SDG: 8304632

Close Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

Tronox LLC, Henderson

SDG: 8304632
Lots #: D9I250174, D9I260177 and D9I260178

Frank Hagar

Northgate Environmental Management, Inc.
1100 Quail Street
Suite 102
Newport Beach, CA 92660

TestAmerica Laboratories, Inc.

Michael P. Phillips

Michael P. Phillips
Project Manager

October 23, 2009

Case Narrative
SDG 8304632

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
One sample plus MS/MSD was received under chain of custody at a temperature of 0.2°C on September 25, 2009, and was logged under lot D9I250174. One sample was received under chain of custody at a temperature of 2.5°C on September 26, 2009, and was logged under lot D9I260177. Two samples were received under chain of custody at a temperature of 2.5°C on September 26, 2009, and was logged under lot D9I260178. These lots are reported here under SDG 8304632.

GC Semivolatiles / Organophosphorus Pesticides – SW846 Method 8141A
The method required MS/MSD was performed for QC batch 9273433 using sample D9I250174-001 (M-89B), as requested, and all results were in control.

The Continuing Calibration Verification (CCV) standard(s) associated with the samples in QC batch 9273433 exhibited %Difference values out of range for Chlormefos, Naled, and Ronnel. The overall mean %Difference was within control limits; therefore, method criteria were met and corrective action was deemed unnecessary. In addition, these compounds were not detected in the associated sample.

Total 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. Samples D9I250174-001 (M-89B), D9I260178-001 (M-2AB), and D9I260178-002 (M-2009AB) were analyzed for Arsenic and Selenium at dilutions of 5X 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 9271338 using sample D9I250174-001 (M-89B), as requested, and exhibited a MSD recovery above the upper QC control limit for Selenium. The acceptable LCS and Method Blank results indicated that the analytical system was operating in control; 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

8304632 : D9I250174

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-89B 09/24/09 11:40 001				
Arsenic	87	25	ug/L	SW846 6020
Selenium	7.9 B	25	ug/L	SW846 6020

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

8304632 : D9I260177

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
FILTB092509-A2 09/25/09 09:31 001				
Selenium	2.0 B	5.0	ug/L	SW846 6020

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

8304632 : D9I260178

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-2AB 09/25/09 10:00 001				
Arsenic	80	25	ug/L	SW846 6020
Selenium	25	25	ug/L	SW846 6020
M-2009AB 09/25/09 10:00 002				
Arsenic	80	25	ug/L	SW846 6020
Selenium	19 B	25	ug/L	SW846 6020

METHODS SUMMARY

8304632

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
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

8304632

ANALYTICAL METHOD	ANALYST	ANALYST ID
SW846 6020	Thomas Lill	006929
SW846 6020	Thomas Lill	6929
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

8304632 : D9I250174

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LLG32	001	M-89B	09/24/09	11:40

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

8304632 : D9I260177

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LLKFN	001	FILTB092509-A2	09/25/09	09:31

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

8304632 : D9I260178

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LLKFP	001	M-2AB	09/25/09	10:00
LLKFR	002	M-2009AB	09/25/09	10:00

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.

QC DATA ASSOCIATION SUMMARY

D9I250174

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	SW846 6020		9271338	9271223
	WG	SW846 8141A		9273433	9273297

QC DATA ASSOCIATION SUMMARY

D9I260177

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	SW846 6020		9271338	9271223

QC DATA ASSOCIATION SUMMARY

D9I260178

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WG	SW846 6020		9271338	9271223
002	WG	SW846 6020		9271338	9271223

TestAmerica

Semivolatile GC

CLP-Like Forms

Lot ID: D9I250174

Client: Northgate/Tronox

Method: SW846 8141A

Associated Samples: 001

Batch: 9273433

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-89B
Lot/SDG Number:	8304632	**Lab Sample ID:**	D9I250174-001
Matrix:	WATER	**Lab WorkOrder:**	LLG321AA
% Moisture:	N/A	**Date/Time Collected:**	09/24/09 11:40
Basis:	Wet	**Date/Time Received:**	09/25/09 08:30
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/30/09 18:40
QC Batch ID:	9273433	**Date/Time Analyzed:**	10/06/09 00:37
Sample Aliquot:	1066 mL	**Instrument ID:**	D
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

Form 1 Analysis Data Sheet Equivalent

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-89B
Lot/SDG Number:	8304632	**Lab Sample ID:**	D9I250174-001
Matrix:	WATER	**Lab WorkOrder:**	LLG321AA
% Moisture:	N/A	**Date/Time Collected:**	09/24/09 11:40
Basis:	Wet	**Date/Time Received:**	09/25/09 08:30
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/30/09 18:40
QC Batch ID:	9273433	**Date/Time Analyzed:**	10/06/09 00:37
Sample Aliquot:	1066 mL	**Instrument ID:**	D
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	58	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:	8304632	**Lab Sample ID:**	D9I300000-433B
Matrix:	WATER	**Lab WorkOrder:**	LLQ6W1AA
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/30/09 18:40
QC Batch ID:	9273433	**Date/Time Analyzed:**	10/05/09 23:24
Sample Aliquot:	1000 mL	**Instrument ID:**	D
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:	8304632	**Lab Sample ID:**	D9I300000-433B
Matrix:	WATER	**Lab WorkOrder:**	LLQ6W1AA
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/30/09 18:40
QC Batch ID:	9273433	**Date/Time Analyzed:**	10/05/09 23:24
Sample Aliquot:	1000 mL	**Instrument ID:**	D
Dilution Factor:	1		

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
115-86-6	Triphenyl phosphate	75	60	154	
24934-91-6	Chlormefos	62	49	171	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Surrogate Recovery Summary

Lab Name: TESTAMERICA DENVER **Extraction** I09P29H
Lot/SDG Number: 8304632 **QC Batch ID:** 9273433

Client ID	Work Order	SRG1	SRG2	SRG3	SRG4	SRG5	SRG6	SRG7	SRG8	TOT OUT
M-89B	LLG321AA	58	77							0
M-89BMS MS	LLG321AF	78	86							0
M-89BMSD MSD	LLG321AG	87	90							0
INTRA-LAB BLANK	LLQ6W1AA	62	75							0
CHECK SAMPLE	LLQ6W1AC	83	86							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:	8304632	**Lab Sample ID:**	D9I300000-433C
Matrix:	WATER	**Lab WorkOrder:**	LLQ6W1AC
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/30/09 18:40
QC Batch ID:	9273433	**Date/Time Analyzed:**	10/06/09 00:00
Sample Aliquot:	1000 mL	**Instrument ID:**	D
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Dichlorvos	4.00	3.15	79		40 - 193
Thionazin	4.00	3.07	77		39 - 180
Dimethoate	4.00	2.27	57		33 - 139
Disulfoton	4.00	3.01	75		44 - 139
EPN	4.00	3.26	81		50 - 150
Ethoprop	4.00	3.10	77		43 - 165
Famphur	8.00	6.63	83		51 - 131
Fensulfothion	4.00	2.44	61		46 - 115
Fenthion	4.00	2.96	74		63 - 128
Malathion	4.00	3.11	78		53 - 137
Merphos	4.00	3.17	79		50 - 150
Methyl parathion	4.00	3.15	79		55 - 131
Azinphos-methyl	4.00	3.05	76		42 - 125
Mevinphos	4.00	2.18	54		39 - 175
Ethyl parathion	4.00	3.05	76		47 - 142
Phorate	4.00	2.46	61		46 - 142
Ronnel	4.00	2.93	73		43 - 115
Sulfotepp	4.00	2.72	68		29 - 166
Trichloronate	4.00	2.72	68		60 - 115
Chlorpyrifos	4.00	3.09	77		60 - 120
Coumaphos	4.00	3.12	78		61 - 115
Diazinon	4.00	3.14	79		47 - 149

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-89BMS
Lot/SDG Number:	8304632	**MS Lab Sample ID:**	D9I250174-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LLG321AF
% Moisture:	N/A	**Date/Time Collected:**	09/24/09 11:40
Basis:	Wet	**Date/Time Received:**	09/25/09 08:30
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/30/09 18:40
QC Batch ID:	9273433	**Date/Time Analyzed:**	10/06/09 01:13
MS Sample Aliquot:	1045 mL	**Instrument ID:**	D
MS Dilution Factor:	1		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Azinphos-methyl	3.83	0.17	U	3.05		80		42 - 125
Chlorpyrifos	3.83	0.36	U	2.75		72		60 - 120
Coumaphos	3.83	0.14	U	3.02		79		61 - 115
Diazinon	3.83	0.15	U	2.88		75		47 - 149
Dichlorvos	3.83	0.16	U	2.92		76		40 - 193
Dimethoate	3.83	0.45	U	2.81		73		33 - 139
Disulfoton	3.83	0.32	U	2.92		76		44 - 139
EPN	3.83	0.15	U	3.02		79		50 - 150
Ethoprop	3.83	0.18	U	2.90		76		43 - 165
Ethyl parathion	3.83	0.14	U	2.96		77		47 - 142
Famphur	7.66	0.18	U	6.34		83		51 - 131
Fensulfothion	3.83	0.54	U	3.05		80		46 - 115
Fenthion	3.83	0.15	U	2.82		74		63 - 128
Malathion	3.83	0.13	U	2.95		77		53 - 137
Merphos	3.83	0.17	U	2.87		75		50 - 150
Methyl parathion	3.83	0.14	U	2.98		78		55 - 131
Mevinphos	3.83	0.46	U	2.36		62		39 - 175
Phorate	3.83	0.15	U	2.31		60		46 - 142
Ronnel	3.83	0.12	U	2.70		71		43 - 115
Sulfotepp	3.83	0.17	U	2.63		69		29 - 166
Thionazin	3.83	0.31	U	2.89		76		39 - 180
Trichloronate	3.83	0.24	U	2.49		65		60 - 115

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-89BMSD
Lot/SDG Number:	8304632	**MSD Lab Sample ID:**	D9I250174-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LLG321AG
% Moisture:	N/A	**Date/Time Collected:**	09/24/09 11:40
Basis:	Wet	**Date/Time Received:**	09/25/09 08:30
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/30/09 18:40
QC Batch ID:	9273433	**Date/Time Analyzed:**	10/06/09 01:49
MSD Sample Aliquot:	1040 mL	**Instrument ID:**	D
MSD Dilution Factor:	1		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Azinphos-methyl	3.85	0.17	U	3.25		84		6.3		42 - 125	36
Chlorpyrifos	3.85	0.36	U	2.87		75		4.3		60 - 120	34
Coumaphos	3.85	0.14	U	3.21		84		6.3		61 - 115	43
Diazinon	3.85	0.15	U	3.08		80		6.8		47 - 149	40
Dichlorvos	3.85	0.16	U	3.15		82		7.7		40 - 193	49
Dimethoate	3.85	0.45	U	2.95		77		5.0		33 - 139	50
Disulfoton	3.85	0.32	U	3.03		79		3.8		44 - 139	40
EPN	3.85	0.15	U	3.34		87		10		50 - 150	50
Ethoprop	3.85	0.18	U	3.10		81		6.8		43 - 165	36
Ethyl parathion	3.85	0.14	U	3.18		83		7.1		47 - 142	40
Famphur	7.69	0.18	U	6.75		88		6.2		51 - 131	88
Fensulfothion	3.85	0.54	U	3.27		85		6.8		46 - 115	62
Fenthion	3.85	0.15	U	3.01		78		6.8		63 - 128	41
Malathion	3.85	0.13	U	3.18		83		7.6		53 - 137	28
Merphos	3.85	0.17	U	3.03		79		5.6		50 - 150	50
Methyl parathion	3.85	0.14	U	3.14		82		5.0		55 - 131	30
Mevinphos	3.85	0.46	U	2.45		64		3.5		39 - 175	40
Phorate	3.85	0.15	U	2.41		63		4.4		46 - 142	40
Ronnel	3.85	0.12	U	2.90		76		7.3		43 - 115	39
Sulfotepp	3.85	0.17	U	2.72		71		3.4		29 - 166	40
Thionazin	3.85	0.31	U	3.04		79		5.0		39 - 180	40
Trichloronate	3.85	0.24	U	2.69		70		7.8		60 - 115	38

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
24934-91-6	Chlormefos	87	49	171	
115-86-6	Triphenyl phosphate	90	60	154	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Method Blank Summary

Lab Name:	TESTAMERICA DENVER	**Lab File ID:**	015F1501.
Lot/SDG Number:	8304632	**Lab Sample ID:**	D9I300000-433B
Matrix:	WATER	**Lab Work Order:**	LLQ6W1AA
Analysis Method:	8141A	**Date/Time Extracted:**	09/30/09 18:40
Extraction Method:	I09P29H	**Date/Time Analyzed:**	10/05/09 23:24
QC Batch ID:	9273433	**Instrument ID:**	D

Client ID	Sample Work Order #	Lab File ID	Date Analyzed	Time Analyzed
M-89B	LLG321AA	015F1501.	10/06/09	00:37
M-89BMS MS	LLG321AF S	016F1601.	10/06/09	01:13
M-89BMSD MSD	LLG321AG D	017F1701.	10/06/09	01:49
CHECK SAMPLE	LLQ6W1AC C	014F1401.	10/06/09	00:00

Report Date : 30-Sep-2009 08:31

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\005F0501.D
Level 6: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\003F0301.D

SEE CALIBRATION HISTORY

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	5.0000 Level 7										
1 o,o,o-TEPT	1.63582	1.46357	1.69904	1.49231	1.55334	1.44588					
	1.33471						AVRG		1.51781		8.08371
2 Dichlorvos	1.09804	1.00105	1.14275	1.03578	1.13071	1.11714					
	1.09964						AVRG		1.08930		4.76749
3 Mevinphos	5844	34212	104479	248213	402659	602352					
	819859						WLINR	0.08261	0.53929		0.99057
5 Thionazin	26137	125634	280712	563076	833121	1175630					
	1528441						WLINR	0.04498	1.14087		0.99227

*All weighted linear $1/x^2$

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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										
6 Demeton-O	8888	43142	84853	165026	243630	345285					
	434270						WLINR	0.00318	0.96138		0.99165
7 Ethoprop	39547	126916	278033	553642	815624	1147081					
	1475254						WLINR	0.01618	1.07726		0.99457
8 Naled	5310	29826	78159	178502	292094	423022					
	571005						WLINR	0.07277	0.38445		0.99629
10 Sulfotepp	1.53870	1.45506	1.61167	1.41213	1.42888	1.35179					
	1.25989						AVRG		1.43687		8.06106
11 Phorate	65747	152671	291306	533826	765652	1060353					
	1353850						WLINR	-0.07478	0.92708		0.99400
12 Dimethoate	+++++	80163	226488	510687	808318	1193294					
	1575516						WLINR	0.10278	1.12223		0.99768
13 Demeton-S	38231	82067	162056	321884	469949	664552					
	864178						WLINR	-0.02988	0.86412		0.99734

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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	+++++	0.37114	0.38516	0.32753	0.33986	0.32914					
	0.30906						AVRG		0.34365		8.39328
15 Atrazine	+++++	0.42071	0.44480	0.40125	0.42142	0.42626					
	0.41891						AVRG		0.42222		3.31561
16 propazine	0.47409	0.45855	0.44433	0.40832	0.42584	0.43090					
	0.41719						AVRG		0.43703		5.34210
17 Disulfoton	20950	82596	206154	430185	637297	902155					
	1174534						WLINR	0.05288	1.26562		0.99670
18 Diazinon	1.88382	1.82569	1.81443	1.58003	1.61382	1.56949					
	1.40473						AVRG		1.67029		10.44280
19 Methyl Parathion	25143	93936	198723	413467	624051	900226					
	1183337						WLINR	0.04024	1.23862		0.99868
20 Ronnel	30043	92833	207764	431001	655015	986468					
	1357486						WLINR	0.03640	1.31799		0.99738

Table of Contents

Report Date : 30-Sep-2009 08:31

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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	0.73980	0.86061	1.01096	0.96567	1.01070	0.99917						
	0.92478						AVRG		0.93024		10.76267	
22 Fenthion	25618	81008	197350	415453	617147	893955						
	1181597						WLINR	0.04167	1.22010		0.99680	
23 Parathion	+++++	64057	164552	364258	575984	833868						
	1129725						WLINR	0.09794	1.18191		0.99826	
24 Chlorpyrifos	+++++	2.09077	1.98130	1.64856	1.66053	1.68232						
	1.57114						AVRG		1.77243		11.87404	
25 Trichloronate	39953	111835	246154	514604	784208	1161418						
	1577851						WLINR	0.03585	1.57763		0.99851	
26 Anilazine	+++++	3022	9122	18930	30638	51752						
	72734						WLINR	0.13554	0.07134		0.98986	<- r=0.995
27 Merphos-A (Merphos)	+++++	2369	19841	99237	171288	390389						
	569663						QUAD	0.32491	2.46824	-0.69646	0.98447	<- NTC

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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)	17165	56276	132732	293015	464319	712949	QUAD	0.07115	1.11462	-0.05261	0.99826
	992586										
29 Tokuthion	38426	102445	227163	463539	700700	1022545	WLINR	0.02104	1.36883		0.99735
	1372371										
30 Merphos-B (Merphos Oxone)	1.18673	1.20397	1.23721	1.04485	1.04018	0.82953	AVRG		1.03395		19.75426
	0.69514										
31 Carbophenothion-methyl	21792	68129	158754	337052	518631	756521	WLINR	0.04109	1.01816		0.99674
	1019566										
32 Fensulfothion	20933	74021	170156	382549	574661	828723	WLINR	0.04849	1.12420		0.99732
	1083760										
33 Bolstar / Pamphur	61134	173165	392428	780681	1162399	1654375	WLINR	0.04532	1.13463		0.99719
	2168160										
34 Carbophenothion	35249	94798	205286	394500	583033	846237	WLINR	0.01102	1.15013		0.99759
	1114078										

Table of Contents

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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										
36 Phosmet	21966	62864	146573	301111	461134	660771					
	881528						WLINR	0.03153	0.89522		0.99668
37 EPN	34992	94375	194560	394014	584842	822064					
	1075540						WLINR	0.00956	1.12405		0.99820
38 Azinphos-methyl	21324	58851	149459	317670	489484	687141					
	902800						WLINR	0.03852	0.93412		0.99284
40 Azinphos-ethyl	1.10513	1.01592	1.07941	0.96607	1.03338	1.00799					
	0.93458						AVRG		1.02035		5.84215
41 Coumaphos	22677	63688	149836	305626	472023	685194					
	924152						WLINR	0.03191	0.92139		0.99604
M 42 Total Demeton	47119	125209	246909	486910	713579	1009837					
	1298448						WLINR	-0.00080	1.37869		0.99748
M 43 Merphos	40761	109753	230843	474965	693990	992478					
	1281411						WLINR	0.01251	1.34499		0.99803

Table of Contents

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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	1.36448	1.36588	1.62655	1.40439	1.42366	1.38996					
	1.30084						AVRG		1.41082		7.28870
$ 35 Triphenyl phosphate	25377	71967	159284	326923	483386	690215					
	913461						WLINR	0.02309	0.94371		0.99807

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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

Report Date: 30-Sep-2009 08:31

Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Start Cal Date: 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
29-SEP-2009 16:12	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
29-SEP-2009 15:35	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
29-SEP-2009 14:59	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
29-SEP-2009 14:22	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
29-SEP-2009 13:46	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
29-SEP-2009 13:09	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
29-SEP-2009 12:33	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\003F0301.D

Continuing Calibration

Ccal Level Mode: BY SAMPLE

29-SEP-2009 16:49	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\010F1001.D
30-SEP-2009 03:08	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\027F2701.D

Report Date : 30-Sep-2009 08:45

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\005F0501.D
Level 6: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\003F0301.D

SEE CALIBRATION HISTORY

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
1 o,o,o-TEPT	1.70944	1.82270	1.91994	1.64505	1.63242	1.58596					
	1.40917						AVRG		1.67495		9.87961
2 Dichlorvos	1.36258	1.20538	1.26335	1.09465	1.15696	1.15368					
	1.11164						AVRG		1.19261		7.88032
4 Mevinphos	0.62406	0.71021	0.81978	0.72187	0.74254	0.72095					
	0.67540						AVRG		0.71640		8.38801
5 Demeton-O	0.67230	0.69342	0.78834	0.69657	0.72786	0.71462					
	0.66994						AVRG		0.70901		5.74420

*All weighted linear are $1/x^2$

Table of Contents

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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										
6 Thionazin	0.92691	1.04072	1.18135	1.04042	1.06307	1.02466					
	0.94497						AVRG		1.03173		8.11775
8 Ethoprop	42901	78683	117585	231940	339190	456780					
	585549						WLINR	-0.13757	1.09519		0.99708
9 Naled	7830	10270	27100	66048	104633	153119					
	201383						LINR	0.05226	0.38732		0.99488
10 Sulfotepp	28344	72236	147729	278947	391784	536170					
	695274						LINR	-0.11085	1.27752		0.99140
11 Phorate	27735	46032	94044	186434	267547	366311					
	457389						WLINR	-0.08395	0.88336		0.99207
12 Demeton-S	7597	22639	48449	105446	148807	218626					
	292846						WLINR	0.01285	0.82789		0.99843
13 Simazine	+++++	2982	12318	32796	50934	77526					
	107753						LINR	0.16673	0.21257		0.99947

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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 / Propazine	11556	30702	66367	137441	207143	307271					
	421388						WLINR	0.02339	0.38510		0.99771
15 Dimethoate	7995	35698	90330	200683	296888	414494					
	547217						WLINR	0.05731	1.10992		0.99591
16 Diazinon	1.00729	1.00825	1.11853	0.99837	0.98565	0.94624					
	0.86867						AVRG		0.99043		7.58654
17 Disulfoton	1.02114	1.01465	1.12139	1.02680	0.98892	0.97618					
	0.88268						AVRG		1.00454		7.08869
18 Methyl Parathion	8492	29837	72062	145647	218781	308584					
	409367						WLINR	0.05013	1.06463		0.99750
19 Ronnel	1.21971	1.18723	1.32067	1.20364	1.28662	1.26207					
	1.25358						AVRG		1.24765		3.79673
20 Malathion	11736	31859	67405	132229	191342	267260					
	350626						WLINR	0.01703	0.91922		0.99849

Table of Contents

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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 Chlorpyrifos	14294	39270	83511	166943	244884	349915	473711	WLINR	0.02320	1.18913		0.99867	
22 Trichloronate	14331	40109	87602	175644	261483	378490	516721	WLINR	0.02932	1.27691		0.99766	
23 Parathion	12594	39453	83031	163192	239376	341103	432482	WLINR	0.02868	1.16172		0.99848	
24 Fenthion	1.36034	1.46554	1.53969	1.38567	1.43691	1.34213	1.31823	AVRG		1.40693		5.55499	
25 Merphos-A (Merphos)	431	+++++	14025	43136	73838	162051	228536	LINR	0.37623	0.64894		0.94993	<- NTC
26 Anilazine	550	2028	5957	11478	19918	26232	35306	WLINR	0.07521	0.09338		0.99426	
27 Tetrachlorvinphos (stirophos)	8356	22635	50985	110089	164289	242093	330886	QUAD	0.05055	1.28376	-0.05352	0.99966	

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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 Tokuthion	1.08753	1.10074	1.24220	1.21557	1.27179	1.25077					
	1.24497						AVRG		1.20194		6.28609
29 Merphos-B (Merphos oxone)	1.22652	1.27415	1.21296	1.07677	1.02350	0.80912					
	0.76337						AVRG		1.05520		19.32026
30 Carbophenothion methyl	11420	31047	66286	127195	192332	269754					
	352947						WLINR	0.01951	0.91500		0.99803
31 Fensulfothion	9459	26023	59611	117044	171184	232294					
	294034						WLINR	0.02472	0.80787		0.99542
32 Bolstar	1.02843	1.03889	1.16718	1.07913	1.10055	1.02961					
	0.95013						AVRG		1.05627		6.44864
33 Carbophenothion	12072	32880	70538	133833	194237	270609					
	347667						WLINR	0.01527	0.93342		0.99725
34 Famphur	10333	30107	67281	137487	195770	273389					
	345194						WLINR	0.02930	0.94099		0.99711

Table of Contents

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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 EPN	0.96427	0.93325	1.08934	0.97332	0.99917	0.94072					
	0.88365						AVRG		0.96910		6.63355
37 Phosmet	0.86015	0.71717	0.90198	0.81421	0.89285	0.88885					
	0.76918						AVRG		0.83491		8.47100
39 Azinphos-methyl	18426	32051	63061	115656	166083	229899					
	301398						WLINR	-0.05641	0.75216		0.99445
40 Azinphos-ethyl	24380	39849	67533	126800	171561	238500					
	301170						WLINR	-0.10839	0.75753		0.99732
41 Coumaphos	20151	38014	63215	114650	160902	222813					
	284996						WLINR	-0.08247	0.72795		0.99879
M 42 Total Demeton	11226	32782	70048	148121	212648	309350					
	412260						WLINR	0.03190	1.04245		0.99868
M 43 Merphos	19148	49545	101511	202373	283468	401105					
	531931						WLINR	0.00943	1.37585		0.99907

Table of Contents

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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	1.26703	1.14885	1.28773	1.09409	1.10504	1.07530					
	1.00692						AVRG		1.14071		9.00151
$ 35 Triphenyl phosphate	0.75137	0.76053	0.86594	0.79535	0.81821	0.78033					
	0.72786						AVRG		0.78566		5.87332

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.i

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

Report Date: 30-Sep-2009 08:45

Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Start Cal Date: 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
29-SEP-2009 16:12	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
29-SEP-2009 15:35	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
29-SEP-2009 14:59	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
29-SEP-2009 14:22	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
29-SEP-2009 13:46	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
29-SEP-2009 13:09	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
29-SEP-2009 12:33	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\003F0301.D

Continuing Calibration

Ccal Level Mode: BY SAMPLE

29-SEP-2009 16:49	8141A	
\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\010F1001.D		

Table of Contents

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B/010F1001.D
Report Date: 09/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 29-SEP-2009 16:49
Lab Sample ID: 8141 SS GSV1084
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.0000	2.0277	1.4	15.0	
2	Dichlorvos	2.0000	1.8383	8.1	15.0	
3	Mevinphos	2.0000	1.3838	30.8	15.0	<-
4	Chlormefos	2.0000	1.9297	3.5	15.0	
5	Thionazin	2.0000	1.9172	4.1	15.0	
~~6~~	~~Demeton-O~~	~~0.6500~~	~~1.9167~~	~~194.9~~	~~15.0~~	~~<-~~
7	Ethoprop	2.0000	1.9138	4.3	15.0	
8	Naled	2.0000	1.8740	6.3	15.0	
9	Sulfotepp	2.0000	1.7418	12.9	15.0	
10	Phorate	2.0000	1.6291	18.5	15.0	<-
11	Dimethoate	2.0000	1.9574	2.1	15.0	
~~12~~	~~Demeton-S~~	~~1.3600~~	~~0.2011~~	~~85.2~~	~~15.0~~	~~<-~~
13	Simazine	2.0000	1.9396	3.0	15.0	
14	Atrazine	2.0000	1.8345	8.3	15.0	
15	propazine	2.0000	1.8174	9.1	15.0	
17	Disulfoton	2.0000	1.9030	4.9	15.0	
16	Diazinon	2.0000	1.7880	10.6	15.0	
18	Methyl Parathion	2.0000	1.8895	5.5	15.0	
19	Ronnel	2.0000	1.9096	4.5	15.0	
20	Malathion	2.0000	1.7586	12.1	15.0	
21	Fenthion	2.0000	1.7893	10.5	15.0	
22	Parathion	2.0000	1.7858	10.7	15.0	
23	Chlorpyrifos	2.0000	1.8763	6.2	15.0	
24	Trichloronate	2.0000	1.7018	14.9	15.0	
25	Anilazine	2.0000	1.3473	32.6	15.0	<-
148	Merphos-A (Merphos)	2.0000	1.0513	47.4	999.0	
26	Tetrachlorvinphos (Stirophos)	2.0000	1.7078	14.6	15.0	
28	Tokuthion	2.0000	1.8589	7.1	15.0	
149	Merphos-B (Merphos Oxone)	2.0000	2.1683	8.4	999.0	
29	Carbophenothion-methyl	2.0000	1.2396	38.0	15.0	<-
29	Fensulfothion	2.0000	1.7345	13.3	15.0	
30	Bolstar / Famphur	4.0000	3.9661	0.8	15.0	
32	Carbophenothion	2.0000	1.9274	3.6	15.0	
31	Triphenyl phosphate	2.0000	2.0501	2.5	15.0	
34	Phosmet	2.0000	2.0603	3.0	15.0	
32	EPN	2.0000	1.9835	0.8	15.0	
33	Azinphos-methyl	2.0000	1.7690	11.5	15.0	
38	Azinphos-ethyl	2.0000	1.8763	6.2	15.0	
36	Coumaphos	2.0000	1.8522	7.4	15.0	

data not available SDW 9/30/09

data not available SDW 9/30/09

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B/010F1001.D
Report Date: 09/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 29-SEP-2009 16:49
Lab Sample ID: 8141 SS GSV1084
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.0000	2.1178	5.9	15.0
27 Merphos	2.0000	1.8157	9.2	15.0

Average %D = 16.7

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B/010F1001.D
Report Date: 09/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 29-SEP-2009 16:49
Lab Sample ID: 8141 SS GSV1107
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1 o,o,o-TEPT	2.0000	2.0546	2.7	15.0	
2 Dichlorvos	2.0000	1.8179	9.1	15.0	
3 Chlormefos	2.0000	1.9854	0.7	15.0	
4 Mevinphos	2.0000	1.5661	21.7	15.0	<-
~~5 Demeton-O~~	~~0.6500~~	~~2.0374~~	~~213.5~~	~~15.0~~	<-
6 Thionazin	2.0000	2.0499	2.5	15.0	
7 Ethoprop	2.0000	1.8574	7.1	15.0	
10 Naled	2.0000	1.7111	14.4	15.0	
145 Sulfotepp	2.0000	1.7465	12.7	15.0	
8 Phorate	2.0000	1.8215	8.9	15.0	
~~15 Demeton-S~~	~~1.3600~~	~~0.0937~~	~~93.1~~	~~15.0~~	<-
10 Simazine	2.0000	2.2211	11.1	15.0	
13 Atrazine / Propazine	4.0000	3.6090	9.8	15.0	
16 Dimethoate	2.0000	1.9112	4.4	15.0	
11 Diazinon	2.0000	1.7312	13.4	15.0	
14 Disulfoton	2.0000	1.8899	5.5	15.0	
23 Methyl Parathion	2.0000	1.8884	5.6	15.0	
17 Ronnel	2.0000	2.0103	0.5	15.0	
24 Malathion	2.0000	1.7017	14.9	15.0	
18 Chlorpyrifos	2.0000	1.8709	6.5	15.0	
20 Trichloronate	2.0000	1.7259	13.7	15.0	
26 Parathion	2.0000	1.9657	1.7	15.0	
19 Fenthion	2.0000	1.9078	4.6	15.0	
151 Merphos-A (Merphos)	2.0000	1.1905	40.5	999.0	
21 Anilazine	2.0000	1.1573	42.1	15.0	<-
27 Tetrachlorvinphos (stirophos)	2.0000	1.7038	14.8	15.0	
25 Tokuthion	2.0000	1.9155	4.2	15.0	
148 Merphos-B (Merphos oxone)	2.0000	2.0651	3.3	999.0	
28 Carbophenothion methyl	2.0000	1.2678	36.6	15.0	<-
30 Fensulfothion	2.0000	1.9488	2.6	15.0	
28 Bolstar	2.0000	2.0207	1.0	15.0	
30 Carbophenothion	2.0000	1.9799	1.0	15.0	
33 Famphur	2.0000	1.9782	1.1	15.0	
29 Triphenyl phosphate	2.0000	2.0893	4.5	15.0	
32 EPN	2.0000	2.0329	1.6	15.0	
34 Phosmet	2.0000	2.0660	3.3	15.0	
34 Azinphos-methyl	2.0000	1.7858	10.7	15.0	
35 Azinphos-ethyl	2.0000	1.9627	1.9	15.0	
36 Coumaphos	2.0000	1.9237	3.8	15.0	

data not available DSW 9/30/09

data not available DSW 9/30/09

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B/010F1001.D
Report Date: 09/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 29-SEP-2009 16:49
Lab Sample ID: 8141 SS GSV1107
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.0000	2.1311	6.6	15.0
22 Merphos	2.0000	1.8093	9.5	15.0

Average %D = 16.3

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B/003F0301.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Analysis Type: NONE

Injection Date: 05-OCT-2009 17:20
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\100

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.3337	6.7	15.0	
2	Dichlorvos	2.5000	2.3277	6.9	15.0	
3	Mevinphos	2.5000	2.4349	2.6	15.0	
4	Chlormefos	2.5000	2.4526	1.9	15.0	
5	Thionazin	2.5000	2.4155	3.4	15.0	
6	Demeton-O	0.8125	0.8126	0.0	15.0	
7	Ethoprop	2.5000	2.4511	2.0	15.0	
8	Naled	2.5000	2.3730	5.1	15.0	
9	Sulfotepp	2.5000	2.3233	7.1	15.0	
10	Phorate	2.5000	2.5544	2.2	15.0	
11	Dimethoate	2.5000	2.6484	5.9	15.0	
12	Demeton-S	1.7000	1.6800	1.2	15.0	
13	Simazine	2.5000	2.5995	4.0	15.0	
14	Atrazine	2.5000	2.5934	3.7	15.0	
15	propazine	2.5000	2.4753	1.0	15.0	
17	Disulfoton	2.5000	2.4862	0.6	15.0	
16	Diazinon	2.5000	2.2633	9.5	15.0	
18	Methyl Parathion	2.5000	2.3436	6.3	15.0	
19	Ronnel	2.5000	2.3639	5.4	15.0	
20	Malathion	2.5000	2.5553	2.2	15.0	
21	Fenthion	2.5000	2.3150	7.4	15.0	
22	Parathion	2.5000	2.4898	0.4	15.0	
23	Chlorpyrifos	2.5000	2.3455	6.2	15.0	
24	Trichloronate	2.5000	2.4448	2.2	15.0	
25	Anilazine	2.5000	1.8888	24.4	15.0	<-
148	Merphos-A (Merphos)	2.5000	2.5268	1.1	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.3775	4.9	15.0	
28	Tokuthion	2.5000	2.5977	3.9	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	2.3301	6.8	999.0	
29	Carbophenothion-methyl	2.5000	2.4312	2.8	15.0	
29	Fensulfothion	2.5000	2.5230	0.9	15.0	
30	Bolstar / Famphur	5.0000	5.1627	3.3	15.0	
32	Carbophenothion	2.5000	2.5423	1.7	15.0	
31	Triphenyl phosphate	2.5000	2.3590	5.6	15.0	
34	Phosmet	2.5000	2.5097	0.4	15.0	
32	EPN	2.5000	2.5265	1.1	15.0	
33	Azinphos-methyl	2.5000	2.5704	2.8	15.0	
38	Azinphos-ethyl	2.5000	2.5761	3.0	15.0	
36	Coumaphos	2.5000	2.6541	6.2	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B/003F0301.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Analysis Type: NONE

Injection Date: 05-OCT-2009 17:20
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\100

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.4925	0.3	15.0
27 Merphos	2.5000	2.4604	1.6	15.0

Average %D = 4.01

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B/003F0301.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Analysis Type: NONE

Injection Date: 05-OCT-2009 17:20
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\100

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.5899	3.6	15.0	
2	Dichlorvos	2.5000	2.4021	3.9	15.0	
3	Chlormefos	2.5000	2.4915	0.3	15.0	
4	Mevinphos	2.5000	2.5581	2.3	15.0	
5	Demeton-O	0.8125	0.8142	0.2	15.0	
6	Thionazin	2.5000	2.6326	5.3	15.0	
7	Ethoprop	2.5000	2.5366	1.5	15.0	
10	Naled	2.5000	2.4509	2.0	15.0	
145	Sulfotepp	2.5000	2.6936	7.7	15.0	
8	Phorate	2.5000	2.8961	15.8	15.0	<-
15	Demeton-S	1.7000	1.8493	8.8	15.0	
10	Simazine	2.5000	2.4592	1.6	15.0	
13	Atrazine / Propazine	5.0000	5.1168	2.3	15.0	
16	Dimethoate	2.5000	2.5408	1.6	15.0	
11	Diazinon	2.5000	2.5109	0.4	15.0	
14	Disulfoton	2.5000	2.4989	0.0	15.0	
23	Methyl Parathion	2.5000	2.3012	8.0	15.0	
17	Ronnel	2.5000	2.3246	7.0	15.0	
24	Malathion	2.5000	2.2683	9.3	15.0	
18	Chlorpyrifos	2.5000	2.2599	9.6	15.0	
20	Trichloronate	2.5000	2.2515	9.9	15.0	
26	Parathion	2.5000	2.3381	6.5	15.0	
19	Fenthion	2.5000	2.3962	4.2	15.0	
151	Merphos-A (Merphos)	2.5000	2.2559	9.8	999.0	
21	Anilazine	2.5000	0.9855	60.6	15.0	<-
27	Tetrachlorvinphos (stirophos)	2.5000	2.3373	6.5	15.0	
25	Tokuthion	2.5000	2.3943	4.2	15.0	
148	Merphos-B (Merphos oxone)	2.5000	2.0754	17.0	999.0	
28	Carbophenothion methyl	2.5000	2.3945	4.2	15.0	
30	Fensulfothion	2.5000	2.4061	3.8	15.0	
28	Bolstar	2.5000	2.4251	3.0	15.0	
30	Carbophenothion	2.5000	2.3995	4.0	15.0	
33	Famphur	2.5000	2.5711	2.8	15.0	
29	Triphenyl phosphate	2.5000	2.4073	3.7	15.0	
32	EPN	2.5000	2.5074	0.3	15.0	
34	Phosmet	2.5000	2.7302	9.2	15.0	
34	Azinphos-methyl	2.5000	2.7561	10.2	15.0	
35	Azinphos-ethyl	2.5000	2.5898	3.6	15.0	
36	Coumaphos	2.5000	2.4742	1.0	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B/003F0301.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Analysis Type: NONE

Injection Date: 05-OCT-2009 17:20
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\100

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.6635	6.5	15.0
22 Merphos	2.5000	2.3197	7.2	15.0

Average %D = 6.58

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B/018F1801.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 018FT801.D
Analysis Type: NONE

Injection Date: 06-OCT-2009 02:25
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\100

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.2796	8.8	15.0	
2	Dichlorvos	2.5000	2.1300	14.8	15.0	
3	Mevinphos	2.5000	2.1879	12.5	15.0	
4	Chlormefos	2.5000	2.0415	18.3	15.0	<-
5	Thionazin	2.5000	2.1752	13.0	15.0	
6	Demeton-O	0.8125	0.7572	6.8	15.0	
7	Ethoprop	2.5000	2.2829	8.7	15.0	
8	Naled	2.5000	2.0576	17.7	15.0	<-
9	Sulfotepp	2.5000	2.1772	12.9	15.0	
10	Phorate	2.5000	2.3382	6.5	15.0	
11	Dimethoate	2.5000	2.2202	11.2	15.0	
12	Demeton-S	1.7000	1.4948	12.1	15.0	
13	Simazine	2.5000	2.2012	12.0	15.0	
14	Atrazine	2.5000	2.1825	12.7	15.0	
15	propazine	2.5000	2.1167	15.3	15.0	<-
17	Disulfoton	2.5000	2.3116	7.5	15.0	
16	Diazinon	2.5000	2.2545	9.8	15.0	
18	Methyl Parathion	2.5000	2.2037	11.9	15.0	
19	Ronnel	2.5000	2.0507	18.0	15.0	<-
20	Malathion	2.5000	2.5171	0.7	15.0	
21	Fenthion	2.5000	2.2218	11.1	15.0	
22	Parathion	2.5000	2.2730	9.1	15.0	
23	Chlorpyrifos	2.5000	2.1255	15.0	15.0	
24	Trichloronate	2.5000	2.1152	15.4	15.0	<-
25	Anilazine	2.5000	1.4893	40.4	15.0	<-
148	Merphos-A (Merphos)	2.5000	1.0873	56.5	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.1801	12.8	15.0	
28	Tokuthion	2.5000	2.2662	9.4	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	2.5706	2.8	999.0	
29	Carbophenothion-methyl	2.5000	2.2034	11.9	15.0	
29	Fensulfothion	2.5000	2.3713	5.1	15.0	
30	Bolstar / Famphur	5.0000	4.7485	5.0	15.0	
32	Carbophenothion	2.5000	2.3825	4.7	15.0	
31	Triphenyl phosphate	2.5000	2.2295	10.8	15.0	
34	Phosmet	2.5000	2.3066	7.7	15.0	
32	EPN	2.5000	2.3502	6.0	15.0	
33	Azinphos-methyl	2.5000	2.3981	4.1	15.0	
38	Azinphos-ethyl	2.5000	2.2665	9.3	15.0	
36	Coumaphos	2.5000	2.2720	9.1	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B/018F1801.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 018F1801.D
Analysis Type: NONE

Injection Date: 06-OCT-2009 02:25
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\100

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.2520	9.9	15.0
27 Merphos	2.5000	2.1364	14.5	15.0

Average %D = 12.2

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B/018F1801.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 018F1801.D
Analysis Type: NONE

Injection Date: 06-OCT-2009 02:25
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\100

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.2238	11.0	15.0	
2	Dichlorvos	2.5000	2.1906	12.4	15.0	
3	Chlormefos	2.5000	2.1117	15.5	15.0	<-
4	Mevinphos	2.5000	2.3650	5.4	15.0	
5	Demeton-O	0.8125	0.7324	9.9	15.0	
6	Thionazin	2.5000	2.2806	8.8	15.0	
7	Ethoprop	2.5000	2.3626	5.5	15.0	
10	Naled	2.5000	2.2043	11.8	15.0	
145	Sulfotepp	2.5000	2.3091	7.6	15.0	
8	Phorate	2.5000	2.3731	5.1	15.0	
15	Demeton-S	1.7000	1.5589	8.3	15.0	
10	Simazine	2.5000	1.9492	22.0	15.0	<-
13	Atrazine / Propazine	5.0000	4.1133	17.7	15.0	<-
16	Dimethoate	2.5000	2.2271	10.9	15.0	
11	Diazinon	2.5000	2.1828	12.7	15.0	
14	Disulfoton	2.5000	2.2130	11.5	15.0	
23	Methyl Parathion	2.5000	2.2832	8.7	15.0	
17	Ronnel	2.5000	2.2925	8.3	15.0	
24	Malathion	2.5000	2.3405	6.4	15.0	
18	Chlorpyrifos	2.5000	2.2319	10.7	15.0	
20	Trichloronate	2.5000	2.1424	14.3	15.0	
26	Parathion	2.5000	2.3831	4.7	15.0	
19	Fenthion	2.5000	2.2715	9.1	15.0	
151	Merphos-A (Merphos)	2.5000	1.5646	37.4	999.0	
21	Anilazine	2.5000	0.6116	75.5	15.0	<-
27	Tetrachlorvinphos (stirophos)	2.5000	2.2821	8.7	15.0	
25	Tokuthion	2.5000	2.2948	8.2	15.0	
148	Merphos-B (Merphos oxone)	2.5000	2.3868	4.5	999.0	
28	Carbophenothion methyl	2.5000	2.3230	7.1	15.0	
30	Fensulfothion	2.5000	2.3115	7.5	15.0	
28	Bolstar	2.5000	2.3079	7.7	15.0	
30	Carbophenothion	2.5000	2.2020	11.9	15.0	
33	Famphur	2.5000	2.2580	9.7	15.0	
29	Triphenyl phosphate	2.5000	2.3289	6.8	15.0	
32	EPN	2.5000	2.3411	6.4	15.0	
34	Phosmet	2.5000	2.2515	9.9	15.0	
34	Azinphos-methyl	2.5000	2.3234	7.1	15.0	
35	Azinphos-ethyl	2.5000	2.3394	6.4	15.0	
36	Coumaphos	2.5000	2.2289	10.8	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B/018F1801.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 018F1801.D
Analysis Type: NONE

Injection Date: 06-OCT-2009 02:25
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\100

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.2914	8.3	15.0
22 Merphos	2.5000	2.2324	10.7	15.0

Average %D = 11.8

M\2\SEQUENCE\D092909.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	8141 L7 GSV1077				
4	Vial 4	8141 L6 GSV1078				
5	Vial 5	8141 L5 GSV1079				
6	Vial 6	8141 L4 GSV1080				
7	Vial 7	8141 L3 GSV1081				
8	Vial 8	8141 L2 GSV1082				
9	Vial 9	8141 L1 GSV1083				
10	Vial 10	8141 SS GSV~~1084~~ 1087				
11	Vial 11	LKXKM1AA,MB				
12	Vial 12	LKXKM1AC,LCS				
13	Vial 13	LKXKM1AD,LCSD				
14	Vial 14	LKVW31A1,125-1				
15	Vial 15	LLF2T1AA,MB				
16	Vial 16	LLF2T1AC,LCS				
17	Vial 17	LK1TV1AC,309-1				
18	Vial 18	LK1TV1AE,309-1S				
19	Vial 19	LK1TV1AF,309-1D				
20	Vial 20	LK1T41AC,309-2				
21	Vial 21	LLF2R1AA,MB				
22	Vial 22	LLF2R1AC,LCS				
23	Vial 23	LK1TV1AD,309-1				
24	Vial 24	LK1TV1AJ,309-1S				
25	Vial 25	LK1TV1AK,309-1D				
26	Vial 26	LK1T41AD,309-2				
27	Vial 27	8141 CCV GSV1085				
28	Vial 28	LK48L1AA,MB				
29	Vial 29	LK48L1AC,LCS				
30	Vial 30	LKV851AA,173-1				
31	Vial 31	LKV9A1AA,173-2				
32	Vial 32	LKV9C1AA,173-3				
33	Vial 33	LK1V21AA,312-1				
34	Vial 34	LK1WH1AA,312-2				
35	Vial 35	LK1WL1AA,312-3				
36	Vial 36	8141 CCV GSV1085				
37	Vial 37	LK32J1AA,225-1				
38	Vial 38	LK32M1AA,225-2				
39	Vial 39	LK32M1AD,225-2S				
40	Vial 40	LK32M1AE,225-2D				
41	Vial 41	LK32W1AA,225-3				
42	Vial 42	8141 CCV GSV1085				
43	Vial 43	8141 L1 GSV1083				
44	Vial 44	LLK3J1AA,MB				
45	Vial 45	LLK3J1AC,LCS				
46	Vial 46	LK51E1AA,182-1				
47	Vial 47	LK51G1AA,182-2				
48	Vial 48	LK51G1AD,182-2S				
49	Vial 49	LK51G1AE,182-2D				
50	Vial 50	LK51H1AA,182-3				
51	Vial 51	LK9DD1AA,250-1				
52	Vial 52	LK9DE1AA,250-2				
53	Vial 53	LK9DM1AA,251-1				
54	Vial 54	8141 CCV GSV1085				
55	Vial 55	LK9DR1AA,251-2				
56	Vial 56	LK9DW1AA,251-3				
57	Vial 57	LK9D21AA,251-4				
58	Vial 58	LLEX71AA,243-1				
59	Vial 59	LLEX91AA,243-2				

1259804

1267577

1267576

9262069

1270024

M\2\SEQUENCE\D092909.S

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
60	Vial 60	LLE0A1AA,243-3				
61	Vial 61	LLE0D1AA,243-4				
62	Vial 62	LLH341AA,285-1				
63	Vial 63	LLH351AA,285-2				
64	Vial 64	8141 CCV GSV1085				
65	Vial 65	8141 L1 GSV1083				

Sequence Table (Back Injector):

No entries - empty table!

EM\2\SEQUENCE\D100509.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	8141 CCV GSV1085					
4	Vial 4	GSV1114-09 LCS					
5	Vial 5	LLN4X1AA,MB					9272488
6	Vial 6	LLN4X1AC,LCS					
7	Vial 7	LLN4X1AD,LCSD					
8	Vial 8	LLE0E1AA,244-1					
9	Vial 9	LKXKM1AA,MB					
10	Vial 10	LKXKM1AC,LCS					9259804
11	Vial 11	LKXKM1AD,LCSD					
12	Vial 12	LKVW31A1,125-1					
13	Vial 13	LLQ6W1AA,MB					
14	Vial 14	LLQ6W1AC,LCS					9273433
15	Vial 15	LLG321AA,174-1					
16	Vial 16	LLG321AF,174-1S					
17	Vial 17	LLG321AG,174-1D					
18	Vial 18	8141 CCV GSV1085					
19	Vial 19	LLQPL1AA,MB					
20	Vial 20	LLQ971AA,LCS					
21	Vial 21	LLFGF1AA,305-1					9273443
22	Vial 22	LLFGF1AD,305-1S					
23	Vial 23	LLFGF1AE,305-1D					
24	Vial 24	LLFGK1AA,305-2					
25	Vial 25	LLQPN1AA,MB					
26	Vial 26	LLRA31AA,LCS					
27	Vial 27	LLFGF1AC,305-1					9273461
28	Vial 28	LLFGK1AC,305-2					
29	Vial 29	LLFGK1AD,305-2S					– RR, bad injection?
30	Vial 30	LLFGK1AE,305-2D					
31	Vial 31	LLFGK1AD,305-2S					
32	Vial 32	8141 CCV GSV1085					
33	Vial 33	LLVJF1AA,MB					
34	Vial 34	LLVJF1AC,LCS					9274554
35	Vial 35	LLVJF1AD,LCSD					
36	Vial 36	LLQRR1AA,236-1					
37	Vial 37	LLVJ01AA,MB					
38	Vial 38	LLVJ01AC,LCS					9274555
39	Vial 39	LLVJ01AD,LCSD					
40	Vial 40	LLTKN1AA,204-1					
41	Vial 41	LLTKX1AA,210-1					
42	Vial 42	LL01M1AA,MB					
43	Vial 43	LL01M1AC,LCS					
44	Vial 44	LL01M1AD,LCSD					9277015
45	Vial 45	LLXA51AE,256-1					
46	Vial 46	LLX1Q1AA,331-1					
47	Vial 47	LLX1V1AA,331-2					
48	Vial 48	LLX1W1AA,331-3					
49	Vial 49	LLX1X1AA,331-4					
50	Vial 50	LLX101AA,331-5					
51	Vial 51	8141 CCV GSV1085					
52	Vial 52	LLVJT1AA,MB					
53	Vial 53	LLVJT1AC,LCS					
54	Vial 54	LLVJT1AD,LCSD					
55	Vial 55	LK9DD2AA,250-1					
56	Vial 56	LLNL31AA,202-1					9274554
57	Vial 57	LLNL51AA,202-2					
58	Vial 58	LLNL61AA,202-3					
59	Vial 59	LLNL71AA,202-4					

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
60	Vial 60	8141 CCV GSV1085				

Sequence Table (Back Injector):

No entries - empty table!

TestAmerica

Total Metals

CLP-Like Forms

Lot ID: D9I250174

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.: D9I250174

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

SOW No.: _____

Sample ID.	Lab Sample No.
M-89B	D9I250174-001
M-89BMS MS	D9I250174-001S
M-89BMSD MSD	D9I250174-001SD

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: 10/7/09 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-89B
Lot/SDG Number:	D9I250174	**Lab Sample ID:**	D9I250174-001
Matrix:	WATER	**Lab WorkOrder:**	LLG32
% Moisture:	N/A	**Date/Time Collected:**	09/24/09 11:40
Basis:	Wet	**Date/Time Received:**	09/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:40
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	5		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**87**	1.0	25	
7782-49-2	Selenium	**7.9**	3.5	25	B

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

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I250174

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	40.5	101.2	50.0	49.4	98.8	50.8	101.6	M
Selenium	40.0	40.6	101.5	50.0	49.4	98.8	50.6	101.2	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.: D9I250174

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				50.0	50.3	100.6			M
Selenium				50.0	52.3	104.6			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.: D9I250174

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	1.045	104.5		
Selenium				1.00	1.025	102.5		

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:	D9I250174	**Lab Sample ID:**	D9I280000-338B
Matrix:	WATER	**Lab WorkOrder:**	LLL0W
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:34
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.: D9I250174

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	-0.703	B	0.700	U	0.700	U	4.101	B	0.70	U	M

Comments:

Total Metals Analysis

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I250174

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	0.37	100.50	100.5			
Selenium	0.0	100.0	0.01	105.60	105.6			

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-89BMS
Lot/SDG Number:	D9I250174	**MS Lab Sample ID:**	D9I250174-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LLG32
% Moisture:	N/A	**Date/Time Collected:**	09/24/09 11:40
Basis:	Wet	**Date/Time Received:**	09/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:48
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	5		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	87		127		101		85 - 117
Selenium	40.0	7.9	B	52.6		112		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-89BMSD
Lot/SDG Number:	D9I250174	**MSD Lab Sample ID:**	D9I250174-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LLG32
% Moisture:	N/A	**Date/Time Collected:**	09/24/09 11:40
Basis:	Wet	**Date/Time Received:**	09/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:51
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	5		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	87		129		106		1.6		85 - 117	20
Selenium	40.0	7.9	B	60.6		132	N	14		77 - 122	20

Total Metals Analysis
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.: M-89B PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I250174

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	217.100		17.326		200.00	99.9		M
Selenium	75 - 125	194.400		1.587	B	200.00	96.4		M

Comments: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9I250174	**Lab Sample ID:**	D9I280000-338C
Matrix:	WATER	**Lab WorkOrder:**	LLL0W
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:37
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	39.5	99		85 - 117
Selenium	40.0	38.8	97		77 - 122

Total Metals Analysis

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

M-89B SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I250174

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	17.326		16.680	B	3.7		M
Selenium	1.587	B	10.440	B	557.8		M

Comments: _____

Total Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I250174

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

Flame AA ID Number: _____

Furnace AA ID Number:

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

Comments: _____

Total Metals Analysis
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I250174

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

Total Metals Analysis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I250174

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-89B	9/29/2009	50.0	50.0
M-89BMS MS	9/29/2009	50.0	50.0
M-89BMSD MSD	9/29/2009	50.0	50.0
MB9271338	9/29/2009	50.0	50.0
Check Sample	9/29/2009	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.: D9I250174

Instrument ID Number: Agilent 7500 Method: M

Start Date: 10/1/2009 End Date: 10/2/2009

Sample ID.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL BLANK	1.00	18:32				X															X						
100 PPB	1.00	18:35				X															X						
ICV	1.00	18:37				X															X						
ICB	1.00	18:43				X															X						
RL STD	1.00	18:45				X															X						
ICSA	1.00	18:54				X															X						
ICSAB	1.00	18:56				X															X						
RINSE	1.00	18:59				X															X						
LR1	1.00	19:02				X															X						
RINSE	1.00	19:04				X															X						
CCV	1.00	19:07				X															X						
CCB	1.00	19:10				X															X						
CAL BLANK	1.00	04:20				X															X						
100 PPB	1.00	04:23				X															X						
CCV	1.00	04:26				X															X						
CCB	1.00	04:28				X															X						
MB9271338	1.00	04:34				X															X						
Check Sample	1.00	04:37				X															X						
M-89B	5.00	04:40				X															X						
M-89B SER	25.00	04:42				X															X						
M-89B PDS	1.00	04:45				X															X						
M-89BMS MS	5.00	04:48				X															X						
M-89BMSD MSD	5.00	04:51				X															X						
CCV	1.00	05:02				X															X						
CCB	1.00	05:05				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: D9I260177

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.: D9I260177

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

SOW No.: _____

Sample ID.	Lab Sample No.
FILTB092509-A2	D9I260177-001

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: 10/8/09 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:**	FILTB092509-A2
Lot/SDG Number:	D91260177	**Lab Sample ID:**	D9I260177-001
Matrix:	WATER	**Lab WorkOrder:**	LLKFN
% Moisture:	N/A	**Date/Time Collected:**	09/25/09 09:31
Basis:	Wet	**Date/Time Received:**	09/26/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:53
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	**2.0**	0.70	5.0	B

Total Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I260177

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	40.5	101.2	50.0	49.4	98.8	50.8	101.6	M
Selenium	40.0	40.6	101.5	50.0	49.4	98.8	50.6	101.2	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.: D9I260177

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				50.0	50.3	100.6			M
Selenium				50.0	52.3	104.6			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.: D9I260177

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	1.045	104.5		
Selenium				1.00	1.025	102.5		

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:	D91260177	**Lab Sample ID:**	D91280000-338B
Matrix:	WATER	**Lab WorkOrder:**	LLL0W
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:34
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.: D9I260177

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	-0.703	B	0.700	U	0.700	U	4.101	B	0.70	U	M

Comments:

Total Metals Analysis

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I260177

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	0.37	100.50	100.5			
Selenium	0.0	100.0	0.01	105.60	105.6			

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:	D9I260177	**MS Lab Sample ID:**	D9I250174-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LLG32
% Moisture:	N/A	**Date/Time Collected:**	09/24/09 11:40
Basis:	Wet	**Date/Time Received:**	09/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:48
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	5		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	87		127		101		85 - 117
Selenium	40.0	7.9	B	52.6		112		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:	D91260177	**MSD Lab Sample ID:**	D91250174-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LLG32
% Moisture:	N/A	**Date/Time Collected:**	09/24/09 11:40
Basis:	Wet	**Date/Time Received:**	09/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:51
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	5		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	87		129		106		1.6		85 - 117	20
Selenium	40.0	7.9	B	60.6		132	N	14		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.: D9I260177

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	217.100		17.326		200.00	99.9		M
Selenium	75 - 125	194.400		1.587	B	200.00	96.4		M

Comments: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9I260177	**Lab Sample ID:**	D9I280000-338C
Matrix:	WATER	**Lab WorkOrder:**	LLL0W
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:37
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	39.5	99		85 - 117
Selenium	40.0	38.8	97		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.: D9I260177

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	17.326		16.680	B	3.7		M
Selenium	1.587	B	10.440	B	557.8		M

Comments: _____

Total Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I260177

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

Flame AA ID Number: _____

Furnace AA ID Number:

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

Comments: _____

Total Metals Analysis
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I260177

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: _____

Total Metals Analysis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I260177

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
INTRA-LAB QC	9/29/2009	50.0	50.0
LAB MS/MSD MS	9/29/2009	50.0	50.0
LAB MS/MSD MSD	9/29/2009	50.0	50.0
FILTB092509-A2	9/29/2009	50.0	50.0
MB9271338	9/29/2009	50.0	50.0
Check Sample	9/29/2009	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.: D9I260177

Instrument ID Number: Agilent 7500 Method: M

Start Date: 10/1/2009 End Date: 10/2/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL BLANK	1.00	18:32				X															X						
100 PPB	1.00	18:35				X															X						
ICV	1.00	18:37				X															X						
ICB	1.00	18:43				X															X						
RL STD	1.00	18:45				X															X						
ICSA	1.00	18:54				X															X						
ICSAB	1.00	18:56				X															X						
RINSE	1.00	18:59				X															X						
LR1	1.00	19:02				X															X						
RINSE	1.00	19:04				X															X						
CCV	1.00	19:07				X															X						
CCB	1.00	19:10				X															X						
CAL BLANK	1.00	04:20				X															X						
100 PPB	1.00	04:23				X															X						
CCV	1.00	04:26				X															X						
CCB	1.00	04:28				X															X						
MB9271338	1.00	04:34				X															X						
Check Sample	1.00	04:37				X															X						
INTRA-LAB QC	5.00	04:40				X															X						
INTRA-LAB QC SER	25.00	04:42				X															X						
INTRA-LAB QC PDS	1.00	04:45				X															X						
LAB MS/MSD MS	5.00	04:48				X															X						
LAB MS/MSD MSD	5.00	04:51				X															X						
FILTB092509-A2	1.00	04:53				X															X						
CCV	1.00	05:02				X															X						
CCB	1.00	05:05				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: D9I260178

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Samples: 001 and 002

TestAmerica

Total Metals Analysis

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9I260178

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

SOW No.: _____

Sample ID.	Lab Sample No.
M-2009AB	D9I260178-002
M-2AB	D9I260178-001

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: 10/8/09 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-2AB
Lot/SDG Number:	D9I260178	**Lab Sample ID:**	D9I260178-001
Matrix:	WATER	**Lab WorkOrder:**	LLKFP
% Moisture:	N/A	**Date/Time Collected:**	09/25/09 10:00
Basis:	Wet	**Date/Time Received:**	09/26/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:56
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	5		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**80**	1.0	25	
7782-49-2	Selenium	**25**	3.5	25	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-2009AB
Lot/SDG Number:	D9I260178	**Lab Sample ID:**	D9I260178-002
Matrix:	WATER	**Lab WorkOrder:**	LLKFR
% Moisture:	N/A	**Date/Time Collected:**	09/25/09 10:00
Basis:	Wet	**Date/Time Received:**	09/26/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:59
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	5		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**80**	1.0	25	
7782-49-2	Selenium	**19**	3.5	25	B

Total Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I260178

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic	40.0	40.5	101.2	50.0	49.4	98.8	50.8	101.6	M
Selenium	40.0	40.6	101.5	50.0	49.4	98.8	50.6	101.2	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.: D9I260178

Initial Calibration Source: High Purity

Continuing Calibration Source: Inorganic Ventures

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Arsenic				50.0	50.3	100.6			M
Selenium				50.0	52.3	104.6			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.: D9I260178

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	1.045	104.5		
Selenium				1.00	1.025	102.5		

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:	D9I260178	**Lab Sample ID:**	D9I280000-338B
Matrix:	WATER	**Lab WorkOrder:**	LLL0W
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:34
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

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I260178

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	-0.703	B	0.700	U	0.700	U	4.101	B	0.70	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.: D9I260178

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	0.37	100.50	100.5			
Selenium	0.0	100.0	0.01	105.60	105.6			

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:	D9I260178	**MS Lab Sample ID:**	D9I250174-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LLG32
% Moisture:	N/A	**Date/Time Collected:**	09/24/09 11:40
Basis:	Wet	**Date/Time Received:**	09/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:48
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	5		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	87		127		101		85 - 117
Selenium	40.0	7.9	B	52.6		112		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:	D91260178	**MSD Lab Sample ID:**	D91250174-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LLG32
% Moisture:	N/A	**Date/Time Collected:**	09/24/09 11:40
Basis:	Wet	**Date/Time Received:**	09/25/09 08:30
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:51
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	5		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	87		129		106		1.6		85 - 117	20
Selenium	40.0	7.9	B	60.6		132	N	14		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.: D9I260178

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	217.100		17.326		200.00	99.9		M
Selenium	75 - 125	194.400		1.587	B	200.00	96.4		M

Comments: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D91260178	**Lab Sample ID:**	D9I280000-338C
Matrix:	WATER	**Lab WorkOrder:**	LLL0W
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	09/29/09 07:30
QC Batch ID:	9271338	**Date/Time Analyzed:**	10/02/09 04:37
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	39.5	99		85 - 117
Selenium	40.0	38.8	97		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.: D9I260178

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	17.326		16.680	B	3.7		M
Selenium	1.587	B	10.440	B	557.8		M

Comments: _____

Total Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I260178

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

Flame AA ID Number: _____

Furnace AA ID Number:

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

Comments: _____

Total Metals Analysis
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I260178

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: _____

Total Metals Analysis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9I260178

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
INTRA-LAB QC	9/29/2009	50.0	50.0
LAB MS/MSD MS	9/29/2009	50.0	50.0
LAB MS/MSD MSD	9/29/2009	50.0	50.0
M-2AB	9/29/2009	50.0	50.0
M-2009AB	9/29/2009	50.0	50.0
MB9271338	9/29/2009	50.0	50.0
Check Sample	9/29/2009	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.: D9I260178

Instrument ID Number: Agilent 7500 Method: M

Start Date: 10/1/2009 End Date: 10/2/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL BLANK	1.00	18:32				X															X						
100 PPB	1.00	18:35				X															X						
ICV	1.00	18:37				X															X						
ICB	1.00	18:43				X															X						
RL STD	1.00	18:45				X															X						
ICSA	1.00	18:54				X															X						
ICSAB	1.00	18:56				X															X						
RINSE	1.00	18:59				X															X						
LR1	1.00	19:02				X															X						
RINSE	1.00	19:04				X															X						
CCV	1.00	19:07				X															X						
CCB	1.00	19:10				X															X						
CAL BLANK	1.00	04:20				X															X						
100 PPB	1.00	04:23				X															X						
CCV	1.00	04:26				X															X						
CCB	1.00	04:28				X															X						
MB9271338	1.00	04:34				X															X						
Check Sample	1.00	04:37				X															X						
INTRA-LAB QC	5.00	04:40				X															X						
INTRA-LAB QC SER	25.00	04:42				X															X						
INTRA-LAB QC PDS	1.00	04:45				X															X						
LAB MS/MSD MS	5.00	04:48				X															X						
LAB MS/MSD MSD	5.00	04:51				X															X						
M-2AB	5.00	04:56				X															X						
M-2009AB	5.00	04:59				X															X						
CCV	1.00	05:02				X															X						
CCB	1.00	05:05				X															X						

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

0.2°C ice
9/25/09
JR1

117

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. 2027.001.00138
Page: 1 of 1
Cooler # ____ of ____
Collection Area: II

Required Ship to Lab:

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

Required Project Information:

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

Required Invoice Information:

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

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

Valid Matrix Codes: MATRIX — DRINKING WATER WP; GROUND WATER WG; WASTE WATER WW; FREE PRODUCT LF; SOIL SO; OIL OL; SOIL GAS SG; WIPE WI; AMBIENT AIR AA; SVE AIR AE; 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/Collison Cell	EPA 8141A OPP Pest	Comments/Lab Sample I.D.
1	M-89B	WG	G	9/24/2009	11:40	1	N			X						X		500 ml Plastic
2	M-89B	WG	G	9/24/2009	11:40	2	N	X									X	2- 1L amber glass
3	M-89BMS	WG	G	9/24/2009	11:40	1	N			X						X		500 ml Plastic
4	M-89BMS	WG	G	9/24/2009	11:40	2	N	X									X	2- 1L amber glass
5	M-89BMSD	WG	G	9/24/2009	11:40	1	N			X						X		500 ml Plastic
6	M-89BMSD	WG	G	9/24/2009	11:40	2	N	X									X	2- 1L amber glass
7																		
8																		
9	DRB																	
10	9-24-09																	
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
Dana R. Brown, NGEM	24-Sep	14:35	Darren Qualls, GES	9/24/2009	14:35
Darren Qualls, GES	24-Sep	16:45	Ima Miller TA Den	9/25/09	0830

SHIPPED VIA: UPS COURIER FEDEX US MAIL

PRINT Name of SAMPLER: Dana R. Brown
SIGNATURE of SAMPLER:
DATE Signed: 9/24/2009
Time: 14:35

Sample Receipt Conditions

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

Table of Contents

TestAmerica

TestAmerica Denver

Sample Receiving Checklist

Lot #: D9I250174 Date/Time Received: 9/25/09 0830

Company Name & Sampling Site: Northgate - TRONOX

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

Residual chlorine check required: ☐ ☒ Quarantined : ☐ ☒

Quote #: 93046

Special Instructions:

Time Zone:

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

Unpacking Checks:

Cooler #(s): 1

Temperatures (°C): 0.2

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

TestAmerica Denver

Sample Receiving Checklist

Lot # D9I250174

Login Checks:

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

Labeling and Storage Checks:

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

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

2.5 IR1
fm 9/26/09

120

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. 2027.001.00859
Page: 1 of 1
Cooler # ____ of ____
Collection Area: II

Required Ship to Lab:

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

Required Project Information:

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

Required Invoice Information:

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

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

Valid Matrix Codes: MATRIX — DRINKING WATER WP; GROUND WATER WG; WASTE WATER LF; FREE PRODUCT OIL; SOIL SW; OIL AA; WIPE AE; AMBIENT AIR; SVE AIR; SOIL GAS; WATER W; SURFACE WATER WS; SO WATER QC WQ; SLUDGE SL; RINSEATE WH; OTHER OT; GS 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 8020/Collison Cell	EPA 8141A OPP Pest.	Comments/Lab Sample I.D.
1	FiltB092509-A2	WG	G	9/25/2009	9:31	1	N			X						X		500 ml Plastic
2																		
3																		
4																		
5	DRB 9-25-09																	
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Additional Comments/Special Instructions:

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

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Dana R. Brown, NGEM	25-Sep	12:39	Darren Qualls, GES	9/25/2009	12:39
Darren Qualls, GES	25-Sep	16:00		9/26/09	0830

UPS COURIER FEDEX
US MAIL

PRINT Name of SAMPLER: Dana R. Brown
SIGNATURE of SAMPLER:
DATE Signed 9/25/2009
Time: 12:39

Sample Receipt Conditions

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

Table of Contents

TestAmerica

Table of Contents

TestAmerica Denver

Sample Receiving Checklist

Lot #: D9I260177 Date/Time Received: 9/26/9 0830

Company Name & Sampling Site: Tronox

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

Residual chlorine check required: ☐ ☒ Quarantined : ☐ ☒

Quote #:

Special Instructions:

Time Zone:

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

Unpacking Checks:

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

Temperatures (°C): 2.5°C _____ _____ _____ _____ _____ _____ _____

N/A	*Yes*	*No*		*Initials*
☐	☑	☐	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	KC
	☑	☐	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 # D9I260177

Login Checks: *Initials* AC

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* LC

☑	☐	☐	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).

