0.29	10	102.2	50 - 150	
75 As	72	1	1.01	ppb	2.72	1	100.7	50 - 150	
78 Se	72	1	0.79	ppb	53.55	1	78.9	50 - 150	
95 Mo	72	1	1.07	ppb	4.00	1	107.1	50 - 150	
107 Ag	115	1	0.99	ppb	3.27	1	99.3	50 - 150	
111 Cd	115	1	1.03	ppb	1.34	1	103.2	50 - 150	
118 Sn	115	1	10.17	ppb	1.04	10	101.7	50 - 150	
121 Sb	115	1	1.03	ppb	5.66	1	102.9	50 - 150	
137 Ba	115	1	1.04	ppb	2.53	1	103.6	50 - 150	
205 Tl	165	1	1.06	ppb	0.83	1	106.2	50 - 150	
208 Pb	165	1	1.01	ppb	1.71	1	101.3	50 - 150	
232 Th	165	1	1.16	ppb	1.52	1	115.9	50 - 150	
238 U	165	1	1.06	ppb	1.52	1	105.6	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381752	0.66	399164	95.6	30 - 120	
45 Sc	1	908450	0.62	940817	96.6	30 - 120	
72 Ge	1	523170	0.29	543541	96.3	30 - 120	
115 In	1	1727746	0.37	1769666	97.6	30 - 120	
165 Ho	1	3986580	0.86	4052095	98.4	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\AG070709B.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\AG070709B.B\009AFCE.D\009AFCE.D#
Date Acquired: Jul 7 2009 06:49 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 07 2009 06:35 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	36.20	0	88.9	80 - 120	
51 V	72	1	0.15	ppb	7.13	0	73.5	80 - 120	
52 Cr	72	1	0.18	ppb	3.37	0	88.4	80 - 120	
55 Mn	72	1	0.20	ppb	12.94	0	101.5	80 - 120	
59 Co	72	1	0.20	ppb	5.47	0	100.2	80 - 120	
60 Ni	72	1	0.19	ppb	8.01	0	94.7	80 - 120	
63 Cu	72	1	0.20	ppb	4.43	0	102.8	80 - 120	
66 Zn	72	1	2.02	ppb	0.83	2	98.9	80 - 120	
75 As	72	1	0.21	ppb	14.22	0	101.8	80 - 120	
78 Se	72	1	0.11	ppb	92.40	0	70.8	80 - 120	
95 Mo	72	1	0.21	ppb	12.83	0	96.0	80 - 120	
107 Ag	115	1	0.19	ppb	14.07	0	93.7	80 - 120	
111 Cd	115	1	0.20	ppb	13.72	0	98.7	80 - 120	
118 Sn	115	1	2.10	ppb	1.98	2	103.2	80 - 120	
121 Sb	115	1	0.21	ppb	3.22	0	103.6	80 - 120	
137 Ba	115	1	0.19	ppb	8.30	0	92.8	80 - 120	
205 Tl	165	1	0.23	ppb	2.69	0	107.3	80 - 120	
208 Pb	165	1	0.21	ppb	2.25	0	102.4	80 - 120	
232 Th	165	1	0.30	ppb	1.72	0	130.8	80 - 120	
238 U	165	1	0.21	ppb	1.37	0	97.8	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	383219	0.57	399164	96.0	30 - 120	
45 Sc	1	910744	0.99	940817	96.8	30 - 120	
72 Ge	1	523238	0.51	543541	96.3	30 - 120	
115 In	1	1749677	0.22	1769666	98.9	30 - 120	
165 Ho	1	3982865	0.61	4052095	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\AG070709B.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\AG070709B.B\010SMPL.D\010SMPL.D#
Date Acquired: Jul 7 2009 06:51 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 07 2009 06:35 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	-0.01	-0.01	ppb	147.72	3600	
52 Cr	72	1	0.00	0.00	ppb	1241.60	3600	
55 Mn	72	1	0.00	0.00	ppb	472.13	3600	
59 Co	72	1	0.00	0.00	ppb	369.37	3600	
60 Ni	72	1	0.01	0.01	ppb	136.71	3600	
63 Cu	72	1	-0.01	-0.01	ppb	86.24	3600	
66 Zn	72	1	0.10	0.10	ppb	20.02	3600	
75 As	72	1	0.00	0.00	ppb	488.01	3600	
78 Se	72	1	1.71	1.71	ppb	19.19	3600	
95 Mo	72	1	0.00	0.00	ppb	42.52	3600	
107 Ag	115	1	0.00	0.00	ppb	89.97	3600	
111 Cd	115	1	0.00	0.00	ppb	483.30	3600	
118 Sn	115	1	0.44	0.44	ppb	3.98	3600	
121 Sb	115	1	0.01	0.01	ppb	51.24	3600	
137 Ba	115	1	0.00	0.00	ppb	2235.70	3600	
205 Tl	165	1	0.02	0.02	ppb	13.37	3600	
208 Pb	165	1	0.00	0.00	ppb	155.70	3600	
232 Th	165	1	0.05	0.05	ppb	11.74	1000	
238 U	165	1	0.00	0.00	ppb	34.75	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381988	0.77	399164	95.7	30 - 120	
45 Sc	1	909120	0.30	940817	96.6	30 - 120	
72 Ge	1	524636	0.43	543541	96.5	30 - 120	
115 In	1	1729729	0.54	1769666	97.7	30 - 120	
165 Ho	1	3992746	0.71	4052095	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\AG070709B.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\AG070709B.B\011ICSA.D\011ICSA.D#
Date Acquired: Jul 7 2009 06:54 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 07 2009 06:35 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	0.01 ppb	173.19	1.00	
51	V	72	1	-0.12 ppb	145.18	1.00	
52	Cr	72	1	1.00 ppb	3.09	1.00	
55	Mn	72	1	2.15 ppb	3.13	1.00	
59	Co	72	1	0.05 ppb	8.09	1.00	
60	Ni	72	1	0.76 ppb	3.84	1.00	
63	Cu	72	1	0.31 ppb	8.08	1.00	
66	Zn	72	1	2.84 ppb	2.36	10.00	
75	As	72	1	0.16 ppb	4.86	1.00	
78	Se	72	1	-0.20 ppb	83.63	1.00	
95	Mo	72	1	2043.00 ppb	1.61	2000.00	
107	Ag	115	1	0.06 ppb	1.56	1.00	
111	Cd	115	1	0.46 ppb	24.91	1.00	
118	Sn	115	1	0.20 ppb	17.21	10.00	
121	Sb	115	1	0.24 ppb	6.95	1.00	
137	Ba	115	1	1.57 ppb	4.74	1.00	
205	Tl	165	1	0.05 ppb	32.86	1.00	
208	Pb	165	1	0.12 ppb	5.36	1.00	
232	Th	165	1	0.10 ppb	10.63	1.00	
238	U	165	1	0.02 ppb	3.23	1.00	