2.5 IR1 LM 9/26/09

123

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. 2027.001.00138
Page: 1 of 1
Cooler # ____ of ____
Collection Area: II

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
Phone/Fax:	303-736-0157	Site PM Name	Derrick Willis	Send EDD to	Frank Hagar Northgate Environmental Management, Inc frank.hagar@ngem.com	NJ Reduced Deliverable Package?	
Lab PM email	michael.phillips@testamericainc.com	Phone/Fax:	949-375-7004	CC Hardcopy report to	PDF Electronic Version Only	MA MCP Cert? ____	CT RCP Cert? ____ Mark One
Applicable Lab Quote #:		Site PM Email:	derrick.willis@ngem.com	CC Hardcopy report to	see additional comments below	Lab Project ID (lab use)	

Valid Matrix Codes: MATRIX — DRINKING WATER WP; GROUND WATER WG; WASTE WATER LF; FREE PRODUCT OL; SOIL SW; OIL AA; WIPE AE; AMBIENT AIR; SVE AIR; SOIL GAS; WATER W; SURFACE WATER WS; WATER QC WQ; SLUDGE SL; RINSEATE WH; OTHER TS; 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-2AB	WG	G	9/25/2009	10:00	1	N			X						X		500 ml Plastic
2	M-2009AB	WG	G	9/25/2009	10:00	1	N			X						X		500 ml Plastic
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		

DRB 9-25-09

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
Dana R. Brown, NGEM	25-Sep	12:39	Darren Qualls, GES	9/25/2009	12:39
Darren Qualls, GES	25-Sep	16:00		9/26/9	0830

SHIPPING METHOD (mark as appropriate) SAMPLER NAME AND SIGNATURE

UPS COURIER FEDEX US MAIL

PRINT Name of SAMPLER: Dana R. Brown
SIGNATURE of SAMPLER:
DATE Signed 9/25/2009 Time: 12:39

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

Table of Contents

TestAmerica Denver

Sample Receiving Checklist

Lot #: D9I260178 Date/Time Received: 9/26/9 0830

Company Name & Sampling Site: Tronox

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

Residual chlorine check required: ☐ ☒ Quarantined : ☐ ☒

Quote #:

Special Instructions:

Time Zone:

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

Unpacking Checks:

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

Temperatures (°C): 2.5°C _____ _____ _____ _____ _____ _____ _____

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. 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 # D9I260178

Login Checks: *Initials* AC

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* AC

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

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

Semivolatile GC

Supporting Documentation

Sample Sequence, Chromatograms

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9I250174

Client: Northgate

Method: 8141

Associated Samples: 1

Batch #(s): 9273433

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

Signature/Date: J. Benallo 10/8/09

GC SEMIVOLATILE ORGANIC EXTRACTION LOG SHEETS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 10/01/09
Time: 18:58:12

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

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

Extractionist: 011821 Chad M. Lane
007404 Melissa N. Dishroon

Concentrationist: 000906 Sarah Otis

QC BATCH: 9273433

PREP DATE: 9/30/09 18:40
COMP DATE: 10/01/09 19:45

Reviewer/Date: OTISS / 10/01/09

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
10/01/09	10/07/09	D9I250174-001 **LLG32-1-AA**	DR	09	P2	WATER	**1066mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV1050 9/24/09
COMMENTS:															
10/01/09	10/07/09	D9I250174-001 **LLG32-1-AFS**	DR	09	P2	WATER	**1045mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV1012 9/14/09 1ML GSV1050 9/24/09
COMMENTS:															
10/01/09	10/07/09	D9I250174-001 **LLG32-1-AGD**	DR	09	P2	WATER	**1040mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV1012 9/14/09 1ML GSV1050 9/24/09
COMMENTS:															
10/01/09	0/00/00	D9I300000-433 **LLQ6W-1-AAB**		09	P2	WATER	**1000mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV1050 9/24/09
COMMENTS:															
10/01/09	0/00/00	D9I300000-433 **LLQ6W-1-ACC**		09	P2	WATER	**1000mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV1012 9/14/09 1ML GSV1050 9/24/09
COMMENTS:															

DV-OP-0006/7 BAL.M27995 H2O:ELGA NACL:H14611 S/S:CL-C W:AJ
TURBOVAP:C@40C HEX:H25E29 PIP:CON-6

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

Sequence: C:\HPCHEM\2\SEQUENCE\D100509.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	8141 CCV GSV1085				
4	Vial 4	GSV1114-09 LCS				
5	Vial 5	LLN4X1AA,MB				
6	Vial 6	LLN4X1AC,LCS				
7	Vial 7	LLN4X1AD,LCSD				
8	Vial 8	LLE0E1AA,244-1				
9	Vial 9	LKXKM1AA,MB				
10	Vial 10	LKXKM1AC,LCS				
11	Vial 11	LKXKM1AD,LCSD				
12	Vial 12	LKVW31A1,125-1				
13	Vial 13	LLQ6W1AA,MB				
14	Vial 14	LLQ6W1AC,LCS				
15	Vial 15	LLG321AA,174-1				
16	Vial 16	LLG321AF,174-1S				
17	Vial 17	LLG321AG,174-1D				
18	Vial 18	8141 CCV GSV1085				
19	Vial 19	LLQPL1AA,MB				
20	Vial 20	LLQ971AA,LCS				
21	Vial 21	LLFGF1AA,305-1				
22	Vial 22	LLFGF1AD,305-1S				
23	Vial 23	LLFGF1AE,305-1D				
24	Vial 24	LLFGK1AA,305-2				
25	Vial 25	LLQPN1AA,MB				
26	Vial 26	LLRA31AA,LCS				
27	Vial 27	LLFGF1AC,305-1				
28	Vial 28	LLFGK1AC,305-2				
29	Vial 29	LLFGK1AD,305-2S				
30	Vial 30	LLFGK1AE,305-2D				
31	Vial 31	LLFGK1AD,305-2S				
32	Vial 32	8141 CCV GSV1085				
33	Vial 33	LLVJF1AA,MB				
34	Vial 34	LLVJF1AC,LCS				
35	Vial 35	LLVJF1AD,LCSD				
36	Vial 36	LLQRR1AA,236-1				
37	Vial 37	LLVJ01AA,MB				
38	Vial 38	LLVJ01AC,LCS				
39	Vial 39	LLVJ01AD,LCSD				
40	Vial 40	LLTKN1AA,204-1				
41	Vial 41	LLTKX1AA,210-1				
42	Vial 42	LL01M1AA,MB				
43	Vial 43	LL01M1AC,LCS				
44	Vial 44	LL01M1AD,LCSD				
45	Vial 45	LLXA51AE,256-1				
46	Vial 46	LLX1Q1AA,331-1				
47	Vial 47	LLX1V1AA,331-2				
48	Vial 48	LLX1W1AA,331-3				
49	Vial 49	LLX1X1AA,331-4				
50	Vial 50	LLX101AA,331-5				
51	Vial 51	8141 CCV GSV1085				
52	Vial 52	LLVJT1AA,MB				
53	Vial 53	LLVJT1AC,LCS				
54	Vial 54	LLVJT1AD,LCSD				
55	Vial 55	LK9DD2AA,250-1				
56	Vial 56	LLNL31AA,202-1				
57	Vial 57	LLNL51AA,202-2				
58	Vial 58	LLNL61AA,202-3				
59	Vial 59	LLNL71AA,202-4				

9272488

9259504

9273433

9273443

9273461

RR, bad injection?

9274554

9274555

9277075

9274556

M\2\SEQUENCE\D100509.S

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
60	Vial 60	8141 CCV GSV1085				

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_D.i\1005091.B/003F0301.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Analysis Type: NONE

Injection Date: 05-OCT-2009 17:20
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.3337	6.7	15.0	
2	Dichlorvos	2.5000	2.3277	6.9	15.0	
3	Mevinphos	2.5000	2.4349	2.6	15.0	
4	Chlormefos	2.5000	2.4526	1.9	15.0	
5	Thionazin	2.5000	2.4155	3.4	15.0	
6	Demeton-O	0.8125	0.8126	0.0	15.0	
7	Ethoprop	2.5000	2.4511	2.0	15.0	
8	Naled	2.5000	2.3730	5.1	15.0	
9	Sulfotepp	2.5000	2.3233	7.1	15.0	
10	Phorate	2.5000	2.5544	2.2	15.0	
11	Dimethoate	2.5000	2.6484	5.9	15.0	
12	Demeton-S	1.7000	1.6800	1.2	15.0	
13	Simazine	2.5000	2.5995	4.0	15.0	
14	Atrazine	2.5000	2.5934	3.7	15.0	
15	propazine	2.5000	2.4753	1.0	15.0	
17	Disulfoton	2.5000	2.4862	0.6	15.0	
16	Diazinon	2.5000	2.2633	9.5	15.0	
18	Methyl Parathion	2.5000	2.3436	6.3	15.0	
19	Ronnel	2.5000	2.3639	5.4	15.0	
20	Malathion	2.5000	2.5553	2.2	15.0	
21	Fenthion	2.5000	2.3150	7.4	15.0	
22	Parathion	2.5000	2.4898	0.4	15.0	
23	Chlorpyrifos	2.5000	2.3455	6.2	15.0	
24	Trichloronate	2.5000	2.4448	2.2	15.0	
25	Anilazine	2.5000	1.8888	24.4	15.0	<-
148	Merphos-A (Merphos)	2.5000	2.5268	1.1	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.3775	4.9	15.0	
28	Tokuthion	2.5000	2.5977	3.9	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	2.3301	6.8	999.0	
29	Carbophenothion-methyl	2.5000	2.4312	2.8	15.0	
29	Fensulfothion	2.5000	2.5230	0.9	15.0	
30	Bolstar / Famphur	5.0000	5.1627	3.3	15.0	
32	Carbophenothion	2.5000	2.5423	1.7	15.0	
31	Triphenyl phosphate	2.5000	2.3590	5.6	15.0	
34	Phosmet	2.5000	2.5097	0.4	15.0	
32	EPN	2.5000	2.5265	1.1	15.0	
33	Azinphos-methyl	2.5000	2.5704	2.8	15.0	
38	Azinphos-ethyl	2.5000	2.5761	3.0	15.0	
36	Coumaphos	2.5000	2.6541	6.2	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B/003F0301.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Analysis Type: NONE

Injection Date: 05-OCT-2009 17:20
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.4925	0.3	15.0
27 Merphos	2.5000	2.4604	1.6	15.0

Average %D = 4.01

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\003F0301.D
Lab Smp Id: 8141 CCV GSV1085 Client Smp ID: 8141 CCV GSV1085
Inj Date : 05-OCT-2009 17:20
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 CCV GSV1085
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Meth Date : 06-Oct-2009 09:09 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 3 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	4.271	4.271	(0.313)	353694	2.50000	2.334
	2 Dichlorvos	5.824	5.824	(0.427)	253193	2.50000	2.328
	3 Mevinphos	9.342	9.342	(0.685)	122227	2.50000	2.435
$	4 Chlormefos	9.462	9.462	(0.694)	345517	2.50000	2.452
	5 Thionazin	12.576	12.576	(0.922)	264931	2.50000	2.415
	6 Demeton-O	12.830	12.830	(0.941)	77394	0.81250	0.8126
	7 Ethoprop	13.144	13.144	(0.964)	260187	2.50000	2.451
	8 Naled	13.425	13.425	(0.984)	85513	2.50000	2.373
*	9 Tributylphosphate	13.639	13.639	(1.000)	199712	2.00000	
	10 Sulfotepp	14.101	14.101	(1.034)	333355	2.50000	2.323
	11 Phorate	14.188	14.188	(1.040)	250315	2.50000	2.554
	12 Dimethoate	14.362	14.362	(1.053)	273750	2.50000	2.648
	13 Demeton-S	14.628	14.628	(1.073)	150116	1.70000	1.680
	14 Simazine	14.753	14.753	(1.082)	89202	2.50000	2.599
	15 Atrazine	14.969	14.969	(1.098)	109344	2.50000	2.593
	16 propazine	15.151	15.151	(1.111)	108025	2.50000	2.475
	17 Disulfoton	15.829	15.829	(0.585)	201770	2.50000	2.486
	18 Diazinon	15.896	15.896	(0.588)	253186	2.50000	2.263
	19 Methyl Parathion	16.799	16.799	(0.621)	187738	2.50000	2.344
	20 Ronnel	17.419	17.419	(0.644)	202237	2.50000	2.364
	21 Malathion	18.088	18.088	(0.669)	159200	2.50000	2.555
	22 Fenthion	18.245	18.245	(0.674)	182357	2.50000	2.315
	23 Parathion	18.355	18.355	(0.678)	181575	2.50000	2.490
	24 Chlorpyrifos	18.411	18.411	(0.680)	278428	2.50000	2.346
	25 Trichloronate	18.918	18.918	(0.699)	250733	2.50000	2.445
	26 Anilazine	19.324	19.324	(0.714)	7730	2.50000	1.889
	27 Merphos-A (Merphos)	19.757	19.757	(0.730)	58023	2.50000	2.527
	28 Tetrachlorvinphos (Stirophos)	20.478	20.478	(0.757)	141342	2.50000	2.377
	29 Tokuthion	21.233	21.233	(0.785)	234289	2.50000	2.598
	30 Merphos-B (Merphos Oxone)	21.484	21.484	(0.794)	161351	2.50000	2.330
	31 Carbophenothion-methyl	22.213	22.213	(0.821)	160177	2.50000	2.431
	32 Fensulfothion	22.390	22.390	(0.828)	182655	2.50000	2.523
	33 Bolstar / Famphur	23.573	23.573	(0.871)	385420	5.00000	5.163

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.898	23.898	(0.883)	194127	2.50000	2.542
$	35 Triphenyl phosphate	25.224	25.224	(0.932)	146178	2.50000	2.359(A)
	36 Phosmet	25.743	25.743	(0.951)	146692	2.50000	2.510
	37 EPN	26.074	26.074	(0.964)	188760	2.50000	2.526
	38 Azinphos-methyl	26.569	26.569	(0.982)	155988	2.50000	2.570
*	39 TOCP	27.056	27.056	(1.000)	133946	2.00000	
	40 Azinphos-ethyl	27.155	27.155	(1.004)	176038	2.50000	2.576
	41 Coumaphos	27.680	27.680	(1.023)	159845	2.50000	2.654
M	42 Total Demeton				227510	2.50000	2.492
M	43 Merphos				219374	2.50000	2.460

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

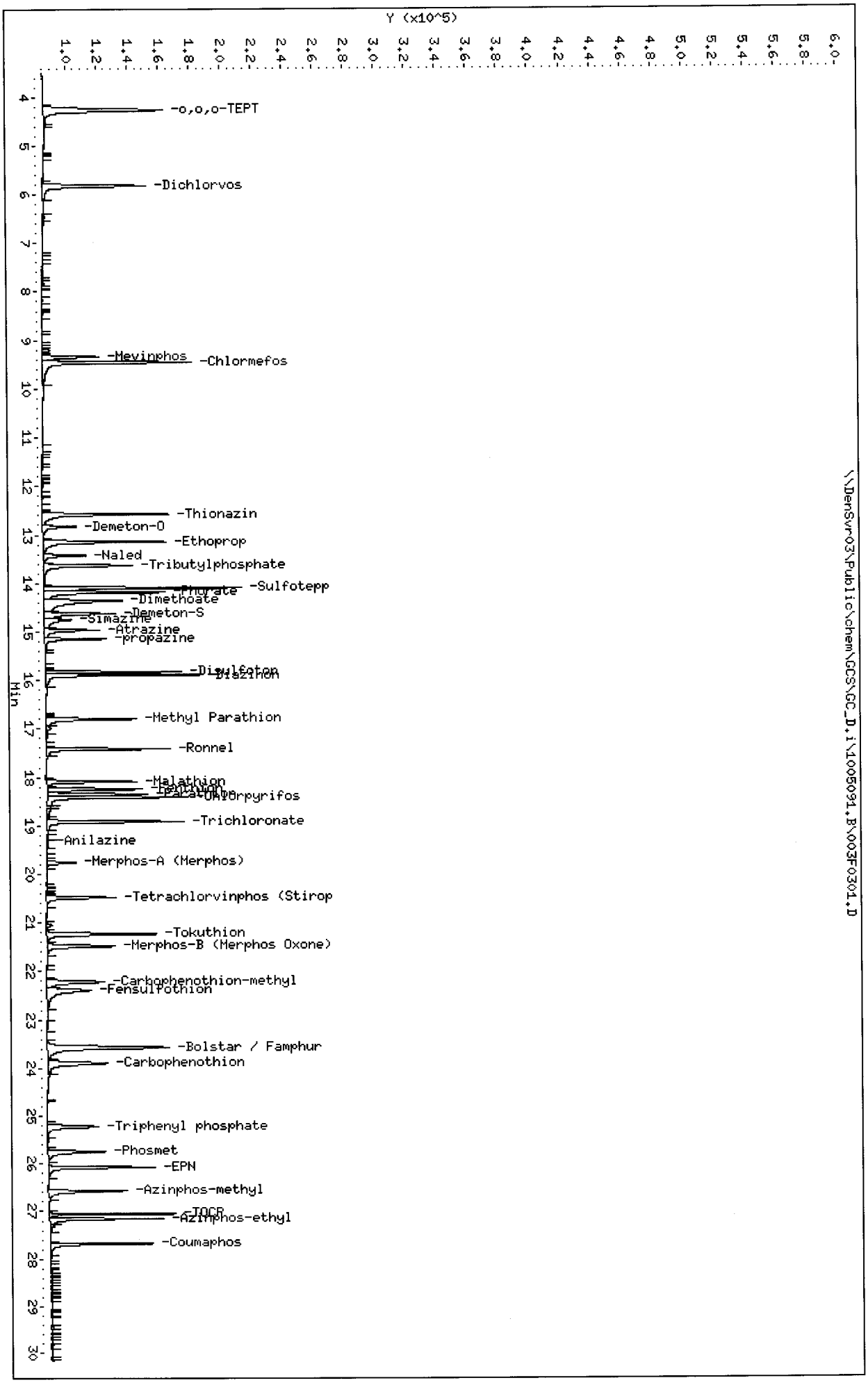
Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Lab Smp Id: 8141 CCV GSV1085
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 06-OCT-2009
Calibration Time: 02:25
Client Smp ID: 8141 CCV GSV108
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	428643	214322	857286	199712	-53.41
39 TOCP	275564	137782	551128	133946	-51.39

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.64	0.00
39 TOCP	27.06	26.56	27.56	27.06	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_D.i\1005091.B\003F0301.D
Date : 05-OCT-2009 17:20
Client ID: 8141 CCV GSV1085
Sample Info: 8141 CCV GSV1085
Column phase: RTx-1MS

\\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\003F0301.D

Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

Page 4

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B/003F0301.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Analysis Type: NONE

Injection Date: 05-OCT-2009 17:20
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.5899	3.6	15.0	
2	Dichlorvos	2.5000	2.4021	3.9	15.0	
3	Chlormefos	2.5000	2.4915	0.3	15.0	
4	Mevinphos	2.5000	2.5581	2.3	15.0	
5	Demeton-O	0.8125	0.8142	0.2	15.0	
6	Thionazin	2.5000	2.6326	5.3	15.0	
7	Ethoprop	2.5000	2.5366	1.5	15.0	
10	Naled	2.5000	2.4509	2.0	15.0	
145	Sulfotepp	2.5000	2.6936	7.7	15.0	
8	Phorate	2.5000	2.8961	15.8	15.0	<-
15	Demeton-S	1.7000	1.8493	8.8	15.0	
10	Simazine	2.5000	2.4592	1.6	15.0	
13	Atrazine / Propazine	5.0000	5.1168	2.3	15.0	
16	Dimethoate	2.5000	2.5408	1.6	15.0	
11	Diazinon	2.5000	2.5109	0.4	15.0	
14	Disulfoton	2.5000	2.4989	0.0	15.0	
23	Methyl Parathion	2.5000	2.3012	8.0	15.0	
17	Ronnel	2.5000	2.3246	7.0	15.0	
24	Malathion	2.5000	2.2683	9.3	15.0	
18	Chlorpyrifos	2.5000	2.2599	9.6	15.0	
20	Trichloronate	2.5000	2.2515	9.9	15.0	
26	Parathion	2.5000	2.3381	6.5	15.0	
19	Fenthion	2.5000	2.3962	4.2	15.0	
151	Merphos-A (Merphos)	2.5000	2.2559	9.8	999.0	
21	Anilazine	2.5000	0.9855	60.6	15.0	<-
27	Tetrachlorvinphos (stirophos)	2.5000	2.3373	6.5	15.0	
25	Tokuthion	2.5000	2.3943	4.2	15.0	
148	Merphos-B (Merphos oxone)	2.5000	2.0754	17.0	999.0	
28	Carbophenothion methyl	2.5000	2.3945	4.2	15.0	
30	Fensulfothion	2.5000	2.4061	3.8	15.0	
28	Bolstar	2.5000	2.4251	3.0	15.0	
30	Carbophenothion	2.5000	2.3995	4.0	15.0	
33	Famphur	2.5000	2.5711	2.8	15.0	
29	Triphenyl phosphate	2.5000	2.4073	3.7	15.0	
32	EPN	2.5000	2.5074	0.3	15.0	
34	Phosmet	2.5000	2.7302	9.2	15.0	
34	Azinphos-methyl	2.5000	2.7561	10.2	15.0	
35	Azinphos-ethyl	2.5000	2.5898	3.6	15.0	
36	Coumaphos	2.5000	2.4742	1.0	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B/003F0301.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Analysis Type: NONE

Injection Date: 05-OCT-2009 17:20
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.6635	6.5	15.0
22 Merphos	2.5000	2.3197	7.2	15.0

Average %D = 6.58

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\003F0301.D
Lab Smp Id: 8141 CCV GSV1085 Client Smp ID: 8141 CCV GSV1085
Inj Date : 05-OCT-2009 17:20
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 CCV GSV1085
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Meth Date : 06-Oct-2009 09:11 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 3 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	6.724	6.724	(0.417)	284527	2.50000	2.590
	2 Dichlorvos	8.899	8.899	(0.551)	187899	2.50000	2.402
$	3 Chlormefos	12.830	12.830	(0.795)	186410	2.50000	2.492
	4 Mevinphos	12.944	12.944	(0.802)	120199	2.50000	2.558
	5 Demeton-O	15.894	15.894	(0.985)	37865	0.81250	0.8142
	6 Thionazin	16.019	16.019	(0.993)	178149	2.50000	2.633
*	7 Tributylphosphate	16.139	16.139	(1.000)	131178	2.00000	
	8 Ethoprop	16.282	16.282	(1.009)	201975	2.50000	2.537
	9 Naled	16.866	16.866	(1.045)	59608	2.50000	2.451
	10 Sulfotepp	17.181	17.181	(1.065)	244274	2.50000	2.694
	11 Phorate	17.219	17.219	(1.067)	177525	2.50000	2.896
	12 Demeton-S	17.906	17.906	(1.110)	99020	1.70000	1.849
	13 Simazine	18.319	18.319	(1.135)	29638	2.50000	2.459
	14 Atrazine / Propazine	18.384	18.384	(1.139)	128060	5.00000	5.117(A)
	15 Dimethoate	18.510	18.510	(1.147)	176622	2.50000	2.541
	16 Diazinon	18.910	18.910	(1.172)	163111	2.50000	2.511
	17 Disulfoton	19.173	19.173	(1.188)	164647	2.50000	2.499
	18 Methyl Parathion	21.074	21.074	(0.735)	132961	2.50000	2.301(A)
	19 Ronnel	21.160	21.160	(0.738)	164572	2.50000	2.325
	20 Malathion	22.420	22.420	(0.782)	116536	2.50000	2.268
	21 Chlorpyrifos	22.576	22.576	(0.787)	149353	2.50000	2.260
	22 Trichloronate	22.749	22.749	(0.793)	158887	2.50000	2.252
	23 Parathion	22.801	22.801	(0.795)	150345	2.50000	2.338
	24 Fenthion	22.869	22.869	(0.797)	191296	2.50000	2.396
	25 Merphos-A (Merphos)	23.403	23.403	(0.816)	55360	2.50000	2.256
	26 Anilazine	24.386	24.386	(0.850)	4425	2.50000	0.9855
	27 Tetrachlorvinphos (stirophos)	25.821	25.821	(0.900)	102720	2.50000	2.337
	28 Tokuthion	26.004	26.004	(0.907)	163295	2.50000	2.394
	29 Merphos-B (Merphos oxone)	26.137	26.137	(0.911)	124266	2.50000	2.075
	30 Carbophenothion methyl	26.973	26.973	(0.940)	122298	2.50000	2.394
	31 Fensulfothion	27.209	27.209	(0.949)	108031	2.50000	2.406
	32 Bolstar	27.322	27.322	(0.953)	145352	2.50000	2.425
	33 Carbophenothion	27.436	27.436	(0.957)	125474	2.50000	2.400

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.620	27.620	(0.963)	134154	2.50000	2.571
$	35 Triphenyl phosphate	27.912	27.912	(0.973)	107319	2.50000	2.407
	36 EPN	28.219	28.219	(0.984)	137880	2.50000	2.507
	37 Phosmet	28.345	28.345	(0.988)	129345	2.50000	2.730
*	38 TOCP	28.680	28.680	(1.000)	113486	2.00000	
	39 Azinphos-methyl	28.792	28.792	(1.004)	122446	2.50000	2.756
	40 Azinphos-ethyl	29.102	29.102	(1.015)	120642	2.50000	2.590
	41 Coumaphos	29.428	29.428	(1.026)	109012	2.50000	2.474
M	42 Total Demeton				136885	2.50000	2.664
M	43 Merphos				179626	2.50000	2.320(A)

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

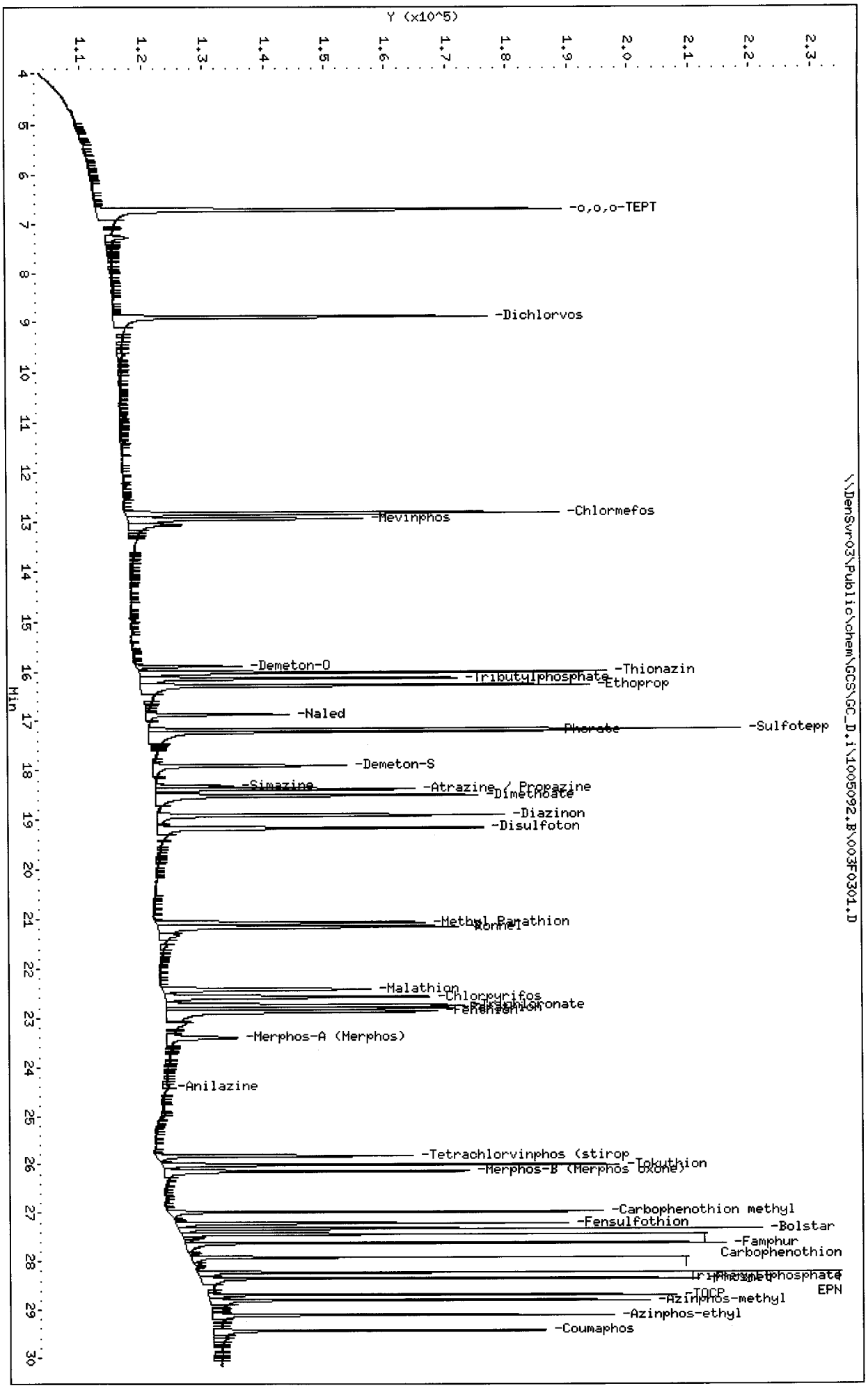
Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Lab Smp Id: 8141 CCV GSV1085
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 06-OCT-2009
Calibration Time: 02:25
Client Smp ID: 8141 CCV GSV108
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	252738	126369	505476	131178	-48.10
38 TOCP	184424	92212	368848	113486	-38.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.14	15.64	16.64	16.14	0.01
38 TOCP	28.68	28.18	29.18	28.68	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_D.i\1005092.B\003F0301.D
Date : 05-OCT-2009 17:20
Client ID: 8141 CCV GSV1085
Sample Info: 8141 CCV GSV1085
Column phase: RTx-OPPest

Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B/018F1801.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 018F1801.D
Analysis Type: NONE

Injection Date: 06-OCT-2009 02:25
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.2796	8.8	15.0	
2	Dichlorvos	2.5000	2.1300	14.8	15.0	
3	Mevinphos	2.5000	2.1879	12.5	15.0	
4	Chlormefos	2.5000	2.0415	18.3	15.0	<-
5	Thionazin	2.5000	2.1752	13.0	15.0	
6	Demeton-O	0.8125	0.7572	6.8	15.0	
7	Ethoprop	2.5000	2.2829	8.7	15.0	
8	Naled	2.5000	2.0576	17.7	15.0	<-
9	Sulfotepp	2.5000	2.1772	12.9	15.0	
10	Phorate	2.5000	2.3382	6.5	15.0	
11	Dimethoate	2.5000	2.2202	11.2	15.0	
12	Demeton-S	1.7000	1.4948	12.1	15.0	
13	Simazine	2.5000	2.2012	12.0	15.0	
14	Atrazine	2.5000	2.1825	12.7	15.0	
15	propazine	2.5000	2.1167	15.3	15.0	<-
17	Disulfoton	2.5000	2.3116	7.5	15.0	
16	Diazinon	2.5000	2.2545	9.8	15.0	
18	Methyl Parathion	2.5000	2.2037	11.9	15.0	
19	Ronnel	2.5000	2.0507	18.0	15.0	<-
20	Malathion	2.5000	2.5171	0.7	15.0	
21	Fenthion	2.5000	2.2218	11.1	15.0	
22	Parathion	2.5000	2.2730	9.1	15.0	
23	Chlorpyrifos	2.5000	2.1255	15.0	15.0	
24	Trichloronate	2.5000	2.1152	15.4	15.0	<-
25	Anilazine	2.5000	1.4893	40.4	15.0	<-
148	Merphos-A (Merphos)	2.5000	1.0873	56.5	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.1801	12.8	15.0	
28	Tokuthion	2.5000	2.2662	9.4	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	2.5706	2.8	999.0	
29	Carbophenothion-methyl	2.5000	2.2034	11.9	15.0	
29	Fensulfothion	2.5000	2.3713	5.1	15.0	
30	Bolstar / Famphur	5.0000	4.7485	5.0	15.0	
32	Carbophenothion	2.5000	2.3825	4.7	15.0	
31	Triphenyl phosphate	2.5000	2.2295	10.8	15.0	
34	Phosmet	2.5000	2.3066	7.7	15.0	
32	EPN	2.5000	2.3502	6.0	15.0	
33	Azinphos-methyl	2.5000	2.3981	4.1	15.0	
38	Azinphos-ethyl	2.5000	2.2665	9.3	15.0	
36	Coumaphos	2.5000	2.2720	9.1	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B/018F1801.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 018F1801.D
Analysis Type: NONE

Injection Date: 06-OCT-2009 02:25
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.2520	9.9	15.0
27 Merphos	2.5000	2.1364	14.5	15.0

Average %D = 12.2

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\018F1801.D
Lab Smp Id: 8141 CCV GSV1085 Client Smp ID: 8141 CCV GSV1085
Inj Date : 06-OCT-2009 02:25
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 CCV GSV1085
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Meth Date : 06-Oct-2009 09:09 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 18 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	4.217	4.271	(0.309)	741538	2.50000	2.280
	2 Dichlorvos	5.795	5.824	(0.425)	497272	2.50000	2.130
	3 Mevinphos	9.334	9.342	(0.684)	233788	2.50000	2.188
$	4 Chlormefos	9.453	9.462	(0.693)	617276	2.50000	2.041
	5 Thionazin	12.574	12.576	(0.922)	509874	2.50000	2.175
	6 Demeton-O	12.830	12.830	(0.941)	154695	0.81250	0.7572
	7 Ethoprop	13.143	13.144	(0.964)	519597	2.50000	2.283
	8 Naled	13.424	13.425	(0.984)	157549	2.50000	2.058
*	9 Tributylphosphate	13.639	13.639	(1.000)	428643	2.00000	
	10 Sulfotepp	14.099	14.101	(1.034)	670484	2.50000	2.177
	11 Phorate	14.184	14.188	(1.040)	494293	2.50000	2.338
	12 Dimethoate	14.370	14.362	(1.054)	484569	2.50000	2.220
	13 Demeton-S	14.632	14.628	(1.073)	287912	1.70000	1.495
	14 Simazine	14.756	14.753	(1.082)	162124	2.50000	2.201
	15 Atrazine	14.970	14.969	(1.098)	197497	2.50000	2.182
	16 propazine	15.152	15.151	(1.111)	198260	2.50000	2.117
	17 Disulfoton	15.832	15.829	(0.585)	384662	2.50000	2.312
	18 Diazinon	15.895	15.896	(0.588)	518841	2.50000	2.254
	19 Methyl Parathion	16.803	16.799	(0.621)	362347	2.50000	2.204
	20 Ronnel	17.420	17.419	(0.644)	359184	2.50000	2.051
	21 Malathion	18.088	18.088	(0.669)	322618	2.50000	2.517
	22 Fenthion	18.247	18.245	(0.674)	359495	2.50000	2.222
	23 Parathion	18.356	18.355	(0.678)	338258	2.50000	2.273
	24 Chlorpyrifos	18.411	18.411	(0.680)	519071	2.50000	2.126
	25 Trichloronate	18.915	18.918	(0.699)	444184	2.50000	2.115
	26 Anilazine	19.339	19.324	(0.715)	11975	2.50000	1.489
	27 Merphos-A (Merphos)	19.757	19.757	(0.730)	25063	2.50000	1.087
	28 Tetrachlorvinphos (Stirophos)	20.480	20.478	(0.757)	263827	2.50000	2.180
	29 Tokuthion	21.234	21.233	(0.785)	419465	2.50000	2.266
	30 Merphos-B (Merphos Oxone)	21.481	21.484	(0.794)	366206	2.50000	2.571
	31 Carbophenothion-methyl	22.216	22.213	(0.821)	297578	2.50000	2.203
	32 Fensulfothion	22.399	22.390	(0.828)	352284	2.50000	2.371
	33 Bolstar / Famphur	23.572	23.573	(0.871)	728163	5.00000	4.748

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.898	23.898	(0.883)	374057	2.50000	2.382
$	35 Triphenyl phosphate	25.225	25.224	(0.932)	283889	2.50000	2.229(A)
	36 Phosmet	25.751	25.743	(0.952)	276725	2.50000	2.306
	37 EPN	26.074	26.074	(0.964)	361017	2.50000	2.350
	38 Azinphos-methyl	26.574	26.569	(0.982)	298736	2.50000	2.398
*	39 TOCP	27.055	27.056	(1.000)	275564	2.00000	
	40 Azinphos-ethyl	27.159	27.155	(1.004)	318634	2.50000	2.266
	41 Coumaphos	27.684	27.680	(1.023)	280327	2.50000	2.272
M	42 Total Demeton				442607	2.50000	2.252
M	43 Merphos				391269	2.50000	2.136

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

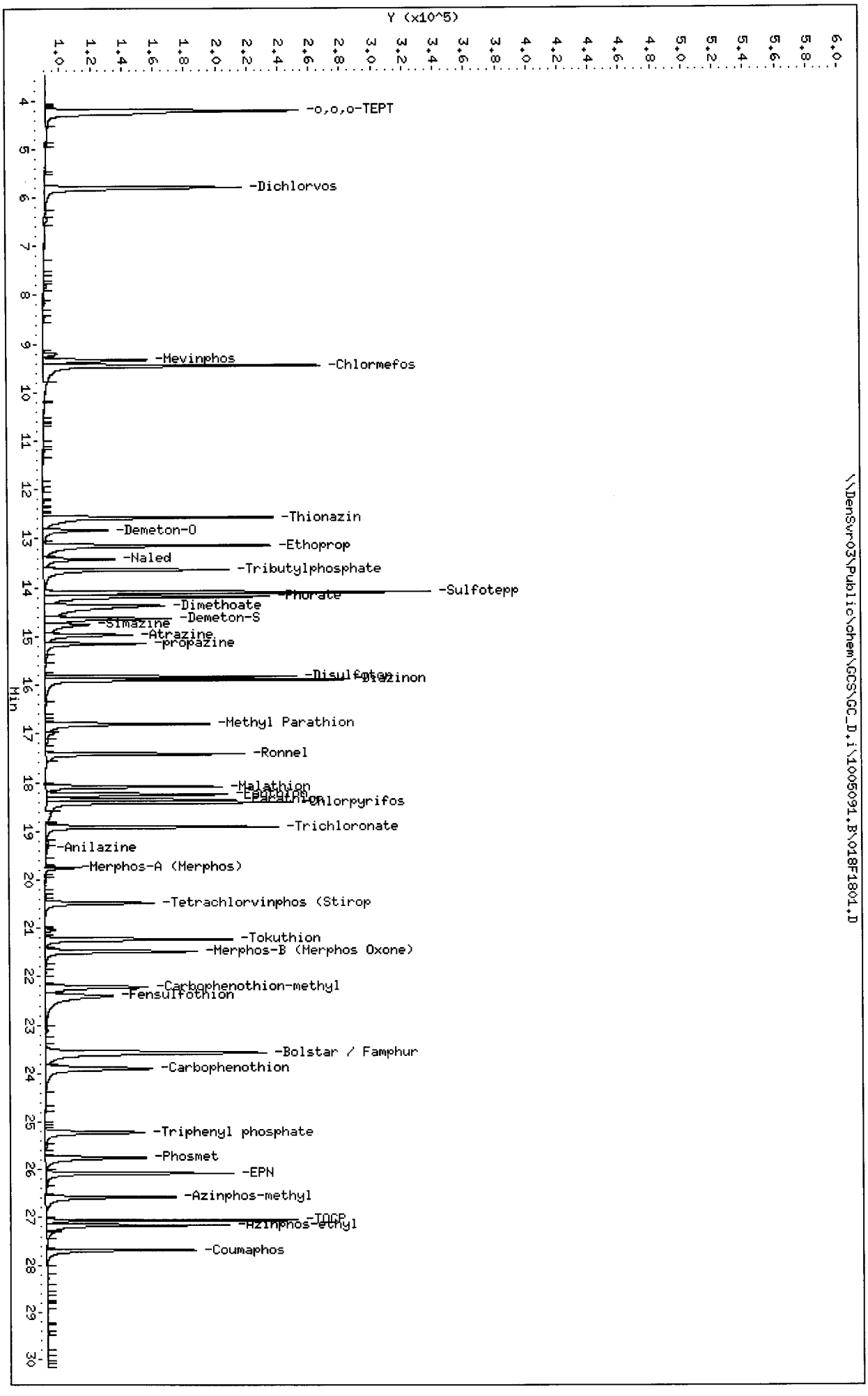
Instrument ID: GC_D.i
Lab File ID: 018F1801.D
Lab Smp Id: 8141 CCV GSV1085
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: 8141 CCV GSV108
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	199712	99856	399424	428643	114.63
39 TOCP	133946	66973	267892	275564	105.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.64	-0.00
39 TOCP	27.06	26.56	27.56	27.06	-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_D.i\1005091.B\018F1801.D
Date : 06-OCT-2009 02:25
Client ID: 8141 CCV GSV1085
Sample Info: 8141 CCV GSV1085
Column phase: RTx-1MS

Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B/018F1801.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 018F1801.D
Analysis Type: NONE

Injection Date: 06-OCT-2009 02:25
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.2238	11.0	15.0	
2	Dichlorvos	2.5000	2.1906	12.4	15.0	
3	Chlormefos	2.5000	2.1117	15.5	15.0	<-
4	Mevinphos	2.5000	2.3650	5.4	15.0	
5	Demeton-O	0.8125	0.7324	9.9	15.0	
6	Thionazin	2.5000	2.2806	8.8	15.0	
7	Ethoprop	2.5000	2.3626	5.5	15.0	
10	Naled	2.5000	2.2043	11.8	15.0	
145	Sulfotepp	2.5000	2.3091	7.6	15.0	
8	Phorate	2.5000	2.3731	5.1	15.0	
15	Demeton-S	1.7000	1.5589	8.3	15.0	
10	Simazine	2.5000	1.9492	22.0	15.0	<-
13	Atrazine / Propazine	5.0000	4.1133	17.7	15.0	<-
16	Dimethoate	2.5000	2.2271	10.9	15.0	
11	Diazinon	2.5000	2.1828	12.7	15.0	
14	Disulfoton	2.5000	2.2130	11.5	15.0	
23	Methyl Parathion	2.5000	2.2832	8.7	15.0	
17	Ronnel	2.5000	2.2925	8.3	15.0	
24	Malathion	2.5000	2.3405	6.4	15.0	
18	Chlorpyrifos	2.5000	2.2319	10.7	15.0	
20	Trichloronate	2.5000	2.1424	14.3	15.0	
26	Parathion	2.5000	2.3831	4.7	15.0	
19	Fenthion	2.5000	2.2715	9.1	15.0	
151	Merphos-A (Merphos)	2.5000	1.5646	37.4	999.0	
21	Anilazine	2.5000	0.6116	75.5	15.0	<-
27	Tetrachlorvinphos (stirophos)	2.5000	2.2821	8.7	15.0	
25	Tokuthion	2.5000	2.2948	8.2	15.0	
148	Merphos-B (Merphos oxone)	2.5000	2.3868	4.5	999.0	
28	Carbophenothion methyl	2.5000	2.3230	7.1	15.0	
30	Fensulfothion	2.5000	2.3115	7.5	15.0	
28	Bolstar	2.5000	2.3079	7.7	15.0	
30	Carbophenothion	2.5000	2.2020	11.9	15.0	
33	Famphur	2.5000	2.2580	9.7	15.0	
29	Triphenyl phosphate	2.5000	2.3289	6.8	15.0	
32	EPN	2.5000	2.3411	6.4	15.0	
34	Phosmet	2.5000	2.2515	9.9	15.0	
34	Azinphos-methyl	2.5000	2.3234	7.1	15.0	
35	Azinphos-ethyl	2.5000	2.3394	6.4	15.0	
36	Coumaphos	2.5000	2.2289	10.8	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B/018F1801.D
Report Date: 10/06/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 018F1801.D
Analysis Type: NONE

Injection Date: 06-OCT-2009 02:25
Lab Sample ID: 8141 CCV GSV1085
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.2914	8.3	15.0
22 Merphos	2.5000	2.2324	10.7	15.0

Average %D = 11.8

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\018F1801.D
Lab Smp Id: 8141 CCV GSV1085 Client Smp ID: 8141 CCV GSV1085
Inj Date : 06-OCT-2009 02:25
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 CCV GSV1085
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Meth Date : 06-Oct-2009 09:11 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 18 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	6.704	6.724	(0.415)	470692	2.50000	2.224
	2 Dichlorvos	8.889	8.899	(0.551)	330143	2.50000	2.191
$	3 Chlormefos	12.826	12.830	(0.795)	304408	2.50000	2.112
	4 Mevinphos	12.941	12.944	(0.802)	214108	2.50000	2.365
	5 Demeton-O	15.893	15.894	(0.985)	65622	0.81250	0.7324
	6 Thionazin	16.019	16.019	(0.993)	297336	2.50000	2.280
*	7 Tributylphosphate	16.138	16.139	(1.000)	252738	2.00000	
	8 Ethoprop	16.281	16.282	(1.009)	365060	2.50000	2.363
	9 Naled	16.866	16.866	(1.045)	102772	2.50000	2.204
	10 Sulfotepp	17.180	17.181	(1.065)	408570	2.50000	2.309
	11 Phorate	17.215	17.219	(1.067)	283643	2.50000	2.373
	12 Demeton-S	17.905	17.906	(1.110)	160406	1.70000	1.559
	13 Simazine	18.318	18.319	(1.135)	43403	2.50000	1.949
	14 Atrazine / Propazine	18.383	18.384	(1.139)	197896	5.00000	4.113
	15 Dimethoate	18.511	18.510	(1.147)	296296	2.50000	2.227
	16 Diazinon	18.909	18.910	(1.172)	273195	2.50000	2.183
	17 Disulfoton	19.173	19.173	(1.188)	280926	2.50000	2.213
	18 Methyl Parathion	21.073	21.074	(0.735)	214302	2.50000	2.283(A)
	19 Ronnel	21.159	21.160	(0.738)	263753	2.50000	2.292
	20 Malathion	22.416	22.420	(0.782)	195503	2.50000	2.340
	21 Chlorpyrifos	22.573	22.576	(0.787)	239642	2.50000	2.232
	22 Trichloronate	22.748	22.749	(0.793)	245350	2.50000	2.142
	23 Parathion	22.798	22.801	(0.795)	249145	2.50000	2.383
	24 Fenthion	22.869	22.869	(0.797)	294698	2.50000	2.272
	25 Merphos-A (Merphos)	23.404	23.403	(0.816)	48596	2.50000	1.564
	26 Anilazine	24.387	24.386	(0.850)	3971	2.50000	0.6116
	27 Tetrachlorvinphos (stirophos)	25.820	25.821	(0.900)	162638	2.50000	2.282
	28 Tokuthion	26.003	26.004	(0.907)	254342	2.50000	2.295
	29 Merphos-B (Merphos oxone)	26.136	26.137	(0.911)	232236	2.50000	2.387
	30 Carbophenothion methyl	26.971	26.973	(0.940)	192709	2.50000	2.323
	31 Fensulfothion	27.210	27.209	(0.949)	168514	2.50000	2.312
	32 Bolstar	27.321	27.322	(0.953)	224791	2.50000	2.308
	33 Carbophenothion	27.436	27.436	(0.957)	186904	2.50000	2.202

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.619	27.620	(0.963)	190842	2.50000	2.258
$	35 Triphenyl phosphate	27.910	27.912	(0.973)	168721	2.50000	2.329
	36 EPN	28.217	28.219	(0.984)	209211	2.50000	2.341
	37 Phosmet	28.344	28.345	(0.988)	173343	2.50000	2.252
*	38 TOCP	28.679	28.680	(1.000)	184424	2.00000	
	39 Azinphos-methyl	28.791	28.792	(1.004)	168975	2.50000	2.323
	40 Azinphos-ethyl	29.100	29.102	(1.015)	178556	2.50000	2.339
	41 Coumaphos	29.426	29.428	(1.026)	160688	2.50000	2.229
M	42 Total Demeton				226028	2.50000	2.291
M	43 Merphos				280832	2.50000	2.232(A)

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

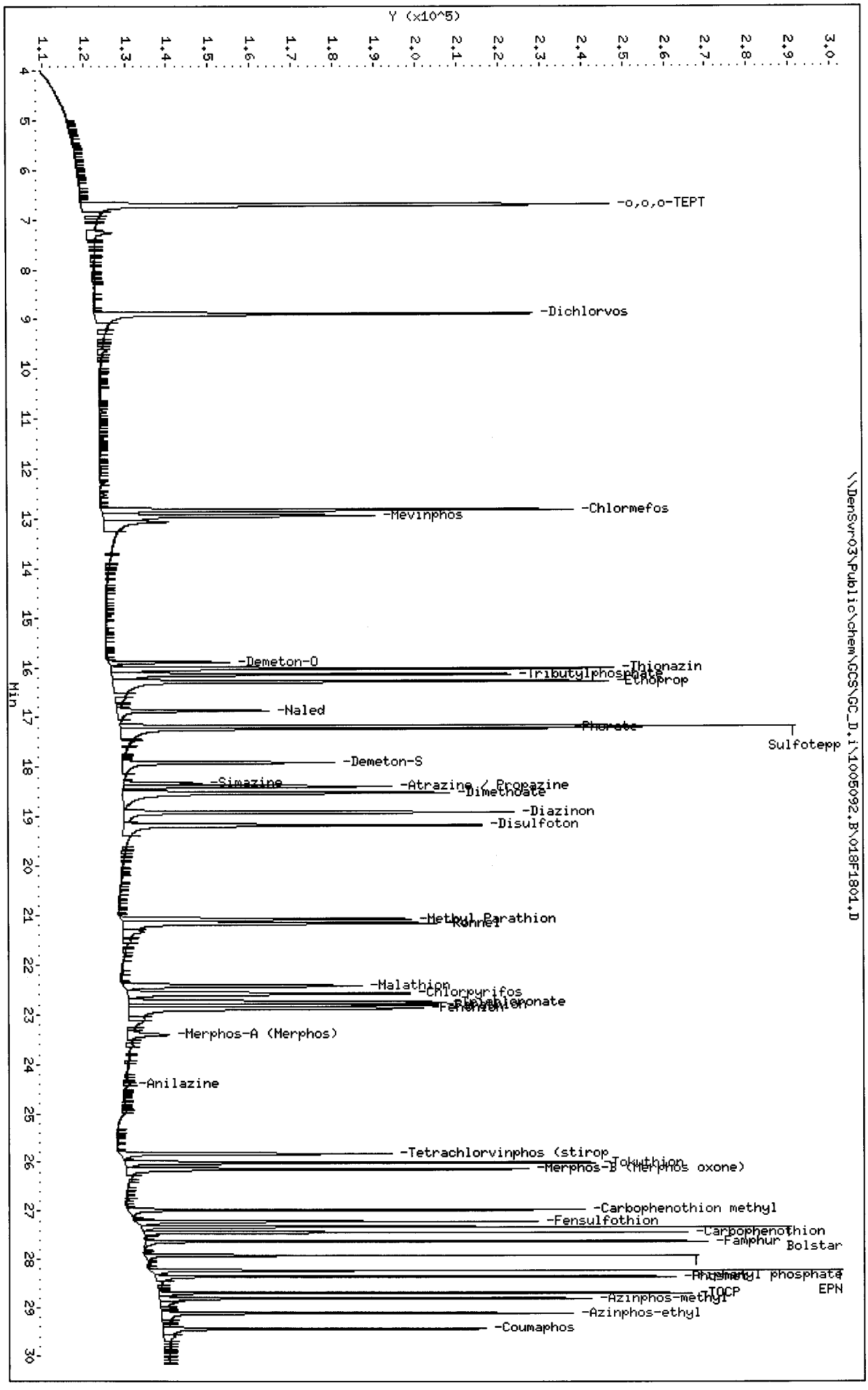
Instrument ID: GC_D.i
Lab File ID: 018F1801.D
Lab Smp Id: 8141 CCV GSV1085
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: 8141 CCV GSV108
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	131178	65589	262356	252738	92.67
38 TOCP	113486	56743	226972	184424	62.51

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.14	15.64	16.64	16.14	-0.01
38 TOCP	28.68	28.18	29.18	28.68	-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_D,i\1005092.B\018F1801.D
Date : 06-OCT-2009 02:25
Client ID: 8141 CCV GSV1085
Sample Info: 8141 CCV GSV1085
Column phase: RTx-OPPest

Instrument: GC_D,i
Operator: TLW
Column diameter: 0.32

GC SEMIVOLATILE SAMPLE DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\013F1301.D
Lab Smp Id: LLQ6W1AA Client Smp ID: BLANK
Inj Date : 05-OCT-2009 23:24
Operator : TLW Inst ID: GC_D.i
Smp Info : LLQ6W1AA,MB
Misc Info : IS GSV1076-09
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Meth Date : 06-Oct-2009 09:08 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 13 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	9.455	9.462	(0.693)	264092	0.61648	1.233
	5	Thionazin	12.608	12.576	(0.924)	87	0.09020	0.1804
	6	Demeton-O	Compound Not Detected.					
	7	Ethoprop	Compound Not Detected.					
	8	Naled	Compound Not Detected.					
*	9	Tributylphosphate	13.652	13.639	(1.000)	607287	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	17.439	17.419	(0.644)	638	0.07527	0.1505 NC
	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	Compound Not Detected.					
	25 Trichloronate	18.888	18.918	(0.698)	117	0.07208	0.1442
	26 Anilazine	19.265	19.324	(0.712)	246	0.28857	0.5771
	27 Merphos-A (Merphos)	Compound Not Detected.					
	28 Tetrachlorvinphos (Stirophos)	Compound Not Detected.					
	29 Tokuthion	Compound Not Detected.					
	30 Merphos-B (Merphos Oxone)	Compound Not Detected.					
	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	25.253	25.224	(0.933)	130526	0.74805	1.496
	36 Phosmet	Compound Not Detected.					
	37 EPN	Compound Not Detected.					
	38 Azinphos-methyl	Compound Not Detected.					
*	39 TOCP	27.059	27.056	(1.000)	394121	2.00000	
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	Compound Not Detected.					
M	42 Total Demeton	Compound Not Detected.					
M	43 Merphos	Compound Not Detected.					