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	365243	0.79	399164	91.5	30 - 120	
45	Sc	1	788222	0.65	940817	83.8	30 - 120	
72	Ge	1	427827	0.97	543541	78.7	30 - 120	
115	In	1	1437454	0.58	1769666	81.2	30 - 120	
165	Ho	1	3581671	0.93	4052095	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\AG070709B.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\AG070709B.B\012ICSB.D\012ICSB.D#
Date Acquired: Jul 7 2009 06:57 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 07 2009 06:35 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	95.41	1.50	100	95.4	80 - 120	
51 V	72	1	103.80	1.00	100	103.8	80 - 120	
52 Cr	72	1	103.20	0.47	100	103.2	80 - 120	
55 Mn	72	1	103.00	0.69	100	103.0	80 - 120	
59 Co	72	1	95.34	0.69	100	95.3	80 - 120	
60 Ni	72	1	92.36	1.58	100	92.4	80 - 120	
63 Cu	72	1	89.22	0.72	100	89.2	80 - 120	
66 Zn	72	1	101.20	0.80	100	101.2	80 - 120	
75 As	72	1	101.20	0.94	100	101.2	80 - 120	
78 Se	72	1	111.30	2.75	100	111.3	80 - 120	
95 Mo	72	1	2173.00	1.31	2100	103.5	80 - 120	
107 Ag	115	1	85.76	1.92	100	85.8	80 - 120	
111 Cd	115	1	96.48	1.43	100	96.5	80 - 120	
118 Sn	115	1	103.80	1.68	100	103.8	80 - 120	
121 Sb	115	1	103.90	1.74	100	103.9	80 - 120	
137 Ba	115	1	106.00	2.12	100	106.0	80 - 120	
205 Tl	165	1	94.99	0.53	100	95.0	80 - 120	
208 Pb	165	1	94.09	0.42	100	94.1	80 - 120	
232 Th	165	1	111.20	1.41	100	111.2	80 - 120	
238 U	165	1	103.30	0.40	100	103.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	363601	0.94	399164	91.1	30 - 120	
45 Sc	1	745518	1.62	940817	79.2	30 - 120	
72 Ge	1	408166	0.77	543541	75.1	30 - 120	
115 In	1	1402003	0.59	1769666	79.2	30 - 120	
165 Ho	1	3568659	0.29	4052095	88.1	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\AG070709B.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\AG070709B.B\013SMPL.D\013SMPL.D#
Date Acquired: Jul 7 2009 06:59 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 07 2009 06:35 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	173.16	3600	
51 V	72	1	-0.07	-0.07	ppb	35.08	3600	
52 Cr	72	1	0.00	0.00	ppb	168.71	3600	
55 Mn	72	1	0.01	0.01	ppb	62.67	3600	
59 Co	72	1	0.01	0.01	ppb	53.27	3600	
60 Ni	72	1	0.02	0.02	ppb	71.92	3600	
63 Cu	72	1	0.01	0.01	ppb	25.23	3600	
66 Zn	72	1	0.08	0.08	ppb	9.50	3600	
75 As	72	1	0.04	0.04	ppb	24.44	3600	
78 Se	72	1	0.02	0.02	ppb	1280.40	3600	
95 Mo	72	1	1.48	1.48	ppb	11.41	3600	
107 Ag	115	1	0.01	0.01	ppb	57.64	3600	
111 Cd	115	1	0.01	0.01	ppb	88.95	3600	
118 Sn	115	1	0.07	0.07	ppb	39.85	3600	
121 Sb	115	1	0.05	0.05	ppb	18.44	3600	
137 Ba	115	1	0.01	0.01	ppb	59.77	3600	
205 Tl	165	1	0.01	0.01	ppb	15.32	3600	
208 Pb	165	1	0.01	0.01	ppb	36.06	3600	
232 Th	165	1	0.85	0.85	ppb	23.15	1000	
238 U	165	1	0.02	0.02	ppb	9.73	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	392230	1.00	399164	98.3	30 - 120	
45 Sc	1	847933	1.38	940817	90.1	30 - 120	
72 Ge	1	494469	0.21	543541	91.0	30 - 120	
115 In	1	1662200	1.03	1769666	93.9	30 - 120	
165 Ho	1	4011358	1.54	4052095	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\AG070709B.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\AG070709B.B\014 LR.D\014 LR.D#
Date Acquired: Jul 7 2009 07:02 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 07 2009 06:35 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	983.40 ppb	1.01	1000	98.3	90 - 110	
51 V	72	1	947.80 ppb	1.93	1000	94.8	90 - 110	
52 Cr	72	1	970.60 ppb	1.54	1000	97.1	90 - 110	
55 Mn	72	1	980.00 ppb	1.74	1000	98.0	90 - 110	
59 Co	72	1	949.60 ppb	1.88	1000	95.0	90 - 110	
60 Ni	72	1	987.80 ppb	1.07	1000	98.8	90 - 110	
63 Cu	72	1	955.00 ppb	1.51	1000	95.5	90 - 110	
66 Zn	72	1	1033.00 ppb	1.84	1000	103.3	90 - 110	
75 As	72	1	994.00 ppb	0.73	1000	99.4	90 - 110	
78 Se	72	1	1029.00 ppb	2.04	1000	102.9	90 - 110	
95 Mo	72	1	1009.00 ppb	1.74	1000	100.9	90 - 110	
107 Ag	115	1	964.50 ppb	1.98	1000	96.5	90 - 110	
111 Cd	115	1	1029.00 ppb	1.52	1000	102.9	90 - 110	
118 Sn	115	1	1005.00 ppb	0.95	1000	100.5	90 - 110	
121 Sb	115	1	998.10 ppb	1.44	1000	99.8	90 - 110	
137 Ba	115	1	1023.00 ppb	0.46	1000	102.3	90 - 110	
205 Tl	165	1	972.10 ppb	0.66	1000	97.2	90 - 110	
208 Pb	165	1	965.00 ppb	0.85	1000	96.5	90 - 110	
232 Th	165	1	1087.00 ppb	2.42	1000	108.7	90 - 110	
238 U	165	1	1004.00 ppb	0.93	1000	100.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	374397	1.09	399164	93.8	30 - 120	
45 Sc	1	839630	1.54	940817	89.2	30 - 120	
72 Ge	1	487501	1.32	543541	89.7	30 - 120	
115 In	1	1652784	1.56	1769666	93.4	30 - 120	
165 Ho	1	4011589	1.51	4052095	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\AG070709B.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\AG070709B.B\015SMPL.D\015SMPL.D#
Date Acquired: Jul 7 2009 07:05 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 07 2009 06:35 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	0.10	0.10	ppb	44.89	3600	
51 V	72	1	0.04	0.04	ppb	13.03	3600	
52 Cr	72	1	0.06	0.06	ppb	24.31	3600	
55 Mn	72	1	0.06	0.06	ppb	39.96	3600	
59 Co	72	1	0.08	0.08	ppb	29.64	3600	
60 Ni	72	1	0.07	0.07	ppb	35.89	3600	
63 Cu	72	1	0.07	0.07	ppb	26.63	3600	
66 Zn	72	1	0.17	0.17	ppb	20.43	3600	
75 As	72	1	0.10	0.10	ppb	31.17	3600	
78 Se	72	1	0.20	0.20	ppb	197.18	3600	
95 Mo	72	1	0.78	0.78	ppb	8.80	3600	
107 Ag	115	1	0.05	0.05	ppb	29.15	3600	
111 Cd	115	1	0.08	0.08	ppb	11.89	3600	
118 Sn	115	1	1.34	1.34	ppb	4.00	3600	
121 Sb	115	1	0.53	0.53	ppb	4.95	3600	
137 Ba	115	1	0.06	0.06	ppb	16.69	3600	
205 Tl	165	1	0.14	0.14	ppb	16.45	3600	
208 Pb	165	1	0.08	0.08	ppb	29.48	3600	
232 Th	165	1	5.32	5.32	ppb	21.32	1000	
238 U	165	1	0.15	0.15	ppb	8.24	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379584	0.33	399164	95.1	30 - 120	
45 Sc	1	873362	0.60	940817	92.8	30 - 120	
72 Ge	1	506731	0.43	543541	93.2	30 - 120	
115 In	1	1692278	0.36	1769666	95.6	30 - 120	
165 Ho	1	4003631	0.89	4052095	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\AG070709B.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\AG070709B.B\016 CCV.D\016 CCV.D#
Date Acquired: Jul 7 2009 07:08 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 07 2009 06:35 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	49.62	ppb	3.63	50	99.2	90 - 110	
51 V	72	1	49.33	ppb	0.48	50	98.7	90 - 110	
52 Cr	72	1	49.99	ppb	0.15	50	100.0	90 - 110	
55 Mn	72	1	50.16	ppb	0.63	50	100.3	90 - 110	
59 Co	72	1	49.28	ppb	0.34	50	98.6	90 - 110	
60 Ni	72	1	49.82	ppb	0.86	50	99.6	90 - 110	
63 Cu	72	1	50.32	ppb	0.27	50	100.6	90 - 110	
66 Zn	72	1	51.12	ppb	0.39	50	102.2	90 - 110	
75 As	72	1	50.01	ppb	0.76	50	100.0	90 - 110	
78 Se	72	1	51.33	ppb	1.78	50	102.7	90 - 110	
95 Mo	72	1	51.04	ppb	0.26	50	102.1	90 - 110	
107 Ag	115	1	50.64	ppb	2.48	50	101.3	90 - 110	
111 Cd	115	1	51.08	ppb	3.26	50	102.2	90 - 110	
118 Sn	115	1	51.20	ppb	2.24	50	102.4	90 - 110	
121 Sb	115	1	50.97	ppb	2.72	50	101.9	90 - 110	
137 Ba	115	1	50.72	ppb	2.33	50	101.4	90 - 110	
205 Tl	165	1	51.22	ppb	0.82	50	102.4	90 - 110	
208 Pb	165	1	50.99	ppb	0.59	50	102.0	90 - 110	
232 Th	165	1	52.84	ppb	2.82	50	105.7	90 - 110	
238 U	165	1	52.33	ppb	1.04	50	104.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	376555	0.66	399164	94.3	30 - 120	
45 Sc	1	876739	1.55	940817	93.2	30 - 120	
72 Ge	1	505139	0.71	543541	92.9	30 - 120	
115 In	1	1690240	2.01	1769666	95.5	30 - 120	
165 Ho	1	3974864	0.42	4052095	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\AG070709B.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\AG070709B.B\017 CCB.D\017 CCB.D#
Date Acquired: Jul 7 2009 07:10 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 07 2009 06:35 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	0.015	ppb	86.59	1.00	
51 V	72	1	0.001	ppb	2310.60	1.00	
52 Cr	72	1	0.015	ppb	77.74	1.00	
55 Mn	72	1	0.007	ppb	71.46	1.00	
59 Co	72	1	0.007	ppb	43.33	1.00	
60 Ni	72	1	0.005	ppb	124.14	1.00	
63 Cu	72	1	0.008	ppb	32.43	1.00	
66 Zn	72	1	-0.004	ppb	189.55	1.00	
75 As	72	1	0.039	ppb	52.57	1.00	
78 Se	72	1	0.034	ppb	988.42	1.00	
95 Mo	72	1	0.152	ppb	12.74	1.00	
107 Ag	115	1	0.008	ppb	0.82	1.00	
111 Cd	115	1	0.001	ppb	1452.00	1.00	
118 Sn	115	1	0.279	ppb	24.24	1.00	
121 Sb	115	1	0.108	ppb	14.18	1.00	
137 Ba	115	1	0.007	ppb	63.36	1.00	
205 Tl	165	1	0.063	ppb	13.43	1.00	
208 Pb	165	1	0.005	ppb	37.30	1.00	
232 Th	165	1	1.413	ppb	14.76	1.00	Fail
238 U	165	1	0.015	ppb	3.77	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	376366	0.39	399164	94.3	30 - 120	
45 Sc	1	871292	1.51	940817	92.6	30 - 120	
72 Ge	1	509432	0.21	543541	93.7	30 - 120	
115 In	1	1694548	0.74	1769666	95.8	30 - 120	
165 Ho	1	3930648	0.63	4052095	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\AG070709B.B\003CALB.D\003CALB.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\AG070709B.B\018WASH.D\018WASH.D#
Date Acquired: Jul 7 2009 07:13 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 07 2009 06:35 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	0.950 ppb	34.59	1.30	
51 V	72	1	5.092 ppb	2.34	6.50	
52 Cr	72	1	2.116 ppb	1.95	2.60	
55 Mn	72	1	1.041 ppb	3.33	1.30	
59 Co	72	1	0.977 ppb	1.97	1.30	
60 Ni	72	1	2.082 ppb	1.15	2.60	
63 Cu	72	1	2.096 ppb	0.80	2.60	
66 Zn	72	1	10.630 ppb	0.64	13.00	
75 As	72	1	5.058 ppb	3.38	6.50	
78 Se	72	1	5.432 ppb	1.49	6.50	
95 Mo	72	1	2.180 ppb	2.74	2.60	
107 Ag	115	1	5.324 ppb	0.74	6.50	
111 Cd	115	1	1.066 ppb	6.36	1.30	
118 Sn	115	1	10.810 ppb	0.98	13.00	
121 Sb	115	1	2.023 ppb	2.76	2.60	
137 Ba	115	1	1.068 ppb	2.92	1.30	
205 Tl	165	1	1.140 ppb	1.37	1.30	
208 Pb	165	1	1.064 ppb	2.30	1.30	
232 Th	165	1	2.562 ppb	0.69	2.60	
238 U	165	1	1.114 ppb	1.20	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	375609	0.51	399164	94.1	30 - 120	
45 Sc	1	888298	1.26	940817	94.4	30 - 120	
72 Ge	1	513002	0.31	543541	94.4	30 - 120	
115 In	1	1688757	0.59	1769666	95.4	30 - 120	
165 Ho	1	3965900	1.10	4052095	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\AG070709B.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\AG070709B.B\019SMPL.D\019SMPL.D#
Date Acquired:	Jul 7 2009 07:16 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	IDL 1
Misc Info:	IDL 1
Vial Number:	2201
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 07 2009 06:35 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	-0.04	-0.04	ppb	68.44	3600	
52 Cr	72	1	0.04	0.04	ppb	29.24	3600	
55 Mn	72	1	0.00	0.00	ppb	256.13	3600	
59 Co	72	1	0.00	0.00	ppb	382.70	3600	
60 Ni	72	1	0.01	0.01	ppb	49.38	3600	
63 Cu	72	1	0.01	0.01	ppb	55.64	3600	
66 Zn	72	1	0.14	0.14	ppb	21.68	3600	
75 As	72	1	0.01	0.01	ppb	203.55	3600	
78 Se	72	1	-0.13	-0.13	ppb	125.58	3600	
95 Mo	72	1	0.05	0.05	ppb	16.98	3600	
107 Ag	115	1	0.00	0.00	ppb	52.68	3600	
111 Cd	115	1	0.00	0.00	ppb	214.07	3600	
118 Sn	115	1	0.15	0.15	ppb	19.57	3600	
121 Sb	115	1	0.06	0.06	ppb	6.05	3600	
137 Ba	115	1	0.00	0.00	ppb	349.53	3600	
205 Tl	165	1	0.12	0.12	ppb	50.04	3600	
208 Pb	165	1	0.00	0.00	ppb	22.86	3600	
232 Th	165	1	0.34	0.34	ppb	17.39	1000	
238 U	165	1	0.00	0.00	ppb	16.51	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379285	0.19	399164	95.0	30 - 120	
45 Sc	1	892144	1.83	940817	94.8	30 - 120	
72 Ge	1	515237	0.27	543541	94.8	30 - 120	
115 In	1	1718488	1.06	1769666	97.1	30 - 120	
165 Ho	1	3986789	1.41	4052095	98.4	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\AG070709B.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\AG070709B.B\020SMPL.D\020SMPL.D#
Date Acquired: Jul 7 2009 07:19 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 2
Misc Info: IDL 2
Vial Number: 2202
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	377.77	3600	
52 Cr	72	1	0.10	0.10	ppb	6.96	3600	
55 Mn	72	1	0.01	0.01	ppb	45.86	3600	
59 Co	72	1	0.00	0.00	ppb	145.74	3600	
60 Ni	72	1	0.00	0.00	ppb	1196.50	3600	
63 Cu	72	1	0.01	0.01	ppb	103.69	3600	
66 Zn	72	1	0.18	0.18	ppb	23.83	3600	
75 As	72	1	0.02	0.02	ppb	70.21	3600	
78 Se	72	1	-0.01	-0.01	ppb	2560.20	3600	
95 Mo	72	1	0.05	0.05	ppb	46.21	3600	
107 Ag	115	1	0.00	0.00	ppb	49.01	3600	
111 Cd	115	1	0.00	0.00	ppb	135.26	3600	
118 Sn	115	1	0.10	0.10	ppb	15.66	3600	
121 Sb	115	1	0.03	0.03	ppb	4.43	3600	
137 Ba	115	1	0.00	0.00	ppb	232.64	3600	
205 Tl	165	1	0.02	0.02	ppb	15.52	3600	
208 Pb	165	1	0.00	0.00	ppb	48.86	3600	
232 Th	165	1	0.15	0.15	ppb	8.53	1000	
238 U	165	1	0.00	0.00	ppb	25.79	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	380373	0.78	399164	95.3	30 - 120	
45 Sc	1	911770	1.04	940817	96.9	30 - 120	
72 Ge	1	519249	0.73	543541	95.5	30 - 120	
115 In	1	1724932	1.14	1769666	97.5	30 - 120	
165 Ho	1	4028099	0.29	4052095	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\AG070709B.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\AG070709B.B\021SMPL.D\021SMPL.D#
Date Acquired: Jul 7 2009 07:21 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 3
Misc Info: IDL 3
Vial Number: 2203
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	36.00	3600	
52 Cr	72	1	0.07	0.07	ppb	28.56	3600	
55 Mn	72	1	0.01	0.01	ppb	52.10	3600	
59 Co	72	1	0.00	0.00	ppb	355.28	3600	
60 Ni	72	1	0.01	0.01	ppb	40.66	3600	
63 Cu	72	1	0.02	0.02	ppb	44.24	3600	
66 Zn	72	1	0.26	0.26	ppb	8.74	3600	
75 As	72	1	0.01	0.01	ppb	60.02	3600	
78 Se	72	1	-0.04	-0.04	ppb	585.23	3600	
95 Mo	72	1	0.03	0.03	ppb	22.63	3600	
107 Ag	115	1	0.00	0.00	ppb	178.94	3600	
111 Cd	115	1	0.00	0.00	ppb	352.78	3600	
118 Sn	115	1	0.08	0.08	ppb	24.98	3600	
121 Sb	115	1	0.03	0.03	ppb	8.44	3600	
137 Ba	115	1	0.00	0.00	ppb	67.24	3600	
205 Tl	165	1	0.01	0.01	ppb	19.44	3600	
208 Pb	165	1	0.01	0.01	ppb	13.68	3600	
232 Th	165	1	0.08	0.08	ppb	3.77	1000	
238 U	165	1	0.00	0.00	ppb	12.12	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382171	0.47	399164	95.7	30 - 120	
45 Sc	1	913266	0.67	940817	97.1	30 - 120	
72 Ge	1	522994	0.15	543541	96.2	30 - 120	
115 In	1	1746978	0.26	1769666	98.7	30 - 120	
165 Ho	1	4035614	0.63	4052095	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\AG070709B.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\AG070709B.B\022SMPL.D\022SMPL.D#
Date Acquired:	Jul 7 2009 07:24 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	IDL 4
Misc Info:	IDL 4
Vial Number:	2204
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 07 2009 06:35 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	0.02	0.02	ppb	152.96	3600	
52 Cr	72	1	0.06	0.06	ppb	24.25	3600	
55 Mn	72	1	0.00	0.00	ppb	144.92	3600	
59 Co	72	1	0.00	0.00	ppb	1117.00	3600	
60 Ni	72	1	0.01	0.01	ppb	53.84	3600	
63 Cu	72	1	0.01	0.01	ppb	130.03	3600	
66 Zn	72	1	0.16	0.16	ppb	19.17	3600	
75 As	72	1	0.01	0.01	ppb	137.11	3600	
78 Se	72	1	0.08	0.08	ppb	286.30	3600	
95 Mo	72	1	0.03	0.03	ppb	66.91	3600	
107 Ag	115	1	0.04	0.04	ppb	167.18	3600	
111 Cd	115	1	0.00	0.00	ppb	1323.30	3600	
118 Sn	115	1	0.07	0.07	ppb	30.62	3600	
121 Sb	115	1	0.02	0.02	ppb	25.73	3600	
137 Ba	115	1	0.00	0.00	ppb	126.77	3600	
205 Tl	165	1	0.00	0.00	ppb	17.01	3600	
208 Pb	165	1	0.01	0.01	ppb	11.23	3600	
232 Th	165	1	0.05	0.05	ppb	3.48	1000	
238 U	165	1	0.00	0.00	ppb	41.01	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	380990	0.19	399164	95.4	30 - 120	
45 Sc	1	921642	0.31	940817	98.0	30 - 120	
72 Ge	1	522994	0.54	543541	96.2	30 - 120	
115 In	1	1746663	0.41	1769666	98.7	30 - 120	
165 Ho	1	4031298	0.35	4052095	99.5	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\AG070709B.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\AG070709B.B\023SMPL.D\023SMPL.D#
Date Acquired: Jul 7 2009 07:27 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 5
Misc Info: IDL 5
Vial Number: 2205
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	69.22	3600	
52 Cr	72	1	0.06	0.06	ppb	39.69	3600	
55 Mn	72	1	0.01	0.01	ppb	116.00	3600	
59 Co	72	1	0.00	0.00	ppb	153.25	3600	
60 Ni	72	1	0.01	0.01	ppb	36.95	3600	
63 Cu	72	1	0.03	0.03	ppb	48.62	3600	
66 Zn	72	1	0.38	0.38	ppb	10.97	3600	
75 As	72	1	0.01	0.01	ppb	58.58	3600	
78 Se	72	1	0.14	0.14	ppb	113.36	3600	
95 Mo	72	1	0.02	0.02	ppb	9.44	3600	
107 Ag	115	1	0.00	0.00	ppb	49.32	3600	
111 Cd	115	1	0.00	0.00	ppb	66.69	3600	
118 Sn	115	1	0.05	0.05	ppb	18.47	3600	
121 Sb	115	1	0.01	0.01	ppb	39.88	3600	
137 Ba	115	1	0.04	0.04	ppb	25.01	3600	
205 Tl	165	1	0.00	0.00	ppb	42.60	3600	
208 Pb	165	1	0.00	0.00	ppb	11.74	3600	
232 Th	165	1	0.03	0.03	ppb	10.68	1000	
238 U	165	1	0.00	0.00	ppb	43.23	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381108	1.08	399164	95.5	30 - 120	
45 Sc	1	917609	0.68	940817	97.5	30 - 120	
72 Ge	1	526581	0.40	543541	96.9	30 - 120	
115 In	1	1753078	0.65	1769666	99.1	30 - 120	
165 Ho	1	4051353	0.90	4052095	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\AG070709B.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\AG070709B.B\024SMPL.D\024SMPL.D#
Date Acquired:	Jul 7 2009 07:30 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	IDL 6
Misc Info:	IDL 6
Vial Number:	2206
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 07 2009 06:35 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	46.47	3600	
52 Cr	72	1	0.04	0.04	ppb	30.72	3600	
55 Mn	72	1	0.01	0.01	ppb	69.39	3600	
59 Co	72	1	0.00	0.00	ppb	147.86	3600	
60 Ni	72	1	0.00	0.00	ppb	209.95	3600	
63 Cu	72	1	0.00	0.00	ppb	636.32	3600	
66 Zn	72	1	0.12	0.12	ppb	19.15	3600	
75 As	72	1	0.01	0.01	ppb	57.82	3600	
78 Se	72	1	-0.14	-0.14	ppb	174.84	3600	
95 Mo	72	1	0.02	0.02	ppb	42.62	3600	
107 Ag	115	1	0.00	0.00	ppb	112.75	3600	
111 Cd	115	1	0.00	0.00	ppb	155.48	3600	
118 Sn	115	1	0.03	0.03	ppb	40.76	3600	
121 Sb	115	1	0.01	0.01	ppb	30.69	3600	
137 Ba	115	1	0.00	0.00	ppb	630.14	3600	
205 Tl	165	1	0.00	0.00	ppb	28.37	3600	
208 Pb	165	1	0.01	0.01	ppb	14.13	3600	
232 Th	165	1	0.02	0.02	ppb	13.98	1000	
238 U	165	1	0.00	0.00	ppb	61.03	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	379484	0.58	399164	95.1	30 - 120	
45 Sc	1	919710	0.59	940817	97.8	30 - 120	
72 Ge	1	529558	0.14	543541	97.4	30 - 120	
115 In	1	1740330	0.31	1769666	98.3	30 - 120	
165 Ho	1	4028294	0.54	4052095	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\AG070709B.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\AG070709B.B\025SMPL.D\025SMPL.D#
Date Acquired: Jul 7 2009 07:32 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: IDL 7
Misc Info: IDL 7
Vial Number: 2207
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 07 2009 06:35 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	-0.02	-0.02	ppb	66.88	3600	
52 Cr	72	1	0.09	0.09	ppb	22.46	3600	
55 Mn	72	1	0.01	0.01	ppb	119.57	3600	
59 Co	72	1	0.00	0.00	ppb	26.53	3600	
60 Ni	72	1	0.01	0.01	ppb	81.48	3600	
63 Cu	72	1	0.01	0.01	ppb	162.49	3600	
66 Zn	72	1	0.46	0.46	ppb	7.54	3600	
75 As	72	1	0.00	0.00	ppb	826.57	3600	
78 Se	72	1	0.10	0.10	ppb	199.05	3600	
95 Mo	72	1	0.03	0.03	ppb	36.36	3600	
107 Ag	115	1	0.00	0.00	ppb	86.85	3600	
111 Cd	115	1	0.00	0.00	ppb	439.55	3600	
118 Sn	115	1	0.07	0.07	ppb	34.83	3600	
121 Sb	115	1	0.01	0.01	ppb	25.15	3600	
137 Ba	115	1	0.01	0.01	ppb	107.25	3600	
205 Tl	165	1	0.00	0.00	ppb	136.49	3600	
208 Pb	165	1	0.00	0.00	ppb	56.94	3600	
232 Th	165	1	0.02	0.02	ppb	11.50	1000	
238 U	165	1	0.00	0.00	ppb	52.38	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382232	0.33	399164	95.8	30 - 120	
45 Sc	1	914289	2.86	940817	97.2	30 - 120	
72 Ge	1	528909	0.57	543541	97.3	30 - 120	
115 In	1	1760439	0.96	1769666	99.5	30 - 120	
165 Ho	1	4061949	1.79	4052095	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\AG070709B.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\AG070709B.B\026 CCV.D\026 CCV.D#
Date Acquired: Jul 7 2009 07:35 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 07 2009 06:35 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	49.11	ppb	1.59	50	98.2	90 - 110	
51 V	72	1	49.65	ppb	0.84	50	99.3	90 - 110	
52 Cr	72	1	49.85	ppb	0.52	50	99.7	90 - 110	
55 Mn	72	1	50.18	ppb	0.98	50	100.4	90 - 110	
59 Co	72	1	49.63	ppb	0.79	50	99.3	90 - 110	
60 Ni	72	1	50.44	ppb	0.39	50	100.9	90 - 110	
63 Cu	72	1	49.99	ppb	0.78	50	100.0	90 - 110	
66 Zn	72	1	50.56	ppb	0.39	50	101.1	90 - 110	
75 As	72	1	50.04	ppb	0.28	50	100.1	90 - 110	
78 Se	72	1	51.86	ppb	3.17	50	103.7	90 - 110	
95 Mo	72	1	50.35	ppb	0.60	50	100.7	90 - 110	
107 Ag	115	1	50.41	ppb	1.84	50	100.8	90 - 110	
111 Cd	115	1	50.40	ppb	1.73	50	100.8	90 - 110	
118 Sn	115	1	50.13	ppb	1.43	50	100.3	90 - 110	
121 Sb	115	1	50.25	ppb	1.11	50	100.5	90 - 110	
137 Ba	115	1	50.69	ppb	1.75	50	101.4	90 - 110	
205 Tl	165	1	50.76	ppb	0.57	50	101.5	90 - 110	
208 Pb	165	1	50.43	ppb	0.52	50	100.9	90 - 110	
232 Th	165	1	50.82	ppb	2.31	50	101.6	90 - 110	
238 U	165	1	51.44	ppb	0.54	50	102.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	371672	0.71	399164	93.1	30 - 120	
45 Sc	1	912752	0.78	940817	97.0	30 - 120	
72 Ge	1	522215	0.41	543541	96.1	30 - 120	
115 In	1	1743103	0.73	1769666	98.5	30 - 120	
165 Ho	1	4005312	0.25	4052095	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\AG070709B.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\AG070709B.B\027 CCB.D\027 CCB.D#
Date Acquired: Jul 7 2009 07:38 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 07 2009 06:35 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	0.015	ppb	86.57	1.00	
51 V	72	1	0.000	ppb	19711.00	1.00	
52 Cr	72	1	-0.001	ppb	6169.20	1.00	
55 Mn	72	1	0.001	ppb	190.49	1.00	
59 Co	72	1	0.008	ppb	39.18	1.00	
60 Ni	72	1	0.019	ppb	96.35	1.00	
63 Cu	72	1	-0.005	ppb	50.33	1.00	
66 Zn	72	1	0.021	ppb	90.07	1.00	
75 As	72	1	0.019	ppb	36.03	1.00	
78 Se	72	1	0.143	ppb	130.86	1.00	
95 Mo	72	1	0.058	ppb	40.81	1.00	
107 Ag	115	1	0.007	ppb	31.96	1.00	
111 Cd	115	1	0.005	ppb	147.19	1.00	
118 Sn	115	1	0.092	ppb	9.40	1.00	
121 Sb	115	1	0.047	ppb	17.39	1.00	
137 Ba	115	1	0.007	ppb	25.78	1.00	
205 Tl	165	1	0.027	ppb	8.32	1.00	
208 Pb	165	1	0.004	ppb	29.24	1.00	
232 Th	165	1	1.122	ppb	18.47	1.00	Fail
238 U	165	1	0.009	ppb	11.87	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	372423	1.23	399164	93.3	30 - 120	
45 Sc	1	912447	0.67	940817	97.0	30 - 120	
72 Ge	1	523888	0.45	543541	96.4	30 - 120	
115 In	1	1734442	0.69	1769666	98.0	30 - 120	
165 Ho	1	3981000	0.53	4052095	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\AG070709B.B\003CALB.D\003CALB.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\AG070709B.B\028WASH.D\028WASH.D#
Date Acquired: Jul 7 2009 07:41 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 07 2009 06:35 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	1.085 ppb	15.68	1.30	
51 V	72	1	5.132 ppb	0.96	6.50	
52 Cr	72	1	2.054 ppb	3.48	2.60	
55 Mn	72	1	1.017 ppb	4.38	1.30	
59 Co	72	1	1.024 ppb	2.60	1.30	
60 Ni	72	1	2.076 ppb	8.39	2.60	
63 Cu	72	1	2.034 ppb	0.60	2.60	
66 Zn	72	1	10.510 ppb	1.39	13.00	
75 As	72	1	5.147 ppb	1.98	6.50	
78 Se	72	1	4.531 ppb	13.79	6.50	
95 Mo	72	1	2.009 ppb	2.89	2.60	
107 Ag	115	1	5.317 ppb	1.44	6.50	
111 Cd	115	1	1.104 ppb	9.81	1.30	
118 Sn	115	1	10.490 ppb	2.91	13.00	
121 Sb	115	1	1.965 ppb	2.52	2.60	
137 Ba	115	1	1.095 ppb	3.49	1.30	
205 Tl	165	1	1.097 ppb	0.49	1.30	
208 Pb	165	1	1.060 ppb	0.29	1.30	
232 Th	165	1	2.347 ppb	1.47	2.60	
238 U	165	1	1.092 ppb	1.22	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	372721	0.46	399164	93.4	30 - 120	
45 Sc	1	900076	1.60	940817	95.7	30 - 120	
72 Ge	1	524566	0.72	543541	96.5	30 - 120	
115 In	1	1735347	1.19	1769666	98.1	30 - 120	
165 Ho	1	4009833	0.10	4052095	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\AG070709B.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: 7/8/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\134CALB.D\134CALB.D#
Date Acquired:	Jul 8 2009 12:34 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 08 2009 12:32 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-108	246.57
52	Cr	72	1	1653	5.08
55	Mn	72	1	180	17.07
59	Co	72	1	53	59.97
60	Ni	72	1	60	49.96
63	Cu	72	1	533	20.71
66	Zn	72	1	196	14.00
75	As	72	1	38	45.31
78	Se	72	1	217	11.91
95	Mo	72	1	320	5.86
107	Ag	115	1	27	57.06
111	Cd	115	1	9	94.56
118	Sn	115	1	363	7.25
121	Sb	115	1	31	53.98
137	Ba	115	1	28	24.75
205	Tl	165	1	36	19.54
208	Pb	165	1	318	9.95
232	Th	165	1	933	10.49
238	U	165	1	32	6.43

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	359710	0.64
45	Sc	1	999296	0.68
72	Ge	1	590607	0.42
115	In	1	1756110	0.38
165	Ho	1	3599124	0.59

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\AG070709B.B\135ICAL.D\135ICAL.D#
Date Acquired: Jul 8 2009 12:37 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 08 2009 12:35 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	42456	0.79
51	V	72	1	677901	0.51
52	Cr	72	1	771532	0.97
55	Mn	72	1	701977	0.22
59	Co	72	1	1096247	1.62
60	Ni	72	1	262850	0.23
63	Cu	72	1	658157	0.06
66	Zn	72	1	119936	0.74
75	As	72	1	80646	0.43
78	Se	72	1	11832	3.06
95	Mo	72	1	303504	0.38
107	Ag	115	1	975217	1.48
111	Cd	115	1	166334	0.80
118	Sn	115	1	422146	0.57
121	Sb	115	1	468819	1.26
137	Ba	115	1	186995	0.82
205	Tl	165	1	1941640	2.52
208	Pb	165	1	2617843	1.23
232	Th	165	1	2474288	4.07
238	U	165	1	2935507	0.82

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	357075	1.18	359710	99.3	30 - 120	
45	Sc	1	1009477	1.71	999296	101.0	30 - 120	
72	Ge	1	575763	0.70	590607	97.5	30 - 120	
115	In	1	1747144	0.55	1756110	99.5	30 - 120	
165	Ho	1	3577226	0.83	3599124	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\AG070709B.B\134CALB.D\134CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070709B.B\136 CCV.D\136 CCV.D#
Date Acquired: Jul 8 2009 12:39 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 08 2009 12:37 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	50.03	ppb	0.56	50	100.1	90 - 110	
51 V	72	1	49.80	ppb	0.84	50	99.6	90 - 110	
52 Cr	72	1	48.81	ppb	0.12	50	97.6	90 - 110	
55 Mn	72	1	49.22	ppb	0.79	50	98.4	90 - 110	
59 Co	72	1	48.81	ppb	0.80	50	97.6	90 - 110	
60 Ni	72	1	49.71	ppb	0.88	50	99.4	90 - 110	
63 Cu	72	1	49.20	ppb	0.30	50	98.4	90 - 110	
66 Zn	72	1	50.04	ppb	1.12	50	100.1	90 - 110	
75 As	72	1	49.55	ppb	0.66	50	99.1	90 - 110	
78 Se	72	1	48.70	ppb	7.53	50	97.4	90 - 110	
95 Mo	72	1	49.10	ppb	0.65	50	98.2	90 - 110	
107 Ag	115	1	49.02	ppb	1.24	50	98.0	90 - 110	
111 Cd	115	1	48.83	ppb	0.79	50	97.7	90 - 110	
118 Sn	115	1	49.21	ppb	0.47	50	98.4	90 - 110	
121 Sb	115	1	48.89	ppb	1.07	50	97.8	90 - 110	
137 Ba	115	1	49.18	ppb	0.88	50	98.4	90 - 110	
205 Tl	165	1	49.43	ppb	0.66	50	98.9	90 - 110	
208 Pb	165	1	49.64	ppb	0.67	50	99.3	90 - 110	
232 Th	165	1	51.45	ppb	2.27	50	102.9	90 - 110	
238 U	165	1	49.34	ppb	1.31	50	98.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	348155	0.34	359710	96.8	30 - 120	
45 Sc	1	976535	2.40	999296	97.7	30 - 120	
72 Ge	1	566977	0.68	590607	96.0	30 - 120	
115 In	1	1731189	0.46	1756110	98.6	30 - 120	
165 Ho	1	3536295	0.16	3599124	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\137 CCB.D\137 CCB.D#
Date Acquired: Jul 8 2009 12:42 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 08 2009 12:37 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	0.024	ppb	99.58	1.00	
51 V	72	1	0.018	ppb	61.07	1.00	
52 Cr	72	1	0.001	ppb	352.73	1.00	
55 Mn	72	1	0.009	ppb	40.91	1.00	
59 Co	72	1	0.004	ppb	59.53	1.00	
60 Ni	72	1	0.011	ppb	122.18	1.00	
63 Cu	72	1	-0.021	ppb	21.33	1.00	
66 Zn	72	1	0.001	ppb	4545.90	1.00	
75 As	72	1	0.007	ppb	98.54	1.00	
78 Se	72	1	-0.199	ppb	427.62	1.00	
95 Mo	72	1	-0.036	ppb	15.25	1.00	
107 Ag	115	1	0.005	ppb	44.75	1.00	
111 Cd	115	1	0.002	ppb	424.36	1.00	
118 Sn	115	1	0.109	ppb	9.40	1.00	
121 Sb	115	1	0.074	ppb	8.54	1.00	
137 Ba	115	1	0.002	ppb	210.19	1.00	
205 Tl	165	1	0.040	ppb	5.51	1.00	
208 Pb	165	1	0.004	ppb	85.66	1.00	
232 Th	165	1	1.629	ppb	17.97	1.00	Fail
238 U	165	1	0.015	ppb	10.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	350828	0.66	359710	97.5	30 - 120	
45 Sc	1	973486	2.25	999296	97.4	30 - 120	
72 Ge	1	570555	0.38	590607	96.6	30 - 120	
115 In	1	1720156	0.91	1756110	98.0	30 - 120	
165 Ho	1	3509645	0.62	3599124	97.5	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\138WASH.D\138WASH.D#
Date Acquired: Jul 8 2009 12:45 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 08 2009 12:37 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	0.979 ppb	34.30	1.30	
51 V	72	1	5.068 ppb	3.72	6.50	
52 Cr	72	1	2.018 ppb	2.07	2.60	
55 Mn	72	1	1.014 ppb	4.96	1.30	
59 Co	72	1	0.964 ppb	1.37	1.30	
60 Ni	72	1	2.014 ppb	1.39	2.60	
63 Cu	72	1	1.962 ppb	1.29	2.60	
66 Zn	72	1	10.290 ppb	2.60	13.00	
75 As	72	1	4.998 ppb	2.58	6.50	
78 Se	72	1	5.245 ppb	9.66	6.50	
95 Mo	72	1	1.966 ppb	4.66	2.60	
107 Ag	115	1	5.162 ppb	1.02	6.50	
111 Cd	115	1	1.074 ppb	10.21	1.30	
118 Sn	115	1	10.220 ppb	1.85	13.00	
121 Sb	115	1	1.873 ppb	2.04	2.60	
137 Ba	115	1	1.017 ppb	3.52	1.30	
205 Tl	165	1	1.072 ppb	1.31	1.30	
208 Pb	165	1	1.039 ppb	0.84	1.30	
232 Th	165	1	2.457 ppb	2.48	2.60	
238 U	165	1	1.060 ppb	0.72	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	352388	0.22	359710	98.0	30 - 120	
45 Sc	1	974978	1.17	999296	97.6	30 - 120	
72 Ge	1	572889	0.46	590607	97.0	30 - 120	
115 In	1	1728325	1.17	1756110	98.4	30 - 120	
165 Ho	1	3531685	0.46	3599124	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\170 CCV.D\170 CCV.D#
Date Acquired: Jul 8 2009 02:13 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 08 2009 12:37 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	52.25	ppb	2.31	50	104.5	90 - 110	
51 V	72	1	48.28	ppb	0.15	50	96.6	90 - 110	
52 Cr	72	1	47.98	ppb	0.91	50	96.0	90 - 110	
55 Mn	72	1	48.02	ppb	0.49	50	96.0	90 - 110	
59 Co	72	1	47.40	ppb	0.99	50	94.8	90 - 110	
60 Ni	72	1	48.09	ppb	0.72	50	96.2	90 - 110	
63 Cu	72	1	48.41	ppb	0.48	50	96.8	90 - 110	
66 Zn	72	1	51.25	ppb	0.79	50	102.5	90 - 110	
75 As	72	1	51.11	ppb	0.68	50	102.2	90 - 110	
78 Se	72	1	47.31	ppb	1.42	50	94.6	90 - 110	
95 Mo	72	1	49.09	ppb	0.32	50	98.2	90 - 110	
107 Ag	115	1	49.14	ppb	1.32	50	98.3	90 - 110	
111 Cd	115	1	50.26	ppb	0.53	50	100.5	90 - 110	
118 Sn	115	1	50.08	ppb	0.55	50	100.2	90 - 110	
121 Sb	115	1	52.86	ppb	0.74	50	105.7	90 - 110	
137 Ba	115	1	50.79	ppb	0.56	50	101.6	90 - 110	
205 Tl	165	1	49.91	ppb	1.62	50	99.8	90 - 110	
208 Pb	165	1	50.25	ppb	1.06	50	100.5	90 - 110	
232 Th	165	1	52.19	ppb	2.46	50	104.4	90 - 110	
238 U	165	1	50.74	ppb	1.41	50	101.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	297820	1.09	359710	82.8	30 - 120	
45 Sc	1	821190	0.56	999296	82.2	30 - 120	
72 Ge	1	496911	0.76	590607	84.1	30 - 120	
115 In	1	1472311	0.13	1756110	83.8	30 - 120	
165 Ho	1	3081621	0.70	3599124	85.6	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\171 CCB.D\171 CCB.D#
Date Acquired:	Jul 8 2009 02:16 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 08 2009 12:37 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	173.25	1.00	
51 V	72	1	-0.013	ppb	179.76	1.00	
52 Cr	72	1	0.003	ppb	753.01	1.00	
55 Mn	72	1	0.022	ppb	41.71	1.00	
59 Co	72	1	0.005	ppb	45.50	1.00	
60 Ni	72	1	0.003	ppb	613.52	1.00	
63 Cu	72	1	-0.010	ppb	29.29	1.00	
66 Zn	72	1	0.013	ppb	30.26	1.00	
75 As	72	1	0.000	ppb	1972.40	1.00	
78 Se	72	1	0.083	ppb	601.56	1.00	
95 Mo	72	1	-0.048	ppb	23.13	1.00	
107 Ag	115	1	0.006	ppb	71.17	1.00	
111 Cd	115	1	0.020	ppb	73.98	1.00	
118 Sn	115	1	0.082	ppb	37.20	1.00	
121 Sb	115	1	0.080	ppb	18.41	1.00	
137 Ba	115	1	0.002	ppb	137.02	1.00	
205 Tl	165	1	0.029	ppb	15.84	1.00	
208 Pb	165	1	0.004	ppb	61.81	1.00	
232 Th	165	1	1.587	ppb	15.59	1.00	Fail
238 U	165	1	0.015	ppb	17.02	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	311145	0.41	359710	86.5	30 - 120	
45 Sc	1	865887	2.51	999296	86.6	30 - 120	
72 Ge	1	521021	0.41	590607	88.2	30 - 120	
115 In	1	1566375	1.62	1756110	89.2	30 - 120	
165 Ho	1	3235774	0.99	3599124	89.9	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\AG070709B.B\134CALB.D\134CALB.D#