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 013F1301.D
Lab Smp Id: LLQ6W1AA
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: BLANK
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	199712	99856	399424	607287	204.08
39 TOCP	133946	66973	267892	394121	194.24

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.65	0.10
39 TOCP	27.06	26.56	27.56	27.06	0.01

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

TestAmerica

RECOVERY REPORT

Client Name:
Client SDG: D9I300000
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: LLQ6W1AA
Client Smp ID: BLANK
Level: LOW
Operator: 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_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

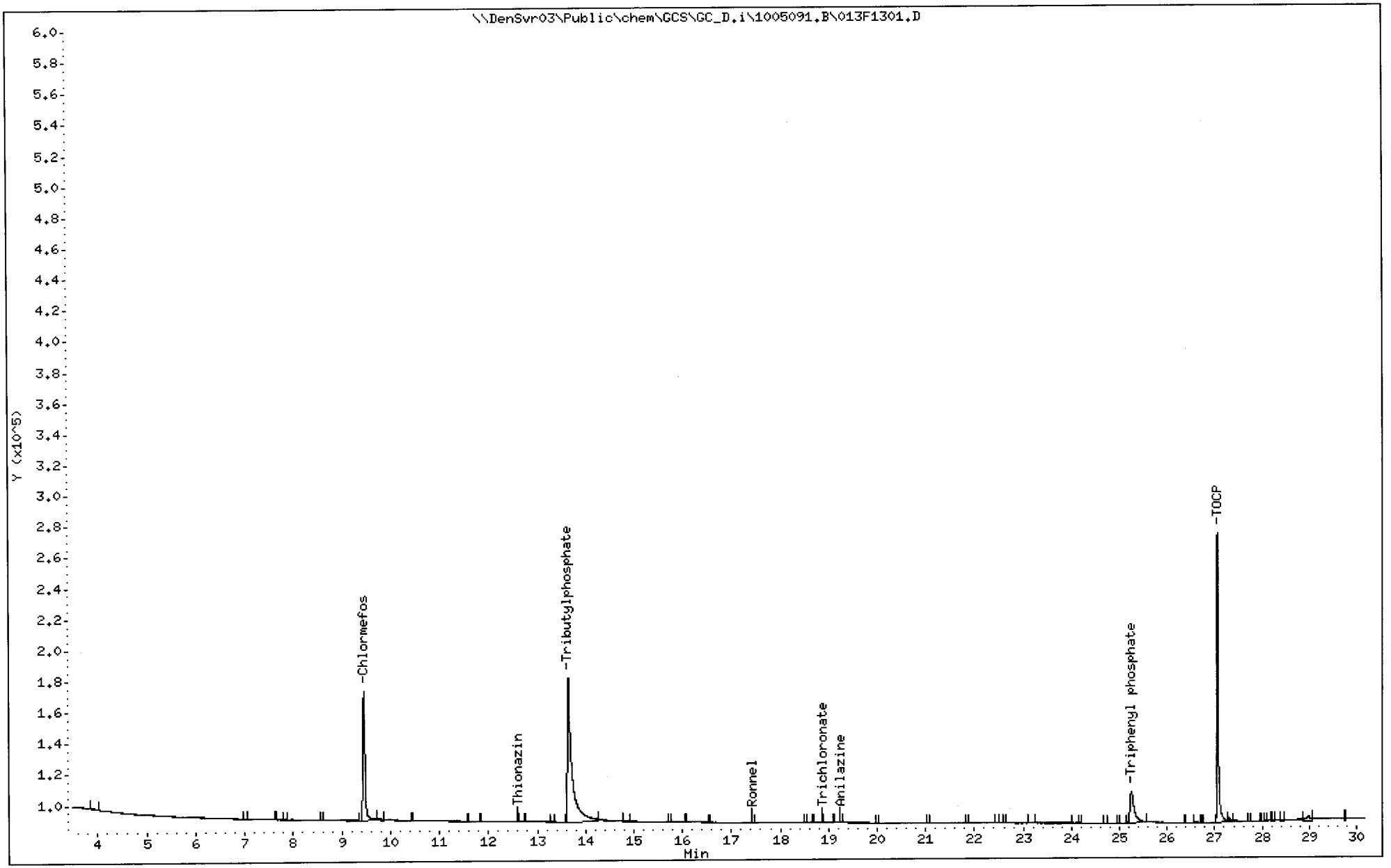
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	2.000	1.233	61.65	48-114
$ 35 Triphenyl phosphat	2.000	1.496	74.80	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\013F1301.D
Date : 05-OCT-2009 23:24
Client ID: BLANK
Sample Info: LLQ6W1AA,MB

Instrument: GC_D.i

Operator: TLW
Column diameter: 0.32

Column phase: RTx-1MS



TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\013F1301.D
Lab Smp Id: LLQ6W1AA Client Smp ID: BLANK
Inj Date : 05-OCT-2009 23:24
Operator : TLW Inst ID: GC_D.i
Smp Info : LLQ6W1AA,MB
Misc Info : IS GSV1076-09
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Meth Date : 06-Oct-2009 09:10 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 13 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	12.828	12.830	(0.795)	152581	0.73540	1.471
4	Mevinphos	Compound Not Detected.					
5	Demeton-O	Compound Not Detected.					
6	Thionazin	Compound Not Detected.					
* 7	Tributylphosphate	16.146	16.139	(1.000)	363773	2.00000	
8	Ethoprop	Compound Not Detected.					
9	Naled	16.892	16.866	(1.046)	900	0.11729	0.2346
10	Sulfotepp	Compound Not Detected.					
11	Phorate	Compound Not Detected.					
12	Demeton-S	Compound Not Detected.					
13	Simazine	18.320	18.319	(1.135)	106	0.33621	0.6724
14	Atrazine / Propazine	Compound Not Detected.					
15	Dimethoate	18.537	18.510	(1.148)	172	0.11546	0.2309
16	Diazinon	Compound Not Detected.					
17	Disulfoton	Compound Not Detected.					
18	Methyl Parathion	21.113	21.074	(0.736)	235	0.10188	0.2038(a)
19	Ronnel	Compound Not Detected.					
20	Malathion	22.443	22.420	(0.783)	375	0.03707	0.07415(a)
21	Chlorpyrifos	Compound Not Detected.					
22	Trichloronate	Compound Not Detected.					

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	22.824	22.801	(0.796)	708	0.06186	0.1237(a)
	24 Fenthion	Compound Not Detected.					
	25 Merphos-A (Merphos)	23.422	23.403	(0.817)	161	0.75430	1.508
	26 Anilazine	Compound Not Detected.					
	27 Tetrachlorvinphos (stirophos)	Compound Not Detected.					
	28 Tokuthion	Compound Not Detected.					
	29 Merphos-B (Merphos oxone)	26.156	26.137	(0.912)	756	0.00528	0.01057(a)
	30 Carbophenothion methyl	Compound Not Detected.					
	31 Fensulfothion	Compound Not Detected.					
	32 Bolstar	Compound Not Detected.					
	33 Carbophenothion	Compound Not Detected.					
	34 Famphur	Compound Not Detected.					
$	35 Triphenyl phosphate	27.913	27.912	(0.973)	81424	0.76438	1.529
	36 EPN	Compound Not Detected.					
	37 Phosmet	Compound Not Detected.					
*	38 TOCP	28.680	28.680	(1.000)	271169	2.00000	
	39 Azinphos-methyl	Compound Not Detected.					
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	Compound Not Detected.					
M	42 Total Demeton	Compound Not Detected.					
M	43 Merphos	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_D.i
Lab File ID: 013F1301.D
Lab Smp Id: LLQ6W1AA
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: BLANK
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	131178	65589	262356	363773	177.31
38 TOCP	113486	56743	226972	271169	138.94

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.14	15.64	16.64	16.15	0.04
38 TOCP	28.68	28.18	29.18	28.68	-0.00

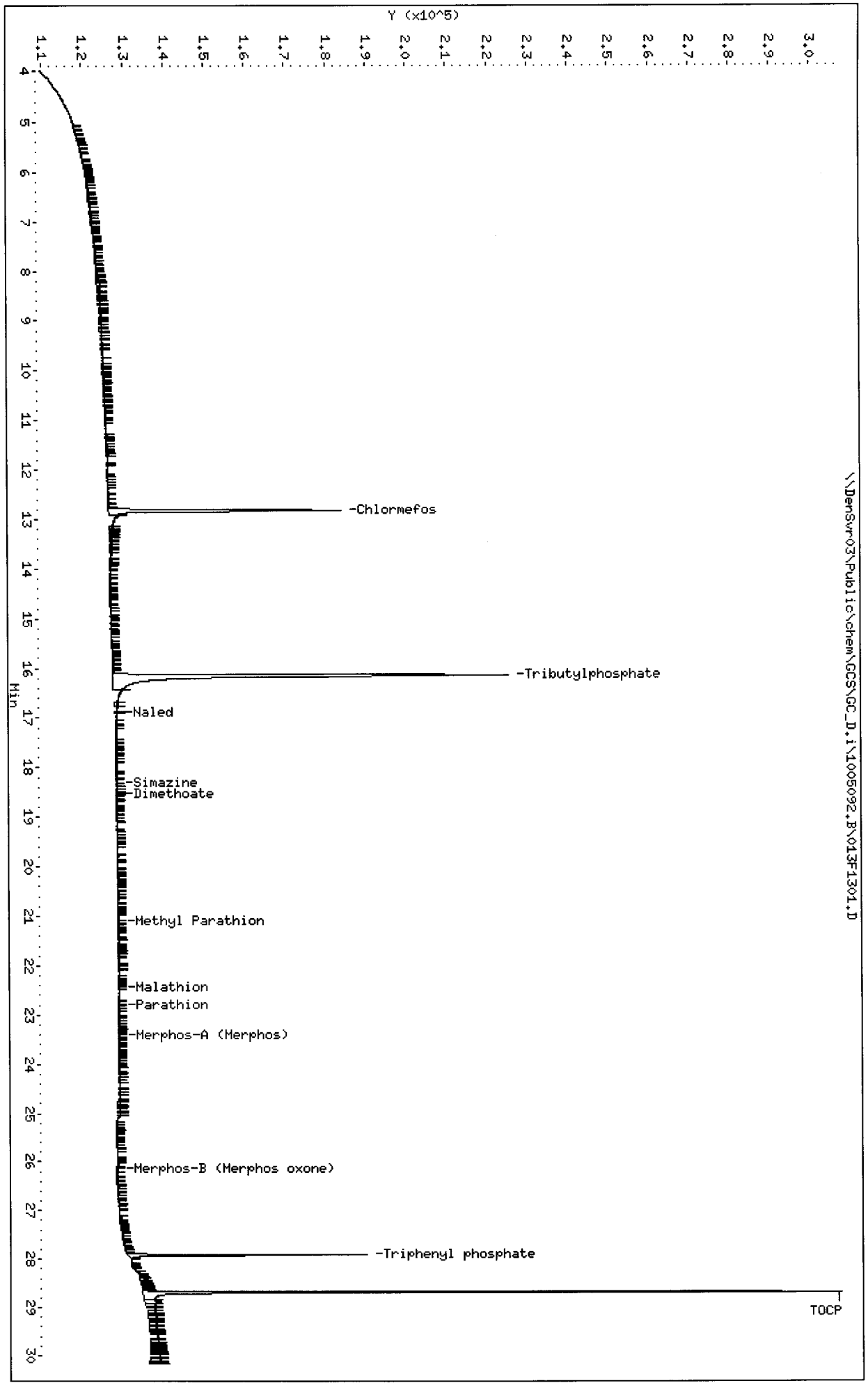
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9I300000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLQ6W1AA Client Smp ID: BLANK
Level: LOW Operator: 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_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	2.000	1.471	73.54	48-114
$ 35 Triphenyl phosphat	2.000	1.529	76.44	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\013F1301.D
Date : 05-OCT-2009 23:24
Client ID: BLANK
Sample Info: LLQ&WIAA,MB
Column phase: RTx-OPPest

\\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\013F1301.D

Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\014F1401.D
Lab Smp Id: LLQ6W1AC Client Smp ID: LCS
Inj Date : 06-OCT-2009 00:00
Operator : TLW Inst ID: GC_D.i
Smp Info : LLQ6W1AC,LCS
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Meth Date : 06-Oct-2009 09:08 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 14 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	4.221	4.271	(0.309)	780858	1.90794	3.816
	2 Dichlorvos	5.803	5.824	(0.425)	462150	1.57342	3.147
	3 Mevinphos	9.345	9.342	(0.685)	134121	1.08755	2.175
$	4 Chlormefos	9.454	9.462	(0.693)	314650	0.82712	1.654
	5 Thionazin	12.576	12.576	(0.922)	443886	1.53289	3.066
	6 Demeton-O	12.830	12.830	(0.940)	340349	1.31930	2.638
	7 Ethoprop	13.147	13.144	(0.964)	440206	1.54782	3.096
	8 Naled	13.428	13.425	(0.984)	133811	1.43635	2.873
*	9 Tributylphosphate	13.643	13.639	(1.000)	539286	2.00000	
	10 Sulfotepp	14.099	14.101	(1.033)	526863	1.35985	2.720(R)
	11 Phorate	14.187	14.188	(1.040)	344435	1.22829	2.456(R)
	12 Dimethoate	14.388	14.362	(1.055)	280829	1.13360	2.267
	13 Demeton-S	14.639	14.628	(1.073)	38550	0.10569	0.2114(R)
	14 Simazine	14.765	14.753	(1.082)	148390	1.60140	3.203
	15 Atrazine	14.976	14.969	(1.098)	157857	1.38654	2.773
	16 propazine	15.155	15.151	(1.111)	173429	1.47170	2.943
	17 Disulfoton	15.834	15.829	(0.585)	290991	1.50394	3.008
	18 Diazinon	15.898	15.896	(0.588)	431471	1.57090	3.142
	19 Methyl Parathion	16.809	16.799	(0.621)	304387	1.57491	3.150
	20 Ronnel	17.423	17.419	(0.644)	301566	1.46423	2.928
	21 Malathion	18.090	18.088	(0.669)	237858	1.55493	3.110
	22 Fenthion	18.253	18.245	(0.675)	280593	1.48187	2.964

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	18.361	18.355	(0.679)	258636	1.52661	3.053
	24 Chlorpyrifos	18.413	18.411	(0.681)	449958	1.54380	3.088
	25 Trichloronate	18.920	18.918	(0.699)	333543	1.35739	2.715
	26 Anilazine	19.348	19.324	(0.715)	14832	1.53531	3.071
	27 Merphos-A (Merphos)	Compound Not Detected.					
	28 Tetrachlorvinphos (Stirophos)	20.485	20.478	(0.757)	190835	1.40039	2.801
	29 Tokuthion	21.238	21.233	(0.785)	340240	1.55363	3.107
	30 Merphos-B (Merphos Oxone)	21.488	21.484	(0.794)	344932	2.02873	4.057
	31 Carbophenothion-methyl	22.226	22.213	(0.821)	227382	1.44025	2.880
	32 Fensulfothion	22.417	22.390	(0.829)	207678	1.22038	2.441
	33 Bolstar / Famphur	23.578	23.573	(0.871)	601918	3.31671	6.633
	34 Carbophenothion	23.907	23.898	(0.884)	287568	1.54252	3.085
$	35 Triphenyl phosphate	25.231	25.224	(0.933)	125807	0.85686	1.714
	36 Phosmet	25.758	25.743	(0.952)	239391	1.68922	3.378
	37 EPN	26.078	26.074	(0.964)	297535	1.62882	3.258
	38 Azinphos-methyl	26.575	26.569	(0.982)	222147	1.52323	3.046
*	39 TOCP	27.056	27.056	(1.000)	328883	2.00000	
	40 Azinphos-ethyl	27.162	27.155	(1.004)	257741	1.53611	3.072
	41 Coumaphos	27.685	27.680	(1.023)	226411	1.55813	3.116
M	42 Total Demeton				378899	1.42499	2.850
M	43 Merphos				344932	1.58458	3.169

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 014F1401.D
Lab Smp Id: LLQ6W1AC
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: LCS
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	199712	99856	399424	539286	170.03
39 TOCP	133946	66973	267892	328883	145.53

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.64	0.03
39 TOCP	27.06	26.56	27.56	27.06	-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: D9I300000
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: LLQ6W1AC
Client Smp ID: LCS
Level: LOW
Operator: 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_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

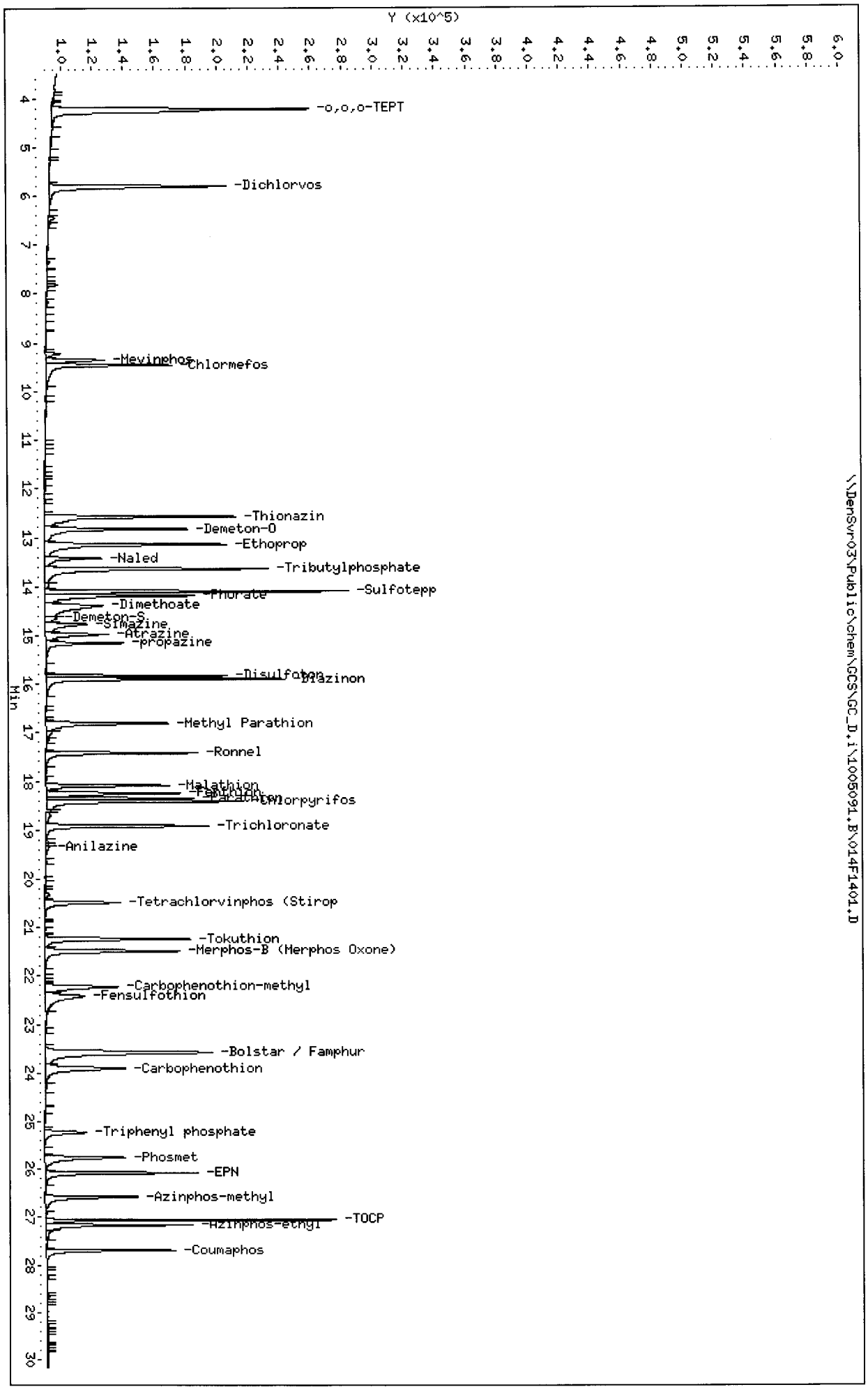
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	4.000	3.816	95.40	36-119
	2	Dichlorvos	4.000	3.147	78.67	50-120
	3	Mevinphos	4.000	2.175	54.38	35-108
$	4	Chlormefos	2.000	1.654	82.71	48-114
	5	Thionazin	4.000	3.066	76.64	65-116
	6	Demeton-O	2.792	2.638	94.51	36-119
	7	Ethoprop	4.000	3.096	77.39	65-108
	8	Naled	4.000	2.873	71.82	36-119
	10	Sulfotepp	4.000	2.720	67.99*	69-103
	11	Phorate	4.000	2.456	61.41*	62-104
	12	Dimethoate	4.000	2.267	56.68	28-115
	13	Demeton-S	1.208	0.2114	17.50*	36-119
	14	Simazine	4.000	3.203	80.07	47-109
	15	Atrazine	4.000	2.773	69.33	36-119
	16	propazine	4.000	2.943	73.58	36-119
	17	Disulfoton	4.000	3.008	75.20	61-103
	18	Diazinon	4.000	3.142	78.55	36-119
	19	Methyl Parathion	4.000	3.150	78.75	68-119
	20	Ronnel	4.000	2.928	73.21	62-115
	21	Malathion	4.000	3.110	77.75	67-115
	22	Fenthion	4.000	2.964	74.09	36-119
	23	Parathion	4.000	3.053	76.33	36-119
	24	Chlorpyrifos	4.000	3.088	77.19	66-101
	25	Trichloronate	4.000	2.715	67.87	36-119
	26	Anilazine	4.000	3.071	76.77	47-115
	28	Tetrachlorvinphos	4.000	2.801	70.02	36-119
	29	Tokuthion	4.000	3.107	77.68	36-119
	31	Carbophenothion-me	4.000	2.880	72.01	36-119
	32	Fensulfothion	4.000	2.441	61.02	61-115
	33	Bolstar / Famphur	8.000	6.633	82.92	36-119
	34	Carbophenothion	4.000	3.085	77.13	50-150
$	35	Triphenyl phosphat	2.000	1.714	85.69	50-150
	36	Phosmet	4.000	3.378	84.46	50-150
	37	EPN	4.000	3.258	81.44	36-119
	38	Azinphos-methyl	4.000	3.046	76.16	55-115
	40	Azinphos-ethyl	4.000	3.072	76.81	36-119
	41	Coumaphos	4.000	3.116	77.91	62-115
M	42	Total Demeton	4.000	2.850	71.25	47-115
M	43	Merphos	4.000	3.169	79.23	36-119

TestAmerica

RECOVERY REPORT

Client Name:
Client SDG: D9I300000
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: LLQ6W1AC
Client Smp ID: LCS
Level: LOW
Operator: 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_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	2.000	1.654	82.71	48-114
$ 35 Triphenyl phosphat	2.000	1.714	85.69	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\014F1401.D
Date : 06-OCT-2009 00:00
Client ID: LCS
Sample Info: LLQ6W1AC,LCS
Column phase: RTx-1MS

\\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\014F1401.D

Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

Page 6

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\014F1401.D
Lab Smp Id: LLQ6W1AC Client Smp ID: LCS
Inj Date : 06-OCT-2009 00:00
Operator : TLW Inst ID: GC_D.i
Smp Info : LLQ6W1AC,LCS
Misc Info : IS GSV1076-09
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Meth Date : 06-Oct-2009 09:10 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 14 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	6.705	6.724	(0.415)	446597	1.71523	3.430
	2 Dichlorvos	8.893	8.899	(0.551)	289949	1.56399	3.128
$	3 Chlormefos	12.828	12.830	(0.795)	128066	0.72222	1.444
	4 Mevinphos	12.947	12.944	(0.802)	110466	0.99193	1.984
	5 Demeton-O	15.893	15.894	(0.985)	155536	1.41121	2.822
	6 Thionazin	16.019	16.019	(0.993)	259146	1.61581	3.232
*	7 Tributylphosphate	16.139	16.139	(1.000)	310899	2.00000	
	8 Ethoprop	16.283	16.282	(1.009)	283461	1.38987	2.780
	9 Naled	16.868	16.866	(1.045)	79059	1.41760	2.835
	10 Sulfotepp	17.179	17.181	(1.064)	507061	2.33161	4.663(R)
	11 Phorate	Compound Not Detected.					
	12 Demeton-S	17.910	17.906	(1.110)	7359	0.08288	0.1658(R)
	13 Simazine	18.321	18.319	(1.135)	53672	1.95770	3.915
	14 Atrazine / Propazine	18.384	18.384	(1.139)	163040	2.77034	5.541
	15 Dimethoate	18.518	18.510	(1.147)	153689	1.00538	2.011
	16 Diazinon	18.910	18.910	(1.172)	212668	1.38131	2.763
	17 Disulfoton	19.173	19.173	(1.188)	208556	1.33557	2.671
	18 Methyl Parathion	21.073	21.074	(0.735)	170636	1.57361	3.147
	19 Ronnel	21.159	21.160	(0.738)	223344	1.64557	3.291
	20 Malathion	22.418	22.420	(0.782)	142449	1.45859	2.917
	21 Chlorpyrifos	22.574	22.576	(0.787)	193940	1.54564	3.091
	22 Trichloronate	22.747	22.749	(0.793)	185307	1.39267	2.785

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	22.801	22.801	(0.795)	198812	1.63053	3.261
	24 Fenthion	22.868	22.869	(0.797)	226275	1.47842	2.957
	25 Merphos-A (Merphos)	23.451	23.403	(0.818)	997	0.76659	1.533
	26 Anilazine	24.383	24.386	(0.850)	5081	0.65060	1.301(R)
	27 Tetrachlorvinphos (stirophos)	25.823	25.821	(0.900)	114045	1.41752	2.835
	28 Tokuthion	26.003	26.004	(0.907)	204898	1.56707	3.134
	29 Merphos-B (Merphos oxone)	26.137	26.137	(0.911)	207380	1.80661	3.613
	30 Carbophenothion methyl	26.972	26.973	(0.940)	142902	1.47468	2.949
	31 Fensulfothion	27.210	27.209	(0.949)	106074	1.25642	2.513
	32 Bolstar	27.322	27.322	(0.953)	194276	1.69073	3.381
	33 Carbophenothion	27.436	27.436	(0.957)	158514	1.59161	3.183
	34 Famphur	27.620	27.620	(0.963)	161441	1.63572	3.271
$	35 Triphenyl phosphate	27.911	27.912	(0.973)	77829	0.91063	1.821
	36 EPN	28.218	28.219	(0.984)	175157	1.66146	3.323
	37 Phosmet	28.345	28.345	(0.988)	151968	1.67319	3.346
*	38 TOCP	28.678	28.680	(1.000)	217569	2.00000	
	39 Azinphos-methyl	28.791	28.792	(1.004)	130705	1.48459	2.969
	40 Azinphos-ethyl	29.100	29.102	(1.015)	149515	1.59754	3.195
	41 Coumaphos	29.427	29.428	(1.026)	129692	1.47280	2.946
M	42 Total Demeton				162895	1.49410	2.988
M	43 Merphos				208377	1.41108	2.822

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 014F1401.D
Lab Smp Id: LLQ6W1AC
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: LCS
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	131178	65589	262356	310899	137.01
38 TOCP	113486	56743	226972	217569	91.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.14	15.64	16.64	16.14	0.00
38 TOCP	28.68	28.18	29.18	28.68	-0.01

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

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9I300000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLQ6W1AC Client Smp ID: LCS
Level: LOW Operator: 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_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

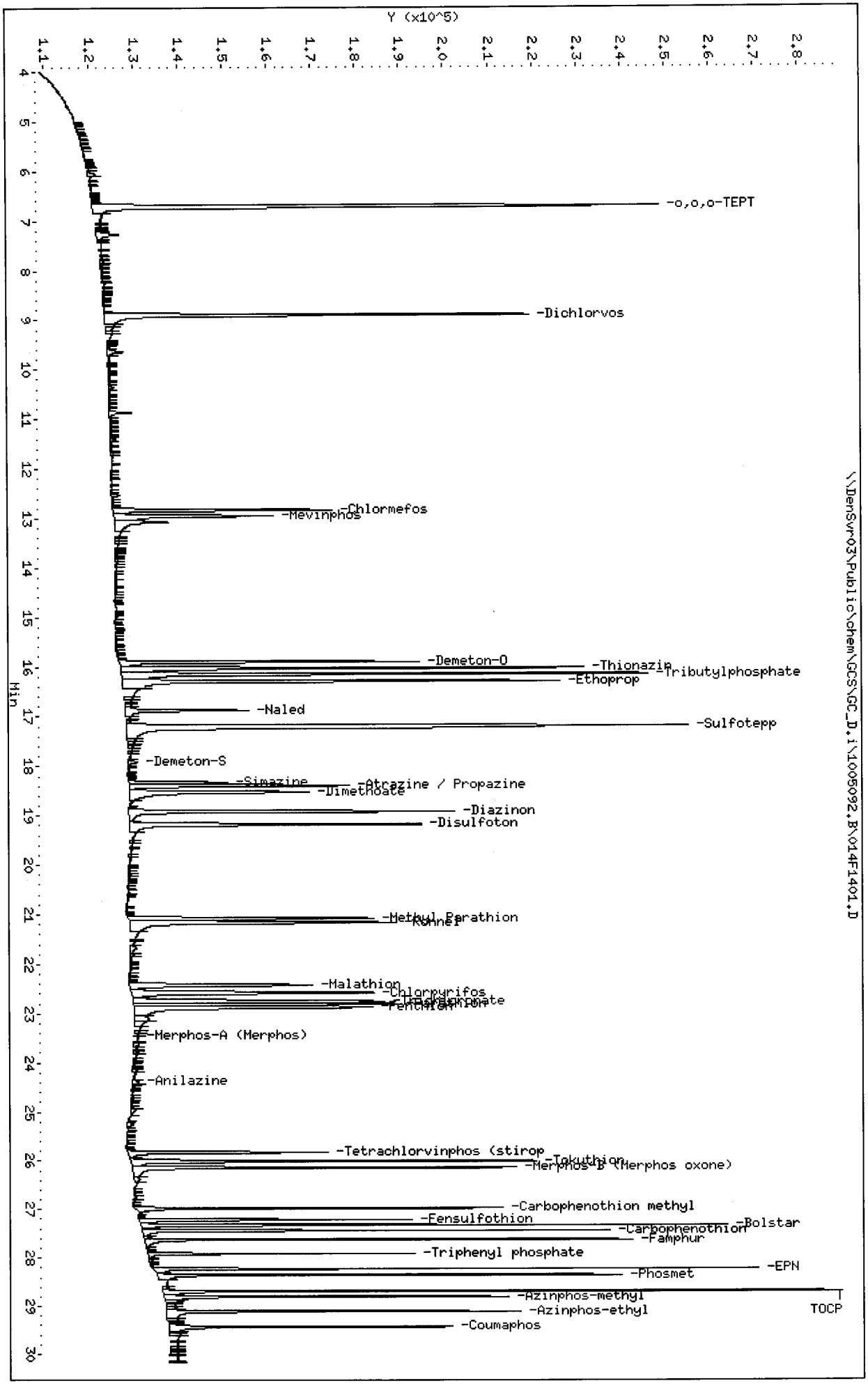
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	4.000	3.430	85.76	36-119
	2	Dichlorvos	4.000	3.128	78.20	50-120
$	3	Chlormefos	2.000	1.444	72.22	48-114
	4	Mevinphos	4.000	1.984	49.60	35-108
	5	Demeton-O	2.800	2.822	100.80	36-119
	6	Thionazin	4.000	3.232	80.79	65-116
	8	Ethoprop	4.000	2.780	69.49	65-108
	9	Naled	4.000	2.835	70.88	36-119
	10	Sulfotepp	4.000	4.663	116.58*	69-103
	11	Phorate	4.000	0.0000	*	62-104
	12	Demeton-S	1.200	0.1658	13.81*	36-119
	13	Simazine	4.000	3.915	97.88	47-109
	14	Atrazine / Propazi	8.000	5.541	69.26	36-119
	15	Dimethoate	4.000	2.011	50.27	28-115
	16	Diazinon	4.000	2.763	69.07	36-119
	17	Disulfoton	4.000	2.671	66.78	61-103
	18	Methyl Parathion	4.000	3.147	78.68	68-119
	19	Ronnel	4.000	3.291	82.28	62-115
	20	Malathion	4.000	2.917	72.93	67-115
	21	Chlorpyrifos	4.000	3.091	77.28	66-101
	22	Trichloronate	4.000	2.785	69.63	36-119
	23	Parathion	4.000	3.261	81.53	36-119
	24	Fenthion	4.000	2.957	73.92	36-119
	26	Anilazine	4.000	1.301	32.53*	47-115
	27	Tetrachlorvinphos	4.000	2.835	70.88	36-119
	28	Tokuthion	4.000	3.134	78.35	36-119
	30	Carbophenothion me	4.000	2.949	73.73	36-119
	31	Fensulfothion	4.000	2.513	62.82	61-115
	32	Bolstar	4.000	3.381	84.54	36-119
	33	Carbophenothion	4.000	3.183	79.58	36-119
	34	Famphur	4.000	3.271	81.79	36-119
$	35	Triphenyl phosphat	2.000	1.821	91.06	36-119
	36	EPN	4.000	3.323	83.07	36-119
	37	Phosmet	4.000	3.346	83.66	36-119
	39	Azinphos-methyl	4.000	2.969	74.23	55-115
	40	Azinphos-ethyl	4.000	3.195	79.88	36-119
	41	Coumaphos	4.000	2.946	73.64	62-115
M	42	Total Demeton	4.000	2.988	74.70	47-115
M	43	Merphos	4.000	2.822	70.55	36-119

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9I300000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLQ6W1AC Client Smp ID: LCS
Level: LOW Operator: 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_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	2.000	1.444	72.22	48-114
$ 35 Triphenyl phosphat	2.000	1.821	91.06	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\014F1401.D
Date : 06-OCT-2009 00:00
Client ID: LCS
Sample Info: LLQ6W1AC,LCS
Column phase: RTx-OPPest
\\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\014F1401.D
Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\015F1501.D
Lab Smp Id: LLG321AA Client Smp ID: M-89B
Inj Date : 06-OCT-2009 00:37
Operator : TLW Inst ID: GC_D.i
Smp Info : LLG321AA,174-1
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Meth Date : 06-Oct-2009 09:08 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 15
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	1066.000	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	9.364	9.342	(0.686)	137	0.16630	0.3120	LTMDL
$ 4	Chlormefos	9.453	9.462	(0.693)	192452	0.57802	1.084	
5	Thionazin	12.588	12.576	(0.922)	358	0.09128	0.1713	LTMDL
6	Demeton-O	Compound Not Detected.						
7	Ethoprop	Compound Not Detected.						
8	Naled	Compound Not Detected.						
* 9	Tributylphosphate	13.650	13.639	(1.000)	471996	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	18.460	18.411	(0.682)	928	0.00322	0.006049(a)
	25 Trichloronate	Compound Not Detected.					
	26 Anilazine	Compound Not Detected.					
	27 Merphos-A (Merphos)	Compound Not Detected.					
	28 Tetrachlorvinphos (Stirophos)	Compound Not Detected.					
	29 Tokuthion	Compound Not Detected.					
	30 Merphos-B (Merphos Oxone)	Compound Not Detected.					
	31 Carbophenothion-methyl	Compound Not Detected.					
	32 Fensulfothion	Compound Not Detected.					
	33 Bolstar / Famphur	23.598	23.573	(0.872)	372	0.09266	0.1738
	34 Carbophenothion	Compound Not Detected.					
$	35 Triphenyl phosphate	25.245	25.224	(0.933)	110488	0.76716	1.439
	36 Phosmet	Compound Not Detected.					
	37 EPN	Compound Not Detected.					
	38 Azinphos-methyl	Compound Not Detected.					
*	39 TOCP	27.058	27.056	(1.000)	324772	2.00000	
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	Compound Not Detected.					
M	42 Total Demeton	Compound Not Detected.					
M	43 Merphos	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_D.i
Lab File ID: 015F1501.D
Lab Smp Id: LLG321AA
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: M-89B
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	199712	99856	399424	471996	136.34
39 TOCP	133946	66973	267892	324772	142.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.65	0.08
39 TOCP	27.06	26.56	27.56	27.06	0.01

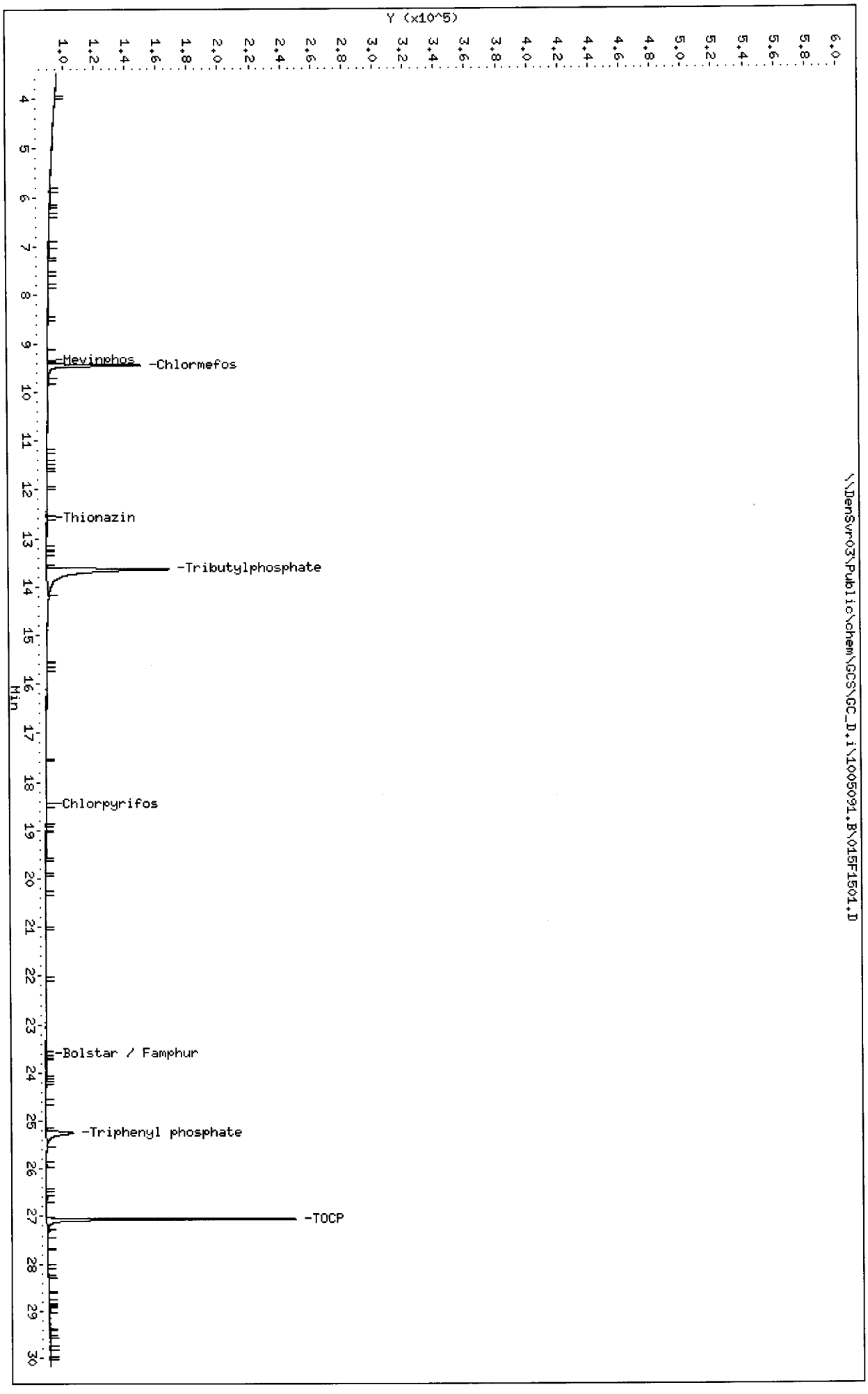
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-SEP-2009 00:00 Client SDG: D9I2501
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLG321AA Client Smp ID: M-89B
Level: LOW Operator: 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_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	1.876	1.084	57.80	48-114
$ 35 Triphenyl phosphat	1.876	1.439	76.72	50-150


Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\015F1501.D
Date : 06-OCT-2009 00:37
Client ID: M-89B
Sample Info: LLG321AA,174-1
Column phase: RTx-1MS
Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\015F1501.D
Y (x10^5)
Min
-Mevinphos
-Chlormefos
-Thionazin
-Tributylphosphate
-Chlorpyrifos
-Bolstar / Famphur
-Triphenyl phosphate
-TOCP

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\015F1501.D
Lab Smp Id: LLG321AA Client Smp ID: M-89B
Inj Date : 06-OCT-2009 00:37
Operator : TLW Inst ID: GC_D.i
Smp Info : LLG321AA,174-1
Misc Info : IS GSV1076-09
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Meth Date : 06-Oct-2009 09:10 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 15
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	1066.000	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	12.827	12.830	(0.794)	123118	0.74518	1.398
4	Mevinphos	Compound Not Detected.					
5	Demeton-O	Compound Not Detected.					
6	Thionazin	Compound Not Detected.					
* 7	Tributylphosphate	16.145	16.139	(1.000)	289678	2.00000	
8	Ethoprop	Compound Not Detected.					
9	Naled	Compound Not Detected.					
10	Sulfotepp	Compound Not Detected.					
11	Phorate	Compound Not Detected.					
12	Demeton-S	Compound Not Detected.					
13	Simazine	18.357	18.319	(1.137)	557	0.35156	0.6596
14	Atrazine / Propazine	Compound Not Detected.					
15	Dimethoate	18.547	18.510	(1.149)	248	0.11615	0.2179
16	Diazinon	Compound Not Detected.					
17	Disulfoton	Compound Not Detected.					
18	Methyl Parathion	21.027	21.074	(0.733)	383	0.10341	0.1940(a)
19	Ronnel	Compound Not Detected.					
20	Malathion	Compound Not Detected.					
21	Chlorpyrifos	Compound Not Detected.					
22	Trichloronate	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 Fenthion	Compound Not Detected.					
	25 Merphos-A (Merphos)	23.422	23.403	(0.817)	167	0.75472	1.416
	26 Anilazine	Compound Not Detected.					
	27 Tetrachlorvinphos (stirophos)	Compound Not Detected.					
	28 Tokuthion	Compound Not Detected.					
	29 Merphos-B (Merphos oxone)	26.178	26.137	(0.913)	114	9e-004	0.001776(a)
	30 Carbophenothion methyl	Compound Not Detected.					
	31 Fensulfothion	Compound Not Detected.					
	32 Bolstar	Compound Not Detected.					
	33 Carbophenothion	Compound Not Detected.					
	34 Famphur	27.648	27.620	(0.964)	1632	0.07380	0.1385
$	35 Triphenyl phosphate	27.912	27.912	(0.973)	73320	0.81756	1.534
	36 EPN	Compound Not Detected.					
	37 Phosmet	Compound Not Detected.					
*	38 TOCP	28.678	28.680	(1.000)	228296	2.00000	
	39 Azinphos-methyl	Compound Not Detected.					
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	Compound Not Detected.					
M	42 Total Demeton	Compound Not Detected.					
M	43 Merphos	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_D.i
Lab File ID: 015F1501.D
Lab Smp Id: LLG321AA
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: M-89B
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	131178	65589	262356	289678	120.83
38 TOCP	113486	56743	226972	228296	101.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.14	15.64	16.64	16.15	0.04
38 TOCP	28.68	28.18	29.18	28.68	-0.01

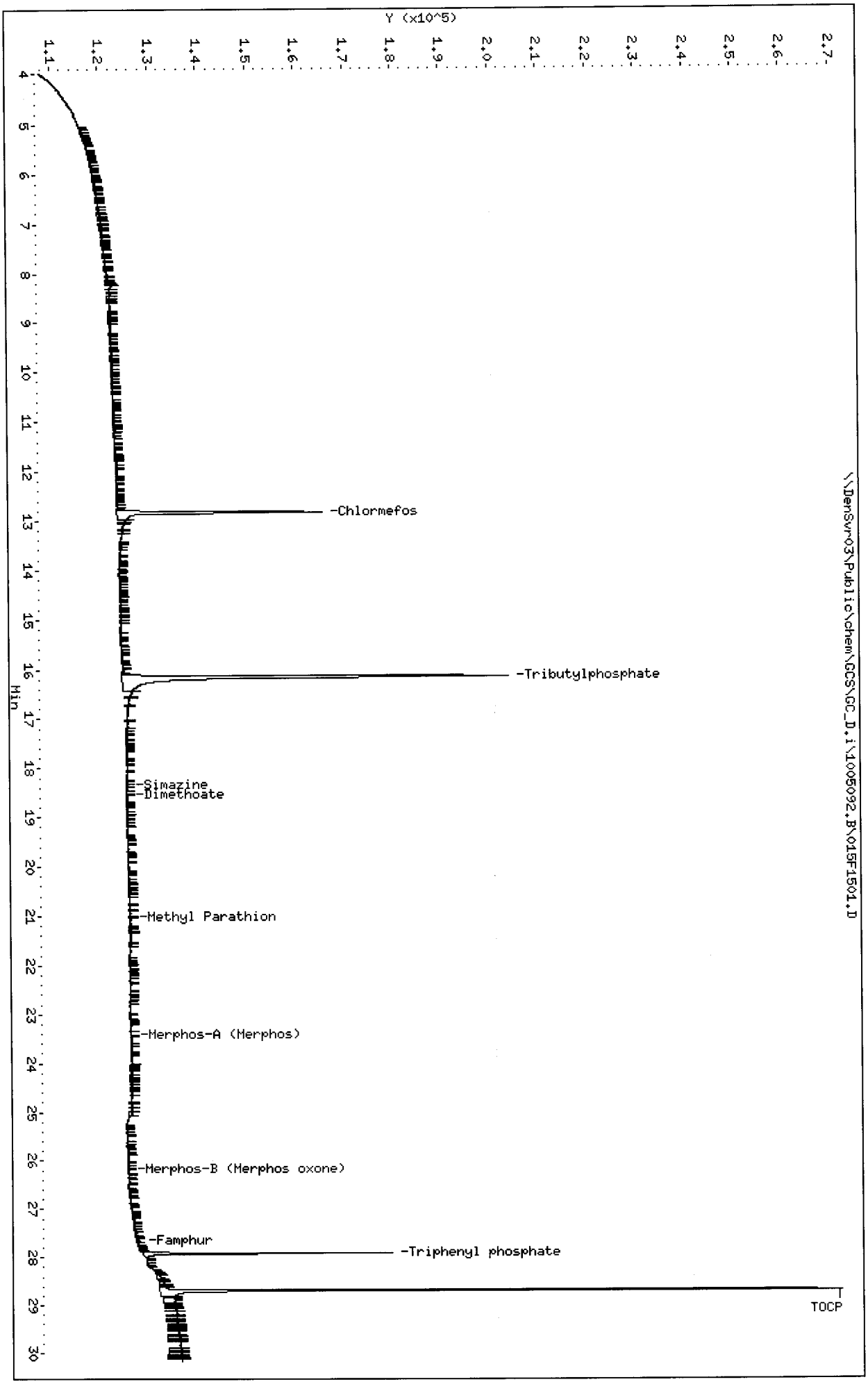
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-SEP-2009 00:00 Client SDG: D9I2501
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLG321AA Client Smp ID: M-89B
Level: LOW Operator: 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_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	1.876	1.398	74.52	48-114
$ 35 Triphenyl phosphat	1.876	1.534	81.76	50-150


Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\015F1501.D
Date : 06-OCT-2009 00:37
Client ID: M-89B
Sample Info: LLG321AA,174-1
Column phase: RTx-OPPest
Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32
Page 5
Y (x10^5)
Min
-Chlormefos
-Tributylphosphate
-Simazine
-Dimethoate
-Methyl Parathion
-Merphos-A (Merphos)
-Merphos-B (Merphos oxone)
-Famphur
-Triphenyl phosphate
TOCP
\\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\015F1501.D

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\016F1601.D
Lab Smp Id: LLG321AF Client Smp ID: M-89BMS
Inj Date : 06-OCT-2009 01:13
Operator : TLW Inst ID: GC_D.i
Smp Info : LLG321AF,174-1S
Misc Info : IS GSV1076-09
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Meth Date : 06-Oct-2009 09:08 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 16 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

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

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1045.000	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	4.223	4.271	(0.310)	787546	1.86397	3.567
2	Dichlorvos	5.804	5.824	(0.426)	462153	1.52412	2.917
3	Mevinphos	9.344	9.342	(0.685)	160620	1.23515	2.364
$ 4	Chlormefos	9.453	9.462	(0.693)	307186	0.78219	1.497
5	Thionazin	12.575	12.576	(0.922)	451287	1.51096	2.892
6	Demeton-O	12.831	12.830	(0.941)	338307	1.27052	2.432
7	Ethoprop	13.145	13.144	(0.964)	444735	1.51543	2.900
8	Naled	13.426	13.425	(0.984)	138398	1.43876	2.754
* 9	Tributylphosphate	13.639	13.639	(1.000)	556736	2.00000	
10	Sulfotepp	14.100	14.101	(1.034)	549312	1.37335	2.628(R)
11	Phorate	14.186	14.188	(1.040)	349557	1.20495	2.306(R)
12	Dimethoate	14.373	14.362	(1.054)	394536	1.46850	2.810
13	Demeton-S	14.636	14.628	(1.073)	38947	0.10216	0.1955(R)
14	Simazine	14.761	14.753	(1.082)	160590	1.67874	3.213
15	Atrazine	14.971	14.969	(1.098)	168933	1.43731	2.751
16	propazine	15.152	15.151	(1.111)	167512	1.37693	2.635
17	Disulfoton	15.832	15.829	(0.585)	316327	1.52663	2.922
18	Diazinon	15.897	15.896	(0.588)	441556	1.50285	2.876
19	Methyl Parathion	16.806	16.799	(0.621)	321940	1.55808	2.982
20	Ronnel	17.421	17.419	(0.644)	310152	1.41058	2.700
21	Malathion	18.090	18.088	(0.669)	252296	1.54183	2.951
22	Fenthion	18.247	18.245	(0.674)	297874	1.47125	2.816

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	18.358	18.355	(0.679)	281155	1.54820	2.963
	24 Chlorpyrifos	18.411	18.411	(0.681)	447683	1.43589	2.748
	25 Trichloronate	18.919	18.918	(0.699)	340794	1.29974	2.488
	26 Anilazine	19.344	19.324	(0.715)	18103	1.71356	3.280
	27 Merphos-A (Merphos)	Compound Not Detected.					
	28 Tetrachlorvinphos (Stirophos)	20.481	20.478	(0.757)	210146	1.43634	2.749
	29 Tokuthion	21.236	21.233	(0.785)	344221	1.47166	2.816
	30 Merphos-B (Merphos Oxone)	21.481	21.484	(0.794)	348445	1.91584	3.667
	31 Carbophenothion-methyl	22.221	22.213	(0.821)	245593	1.45343	2.782
	32 Fensulfothion	22.405	22.390	(0.828)	296174	1.59468	3.052
	33 Bolstar / Famphur	23.576	23.573	(0.871)	643617	3.31539	6.345
	34 Carbophenothion	23.900	23.898	(0.883)	297861	1.49431	2.860
$	35 Triphenyl phosphate	25.225	25.224	(0.932)	135581	0.86291	1.652
	36 Phosmet	25.756	25.743	(0.952)	257549	1.69856	3.251
	37 EPN	26.075	26.074	(0.964)	307801	1.57584	3.016
	38 Azinphos-methyl	26.573	26.569	(0.982)	249000	1.59240	3.048
*	39 TOCP	27.055	27.056	(1.000)	351810	2.00000	
	40 Azinphos-ethyl	27.160	27.155	(1.004)	282363	1.57318	3.011
	41 Coumaphos	27.684	27.680	(1.023)	245120	1.57618	3.017
M	42 Total Demeton				377254	1.37267	2.627
M	43 Merphos				348445	1.49779	2.866

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 016F1601.D
Lab Smp Id: LLG321AF
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: M-89BMS
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	199712	99856	399424	556736	178.77
39 TOCP	133946	66973	267892	351810	162.65

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.64	0.00
39 TOCP	27.06	26.56	27.56	27.06	-0.01

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

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-SEP-2009 00:00 Client SDG: D9I2501
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLG321AF Client Smp ID: M-89BMS
Level: LOW Operator: TLW
Data Type: GC DATA SampleType: MS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

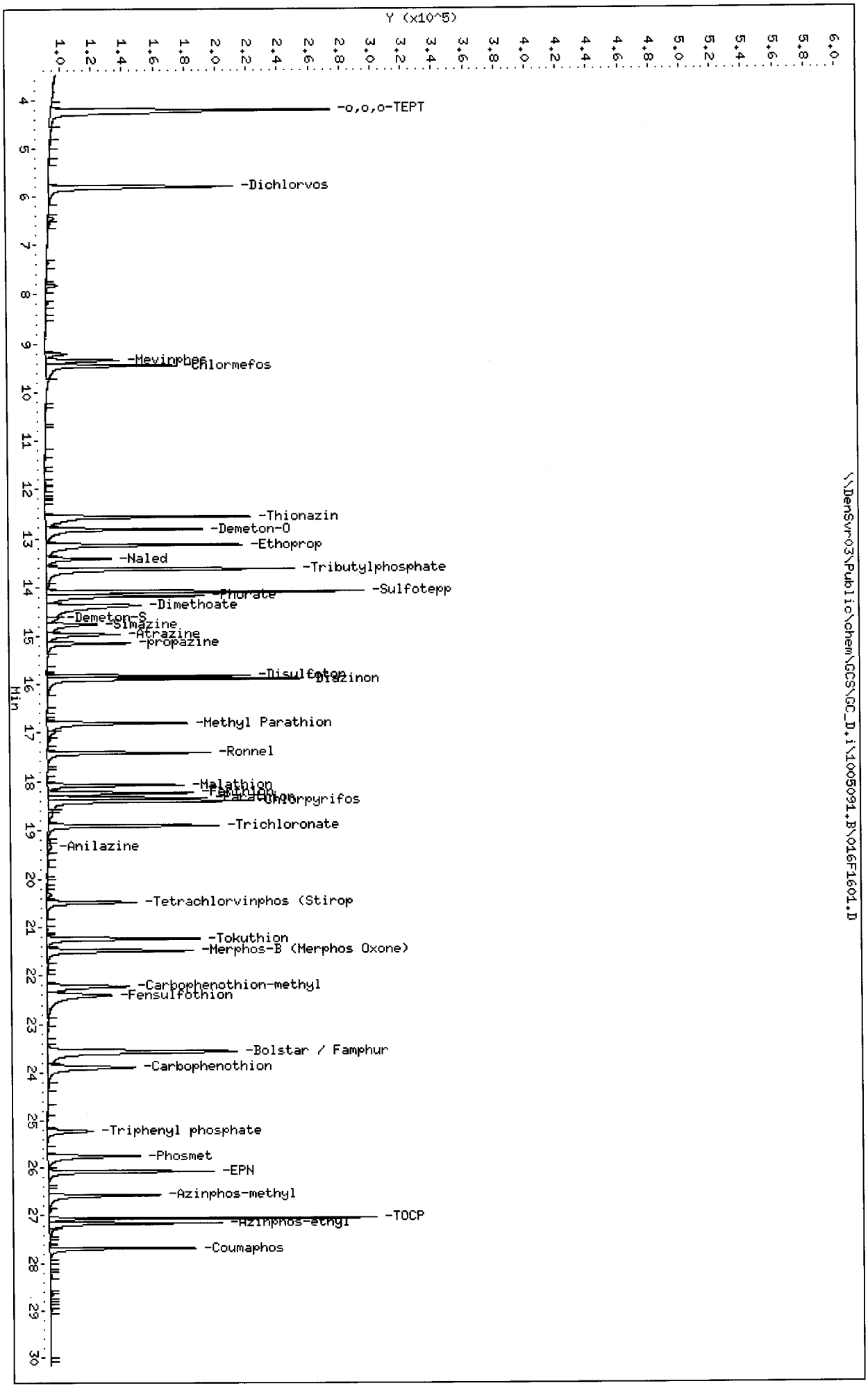
	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1 o,o,o-TEPT	3.828	3.567	93.20	36-119
	2 Dichlorvos	3.828	2.917	76.21	50-120
	3 Mevinphos	3.828	2.364	61.76	35-108
$	4 Chlormefos	1.914	1.497	78.22	48-114
	5 Thionazin	3.828	2.892	75.55	65-116
	6 Demeton-O	2.672	2.432	91.01	36-119
	7 Ethoprop	3.828	2.900	75.77	65-108
	8 Naled	3.828	2.754	71.94	36-119
	10 Sulfotepp	3.828	2.628	68.67*	69-103
	11 Phorate	3.828	2.306	60.25*	62-104
	12 Dimethoate	3.828	2.810	73.42	28-115
	13 Demeton-S	1.156	0.1955	16.91*	36-119
	14 Simazine	3.828	3.213	83.94	47-109
	15 Atrazine	3.828	2.751	71.87	36-119
	16 propazine	3.828	2.635	68.85	36-119
	17 Disulfoton	3.828	2.922	76.33	61-103
	18 Diazinon	3.828	2.876	75.14	36-119
	19 Methyl Parathion	3.828	2.982	77.90	68-119
	20 Ronnel	3.828	2.700	70.53	62-115
	21 Malathion	3.828	2.951	77.09	67-115
	22 Fenthion	3.828	2.816	73.56	36-119
	23 Parathion	3.828	2.963	77.41	36-119
	24 Chlorpyrifos	3.828	2.748	71.79	66-101
	25 Trichloronate	3.828	2.488	64.99	36-119
	26 Anilazine	3.828	3.280	85.68	47-115
	28 Tetrachlorvinphos	3.828	2.749	71.82	36-119
	29 Tokuthion	3.828	2.816	73.58	36-119
	31 Carbophenothion-me	3.828	2.782	72.67	36-119
	32 Fensulfothion	3.828	3.052	79.73	61-115
	33 Bolstar / Famphur	7.656	6.345	82.88	36-119
	34 Carbophenothion	3.828	2.860	74.72	50-150
$	35 Triphenyl phosphat	1.914	1.652	86.29	50-150
	36 Phosmet	3.828	3.251	84.93	50-150
	37 EPN	3.828	3.016	78.79	36-119
	38 Azinphos-methyl	3.828	3.048	79.62	55-115
	40 Azinphos-ethyl	3.828	3.011	78.66	36-119
	41 Coumaphos	3.828	3.017	78.81	62-115
M	42 Total Demeton	3.828	2.627	68.63	47-115
M	43 Merphos	3.828	2.866	74.89	36-119

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-SEP-2009 00:00 Client SDG: D9I2501
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLG321AF Client Smp ID: M-89BMS
Level: LOW Operator: TLW
Data Type: GC DATA SampleType: MS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	1.876	1.497	78.22	48-114
$ 35 Triphenyl phosphat	1.876	1.652	86.29	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\1005091,B\016F1601,D
Date : 06-OCT-2009 01:13
Client ID: M-89BMS
Sample Info: LLG321AF,174-1S
Column phase: RTx-1MS

\\DenSvr03\Public\chem\GCS\GC_D,i\1005091,B\016F1601,D

Instrument: GC_D,i
Operator: TLW
Column diameter: 0.32

Page 6

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\016F1601.D
Lab Smp Id: LLG321AF Client Smp ID: M-89BMS
Inj Date : 06-OCT-2009 01:13
Operator : TLW Inst ID: GC_D.i
Smp Info : LLG321AF,174-1S
Misc Info : IS GSV1076-09
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Meth Date : 06-Oct-2009 09:10 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 16 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

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

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1045.000	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	6.705	6.724	(0.415)	450722	1.65488	3.167
	2 Dichlorvos	8.892	8.899	(0.551)	296563	1.52926	2.927
$	3 Chlormefos	12.826	12.830	(0.795)	132290	0.71320	1.365
	4 Mevinphos	12.943	12.944	(0.802)	129946	1.11549	2.135
	5 Demeton-O	15.892	15.894	(0.985)	165598	1.43637	2.749
	6 Thionazin	16.018	16.019	(0.993)	269572	1.60684	3.075
*	7 Tributylphosphate	16.139	16.139	(1.000)	325213	2.00000	
	8 Ethoprop	16.282	16.282	(1.009)	296053	1.38730	2.655
	9 Naled	16.866	16.866	(1.045)	80630	1.38475	2.650
	10 Sulfotepp	17.181	17.181	(1.065)	453396	1.96089	3.753
	11 Phorate	Compound Not Detected.					
	12 Demeton-S	17.908	17.906	(1.110)	6227	0.07196	0.1377(R)
	13 Simazine	18.319	18.319	(1.135)	62382	2.13819	4.092
	14 Atrazine / Propazine	18.383	18.384	(1.139)	174260	2.82964	5.416
	15 Dimethoate	18.513	18.510	(1.147)	227537	1.37535	2.632
	16 Diazinon	18.911	18.910	(1.172)	222516	1.38166	2.644
	17 Disulfoton	19.171	19.173	(1.188)	228289	1.39759	2.675
	18 Methyl Parathion	21.074	21.074	(0.735)	183274	1.59543	3.053
	19 Ronnel	21.161	21.160	(0.738)	233877	1.62811	3.116
	20 Malathion	22.415	22.420	(0.782)	147358	1.42639	2.730
	21 Chlorpyrifos	22.573	22.576	(0.787)	195877	1.47707	2.827
	22 Trichloronate	22.748	22.749	(0.793)	190249	1.35269	2.589

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	22.799	22.801	(0.795)	208194	1.61388	3.089
	24 Fenthion	22.868	22.869	(0.797)	235451	1.45350	2.782
	25 Merphos-A (Merphos)	23.444	23.403	(0.817)	2920	0.79155	1.515
	26 Anilazine	24.383	24.386	(0.850)	4861	0.60254	1.153(R)
	27 Tetrachlorvinphos (stirophos)	25.821	25.821	(0.900)	128200	1.49733	2.866
	28 Tokuthion	26.003	26.004	(0.907)	209647	1.51493	2.899
	29 Merphos-B (Merphos oxone)	26.136	26.137	(0.911)	215322	1.77231	3.392
	30 Carbophenothion methyl	26.971	26.973	(0.940)	158438	1.54295	2.953
	31 Fensulfothion	27.209	27.209	(0.949)	146361	1.62296	3.106
	32 Bolstar	27.320	27.322	(0.953)	199964	1.64423	3.147
	33 Carbophenothion	27.436	27.436	(0.957)	163893	1.55554	2.977
	34 Famphur	27.619	27.620	(0.963)	171508	1.64163	3.142
$	35 Triphenyl phosphate	27.910	27.912	(0.973)	81362	0.89945	1.721
	36 EPN	28.217	28.219	(0.984)	181893	1.63017	3.120
	37 Phosmet	28.344	28.345	(0.988)	157875	1.64233	3.143
*	38 TOCP	28.679	28.680	(1.000)	230273	2.00000	
	39 Azinphos-methyl	28.792	28.792	(1.004)	145591	1.56835	3.002
	40 Azinphos-ethyl	29.100	29.102	(1.015)	157916	1.59377	3.050
	41 Coumaphos	29.426	29.428	(1.026)	139600	1.50066	2.872
M	42 Total Demeton				171825	1.50833	2.887
M	43 Merphos				218242	1.39655	2.673

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 016F1601.D
Lab Smp Id: LLG321AF
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: M-89BMS
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	131178	65589	262356	325213	147.92
38 TOCP	113486	56743	226972	230273	102.91

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.14	15.64	16.64	16.14	0.00
38 TOCP	28.68	28.18	29.18	28.68	-0.00

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

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-SEP-2009 00:00 Client SDG: D9I2501
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLG321AF Client Smp ID: M-89BMS
Level: LOW Operator: TLW
Data Type: GC DATA SampleType: MS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