1 :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\AG070709B.B\172WASH.D\172WASH.D#
Date Acquired: Jul 8 2009 02:19 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 08 2009 12:37 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	1.108 ppb	11.14	1.30	
51 V	72	1	4.987 ppb	2.20	6.50	
52 Cr	72	1	2.019 ppb	0.87	2.60	
55 Mn	72	1	1.026 ppb	4.94	1.30	
59 Co	72	1	0.990 ppb	1.52	1.30	
60 Ni	72	1	1.993 ppb	4.57	2.60	
63 Cu	72	1	2.003 ppb	0.52	2.60	
66 Zn	72	1	10.600 ppb	0.57	13.00	
75 As	72	1	5.166 ppb	2.10	6.50	
78 Se	72	1	5.617 ppb	6.11	6.50	
95 Mo	72	1	1.915 ppb	2.54	2.60	
107 Ag	115	1	5.106 ppb	0.39	6.50	
111 Cd	115	1	1.021 ppb	4.92	1.30	
118 Sn	115	1	10.420 ppb	0.80	13.00	
121 Sb	115	1	1.987 ppb	4.16	2.60	
137 Ba	115	1	1.085 ppb	5.30	1.30	
205 Tl	165	1	1.081 ppb	1.19	1.30	
208 Pb	165	1	1.061 ppb	1.33	1.30	
232 Th	165	1	2.515 ppb	1.76	2.60	
238 U	165	1	1.093 ppb	1.74	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	316333	0.07	359710	87.9	30 - 120	
45 Sc	1	887198	0.56	999296	88.8	30 - 120	
72 Ge	1	530843	0.48	590607	89.9	30 - 120	
115 In	1	1618138	0.95	1756110	92.1	30 - 120	
165 Ho	1	3373797	0.53	3599124	93.7	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\173 BLK.D\173 BLK.D#
Date Acquired: Jul 8 2009 02:22 am
Operator: TEL
Sample Name: LF30GBF
Misc Info: BLANK 9187175 6020
Vial Number: 3407
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Jul 08 2009 12:37 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	173.20	2.00	
51 V	72	1	0.016 ppb	193.58	2.00	
52 Cr	72	1	-0.017 ppb	101.97	2.00	
55 Mn	72	1	0.015 ppb	39.29	2.00	
59 Co	72	1	-0.002 ppb	61.70	2.00	
60 Ni	72	1	0.017 ppb	28.07	2.00	
63 Cu	72	1	0.016 ppb	65.20	2.00	
66 Zn	72	1	0.287 ppb	11.22	2.00	
75 As	72	1	0.000 ppb	600.84	2.00	
78 Se	72	1	-0.429 ppb	19.76	2.00	
95 Mo	72	1	-0.082 ppb	4.37	2.00	
107 Ag	115	1	0.002 ppb	2.08	2.00	
111 Cd	115	1	0.002 ppb	233.83	2.00	
118 Sn	115	1	0.041 ppb	43.39	2.00	
121 Sb	115	1	0.037 ppb	22.69	2.00	
137 Ba	115	1	0.008 ppb	21.06	2.00	
205 Tl	165	1	0.018 ppb	19.84	2.00	
208 Pb	165	1	0.070 ppb	8.60	2.00	
232 Th	165	1	0.117 ppb	17.60	2.00	
238 U	165	1	0.002 ppb	24.74	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	312470	0.98	359710	86.9	30 - 120	
45 Sc	1	890718	0.47	999296	89.1	30 - 120	
72 Ge	1	534914	0.67	590607	90.6	30 - 120	
115 In	1	1609641	0.81	1756110	91.7	30 - 120	
165 Ho	1	3377369	1.08	3599124	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\174 LCS.D\174 LCS.D#
Date Acquired:	Jul 8 2009 02:25 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF30GCF
Misc Info:	LCS
Vial Number:	3408
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 12:37 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	43.71	2.91	40	109.3	80 - 120	
51 V	72	1	40.21	0.96	40	100.5	80 - 120	
52 Cr	72	1	40.76	0.52	40	101.9	80 - 120	
55 Mn	72	1	40.91	0.49	40	102.3	80 - 120	
59 Co	72	1	40.46	0.50	40	101.2	80 - 120	
60 Ni	72	1	40.74	0.86	40	101.9	80 - 120	
63 Cu	72	1	41.20	1.05	40	103.0	80 - 120	
66 Zn	72	1	43.82	0.87	40	109.6	80 - 120	
75 As	72	1	42.53	0.80	40	106.3	80 - 120	
78 Se	72	1	44.13	6.30	40	110.3	80 - 120	
95 Mo	72	1	41.94	0.76	40	104.9	80 - 120	
107 Ag	115	1	41.04	0.30	40	102.6	80 - 120	
111 Cd	115	1	41.99	0.31	40	105.0	80 - 120	
118 Sn	115	1	0.09	3.85	40	0.2	80 - 120	
121 Sb	115	1	42.29	0.73	40	105.7	80 - 120	
137 Ba	115	1	42.00	0.38	40	105.0	80 - 120	
205 Tl	165	1	42.77	1.11	40	106.9	80 - 120	
208 Pb	165	1	43.10	1.20	40	107.8	80 - 120	
232 Th	165	1	41.54	2.51	40	103.9	80 - 120	
238 U	165	1	43.86	1.68	40	109.7	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	310470	1.14	359710	86.3	30 - 120	
45 Sc	1	869016	0.47	999296	87.0	30 - 120	
72 Ge	1	515847	0.72	590607	87.3	30 - 120	
115 In	1	1617308	1.07	1756110	92.1	30 - 120	
165 Ho	1	3378777	0.93	3599124	93.9	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\175SMPL.D\175SMPL.D#
Date Acquired: Jul 8 2009 02:27 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1T5F 10X
Misc Info: D9G020221
Vial Number: 3409
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 12:37 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	27.07	2.71	ppb	2.42	3600	
52 Cr	72	1	35.58	3.56	ppb	1.14	3600	
55 Mn	72	1	19.49	1.95	ppb	4.84	3600	
59 Co	72	1	0.64	0.06	ppb	23.42	3600	
60 Ni	72	1	2.82	0.28	ppb	22.12	3600	
63 Cu	72	1	0.50	0.05	ppb	7.45	3600	
66 Zn	72	1	1.07	0.11	ppb	26.36	3600	
75 As	72	1	154.50	15.45	ppb	0.76	3600	
78 Se	72	1	-0.09	-0.01	ppb	4730.40	3600	
95 Mo	72	1	30.17	3.02	ppb	1.71	3600	
107 Ag	115	1	0.06	0.01	ppb	88.96	3600	
111 Cd	115	1	0.08	0.01	ppb	139.88	3600	
118 Sn	115	1	-0.12	-0.01	ppb	38.81	3600	
121 Sb	115	1	0.68	0.07	ppb	7.31	3600	
137 Ba	115	1	34.70	3.47	ppb	2.00	3600	
205 Tl	165	1	0.75	0.08	ppb	6.93	3600	
208 Pb	165	1	0.09	0.01	ppb	16.66	3600	
232 Th	165	1	14.75	1.48	ppb	16.90	1000	
238 U	165	1	53.47	5.35	ppb	1.31	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	305670	1.08	359710	85.0	30 - 120	
45 Sc	1	855518	1.05	999296	85.6	30 - 120	
72 Ge	1	502137	0.59	590607	85.0	30 - 120	
115 In	1	1525563	0.50	1756110	86.9	30 - 120	
165 Ho	1	3233358	1.02	3599124	89.8	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\176AREF.D\176AREF.D#
Date Acquired: Jul 8 2009 02:30 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1WAF 10X
Misc Info: D9G020227
Vial Number: 3410
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 12:37 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	-243.20	-24.32	ppb	14.30	3600	
52 Cr	72	1	10,060.00	1006.00	ppb	1.32	3600	
55 Mn	72	1	2.09	0.21	ppb	11.67	3600	
59 Co	72	1	0.49	0.05	ppb	21.48	3600	
60 Ni	72	1	1.79	0.18	ppb	9.91	3600	
63 Cu	72	1	0.68	0.07	ppb	23.73	3600	
66 Zn	72	1	1.27	0.13	ppb	13.90	3600	
75 As	72	1	748.60	74.86	ppb	0.91	3600	
78 Se	72	1	-0.22	-0.02	ppb	1295.20	3600	
95 Mo	72	1	47.17	4.72	ppb	3.51	3600	
107 Ag	115	1	0.13	0.01	ppb	43.50	3600	
111 Cd	115	1	0.01	0.00	ppb	1569.70	3600	
118 Sn	115	1	-0.04	0.00	ppb	295.47	3600	
121 Sb	115	1	0.68	0.07	ppb	9.26	3600	
137 Ba	115	1	16.07	1.61	ppb	0.97	3600	
205 Tl	165	1	0.19	0.02	ppb	9.45	3600	
208 Pb	165	1	0.05	0.00	ppb	28.89	3600	
232 Th	165	1	4.37	0.44	ppb	11.63	1000	
238 U	165	1	34.87	3.49	ppb	1.20	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	292204	0.60	359710	81.2	30 - 120	
45 Sc	1	798598	0.22	999296	79.9	30 - 120	
72 Ge	1	469323	0.66	590607	79.5	30 - 120	
115 In	1	1402216	0.73	1756110	79.8	30 - 120	
165 Ho	1	3007910	0.68	3599124	83.6	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\177SDIL.D\177SDIL.D#
Date Acquired: Jul 8 2009 02:33 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1WAP50F
Misc Info: SERIAL DILUTION
Vial Number: 3411
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 12:37 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070709B.B\176AREF.D\176AREF.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	-1.38	ppb	52.12	-4.86	28.5	90 - 110	
52 Cr	72	1	206.70	ppb	0.94	201.20	102.7	90 - 110	
55 Mn	72	1	0.07	ppb	21.68	0.04	158.1	90 - 110	
59 Co	72	1	0.01	ppb	44.53	0.01	128.0	90 - 110	
60 Ni	72	1	0.18	ppb	3.53	0.04	507.0	90 - 110	
63 Cu	72	1	0.02	ppb	63.64	0.01	125.0	90 - 110	
66 Zn	72	1	0.09	ppb	5.33	0.03	342.1	90 - 110	
75 As	72	1	14.28	ppb	0.31	14.97	95.4	90 - 110	
78 Se	72	1	-0.57	ppb	89.60	0.00	12705.7	90 - 110	
95 Mo	72	1	0.89	ppb	3.87	0.94	93.9	90 - 110	
107 Ag	115	1	0.00	ppb	60.93	0.00	179.7	90 - 110	
111 Cd	115	1	0.00	ppb	301.38	0.00	-2239.2	90 - 110	
118 Sn	115	1	0.01	ppb	88.94	0.00	-1832.6	90 - 110	
121 Sb	115	1	0.01	ppb	23.30	0.01	108.0	90 - 110	
137 Ba	115	1	0.31	ppb	3.06	0.32	96.8	90 - 110	
205 Tl	165	1	0.01	ppb	12.17	0.00	136.5	90 - 110	
208 Pb	165	1	0.00	ppb	662.23	0.00	41.1	90 - 110	
232 Th	165	1	0.13	ppb	12.39	0.09	145.4	90 - 110	
238 U	165	1	0.70	ppb	1.15	0.70	99.9	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	305980	0.72	359710	85.1	30 - 120	
45 Sc	1	813394	0.50	999296	81.4	30 - 120	
72 Ge	1	488705	0.23	590607	82.7	30 - 120	
115 In	1	1498043	1.32	1756110	85.3	30 - 120	
165 Ho	1	3190430	0.79	3599124	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\AG070709B.B\134CALB.D\134CALB.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: 07/08/09 09:50:33

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LF1WAP50F** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070709B # 177 | Method 6020_
Acquired: 07/08/2009 02:33:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/08/2009 00:34:00 | 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	-8065	-69.200	-243.20			*	
7440-47-3	Chromium	52	1352420	10335	10060	2.73		*	
7439-96-5	Manganese	55	543	3.3095	2.0930	58.1		*	
7440-48-4	Cobalt	59	160	0.62250	0.48650	28.0		*	
7440-02-0	Nickel	60	453	9.0500	1.7850	407		*	
7440-50-8	Copper	63	537	0.85400	0.68310	25.0		*	
7440-66-6	Zinc	66	251	4.3555	1.2730	242		*	
7440-38-2	Arsenic	75	9804	714.00	748.60	4.62	0.21	4.6	☑
7782-49-2	Selenium	78	123	-28.410	-0.22360		0.70	NC	☑
7439-98-7	Molybdenum	95	2544	44.275	47.170	6.14		*	
7440-22-4	Silver	107	63	0.24240	0.13490	79.7		*	
7440-43-9	Cadmium	111	4	-0.12280	0.00548	2340		*	
7440-31-5	Tin	118	363	0.73250	-0.03997			*	
7440-36-0	Antimony	121	86	0.73550	0.68100	8.00		*	
7440-39-3	Barium	137	522	15.550	16.070	3.24		*	
7440-28-0	Thallium	205	123	0.26490	0.19410	36.5		*	
7439-92-1	Lead	208	291	0.01991	0.04846	58.9		*	
7440-61-1	Uranium	238	18272	34.840	34.870	0.0860		*	
7440-29-1	Thorium	232	3631	6.3600	4.3740	45.4		*	
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: 7/8/09

Post Digestion Spiked Sample (PDS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\178PDS.D\178PDS.D#
Date Acquired:	Jul 8 2009 02:36 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1WAZF
Misc Info:	POST DIGESTION SPIKE
Vial Number:	3412
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 12:37 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	201.20	0.00	ppb	0.25	200	100.6	75 - 125	
51 V	72	1	167.50	-24.32	ppb	4.36	200	95.3	75 - 125	
52 Cr	72	1	1158.00	1006.00	ppb	0.96	200	96.0	75 - 125	
55 Mn	72	1	199.00	0.21	ppb	0.53	200	99.4	75 - 125	
59 Co	72	1	189.10	0.05	ppb	1.23	200	94.5	75 - 125	
60 Ni	72	1	181.90	0.18	ppb	0.33	200	90.9	75 - 125	
63 Cu	72	1	181.90	0.07	ppb	0.91	200	90.9	75 - 125	
66 Zn	72	1	193.70	0.13	ppb	0.42	200	96.8	75 - 125	
75 As	72	1	269.10	74.86	ppb	0.55	200	97.9	75 - 125	
78 Se	72	1	205.60	-0.02	ppb	2.08	200	102.8	75 - 125	
95 Mo	72	1	207.00	4.72	ppb	0.30	200	101.1	75 - 125	
107 Ag	115	1	43.59	0.01	ppb	0.43	50	87.2	75 - 125	
111 Cd	115	1	189.70	0.00	ppb	0.73	200	94.8	75 - 125	
118 Sn	115	1	175.70	0.00	ppb	0.85	200	87.9	75 - 125	
121 Sb	115	1	197.20	0.07	ppb	0.38	200	98.6	75 - 125	
137 Ba	115	1	198.70	1.61	ppb	0.32	200	98.6	75 - 125	
205 Tl	165	1	183.30	0.02	ppb	1.60	200	91.6	75 - 125	
208 Pb	165	1	184.40	0.00	ppb	0.94	200	92.2	75 - 125	
232 Th	165	1	0.10	0.44	ppb	16.57	200	0.1	75 - 125	
238 U	165	1	192.90	3.49	ppb	0.88	200	94.8	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	297444	0.90	359710	82.7	30 - 120	
45 Sc	1	818816	0.91	999296	81.9	30 - 120	
72 Ge	1	465209	1.25	590607	78.8	30 - 120	
115 In	1	1448516	1.43	1756110	82.5	30 - 120	
165 Ho	1	3126678	1.34	3599124	86.9	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\AG070709B.B\134CALB.D\134CALB.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: 07/08/09 09:50:37

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LF1WAZF** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG070709B # 178
Acquired: 07/08/2009 02:36:00
Calibrated: 07/08/2009 00:34:00

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	71147	201.20	0	101	200		☑
7440-62-2	Vanadium	51	917399	167.50	-24.320	83.8	200		☐
7440-47-3	Chromium	52	7203880	1158.0	1006.0	76.0	200	*	☐
7439-96-5	Manganese	55	1128500	199.00	0.20930	99.4	200		☑
7440-48-4	Cobalt	59	1674600	189.10	0.04865	94.5	200		☐
7440-02-0	Nickel	60	386226	181.90	0.17850	90.9	200		☑
7440-50-8	Copper	63	966930	181.90	0.06831	90.9	200		☐
7440-66-6	Zinc	66	187534	193.70	0.12730	96.8	200		☐
7440-38-2	Arsenic	75	175287	269.10	74.860	97.1	200		☑
7782-49-2	Selenium	78	19481	205.60	-0.02236	103	200		☑
7439-98-7	Molybdenum	95	507446	207.00	4.7170	101	200		☐
7440-22-4	Silver	107	352504	43.590	0.01349	87.2	50.0		☑
7440-43-9	Cadmium	111	261645	189.70	0.00055	94.8	200		☑
7440-31-5	Tin	118	614805	175.70	-0.00400	87.8	200		☐
7440-36-0	Antimony	121	766415	197.20	0.06810	98.6	200		☑
7440-39-3	Barium	137	308052	198.70	1.6070	98.5	200		☑
7440-28-0	Thallium	205	3110570	183.30	0.01941	91.6	200		☑
7439-92-1	Lead	208	4219680	184.40	0.00485	92.2	200		☑
7440-61-1	Uranium	238	4948960	192.90	3.4870	94.7	200		☐
7440-29-1	Thorium	232	2987	0.10060	0.43740				
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: 7/8/09

Spiked Sample (MS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\179_MS.D\179_MS.D#
Date Acquired:	Jul 8 2009 02:38 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1WASF 10X
Misc Info:	MATRIX SPIKE
Vial Number:	3501
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 12:37 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	3.85	0.00	ppb	10.07	40	9.6	50 - 150	
51 V	72	1	-16.16	-24.32	ppb	25.63	40	-103.1	50 - 150	
52 Cr	72	1	977.90	1006.00	ppb	0.87	40	93.5	50 - 150	
55 Mn	72	1	4.13	0.21	ppb	2.94	40	10.3	50 - 150	
59 Co	72	1	3.88	0.05	ppb	1.59	40	9.7	50 - 150	
60 Ni	72	1	4.13	0.18	ppb	2.80	40	10.3	50 - 150	
63 Cu	72	1	3.84	0.07	ppb	1.54	40	9.6	50 - 150	
66 Zn	72	1	4.09	0.13	ppb	2.91	40	10.2	50 - 150	
75 As	72	1	75.55	74.86	ppb	1.26	40	65.8	50 - 150	
78 Se	72	1	5.18	-0.02	ppb	18.02	40	13.0	50 - 150	
95 Mo	72	1	8.73	4.72	ppb	1.69	40	19.5	50 - 150	
107 Ag	115	1	3.74	0.01	ppb	0.81	40	9.3	50 - 150	
111 Cd	115	1	4.00	0.00	ppb	0.38	40	10.0	50 - 150	
118 Sn	115	1	0.38	0.00	ppb	23.74	40	1.0	50 - 150	
121 Sb	115	1	4.35	0.07	ppb	2.68	40	10.8	50 - 150	
137 Ba	115	1	5.58	1.61	ppb	4.46	40	13.4	50 - 150	
205 Tl	165	1	3.92	0.02	ppb	1.41	40	9.8	50 - 150	
208 Pb	165	1	3.89	0.00	ppb	0.55	40	9.7	50 - 150	
232 Th	165	1	4.08	0.44	ppb	2.39	40	10.1	50 - 150	
238 U	165	1	7.45	3.49	ppb	0.40	40	17.1	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	304405	0.41	359710	84.6	30 - 120	
45 Sc	1	832710	0.88	999296	83.3	30 - 120	
72 Ge	1	474308	0.59	590607	80.3	30 - 120	
115 In	1	1452546	0.74	1756110	82.7	30 - 120	
165 Ho	1	3119868	0.20	3599124	86.7	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\180 MSD.D\180 MSD.D#
Date Acquired: Jul 8 2009 02:41 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1WADF 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3502
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 12:37 am
Sample Type: MSD
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070709B.B\179 MS.D\179 MS.D#

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	4.03	ppb	9.92	3.85	4.49	20	
51 V	72	1	-16.74	ppb	16.41	-16.16	-3.53	20	
52 Cr	72	1	974.30	ppb	0.61	977.90	0.37	20	
55 Mn	72	1	4.17	ppb	3.28	4.13	1.04	20	
59 Co	72	1	3.94	ppb	0.45	3.88	1.76	20	
60 Ni	72	1	3.99	ppb	2.75	4.13	3.35	20	
63 Cu	72	1	3.91	ppb	2.16	3.84	1.78	20	
66 Zn	72	1	4.03	ppb	0.40	4.09	1.60	20	
75 As	72	1	75.48	ppb	0.78	75.55	0.09	20	
78 Se	72	1	5.20	ppb	4.58	5.18	0.25	20	
95 Mo	72	1	8.71	ppb	1.88	8.73	0.24	20	
107 Ag	115	1	3.69	ppb	1.68	3.73	1.19	20	
111 Cd	115	1	4.08	ppb	4.07	4.00	1.88	20	
118 Sn	115	1	0.08	ppb	50.39	0.38	131.65	20	
121 Sb	115	1	4.29	ppb	2.60	4.35	1.34	20	
137 Ba	115	1	5.59	ppb	4.46	5.58	0.13	20	
205 Tl	165	1	3.93	ppb	1.29	3.92	0.25	20	
208 Pb	165	1	3.96	ppb	0.31	3.89	1.68	20	
232 Th	165	1	4.29	ppb	2.85	4.08	5.02	20	
238 U	165	1	7.56	ppb	0.86	7.45	1.45	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	304960	0.65	359710	84.8	30 - 120	
45 Sc	1	824410	1.54	999296	82.5	30 - 120	
72 Ge	1	473176	0.55	590607	80.1	30 - 120	
115 In	1	1456082	1.44	1756110	82.9	30 - 120	
165 Ho	1	3134679	0.47	3599124	87.1	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\181 CCV.D\181 CCV.D#
Date Acquired: Jul 8 2009 02:44 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 08 2009 12:37 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	48.16	ppb	3.07	50	96.3	90 - 110	
51 V	72	1	48.18	ppb	0.80	50	96.4	90 - 110	
52 Cr	72	1	47.77	ppb	0.92	50	95.5	90 - 110	
55 Mn	72	1	48.53	ppb	0.91	50	97.1	90 - 110	
59 Co	72	1	47.39	ppb	0.96	50	94.8	90 - 110	
60 Ni	72	1	47.86	ppb	0.70	50	95.7	90 - 110	
63 Cu	72	1	47.47	ppb	1.18	50	94.9	90 - 110	
66 Zn	72	1	49.49	ppb	0.45	50	99.0	90 - 110	
75 As	72	1	48.57	ppb	1.54	50	97.1	90 - 110	
78 Se	72	1	48.70	ppb	5.98	50	97.4	90 - 110	
95 Mo	72	1	49.01	ppb	0.48	50	98.0	90 - 110	
107 Ag	115	1	47.17	ppb	0.50	50	94.3	90 - 110	
111 Cd	115	1	48.30	ppb	1.94	50	96.6	90 - 110	
118 Sn	115	1	48.12	ppb	1.16	50	96.2	90 - 110	
121 Sb	115	1	48.14	ppb	0.35	50	96.3	90 - 110	
137 Ba	115	1	48.90	ppb	0.71	50	97.8	90 - 110	
205 Tl	165	1	49.40	ppb	0.74	50	98.8	90 - 110	
208 Pb	165	1	49.70	ppb	0.94	50	99.4	90 - 110	
232 Th	165	1	49.92	ppb	4.88	50	99.8	90 - 110	
238 U	165	1	50.45	ppb	0.43	50	100.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	312690	0.38	359710	86.9	30 - 120	
45 Sc	1	834535	1.50	999296	83.5	30 - 120	
72 Ge	1	488872	0.27	590607	82.8	30 - 120	
115 In	1	1560860	0.36	1756110	88.9	30 - 120	
165 Ho	1	3285970	0.31	3599124	91.3	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\AG070709B.B\134CALB.D\134CALB.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\AG070709B.B\182 CCB.D\182 CCB.D#
Date Acquired: Jul 8 2009 02:47 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 08 2009 12:37 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	-0.003	ppb	1027.40	1.00	
52 Cr	72	1	0.042	ppb	47.13	1.00	
55 Mn	72	1	0.010	ppb	53.11	1.00	
59 Co	72	1	0.007	ppb	55.97	1.00	
60 Ni	72	1	0.004	ppb	493.27	1.00	
63 Cu	72	1	-0.004	ppb	176.29	1.00	
66 Zn	72	1	0.041	ppb	68.39	1.00	
75 As	72	1	0.009	ppb	63.97	1.00	
78 Se	72	1	-0.761	ppb	66.46	1.00	
95 Mo	72	1	-0.023	ppb	74.18	1.00	
107 Ag	115	1	0.007	ppb	42.91	1.00	
111 Cd	115	1	0.014	ppb	29.55	1.00	
118 Sn	115	1	0.119	ppb	24.58	1.00	
121 Sb	115	1	0.064	ppb	12.71	1.00	
137 Ba	115	1	0.000	ppb	3826.60	1.00	
205 Tl	165	1	0.027	ppb	13.20	1.00	
208 Pb	165	1	0.005	ppb	42.53	1.00	
232 Th	165	1	1.282	ppb	15.40	1.00	Fail
238 U	165	1	0.015	ppb	11.17	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	315065	0.86	359710	87.6	30 - 120	
45 Sc	1	842095	0.82	999296	84.3	30 - 120	
72 Ge	1	499567	0.38	590607	84.6	30 - 120	
115 In	1	1565358	0.48	1756110	89.1	30 - 120	
165 Ho	1	3279903	0.89	3599124	91.1	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\AG070709B.B\134CALB.D\134CALB.D#

1 :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\AG070709B.B\183WASH.D\183WASH.D#
Date Acquired: Jul 8 2009 02:49 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 08 2009 12:37 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	0.997 ppb	30.40	1.30	
51 V	72	1	5.014 ppb	3.16	6.50	
52 Cr	72	1	1.992 ppb	0.95	2.60	
55 Mn	72	1	0.992 ppb	4.21	1.30	
59 Co	72	1	0.973 ppb	2.46	1.30	
60 Ni	72	1	1.951 ppb	4.01	2.60	
63 Cu	72	1	1.976 ppb	1.42	2.60	
66 Zn	72	1	10.220 ppb	1.26	13.00	
75 As	72	1	4.882 ppb	4.79	6.50	
78 Se	72	1	4.697 ppb	25.19	6.50	
95 Mo	72	1	1.978 ppb	8.06	2.60	
107 Ag	115	1	4.923 ppb	1.61	6.50	
111 Cd	115	1	0.992 ppb	5.92	1.30	
118 Sn	115	1	9.899 ppb	1.21	13.00	
121 Sb	115	1	1.882 ppb	5.37	2.60	
137 Ba	115	1	1.003 ppb	2.73	1.30	
205 Tl	165	1	1.056 ppb	1.70	1.30	
208 Pb	165	1	1.034 ppb	1.79	1.30	
232 Th	165	1	2.355 ppb	0.47	2.60	
238 U	165	1	1.066 ppb	1.29	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	314494	0.56	359710	87.4	30 - 120	
45 Sc	1	851256	0.46	999296	85.2	30 - 120	
72 Ge	1	501855	0.60	590607	85.0	30 - 120	
115 In	1	1571422	1.33	1756110	89.5	30 - 120	
165 Ho	1	3292934	0.34	3599124	91.5	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\AG070709B.B\134CALB.D\134CALB.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: 7/8/09