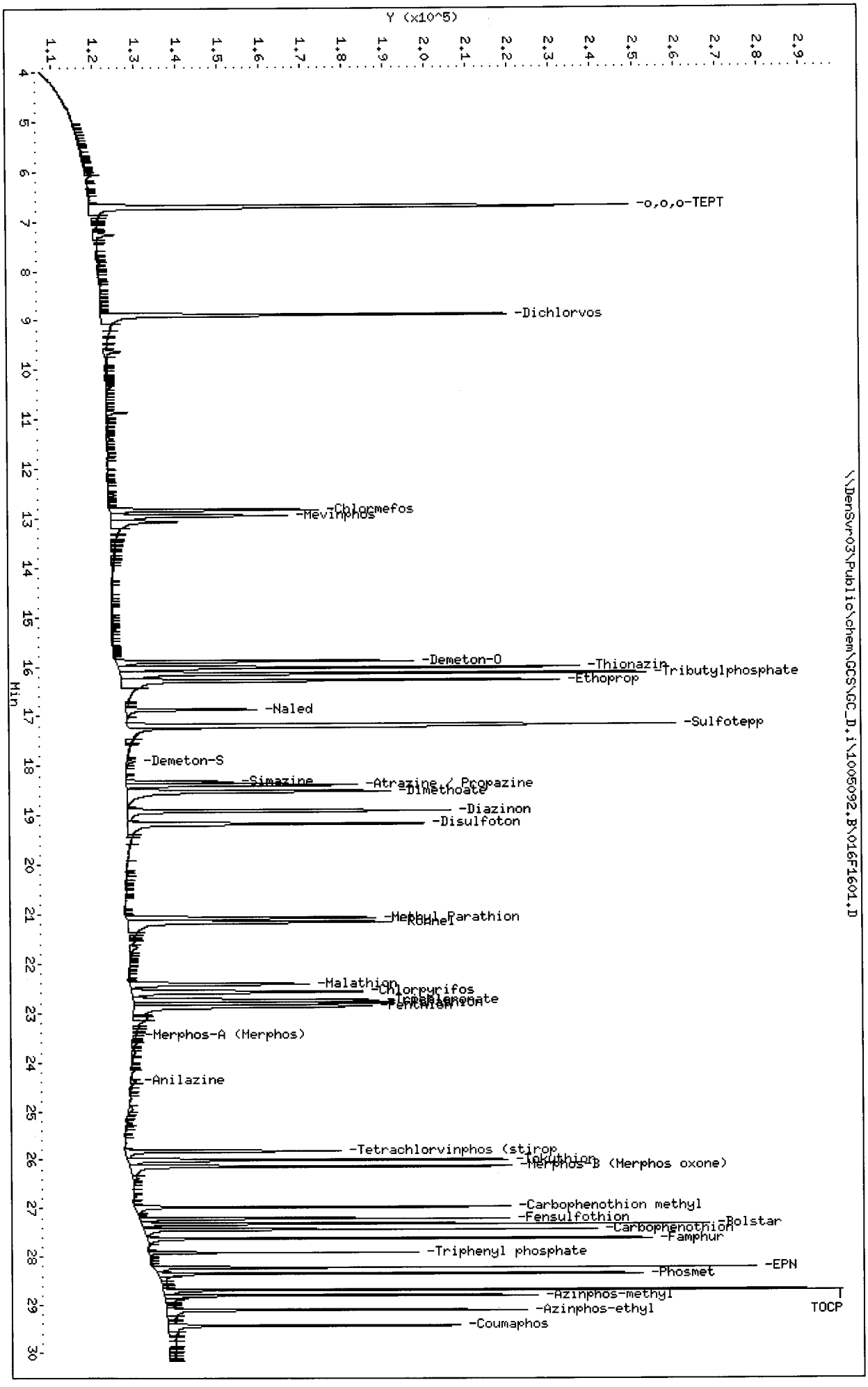
	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1 o,o,o-TEPT	3.828	3.167	82.74	36-119
	2 Dichlorvos	3.828	2.927	76.46	50-120
$	3 Chlormefos	1.914	1.365	71.32	48-114
	4 Mevinphos	3.828	2.135	55.77	35-108
	5 Demeton-O	2.679	2.749	102.60	36-119
	6 Thionazin	3.828	3.075	80.34	65-116
	8 Ethoprop	3.828	2.655	69.36	65-108
	9 Naled	3.828	2.650	69.24	36-119
	10 Sulfotepp	3.828	3.753	98.04	69-103
	11 Phorate	3.828	0.0000	*	62-104
	12 Demeton-S	1.148	0.1377	11.99*	36-119
	13 Simazine	3.828	4.092	106.91	47-109
	14 Atrazine / Propazi	7.656	5.416	70.74	36-119
	15 Dimethoate	3.828	2.632	68.77	28-115
	16 Diazinon	3.828	2.644	69.08	36-119
	17 Disulfoton	3.828	2.675	69.88	61-103
	18 Methyl Parathion	3.828	3.053	79.77	68-119
	19 Ronnel	3.828	3.116	81.41	62-115
	20 Malathion	3.828	2.730	71.32	67-115
	21 Chlorpyrifos	3.828	2.827	73.85	66-101
	22 Trichloronate	3.828	2.589	67.63	36-119
	23 Parathion	3.828	3.089	80.69	36-119
	24 Fenthion	3.828	2.782	72.67	36-119
	26 Anilazine	3.828	1.153	30.13*	47-115
	27 Tetrachlorvinphos	3.828	2.866	74.87	36-119
	28 Tokuthion	3.828	2.899	75.75	36-119
	30 Carbophenothion me	3.828	2.953	77.15	36-119
	31 Fensulfothion	3.828	3.106	81.15	61-115
	32 Bolstar	3.828	3.147	82.21	36-119
	33 Carbophenothion	3.828	2.977	77.78	36-119
	34 Famphur	3.828	3.142	82.08	36-119
$	35 Triphenyl phosphat	1.914	1.721	89.94	36-119
	36 EPN	3.828	3.120	81.51	36-119
	37 Phosmet	3.828	3.143	82.12	36-119
	39 Azinphos-methyl	3.828	3.002	78.42	55-115
	40 Azinphos-ethyl	3.828	3.050	79.69	36-119
	41 Coumaphos	3.828	2.872	75.03	62-115
M	42 Total Demeton	3.828	2.887	75.42	47-115
M	43 Merphos	3.828	2.673	69.83	36-119

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-SEP-2009 00:00 Client SDG: D9I2501
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLG321AF Client Smp ID: M-89BMS
Level: LOW Operator: TLW
Data Type: GC DATA SampleType: MS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	1.876	1.365	71.32	48-114
$ 35 Triphenyl phosphat	1.876	1.721	89.94	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\016F1601.D
Date : 06-OCT-2009 01:13
Client ID: M-89BMS
Sample Info: LLG324AF,174-1S
Column phase: RTx-OPPest

Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\017F1701.D
Lab Smp Id: LLG321AG Client Smp ID: M-89BMSD
Inj Date : 06-OCT-2009 01:49
Operator : TLW Inst ID: GC_D.i
Smp Info : LLG321AG,174-1D
Misc Info : IS GSV1076-09
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Meth Date : 06-Oct-2009 09:08 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 17 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

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

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1040.000	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	4.221	4.271	(0.309)	789049	1.94419	3.739
	2 Dichlorvos	5.802	5.824	(0.425)	477152	1.63818	3.150
	3 Mevinphos	9.343	9.342	(0.685)	159836	1.27364	2.449
$	4 Chlormefos	9.453	9.462	(0.693)	329854	0.87438	1.682
	5 Thionazin	12.575	12.576	(0.922)	454718	1.58055	3.040
	6 Demeton-O	12.829	12.830	(0.940)	354391	1.38498	2.663
	7 Ethoprop	13.144	13.144	(0.964)	455803	1.61473	3.105
	8 Naled	13.425	13.425	(0.984)	145480	1.56074	3.001
*	9 Tributylphosphate	13.641	13.639	(1.000)	534782	2.00000	
	10 Sulfotepp	14.100	14.101	(1.034)	543265	1.41399	2.719
	11 Phorate	14.186	14.188	(1.040)	347676	1.25296	2.410
	12 Dimethoate	14.376	14.362	(1.054)	399053	1.53540	2.953
	13 Demeton-S	14.636	14.628	(1.073)	40168	0.11409	0.2194(R)
	14 Simazine	14.759	14.753	(1.082)	166855	1.81584	3.492
	15 Atrazine	14.972	14.969	(1.098)	172728	1.52993	2.942
	16 propazine	15.152	15.151	(1.111)	177037	1.51497	2.913
	17 Disulfoton	15.832	15.829	(0.585)	309703	1.57747	3.034
	18 Diazinon	15.897	15.896	(0.588)	444733	1.60136	3.080
	19 Methyl Parathion	16.806	16.799	(0.621)	319278	1.63076	3.136
	20 Ronnel	17.422	17.419	(0.644)	314996	1.51019	2.904
	21 Malathion	18.088	18.088	(0.669)	256155	1.65610	3.185
	22 Fenthion	18.248	18.245	(0.674)	300998	1.56706	3.014

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	18.359	18.355	(0.679)	286592	1.65421	3.181
	24 Chlorpyrifos	18.412	18.411	(0.681)	439595	1.49164	2.868
	25 Trichloronate	18.918	18.918	(0.699)	348050	1.39854	2.690
	26 Anilazine	19.343	19.324	(0.715)	24296	2.31919	4.460(R)
	27 Merphos-A (Merphos)	Compound Not Detected.					
	28 Tetrachlorvinphos (Stirophos)	20.479	20.478	(0.757)	208829	1.50071	2.886
	29 Tokuthion	21.234	21.233	(0.785)	344207	1.55442	2.989
	30 Merphos-B (Merphos Oxone)	21.482	21.484	(0.794)	346911	2.01791	3.880
	31 Carbophenothion-methyl	22.219	22.213	(0.821)	245529	1.53250	2.947
	32 Fensulfothion	22.402	22.390	(0.828)	299551	1.69952	3.268
	33 Bolstar / Famphur	23.574	23.573	(0.871)	644985	3.50947	6.749
	34 Carbophenothion	23.898	23.898	(0.883)	302363	1.60315	3.083
$	35 Triphenyl phosphate	25.222	25.224	(0.932)	134686	0.90452	1.739
	36 Phosmet	25.752	25.743	(0.952)	266806	1.85550	3.568
	37 EPN	26.077	26.074	(0.964)	321098	1.73717	3.341
	38 Azinphos-methyl	26.573	26.569	(0.982)	250164	1.68769	3.246
*	39 TOCP	27.056	27.056	(1.000)	332544	2.00000	
	40 Azinphos-ethyl	27.160	27.155	(1.004)	283094	1.66864	3.209
	41 Coumaphos	27.683	27.680	(1.023)	246286	1.67141	3.214
M	42 Total Demeton				394559	1.49907	2.883
M	43 Merphos				346911	1.57626	3.031

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 017F1701.D
Lab Smp Id: LLG321AG
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: M-89BMSD
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	199712	99856	399424	534782	167.78
39 TOCP	133946	66973	267892	332544	148.27

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.64	0.02
39 TOCP	27.06	26.56	27.56	27.06	-0.00

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

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-SEP-2009 00:00 Client SDG: D9I2501
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLG321AG Client Smp ID: M-89BMSD
Level: LOW Operator: TLW
Data Type: GC DATA SampleType: MSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

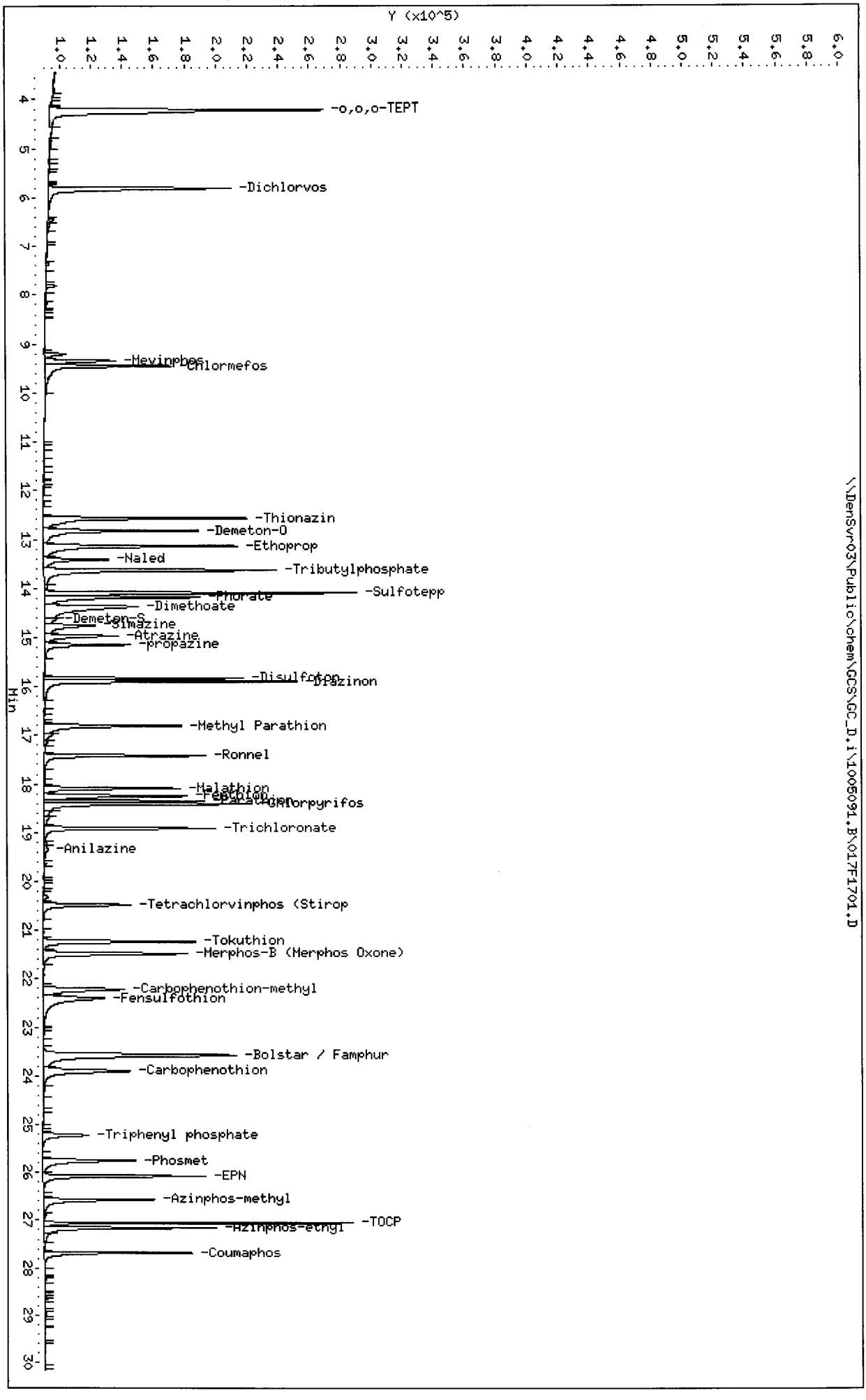
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	3.846	3.739	97.21	36-119
	2	Dichlorvos	3.846	3.150	81.91	50-120
	3	Mevinphos	3.846	2.449	63.68	35-108
$	4	Chlormefos	1.923	1.682	87.44	48-114
	5	Thionazin	3.846	3.040	79.03	65-116
	6	Demeton-O	2.685	2.663	99.21	36-119
	7	Ethoprop	3.846	3.105	80.74	65-108
	8	Naled	3.846	3.001	78.04	36-119
	10	Sulfotepp	3.846	2.719	70.70	69-103
	11	Phorate	3.846	2.410	62.65	62-104
	12	Dimethoate	3.846	2.953	76.77	28-115
	13	Demeton-S	1.162	0.2194	18.89*	36-119
	14	Simazine	3.846	3.492	90.79	47-109
	15	Atrazine	3.846	2.942	76.50	36-119
	16	propazine	3.846	2.913	75.75	36-119
	17	Disulfoton	3.846	3.034	78.87	61-103
	18	Diazinon	3.846	3.080	80.07	36-119
	19	Methyl Parathion	3.846	3.136	81.54	68-119
	20	Ronnel	3.846	2.904	75.51	62-115
	21	Malathion	3.846	3.185	82.81	67-115
	22	Fenthion	3.846	3.014	78.35	36-119
	23	Parathion	3.846	3.181	82.71	36-119
	24	Chlorpyrifos	3.846	2.868	74.58	66-101
	25	Trichloronate	3.846	2.690	69.93	36-119
	26	Anilazine	3.846	4.460	115.96*	47-115
	28	Tetrachlorvinphos	3.846	2.886	75.04	36-119
	29	Tokuthion	3.846	2.989	77.72	36-119
	31	Carbophenothion-me	3.846	2.947	76.62	36-119
	32	Fensulfothion	3.846	3.268	84.98	61-115
	33	Bolstar / Famphur	7.692	6.749	87.74	36-119
	34	Carbophenothion	3.846	3.083	80.16	50-150
$	35	Triphenyl phosphat	1.923	1.739	90.45	50-150
	36	Phosmet	3.846	3.568	92.78	50-150
	37	EPN	3.846	3.341	86.86	36-119
	38	Azinphos-methyl	3.846	3.246	84.38	55-115
	40	Azinphos-ethyl	3.846	3.209	83.43	36-119
	41	Coumaphos	3.846	3.214	83.57	62-115
M	42	Total Demeton	3.846	2.883	74.95	47-115
M	43	Merphos	3.846	3.031	78.81	36-119

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-SEP-2009 00:00 Client SDG: D9I2501
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLG321AG Client Smp ID: M-89BMSD
Level: LOW Operator: TLW
Data Type: GC DATA SampleType: MSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\8141A-1.m
Misc Info: IS GSV1076-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	1.876	1.682	87.44	48-114
$ 35 Triphenyl phosphat	1.876	1.739	90.45	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005091.B\017F1701.D
Date : 06-OCT-2009 01:49
Client ID: M-89BMSD
Sample Info: LLG321AG,174-1D
Column phase: RTx-1MS

Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\017F1701.D
Lab Smp Id: LLG321AG Client Smp ID: M-89BMSD
Inj Date : 06-OCT-2009 01:49
Operator : TLW Inst ID: GC_D.i
Smp Info : LLG321AG,174-1D
Misc Info : IS GSV1076-09
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Meth Date : 06-Oct-2009 09:10 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 17 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

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

Name	Value	Description
DF	1.000	Dilution Factor
Vf	2000.000	Final Extract Volume (uL)
Vs	1040.000	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	6.704	6.724	(0.415)	439697	1.66831	3.208
	2 Dichlorvos	8.892	8.899	(0.551)	295397	1.57411	3.027
$	3 Chlormefos	12.826	12.830	(0.795)	128473	0.71575	1.376
	4 Mevinphos	12.944	12.944	(0.802)	130169	1.15472	2.221
	5 Demeton-O	15.892	15.894	(0.985)	165771	1.48589	2.857
	6 Thionazin	16.018	16.019	(0.993)	269419	1.65955	3.191
*	7 Tributylphosphate	16.137	16.139	(1.000)	314705	2.00000	
	8 Ethoprop	16.281	16.282	(1.009)	300880	1.47082	2.828
	9 Naled	16.867	16.866	(1.045)	94287	1.65158	3.176
	10 Sulfotepp	17.180	17.181	(1.065)	512411	2.32734	4.476(R)
	11 Phorate	Compound Not Detected.					
	12 Demeton-S	17.907	17.906	(1.110)	7396	0.08248	0.1586(R)
	13 Simazine	18.319	18.319	(1.135)	63148	2.22135	4.272(R)
	14 Atrazine / Propazine	18.382	18.384	(1.139)	172871	2.89964	5.576
	15 Dimethoate	18.512	18.510	(1.147)	225550	1.40607	2.704
	16 Diazinon	18.909	18.910	(1.172)	216449	1.38886	2.671
	17 Disulfoton	19.172	19.173	(1.188)	223454	1.41367	2.718
	18 Methyl Parathion	21.074	21.074	(0.735)	181449	1.64052	3.155
	19 Ronnel	21.157	21.160	(0.738)	239587	1.73544	3.337
	20 Malathion	22.417	22.420	(0.782)	148342	1.49248	2.870
	21 Chlorpyrifos	22.574	22.576	(0.787)	195340	1.53097	2.944
	22 Trichloronate	22.748	22.749	(0.793)	181217	1.34121	2.579

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	22.798	22.801	(0.795)	210764	1.69695	3.263
	24 Fenthion	22.867	22.869	(0.797)	231480	1.48689	2.859
	25 Merphos-A (Merphos)	Compound Not Detected.					
	26 Anilazine	24.392	24.386	(0.851)	7499	0.87616	1.685(R)
	27 Tetrachlorvinphos (stirophos)	25.822	25.821	(0.900)	126740	1.53639	2.954
	28 Tokuthion	26.002	26.004	(0.907)	204184	1.53525	2.952
	29 Merphos-B (Merphos oxone)	26.136	26.137	(0.911)	205390	1.75907	3.383
	30 Carbophenothion methyl	26.972	26.973	(0.941)	156560	1.58534	3.049
	31 Fensulfothion	27.208	27.209	(0.949)	145363	1.67556	3.222
	32 Bolstar	27.321	27.322	(0.953)	199811	1.70955	3.288
	33 Carbophenothion	27.435	27.436	(0.957)	163260	1.61121	3.098
	34 Famphur	27.619	27.620	(0.963)	172840	1.71857	3.305
$	35 Triphenyl phosphate	27.910	27.912	(0.973)	81179	0.93379	1.796
	36 EPN	28.217	28.219	(0.984)	182726	1.70400	3.277
	37 Phosmet	28.344	28.345	(0.988)	159578	1.72731	3.322
*	38 TOCP	28.678	28.680	(1.000)	221305	2.00000	
	39 Azinphos-methyl	28.791	28.792	(1.004)	150118	1.69087	3.252
	40 Azinphos-ethyl	29.100	29.102	(1.015)	161636	1.71152	3.291
	41 Coumaphos	29.426	29.428	(1.026)	144923	1.63424	3.143
M	42 Total Demeton				173167	1.56836	3.016
M	43 Merphos				205390	1.36796	2.631

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 017F1701.D
Lab Smp Id: LLG321AG
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 05-OCT-2009
Calibration Time: 17:20
Client Smp ID: M-89BMSD
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	131178	65589	262356	314705	139.91
38 TOCP	113486	56743	226972	221305	95.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.14	15.64	16.64	16.14	-0.01
38 TOCP	28.68	28.18	29.18	28.68	-0.01

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

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-SEP-2009 00:00 Client SDG: D9I2501
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLG321AG Client Smp ID: M-89BMSD
Level: LOW Operator: TLW
Data Type: GC DATA SampleType: MSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

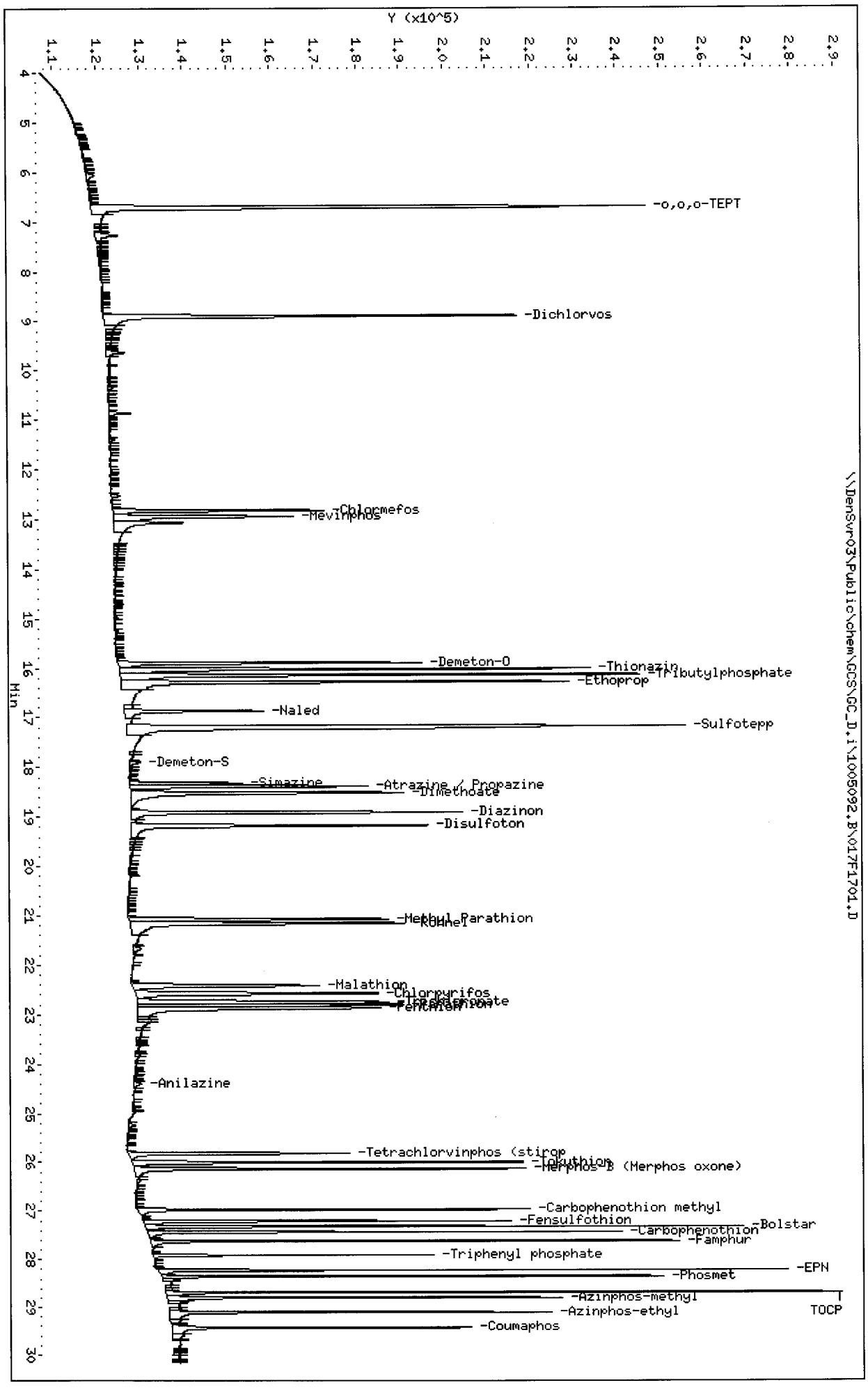
		SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	3.846	3.208	83.42	36-119
	2	Dichlorvos	3.846	3.027	78.71	50-120
$	3	Chlormefos	1.923	1.376	71.58	48-114
	4	Mevinphos	3.846	2.221	57.74	35-108
	5	Demeton-O	2.692	2.857	106.13	36-119
	6	Thionazin	3.846	3.191	82.98	65-116
	8	Ethoprop	3.846	2.828	73.54	65-108
	9	Naled	3.846	3.176	82.58	36-119
	10	Sulfotepp	3.846	4.476	116.37*	69-103
	11	Phorate	3.846	0.0000	*	62-104
	12	Demeton-S	1.154	0.1586	13.75*	36-119
	13	Simazine	3.846	4.272	111.07*	47-109
	14	Atrazine / Propazi	7.692	5.576	72.49	36-119
	15	Dimethoate	3.846	2.704	70.30	28-115
	16	Diazinon	3.846	2.671	69.44	36-119
	17	Disulfoton	3.846	2.718	70.68	61-103
	18	Methyl Parathion	3.846	3.155	82.03	68-119
	19	Ronnel	3.846	3.337	86.77	62-115
	20	Malathion	3.846	2.870	74.62	67-115
	21	Chlorpyrifos	3.846	2.944	76.55	66-101
	22	Trichloronate	3.846	2.579	67.06	36-119
	23	Parathion	3.846	3.263	84.85	36-119
	24	Fenthion	3.846	2.859	74.34	36-119
	26	Anilazine	3.846	1.685	43.81*	47-115
	27	Tetrachlorvinphos	3.846	2.954	76.82	36-119
	28	Tokuthion	3.846	2.952	76.76	36-119
	30	Carbophenothion me	3.846	3.049	79.27	36-119
	31	Fensulfothion	3.846	3.222	83.78	61-115
	32	Bolstar	3.846	3.288	85.48	36-119
	33	Carbophenothion	3.846	3.098	80.56	36-119
	34	Famphur	3.846	3.305	85.93	36-119
$	35	Triphenyl phosphat	1.923	1.796	93.38	36-119
	36	EPN	3.846	3.277	85.20	36-119
	37	Phosmet	3.846	3.322	86.37	36-119
	39	Azinphos-methyl	3.846	3.252	84.54	55-115
	40	Azinphos-ethyl	3.846	3.291	85.58	36-119
	41	Coumaphos	3.846	3.143	81.71	62-115
M	42	Total Demeton	3.846	3.016	78.42	47-115
M	43	Merphos	3.846	2.631	68.40	36-119

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen25-SEP-2009 00:00 Client SDG: D9I2501
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LLG321AG Client Smp ID: M-89BMSD
Level: LOW Operator: TLW
Data Type: GC DATA SampleType: MSD
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\1005092.B\8141A-2.m
Misc Info: IS GSV1076-09

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	1.876	1.376	71.58	48-114
$ 35 Triphenyl phosphat	1.876	1.796	93.38	50-150


Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Chlorpyrifos
-Mevinphos
-Demeton-O
-Thionazin
-Tributylphosphate
-Ethoprop
-Naled
-Sulfotepp
-Demeton-S
-Simazine
-Atrazine / Propazine
-Dimethoate
-Diazinon
-Disulfoton
-Methyl Parathion
-Malathion
-Chlorpyrifos
-Anilazine
-Tetrachlorvinphos (stirop
-Merphos-B (Merphos oxone)
-Carbophenothion methyl
-Fensulfothion
-Bolstar
-Carbophenothion
-Famphur
-Triphenyl phosphate
-EPN
-Phosmet
-Azinphos-methyl
-Azinphos-ethyl
TOCP
-Coumaphos
\\DenSvr03\Public\chem\GCS\GC_D,i\1005092.B\017F1701.D
Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\1005092.B\017F1701.D
Date : 06-OCT-2009 01:49
Client ID: M-89BMSD
Sample Info: LLG321AG,174-1D
Column phase: RTx-OPPest
Instrument: GC_D,i
Operator: TLW
Column diameter: 0.32
Page 6

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 614
8310 8330 Other HPLC_____

601 602 8021 BTEX
TPH/GRO Other Volatile GC_____

Calibration Date: 092909
Instrument ID: D

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 or not detected
4. Is linearity acceptable, 8000 Series: linear least-squares regression with r ≥ 0.990, (DOD projects require r ≥ 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%?		✓		✓	Primary Include %R Mevinphos -30.8%, Phorate -18.5%, Anilazine -32.6%, Carbophenothion-methyl -38.0% Secondary Include %R Mevinphos -21.7%, Anilazine -42.1%, Carbophenothion-methyl -36.6%

1st Level Reviewer: Debra L. Williams Date: 9/30/09
2nd Level Reviewer: JG Date: 9/30/09

Sequence Table (Front Injector):

Quantification Part:

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	Vial 1	PRIMER				
2	Vial 2	HEXANE				
3	Vial 3	8141 L7 GSV1077				
4	Vial 4	8141 L6 GSV1078				
5	Vial 5	8141 L5 GSV1079				
6	Vial 6	8141 L4 GSV1080				
7	Vial 7	8141 L3 GSV1081				
8	Vial 8	8141 L2 GSV1082				
9	Vial 9	8141 L1 GSV1083				
10	Vial 10	8141 SS GSV~~1084~~ 1107				
11	Vial 11	LKXKM1AA,MB				
12	Vial 12	LKXKM1AC,LCS				
13	Vial 13	LKXKM1AD,LCSD				
14	Vial 14	LKVW31A1,125-1				
15	Vial 15	LLF2T1AA,MB				
16	Vial 16	LLF2T1AC,LCS				
17	Vial 17	LK1TV1AC,309-1				
18	Vial 18	LK1TV1AE,309-1S				
19	Vial 19	LK1TV1AF,309-1D				
20	Vial 20	LK1T41AC,309-2				
21	Vial 21	LLF2R1AA,MB				
22	Vial 22	LLF2R1AC,LCS				
23	Vial 23	LK1TV1AD,309-1				
24	Vial 24	LK1TV1AJ,309-1S				
25	Vial 25	LK1TV1AK,309-1D				
26	Vial 26	LK1T41AD,309-2				
27	Vial 27	8141 CCV GSV1085				
28	Vial 28	LK48L1AA,MB				
29	Vial 29	LK48L1AC,LCS				
30	Vial 30	LKV851AA,173-1				
31	Vial 31	LKV9A1AA,173-2				
32	Vial 32	LKV9C1AA,173-3				
33	Vial 33	LK1V21AA,312-1				
34	Vial 34	LK1WH1AA,312-2				
35	Vial 35	LK1WL1AA,312-3				
36	Vial 36	8141 CCV GSV1085				
37	Vial 37	LK32J1AA,225-1				
38	Vial 38	LK32M1AA,225-2				
39	Vial 39	LK32M1AD,225-2S				
40	Vial 40	LK32M1AE,225-2D				
41	Vial 41	LK32W1AA,225-3				
42	Vial 42	8141 CCV GSV1085				
43	Vial 43	8141 L1 GSV1083				
44	Vial 44	LLK3J1AA,MB				
45	Vial 45	LLK3J1AC,LCS				
46	Vial 46	LK51E1AA,182-1				
47	Vial 47	LK51G1AA,182-2				
48	Vial 48	LK51G1AD,182-2S				
49	Vial 49	LK51G1AE,182-2D				
50	Vial 50	LK51H1AA,182-3				
51	Vial 51	LK9DD1AA,250-1				
52	Vial 52	LK9DE1AA,250-2				
53	Vial 53	LK9DM1AA,251-1				
54	Vial 54	8141 CCV GSV1085				
55	Vial 55	LK9DR1AA,251-2				
56	Vial 56	LK9DW1AA,251-3				
57	Vial 57	LK9D21AA,251-4				
58	Vial 58	LLEX71AA,243-1				
59	Vial 59	LLEX91AA,243-2				

925984

926577

926576

926269

927024

EM\2\SEQUENCE\D092909.S

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
60	Vial 60	LLE0A1AA,243-3				
61	Vial 61	LLE0D1AA,243-4				
62	Vial 62	LLH341AA,285-1				
63	Vial 63	LLH351AA,285-2				
64	Vial 64	8141 CCV GSV1085				
65	Vial 65	8141 L1 GSV1083				

Sequence Table (Back Injector):

No entries - empty table!

Report Date : 30-Sep-2009 08:31

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\005F0501.D
Level 6: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.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	1.63582 / 1.33471	1.46357	1.69904	1.49231	1.55334	1.44588	AVRG		1.51781		8.08371
2 Dichlorvos	1.09804 / 1.09964	1.00105	1.14275	1.03578	1.13071	1.11714	AVRG		1.08930		4.76749
3 Mevinphos	5844 / 819859	34212	104479	248213	402659	602352	WLINR	0.08261	0.53929		0.99057
5 Thionazin	26137 / 1528441	125634	280712	563076	833121	1175630	WLINR	0.04498	1.14087		0.99227

*All weighted linear $1/x^2$

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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	m1	m2	%RSD or R^2
6 Demeton-O	8888 / 434270	43142	84853	165026	243630	345285	WLINR	0.00318	0.96138		0.99165
7 Ethoprop	39547 / 1475254	126916	278033	553642	815624	1147081	WLINR	0.01618	1.07726		0.99457
8 Naled	5310 / 571005	29826	78159	178502	292094	423022	WLINR	0.07277	0.38445		0.99629
10 Sulfotepp	1.53870 / 1.25989	1.45506	1.61167	1.41213	1.42888	1.35179	AVRG		1.43687		8.06106
11 Phorate	65747 / 1353850	152671	291306	533826	765652	1060353	WLINR	-0.07478	0.92708		0.99400
12 Dimethoate	+++++ / 1575516	80163	226488	510687	808318	1193294	WLINR	0.10278	1.12223		0.99768
13 Demeton-S	38231 / 864178	82067	162056	321884	469949	664552	WLINR	-0.02988	0.86412		0.99734

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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 Simazine	+++++	0.37114	0.38516	0.32753	0.33986	0.32914					
	0.30906						AVRG		0.34365		8.39328
15 Atrazine	+++++	0.42071	0.44480	0.40125	0.42142	0.42626					
	0.41891						AVRG		0.42222		3.31561
16 propazine	0.47409	0.45855	0.44433	0.40832	0.42584	0.43090					
	0.41719						AVRG		0.43703		5.34210
17 Disulfoton	20950	82596	206154	430185	637297	902155					
	1174534						WLINR	0.05288	1.26562		0.99670
18 Diazinon	1.88382	1.82569	1.81443	1.58003	1.61382	1.56949					
	1.40473						AVRG		1.67029		10.44280
19 Methyl Parathion	25143	93936	198723	413467	624051	900226					
	1183337						WLINR	0.04024	1.23862		0.99868
20 Ronnel	30043	92833	207764	431001	655015	986468					
	1357486						WLINR	0.03640	1.31799		0.99738

Table of Contents

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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	0.73980	0.86061	1.01096	0.96567	1.01070	0.99917						
	0.92478						AVRG		0.93024		10.76267	
22 Fenthion	25618	81008	197350	415453	617147	893955						
	1181597						WLINR	0.04167	1.22010		0.99680	
23 Parathion	+++++	64057	164552	364258	575984	833868						
	1129725						WLINR	0.09794	1.18191		0.99826	
24 Chlorpyrifos	+++++	2.09077	1.98130	1.64856	1.66053	1.68232						
	1.57114						AVRG		1.77243		11.87404	
25 Trichloronate	39953	111835	246154	514604	784208	1161418						
	1577851						WLINR	0.03585	1.57763		0.99851	
26 Anilazine	+++++	3022	9122	18930	30638	51752						
	72734						WLINR	0.13554	0.07134		0.98986	<- r=0.995
27 Merphos-A (Merphos)	+++++	2369	19841	99237	171288	390389						
	569663						QUAD	0.32491	2.46824	-0.69646	0.98447	<- NTC

Table of Contents

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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)	17165	56276	132732	293015	464319	712949					
	992586						QUAD	0.07115	1.11462	-0.05261	0.99826
29 Tokuthion	38426	102445	227163	463539	700700	1022545					
	1372371						WLINR	0.02104	1.36883		0.99735
30 Merphos-B (Merphos Oxone)	1.18673	1.20397	1.23721	1.04485	1.04018	0.82953					
	0.69514						AVRG		1.03395		19.75426
31 Carbophenothion-methyl	21792	68129	158754	337052	518631	756521					
	1019566						WLINR	0.04109	1.01816		0.99674
32 Fensulfothion	20933	74021	170156	382549	574661	828723					
	1083760						WLINR	0.04849	1.12420		0.99732
33 Bolstar / Famphur	61134	173165	392428	780681	1162399	1654375					
	2168160						WLINR	0.04532	1.13463		0.99719
34 Carbophenothion	35249	94798	205286	394500	583033	846237					
	1114078						WLINR	0.01102	1.15013		0.99759

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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	21966	62864	146573	301111	461134	660771					
	881528						WLINR	0.03153	0.89522		0.99668
37 EPN	34992	94375	194560	394014	584842	822064					
	1075540						WLINR	0.00956	1.12405		0.99820
38 Azinphos-methyl	21324	58851	149459	317670	489484	687141					
	902800						WLINR	0.03852	0.93412		0.99284
40 Azinphos-ethyl	1.10513	1.01592	1.07941	0.96607	1.03338	1.00799					
	0.93458						AVRG		1.02035		5.84215
41 Coumaphos	22677	63688	149836	305626	472023	685194					
	924152						WLINR	0.03191	0.92139		0.99604
M 42 Total Demeton	47119	125209	246909	486910	713579	1009837					
	1298448						WLINR	-0.00080	1.37869		0.99748
M 43 Merphos	40761	109753	230843	474965	693990	992478					
	1281411						WLINR	0.01251	1.34499		0.99803

Table of Contents

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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	1.36448	1.36588	1.62655	1.40439	1.42366	1.38996					
	1.30084						AVRG		1.41082		7.28870
$ 35 Triphenyl phosphate	25377	71967	159284	326923	483386	690215					
	913461						WLINR	0.02309	0.94371		0.99807

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Last Edit : 30-Sep-2009 08:31 GC_D.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

Report Date: 30-Sep-2009 08:31

Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Start Cal Date: 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
29-SEP-2009 16:12	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
29-SEP-2009 15:35	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
29-SEP-2009 14:59	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
29-SEP-2009 14:22	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
29-SEP-2009 13:46	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
29-SEP-2009 13:09	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
29-SEP-2009 12:33	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\003F0301.D

Continuing Calibration

Ccal Level Mode: BY SAMPLE

29-SEP-2009 16:49	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\010F1001.D
30-SEP-2009 03:08	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\027F2701.D

Report Date : 30-Sep-2009 08:45

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\005F0501.D
Level 6: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\003F0301.D

SEE CALIBRATION HISTORY

Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	5.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
1 o,o,o-TEPT	1.70944	1.82270	1.91994	1.64505	1.63242	1.58596	1.40917	AVRG		1.67495		9.87961
2 Dichlorvos	1.36258	1.20538	1.26335	1.09465	1.15696	1.15368	1.11164	AVRG		1.19261		7.88032
4 Mevinphos	0.62406	0.71021	0.81978	0.72187	0.74254	0.72095	0.67540	AVRG		0.71640		8.38801
5 Demeton-O	0.67230	0.69342	0.78834	0.69657	0.72786	0.71462	0.66994	AVRG		0.70901		5.74420

*All weighted linear are 1/x2

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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	0.92691	1.04072	1.18135	1.04042	1.06307	1.02466	0.94497	AVRG		1.03173		8.11775
8 Ethoprop	42901	78683	117585	231940	339190	456780	585549	WLINR	-0.13757	1.09519		0.99708
9 Naled	7830	10270	27100	66048	104633	153119	201383	LINR	0.05226	0.38732		0.99488
10 Sulfotepp	28344	72236	147729	278947	391784	536170	695274	LINR	-0.11085	1.27752		0.99140
11 Phorate	27735	46032	94044	186434	267547	366311	457389	WLINR	-0.08395	0.88336		0.99207
12 Demeton-S	7597	22639	48449	105446	148807	218626	292846	WLINR	0.01285	0.82789		0.99843
13 Simazine	+++++	2982	12318	32796	50934	77526	107753	LINR	0.16673	0.21257		0.99947

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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
14 Atrazine / Propazine	11556	30702	66367	137441	207143	307271	421388	WLINR	0.02339	0.38510		0.99771
15 Dimethoate	7995	35698	90330	200683	296888	414494	547217	WLINR	0.05731	1.10992		0.99591
16 Diazinon	1.00729	1.00825	1.11853	0.99837	0.98565	0.94624	0.86867	AVRG		0.99043		7.58654
17 Disulfoton	1.02114	1.01465	1.12139	1.02680	0.98892	0.97618	0.88268	AVRG		1.00454		7.08869
18 Methyl Parathion	8492	29837	72062	145647	218781	308584	409367	WLINR	0.05013	1.06463		0.99750
19 Ronnel	1.21971	1.18723	1.32067	1.20364	1.28662	1.26207	1.25358	AVRG		1.24765		3.79673
20 Malathion	11736	31859	67405	132229	191342	267260	350626	WLINR	0.01703	0.91922		0.99849

Table of Contents

Report Date : 30-Sep-2009 08:45

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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	m1	m2	%RSD or R^2	
21 Chlorpyrifos	14294 / 473711	39270	83511	166943	244884	349915	WLINR	0.02320	1.18913		0.99867	
22 Trichloronate	14331 / 516721	40109	87602	175644	261483	378490	WLINR	0.02932	1.27691		0.99766	
23 Parathion	12594 / 432482	39453	83031	163192	239376	341103	WLINR	0.02868	1.16172		0.99848	
24 Fenthion	1.36034 / 1.31823	1.46554	1.53969	1.38567	1.43691	1.34213	AVRG		1.40693		5.55499	
25 Merphos-A (Merphos)	431 / 228536	+++++	14025	43136	73838	162051	LINR	0.37623	0.64894		0.94993	<- NTC
26 Anilazine	550 / 35306	2028	5957	11478	19918	26232	WLINR	0.07521	0.09338		0.99426	
27 Tetrachlorvinphos (stirophos)	8356 / 330886	22635	50985	110089	164289	242093	QUAD	0.05055	1.28376	-0.05352	0.99966	

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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 Tokuthion	1.08753	1.10074	1.24220	1.21557	1.27179	1.25077					
	1.24497						AVRG		1.20194		6.28609
29 Merphos-B (Merphos oxone)	1.22652	1.27415	1.21296	1.07677	1.02350	0.80912					
	0.76337						AVRG		1.05520		19.32026
30 Carbophenothion methyl	11420	31047	66286	127195	192332	269754					
	352947						WLINR	0.01951	0.91500		0.99803
31 Fensulfothion	9459	26023	59611	117044	171184	232294					
	294034						WLINR	0.02472	0.80787		0.99542
32 Bolstar	1.02843	1.03889	1.16718	1.07913	1.10055	1.02961					
	0.95013						AVRG		1.05627		6.44864
33 Carbophenothion	12072	32880	70538	133833	194237	270609					
	347667						WLINR	0.01527	0.93342		0.99725
34 Famphur	10333	30107	67281	137487	195770	273389					
	345194						WLINR	0.02930	0.94099		0.99711

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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										
36 EPN	0.96427	0.93325	1.08934	0.97332	0.99917	0.94072					
	0.88365						AVRG		0.96910		6.63355
37 Phosmet	0.86015	0.71717	0.90198	0.81421	0.89285	0.88885					
	0.76918						AVRG		0.83491		8.47100
39 Azinphos-methyl	18426	32051	63061	115656	166083	229899					
	301398						WLINR	-0.05641	0.75216		0.99445
40 Azinphos-ethyl	24380	39849	67533	126800	171561	238500					
	301170						WLINR	-0.10839	0.75753		0.99732
41 Coumaphos	20151	38014	63215	114650	160902	222813					
	284996						WLINR	-0.08247	0.72795		0.99879
M 42 Total Demeton	11226	32782	70048	148121	212648	309350					
	412260						WLINR	0.03190	1.04245		0.99868
M 43 Merphos	19148	49545	101511	202373	283468	401105					
	531931						WLINR	0.00943	1.37585		0.99907

Table of Contents

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.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	1.26703	1.14885	1.28773	1.09409	1.10504	1.07530					
	1.00692						AVRG		1.14071		9.00151
$ 35 Triphenyl phosphate	0.75137	0.76053	0.86594	0.79535	0.81821	0.78033					
	0.72786						AVRG		0.78566		5.87332

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Last Edit : 30-Sep-2009 08:45 GC_D.i

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

Report Date: 30-Sep-2009 08:45

Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Start Cal Date: 29-SEP-2009 12:33
End Cal Date : 29-SEP-2009 16:12
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
29-SEP-2009 16:12	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
29-SEP-2009 15:35	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
29-SEP-2009 14:59	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
29-SEP-2009 14:22	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
29-SEP-2009 13:46	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
29-SEP-2009 13:09	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
29-SEP-2009 12:33	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\003F0301.D

Continuing Calibration

Ccal Level Mode: BY SAMPLE

29-SEP-2009 16:49	8141A	
\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\010F1001.D		

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B/010F1001.D
Report Date: 09/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 29-SEP-2009 16:49
Lab Sample ID: 8141 SS GSV1084
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.0000	2.0277	1.4	15.0	
2	Dichlorvos	2.0000	1.8383	8.1	15.0	
3	Mevinphos	2.0000	1.3838	30.8	15.0	<-
4	Chlormefos	2.0000	1.9297	3.5	15.0	
5	Thionazin	2.0000	1.9172	4.1	15.0	
~~6~~	~~Demeton-O~~	~~0.6500~~	~~1.9167~~	~~194.9~~	~~15.0~~	~~<-~~
7	Ethoprop	2.0000	1.9138	4.3	15.0	
8	Naled	2.0000	1.8740	6.3	15.0	
9	Sulfotepp	2.0000	1.7418	12.9	15.0	
10	Phorate	2.0000	1.6291	18.5	15.0	<-
11	Dimethoate	2.0000	1.9574	2.1	15.0	
~~12~~	~~Demeton-S~~	~~1.3600~~	~~0.2011~~	~~85.2~~	~~15.0~~	~~<-~~
13	Simazine	2.0000	1.9396	3.0	15.0	
14	Atrazine	2.0000	1.8345	8.3	15.0	
15	propazine	2.0000	1.8174	9.1	15.0	
17	Disulfoton	2.0000	1.9030	4.9	15.0	
16	Diazinon	2.0000	1.7880	10.6	15.0	
18	Methyl Parathion	2.0000	1.8895	5.5	15.0	
19	Ronnel	2.0000	1.9096	4.5	15.0	
20	Malathion	2.0000	1.7586	12.1	15.0	
21	Fenthion	2.0000	1.7893	10.5	15.0	
22	Parathion	2.0000	1.7858	10.7	15.0	
23	Chlorpyrifos	2.0000	1.8763	6.2	15.0	
24	Trichloronate	2.0000	1.7018	14.9	15.0	
25	Anilazine	2.0000	1.3473	32.6	15.0	<-
148	Merphos-A (Merphos)	2.0000	1.0513	47.4	999.0	
26	Tetrachlorvinphos (Stirophos)	2.0000	1.7078	14.6	15.0	
28	Tokuthion	2.0000	1.8589	7.1	15.0	
149	Merphos-B (Merphos Oxone)	2.0000	2.1683	8.4	999.0	
29	Carbophenothion-methyl	2.0000	1.2396	38.0	15.0	<-
29	Fensulfothion	2.0000	1.7345	13.3	15.0	
30	Bolstar / Famphur	4.0000	3.9661	0.8	15.0	
32	Carbophenothion	2.0000	1.9274	3.6	15.0	
31	Triphenyl phosphate	2.0000	2.0501	2.5	15.0	
34	Phosmet	2.0000	2.0603	3.0	15.0	
32	EPN	2.0000	1.9835	0.8	15.0	
33	Azinphos-methyl	2.0000	1.7690	11.5	15.0	
38	Azinphos-ethyl	2.0000	1.8763	6.2	15.0	
36	Coumaphos	2.0000	1.8522	7.4	15.0	

data not available SDW 9/30/09

data not available SDW 9/30/09

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B/010F1001.D
Report Date: 09/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 29-SEP-2009 16:49
Lab Sample ID: 8141 SS GSV1084
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.0000	2.1178	5.9	15.0
27 Merphos	2.0000	1.8157	9.2	15.0

Average %D = 16.7

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B/010F1001.D
Report Date: 09/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 29-SEP-2009 16:49
Lab Sample ID: 8141 SS GSV1107
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.0000	2.0546	2.7	15.0	
2	Dichlorvos	2.0000	1.8179	9.1	15.0	
3	Chlormefos	2.0000	1.9854	0.7	15.0	
4	Mevinphos	2.0000	1.5661	21.7	15.0	<-
~~5~~	~~Demeton-O~~	~~0.6500~~	~~2.0374~~	~~213.5~~	~~15.0~~	~~<-~~ data not available ODW 9130/09
6	Thionazin	2.0000	2.0499	2.5	15.0	
7	Ethoprop	2.0000	1.8574	7.1	15.0	
10	Naled	2.0000	1.7111	14.4	15.0	
145	Sulfotepp	2.0000	1.7465	12.7	15.0	
8	Phorate	2.0000	1.8215	8.9	15.0	
~~15~~	~~Demeton-S~~	~~1.3600~~	~~0.0937~~	~~93.1~~	~~15.0~~	~~<-~~ data not available ODW 9130109
10	Simazine	2.0000	2.2211	11.1	15.0	
13	Atrazine / Propazine	4.0000	3.6090	9.8	15.0	
16	Dimethoate	2.0000	1.9112	4.4	15.0	
11	Diazinon	2.0000	1.7312	13.4	15.0	
14	Disulfoton	2.0000	1.8899	5.5	15.0	
23	Methyl Parathion	2.0000	1.8884	5.6	15.0	
17	Ronnel	2.0000	2.0103	0.5	15.0	
24	Malathion	2.0000	1.7017	14.9	15.0	
18	Chlorpyrifos	2.0000	1.8709	6.5	15.0	
20	Trichloronate	2.0000	1.7259	13.7	15.0	
26	Parathion	2.0000	1.9657	1.7	15.0	
19	Fenthion	2.0000	1.9078	4.6	15.0	
151	Merphos-A (Merphos)	2.0000	1.1905	40.5	999.0	
21	Anilazine	2.0000	1.1573	42.1	15.0	<-
27	Tetrachlorvinphos (stirophos)	2.0000	1.7038	14.8	15.0	
25	Tokuthion	2.0000	1.9155	4.2	15.0	
148	Merphos-B (Merphos oxone)	2.0000	2.0651	3.3	999.0	
28	Carbophenothion methyl	2.0000	1.2678	36.6	15.0	<-
30	Fensulfothion	2.0000	1.9488	2.6	15.0	
28	Bolstar	2.0000	2.0207	1.0	15.0	
30	Carbophenothion	2.0000	1.9799	1.0	15.0	
33	Famphur	2.0000	1.9782	1.1	15.0	
29	Triphenyl phosphate	2.0000	2.0893	4.5	15.0	
32	EPN	2.0000	2.0329	1.6	15.0	
34	Phosmet	2.0000	2.0660	3.3	15.0	
34	Azinphos-methyl	2.0000	1.7858	10.7	15.0	
35	Azinphos-ethyl	2.0000	1.9627	1.9	15.0	
36	Coumaphos	2.0000	1.9237	3.8	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B/010F1001.D
Report Date: 09/30/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 29-SEP-2009 16:49
Lab Sample ID: 8141 SS GSV1107
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.0000	2.1311	6.6	15.0
22 Merphos	2.0000	1.8093	9.5	15.0

Average %D = 16.3

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\003F0301.D
Lab Smp Id: 8141 L7 GSV1077 Client Smp ID: 8141 L7 GSV1077
Inj Date : 29-SEP-2009 12:33
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L7 GSV1077
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Meth Date : 30-Sep-2009 08:30 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 14:59 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	4.263	4.260	(0.313)	2029691	5.00000	4.397
	2 Dichlorvos	5.819	5.821	(0.427)	1672222	5.00000	5.047(A)
	3 Mevinphos	9.343	9.350	(0.685)	819859	5.00000	5.164(A)
$	4 Chlormefos	9.464	9.466	(0.694)	1978185	5.00000	4.610
	5 Thionazin	12.578	12.581	(0.922)	1528441	5.00000	4.495
	6 Demeton-O	12.833	12.837	(0.941)	434270	1.62500	1.492
	7 Ethoprop	13.145	13.150	(0.964)	1475254	5.00000	4.535
	8 Naled	13.427	13.431	(0.984)	571005	5.00000	5.029(A)
*	9 Tributylphosphate	13.639	13.646	(1.000)	608279	2.00000	
	10 Sulfotepp	14.103	14.105	(1.034)	1915905	5.00000	4.384
	11 Phorate	14.189	14.191	(1.040)	1353850	5.00000	4.652
	12 Dimethoate	14.356	14.366	(1.053)	1575516	5.00000	4.822
	13 Demeton-S	14.630	14.636	(1.073)	864178	3.40000	3.228
	14 Simazine	14.751	14.756	(1.082)	469988	5.00000	4.497
	15 Atrazine	14.968	14.971	(1.097)	637032	5.00000	4.961
	16 propazine	15.148	15.152	(1.111)	634425	5.00000	4.773
	17 Disulfoton	15.831	15.835	(0.585)	1174534	5.00000	4.638
	18 Diazinon	15.896	15.901	(0.588)	1438291	5.00000	4.205
	19 Methyl Parathion	16.797	16.802	(0.621)	1183337	5.00000	4.746
	20 Ronnel	17.417	17.422	(0.644)	1357486	5.00000	5.102(A)
	21 Malathion	18.091	18.094	(0.669)	946882	5.00000	4.971
	22 Fenthion	18.246	18.250	(0.674)	1181597	5.00000	4.812
	23 Parathion	18.353	18.360	(0.678)	1129725	5.00000	4.864
	24 Chlorpyrifos	18.411	18.416	(0.681)	1608684	5.00000	4.432
	25 Trichloronate	18.915	18.921	(0.699)	1577851	5.00000	4.956
	26 Anilazine	19.317	19.331	(0.714)	72734	5.00000	5.249(AM)
	27 Merphos-A (Merphos)	19.760	19.763	(0.730)	569663	5.00000	4.821
	28 Tetrachlorvinphos (Stirophos)	20.474	20.483	(0.757)	992586	5.00000	4.927
	29 Tokuthion	21.231	21.237	(0.785)	1372371	5.00000	4.938
	30 Merphos-B (Merphos Oxone)	21.481	21.486	(0.794)	711748	5.00000	3.362
	31 Carbophenothion-methyl	22.210	22.219	(0.821)	1019566	5.00000	4.972
	32 Fensulfothion	22.385	22.401	(0.827)	1083760	5.00000	4.805
	33 Bolstar / Famphur	23.571	23.575	(0.871)	2168160	10.0000	9.422

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.891	23.899	(0.883)	1114078	5.00000	4.752
$	35 Triphenyl phosphate	25.220	25.226	(0.932)	913461	5.00000	4.773(A)
	36 Phosmet	25.737	25.748	(0.951)	881528	5.00000	4.872
	37 EPN	26.069	26.075	(0.964)	1075540	5.00000	4.692
	38 Azinphos-methyl	26.562	26.574	(0.982)	902800	5.00000	4.797
*	39 TOCP	27.055	27.058	(1.000)	409558	2.00000	
	40 Azinphos-ethyl	27.154	27.159	(1.004)	956909	5.00000	4.580
	41 Coumaphos	27.679	27.686	(1.023)	924152	5.00000	4.962
M	42 Total Demeton				1298448	5.00000	4.720
M	43 Merphos				1281411	5.00000	4.689

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

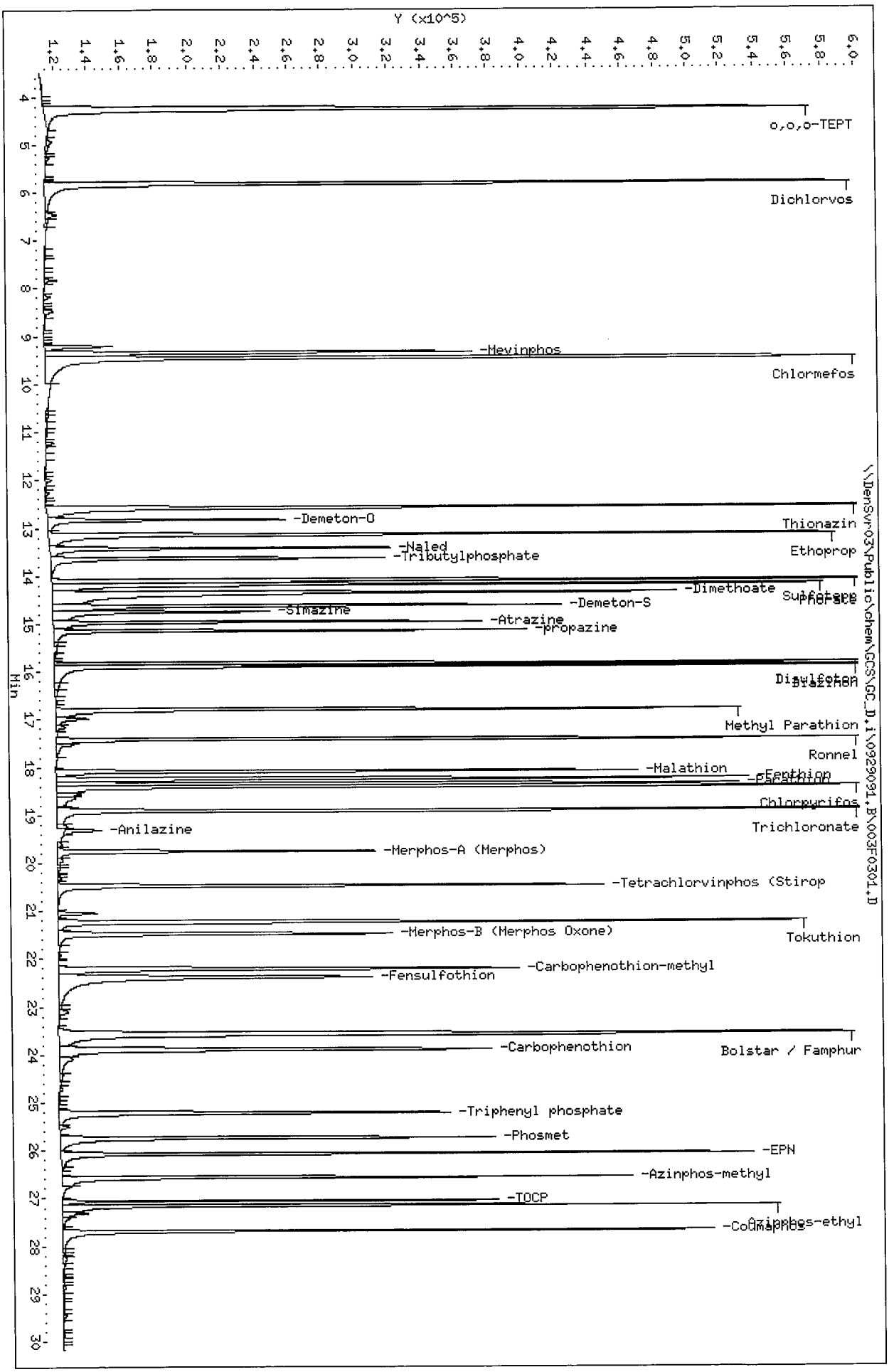
Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Lab Smp Id: 8141 L7 GSV1077
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 30-SEP-2009
Calibration Time: 03:08
Client Smp ID: 8141 L7 GSV1077
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	744009	372005	1488018	608279	-18.24
39 TOCP	484260	242130	968520	409558	-15.43

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.64	0.01
39 TOCP	27.06	26.56	27.56	27.06	-0.00