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\191CALB.D\191CALB.D#
Date Acquired:	Jul 8 2009 03:11 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 08 2009 03:09 am
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	47	12.40
51	V	72	1	787	32.57
52	Cr	72	1	2124	8.83
55	Mn	72	1	710	12.00
59	Co	72	1	793	13.54
60	Ni	72	1	193	12.58
63	Cu	72	1	983	2.95
66	Zn	72	1	233	6.23
75	As	72	1	80	6.77
78	Se	72	1	123	41.18
95	Mo	72	1	393	12.48
107	Ag	115	1	520	5.05
111	Cd	115	1	120	31.74
118	Sn	115	1	470	10.83
121	Sb	115	1	266	8.80
137	Ba	115	1	160	12.69
205	Tl	165	1	1422	3.79
208	Pb	165	1	2148	3.03
232	Th	165	1	2184	2.94
238	U	165	1	2117	5.20

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	329497	0.51
45	Sc	1	923934	1.74
72	Ge	1	537691	0.69
115	In	1	1636252	0.19
165	Ho	1	3317690	0.70

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\AG070709B.B\192ICAL.D\192ICAL.D#
Date Acquired: Jul 8 2009 03:14 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 08 2009 03:12 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	37983	0.96
51	V	72	1	590758	0.60
52	Cr	72	1	673559	0.37
55	Mn	72	1	620805	0.16
59	Co	72	1	967031	2.23
60	Ni	72	1	227670	1.37
63	Cu	72	1	571687	0.80
66	Zn	72	1	106169	0.59
75	As	72	1	72411	0.33
78	Se	72	1	10728	2.94
95	Mo	72	1	270653	0.50
107	Ag	115	1	869708	0.62
111	Cd	115	1	148986	0.81
118	Sn	115	1	379638	0.60
121	Sb	115	1	426526	0.88
137	Ba	115	1	171103	0.67
205	Tl	165	1	1790669	1.13
208	Pb	165	1	2428403	1.42
232	Th	165	1	2283140	3.94
238	U	165	1	2703171	1.85

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	320799	1.12	329497	97.4	30 - 120	
45	Sc	1	893683	1.39	923934	96.7	30 - 120	
72	Ge	1	515008	0.49	537691	95.8	30 - 120	
115	In	1	1607003	0.57	1636252	98.2	30 - 120	
165	Ho	1	3289965	1.41	3317690	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\AG070709B.B\191CALB.D\191CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\193 CCV.D\193 CCV.D#
Date Acquired:	Jul 8 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 08 2009 03:15 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	51.37	ppb	1.18	50	102.7	90 - 110	
51 V	72	1	49.40	ppb	0.29	50	98.8	90 - 110	
52 Cr	72	1	49.31	ppb	0.30	50	98.6	90 - 110	
55 Mn	72	1	49.21	ppb	0.48	50	98.4	90 - 110	
59 Co	72	1	48.56	ppb	0.78	50	97.1	90 - 110	
60 Ni	72	1	49.78	ppb	0.43	50	99.6	90 - 110	
63 Cu	72	1	49.47	ppb	0.77	50	98.9	90 - 110	
66 Zn	72	1	50.01	ppb	1.68	50	100.0	90 - 110	
75 As	72	1	49.44	ppb	0.35	50	98.9	90 - 110	
78 Se	72	1	48.63	ppb	2.94	50	97.3	90 - 110	
95 Mo	72	1	48.81	ppb	1.21	50	97.6	90 - 110	
107 Ag	115	1	48.99	ppb	0.59	50	98.0	90 - 110	
111 Cd	115	1	49.48	ppb	1.23	50	99.0	90 - 110	
118 Sn	115	1	49.38	ppb	0.49	50	98.8	90 - 110	
121 Sb	115	1	49.15	ppb	0.49	50	98.3	90 - 110	
137 Ba	115	1	49.39	ppb	0.43	50	98.8	90 - 110	
205 Tl	165	1	49.73	ppb	0.25	50	99.5	90 - 110	
208 Pb	165	1	49.61	ppb	0.24	50	99.2	90 - 110	
232 Th	165	1	52.01	ppb	3.77	50	104.0	90 - 110	
238 U	165	1	50.63	ppb	2.22	50	101.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	312657	0.23	329497	94.9	30 - 120	
45 Sc	1	867791	0.16	923934	93.9	30 - 120	
72 Ge	1	507091	0.42	537691	94.3	30 - 120	
115 In	1	1598177	0.57	1636252	97.7	30 - 120	
165 Ho	1	3265322	0.69	3317690	98.4	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\194 CCB.D\194 CCB.D#
Date Acquired: Jul 8 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 08 2009 03:15 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	-0.084	ppb	18.39	1.00	
51 V	72	1	-0.120	ppb	38.41	1.00	
52 Cr	72	1	-0.087	ppb	16.03	1.00	
55 Mn	72	1	-0.075	ppb	5.53	1.00	
59 Co	72	1	-0.070	ppb	4.75	1.00	
60 Ni	72	1	-0.049	ppb	22.79	1.00	
63 Cu	72	1	-0.104	ppb	7.77	1.00	
66 Zn	72	1	-0.042	ppb	50.42	1.00	
75 As	72	1	-0.052	ppb	34.22	1.00	
78 Se	72	1	0.406	ppb	70.84	1.00	
95 Mo	72	1	-0.035	ppb	27.06	1.00	
107 Ag	115	1	-0.049	ppb	7.23	1.00	
111 Cd	115	1	-0.064	ppb	15.98	1.00	
118 Sn	115	1	0.104	ppb	9.70	1.00	
121 Sb	115	1	0.027	ppb	34.63	1.00	
137 Ba	115	1	-0.070	ppb	20.68	1.00	
205 Tl	165	1	-0.039	ppb	2.30	1.00	
208 Pb	165	1	-0.071	ppb	0.34	1.00	
232 Th	165	1	1.621	ppb	15.08	1.00	Fail
238 U	165	1	-0.059	ppb	2.23	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	314922	1.32	329497	95.6	30 - 120	
45 Sc	1	871707	1.17	923934	94.3	30 - 120	
72 Ge	1	510835	0.37	537691	95.0	30 - 120	
115 In	1	1597977	0.22	1636252	97.7	30 - 120	
165 Ho	1	3242965	0.51	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\195WASH.D\195WASH.D#
Date Acquired: Jul 8 2009 03:22 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 08 2009 03:15 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	0.890 ppb	14.75	1.30	
51 V	72	1	4.897 ppb	2.77	6.50	
52 Cr	72	1	1.911 ppb	3.39	2.60	
55 Mn	72	1	0.949 ppb	2.25	1.30	
59 Co	72	1	0.903 ppb	4.78	1.30	
60 Ni	72	1	2.026 ppb	4.41	2.60	
63 Cu	72	1	1.955 ppb	4.91	2.60	
66 Zn	72	1	10.300 ppb	0.93	13.00	
75 As	72	1	4.965 ppb	1.73	6.50	
78 Se	72	1	4.916 ppb	5.07	6.50	
95 Mo	72	1	1.920 ppb	6.90	2.60	
107 Ag	115	1	5.018 ppb	2.30	6.50	
111 Cd	115	1	0.983 ppb	5.18	1.30	
118 Sn	115	1	10.270 ppb	2.27	13.00	
121 Sb	115	1	1.861 ppb	3.73	2.60	
137 Ba	115	1	0.993 ppb	1.75	1.30	
205 Tl	165	1	0.996 ppb	0.64	1.30	
208 Pb	165	1	0.959 ppb	1.63	1.30	
232 Th	165	1	2.396 ppb	0.80	2.60	
238 U	165	1	0.989 ppb	0.61	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	315380	0.22	329497	95.7	30 - 120	
45 Sc	1	870144	1.46	923934	94.2	30 - 120	
72 Ge	1	515151	0.12	537691	95.8	30 - 120	
115 In	1	1604946	1.44	1636252	98.1	30 - 120	
165 Ho	1	3272545	0.17	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\196 BLK.D\196 BLK.D#
Date Acquired:	Jul 8 2009 03:25 am
Operator:	TEL
Sample Name:	LF3X8B
Misc Info:	BLANK 9187169 6020
Vial Number:	3503
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update:	Jul 08 2009 03:15 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	-0.111 ppb	14.37	2.00	
51 V	72	1	-0.143 ppb	22.14	2.00	
52 Cr	72	1	0.088 ppb	25.46	2.00	
55 Mn	72	1	0.022 ppb	72.49	2.00	
59 Co	72	1	-0.073 ppb	1.68	2.00	
60 Ni	72	1	-0.048 ppb	47.35	2.00	
63 Cu	72	1	-0.075 ppb	17.97	2.00	
66 Zn	72	1	0.343 ppb	6.48	2.00	
75 As	72	1	-0.065 ppb	10.25	2.00	
78 Se	72	1	0.073 ppb	198.06	2.00	
95 Mo	72	1	-0.093 ppb	14.21	2.00	
107 Ag	115	1	-0.056 ppb	4.86	2.00	
111 Cd	115	1	-0.069 ppb	7.37	2.00	
118 Sn	115	1	0.028 ppb	29.66	2.00	
121 Sb	115	1	-0.022 ppb	12.73	2.00	
137 Ba	115	1	0.049 ppb	34.11	2.00	
205 Tl	165	1	-0.048 ppb	14.71	2.00	
208 Pb	165	1	-0.072 ppb	4.45	2.00	
232 Th	165	1	0.357 ppb	15.29	2.00	
238 U	165	1	-0.073 ppb	0.85	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	308912	0.48	329497	93.8	30 - 120	
45 Sc	1	855299	0.36	923934	92.6	30 - 120	
72 Ge	1	504085	0.32	537691	93.7	30 - 120	
115 In	1	1565996	0.39	1636252	95.7	30 - 120	
165 Ho	1	3239289	0.59	3317690	97.6	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\197 LCS.D\197 LCS.D#
Date Acquired:	Jul 8 2009 03:28 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF3X8C
Misc Info:	LCS
Vial Number:	3504
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	38.86	1.75	40	97.2	80 - 120	
51 V	72	1	39.63	0.49	40	99.1	80 - 120	
52 Cr	72	1	40.02	0.68	40	100.1	80 - 120	
55 Mn	72	1	40.62	0.35	40	101.6	80 - 120	
59 Co	72	1	39.25	1.08	40	98.1	80 - 120	
60 Ni	72	1	39.95	1.18	40	99.9	80 - 120	
63 Cu	72	1	40.14	1.29	40	100.4	80 - 120	
66 Zn	72	1	40.71	1.59	40	101.8	80 - 120	
75 As	72	1	38.49	1.93	40	96.2	80 - 120	
78 Se	72	1	40.01	5.25	40	100.0	80 - 120	
95 Mo	72	1	39.16	1.42	40	97.9	80 - 120	
107 Ag	115	1	39.55	0.32	40	98.9	80 - 120	
111 Cd	115	1	39.19	0.84	40	98.0	80 - 120	
118 Sn	115	1	0.02	139.60	40	0.1	80 - 120	
121 Sb	115	1	38.95	0.64	40	97.4	80 - 120	
137 Ba	115	1	40.06	0.36	40	100.2	80 - 120	
205 Tl	165	1	40.26	0.62	40	100.7	80 - 120	
208 Pb	165	1	40.13	0.65	40	100.3	80 - 120	
232 Th	165	1	42.28	2.59	40	105.7	80 - 120	
238 U	165	1	40.83	2.22	40	102.1	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	309475	0.68	329497	93.9	30 - 120	
45 Sc	1	847752	1.13	923934	91.8	30 - 120	
72 Ge	1	491519	0.71	537691	91.4	30 - 120	
115 In	1	1562031	0.44	1636252	95.5	30 - 120	
165 Ho	1	3240093	0.07	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\198SMPL.D\198SMPL.D#
Date Acquired:	Jul 8 2009 03:31 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LFX9W 10X
Misc Info:	D9G010276
Vial Number:	3505
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.01	-0.10	ppb	16.17	3600	
51 V	72	1	61.18	6.12	ppb	1.67	3600	
52 Cr	72	1	63.45	6.35	ppb	1.27	3600	
55 Mn	72	1	50.25	5.03	ppb	0.75	3600	
59 Co	72	1	-0.09	-0.01	ppb	147.90	3600	
60 Ni	72	1	5.70	0.57	ppb	1.70	3600	
63 Cu	72	1	0.71	0.07	ppb	15.94	3600	
66 Zn	72	1	3.77	0.38	ppb	12.56	3600	
75 As	72	1	122.60	12.26	ppb	2.27	3600	
78 Se	72	1	2.11	0.21	ppb	143.15	3600	
95 Mo	72	1	38.17	3.82	ppb	1.52	3600	
107 Ag	115	1	-0.49	-0.05	ppb	11.51	3600	
111 Cd	115	1	-0.23	-0.02	ppb	115.49	3600	
118 Sn	115	1	-0.15	-0.02	ppb	88.84	3600	
121 Sb	115	1	0.18	0.02	ppb	24.20	3600	
137 Ba	115	1	36.07	3.61	ppb	1.17	3600	
205 Tl	165	1	-0.14	-0.01	ppb	67.32	3600	
208 Pb	165	1	-0.53	-0.05	ppb	7.58	3600	
232 Th	165	1	10.00	1.00	ppb	19.72	1000	
238 U	165	1	31.50	3.15	ppb	1.87	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298817	0.21	329497	90.7	30 - 120	
45 Sc	1	813176	1.09	923934	88.0	30 - 120	
72 Ge	1	476045	0.77	537691	88.5	30 - 120	
115 In	1	1460770	1.60	1636252	89.3	30 - 120	
165 Ho	1	3099895	1.11	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\199AREF.D\199AREF.D#
Date Acquired:	Jul 8 2009 03:33 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1T1 10X
Misc Info:	D9G020221
Vial Number:	3506
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.10	-0.11	ppb	14.58	3600	
51 V	72	1	26.83	2.68	ppb	5.07	3600	
52 Cr	72	1	35.13	3.51	ppb	5.16	3600	
55 Mn	72	1	21.07	2.11	ppb	3.46	3600	
59 Co	72	1	-0.22	-0.02	ppb	17.03	3600	
60 Ni	72	1	2.83	0.28	ppb	3.65	3600	
63 Cu	72	1	-0.57	-0.06	ppb	4.46	3600	
66 Zn	72	1	4.00	0.40	ppb	14.70	3600	
75 As	72	1	146.20	14.62	ppb	0.84	3600	
78 Se	72	1	1.49	0.15	ppb	173.83	3600	
95 Mo	72	1	28.76	2.88	ppb	1.48	3600	
107 Ag	115	1	-0.52	-0.05	ppb	3.71	3600	
111 Cd	115	1	-0.73	-0.07	ppb	11.57	3600	
118 Sn	115	1	-0.15	-0.02	ppb	80.22	3600	
121 Sb	115	1	-0.20	-0.02	ppb	46.22	3600	
137 Ba	115	1	35.77	3.58	ppb	3.81	3600	
205 Tl	165	1	-0.26	-0.03	ppb	5.20	3600	
208 Pb	165	1	-0.34	-0.03	ppb	6.60	3600	
232 Th	165	1	2.33	0.23	ppb	11.27	1000	
238 U	165	1	51.74	5.17	ppb	0.84	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	302264	0.35	329497	91.7	30 - 120	
45 Sc	1	828840	0.29	923934	89.7	30 - 120	
72 Ge	1	473915	0.52	537691	88.1	30 - 120	
115 In	1	1472330	0.26	1636252	90.0	30 - 120	
165 Ho	1	3122477	0.43	3317690	94.1	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\200SDIL.D\200SDIL.D#
Date Acquired: Jul 8 2009 03:36 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1T1P50
Misc Info: SERIAL DILUTION
Vial Number: 3507
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 03:15 am
Sample Type: SDIL
Dilution Factor: 10.00

Dilution Ref File: C:\ICPCHEM\1\DATA\AG070709B.B\199AREF.D\199AREF.D#

QC Summary:
Analytes: Pass
ISTD: Pass

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	-0.12	ppb	0.00	-0.02	542.1	90 - 110	
51 V	72	1	0.43	ppb	22.54	0.54	80.8	90 - 110	
52 Cr	72	1	0.77	ppb	2.96	0.70	110.0	90 - 110	
55 Mn	72	1	0.41	ppb	7.95	0.42	96.3	90 - 110	
59 Co	72	1	-0.06	ppb	12.54	0.00	1445.1	90 - 110	
60 Ni	72	1	0.14	ppb	10.79	0.06	239.0	90 - 110	
63 Cu	72	1	-0.09	ppb	8.69	-0.01	769.3	90 - 110	
66 Zn	72	1	0.06	ppb	12.53	0.08	69.5	90 - 110	
75 As	72	1	2.91	ppb	1.88	2.92	99.6	90 - 110	
78 Se	72	1	0.18	ppb	93.39	0.03	604.0	90 - 110	
95 Mo	72	1	0.51	ppb	14.47	0.58	88.1	90 - 110	
107 Ag	115	1	-0.06	ppb	2.15	-0.01	556.9	90 - 110	
111 Cd	115	1	-0.07	ppb	7.09	-0.01	494.4	90 - 110	
118 Sn	115	1	-0.04	ppb	26.17	0.00	1459.1	90 - 110	
121 Sb	115	1	-0.04	ppb	2.06	0.00	1060.0	90 - 110	
137 Ba	115	1	0.66	ppb	3.84	0.72	91.7	90 - 110	
205 Tl	165	1	-0.07	ppb	1.98	-0.01	1246.5	90 - 110	
208 Pb	165	1	-0.07	ppb	1.76	-0.01	1003.2	90 - 110	
232 Th	165	1	0.02	ppb	32.04	0.05	44.4	90 - 110	
238 U	165	1	1.01	ppb	1.78	1.03	97.1	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	306409	0.97	329497	93.0	30 - 120	
45 Sc	1	817720	1.55	923934	88.5	30 - 120	
72 Ge	1	487420	0.68	537691	90.7	30 - 120	
115 In	1	1501254	0.50	1636252	91.7	30 - 120	
165 Ho	1	3122338	0.78	3317690	94.1	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\AG070709B.B\191CALB.D\191CALB.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: 07/08/09 09:50:47

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LF1T1P50** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070709B # 200 | Method 6020_
Acquired: 07/08/2009 03:36:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/08/2009 03:11:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9		-5.9850	-1.1040			*	
7440-62-2	Vanadium	51	3138	21.690	26.830	19.2		*	
7440-47-3	Chromium	52	6839	38.655	35.130	10.0		*	
7439-96-5	Manganese	55	3024	20.280	21.070	3.75		*	
7440-48-4	Cobalt	59	137	-3.1835	-0.22030			*	
7440-02-0	Nickel	60	467	6.7700	2.8330	139		*	
7440-50-8	Copper	63	417	-4.3940	-0.57120			*	
7440-66-6	Zinc	66	267	2.7800	3.9980	30.5		*	
7440-38-2	Arsenic	75	2067	145.65	146.20	0.376	0.21	NC	☑
7782-49-2	Selenium	78	130	9.0000	1.4900	504	0.70	NC	☑
7439-98-7	Molybdenum	95	1653	25.350	28.760	11.9		*	
7440-22-4	Silver	107	10	-2.8760	-0.51640			*	
7440-43-9	Cadmium	111	10	-3.6020	-0.72860			*	
7440-31-5	Tin	118	273	-2.2280	-0.15270			*	
7440-36-0	Antimony	121	76	-2.1105	-0.19910			*	
7440-39-3	Barium	137	1195	32.805	35.770	8.29		*	
7440-28-0	Thallium	205	229	-3.2670	-0.26210			*	
7439-92-1	Lead	208	436	-3.4430	-0.34320			*	
7440-61-1	Uranium	238	27759	50.250	51.740	2.88		*	
7440-29-1	Thorium	232	2504	1.0345	2.3280	55.6		*	
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: 7/8/09

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070709B.B\201PDS.D\201PDS.D#
Date Acquired: Jul 8 2009 03:39 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1T1Z
Misc Info: POST DIGESTION SPIKE
Vial Number: 3508
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 03:15 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	195.00	-0.11	ppb	1.02	200	97.6	75 - 125	
51 V	72	1	206.10	2.68	ppb	0.66	200	101.7	75 - 125	
52 Cr	72	1	202.40	3.51	ppb	1.34	200	99.5	75 - 125	
55 Mn	72	1	201.50	2.11	ppb	1.74	200	99.7	75 - 125	
59 Co	72	1	186.40	-0.02	ppb	1.81	200	93.2	75 - 125	
60 Ni	72	1	180.40	0.28	ppb	0.96	200	90.1	75 - 125	
63 Cu	72	1	179.90	-0.06	ppb	0.07	200	90.0	75 - 125	
66 Zn	72	1	189.50	0.40	ppb	0.35	200	94.6	75 - 125	
75 As	72	1	208.70	14.62	ppb	0.45	200	97.2	75 - 125	
78 Se	72	1	192.40	0.15	ppb	2.03	200	96.1	75 - 125	
95 Mo	72	1	201.50	2.88	ppb	0.53	200	99.3	75 - 125	
107 Ag	115	1	44.66	-0.05	ppb	1.40	50	89.4	75 - 125	
111 Cd	115	1	190.00	-0.07	ppb	1.02	200	95.0	75 - 125	
118 Sn	115	1	174.80	-0.02	ppb	1.29	200	87.4	75 - 125	
121 Sb	115	1	193.50	-0.02	ppb	1.11	200	96.8	75 - 125	
137 Ba	115	1	195.30	3.58	ppb	1.09	200	95.9	75 - 125	
205 Tl	165	1	183.40	-0.03	ppb	0.91	200	91.7	75 - 125	
208 Pb	165	1	183.10	-0.03	ppb	0.56	200	91.6	75 - 125	
232 Th	165	1	0.04	0.23	ppb	25.36	200	0.0	75 - 125	
238 U	165	1	195.00	5.17	ppb	0.71	200	95.0	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	295099	0.92	329497	89.6	30 - 120	
45 Sc	1	798746	0.54	923934	86.5	30 - 120	
72 Ge	1	458704	0.57	537691	85.3	30 - 120	
115 In	1	1449786	0.98	1636252	88.6	30 - 120	
165 Ho	1	3084504	0.31	3317690	93.0	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\AG070709B.B\191CALB.D\191CALB.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: 07/08/09 09:50:52

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LF1T1Z** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG070709B # 201 | Method 6020_
Acquired: 07/08/2009 03:39:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 07/08/2009 03:11:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	68089	195.00	-0.11040	97.5	200		☑
7440-62-2	Vanadium	51	1083840	206.10	2.6830	102	200		☐
7440-47-3	Chromium	52	1212510	202.40	3.5130	99.4	200		☑
7439-96-5	Manganese	55	1113340	201.50	2.1070	99.7	200		☑
7440-48-4	Cobalt	59	1605230	186.40	-0.02203	93.2	200		☐
7440-02-0	Nickel	60	365567	180.40	0.28330	90.1	200		☑
7440-50-8	Copper	63	915406	179.90	-0.05712	89.9	200		☐
7440-66-6	Zinc	66	179019	189.50	0.39980	94.6	200		☐
7440-38-2	Arsenic	75	134530	208.70	14.620	97.0	200		☑
7782-49-2	Selenium	78	18293	192.40	0.14900	96.1	200		☑
7439-98-7	Molybdenum	95	485366	201.50	2.8760	99.3	200		☐
7440-22-4	Silver	107	350636	44.660	-0.05164	89.3	50.0		☑
7440-43-9	Cadmium	111	255254	190.00	-0.07286	95.0	200		☑
7440-31-5	Tin	118	598539	174.80	-0.01527	87.4	200		☐
7440-36-0	Antimony	121	744129	193.50	-0.01991	96.8	200		☑
7440-39-3	Barium	137	301297	195.30	3.5770	95.9	200		☑
7440-28-0	Thallium	205	3077580	183.40	-0.02621	91.7	200		☑
7439-92-1	Lead	208	4167550	183.10	-0.03432	91.6	200		☑
7440-61-1	Uranium	238	4940350	195.00	5.1740	94.9	200		☐
7440-29-1	Thorium	232	2814	0.03664	0.23280				
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: 7/8/09

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG070709B.B\202 CCV.D\202 CCV.D#
Date Acquired: Jul 8 2009 03:42 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 08 2009 03:15 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	47.32	ppb	4.45	50	94.6	90 - 110	
51 V	72	1	48.56	ppb	2.15	50	97.1	90 - 110	
52 Cr	72	1	48.47	ppb	1.10	50	96.9	90 - 110	
55 Mn	72	1	48.67	ppb	1.05	50	97.3	90 - 110	
59 Co	72	1	47.81	ppb	0.57	50	95.6	90 - 110	
60 Ni	72	1	48.91	ppb	2.39	50	97.8	90 - 110	
63 Cu	72	1	48.60	ppb	0.23	50	97.2	90 - 110	
66 Zn	72	1	49.34	ppb	0.33	50	98.7	90 - 110	
75 As	72	1	48.30	ppb	0.91	50	96.6	90 - 110	
78 Se	72	1	47.24	ppb	3.83	50	94.5	90 - 110	
95 Mo	72	1	48.94	ppb	0.93	50	97.9	90 - 110	
107 Ag	115	1	48.30	ppb	1.69	50	96.6	90 - 110	
111 Cd	115	1	48.40	ppb	0.91	50	96.8	90 - 110	
118 Sn	115	1	49.12	ppb	1.53	50	98.2	90 - 110	
121 Sb	115	1	48.80	ppb	0.84	50	97.6	90 - 110	
137 Ba	115	1	49.06	ppb	1.12	50	98.1	90 - 110	
205 Tl	165	1	49.87	ppb	0.87	50	99.7	90 - 110	
208 Pb	165	1	49.89	ppb	0.70	50	99.8	90 - 110	
232 Th	165	1	49.03	ppb	4.45	50	98.1	90 - 110	
238 U	165	1	50.92	ppb	0.04	50	101.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300696	0.39	329497	91.3	30 - 120	
45 Sc	1	800121	0.63	923934	86.6	30 - 120	
72 Ge	1	474172	0.25	537691	88.2	30 - 120	
115 In	1	1518112	0.41	1636252	92.8	30 - 120	
165 Ho	1	3159432	0.87	3317690	95.2	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\203 CCB.D\203 CCB.D#
Date Acquired:	Jul 8 2009 03:44 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 08 2009 03:15 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	-0.073	ppb	22.56	1.00	
51 V	72	1	-0.148	ppb	13.57	1.00	
52 Cr	72	1	-0.089	ppb	20.09	1.00	
55 Mn	72	1	-0.080	ppb	7.45	1.00	
59 Co	72	1	-0.066	ppb	7.61	1.00	
60 Ni	72	1	-0.058	ppb	13.80	1.00	
63 Cu	72	1	-0.087	ppb	11.82	1.00	
66 Zn	72	1	-0.044	ppb	19.48	1.00	
75 As	72	1	-0.050	ppb	50.18	1.00	
78 Se	72	1	0.148	ppb	196.07	1.00	
95 Mo	72	1	-0.064	ppb	34.61	1.00	
107 Ag	115	1	-0.046	ppb	7.97	1.00	
111 Cd	115	1	-0.062	ppb	4.81	1.00	
118 Sn	115	1	0.151	ppb	2.16	1.00	
121 Sb	115	1	0.041	ppb	24.96	1.00	
137 Ba	115	1	-0.069	ppb	2.93	1.00	
205 Tl	165	1	-0.047	ppb	4.47	1.00	
208 Pb	165	1	-0.069	ppb	2.47	1.00	
232 Th	165	1	1.189	ppb	15.23	1.00	Fail
238 U	165	1	-0.059	ppb	2.72	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300372	0.94	329497	91.2	30 - 120	
45 Sc	1	824755	0.34	923934	89.3	30 - 120	
72 Ge	1	487346	0.22	537691	90.6	30 - 120	
115 In	1	1530334	0.08	1636252	93.5	30 - 120	
165 Ho	1	3250949	0.58	3317690	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\AG070709B.B\191CALB.D\191CALB.D#

1 :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\AG070709B.B\204WASH.D\204WASH.D#
Date Acquired:	Jul 8 2009 03:47 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 08 2009 03:15 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	0.887 ppb	13.84	1.30	
51 V	72	1	4.966 ppb	1.32	6.50	
52 Cr	72	1	1.952 ppb	4.40	2.60	
55 Mn	72	1	0.945 ppb	4.12	1.30	
59 Co	72	1	0.923 ppb	1.79	1.30	
60 Ni	72	1	1.869 ppb	6.37	2.60	
63 Cu	72	1	1.957 ppb	3.56	2.60	
66 Zn	72	1	10.410 ppb	1.14	13.00	
75 As	72	1	4.964 ppb	3.35	6.50	
78 Se	72	1	4.239 ppb	29.58	6.50	
95 Mo	72	1	1.941 ppb	1.48	2.60	
107 Ag	115	1	5.096 ppb	0.81	6.50	
111 Cd	115	1	0.983 ppb	4.20	1.30	
118 Sn	115	1	10.320 ppb	1.14	13.00	
121 Sb	115	1	1.875 ppb	1.91	2.60	
137 Ba	115	1	0.954 ppb	4.91	1.30	
205 Tl	165	1	1.003 ppb	1.63	1.30	
208 Pb	165	1	0.988 ppb	1.52	1.30	
232 Th	165	1	2.372 ppb	1.00	2.60	
238 U	165	1	1.026 ppb	1.50	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	296961	0.40	329497	90.1	30 - 120	
45 Sc	1	804867	0.71	923934	87.1	30 - 120	
72 Ge	1	480975	0.57	537691	89.5	30 - 120	
115 In	1	1508499	0.40	1636252	92.2	30 - 120	
165 Ho	1	3156976	0.99	3317690	95.2	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\AG070709B.B\191CALB.D\191CALB.D#