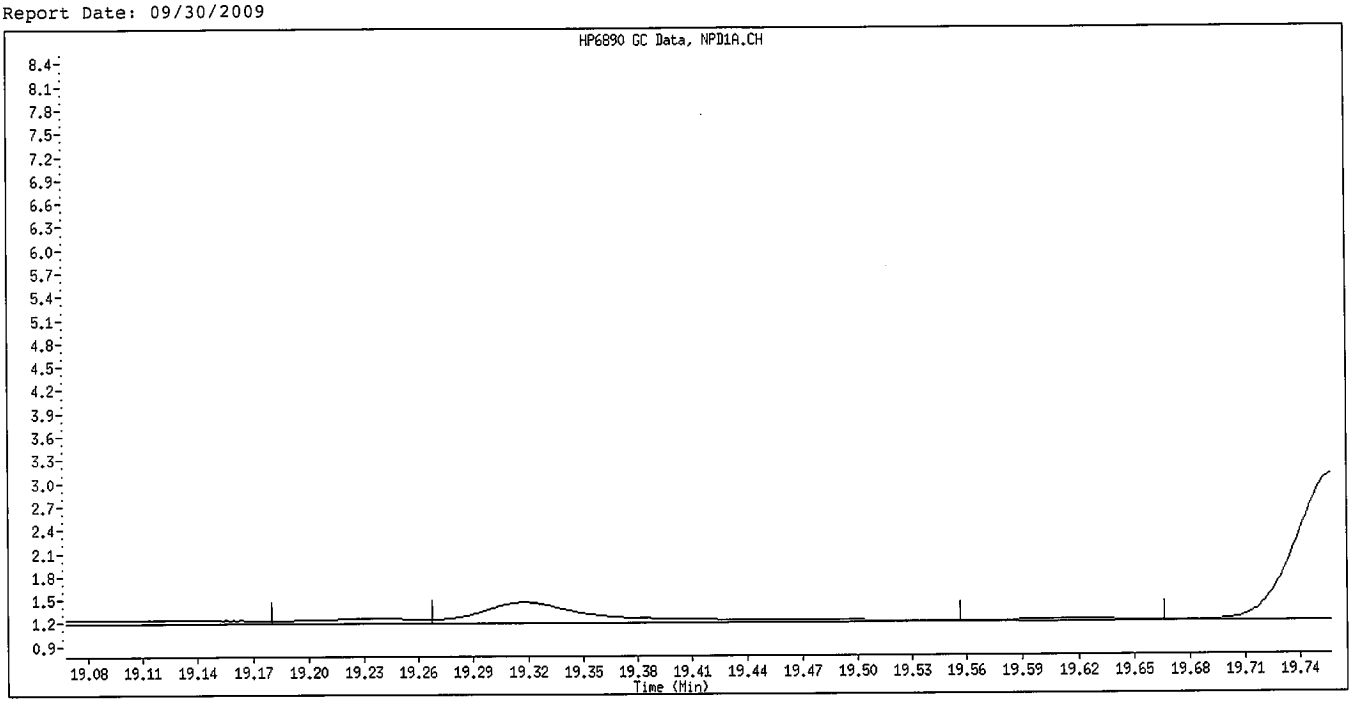
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



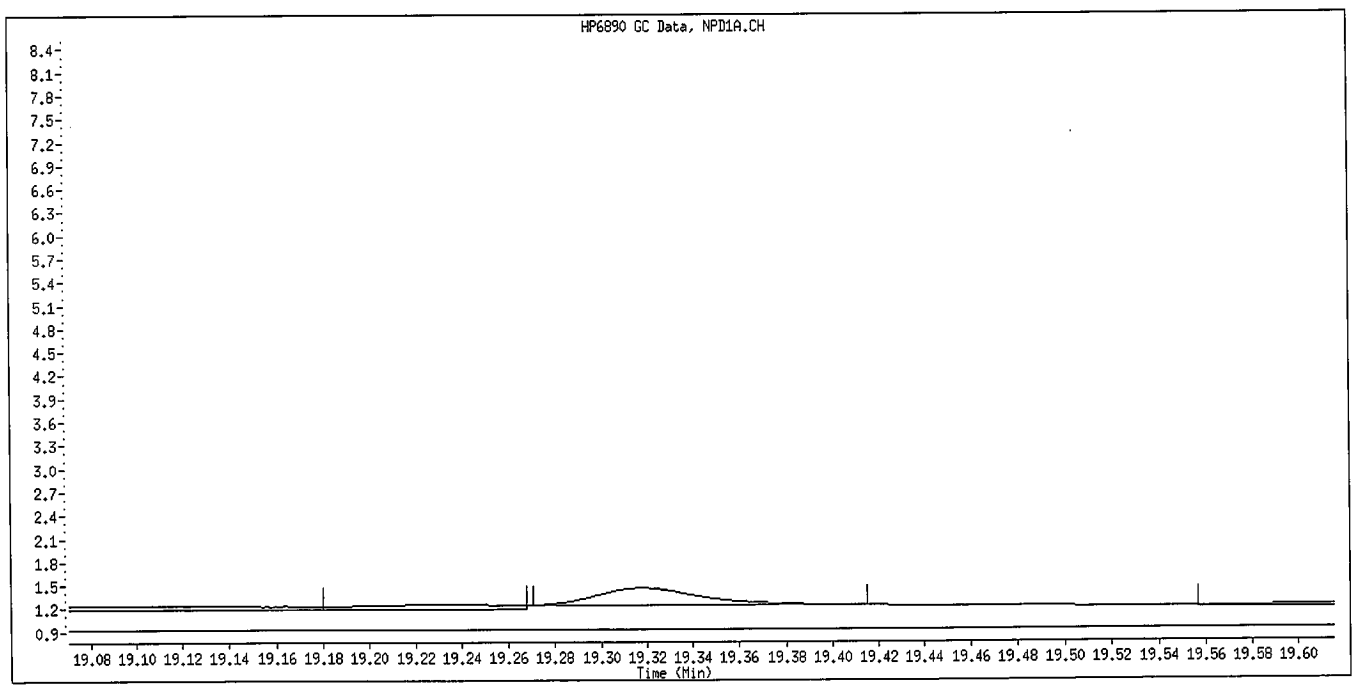
Data File: \\DenSvr03\Public\chem\GCS\GC_D_i\0929091_B\003F0301.D
Date : 29-SEP-2009 12:33
Client ID: 8141 L7 GSV1077
Sample Info: 8141 L7 GSV1077
Column phase: RTx-1MS

Instrument: GC_D_i
Operator: TLW
Column diameter: 0.32

Data File Name: 003F0301.D
Inj. Date and Time: 29-SEP-2009 12:33
Instrument ID: GC_D.i
Client ID: 8141 L7 GSV1077
Compound Name: Anilazine
CAS #:
Report Date: 09/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\004F0401.D
Lab Smp Id: 8141 L6 GSV1078 Client Smp ID: 8141 L6 GSV1078
Inj Date : 29-SEP-2009 13:09
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L6 GSV1078
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Meth Date : 30-Sep-2009 08:30 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 12:33 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	4.265	4.260	(0.313)	1595520	4.00000	3.810
	2 Dichlorvos	5.821	5.821	(0.427)	1232758	4.00000	4.102
	3 Mevinphos	9.346	9.350	(0.685)	602352	4.00000	4.214
$	4 Chlormefos	9.465	9.466	(0.694)	1533805	4.00000	3.941
	5 Thionazin	12.579	12.581	(0.922)	1175630	4.00000	3.825
	6 Demeton-O	12.835	12.837	(0.941)	345285	1.30000	1.308
	7 Ethoprop	13.146	13.150	(0.964)	1147081	4.00000	3.892
	8 Naled	13.428	13.431	(0.984)	423022	4.00000	4.134
*	9 Tributylphosphate	13.641	13.646	(1.000)	551746	2.00000	
	10 Sulfotepp	14.103	14.105	(1.034)	1491687	4.00000	3.763
	11 Phorate	14.188	14.191	(1.040)	1060353	4.00000	3.996
	12 Dimethoate	14.361	14.366	(1.053)	1193294	4.00000	4.060
	13 Demeton-S	14.631	14.636	(1.073)	664552	2.72000	2.728
	14 Simazine	14.751	14.756	(1.081)	363208	4.00000	3.831
	15 Atrazine	14.967	14.971	(1.097)	470380	4.00000	4.038
	16 propazine	15.148	15.152	(1.111)	475496	4.00000	3.944
	17 Disulfoton	15.832	15.835	(0.585)	902155	4.00000	4.034
	18 Diazinon	15.897	15.901	(0.588)	1139164	4.00000	3.759
	19 Methyl Parathion	16.798	16.802	(0.621)	900226	4.00000	4.086
	20 Ronnel	17.419	17.422	(0.644)	986468	4.00000	4.198
	21 Malathion	18.091	18.094	(0.669)	725218	4.00000	4.296
	22 Fenthion	18.245	18.250	(0.674)	893955	4.00000	4.121
	23 Parathion	18.356	18.360	(0.678)	833868	4.00000	4.084
	24 Chlorpyrifos	18.413	18.416	(0.681)	1221063	4.00000	3.797
	25 Trichloronate	18.918	18.921	(0.699)	1161418	4.00000	4.129
	26 Anilazine	19.318	19.331	(0.714)	51752	4.00000	4.269(M)
	27 Merphos-A (Merphos)	19.761	19.763	(0.730)	390389	4.00000	4.348
	28 Tetrachlorvinphos (Stirophos)	20.478	20.483	(0.757)	712949	4.00000	4.116
	29 Tokuthion	21.233	21.237	(0.785)	1022545	4.00000	4.159
	30 Merphos-B (Merphos Oxone)	21.486	21.486	(0.794)	602089	4.00000	3.209
	31 Carbophenothion-methyl	22.211	22.219	(0.821)	756521	4.00000	4.177
	32 Fensulfothion	22.391	22.401	(0.828)	828723	4.00000	4.160
	33 Bolstar / Famphur	23.571	23.575	(0.871)	1654375	8.00000	8.126

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.897	23.899	(0.883)	846237	4.00000	4.077
$	35 Triphenyl phosphate	25.221	25.226	(0.932)	690215	4.00000	4.077(A)
	36 Phosmet	25.744	25.748	(0.951)	660771	4.00000	4.131
	37 EPN	26.073	26.075	(0.964)	822064	4.00000	4.050
	38 Azinphos-methyl	26.566	26.574	(0.982)	687141	4.00000	4.131
*	39 TOCP	27.056	27.058	(1.000)	362910	2.00000	
	40 Azinphos-ethyl	27.156	27.159	(1.004)	731616	4.00000	3.952
	41 Coumaphos	27.684	27.686	(1.023)	685194	4.00000	4.162
M	42 Total Demeton				1009837	4.00000	4.036
M	43 Merphos				992478	4.00000	4.102

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

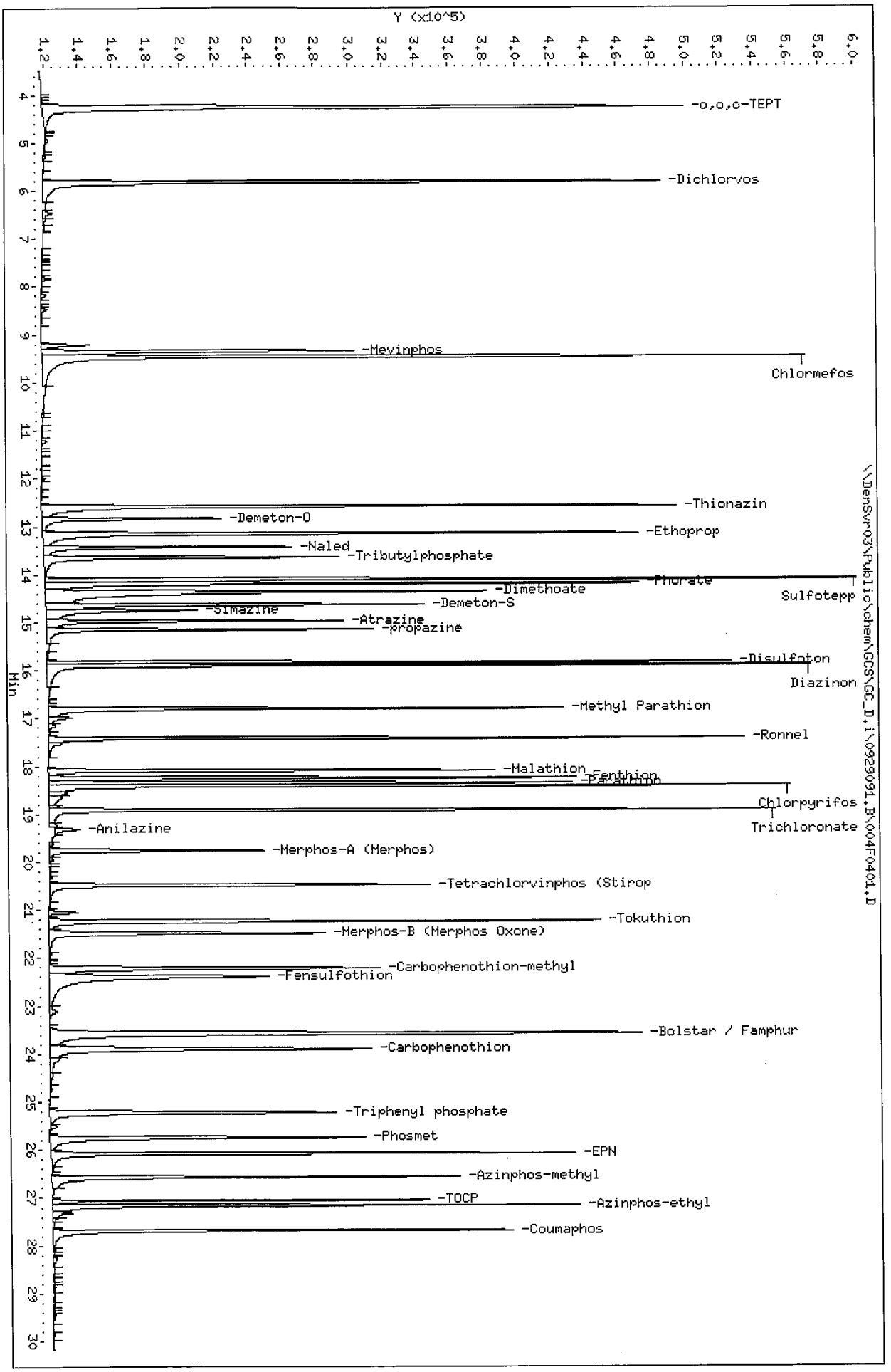
Instrument ID: GC_D.i
Lab File ID: 004F0401.D
Lab Smp Id: 8141 L6 GSV1078
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 30-SEP-2009
Calibration Time: 03:08
Client Smp ID: 8141 L6 GSV1078
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	744009	372005	1488018	551746	-25.84
39 TOCP	484260	242130	968520	362910	-25.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.64	0.02
39 TOCP	27.06	26.56	27.56	27.06	0.00

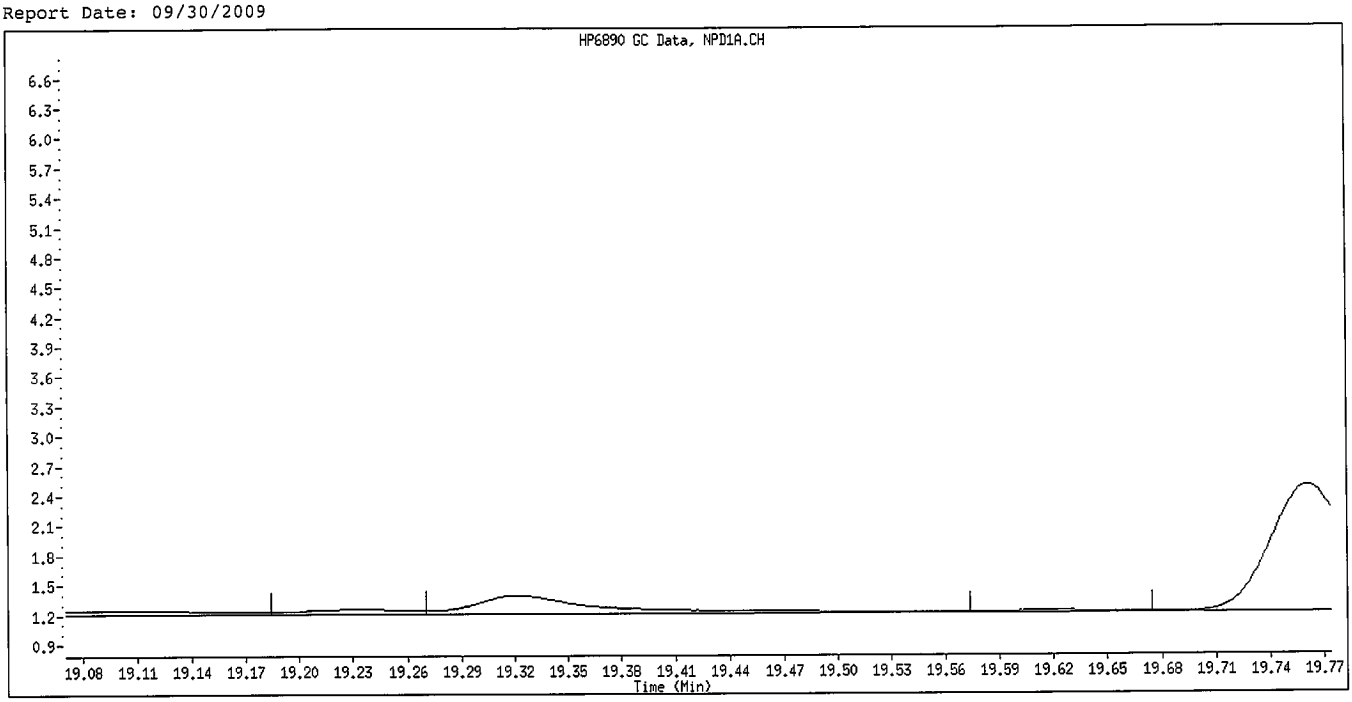
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



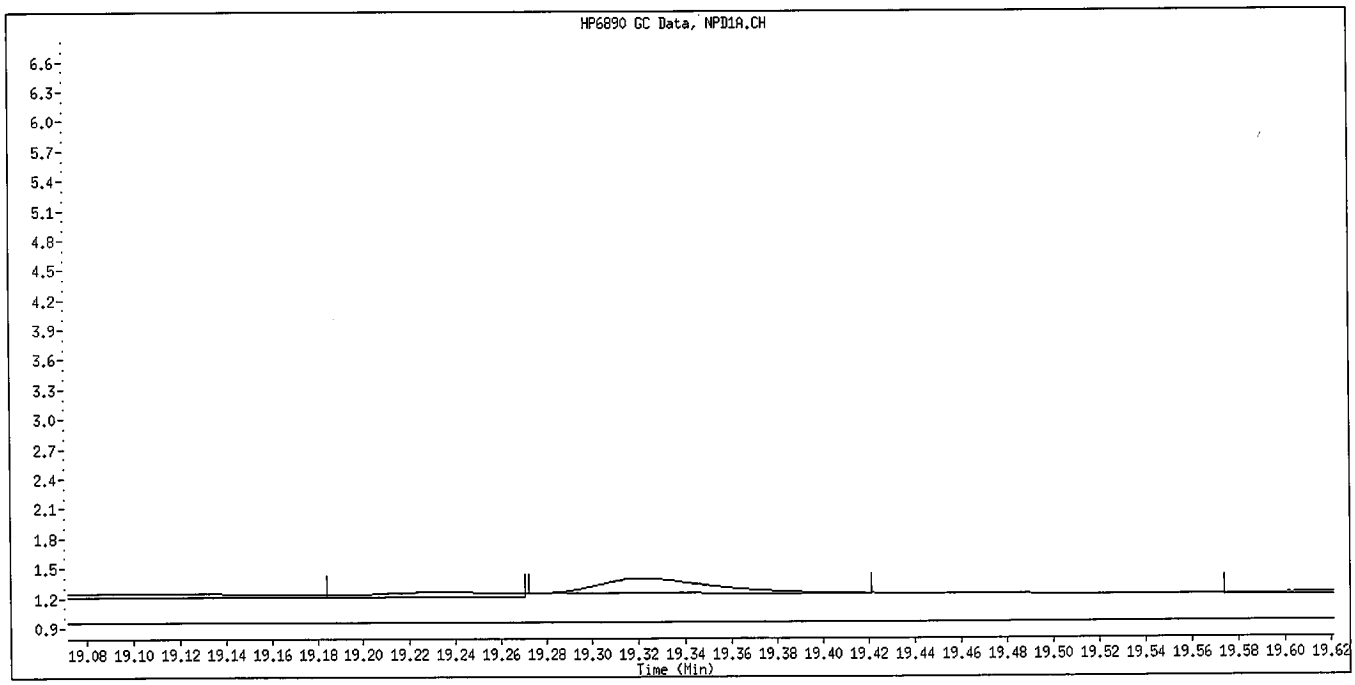
Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\004F0401.D
Date : 29-SEP-2009 13:09
Client ID: 8141 L6 GSV1078
Sample Info: 8141 L6 GSV1078
Column phase: RTx-1MS

Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

Data File Name: 004F0401.D
Inj. Date and Time: 29-SEP-2009 13:09
Instrument ID: GC_D.i
Client ID: 8141 L6 GSV1078
Compound Name: Anilazine
CAS #:
Report Date: 09/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\005F0501.D
Lab Smp Id: 8141 L5 GSV1079 Client Smp ID: 8141 L5 GSV1079
Inj Date : 29-SEP-2009 13:46
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L5 GSV1079
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Meth Date : 30-Sep-2009 08:30 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 13:09 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	4.259	4.260	(0.312)	1175499	3.00000	3.070
	2 Dichlorvos	5.820	5.821	(0.427)	855667	3.00000	3.114
	3 Mevinphos	9.349	9.350	(0.685)	402659	3.00000	3.125
$	4 Chlormefos	9.465	9.466	(0.694)	1077363	3.00000	3.027
	5 Thionazin	12.581	12.581	(0.922)	833121	3.00000	2.985
	6 Demeton-O	12.837	12.837	(0.941)	243630	0.97500	1.011
	7 Ethoprop	13.149	13.150	(0.964)	815624	3.00000	3.034
	8 Naled	13.431	13.431	(0.984)	292094	3.00000	3.157
*	9 Tributylphosphate	13.645	13.646	(1.000)	504503	2.00000	
	10 Sulfotepp	14.104	14.105	(1.034)	1081308	3.00000	2.983
	11 Phorate	14.191	14.191	(1.040)	765652	3.00000	3.124
	12 Dimethoate	14.366	14.366	(1.053)	808318	3.00000	3.061
	13 Demeton-S	14.636	14.636	(1.073)	469949	2.04000	2.096
	14 Simazine	14.755	14.756	(1.081)	257194	3.00000	2.967
	15 Atrazine	14.970	14.971	(1.097)	318911	3.00000	2.994
	16 propazine	15.152	15.152	(1.110)	322259	3.00000	2.923
	17 Disulfoton	15.834	15.835	(0.585)	637297	3.00000	3.112
	18 Diazinon	15.900	15.901	(0.588)	810958	3.00000	2.898
	19 Methyl Parathion	16.802	16.802	(0.621)	624051	3.00000	3.088
	20 Ronnel	17.422	17.422	(0.644)	655015	3.00000	3.040
	21 Malathion	18.093	18.094	(0.669)	507888	3.00000	3.259
	22 Fenthion	18.249	18.250	(0.674)	617147	3.00000	3.103
	23 Parathion	18.359	18.360	(0.679)	575984	3.00000	3.105
	24 Chlorpyrifos	18.415	18.416	(0.681)	834429	3.00000	2.810
	25 Trichloronate	18.920	18.921	(0.699)	784208	3.00000	3.039
	26 Anilazine	19.330	19.331	(0.714)	30638	3.00000	2.835(M)
	27 Merphos-A (Merphos)	19.763	19.763	(0.730)	171288	3.00000	2.810
	28 Tetrachlorvinphos (Stirophos)	20.483	20.483	(0.757)	464319	3.00000	3.030
	29 Tokuthion	21.237	21.237	(0.785)	700700	3.00000	3.098
	30 Merphos-B (Merphos Oxone)	21.485	21.486	(0.794)	522702	3.00000	3.018
	31 Carbophenothion-methyl	22.218	22.219	(0.821)	518631	3.00000	3.123
	32 Fensulfothion	22.401	22.401	(0.828)	574661	3.00000	3.149
	33 Bolstar / Famphur	23.574	23.575	(0.871)	1162399	6.00000	6.207

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34 Carbophenothion	23.898	23.899	(0.883)	583033	3.00000	3.048
$	35 Triphenyl phosphate	25.226	25.226	(0.932)	483386	3.00000	3.104(A)
	36 Phosmet	25.748	25.748	(0.952)	461134	3.00000	3.138
	37 EPN	26.074	26.075	(0.964)	584842	3.00000	3.125
	38 Azinphos-methyl	26.573	26.574	(0.982)	489484	3.00000	3.205
*	39 TOCP	27.058	27.058	(1.000)	335006	2.00000	
	40 Azinphos-ethyl	27.158	27.159	(1.004)	519281	3.00000	3.038
	41 Coumaphos	27.685	27.686	(1.023)	472023	3.00000	3.122
M	42 Total Demeton				713579	3.00000	3.107
M	43 Merphos				693990	3.00000	3.113

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

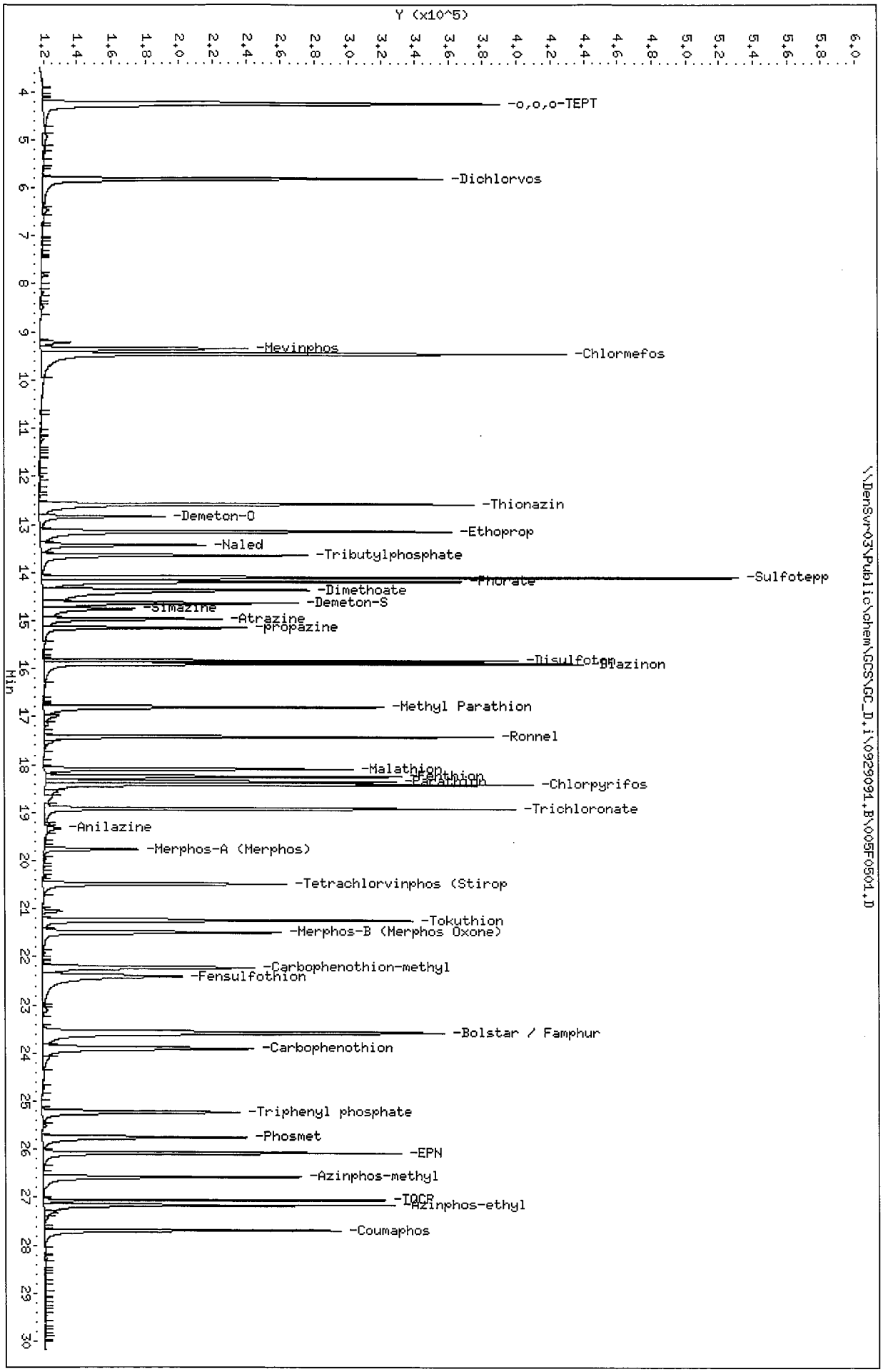
Instrument ID: GC_D.i
Lab File ID: 005F0501.D
Lab Smp Id: 8141 L5 GSV1079
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 30-SEP-2009
Calibration Time: 03:08
Client Smp ID: 8141 L5 GSV1079
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	744009	372005	1488018	504503	-32.19
39 TOCP	484260	242130	968520	335006	-30.82

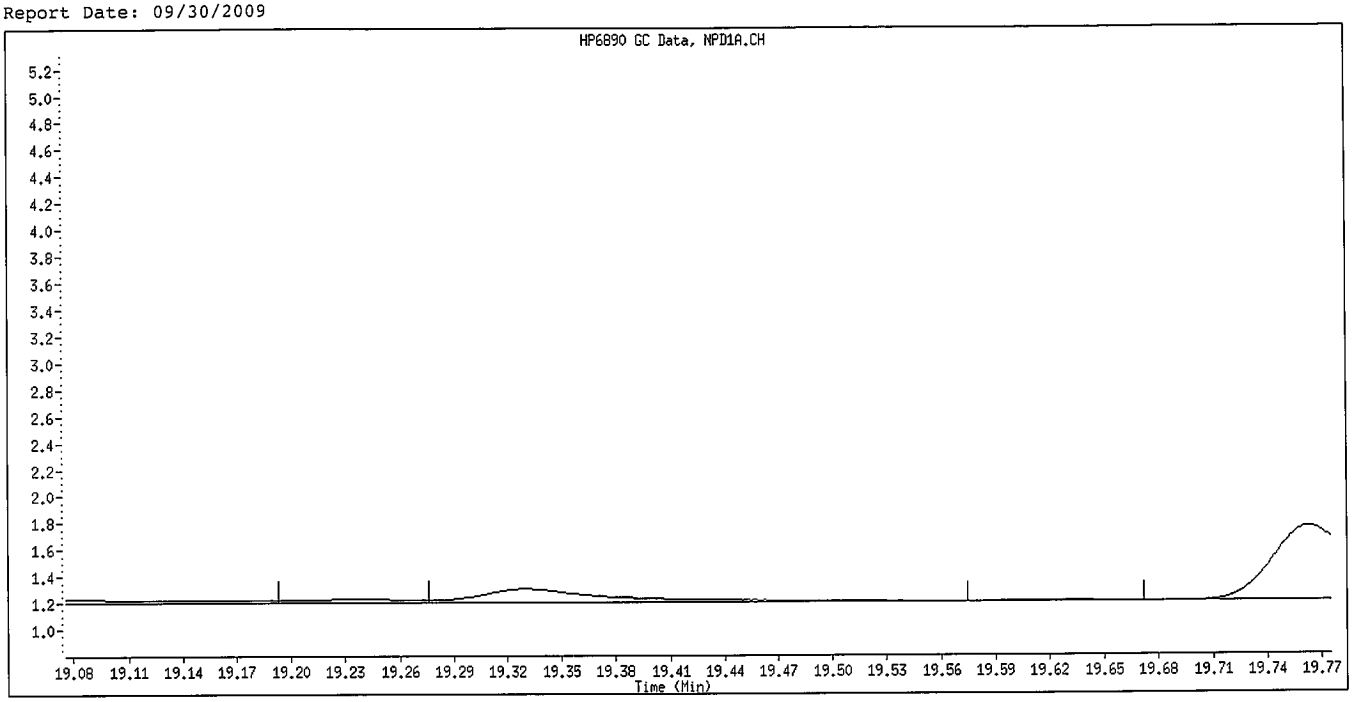
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.65	0.05
39 TOCP	27.06	26.56	27.56	27.06	0.01

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.

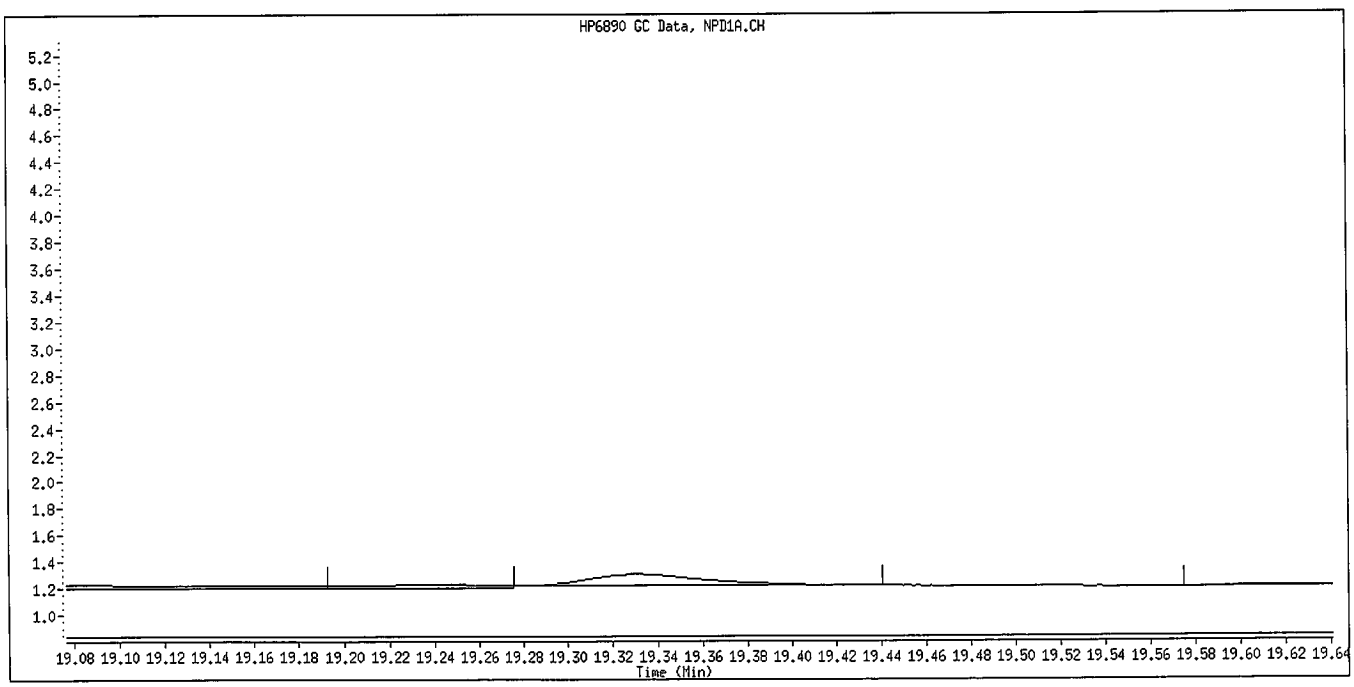


Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\005F0501.D
Date : 29-SEP-2009 13:46
Client ID: 8141 L5 GSV1079
Sample Info: 8141 L5 GSV1079
Column phase: RTx-1MS
\\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\005F0501.D
Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

Data File Name: 005F0501.D
Inj. Date and Time: 29-SEP-2009 13:46
Instrument ID: GC_D.i
Client ID: 8141 L5 GSV1079
Compound Name: Anilazine
CAS #:
Report Date: 09/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\006F0601.D
Lab Smp Id: 8141 L4 GSV1080 Client Smp ID: 8141 L4 GSV1080
Inj Date : 29-SEP-2009 14:22
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L4 GSV1080
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Meth Date : 30-Sep-2009 08:31 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 13:46 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	4.260	4.260	(0.312)	790763	2.00000	1.966
	2 Dichlorvos	5.821	5.821	(0.427)	548853	2.00000	1.902
	3 Mevinphos	9.352	9.350	(0.685)	248213	2.00000	1.902
$	4 Chlormefos	9.464	9.466	(0.694)	744173	2.00000	1.991
	5 Thionazin	12.581	12.581	(0.922)	563076	2.00000	1.953
	6 Demeton-O	12.837	12.837	(0.941)	165026	0.65000	0.6542
	7 Ethoprop	13.150	13.150	(0.964)	553642	2.00000	1.972
	8 Naled	13.432	13.431	(0.984)	178502	2.00000	1.898
*	9 Tributylphosphate	13.645	13.646	(1.000)	529892	2.00000	
	10 Sulfotepp	14.105	14.105	(1.034)	748275	2.00000	1.966
	11 Phorate	14.190	14.191	(1.040)	533826	2.00000	2.024
	12 Dimethoate	14.376	14.366	(1.054)	510687	2.00000	1.923
	13 Demeton-S	14.640	14.636	(1.073)	321884	1.36000	1.346
	14 Simazine	14.756	14.756	(1.081)	173554	2.00000	1.906
	15 Atrazine	14.970	14.971	(1.097)	212618	2.00000	1.901
	16 propazine	15.151	15.152	(1.110)	216365	2.00000	1.868
	17 Disulfoton	15.834	15.835	(0.585)	430185	2.00000	1.996
	18 Diazinon	15.900	15.901	(0.588)	568178	2.00000	1.892
	19 Methyl Parathion	16.803	16.802	(0.621)	413467	2.00000	1.937
	20 Ronnel	17.422	17.422	(0.644)	431001	2.00000	1.892
	21 Malathion	18.095	18.094	(0.669)	347255	2.00000	2.076
	22 Fenthion	18.248	18.250	(0.674)	415453	2.00000	1.977
	23 Parathion	18.360	18.360	(0.679)	364258	2.00000	1.910
	24 Chlorpyrifos	18.414	18.416	(0.681)	592819	2.00000	1.860
	25 Trichloronate	18.920	18.921	(0.699)	514604	2.00000	1.886
	26 Anilazine	19.339	19.331	(0.715)	18930	2.00000	1.747(M)
	27 Merphos-A (Merphos)	19.763	19.763	(0.730)	99237	2.00000	1.906
	28 Tetrachlorvinphos (Stirophos)	20.485	20.483	(0.757)	293015	2.00000	1.889
	29 Tokuthion	21.240	21.237	(0.785)	463539	2.00000	1.926
	30 Merphos-B (Merphos Oxone)	21.488	21.486	(0.794)	375728	2.00000	2.021
	31 Carbophenothion-methyl	22.220	22.219	(0.821)	337052	2.00000	1.923
	32 Fensulfothion	22.412	22.401	(0.828)	382549	2.00000	1.990
	33 Bolstar / Famphur	23.578	23.575	(0.871)	780681	4.00000	3.917

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.904	23.899	(0.883)	394500	2.00000	1.930
$	35 Triphenyl phosphate	25.228	25.226	(0.932)	326923	2.00000	1.973
	36 Phosmet	25.755	25.748	(0.952)	301111	2.00000	1.934
	37 EPN	26.077	26.075	(0.964)	394014	2.00000	1.969
	38 Azinphos-methyl	26.576	26.574	(0.982)	317670	2.00000	1.968
*	39 TOCP	27.058	27.058	(1.000)	359599	2.00000	
	40 Azinphos-ethyl	27.164	27.159	(1.004)	347398	2.00000	1.894
	41 Coumaphos	27.690	27.686	(1.023)	305626	2.00000	1.909
M	42 Total Demeton				486910	2.00000	2.000
M	43 Merphos				474965	2.00000	1.994

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

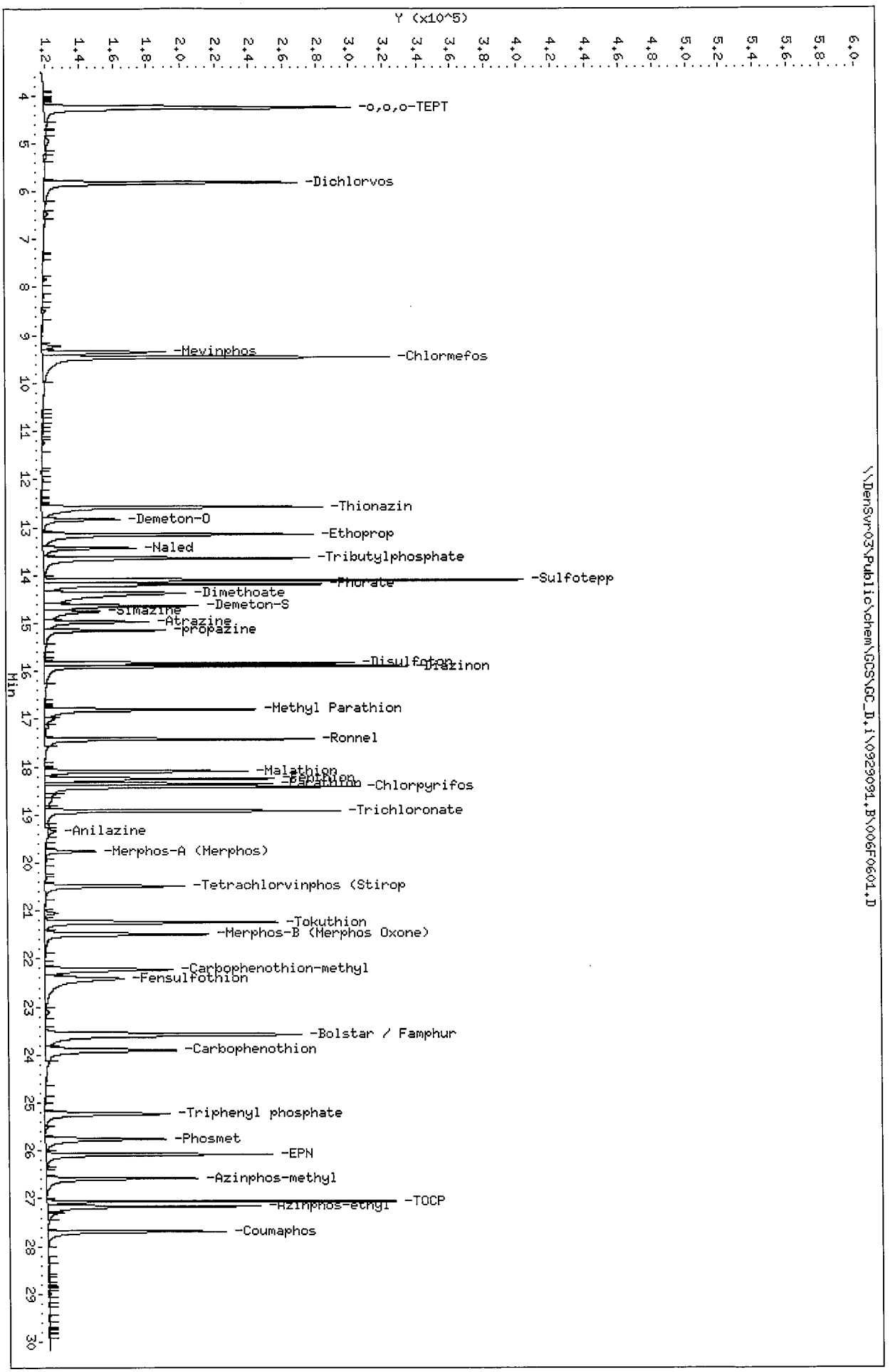
Instrument ID: GC_D.i
Lab File ID: 006F0601.D
Lab Smp Id: 8141 L4 GSV1080
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 30-SEP-2009
Calibration Time: 03:08
Client Smp ID: 8141 L4 GSV1080
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	744009	372005	1488018	529892	-28.78
39 TOCP	484260	242130	968520	359599	-25.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.65	0.05
39 TOCP	27.06	26.56	27.56	27.06	0.01

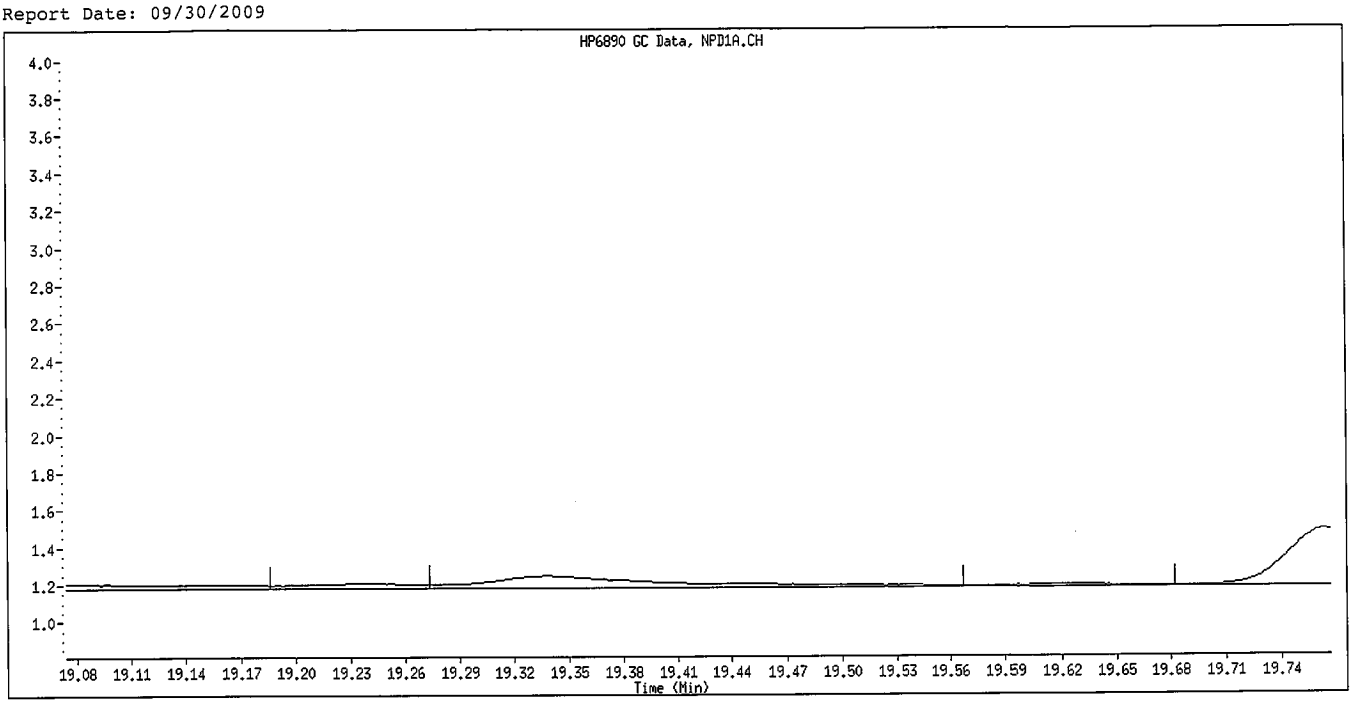
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



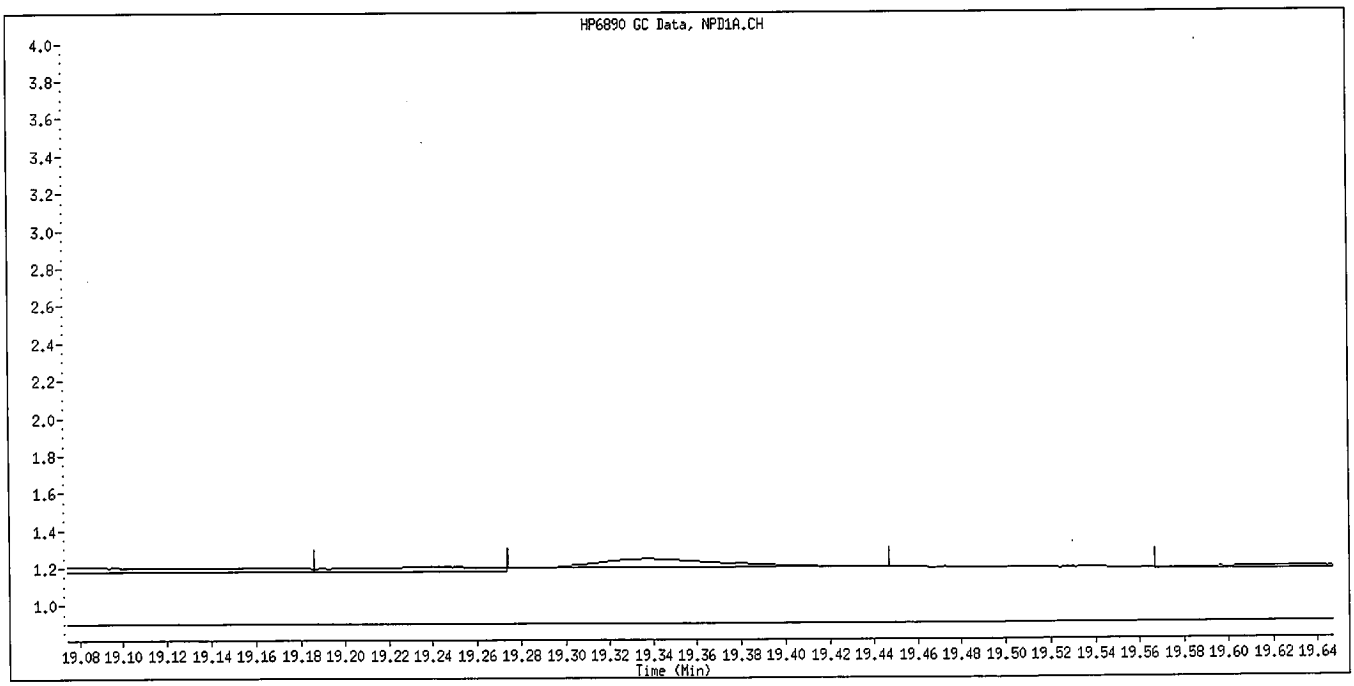
Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\092909I,B\006F0601,D
Date : 29-SEP-2009 14:22
Client ID: 8141 L4 GSV1080
Sample Info: 8141 L4 GSV1080
Column phase: RTx-1MS

Instrument: GC_D,i
Operator: TLM
Column diameter: 0.32

Data File Name: 006F0601.D
Inj. Date and Time: 29-SEP-2009 14:22
Instrument ID: GC_D.i
Client ID: 8141 L4 GSV1080
Compound Name: Anilazine
CAS #:
Report Date: 09/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\007F0701.D
Lab Smp Id: 8141 L3 GSV1081 Client Smp ID: 8141 L3 GSV1081
Inj Date : 29-SEP-2009 14:59
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L3 GSV1081
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Meth Date : 30-Sep-2009 08:31 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 14:22 Cal File: 006F0601.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	4.263	4.260	(0.312)	406277	1.00000	1.119
	2 Dichlorvos	5.826	5.821	(0.427)	273255	1.00000	1.049
	3 Mevinphos	9.361	9.350	(0.686)	104479	1.00000	0.9754
$	4 Chlormefos	9.465	9.466	(0.693)	388944	1.00000	1.153
	5 Thionazin	12.589	12.581	(0.922)	280712	1.00000	1.119
	6 Demeton-O	12.840	12.837	(0.940)	84853	0.32500	0.3755
	7 Ethoprop	13.158	13.150	(0.964)	278033	1.00000	1.112
	8 Naled	13.437	13.431	(0.984)	78159	1.00000	0.9957
*	9 Tributylphosphate	13.654	13.646	(1.000)	478243	2.00000	
	10 Sulfotepp	14.108	14.105	(1.033)	385386	1.00000	1.122
	11 Phorate	14.194	14.191	(1.040)	291306	1.00000	1.164
	12 Dimethoate	14.405	14.366	(1.055)	226488	1.00000	1.050
	13 Demeton-S	14.654	14.636	(1.073)	162056	0.68000	0.7245
	14 Simazine	14.775	14.756	(1.082)	92100	1.00000	1.121
	15 Atrazine	14.984	14.971	(1.097)	106361	1.00000	1.053
	16 propazine	15.161	15.152	(1.110)	106249	1.00000	1.017
	17 Disulfoton	15.842	15.835	(0.585)	206154	1.00000	1.061
	18 Diazinon	15.906	15.901	(0.588)	309445	1.00000	1.086
	19 Methyl Parathion	16.818	16.802	(0.621)	198723	1.00000	1.021
	20 Ronnel	17.431	17.422	(0.644)	207764	1.00000	0.9971
	21 Malathion	18.100	18.094	(0.669)	172416	1.00000	1.087
	22 Fenthion	18.261	18.250	(0.675)	197350	1.00000	1.032
	23 Parathion	18.374	18.360	(0.679)	164552	1.00000	1.012
	24 Chlorpyrifos	18.424	18.416	(0.681)	337904	1.00000	1.118
	25 Trichloronate	18.928	18.921	(0.699)	246154	1.00000	0.9866
	26 Anilazine	19.359	19.331	(0.715)	9122	1.00000	1.021(M)
	27 Merphos-A (Merphos)	19.769	19.763	(0.731)	19841	1.00000	0.9322(M)
	28 Tetrachlorvinphos (Stirophos)	20.499	20.483	(0.758)	132732	1.00000	0.9938
	29 Tokuthion	21.248	21.237	(0.785)	227163	1.00000	1.015
	30 Merphos-B (Merphos Oxone)	21.499	21.486	(0.794)	211002	1.00000	1.196
	31 Carbophenothion-methyl	22.239	22.219	(0.822)	158754	1.00000	0.9964
	32 Fensulfothion	22.445	22.401	(0.829)	170156	1.00000	0.9845
	33 Bolstar / Famphur	23.589	23.575	(0.872)	392428	2.00000	2.119

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.917	23.899	(0.884)	205286	1.00000	1.069
$	35 Triphenyl phosphate	25.240	25.226	(0.933)	159284	1.00000	1.036
	36 Phosmet	25.769	25.748	(0.952)	146573	1.00000	1.023
	37 EPN	26.083	26.075	(0.964)	194560	1.00000	1.034
	38 Azinphos-methyl	26.590	26.574	(0.983)	149459	1.00000	1.015
*	39 TOCP	27.061	27.058	(1.000)	341094	2.00000	
	40 Azinphos-ethyl	27.172	27.159	(1.004)	184090	1.00000	1.058
	41 Coumaphos	27.698	27.686	(1.024)	149836	1.00000	1.017
M	42 Total Demeton				246909	1.00000	1.100
M	43 Merphos				230843	1.00000	1.034

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

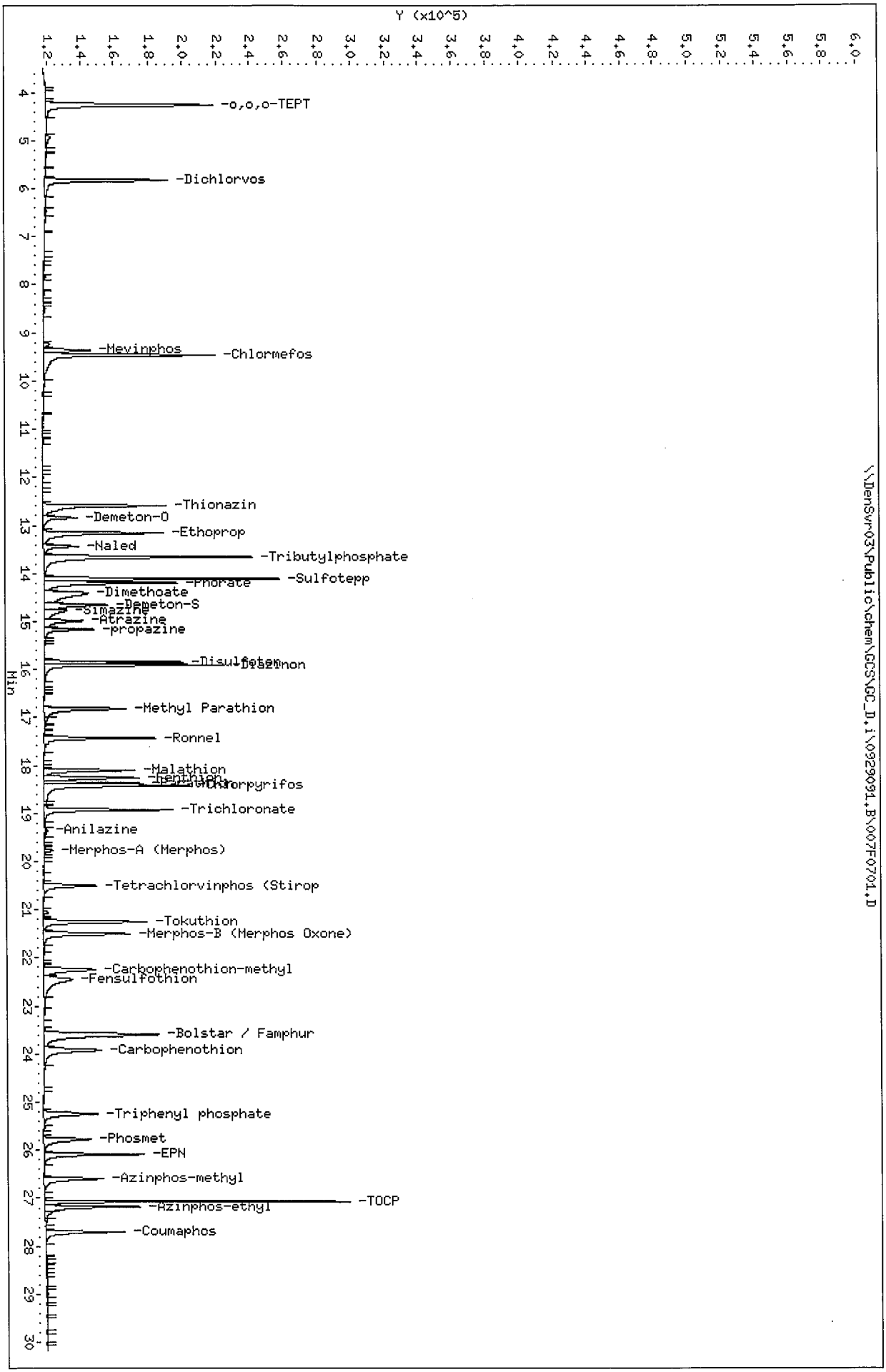
Instrument ID: GC_D.i
Lab File ID: 007F0701.D
Lab Smp Id: 8141 L3 GSV1081
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 30-SEP-2009
Calibration Time: 03:08
Client Smp ID: 8141 L3 GSV1081
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	744009	372005	1488018	478243	-35.72
39 TOCP	484260	242130	968520	341094	-29.56

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.65	0.12
39 TOCP	27.06	26.56	27.56	27.06	0.02

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.