0 :Element Failures
0 :ISTD Failures

0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed

Spiked Sample (MS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG070709B.B\205_MS.D\205_MS.D#
Date Acquired:	Jul 8 2009 03:50 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1T1S 10X
Misc Info:	MATRIX SPIKE
Vial Number:	3509
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	3.75	-0.11	ppb	4.17	40	9.4	50 - 150	
51 V	72	1	6.95	2.68	ppb	4.03	40	16.3	50 - 150	
52 Cr	72	1	7.67	3.51	ppb	1.78	40	17.6	50 - 150	
55 Mn	72	1	6.18	2.11	ppb	1.38	40	14.7	50 - 150	
59 Co	72	1	3.84	-0.02	ppb	1.21	40	9.6	50 - 150	
60 Ni	72	1	4.04	0.28	ppb	3.33	40	10.0	50 - 150	
63 Cu	72	1	3.74	-0.06	ppb	0.63	40	9.4	50 - 150	
66 Zn	72	1	4.77	0.40	ppb	2.06	40	11.8	50 - 150	
75 As	72	1	19.07	14.62	ppb	1.00	40	34.9	50 - 150	
78 Se	72	1	4.80	0.15	ppb	15.90	40	12.0	50 - 150	
95 Mo	72	1	6.83	2.88	ppb	2.62	40	15.9	50 - 150	
107 Ag	115	1	3.76	-0.05	ppb	4.01	40	9.4	50 - 150	
111 Cd	115	1	3.95	-0.07	ppb	0.84	40	9.9	50 - 150	
118 Sn	115	1	0.04	-0.02	ppb	46.43	40	0.1	50 - 150	
121 Sb	115	1	4.16	-0.02	ppb	1.15	40	10.4	50 - 150	
137 Ba	115	1	7.82	3.58	ppb	1.25	40	17.9	50 - 150	
205 Tl	165	1	4.00	-0.03	ppb	1.75	40	10.0	50 - 150	
208 Pb	165	1	3.90	-0.03	ppb	0.41	40	9.7	50 - 150	
232 Th	165	1	4.37	0.23	ppb	1.58	40	10.9	50 - 150	
238 U	165	1	9.47	5.17	ppb	0.53	40	21.0	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	291491	1.20	329497	88.5	30 - 120	
45 Sc	1	807321	0.80	923934	87.4	30 - 120	
72 Ge	1	464643	0.54	537691	86.4	30 - 120	
115 In	1	1450544	1.06	1636252	88.7	30 - 120	
165 Ho	1	3126884	0.81	3317690	94.2	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\206 MSD.D\206 MSD.D#
Date Acquired: Jul 8 2009 03:53 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LF1T1D 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3510
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Jul 08 2009 03:15 am
Sample Type: MSD
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG070709B.B\205 MS.D\205 MS.D#

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	3.96	ppb	5.95	3.75	5.37	20	
51 V	72	1	6.72	ppb	1.77	6.95	3.38	20	
52 Cr	72	1	7.43	ppb	0.96	7.67	3.13	20	
55 Mn	72	1	6.04	ppb	1.66	6.18	2.23	20	
59 Co	72	1	3.82	ppb	1.52	3.84	0.50	20	
60 Ni	72	1	4.01	ppb	3.51	4.04	0.87	20	
63 Cu	72	1	3.60	ppb	1.79	3.74	3.68	20	
66 Zn	72	1	4.45	ppb	2.73	4.76	6.93	20	
75 As	72	1	18.88	ppb	0.50	19.07	1.00	20	
78 Se	72	1	5.03	ppb	3.39	4.80	4.64	20	
95 Mo	72	1	6.94	ppb	1.78	6.83	1.58	20	
107 Ag	115	1	3.78	ppb	2.01	3.76	0.61	20	
111 Cd	115	1	3.99	ppb	0.62	3.95	0.91	20	
118 Sn	115	1	-0.01	ppb	50.03	0.04	390.80	20	
121 Sb	115	1	4.12	ppb	2.27	4.16	0.97	20	
137 Ba	115	1	7.61	ppb	0.56	7.82	2.66	20	
205 Tl	165	1	3.93	ppb	0.97	4.00	1.94	20	
208 Pb	165	1	3.92	ppb	1.72	3.90	0.67	20	
232 Th	165	1	4.29	ppb	1.48	4.37	1.85	20	
238 U	165	1	9.40	ppb	1.00	9.47	0.70	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	295331	0.98	329497	89.6	30 - 120	
45 Sc	1	812994	0.19	923934	88.0	30 - 120	
72 Ge	1	471214	0.24	537691	87.6	30 - 120	
115 In	1	1474525	0.10	1636252	90.1	30 - 120	
165 Ho	1	3150130	0.66	3317690	94.9	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\207SMPL.D\207SMPL.D#
Date Acquired:	Jul 8 2009 03:56 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1T6 10X
Misc Info:	D9G020221
Vial Number:	3511
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.10	-0.11	ppb	14.76	3600	
51 V	72	1	-10.24	-1.02	ppb	48.40	3600	
52 Cr	72	1	1,146.00	114.60	ppb	1.16	3600	
55 Mn	72	1	13.07	1.31	ppb	2.67	3600	
59 Co	72	1	-0.30	-0.03	ppb	34.55	3600	
60 Ni	72	1	2.50	0.25	ppb	18.96	3600	
63 Cu	72	1	-0.67	-0.07	ppb	36.84	3600	
66 Zn	72	1	25.23	2.52	ppb	2.67	3600	
75 As	72	1	103.70	10.37	ppb	2.32	3600	
78 Se	72	1	8.03	0.80	ppb	86.08	3600	
95 Mo	72	1	25.07	2.51	ppb	3.73	3600	
107 Ag	115	1	-0.52	-0.05	ppb	9.10	3600	
111 Cd	115	1	-0.80	-0.08	ppb	11.66	3600	
118 Sn	115	1	-0.09	-0.01	ppb	370.24	3600	
121 Sb	115	1	-0.32	-0.03	ppb	11.33	3600	
137 Ba	115	1	37.49	3.75	ppb	3.03	3600	
205 Tl	165	1	-0.06	-0.01	ppb	153.28	3600	
208 Pb	165	1	-0.69	-0.07	ppb	3.12	3600	
232 Th	165	1	1.49	0.15	ppb	14.85	1000	
238 U	165	1	36.87	3.69	ppb	2.59	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299657	0.37	329497	90.9	30 - 120	
45 Sc	1	842209	2.69	923934	91.2	30 - 120	
72 Ge	1	488819	0.90	537691	90.9	30 - 120	
115 In	1	1505724	1.38	1636252	92.0	30 - 120	
165 Ho	1	3258359	1.30	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\208SMPL.D\208SMPL.D#
Date Acquired:	Jul 8 2009 03:58 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1VJ 10X
Misc Info:	D9G020227
Vial Number:	3512
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-1.10	-0.11	ppb	15.22	3600	
51 V	72	1	-427.80	-42.78	ppb	7.41	3600	
52 Cr	72	1	11,230.00	1123.00	ppb	0.84	3600	
55 Mn	72	1	21.53	2.15	ppb	4.11	3600	
59 Co	72	1	-0.31	-0.03	ppb	7.40	3600	
60 Ni	72	1	3.02	0.30	ppb	6.37	3600	
63 Cu	72	1	-0.52	-0.05	ppb	22.39	3600	
66 Zn	72	1	1.37	0.14	ppb	23.30	3600	
75 As	72	1	103.60	10.36	ppb	0.84	3600	
78 Se	72	1	6.32	0.63	ppb	86.78	3600	
95 Mo	72	1	15.81	1.58	ppb	5.44	3600	
107 Ag	115	1	-0.52	-0.05	ppb	6.45	3600	
111 Cd	115	1	-0.47	-0.05	ppb	26.18	3600	
118 Sn	115	1	-0.15	-0.02	ppb	120.07	3600	
121 Sb	115	1	-0.26	-0.03	ppb	25.25	3600	
137 Ba	115	1	34.45	3.45	ppb	2.28	3600	
205 Tl	165	1	-0.50	-0.05	ppb	2.50	3600	
208 Pb	165	1	-0.68	-0.07	ppb	3.22	3600	
232 Th	165	1	-0.02	0.00	ppb	286.46	1000	
238 U	165	1	45.31	4.53	ppb	0.22	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291984	0.51	329497	88.6	30 - 120	
45 Sc	1	815966	1.80	923934	88.3	30 - 120	
72 Ge	1	472962	0.83	537691	88.0	30 - 120	
115 In	1	1433448	0.71	1636252	87.6	30 - 120	
165 Ho	1	3081614	0.18	3317690	92.9	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\209SMPL.D\209SMPL.D#
Date Acquired:	Jul 8 2009 04:01 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LF1V5 10X
Misc Info:	D9G020227
Vial Number:	4101
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Jul 08 2009 03:15 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	-0.62	-0.06	ppb	0.57	3600	
51 V	72	1	-216.50	-21.65	ppb	9.09	3600	
52 Cr	72	1	10,330.00	1033.00	ppb	0.77	3600	
55 Mn	72	1	691.40	69.14	ppb	1.09	3600	
59 Co	72	1	6.06	0.61	ppb	3.72	3600	
60 Ni	72	1	5.38	0.54	ppb	6.96	3600	
63 Cu	72	1	5.00	0.50	ppb	7.24	3600	
66 Zn	72	1	12.79	1.28	ppb	0.55	3600	
75 As	72	1	757.00	75.70	ppb	0.81	3600	
78 Se	72	1	7.69	0.77	ppb	139.98	3600	
95 Mo	72	1	46.91	4.69	ppb	5.34	3600	
107 Ag	115	1	0.04	0.00	ppb	353.81	3600	
111 Cd	115	1	-0.33	-0.03	ppb	93.08	3600	
118 Sn	115	1	-0.21	-0.02	ppb	58.27	3600	
121 Sb	115	1	0.07	0.01	ppb	57.53	3600	
137 Ba	115	1	42.06	4.21	ppb	2.69	3600	
205 Tl	165	1	-0.55	-0.06	ppb	4.17	3600	
208 Pb	165	1	4.01	0.40	ppb	2.47	3600	
232 Th	165	1	4.96	0.50	ppb	1.87	1000	
238 U	165	1	35.55	3.56	ppb	1.34	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291934	0.60	329497	88.6	30 - 120	
45 Sc	1	828690	2.38	923934	89.7	30 - 120	
72 Ge	1	480972	0.44	537691	89.5	30 - 120	
115 In	1	1454738	0.51	1636252	88.9	30 - 120	
165 Ho	1	3140633	0.74	3317690	94.7	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\210 CCV.D\210 CCV.D#
Date Acquired:	Jul 8 2009 04:04 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 08 2009 03:15 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	50.82	ppb	1.57	50	101.6	90 - 110	
51 V	72	1	49.34	ppb	0.26	50	98.7	90 - 110	
52 Cr	72	1	49.37	ppb	0.73	50	98.7	90 - 110	
55 Mn	72	1	50.56	ppb	1.15	50	101.1	90 - 110	
59 Co	72	1	48.48	ppb	0.89	50	97.0	90 - 110	
60 Ni	72	1	49.80	ppb	0.71	50	99.6	90 - 110	
63 Cu	72	1	49.25	ppb	0.53	50	98.5	90 - 110	
66 Zn	72	1	50.70	ppb	0.24	50	101.4	90 - 110	
75 As	72	1	49.26	ppb	0.85	50	98.5	90 - 110	
78 Se	72	1	51.19	ppb	1.61	50	102.4	90 - 110	
95 Mo	72	1	50.57	ppb	1.21	50	101.1	90 - 110	
107 Ag	115	1	49.35	ppb	1.30	50	98.7	90 - 110	
111 Cd	115	1	50.91	ppb	0.42	50	101.8	90 - 110	
118 Sn	115	1	49.92	ppb	1.35	50	99.8	90 - 110	
121 Sb	115	1	49.57	ppb	1.16	50	99.1	90 - 110	
137 Ba	115	1	50.10	ppb	1.48	50	100.2	90 - 110	
205 Tl	165	1	51.01	ppb	1.27	50	102.0	90 - 110	
208 Pb	165	1	51.01	ppb	1.29	50	102.0	90 - 110	
232 Th	165	1	51.10	ppb	2.12	50	102.2	90 - 110	
238 U	165	1	52.44	ppb	1.67	50	104.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	290919	0.87	329497	88.3	30 - 120	
45 Sc	1	797863	1.14	923934	86.4	30 - 120	
72 Ge	1	473414	0.73	537691	88.0	30 - 120	
115 In	1	1534632	0.69	1636252	93.8	30 - 120	
165 Ho	1	3241962	0.77	3317690	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\211 CCB.D\211 CCB.D#
Date Acquired: Jul 8 2009 04:07 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 08 2009 03:15 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	-0.120	ppb	0.00	1.00	
51 V	72	1	-0.121	ppb	15.11	1.00	
52 Cr	72	1	-0.037	ppb	24.93	1.00	
55 Mn	72	1	-0.073	ppb	10.41	1.00	
59 Co	72	1	-0.062	ppb	2.00	1.00	
60 Ni	72	1	-0.053	ppb	35.25	1.00	
63 Cu	72	1	-0.091	ppb	18.75	1.00	
66 Zn	72	1	-0.021	ppb	122.48	1.00	
75 As	72	1	-0.049	ppb	17.16	1.00	
78 Se	72	1	0.122	ppb	169.07	1.00	
95 Mo	72	1	-0.076	ppb	31.52	1.00	
107 Ag	115	1	-0.046	ppb	3.98	1.00	
111 Cd	115	1	-0.065	ppb	10.94	1.00	
118 Sn	115	1	0.058	ppb	18.79	1.00	
121 Sb	115	1	0.008	ppb	61.48	1.00	
137 Ba	115	1	-0.070	ppb	10.54	1.00	
205 Tl	165	1	-0.047	ppb	3.11	1.00	
208 Pb	165	1	-0.070	ppb	3.70	1.00	
232 Th	165	1	1.201	ppb	19.06	1.00	
238 U	165	1	-0.060	ppb	1.69	1.00	Fail

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	292571	0.74	329497	88.8	30 - 120	
45 Sc	1	820202	1.06	923934	88.8	30 - 120	
72 Ge	1	484175	0.35	537691	90.0	30 - 120	
115 In	1	1551306	0.26	1636252	94.8	30 - 120	
165 Ho	1	3263240	0.37	3317690	98.4	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\AG070709B.B\191CALB.D\191CALB.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\AG070709B.B\212WASH.D\212WASH.D#
Date Acquired: Jul 8 2009 04:09 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 08 2009 03:15 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	1.102 ppb	18.90	1.30	
51 V	72	1	4.865 ppb	2.31	6.50	
52 Cr	72	1	1.920 ppb	1.31	2.60	
55 Mn	72	1	0.925 ppb	5.60	1.30	
59 Co	72	1	0.937 ppb	4.37	1.30	
60 Ni	72	1	2.066 ppb	9.04	2.60	
63 Cu	72	1	1.864 ppb	2.35	2.60	
66 Zn	72	1	10.360 ppb	1.59	13.00	
75 As	72	1	4.955 ppb	2.38	6.50	
78 Se	72	1	5.032 ppb	13.31	6.50	
95 Mo	72	1	1.911 ppb	2.92	2.60	
107 Ag	115	1	4.974 ppb	1.05	6.50	
111 Cd	115	1	1.018 ppb	3.35	1.30	
118 Sn	115	1	10.310 ppb	0.54	13.00	
121 Sb	115	1	1.864 ppb	1.05	2.60	
137 Ba	115	1	0.974 ppb	2.37	1.30	
205 Tl	165	1	1.015 ppb	1.27	1.30	
208 Pb	165	1	0.991 ppb	0.79	1.30	
232 Th	165	1	2.366 ppb	1.17	2.60	
238 U	165	1	1.019 ppb	1.46	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	290814	0.85	329497	88.3	30 - 120	
45 Sc	1	819634	0.45	923934	88.7	30 - 120	
72 Ge	1	487158	0.50	537691	90.6	30 - 120	
115 In	1	1561344	0.94	1636252	95.4	30 - 120	
165 Ho	1	3289382	0.12	3317690	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\AG070709B.B\191CALB.D\191CALB.D#

0 :Element Failures
0 :ISTD Failures
0 :Max. Number of Failures Allowed
0 :Max. Number of ISTD Failures Allowed