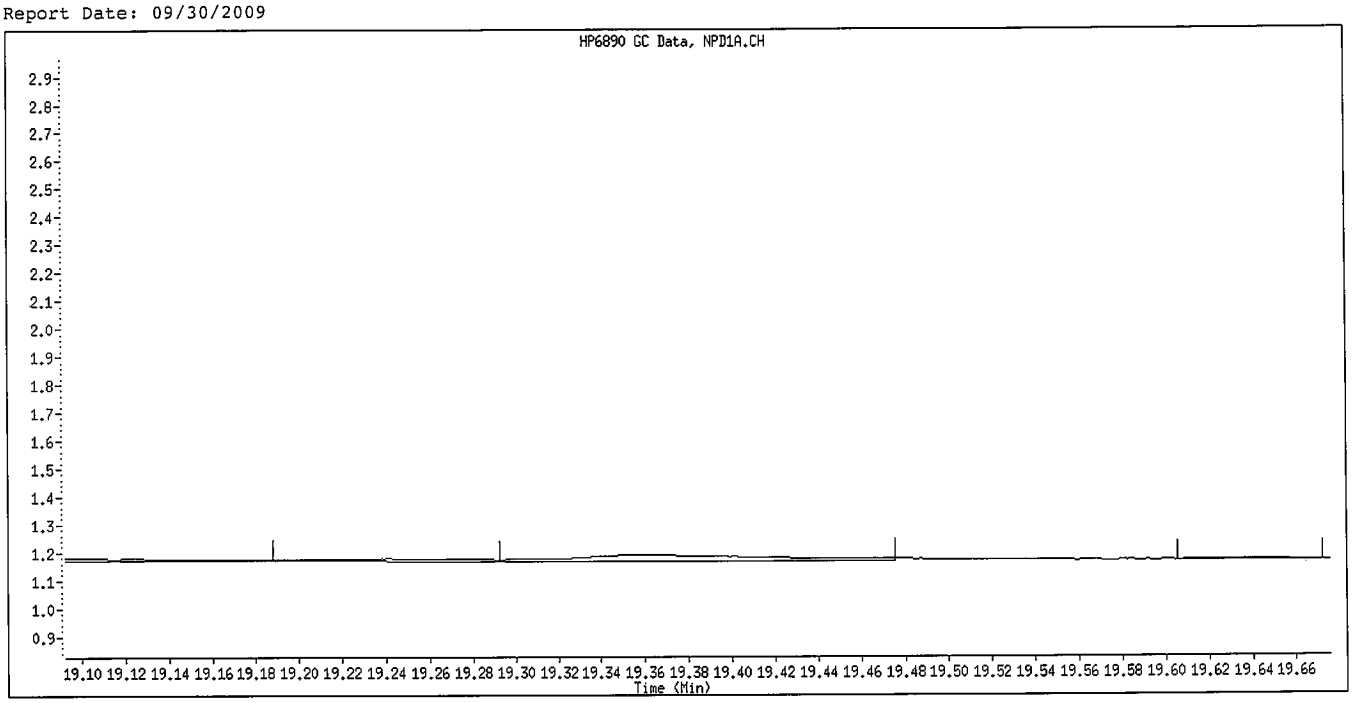


Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0929091,B\007F0701,D
Date : 29-SEP-2009 14:59
Client ID: 8141 L3 CSV1081
Sample Info: 8141 L3 CSV1081
Column phase: RTx-1MS

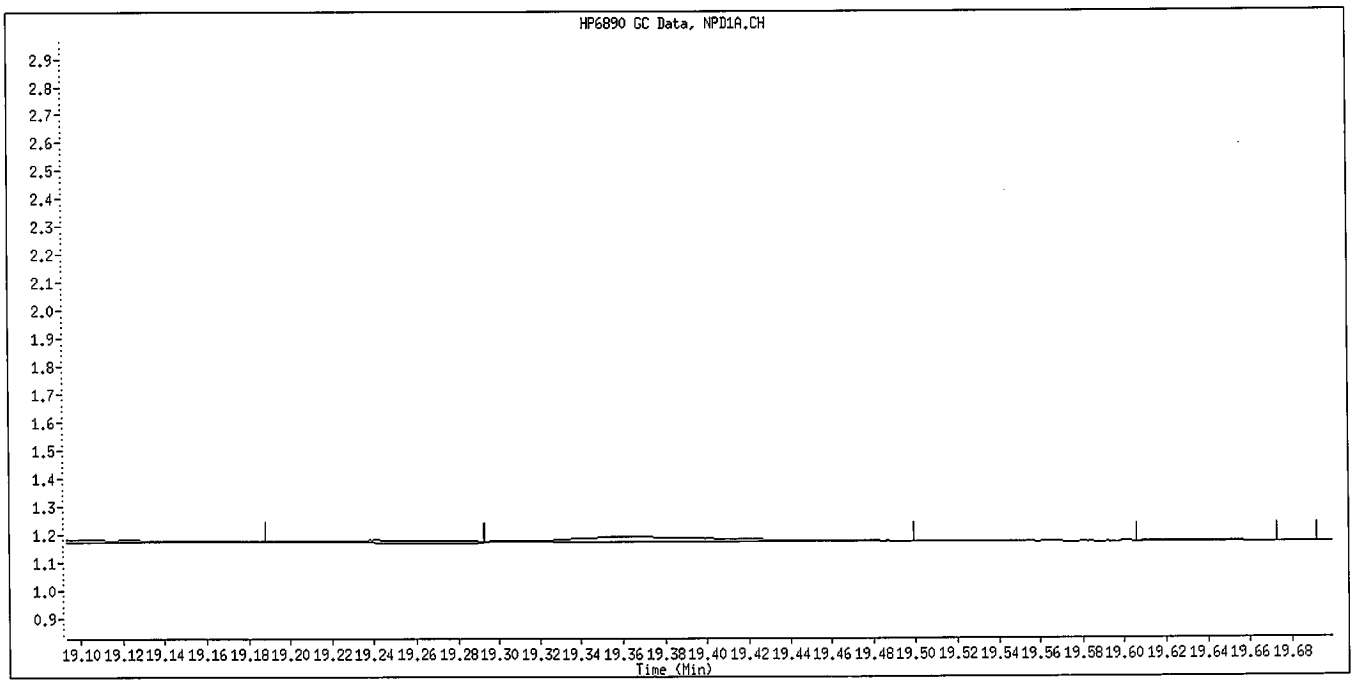
Instrument: GC_D,i
Operator: TLW
Column diameter: 0.32

Table of Contents

Data File Name: 007F0701.D
Inj. Date and Time: 29-SEP-2009 14:59
Instrument ID: GC_D.i
Client ID: 8141 L3 GSV1081
Compound Name: Anilazine
CAS #:
Report Date: 09/30/2009



Original Integration



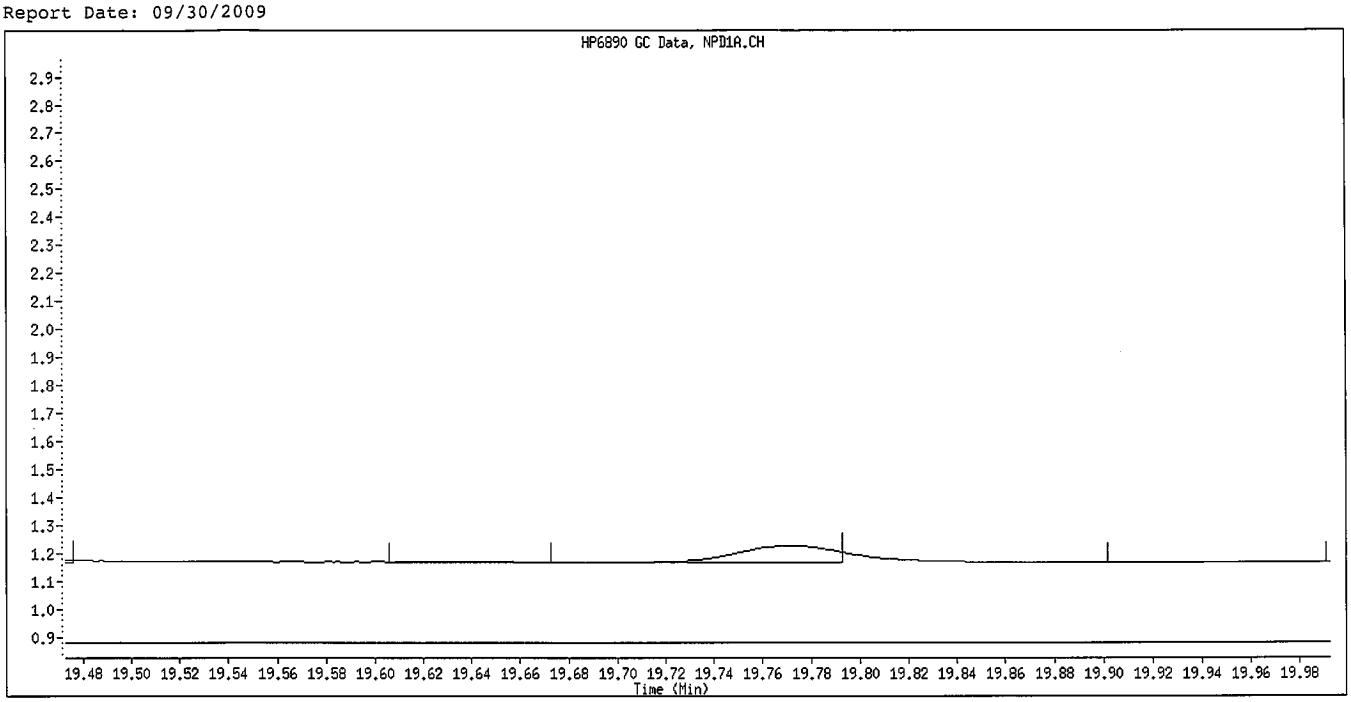
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

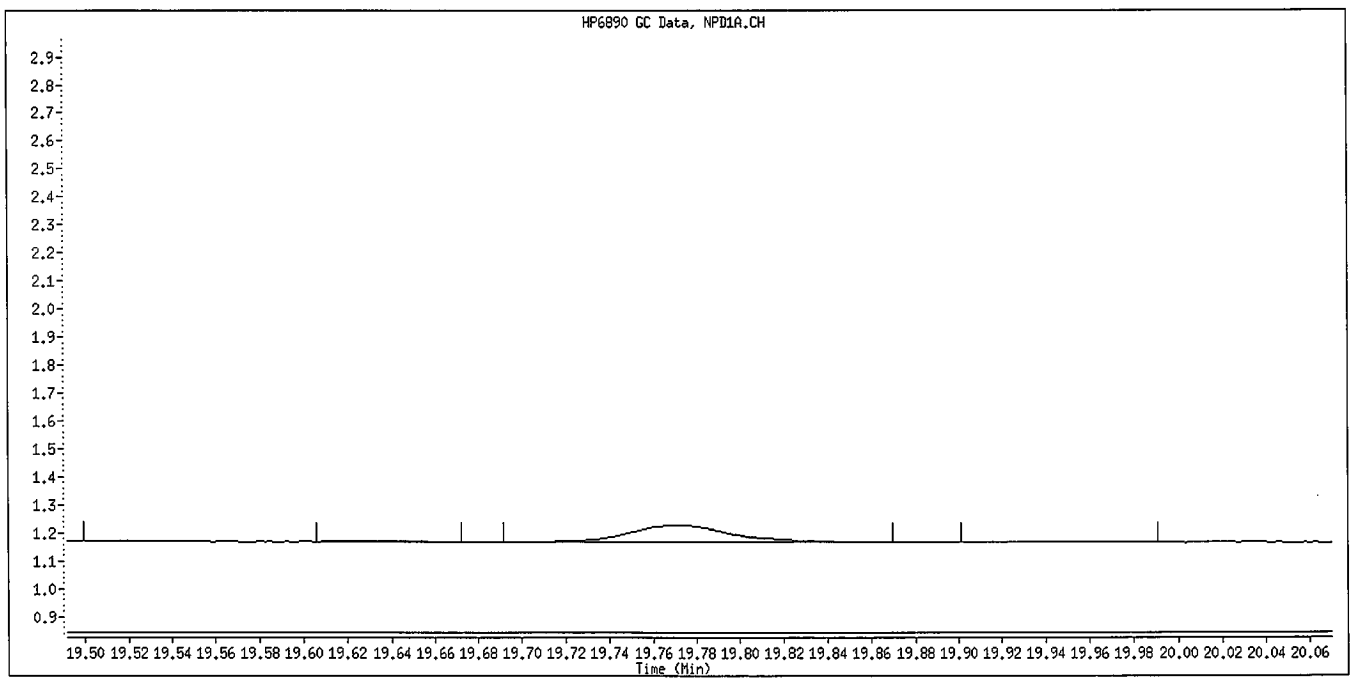
9/30/09

Table of Contents

Data File Name: 007F0701.D
Inj. Date and Time: 29-SEP-2009 14:59
Instrument ID: GC_D.i
Client ID: 8141 L3 GSV1081
Compound Name: Merphos-A (Merphos)
CAS #:
Report Date: 09/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\008F0801.D
Lab Smp Id: 8141 L2 GSV1082 Client Smp ID: 8141 L2 GSV1082
Inj Date : 29-SEP-2009 15:35
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L2 GSV1082
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Meth Date : 30-Sep-2009 08:31 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 14:59 Cal File: 007F0701.D
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	4.264	4.260	(0.312)	182760	0.50000	0.4821
	2 Dichlorvos	5.829	5.821	(0.427)	125004	0.50000	0.4595
	3 Mevinphos	9.372	9.350	(0.686)	34212	0.50000	0.4192
$	4 Chlormefos	9.467	9.466	(0.693)	170562	0.50000	0.4841
	5 Thionazin	12.594	12.581	(0.922)	125634	0.50000	0.5309
	6 Demeton-O	12.844	12.837	(0.940)	43142	0.16250	0.1860
	7 Ethoprop	13.165	13.150	(0.964)	126916	0.50000	0.5041
	8 Naled	13.443	13.431	(0.984)	29826	0.50000	0.4562
*	9 Tributylphosphate	13.660	13.646	(1.000)	499492	2.00000	
	10 Sulfotepp	14.110	14.105	(1.033)	181698	0.50000	0.5063
	11 Phorate	14.199	14.191	(1.039)	152671	0.50000	0.5098
	12 Dimethoate	14.475	14.366	(1.060)	80163	0.50000	0.4916(M)
	13 Demeton-S	14.671	14.636	(1.074)	82067	0.34000	0.3205
	14 Simazine	14.803	14.756	(1.084)	46345	0.50000	0.5400
	15 Atrazine	15.005	14.971	(1.098)	52535	0.50000	0.4982
	16 propazine	15.172	15.152	(1.111)	57260	0.50000	0.5246
	17 Disulfoton	15.850	15.835	(0.586)	82596	0.50000	0.4716
	18 Diazinon	15.912	15.901	(0.588)	162836	0.50000	0.5465
	19 Methyl Parathion	16.835	16.802	(0.622)	93936	0.50000	0.5056
	20 Ronnel	17.440	17.422	(0.644)	92833	0.50000	0.4677
	21 Malathion	18.111	18.094	(0.669)	76759	0.50000	0.4626
	22 Fenthion	18.275	18.250	(0.675)	81008	0.50000	0.4556
	23 Parathion	18.399	18.360	(0.680)	64057	0.50000	0.4997(M)
	24 Chlorpyrifos	18.428	18.416	(0.681)	186478	0.50000	0.5898(M)
	25 Trichloronate	18.935	18.921	(0.700)	111835	0.50000	0.4691
	26 Anilazine	19.399	19.331	(0.717)	3022	0.50000	0.5085(M)
	27 Merphos-A (Merphos)	19.770	19.763	(0.731)	2369	0.50000	0.6825
	28 Tetrachlorvinphos (Stirophos)	20.513	20.483	(0.758)	56276	0.50000	0.4913
	29 Tokuthion	21.261	21.237	(0.786)	102445	0.50000	0.4616
	30 Merphos-B (Merphos Oxone)	21.510	21.486	(0.795)	107384	0.50000	0.5822
	31 Carbophenothion-methyl	22.260	22.219	(0.823)	68129	0.50000	0.4573
	32 Fensulfothion	22.487	22.401	(0.831)	74021	0.50000	0.4661
	33 Bolstar / Famphur	23.610	23.575	(0.872)	173165	1.00000	0.9462

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.938	23.899	(0.885)	94798	0.50000	0.4841
$	35 Triphenyl phosphate	25.259	25.226	(0.933)	71967	0.50000	0.4737
	36 Phosmet	25.794	25.748	(0.953)	62864	0.50000	0.4567
	37 EPN	26.094	26.075	(0.964)	94375	0.50000	0.4898
	38 Azinphos-methyl	26.605	26.574	(0.983)	58851	0.50000	0.4302
*	39 TOCP	27.062	27.058	(1.000)	356765	2.00000	
	40 Azinphos-ethyl	27.181	27.159	(1.004)	90611	0.50000	0.4978
	41 Coumaphos	27.708	27.686	(1.024)	63688	0.50000	0.4513
M	42 Total Demeton				125209	0.50000	0.5066
M	43 Merphos				109753	0.50000	0.4825

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

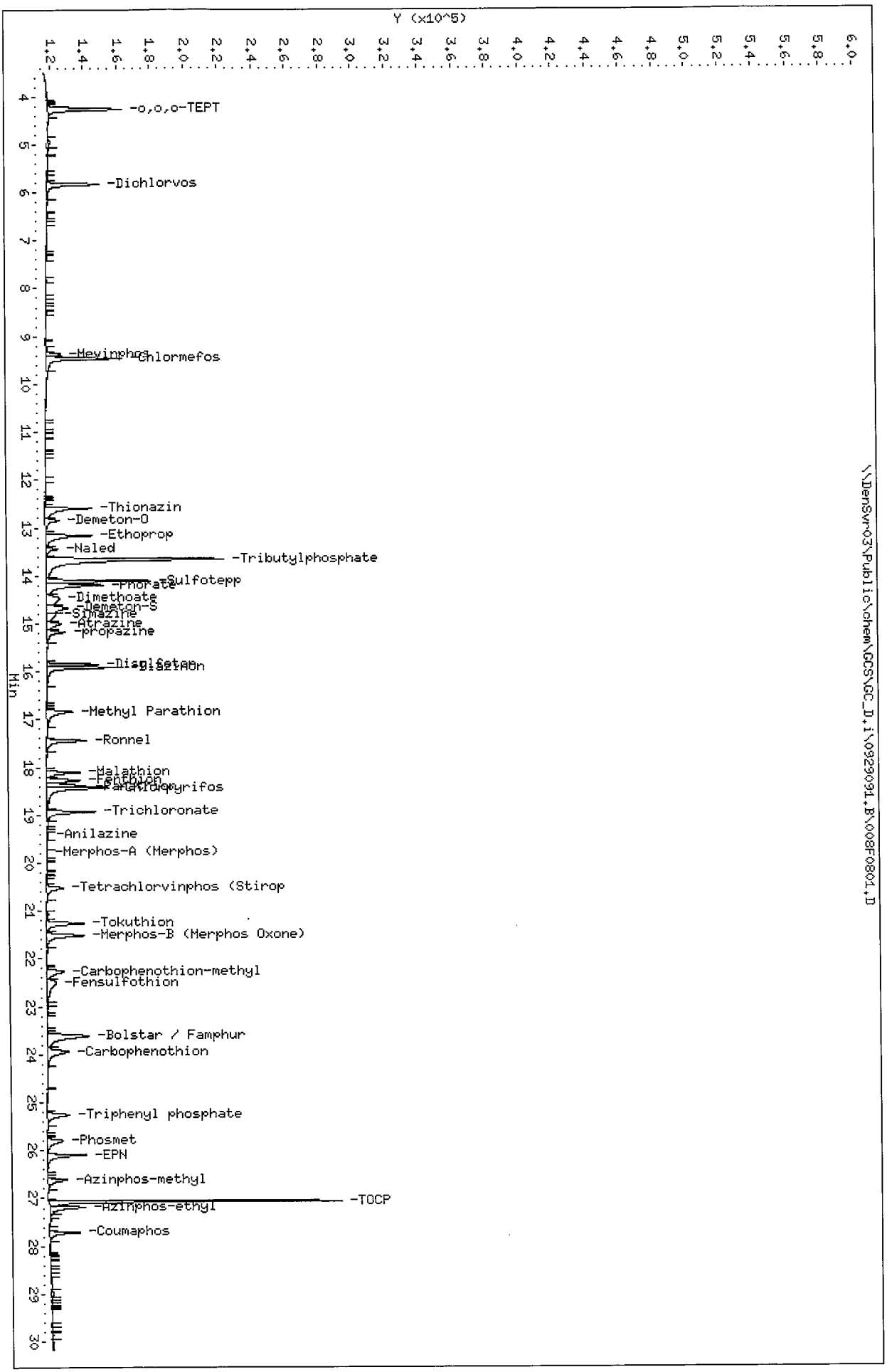
Instrument ID: GC_D.i
Lab File ID: 008F0801.D
Lab Smp Id: 8141 L2 GSV1082
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 30-SEP-2009
Calibration Time: 03:08
Client Smp ID: 8141 L2 GSV1082
Level:
Sample Type:

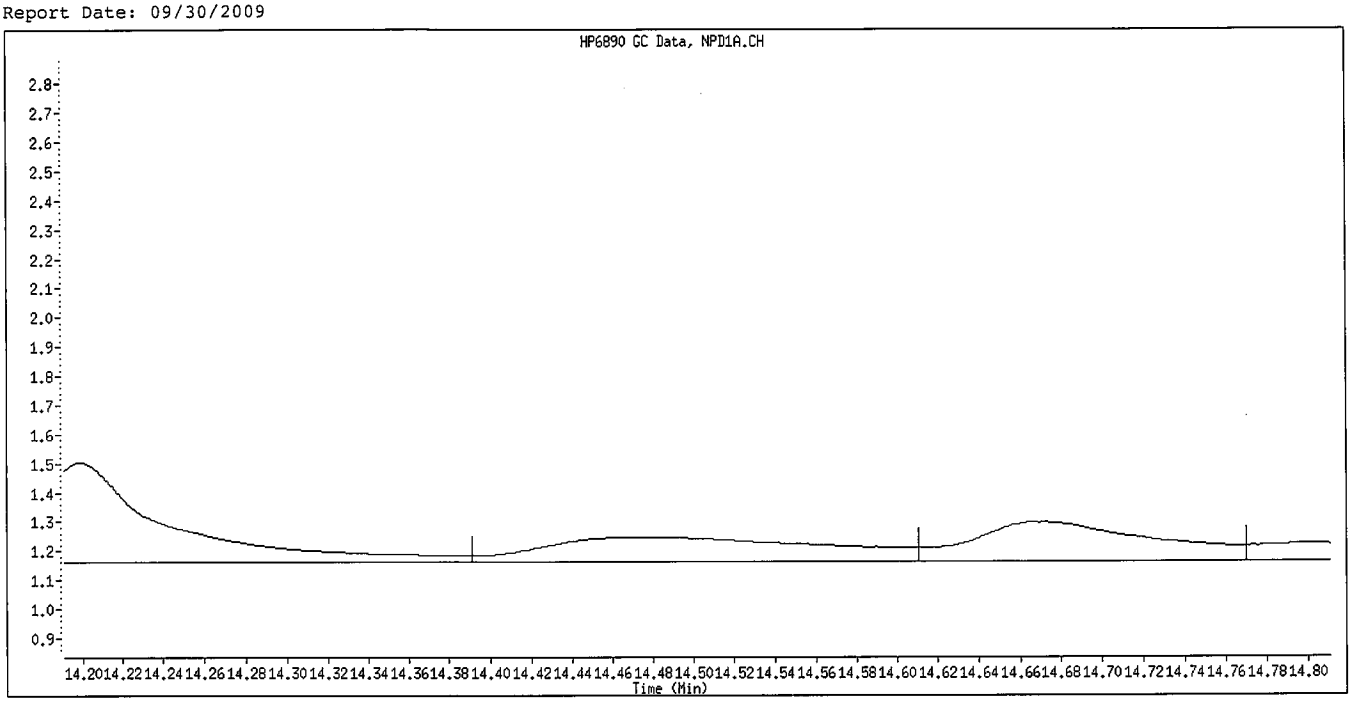
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	744009	372005	1488018	499492	-32.86
39 TOCP	484260	242130	968520	356765	-26.33

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.66	0.16
39 TOCP	27.06	26.56	27.56	27.06	0.02

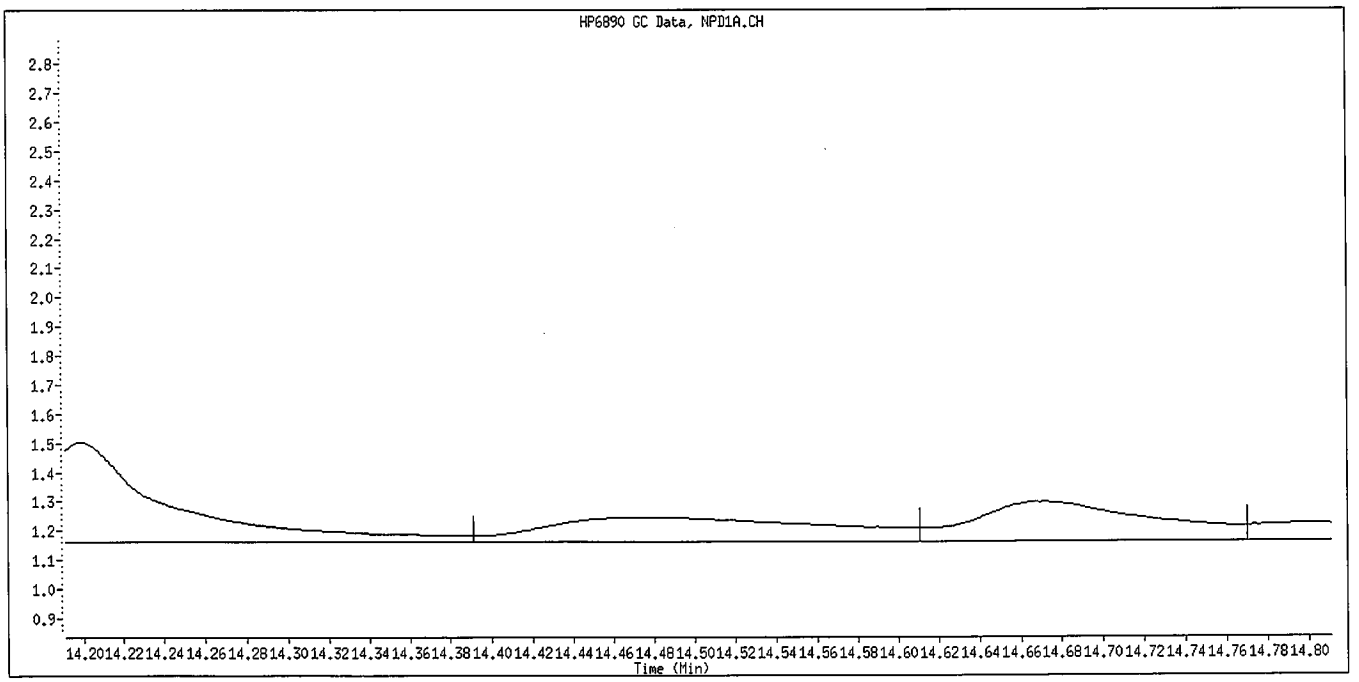
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0929091,B\008F0801.D
Date : 29-SEP-2009 15:35
Client ID: 8141 L2 GSV1082
Sample Info: 8141 L2 GSV1082
Column phase: RTx-1MS
Instrument: GC_D,i
Operator: TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D,i\0929091,B\008F0801.D
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Mevinphos
-Chlormefos
-Thionazin
-Demeton-O
-Ethoprop
-Naled
-Tributylphosphate
-Sulfotepp
-Phorate
-Dimethoate
-Demeton-S
-Simazine
-Atrazine
-Propazine
-Diazinon
-Methyl Parathion
-Ronnel
-Malathion
-Fenthion
-Parathion
-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
-TOCP
-Azinphos-ethyl
-Coumaphos
Page 4

Data File Name: 008F0801.D
Inj. Date and Time: 29-SEP-2009 15:35
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV1082
Compound Name: Dimethoate
CAS #:
Report Date: 09/30/2009



Original Integration

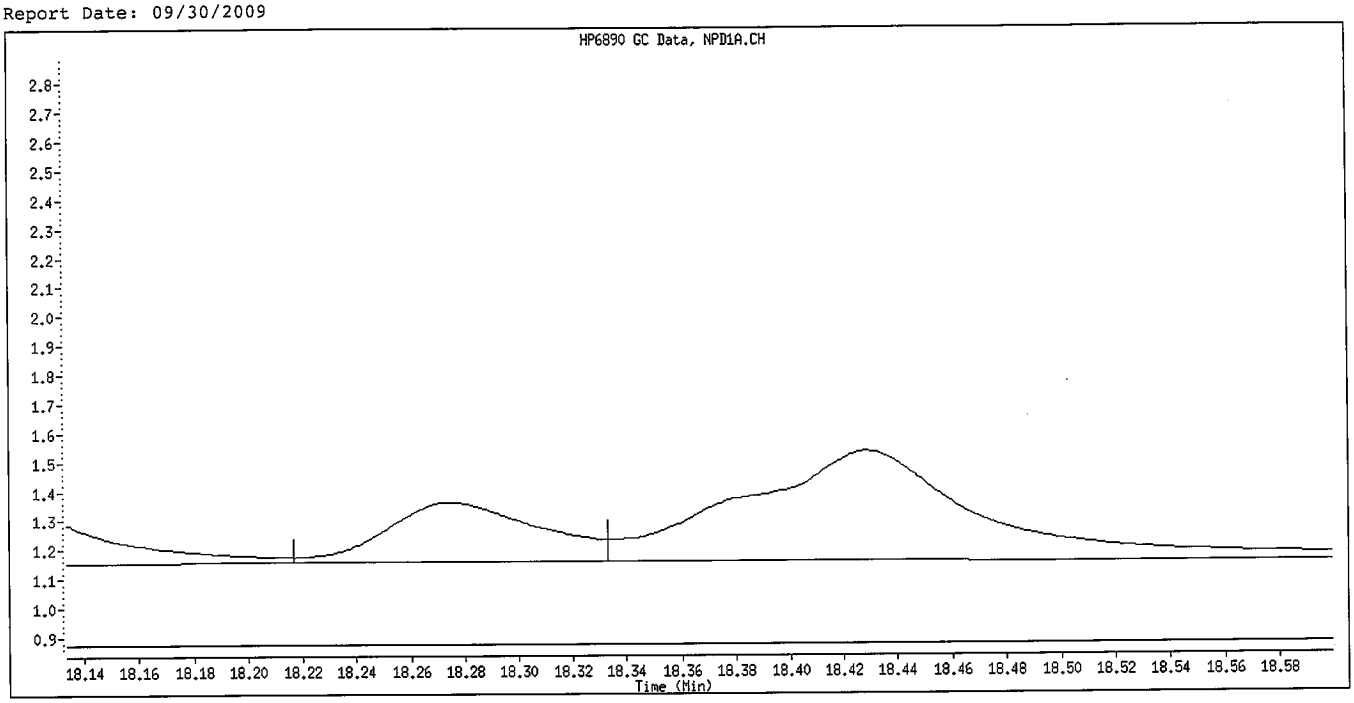


Manual Integration

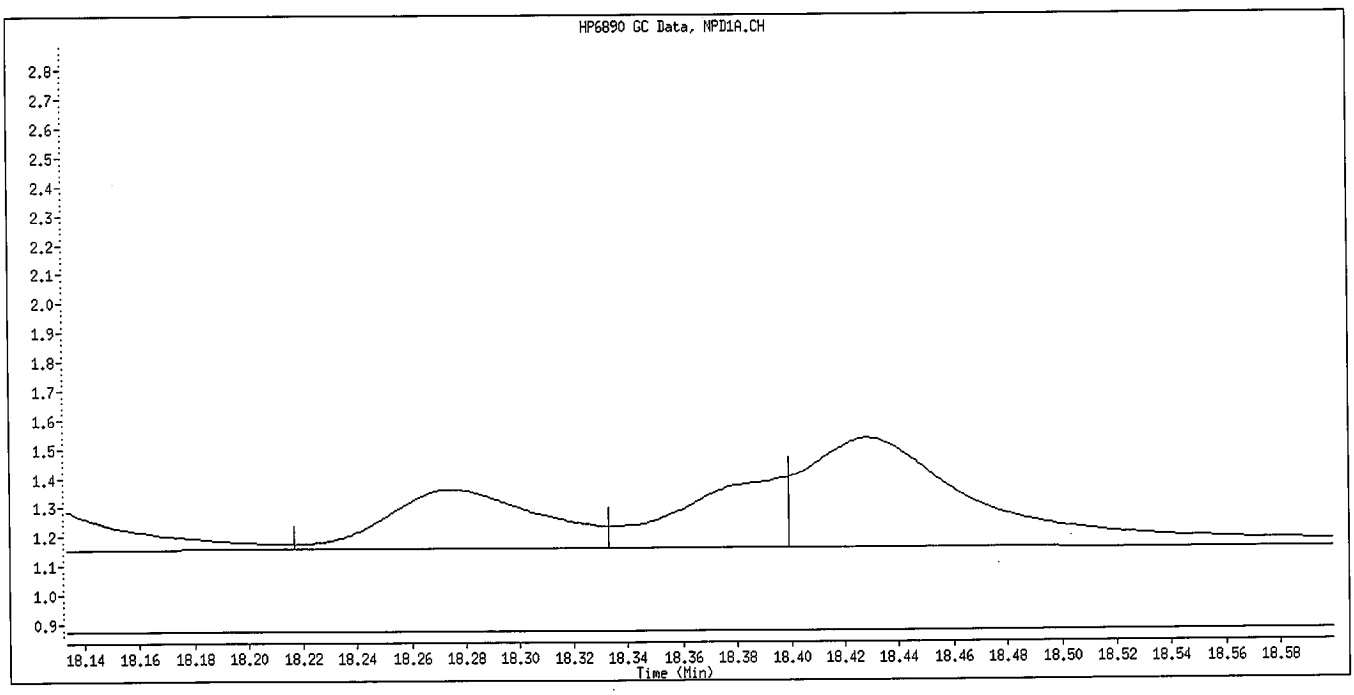
Manually Integrated By: williamst
Manual Integration Reason: Analyte Misidentified by the Data System

9/30/09

Data File Name: 008F0801.D
Inj. Date and Time: 29-SEP-2009 15:35
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV1082
Compound Name: Parathion
CAS #:
Report Date: 09/30/2009



Original Integration

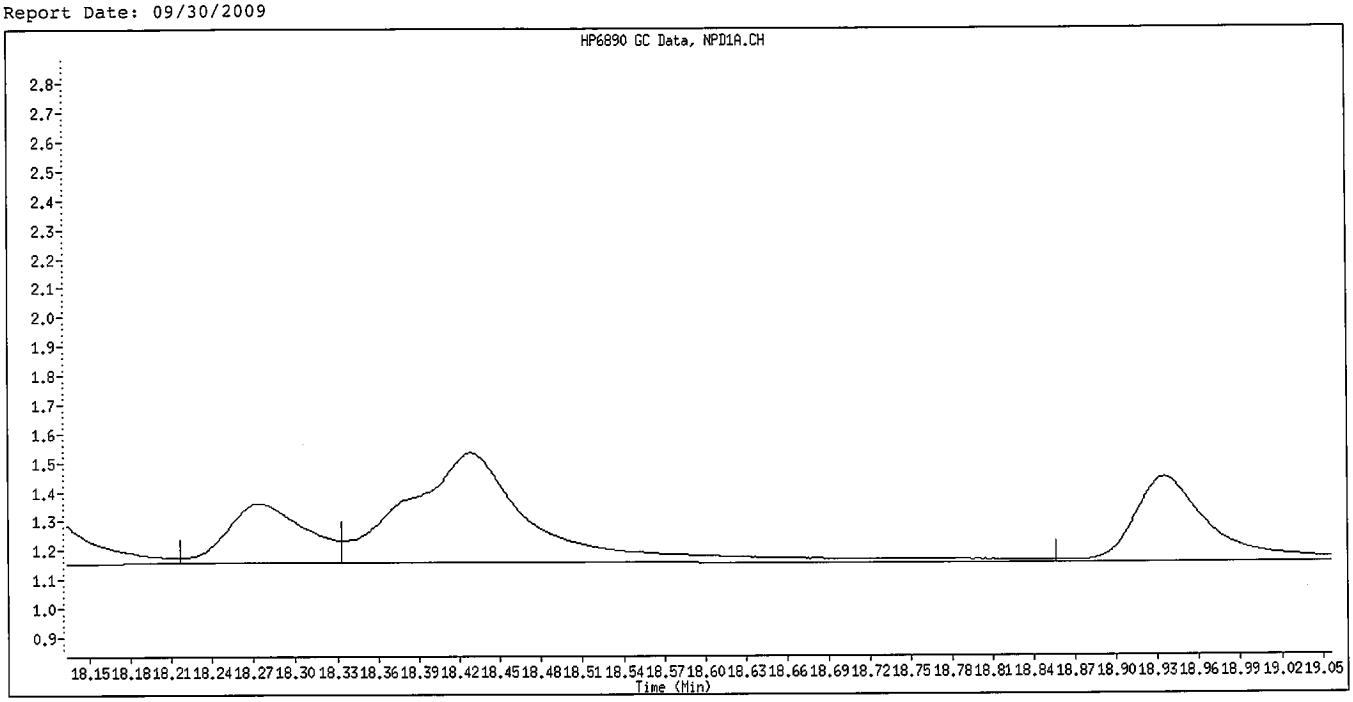


Manual Integration

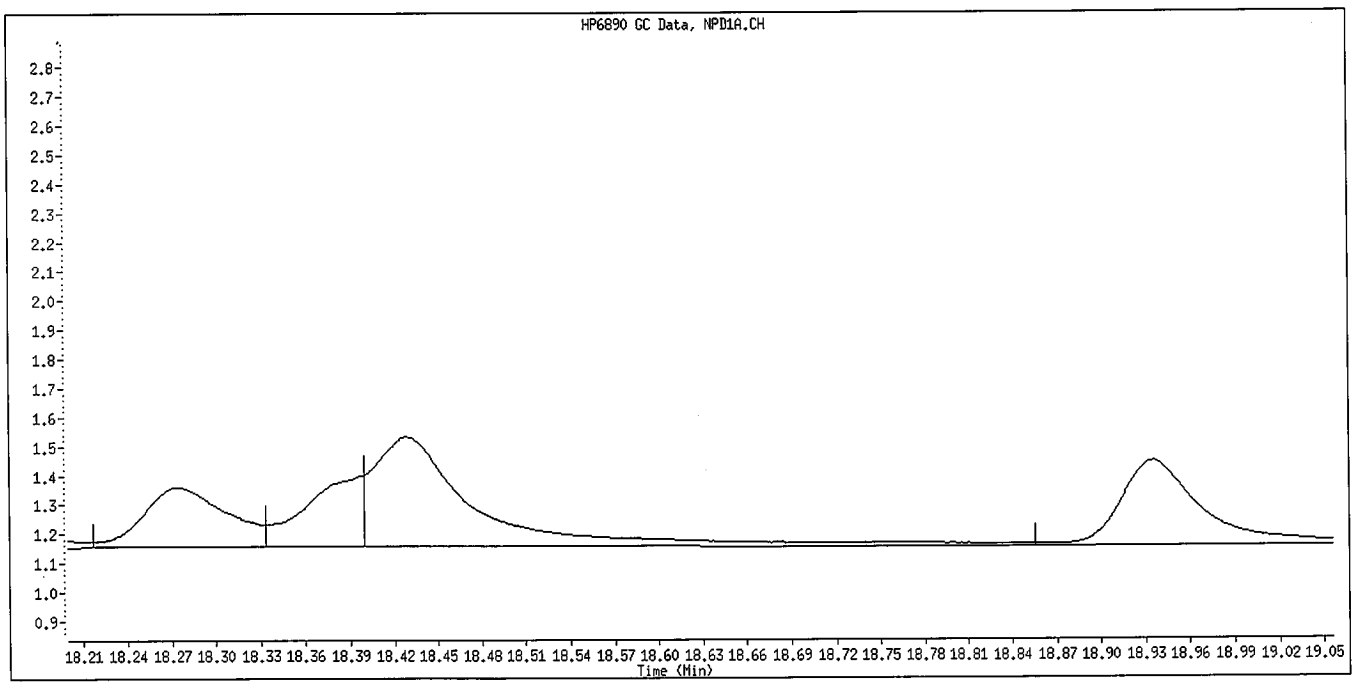
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

Data File Name: 008F0801.D
Inj. Date and Time: 29-SEP-2009 15:35
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV1082
Compound Name: Chlorpyrifos
CAS #:
Report Date: 09/30/2009



Original Integration

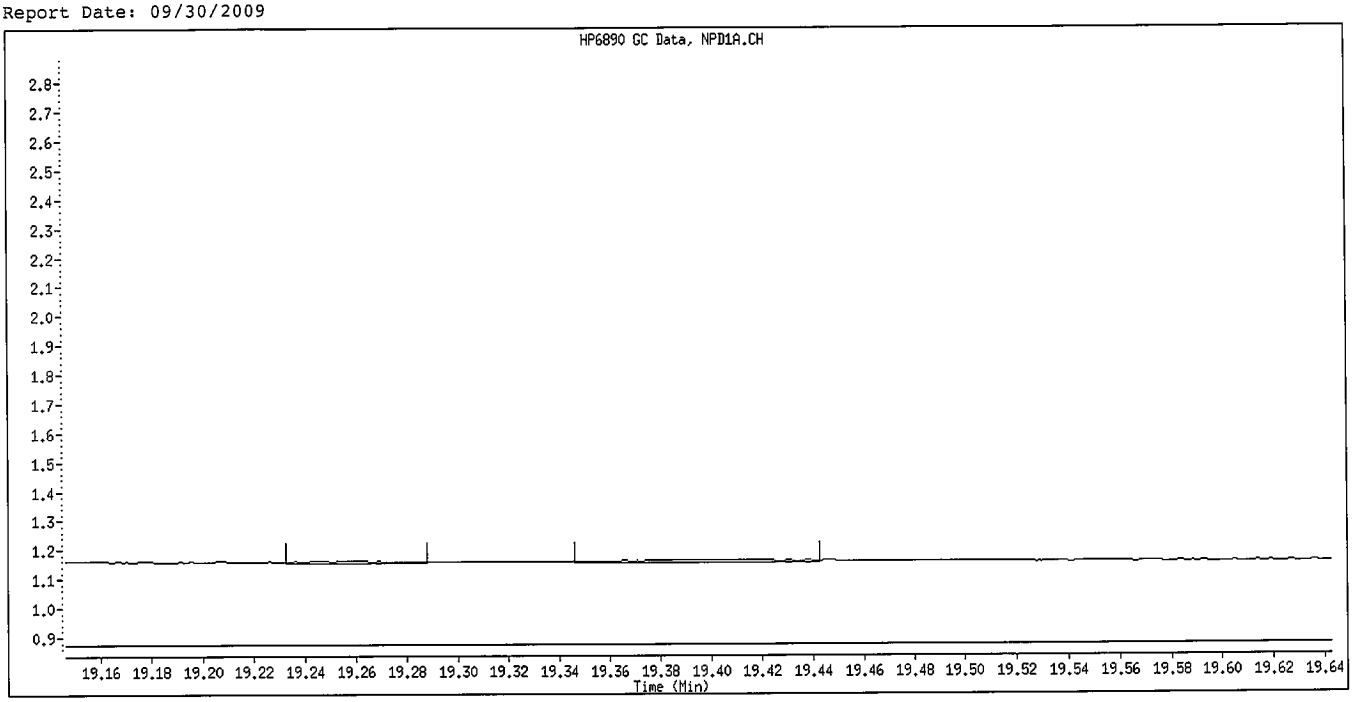


Manual Integration

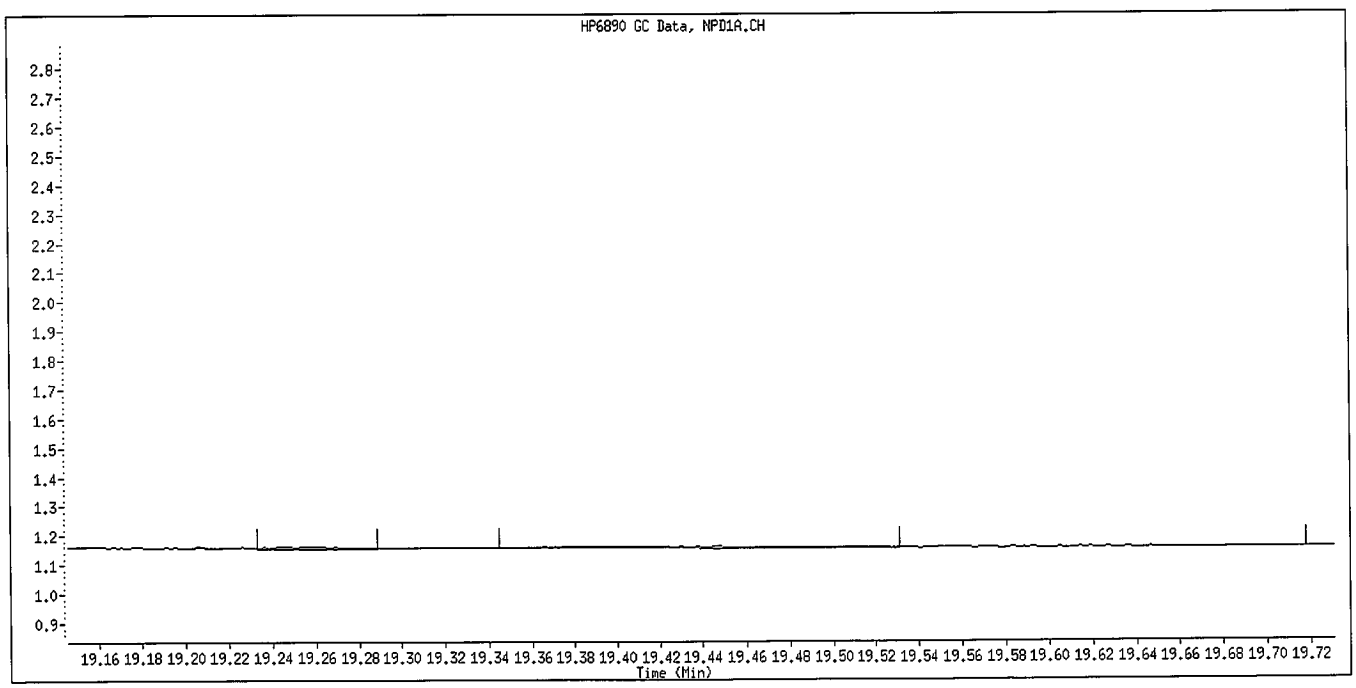
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

Data File Name: 008F0801.D
Inj. Date and Time: 29-SEP-2009 15:35
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV1082
Compound Name: Anilazine
CAS #:
Report Date: 09/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Unknown

Baseline YL 9/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\009F0901.D
Lab Smp Id: 8141 L1 GSV1083 Client Smp ID: 8141 L1 GSV1083
Inj Date : 29-SEP-2009 16:12
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L1 GSV1083
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Meth Date : 30-Sep-2009 08:31 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 15:35 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	4.264	4.260	(0.312)	73387	0.20000	0.2156
	2 Dichlorvos	5.829	5.821	(0.427)	49261	0.20000	0.2016
	3 Mevinphos	9.385	9.350	(0.687)	5844	0.20000	0.2135
$	4 Chlormefos	9.466	9.466	(0.693)	61214	0.20000	0.1934
	5 Thionazin	12.599	12.581	(0.922)	26137	0.20000	0.1921
	6 Demeton-O	12.851	12.837	(0.940)	8888	0.06500	0.04758
	7 Ethoprop	13.174	13.150	(0.964)	39547	0.20000	0.1960
	8 Naled	13.454	13.431	(0.985)	5310	0.20000	0.2071
*	9 Tributylphosphate	13.665	13.646	(1.000)	448625	2.00000	
	10 Sulfotepp	14.113	14.105	(1.033)	69030	0.20000	0.2142
	11 Phorate	14.201	14.191	(1.039)	65747	0.20000	0.1666
	12 Dimethoate	Compound Not Detected.					
	13 Demeton-S	14.700	14.636	(1.076)	38231	0.13600	0.1375
	14 Simazine	Compound Not Detected.					
	15 Atrazine	15.039	14.971	(1.100)	18424	0.20000	0.1945
	16 propazine	15.193	15.152	(1.112)	21269	0.20000	0.2170
	17 Disulfoton	15.859	15.835	(0.586)	20950	0.20000	0.2021
	18 Diazinon	15.921	15.901	(0.588)	64704	0.20000	0.2256
	19 Methyl Parathion	16.876	16.802	(0.624)	25143	0.20000	0.1987(M)
	20 Ronnel	17.459	17.422	(0.645)	30043	0.20000	0.2055
	21 Malathion	18.127	18.094	(0.670)	25410	0.20000	0.1590
	22 Fenthion	18.299	18.250	(0.676)	25618	0.20000	0.2056
	23 Parathion	Compound Not Detected.					
	24 Chlorpyrifos	18.445	18.416	(0.682)	85896	0.20000	0.2822
	25 Trichloronate	18.951	18.921	(0.700)	39953	0.20000	0.2192(M)
	26 Anilazine	Compound Not Detected.					
	27 Merphos-A (Merphos)	Compound Not Detected.					
	28 Tetrachlorvinphos (Stirophos)	20.538	20.483	(0.759)	17165	0.20000	0.2534(M)
	29 Tokuthion	21.275	21.237	(0.786)	38426	0.20000	0.2055
	30 Merphos-B (Merphos Oxone)	21.526	21.486	(0.795)	40761	0.20000	0.2296
	31 Carbophenothion-methyl	22.301	22.219	(0.824)	21792	0.20000	0.2068(M)
	32 Fensulfothion	22.560	22.401	(0.834)	20933	0.20000	0.2054(M)
	33 Bolstar / Famphur	23.637	23.575	(0.873)	61134	0.40000	0.4044(M)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.968	23.899	(0.886)	35249	0.20000	0.2005(M)
$	35 Triphenyl phosphate	25.275	25.226	(0.934)	25377	0.20000	0.2028
	36 Phosmet	25.826	25.748	(0.954)	21966	0.20000	0.2059(M)
	37 EPN	26.108	26.075	(0.965)	34992	0.20000	0.2004
	38 Azinphos-methyl	26.621	26.574	(0.984)	21324	0.20000	0.2100
*	39 TOCP	27.064	27.058	(1.000)	343472	2.00000	
	40 Azinphos-ethyl	27.196	27.159	(1.005)	37958	0.20000	0.2166
	41 Coumaphos	27.718	27.686	(1.024)	22677	0.20000	0.2071
M	42 Total Demeton				47119	0.20000	0.1851
M	43 Merphos				40761	0.20000	0.2015

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

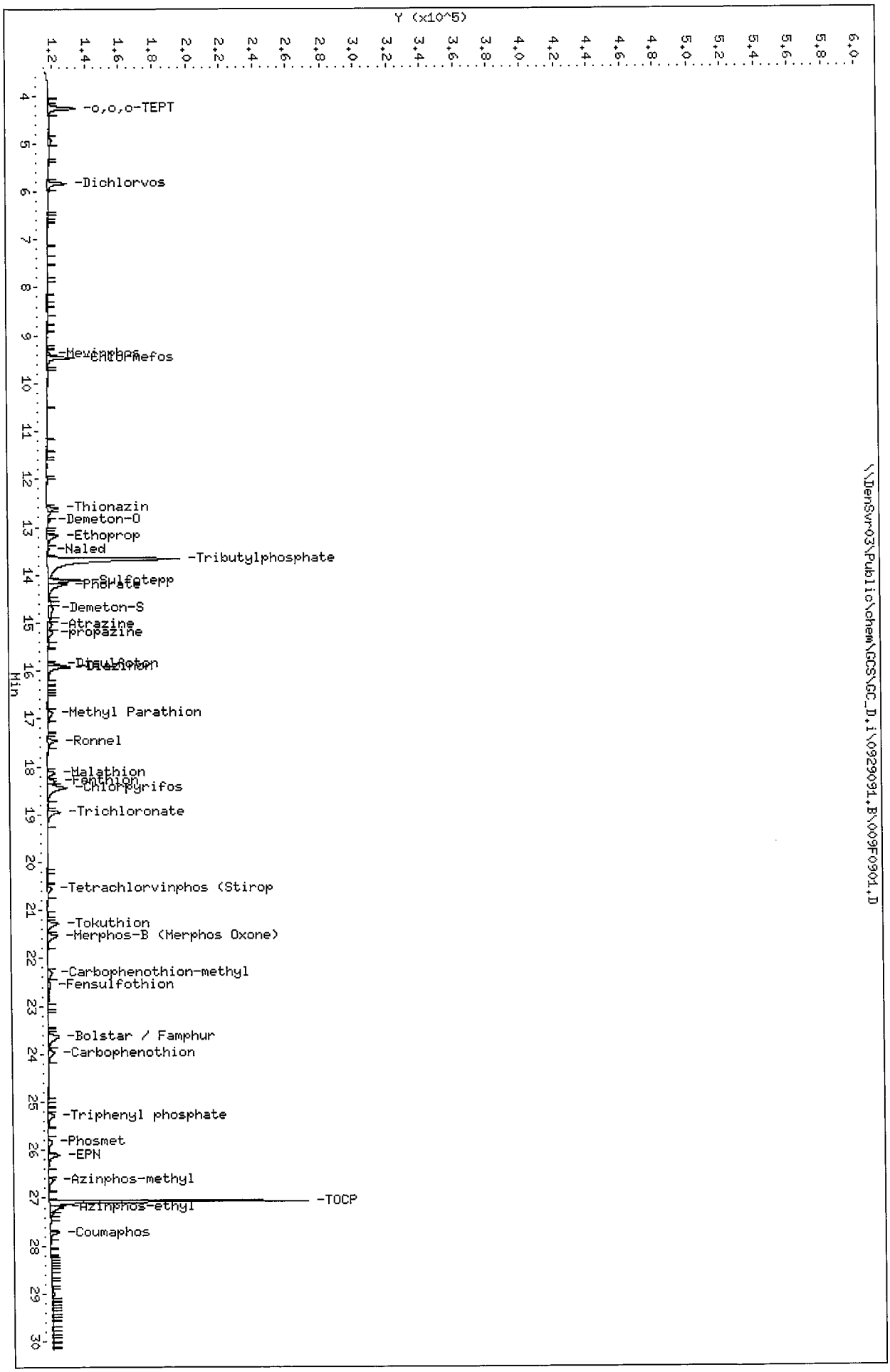
Instrument ID: GC_D.i
Lab File ID: 009F0901.D
Lab Smp Id: 8141 L1 GSV1083
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 30-SEP-2009
Calibration Time: 03:08
Client Smp ID: 8141 L1 GSV1083
Level:
Sample Type:

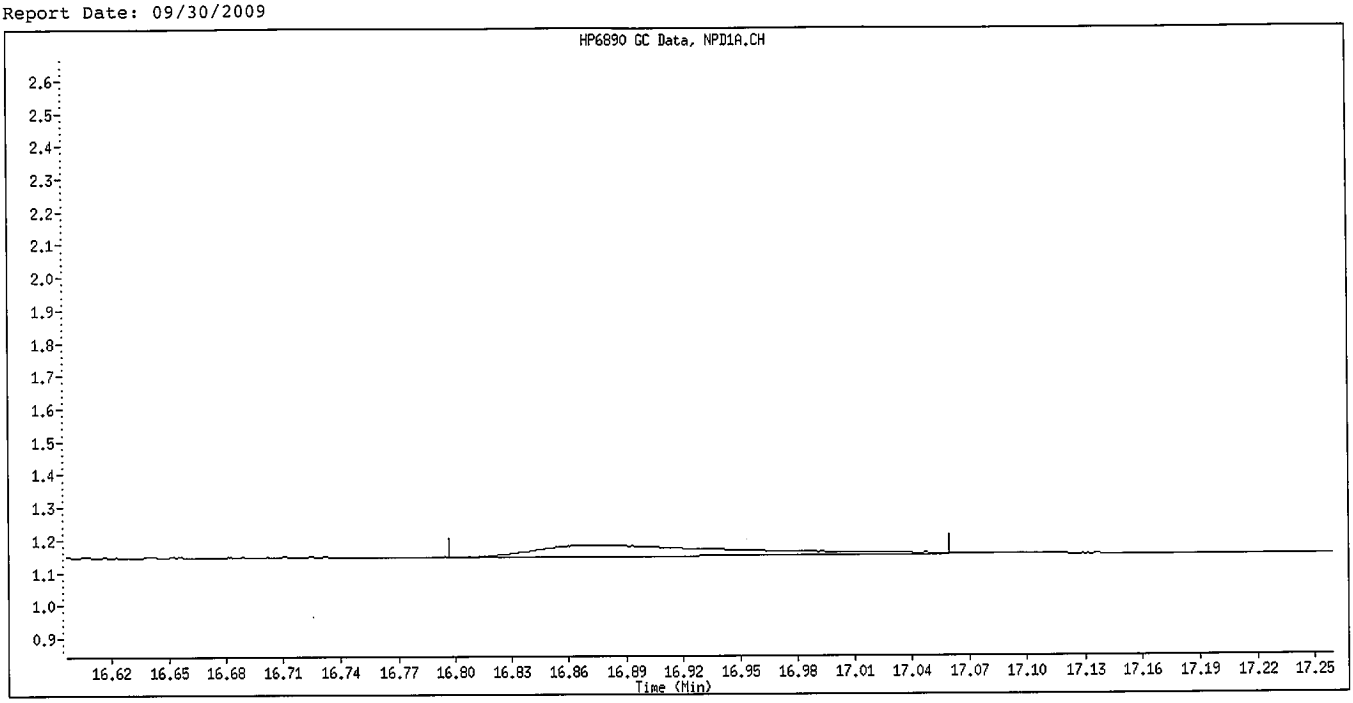
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	744009	372005	1488018	448625	-39.70
39 TOCP	484260	242130	968520	343472	-29.07

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.67	0.20
39 TOCP	27.06	26.56	27.56	27.06	0.03

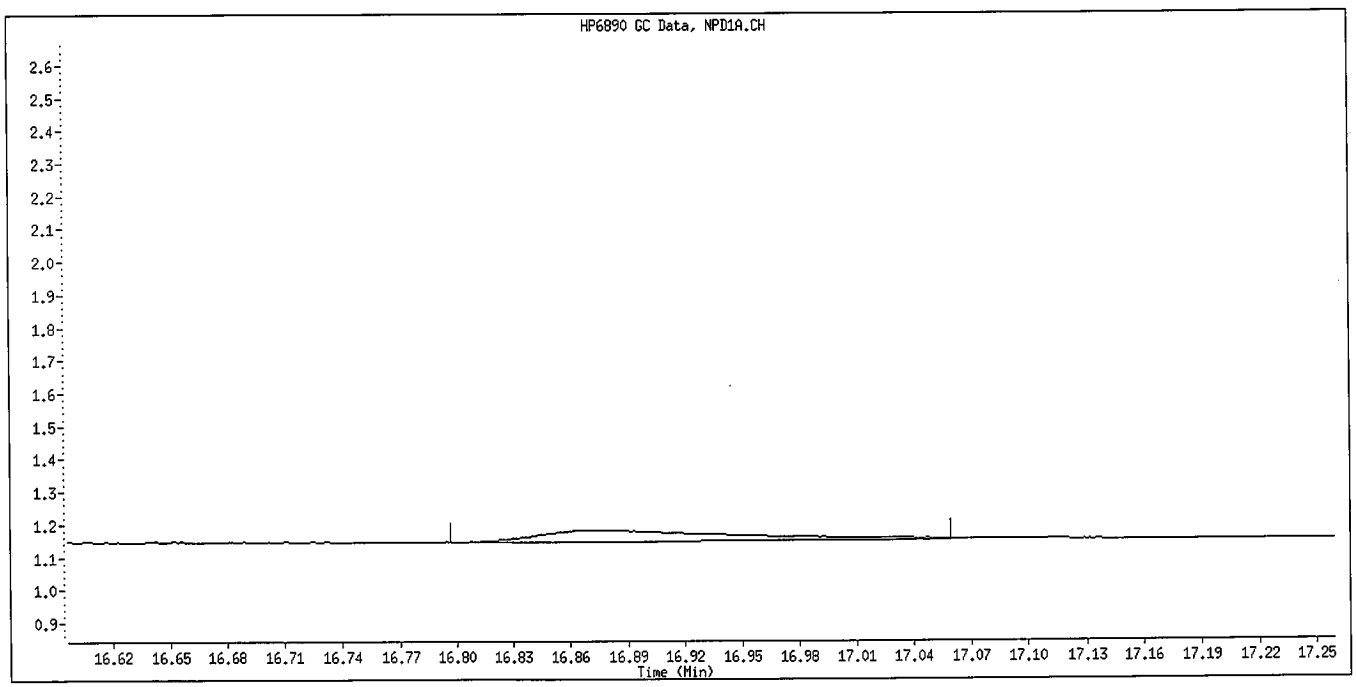
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0929091,B\009F0901,D
Date : 29-SEP-2009 16:12
Client ID: 8141 L1 GSV1083
Sample Info: 8141 L1 GSV1083
Column phase: RTx-1MS
Instrument: GC_D,i
Operator: TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D,i\0929091,B\009F0901,D
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Mevinphos
-Chlorpyrifos
-Thionazin
-Demeton-O
-Ethoprop
-Naled
-Tributylphosphate
-Phorate
-Demeton-S
-Atrazine
-Diazinon
-Methyl Parathion
-Ronnel
-Malathion
-Trichloronate
-Tetrachlorvinphos (Stirop
-Tokuthion
-Merphos-B (Merphos Oxone)
-Carbophenothion-methyl
-Fensulfothion
-Bolstar / Famphur
-Carbophenothion
-Triphenyl phosphate
-Phosmet
-EPN
-Azinphos-methyl
-TOCP
-Coumaphos

Data File Name: 009F0901.D
Inj. Date and Time: 29-SEP-2009 16:12
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV1083
Compound Name: Methyl Parathion
CAS #: 298-00-0
Report Date: 09/30/2009



Original Integration

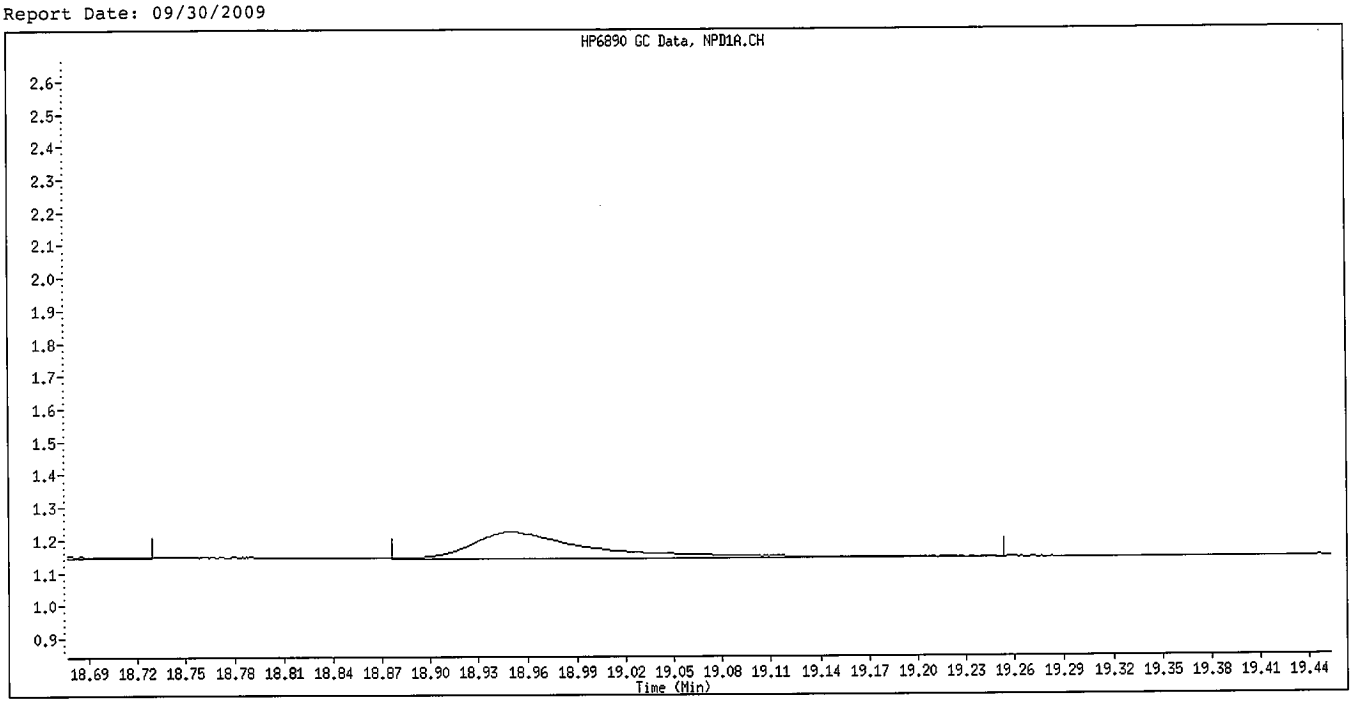


Manual Integration

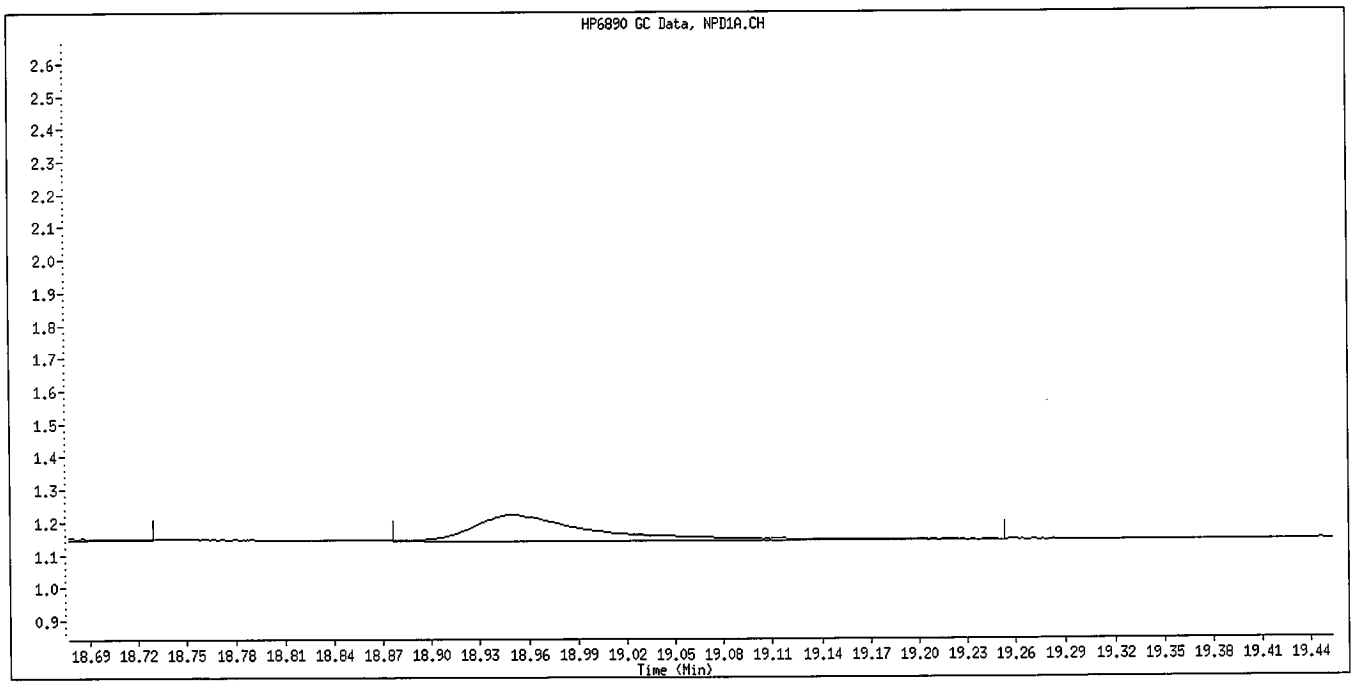
Manually Integrated By: williamst
Manual Integration Reason: Analyte Misidentified by the Data System

9/30/09

Data File Name: 009F0901.D
Inj. Date and Time: 29-SEP-2009 16:12
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV1083
Compound Name: Trichloronate
CAS #:
Report Date: 09/30/2009



Original Integration

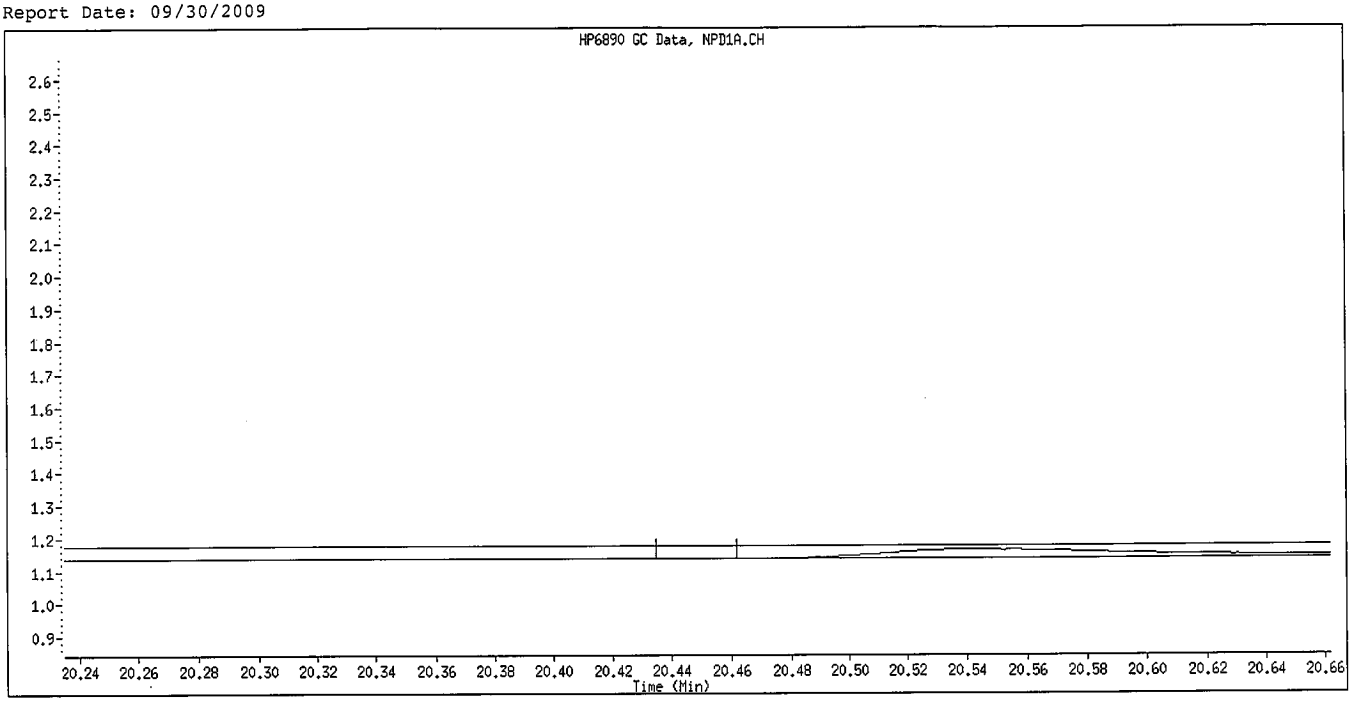


Manual Integration

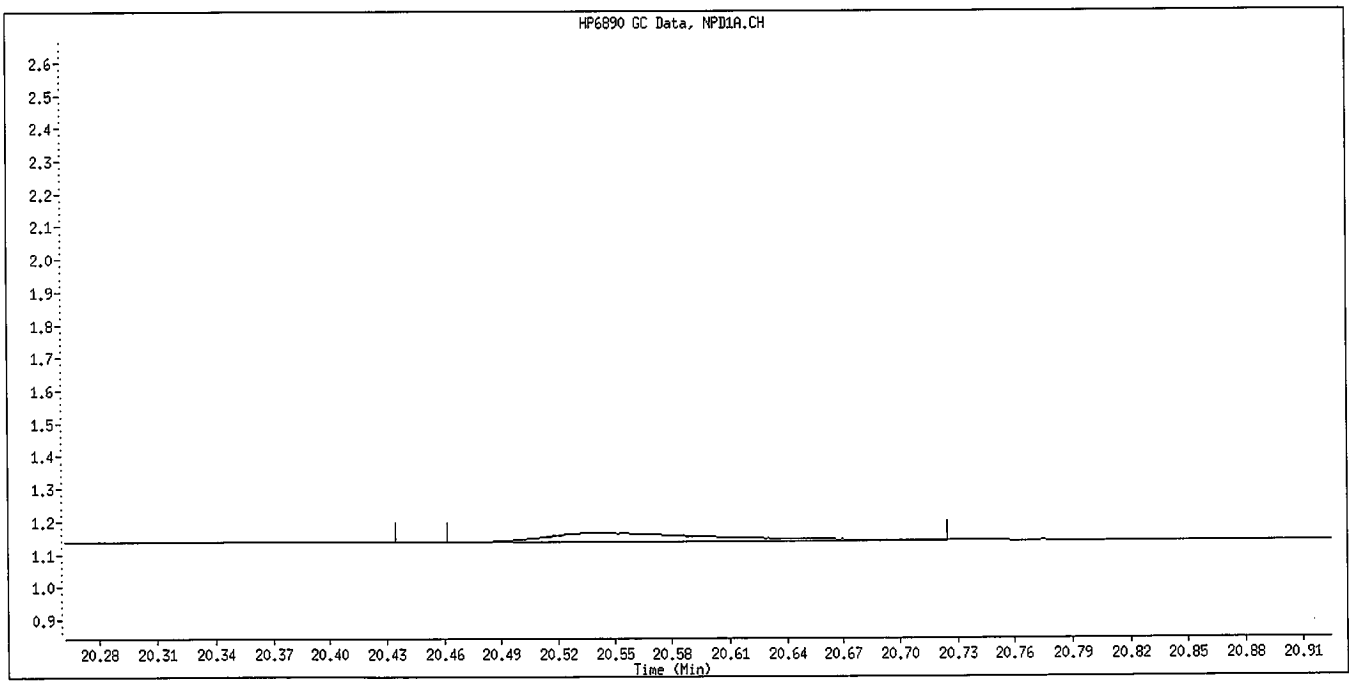
Manually Integrated By: williamst
Manual Integration Reason: Analyte Misidentified by the Data System

JL 9/30/09

Data File Name: 009F0901.D
Inj. Date and Time: 29-SEP-2009 16:12
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV1083
Compound Name: Tetrachlorvinphos (Stirophos)
CAS #:
Report Date: 09/30/2009



Original Integration



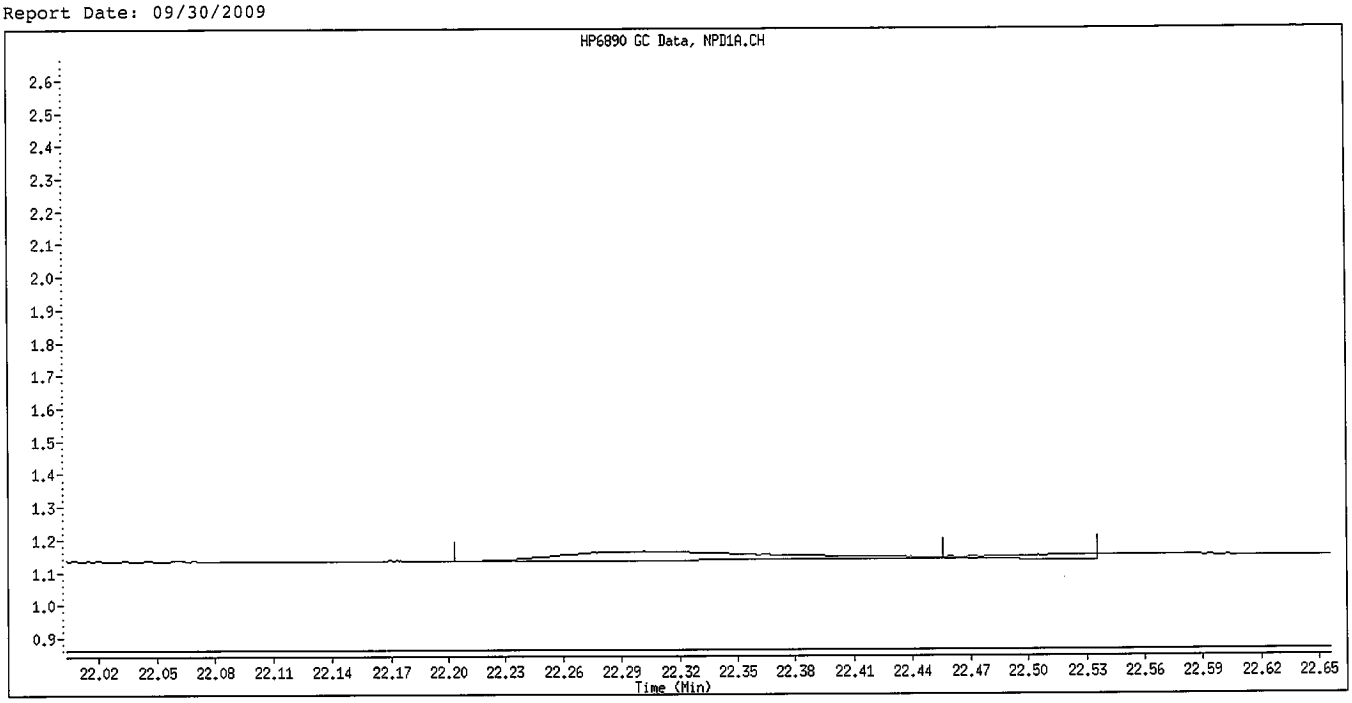
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Analyte Misidentified by the Data System

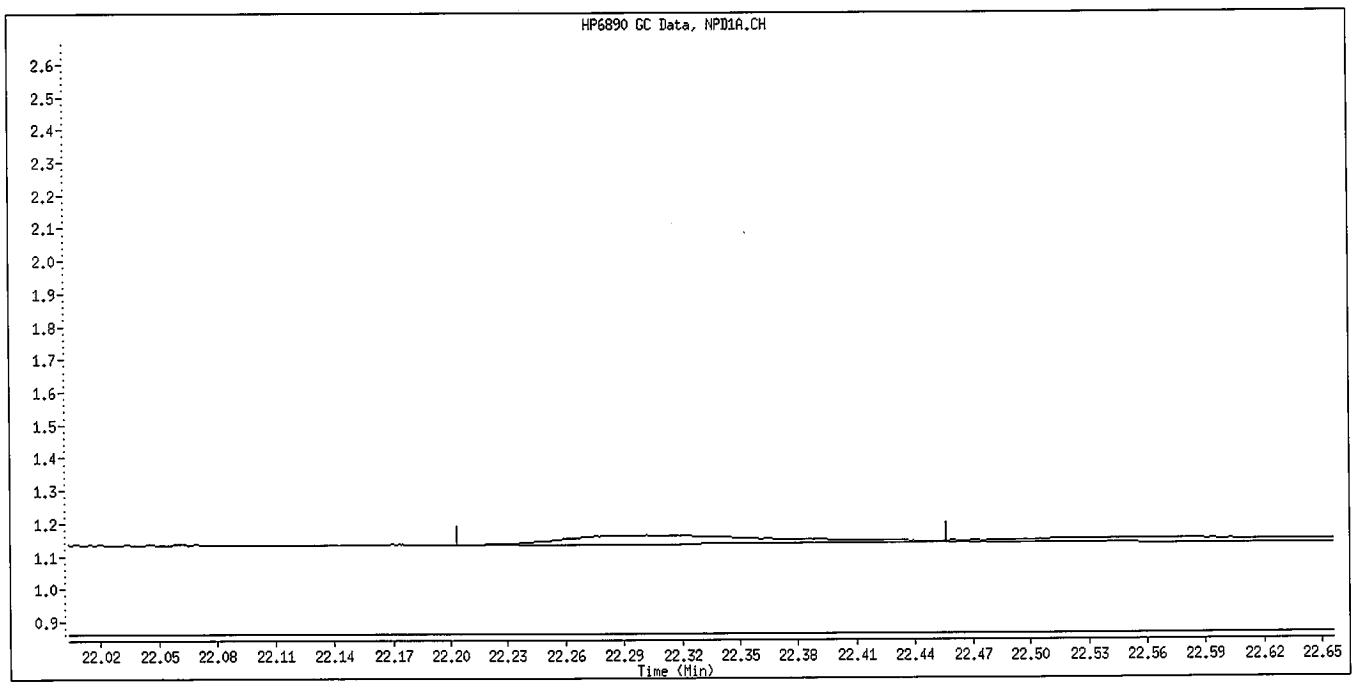
9/30/09

Table of Contents

Data File Name: 009F0901.D
Inj. Date and Time: 29-SEP-2009 16:12
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV1083
Compound Name: Carbophenothion-methyl
CAS #:
Report Date: 09/30/2009



Original Integration

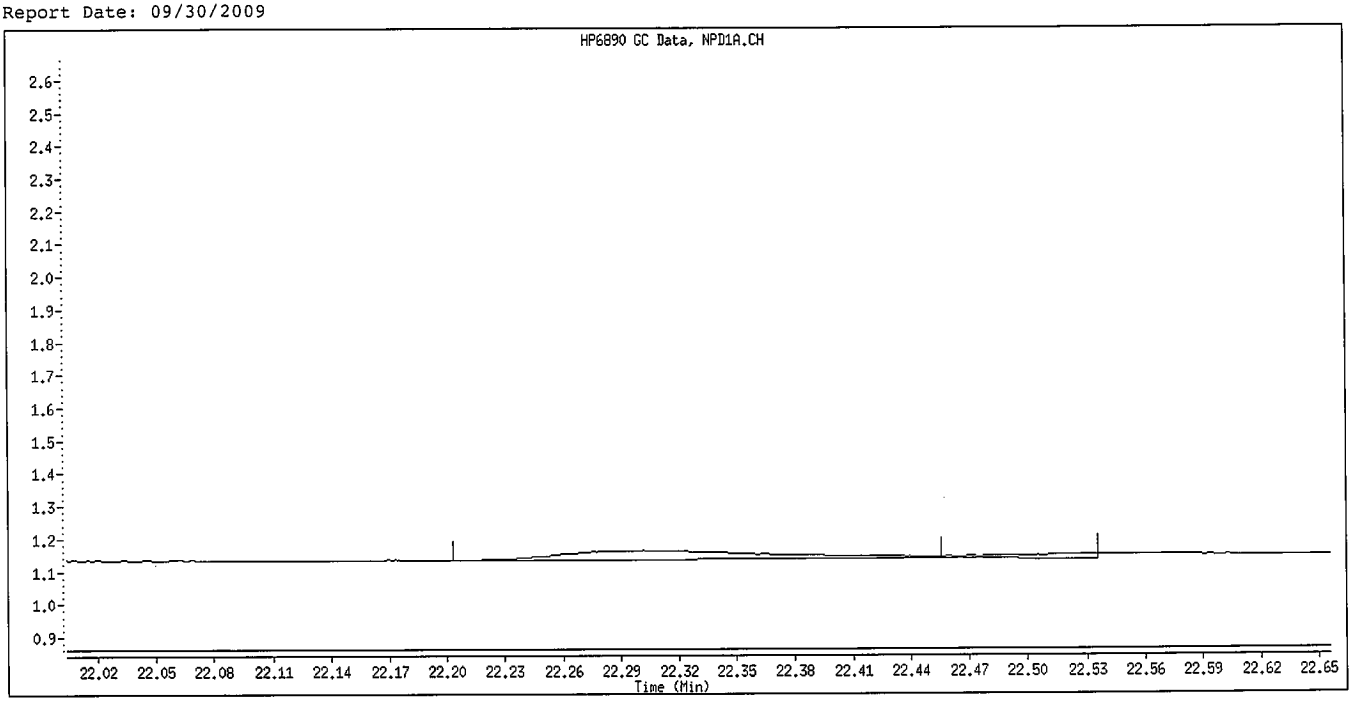


Manual Integration

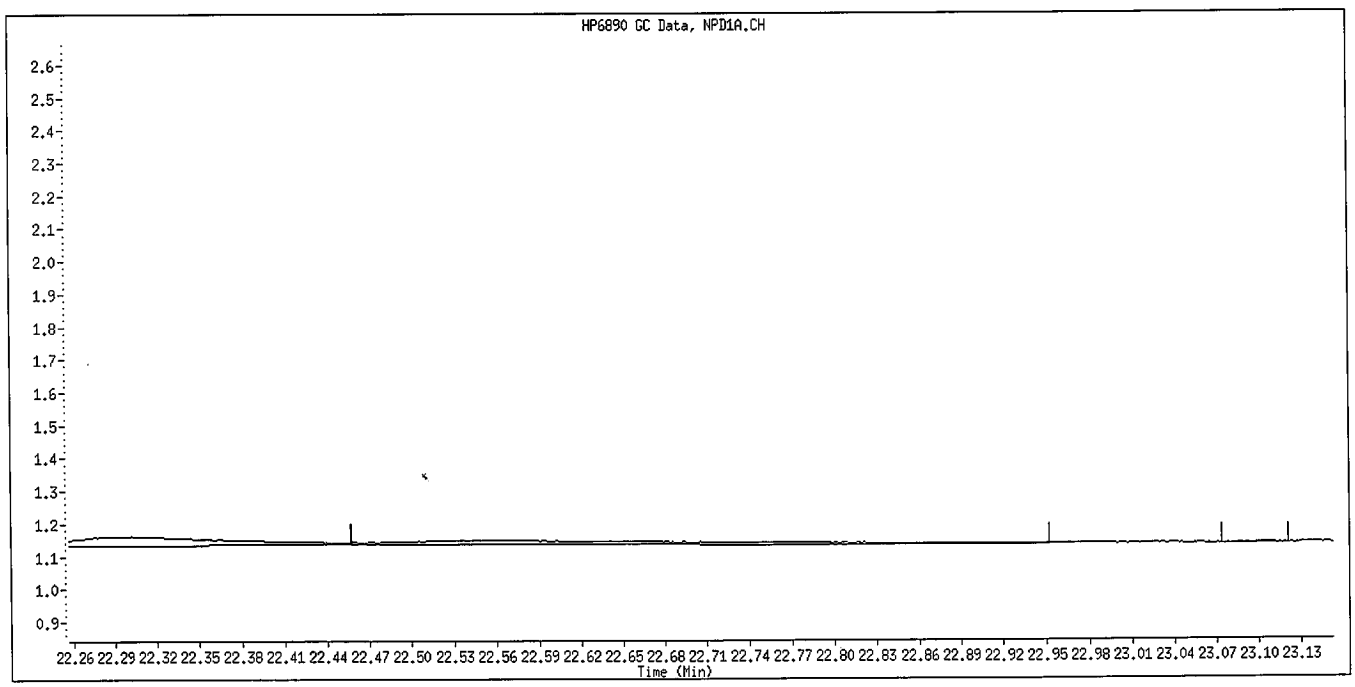
Manually Integrated By: williamst
Manual Integration Reason: Analyte Misidentified by the Data System

9/30/09

Data File Name: 009F0901.D
Inj. Date and Time: 29-SEP-2009 16:12
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV1083
Compound Name: Fensulfothion
CAS #:
Report Date: 09/30/2009



Original Integration

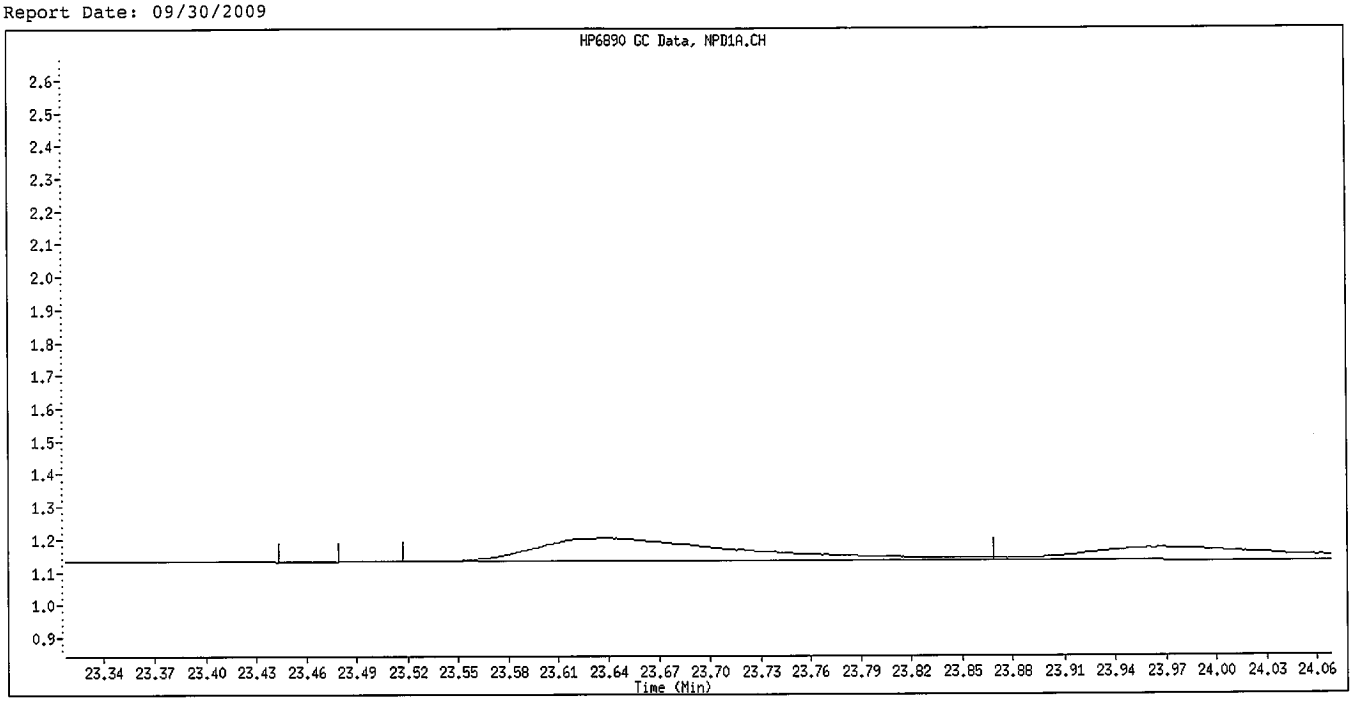


Manual Integration

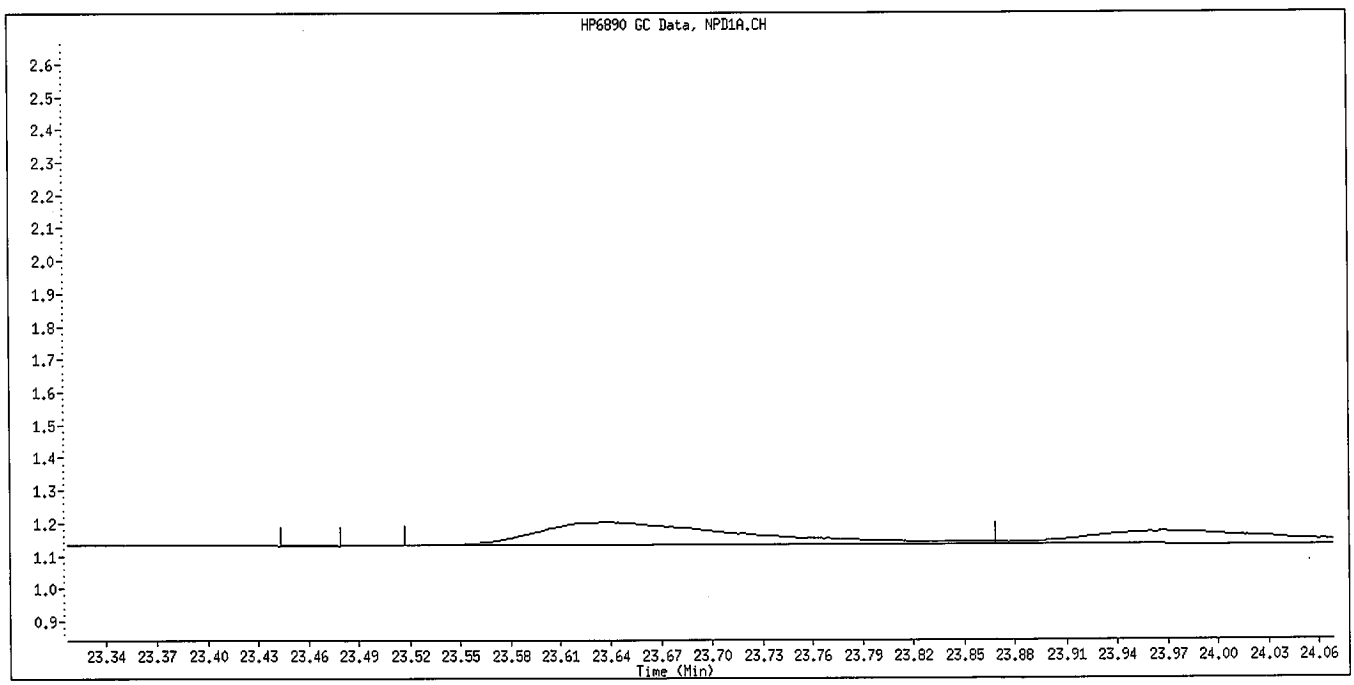
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

JG 9/30/09

Data File Name: 009F0901.D
Inj. Date and Time: 29-SEP-2009 16:12
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV1083
Compound Name: Bolstar / Famphur
CAS #:
Report Date: 09/30/2009



Original Integration

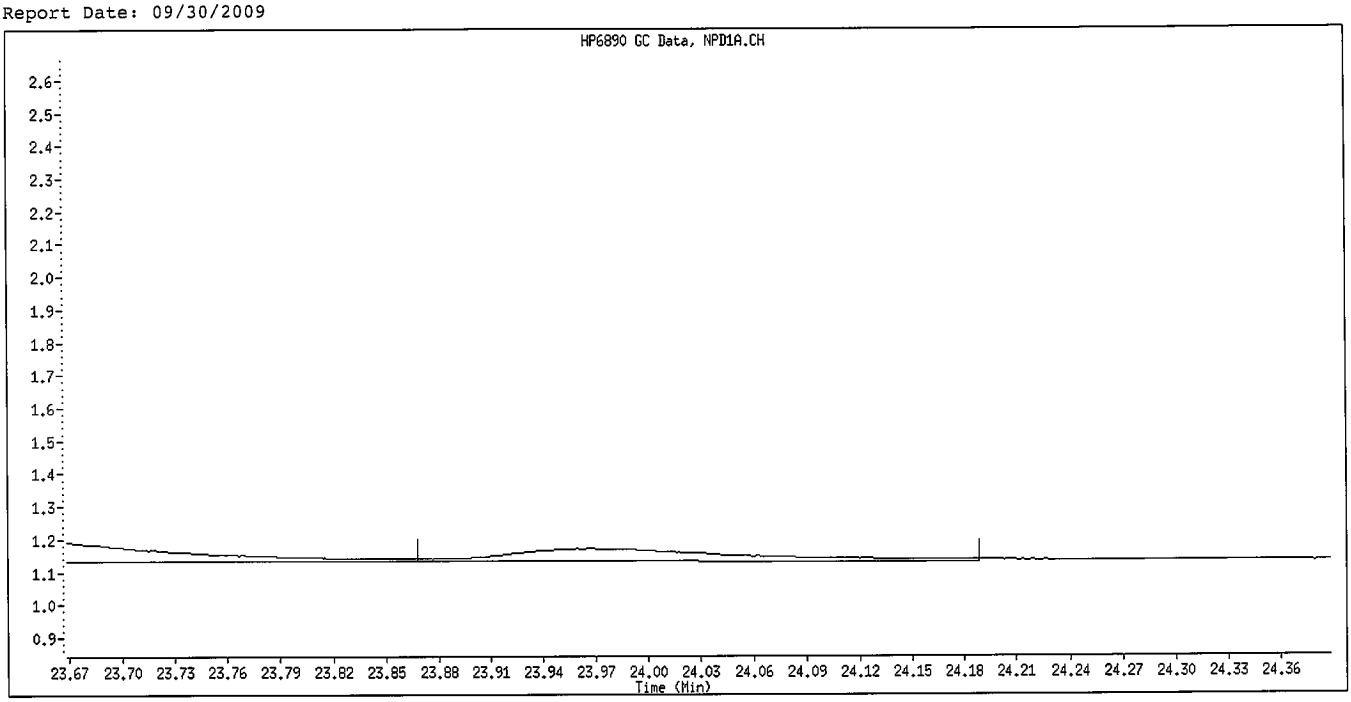


Manual Integration

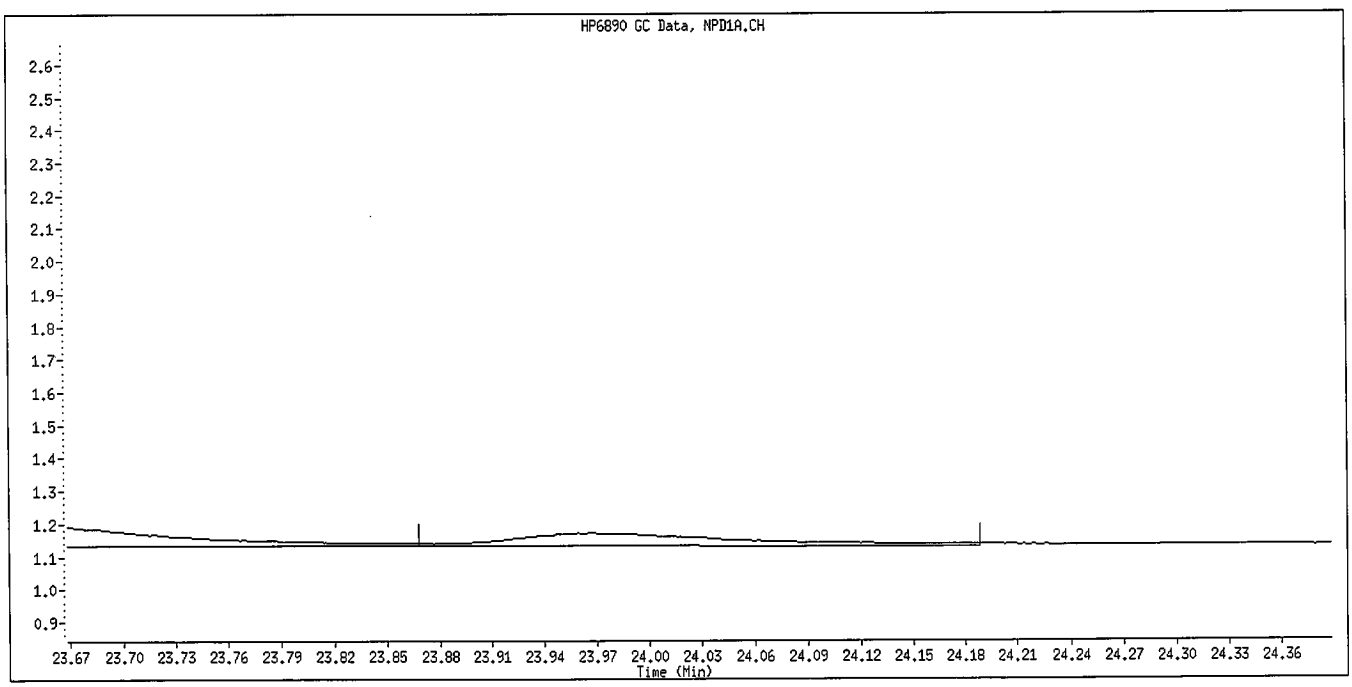
Manually Integrated By: williamst
Manual Integration Reason: Analyte Misidentified by the Data System

YL 9/30/09

Data File Name: 009F0901.D
Inj. Date and Time: 29-SEP-2009 16:12
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV1083
Compound Name: Carbophenothion
CAS #:
Report Date: 09/30/2009



Original Integration

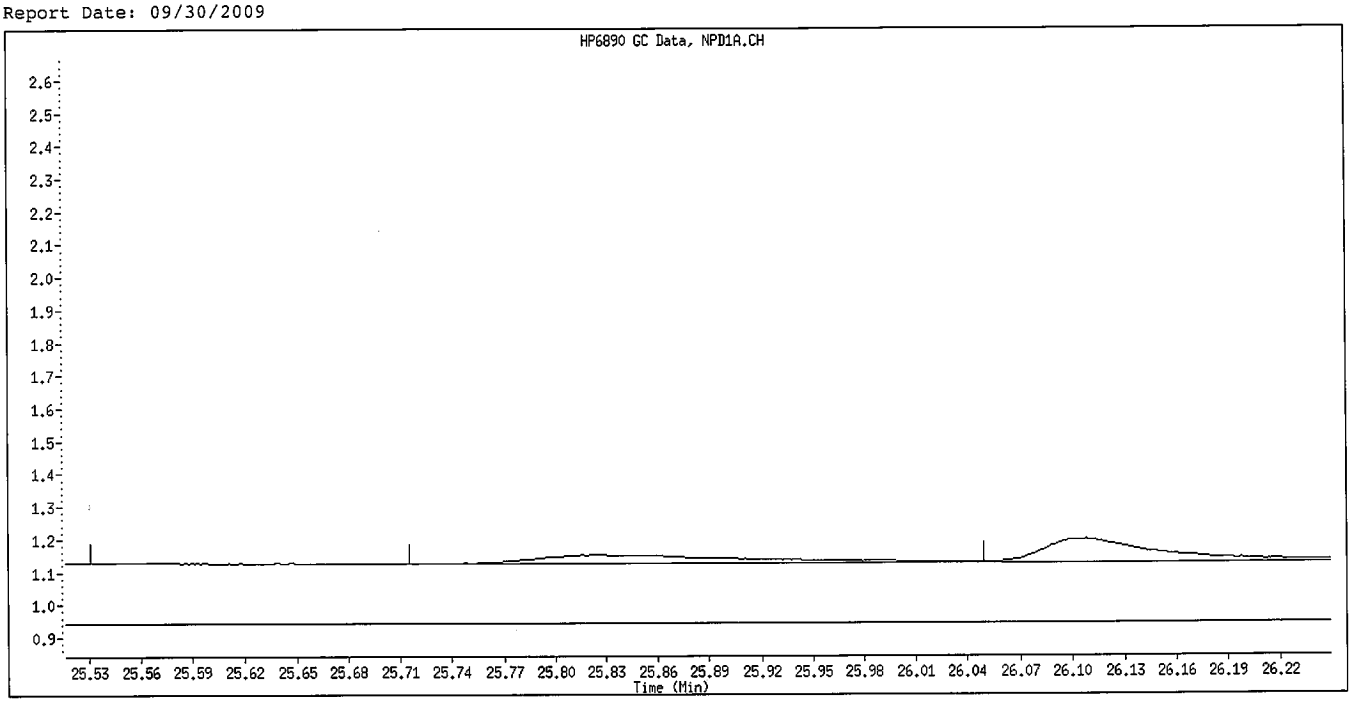


Manual Integration

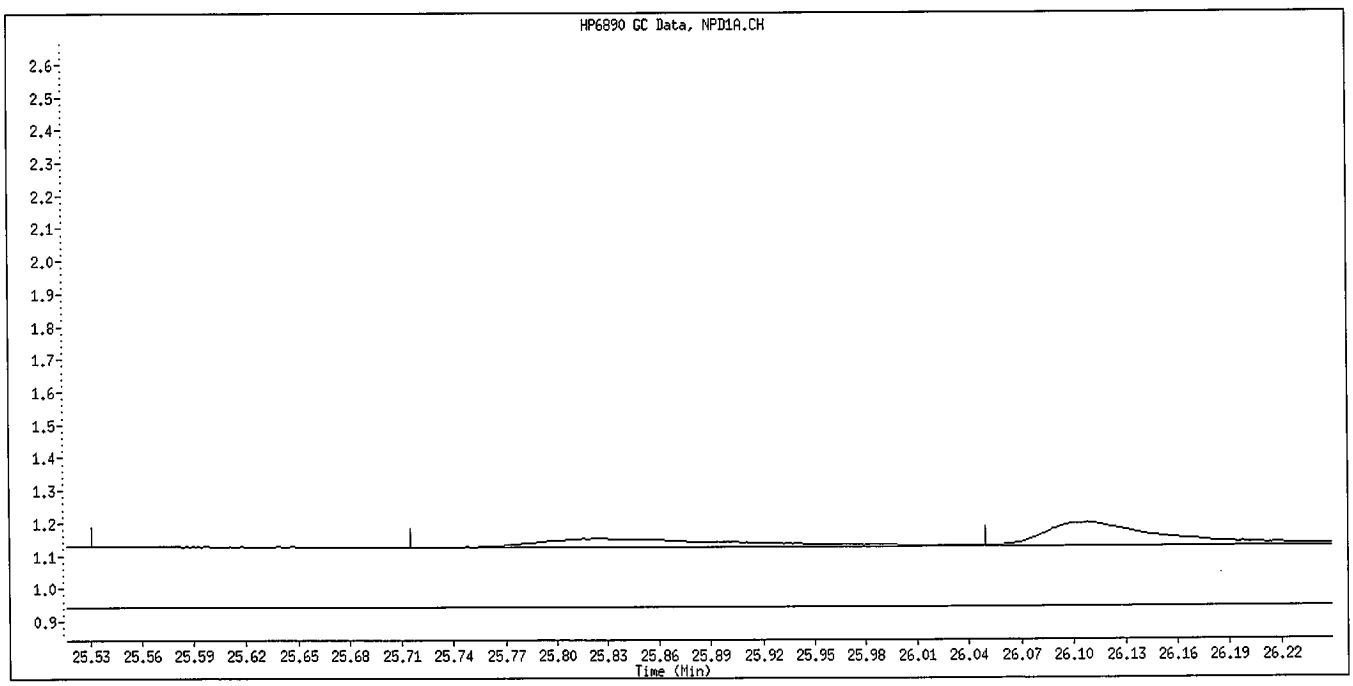
Manually Integrated By: williamst
Manual Integration Reason: Analyte Misidentified by the Data System

9/30/09

Data File Name: 009F0901.D
Inj. Date and Time: 29-SEP-2009 16:12
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV1083
Compound Name: Phosmet
CAS #:
Report Date: 09/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Analyte Misidentified by the Data System

9/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\010F1001.D
Lab Smp Id: 8141 SS GSV1107 Client Smp ID: 8141 SS GSV1107
Inj Date : 29-SEP-2009 16:49
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 SS GSV1107
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Meth Date : 30-Sep-2009 08:47 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 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	4.263	4.260	(0.312)	662975	2.00000	2.028
	2 Dichlorvos	5.825	5.821	(0.427)	431366	2.00000	1.838
	3 Mevinphos	9.357	9.350	(0.685)	141564	2.00000	1.384
$	4 Chlormefos	9.465	9.466	(0.693)	586456	2.00000	1.930
	5 Thionazin	12.585	12.581	(0.922)	449061	2.00000	1.917
	6 Demeton-O	12.837	12.837	(0.940)	395623	0.65000	1.917
	7 Ethoprop	13.154	13.150	(0.964)	436594	2.00000	1.914
	8 Naled	13.435	13.431	(0.984)	143145	2.00000	1.874
*	9 Tributylphosphate	13.652	13.646	(1.000)	430831	2.00000	
	10 Sulfotepp	14.107	14.105	(1.033)	539115	2.00000	1.742
	11 Phorate	14.194	14.191	(1.040)	355210	2.00000	1.629
	12 Dimethoate	14.383	14.366	(1.054)	423508	2.00000	1.957
	13 Demeton-S	14.648	14.636	(1.073)	48550	1.36000	0.2011
	14 Simazine	14.764	14.756	(1.081)	143580	2.00000	1.940
	15 Atrazine	14.974	14.971	(1.097)	166856	2.00000	1.834
	16 propazine	15.154	15.152	(1.110)	171094	2.00000	1.817
	17 Disulfoton	15.838	15.835	(0.585)	333233	2.00000	1.903
	18 Diazinon	15.902	15.901	(0.588)	437524	2.00000	1.788
	19 Methyl Parathion	16.809	16.802	(0.621)	328271	2.00000	1.890
	20 Ronnel	17.427	17.422	(0.644)	354668	2.00000	1.910
	21 Malathion	18.097	18.094	(0.669)	239659	2.00000	1.758
	22 Fenthion	18.255	18.250	(0.675)	304926	2.00000	1.789
	23 Parathion	18.363	18.360	(0.679)	275293	2.00000	1.786
	24 Chlorpyrifos	18.417	18.416	(0.681)	487214	2.00000	1.876
	25 Trichloronate	18.923	18.921	(0.699)	376765	2.00000	1.702
	26 Anilazine	19.348	19.331	(0.715)	11249	2.00000	1.347(M)
	27 Merphos-A (Merphos)	19.769	19.763	(0.731)	24402	2.00000	1.051
	28 Tetrachlorvinphos (Stirophos)	20.492	20.483	(0.757)	213082	2.00000	1.708
	29 Tokuthion	21.242	21.237	(0.785)	364339	2.00000	1.859
	30 Merphos-B (Merphos Oxone)	21.491	21.486	(0.794)	328446	2.00000	2.168
	31 Carbophenothion-methyl	22.230	22.219	(0.822)	172645	2.00000	1.240
	32 Fensulfothion	22.419	22.401	(0.829)	269701	2.00000	1.734
	33 Bolstar / Famphur	23.585	23.575	(0.872)	644189	4.00000	3.966

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.908	23.899	(0.884)	321039	2.00000	1.927
$	35 Triphenyl phosphate	25.230	25.226	(0.932)	277059	2.00000	2.050(A)
	36 Phosmet	25.759	25.748	(0.952)	261945	2.00000	2.060
	37 EPN	26.083	26.075	(0.964)	323485	2.00000	1.984
	38 Azinphos-methyl	26.581	26.574	(0.982)	231547	2.00000	1.769
*	39 TOCP	27.060	27.058	(1.000)	293002	2.00000	
	40 Azinphos-ethyl	27.166	27.159	(1.004)	280474	2.00000	1.876
	41 Coumaphos	27.693	27.686	(1.023)	241408	2.00000	1.852
M	42 Total Demeton				444173	2.00000	2.118
M	43 Merphos				352848	2.00000	1.816

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

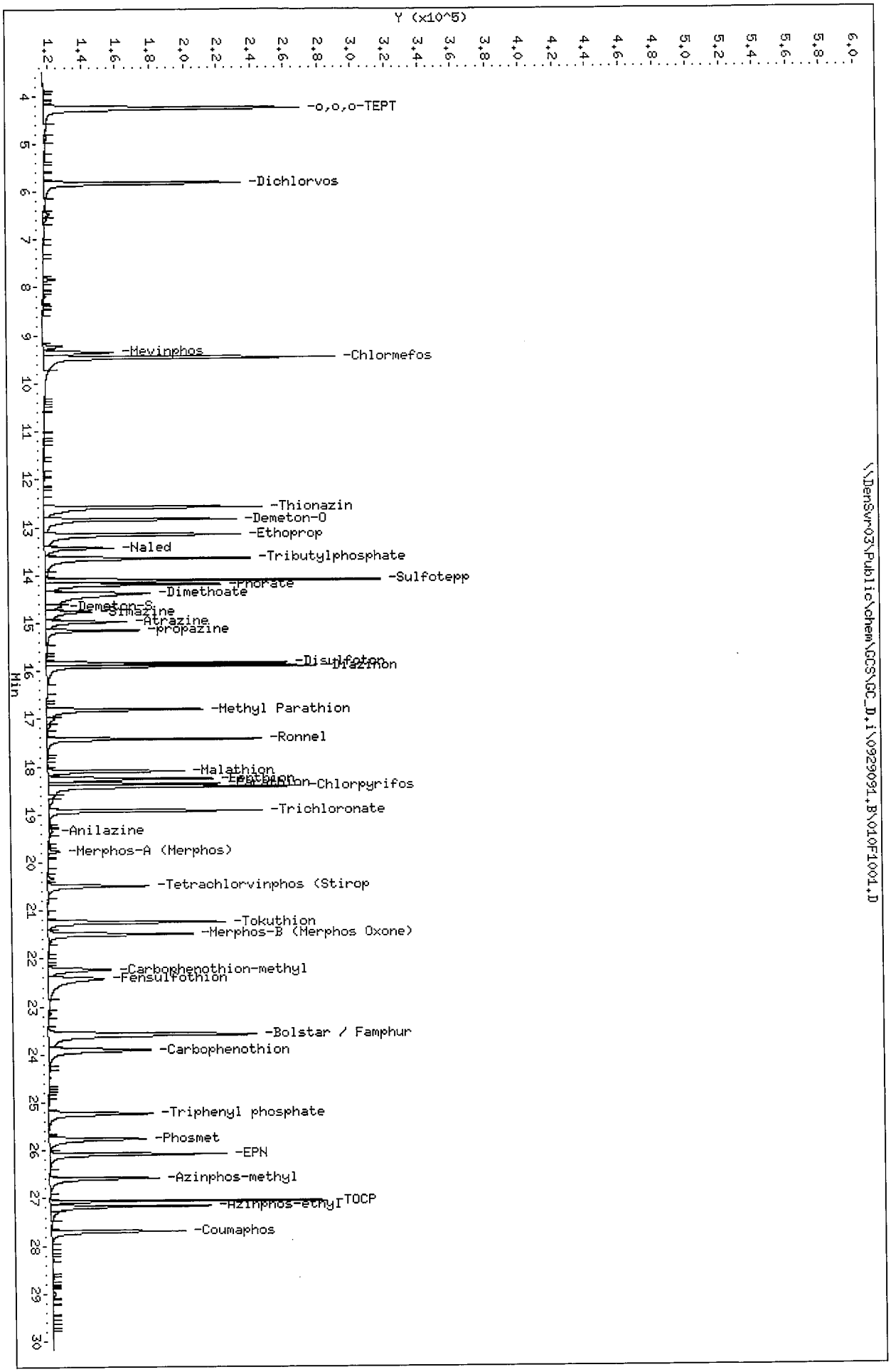
Instrument ID: GC_D.i
Lab File ID: 010F1001.D
Lab Smp Id: 8141 SS GSV1107
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929091.B\8141A-1.m
Misc Info: IS GSV1076-09

Calibration Date: 30-SEP-2009
Calibration Time: 03:08
Client Smp ID: 8141 SS GSV1107
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	744009	372005	1488018	430831	-42.09
39 TOCP	484260	242130	968520	293002	-39.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.64	13.14	14.14	13.65	0.10
39 TOCP	27.06	26.56	27.56	27.06	0.02

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.

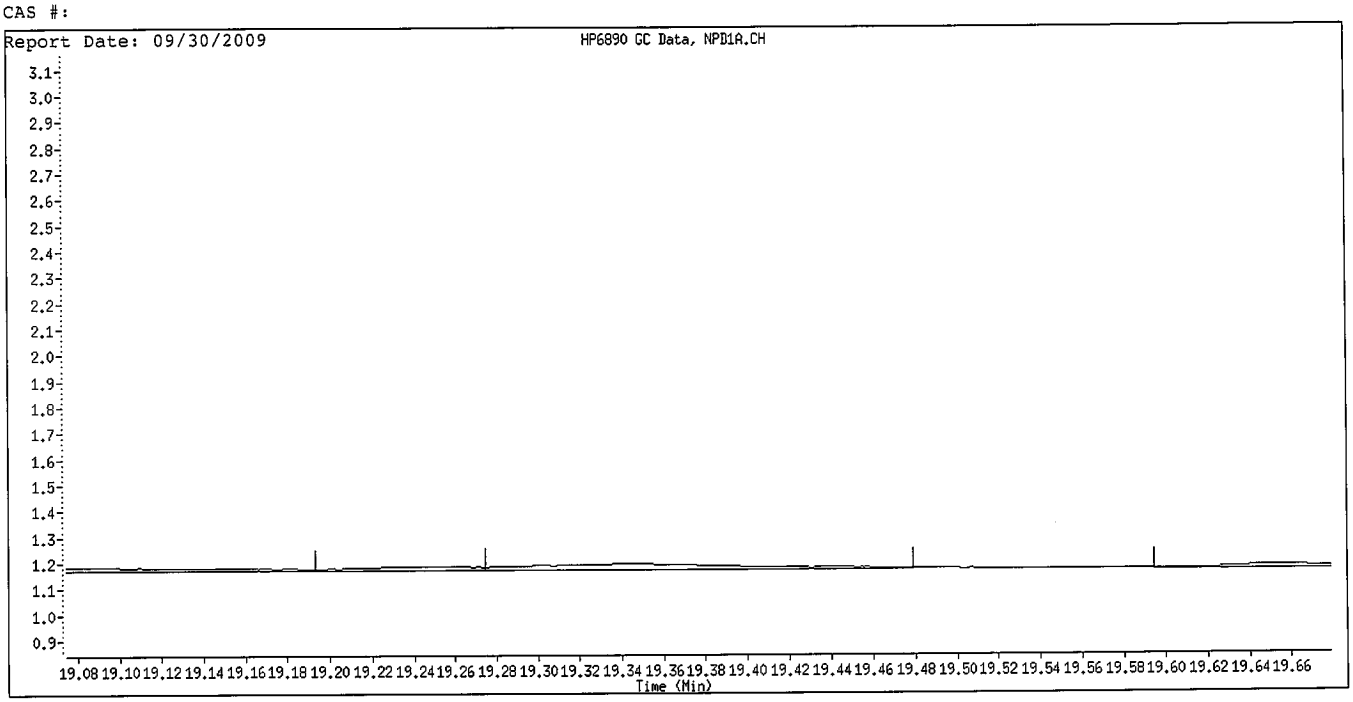


Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0929091,B\010F1001,D
Date : 29-SEP-2009 16:49
Client ID: 8141 SS GSV1107
Sample Info: 8141 SS GSV1107
Column phase: RTx-1MS

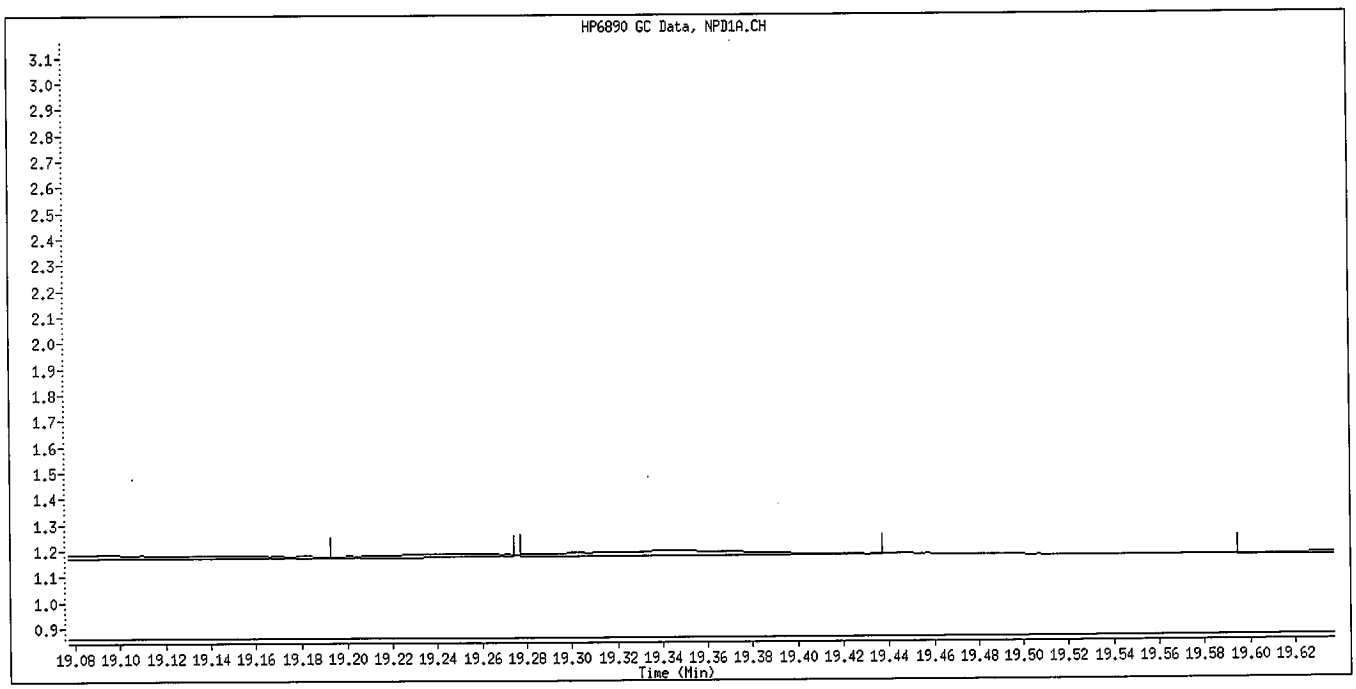
\\DenSvr03\Public\chem\GCS\GC_D,i\0929091,B\010F1001,D

Instrument: GC_D,i
Operator: TLW
Column diameter: 0.32

Data File Name: 010F1001.D
Inj. Date and Time: 29-SEP-2009 16:49
Instrument ID: GC_D.i
Client ID: 8141 SS GSV1107
Compound Name: Anilazine
CAS #:



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\003F0301.D
Lab Smp Id: 8141 L7 GSV1077 Client Smp ID: 8141 L7 GSV1077
Inj Date : 29-SEP-2009 12:33
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L7 GSV1077
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Meth Date : 30-Sep-2009 08:44 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 Cal File: 009F0901.D
Als bottle: 3 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	6.726	6.726	(0.417)	772865	5.00000	4.207
	2 Dichlorvos	8.901	8.903	(0.551)	609684	5.00000	4.660
$	3 Chlormefos	12.835	12.838	(0.795)	552249	5.00000	4.414
	4 Mevinphos	12.949	12.953	(0.802)	370427	5.00000	4.714
	5 Demeton-O	15.897	15.901	(0.985)	119414	1.62500	1.535
	6 Thionazin	16.023	16.027	(0.993)	518273	5.00000	4.580
*	7 Tributylphosphate	16.141	16.146	(1.000)	219381	2.00000	
	8 Ethoprop	16.286	16.290	(1.009)	585549	5.00000	4.599
	9 Naled	16.871	16.873	(1.045)	201383	5.00000	4.844
	10 Sulfotepp	17.187	17.189	(1.065)	695274	5.00000	4.740
	11 Phorate	17.223	17.225	(1.067)	457389	5.00000	4.552
	12 Demeton-S	17.908	17.914	(1.109)	292846	3.40000	3.250
	13 Simazine	18.321	18.324	(1.135)	107753	5.00000	4.955
	14 Atrazine / Propazine	18.387	18.391	(1.139)	421388	10.0000	10.02(A)
	15 Dimethoate	18.513	18.518	(1.147)	547217	5.00000	4.609
	16 Diazinon	18.915	18.919	(1.172)	476423	5.00000	4.385
	17 Disulfoton	19.177	19.182	(1.188)	484109	5.00000	4.393
	18 Methyl Parathion	21.077	21.081	(0.735)	409367	5.00000	4.938(A)
	19 Ronnel	21.166	21.170	(0.738)	498225	5.00000	5.024(A)
	20 Malathion	22.426	22.430	(0.782)	350626	5.00000	4.833
	21 Chlorpyrifos	22.581	22.586	(0.787)	473711	5.00000	5.058(A)
	22 Trichloronate	22.754	22.757	(0.793)	516721	5.00000	5.150(A)
	23 Parathion	22.803	22.810	(0.795)	432482	5.00000	4.741
	24 Fenthion	22.876	22.881	(0.798)	523921	5.00000	4.685
	25 Merphos-A (Merphos)	23.411	23.412	(0.816)	228536	5.00000	5.183(A)
	26 Anilazine	24.391	24.396	(0.850)	35306	5.00000	4.907
	27 Tetrachlorvinphos (stirophos)	25.825	25.828	(0.900)	330886	5.00000	4.981
	28 Tokuthion	26.007	26.009	(0.907)	494804	5.00000	5.179(A)
	29 Merphos-B (Merphos oxone)	26.139	26.142	(0.911)	303395	5.00000	3.617
	30 Carbophenothion methyl	26.975	26.976	(0.940)	352947	5.00000	4.892
	31 Fensulfothion	27.211	27.214	(0.949)	294034	5.00000	4.628
	32 Bolstar	27.324	27.326	(0.953)	377622	5.00000	4.498
	33 Carbophenothion	27.438	27.440	(0.957)	347667	5.00000	4.716

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.622	27.624	(0.963)	345194	5.00000	4.674
$	35 Triphenyl phosphate	27.913	27.914	(0.973)	289283	5.00000	4.632
	36 EPN	28.221	28.223	(0.984)	351202	5.00000	4.559
	37 Phosmet	28.346	28.348	(0.988)	305705	5.00000	4.606
*	38 TOCP	28.682	28.684	(1.000)	158977	2.00000	
	39 Azinphos-methyl	28.793	28.796	(1.004)	301398	5.00000	4.928
	40 Azinphos-ethyl	29.103	29.106	(1.015)	301170	5.00000	4.785
	41 Coumaphos	29.430	29.433	(1.026)	284996	5.00000	4.760
M	42 Total Demeton				412260	5.00000	4.786
M	43 Merphos				531931	5.00000	4.883(A)

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

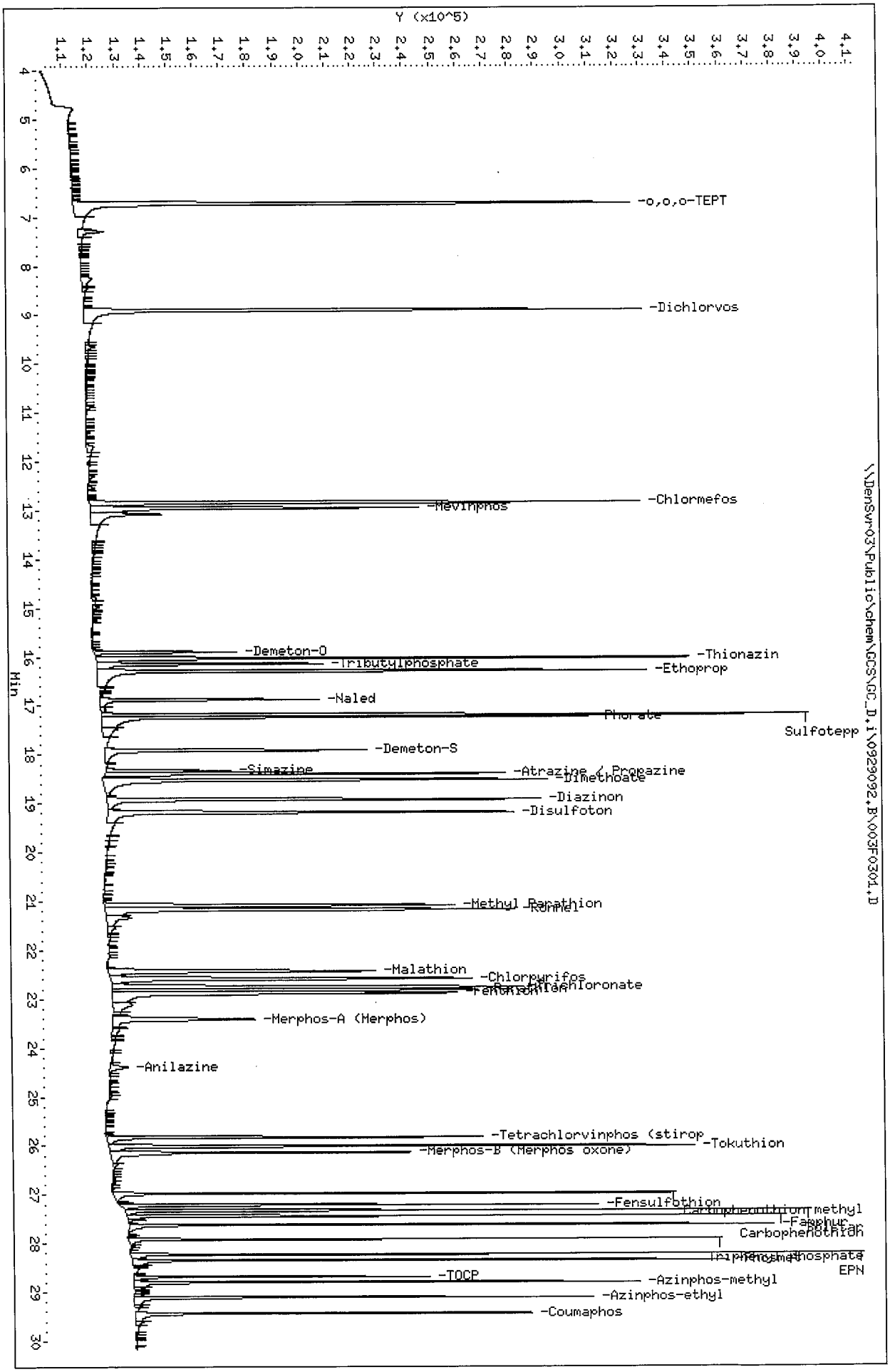
Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Lab Smp Id: 8141 L7 GSV1077
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 29-SEP-2009
Calibration Time: 16:49
Client Smp ID: 8141 L7 GSV1077
Level:
Sample Type:

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	168771	84386	337542	219381	29.99
38 TOCP	129625	64813	259250	158977	22.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.15	15.65	16.65	16.14	-0.04
38 TOCP	28.68	28.18	29.18	28.68	-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_D,i\0929092,B\003F0301,D
Date : 29-SEP-2009 12:33
Client ID: 8141 L7 GSW1077
Sample Info: 8141 L7 GSW1077
Column phase: RTx-OPPest

\\DenSvr03\Public\chem\GCS\GC_D,i\0929092,B\003F0301,D

Instrument: GC_D,i
Operator: TLW
Column diameter: 0.32

Page 4

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\004F0401.D
Lab Smp Id: 8141 L6 GSV1078 Client Smp ID: 8141 L6 GSV1078
Inj Date : 29-SEP-2009 13:09
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L6 GSV1078
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Meth Date : 30-Sep-2009 08:44 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 12:33 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	6.726	6.726	(0.417)	619522	4.00000	3.787
	2 Dichlorvos	8.902	8.903	(0.551)	450663	4.00000	3.869
$	3 Chlormefos	12.836	12.838	(0.795)	420046	4.00000	3.771
	4 Mevinphos	12.950	12.953	(0.802)	281626	4.00000	4.025
	5 Demeton-O	15.898	15.901	(0.985)	90724	1.30000	1.310
	6 Thionazin	16.025	16.027	(0.993)	400261	4.00000	3.972
*	7 Tributylphosphate	16.142	16.146	(1.000)	195315	2.00000	
	8 Ethoprop	16.287	16.290	(1.009)	456780	4.00000	3.996
	9 Naled	16.873	16.873	(1.045)	153119	4.00000	4.153
	10 Sulfotepp	17.187	17.189	(1.065)	536170	4.00000	4.076
	11 Phorate	17.224	17.225	(1.067)	366311	4.00000	4.078
	12 Demeton-S	17.911	17.914	(1.110)	218626	2.72000	2.730
	13 Simazine	18.322	18.324	(1.135)	77526	4.00000	4.068
	14 Atrazine / Propazine	18.387	18.391	(1.139)	307271	8.00000	8.217(A)
	15 Dimethoate	18.514	18.518	(1.147)	414494	4.00000	3.939
	16 Diazinon	18.916	18.919	(1.172)	369629	4.00000	3.822
	17 Disulfoton	19.178	19.182	(1.188)	381324	4.00000	3.887
	18 Methyl Parathion	21.078	21.081	(0.735)	308584	4.00000	4.024(A)
	19 Ronnel	21.166	21.170	(0.738)	372879	4.00000	4.046
	20 Malathion	22.426	22.430	(0.782)	267260	4.00000	3.970
	21 Chlorpyrifos	22.582	22.586	(0.787)	349915	4.00000	4.030
	22 Trichloronate	22.755	22.757	(0.793)	378490	4.00000	4.072
	23 Parathion	22.806	22.810	(0.795)	341103	4.00000	4.032
	24 Fenthion	22.877	22.881	(0.798)	396533	4.00000	3.816
	25 Merphos-A (Merphos)	23.410	23.412	(0.816)	162051	4.00000	4.133
	26 Anilazine	24.392	24.396	(0.850)	26232	4.00000	3.954
	27 Tetrachlorvinphos (stirophos)	25.826	25.828	(0.900)	242093	4.00000	4.021
	28 Tokuthion	26.007	26.009	(0.907)	369539	4.00000	4.162
	29 Merphos-B (Merphos oxone)	26.142	26.142	(0.911)	239054	4.00000	3.067
	30 Carbophenothion methyl	26.975	26.976	(0.940)	269754	4.00000	4.030
	31 Fensulfothion	27.212	27.214	(0.949)	232294	4.00000	3.942
	32 Bolstar	27.325	27.326	(0.953)	304199	4.00000	3.899
	33 Carbophenothion	27.439	27.440	(0.957)	270609	4.00000	3.956

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.623	27.624	(0.963)	273389	4.00000	3.992
$	35 Triphenyl phosphate	27.913	27.914	(0.973)	230548	4.00000	3.973
	36 EPN	28.221	28.223	(0.984)	277935	4.00000	3.883
	37 Phosmet	28.346	28.348	(0.988)	262610	4.00000	4.258
*	38 TOCP	28.682	28.684	(1.000)	147725	2.00000	
	39 Azinphos-methyl	28.794	28.796	(1.004)	229899	4.00000	4.025
	40 Azinphos-ethyl	29.104	29.106	(1.015)	238500	4.00000	4.046
	41 Coumaphos	29.429	29.433	(1.026)	222813	4.00000	3.979
M	42 Total Demeton				309350	4.00000	4.040
M	43 Merphos				401105	4.00000	3.966(A)

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

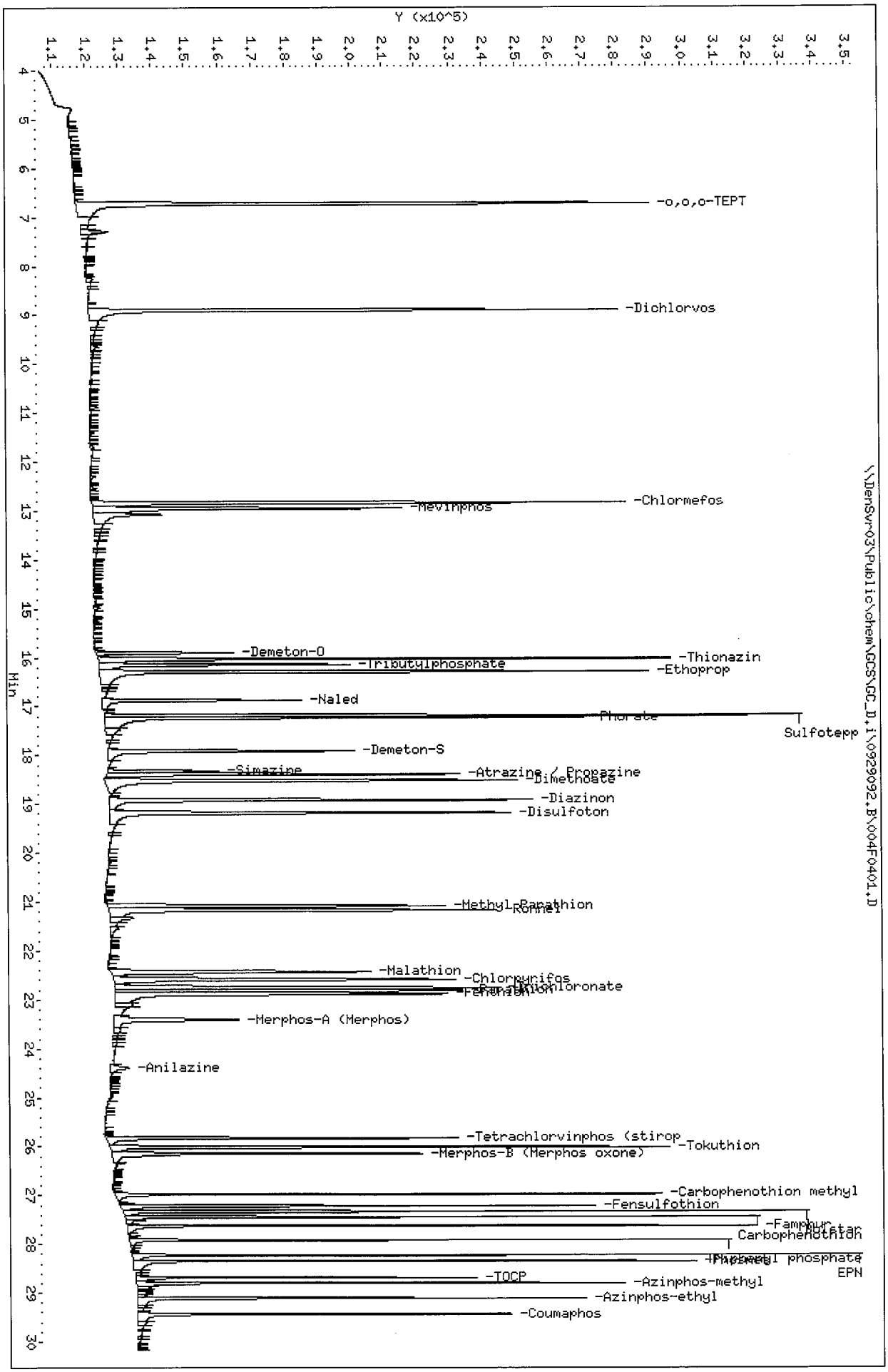
Instrument ID: GC_D.i
Lab File ID: 004F0401.D
Lab Smp Id: 8141 L6 GSV1078
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 29-SEP-2009
Calibration Time: 16:49
Client Smp ID: 8141 L6 GSV1078
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	168771	84386	337542	195315	15.73
38 TOCP	129625	64813	259250	147725	13.96

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.15	15.65	16.65	16.14	-0.04
38 TOCP	28.68	28.18	29.18	28.68	-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_D.i\0929092.B\004F0401.D
Date : 29-SEP-2009 13:09
Client ID: 8141 L6 GSV1078
Sample Info: 8141 L6 GSV1078
Column phase: RTx-OPPest

Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\005F0501.D
Lab Smp Id: 8141 L5 GSV1079 Client Smp ID: 8141 L5 GSV1079
Inj Date : 29-SEP-2009 13:46
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L5 GSV1079
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Meth Date : 30-Sep-2009 08:44 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 13:09 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	6.725	6.726	(0.417)	440556	3.00000	2.924
	2 Dichlorvos	8.903	8.903	(0.551)	312239	3.00000	2.910
$	3 Chlormefos	12.838	12.838	(0.795)	298226	3.00000	2.906
	4 Mevinphos	12.953	12.953	(0.802)	200396	3.00000	3.109
	5 Demeton-O	15.900	15.901	(0.985)	63841	0.97500	1.001
	6 Thionazin	16.027	16.027	(0.993)	286900	3.00000	3.091
*	7 Tributylphosphate	16.145	16.146	(1.000)	179919	2.00000	
	8 Ethoprop	16.289	16.290	(1.009)	339190	3.00000	3.168
	9 Naled	16.873	16.873	(1.045)	104633	3.00000	3.108
	10 Sulfotepp	17.188	17.189	(1.065)	391784	3.00000	3.187
	11 Phorate	17.224	17.225	(1.067)	267547	3.00000	3.199
	12 Demeton-S	17.913	17.914	(1.110)	148807	2.04000	2.024
	13 Simazine	18.323	18.324	(1.135)	50934	3.00000	2.997
	14 Atrazine / Propazine	18.390	18.391	(1.139)	207143	6.00000	6.026(A)
	15 Dimethoate	18.518	18.518	(1.147)	296888	3.00000	3.088
	16 Diazinon	18.918	18.919	(1.172)	266007	3.00000	2.986
	17 Disulfoton	19.182	19.182	(1.188)	266889	3.00000	2.953
	18 Methyl Parathion	21.080	21.081	(0.735)	218781	3.00000	3.110(A)
	19 Ronnel	21.169	21.170	(0.738)	263521	3.00000	3.094
	20 Malathion	22.429	22.430	(0.782)	191342	3.00000	3.083
	21 Chlorpyrifos	22.585	22.586	(0.787)	244884	3.00000	3.063
	22 Trichloronate	22.757	22.757	(0.793)	261483	3.00000	3.058
	23 Parathion	22.809	22.810	(0.795)	239376	3.00000	3.075
	24 Fenthion	22.880	22.881	(0.798)	294303	3.00000	3.064
	25 Merphos-A (Merphos)	23.412	23.412	(0.816)	73838	3.00000	2.419
	26 Anilazine	24.395	24.396	(0.850)	19918	3.00000	3.275
	27 Tetrachlorvinphos (stirophos)	25.828	25.828	(0.900)	164289	3.00000	3.035
	28 Tokuthion	26.008	26.009	(0.907)	260483	3.00000	3.174
	29 Merphos-B (Merphos oxone)	26.142	26.142	(0.911)	209630	3.00000	2.910
	30 Carbophenothion methyl	26.975	26.976	(0.940)	192332	3.00000	3.118
	31 Fensulfothion	27.213	27.214	(0.949)	171184	3.00000	3.153
	32 Bolstar	27.325	27.326	(0.953)	225411	3.00000	3.126
	33 Carbophenothion	27.439	27.440	(0.957)	194237	3.00000	3.078

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.623	27.624	(0.963)	195770	3.00000	3.106
$	35 Triphenyl phosphate	27.913	27.914	(0.973)	167583	3.00000	3.124
	36 EPN	28.223	28.223	(0.984)	204647	3.00000	3.093
	37 Phosmet	28.348	28.348	(0.988)	182870	3.00000	3.208
*	38 TOCP	28.683	28.684	(1.000)	136544	2.00000	
	39 Azinphos-methyl	28.795	28.796	(1.004)	166083	3.00000	3.121
	40 Azinphos-ethyl	29.106	29.106	(1.015)	171561	3.00000	3.100
	41 Coumaphos	29.433	29.433	(1.026)	160902	3.00000	3.073
M	42 Total Demeton				212648	3.00000	3.025
M	43 Merphos				283468	3.00000	3.037(A)

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

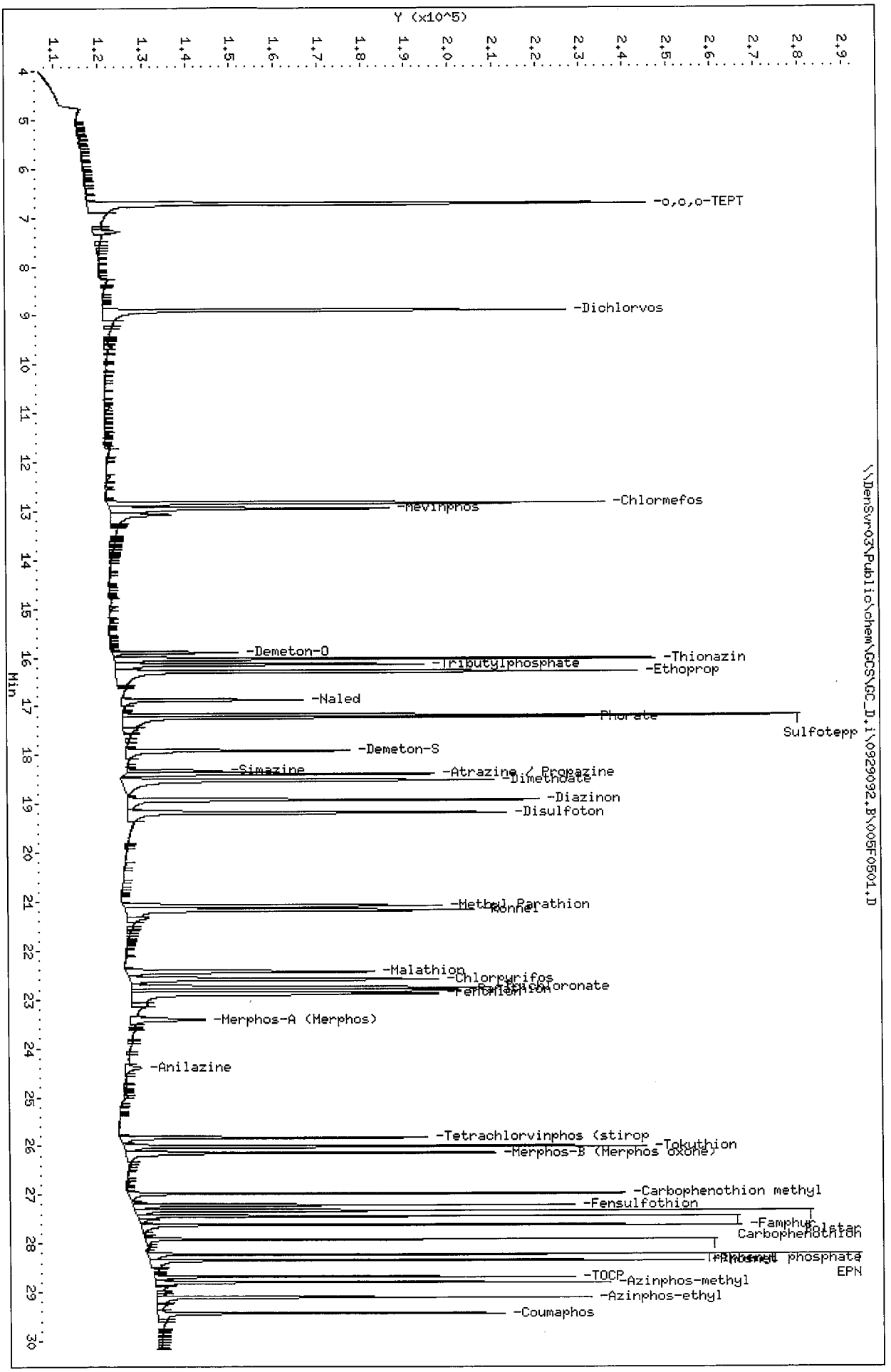
Instrument ID: GC_D.i
Lab File ID: 005F0501.D
Lab Smp Id: 8141 L5 GSV1079
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 29-SEP-2009
Calibration Time: 16:49
Client Smp ID: 8141 L5 GSV1079
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	168771	84386	337542	179919	6.61
38 TOCP	129625	64813	259250	136544	5.34

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.15	15.65	16.65	16.15	-0.02
38 TOCP	28.68	28.18	29.18	28.68	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_D.i\0929092.B\005F0501.D
Date : 29-SEP-2009 13:46
Client ID: 8141 L5 GSV1079
Sample Info: 8141 L5 GSV1079
Column phase: RTx-OPPest

\\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\005F0501.D

Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\006F0601.D
Lab Smp Id: 8141 L4 GSV1080 Client Smp ID: 8141 L4 GSV1080
Inj Date : 29-SEP-2009 14:22
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L4 GSV1080
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Meth Date : 30-Sep-2009 08:44 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 13:46 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	6.725	6.726	(0.417)	310103	2.00000	1.964
	2 Dichlorvos	8.902	8.903	(0.551)	206350	2.00000	1.836
$	3 Chlormefos	12.835	12.838	(0.795)	206244	2.00000	1.918
	4 Mevinphos	12.952	12.953	(0.802)	136078	2.00000	2.015
	5 Demeton-O	15.899	15.901	(0.985)	42675	0.65000	0.6386
	6 Thionazin	16.025	16.027	(0.993)	196127	2.00000	2.017
*	7 Tributylphosphate	16.144	16.146	(1.000)	188507	2.00000	
	8 Ethoprop	16.289	16.290	(1.009)	231940	2.00000	1.972
	9 Naled	16.872	16.873	(1.045)	66048	2.00000	1.914
	10 Sulfotepp	17.187	17.189	(1.065)	278947	2.00000	2.095
	11 Phorate	17.225	17.225	(1.067)	186434	2.00000	2.071
	12 Demeton-S	17.914	17.914	(1.110)	105446	1.36000	1.377
	13 Simazine	18.323	18.324	(1.135)	32796	2.00000	1.970
	14 Atrazine / Propazine	18.387	18.391	(1.139)	137441	4.00000	3.833
	15 Dimethoate	18.519	18.518	(1.147)	200683	2.00000	2.033
	16 Diazinon	18.917	18.919	(1.172)	188199	2.00000	2.016
	17 Disulfoton	19.180	19.182	(1.188)	193559	2.00000	2.044
	18 Methyl Parathion	21.080	21.081	(0.735)	145647	2.00000	1.950
	19 Ronnel	21.166	21.170	(0.738)	177999	2.00000	1.929
	20 Malathion	22.430	22.430	(0.782)	132229	2.00000	1.979
	21 Chlorpyrifos	22.584	22.586	(0.787)	166943	2.00000	1.945
	22 Trichloronate	22.759	22.757	(0.793)	175644	2.00000	1.919
	23 Parathion	22.808	22.810	(0.795)	163192	2.00000	1.957
	24 Fenthion	22.879	22.881	(0.798)	204919	2.00000	1.970
	25 Merphos-A (Merphos)	23.409	23.412	(0.816)	43136	2.00000	1.651
	26 Anilazine	24.402	24.396	(0.851)	11478	2.00000	1.813
	27 Tetrachlorvinphos (stirophos)	25.828	25.828	(0.900)	110089	2.00000	1.953
	28 Tokuthion	26.010	26.009	(0.907)	179763	2.00000	2.023
	29 Merphos-B (Merphos oxone)	26.140	26.142	(0.911)	159237	2.00000	2.041
	30 Carbophenothion methyl	26.975	26.976	(0.940)	127195	2.00000	1.919
	31 Fensulfothion	27.214	27.214	(0.949)	117044	2.00000	2.009
	32 Bolstar	27.325	27.326	(0.953)	159586	2.00000	2.043
	33 Carbophenothion	27.439	27.440	(0.957)	133833	2.00000	1.970

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.623	27.624	(0.963)	137487	2.00000	2.035
$	35 Triphenyl phosphate	27.914	27.914	(0.973)	117620	2.00000	2.025
	36 EPN	28.221	28.223	(0.984)	143938	2.00000	2.009
	37 Phosmet	28.348	28.348	(0.988)	120409	2.00000	1.950
*	38 TOCP	28.683	28.684	(1.000)	147884	2.00000	
	39 Azinphos-methyl	28.796	28.796	(1.004)	115656	2.00000	1.967
	40 Azinphos-ethyl	29.106	29.106	(1.015)	126800	2.00000	2.047
	41 Coumaphos	29.432	29.433	(1.026)	114650	2.00000	1.965
M	42 Total Demeton				148121	2.00000	2.016
M	43 Merphos				202373	2.00000	2.008(A)

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

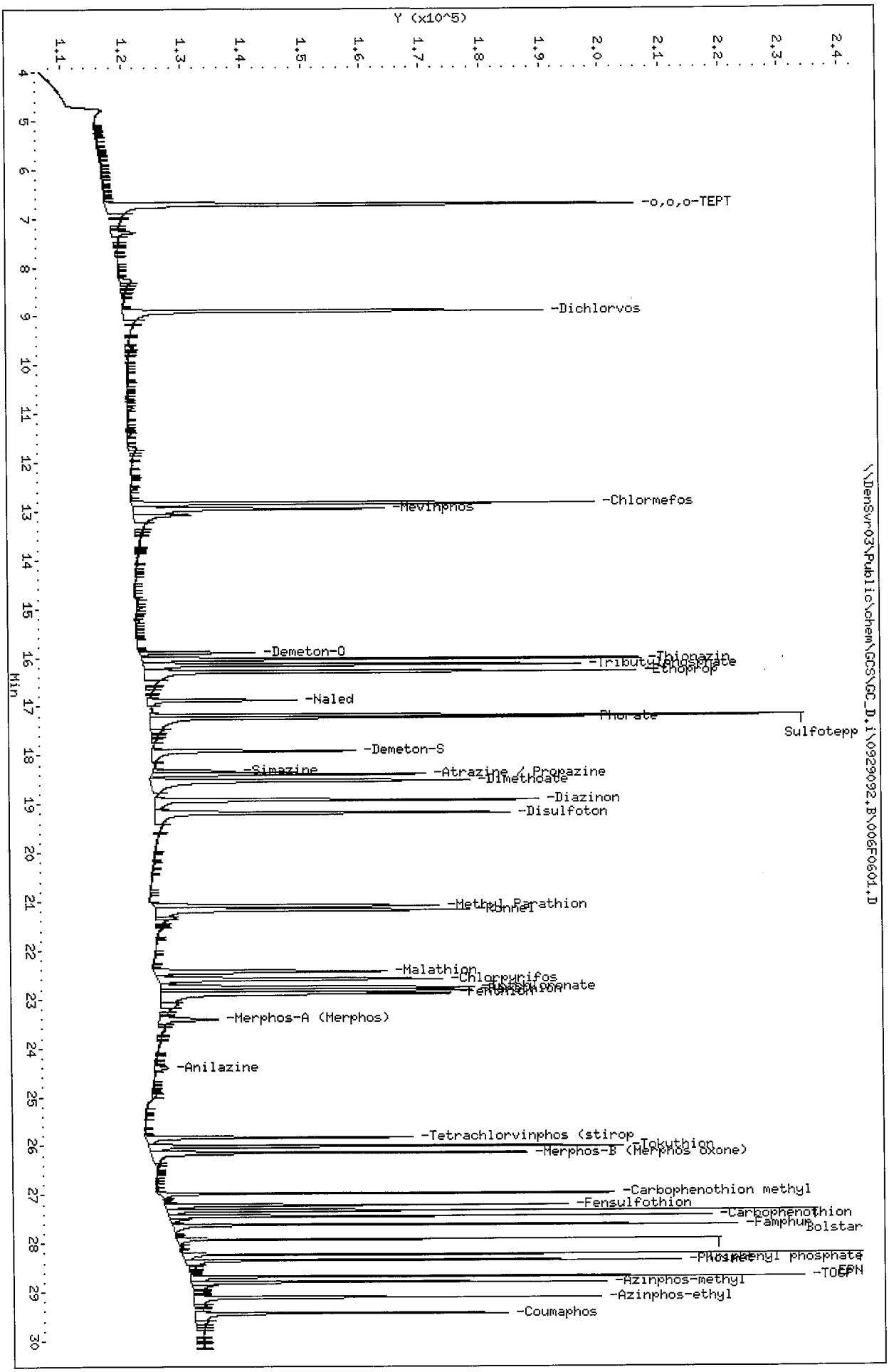
Instrument ID: GC_D.i
Lab File ID: 006F0601.D
Lab Smp Id: 8141 L4 GSV1080
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 29-SEP-2009
Calibration Time: 16:49
Client Smp ID: 8141 L4 GSV1080
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	168771	84386	337542	188507	11.69
38 TOCP	129625	64813	259250	147884	14.09

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.15	15.65	16.65	16.14	-0.03
38 TOCP	28.68	28.18	29.18	28.68	-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_D,i\0929092,B\006F0601.D
Date : 29-SEP-2009 14:22
Client ID: 8141 L4 GSV1080
Sample Info: 8141 L4 GSV1080
Column phase: RTx-OPPest
Instrument: GC_D,i
Operator: TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D,i\0929092,B\006F0601.D
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Mevinphos
-Chlormefos
-Demeton-O
-Thionazin
-Tributyl phosphate
-Ethoprop
-Naled
-Phorate
Sulfotepp
-Demeton-S
-Simazine
-Atrazine / Propazine
-Dimethoate
-Diazinon
-Disulfoton
-Methyl Parathion
-Malathion
-Chlorpyrifos
-Fenthion
-Merphos-A (Merphos)
-Anilazine
-Tetrachlorvinphos (stirop
-Merphos-B (Merphos Oxone)
-Carbophenothion methyl
-Fensulfothion
-Carbophenothion
-Famphur
Bolstar
-TOCP
EPN
-Azinphos-methyl
-Azinphos-ethyl
-Coumaphos

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\007F0701.D
Lab Smp Id: 8141 L3 GSV1081 Client Smp ID: 8141 L3 GSV1081
Inj Date : 29-SEP-2009 14:59
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L3 GSV1081
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Meth Date : 30-Sep-2009 08:44 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 14:22 Cal File: 006F0601.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	6.726	6.726	(0.417)	161855	1.00000	1.146
	2 Dichlorvos	8.905	8.903	(0.551)	106503	1.00000	1.059
$	3 Chlormefos	12.838	12.838	(0.795)	108558	1.00000	1.129
	4 Mevinphos	12.955	12.953	(0.802)	69109	1.00000	1.144
	5 Demeton-O	15.903	15.901	(0.985)	21599	0.32500	0.3614
	6 Thionazin	16.029	16.027	(0.993)	99590	1.00000	1.145
*	7 Tributylphosphate	16.149	16.146	(1.000)	168604	2.00000	
	8 Ethoprop	16.292	16.290	(1.009)	117585	1.00000	0.9984
	9 Naled	16.877	16.873	(1.045)	27100	1.00000	0.9345
	10 Sulfotepp	17.191	17.189	(1.065)	147729	1.00000	1.150(M)
	11 Phorate	17.227	17.225	(1.067)	94044	1.00000	1.095(M)
	12 Demeton-S	17.920	17.914	(1.110)	48449	0.68000	0.7199
	13 Simazine	18.331	18.324	(1.135)	12318	1.00000	1.021
	14 Atrazine / Propazine	18.395	18.391	(1.139)	66367	2.00000	2.091
	15 Dimethoate	18.530	18.518	(1.147)	90330	1.00000	1.080
	16 Diazinon	18.922	18.919	(1.172)	94294	1.00000	1.129
	17 Disulfoton	19.185	19.182	(1.188)	94535	1.00000	1.116
	18 Methyl Parathion	21.086	21.081	(0.735)	72062	1.00000	1.039
	19 Ronnel	21.171	21.170	(0.738)	95255	1.00000	1.058
	20 Malathion	22.434	22.430	(0.782)	67405	1.00000	1.051
	21 Chlorpyrifos	22.590	22.586	(0.788)	83511	1.00000	1.020
	22 Trichloronate	22.761	22.757	(0.793)	87602	1.00000	1.010
	23 Parathion	22.814	22.810	(0.795)	83031	1.00000	1.048
	24 Fenthion	22.884	22.881	(0.798)	111052	1.00000	1.094
	25 Merphos-A (Merphos)	23.411	23.412	(0.816)	14025	1.00000	1.052
	26 Anilazine	24.407	24.396	(0.851)	5957	1.00000	1.035(M)
	27 Tetrachlorvinphos (stirophos)	25.832	25.828	(0.901)	50985	1.00000	0.9952
	28 Tokuthion	26.012	26.009	(0.907)	89595	1.00000	1.033
	29 Merphos-B (Merphos oxone)	26.145	26.142	(0.911)	87486	1.00000	1.150
	30 Carbophenothion methyl	26.979	26.976	(0.941)	66286	1.00000	1.043
	31 Fensulfothion	27.217	27.214	(0.949)	59611	1.00000	1.072
	32 Bolstar	27.328	27.326	(0.953)	84184	1.00000	1.105
	33 Carbophenothion	27.442	27.440	(0.957)	70538	1.00000	1.078

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.626	27.624	(0.963)	67281	1.00000	1.050
$	35 Triphenyl phosphate	27.916	27.914	(0.973)	62457	1.00000	1.102
	36 EPN	28.224	28.223	(0.984)	78570	1.00000	1.124
	37 Phosmet	28.351	28.348	(0.988)	65056	1.00000	1.080
*	38 TOCP	28.685	28.684	(1.000)	144252	2.00000	
	39 Azinphos-methyl	28.799	28.796	(1.004)	63061	1.00000	1.050
	40 Azinphos-ethyl	29.109	29.106	(1.015)	67533	1.00000	1.019
	41 Coumaphos	29.436	29.433	(1.026)	63215	1.00000	1.039
M	42 Total Demeton				70048	1.00000	1.081
M	43 Merphos				101511	1.00000	1.042

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

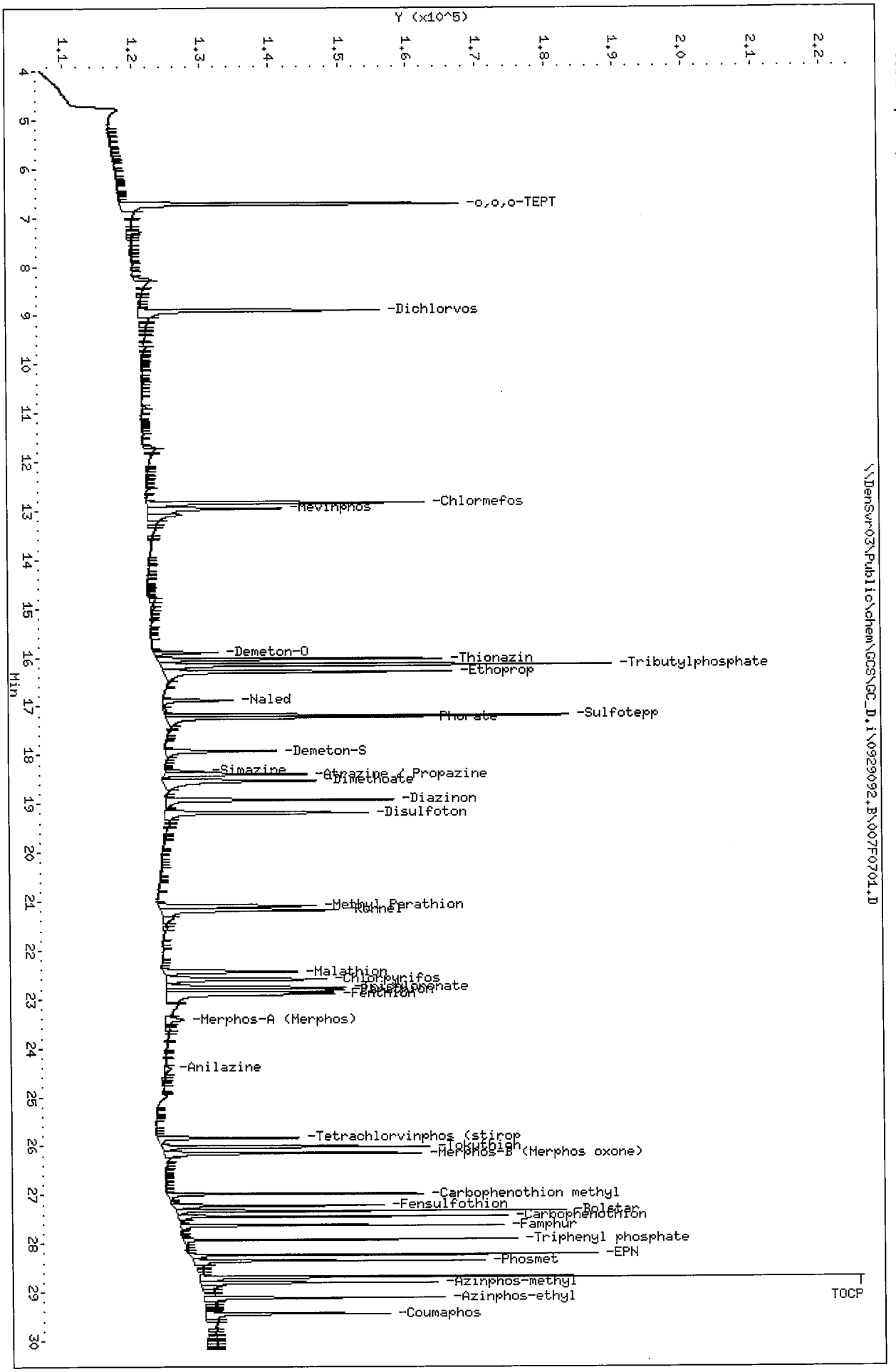
Instrument ID: GC_D.i
Lab File ID: 007F0701.D
Lab Smp Id: 8141 L3 GSV1081
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 29-SEP-2009
Calibration Time: 16:49
Client Smp ID: 8141 L3 GSV1081
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	168771	84386	337542	168604	-0.10
38 TOCP	129625	64813	259250	144252	11.28

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.15	15.65	16.65	16.15	0.00
38 TOCP	28.68	28.18	29.18	28.69	0.01

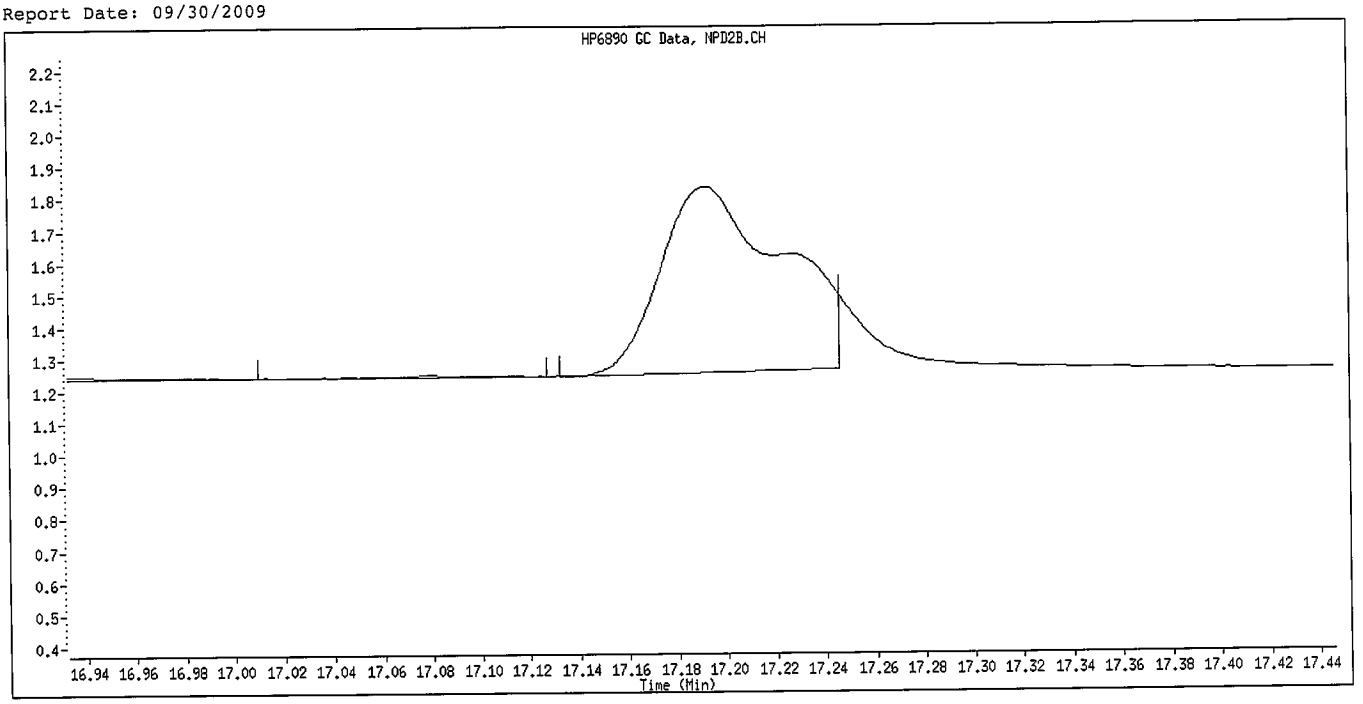
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



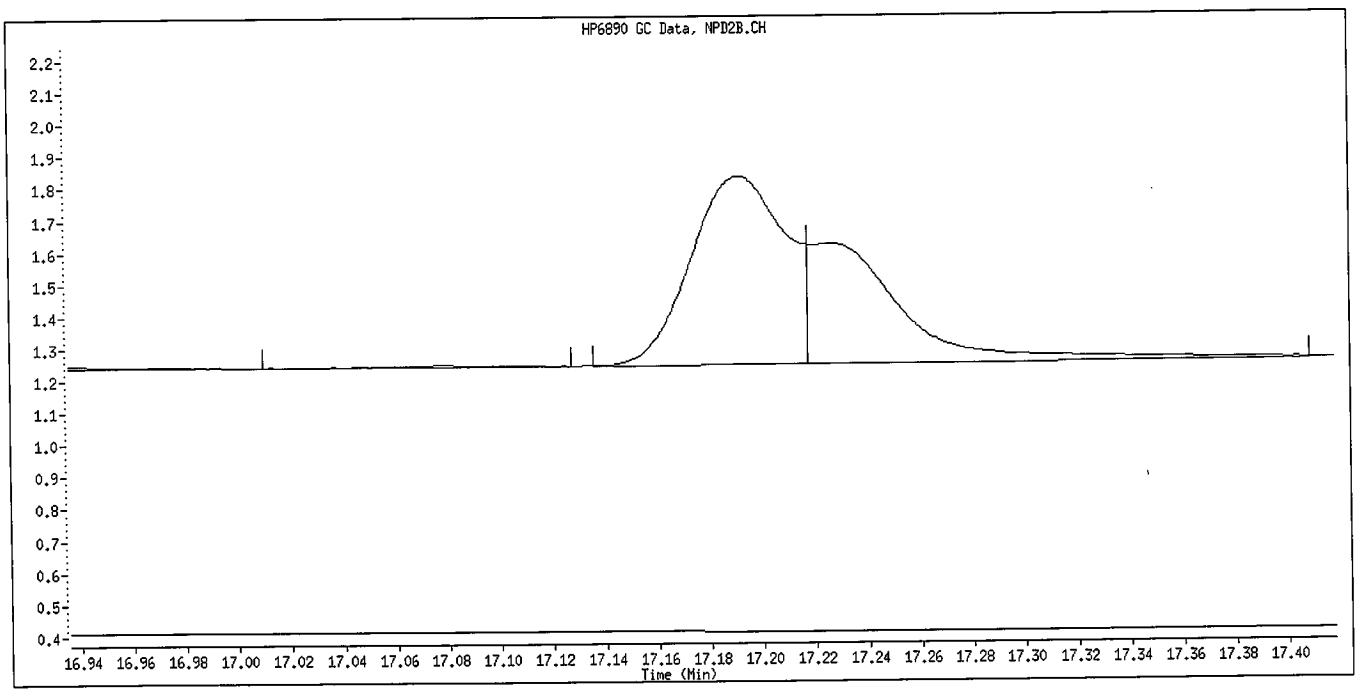
Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0929092.B\007F0701.D
Date : 29-SEP-2009 14:59
Client ID: 8141 L3 GSV1081
Sample Info: 8141 L3 GSV1081
Column phase: RTx-OPPest

Instrument: GC_D,i
Operator: TLW
Column diameter: 0.32

Data File Name: 007F0701.D
Inj. Date and Time: 29-SEP-2009 14:59
Instrument ID: GC_D.i
Client ID: 8141 L3 GSV1081
Compound Name: Sulfotepp
CAS #:
Report Date: 09/30/2009



Original Integration

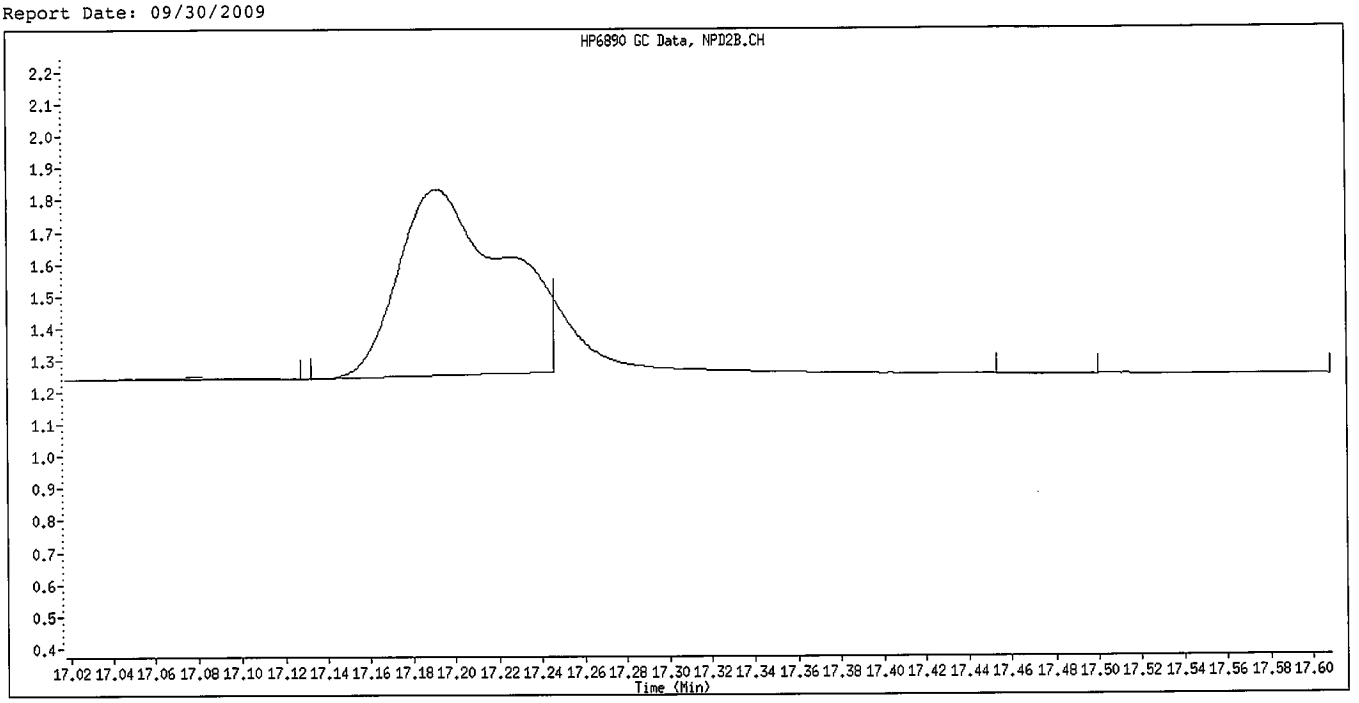


Manual Integration

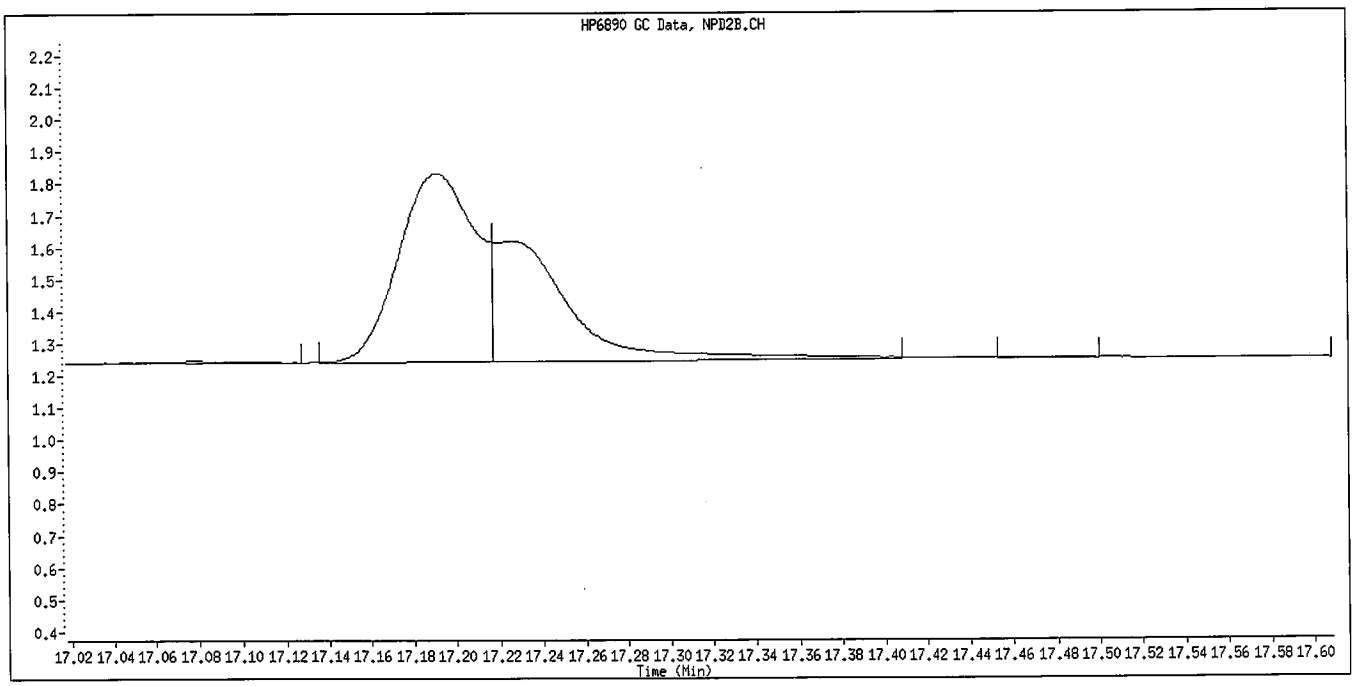
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

Data File Name: 007F0701.D
Inj. Date and Time: 29-SEP-2009 14:59
Instrument ID: GC_D.i
Client ID: 8141 L3 GSV1081
Compound Name: Phorate
CAS #:
Report Date: 09/30/2009



Original Integration

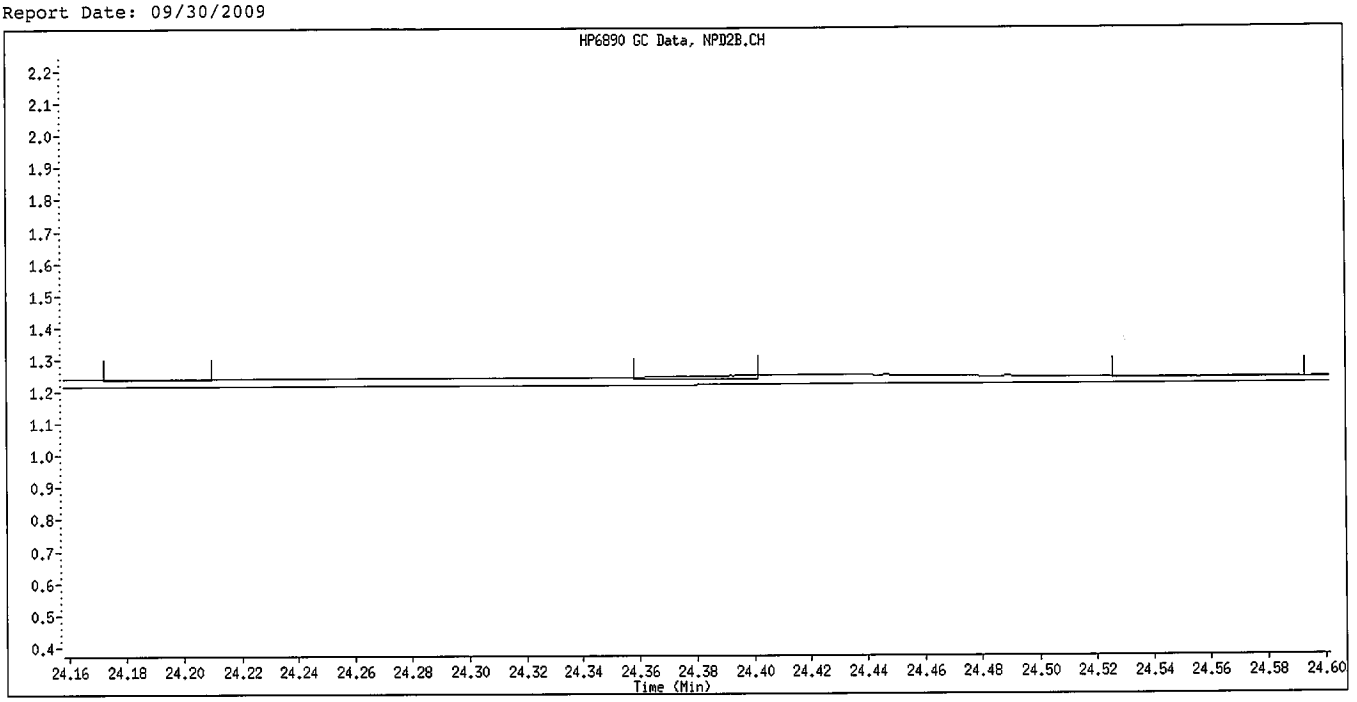


Manual Integration

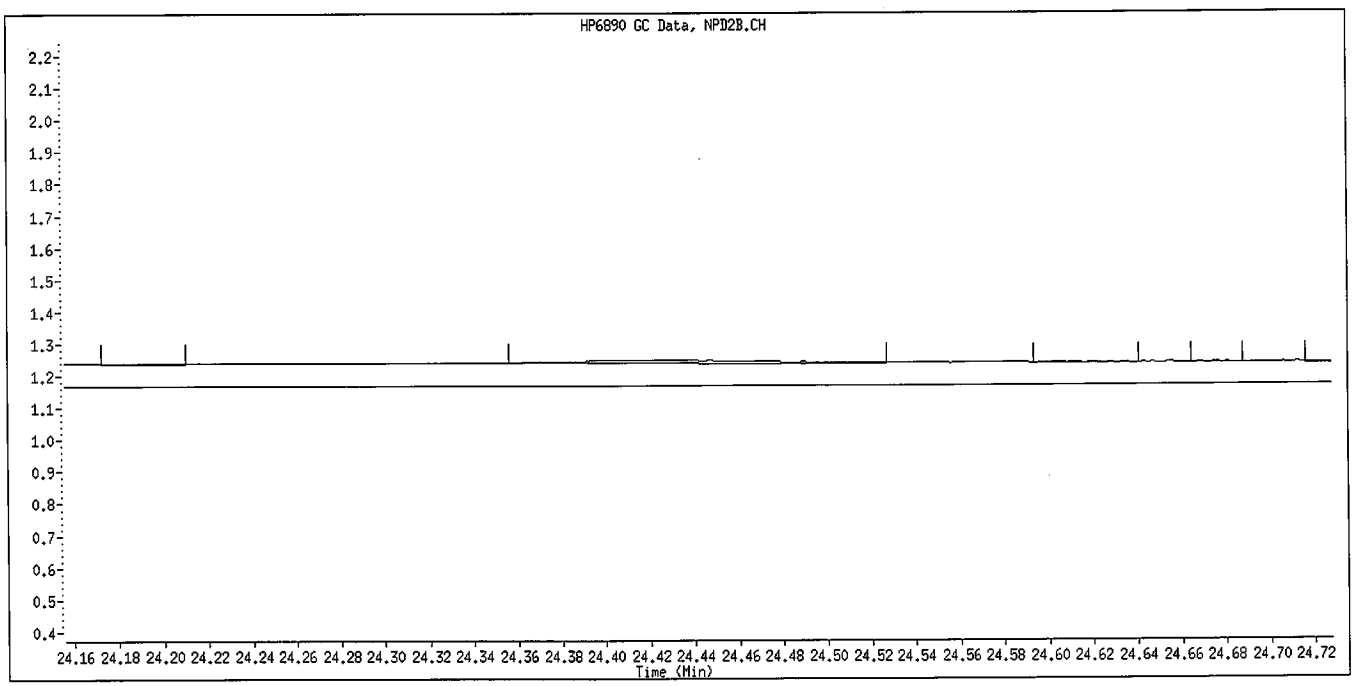
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

Data File Name: 007F0701.D
Inj. Date and Time: 29-SEP-2009 14:59
Instrument ID: GC_D.i
Client ID: 8141 L3 GSV1081
Compound Name: Anilazine
CAS #:
Report Date: 09/30/2009



Original Integration



Manual Integration

BAS - Baseline Event

2DW 9/30/09

9/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\008F0801.D
Lab Smp Id: 8141 L2 GSV1082 Client Smp ID: 8141 L2 GSV1082
Inj Date : 29-SEP-2009 15:35
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L2 GSV1082
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Meth Date : 30-Sep-2009 08:44 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 14:59 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	6.729	6.726	(0.417)	82035	0.50000	0.5441
	2 Dichlorvos	8.908	8.903	(0.551)	54251	0.50000	0.5054
$	3 Chlormefos	12.839	12.838	(0.795)	51707	0.50000	0.5036
	4 Mevinphos	12.960	12.953	(0.802)	31965	0.50000	0.4957
	5 Demeton-O	15.903	15.901	(0.985)	10143	0.16250	0.1589
	6 Thionazin	16.033	16.027	(0.993)	46840	0.50000	0.5044
*	7 Tributylphosphate	16.153	16.146	(1.000)	180030	2.00000	
	8 Ethoprop	16.295	16.290	(1.009)	78683	0.50000	0.5230
	9 Naled	16.880	16.873	(1.045)	10270	0.50000	0.3991
	10 Sulfotepp	17.191	17.189	(1.064)	72236	0.50000	0.4064(M)
	11 Phorate	17.228	17.225	(1.067)	46032	0.50000	0.4110(M)
	12 Demeton-S	17.928	17.914	(1.110)	22639	0.34000	0.3295
	13 Simazine	18.342	18.324	(1.136)	2982	0.50000	0.4893
	14 Atrazine / Propazine	18.401	18.391	(1.139)	30702	1.00000	0.9325
	15 Dimethoate	18.547	18.518	(1.148)	35698	0.50000	0.4719
	16 Diazinon	18.925	18.919	(1.172)	45379	0.50000	0.5090
	17 Disulfoton	19.190	19.182	(1.188)	45667	0.50000	0.5050
	18 Methyl Parathion	21.095	21.081	(0.735)	29837	0.50000	0.4606
	19 Ronnel	21.176	21.170	(0.738)	46165	0.50000	0.4758
	20 Malathion	22.441	22.430	(0.782)	31859	0.50000	0.4797
	21 Chlorpyrifos	22.595	22.586	(0.788)	39270	0.50000	0.4710
	22 Trichloronate	22.765	22.757	(0.794)	40109	0.50000	0.4625
	23 Parathion	22.820	22.810	(0.796)	39453	0.50000	0.4940
	24 Fenthion	22.888	22.881	(0.798)	56987	0.50000	0.5208
	25 Merphos-A (Merphos)	Compound Not Detected.					
	26 Anilazine	24.433	24.396	(0.852)	2028	0.50000	0.4297(M)
	27 Tetrachlorvinphos (stirophos)	25.839	25.828	(0.901)	22635	0.50000	0.4725
	28 Tokuthion	26.016	26.009	(0.907)	42802	0.50000	0.4579
	29 Merphos-B (Merphos oxone)	26.150	26.142	(0.912)	49545	0.50000	0.6037
	30 Carbophenothion methyl	26.984	26.976	(0.941)	31047	0.50000	0.4753
	31 Fensulfothion	27.224	27.214	(0.949)	26023	0.50000	0.4636
	32 Bolstar	27.330	27.326	(0.953)	40397	0.50000	0.4918
	33 Carbophenothion	27.445	27.440	(0.957)	32880	0.50000	0.4835

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.628	27.624	(0.963)	30107	0.50000	0.4700
$	35 Triphenyl phosphate	27.918	27.914	(0.973)	29573	0.50000	0.4840
	36 EPN	28.225	28.223	(0.984)	36289	0.50000	0.4815
	37 Phosmet	28.354	28.348	(0.988)	27887	0.50000	0.4295
*	38 TOCP	28.685	28.684	(1.000)	155539	2.00000	
	39 Azinphos-methyl	28.803	28.796	(1.004)	32051	0.50000	0.4351
	40 Azinphos-ethyl	29.113	29.106	(1.015)	39849	0.50000	0.4596
	41 Coumaphos	29.440	29.433	(1.026)	38014	0.50000	0.5065
M	42 Total Demeton				32782	0.50000	0.4884
M	43 Merphos				49545	0.50000	0.4819

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

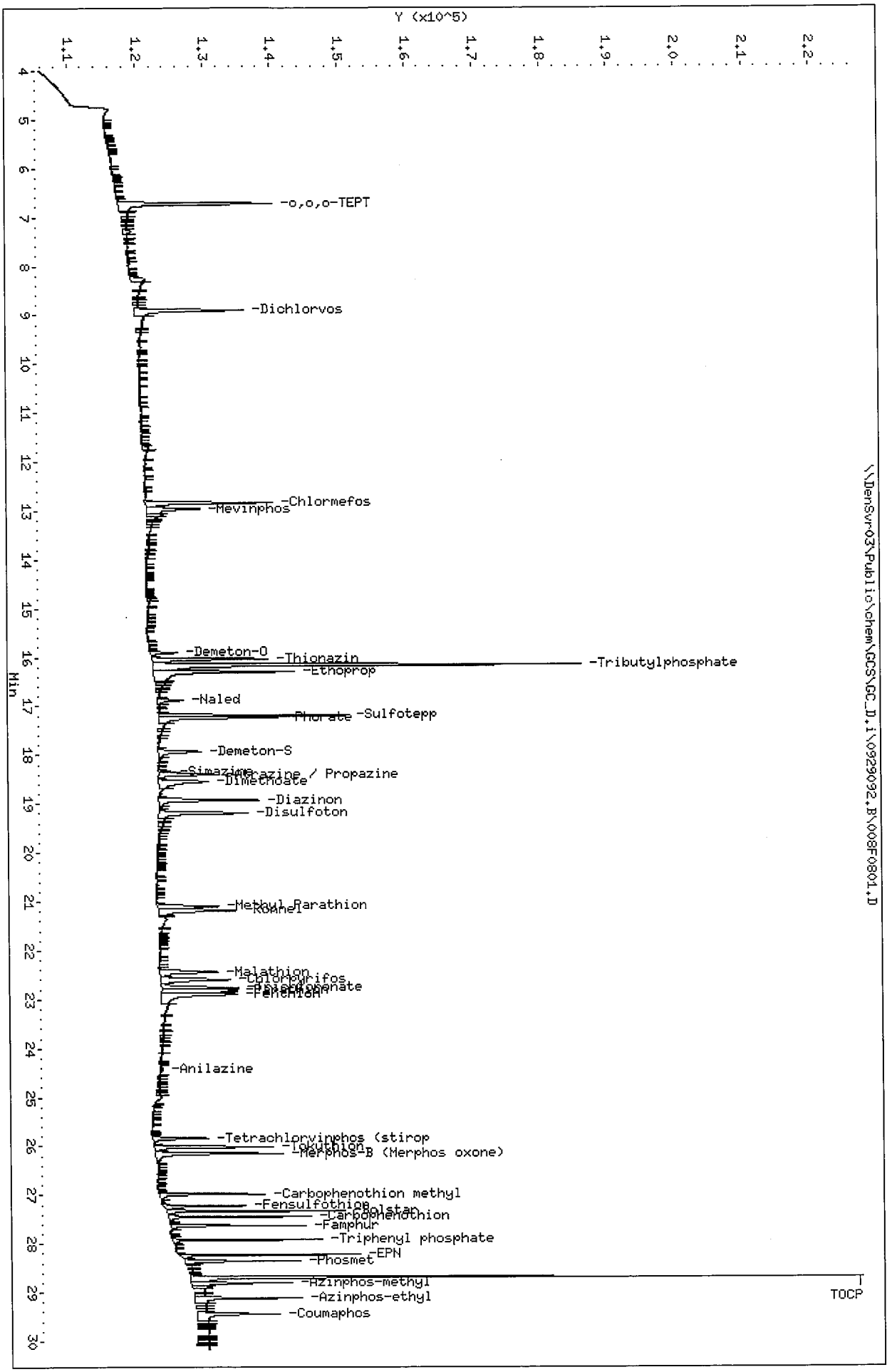
Instrument ID: GC_D.i
Lab File ID: 008F0801.D
Lab Smp Id: 8141 L2 GSV1082
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 29-SEP-2009
Calibration Time: 16:49
Client Smp ID: 8141 L2 GSV1082
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	168771	84386	337542	180030	6.67
38 TOCP	129625	64813	259250	155539	19.99

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.15	15.65	16.65	16.15	0.03
38 TOCP	28.68	28.18	29.18	28.69	0.01

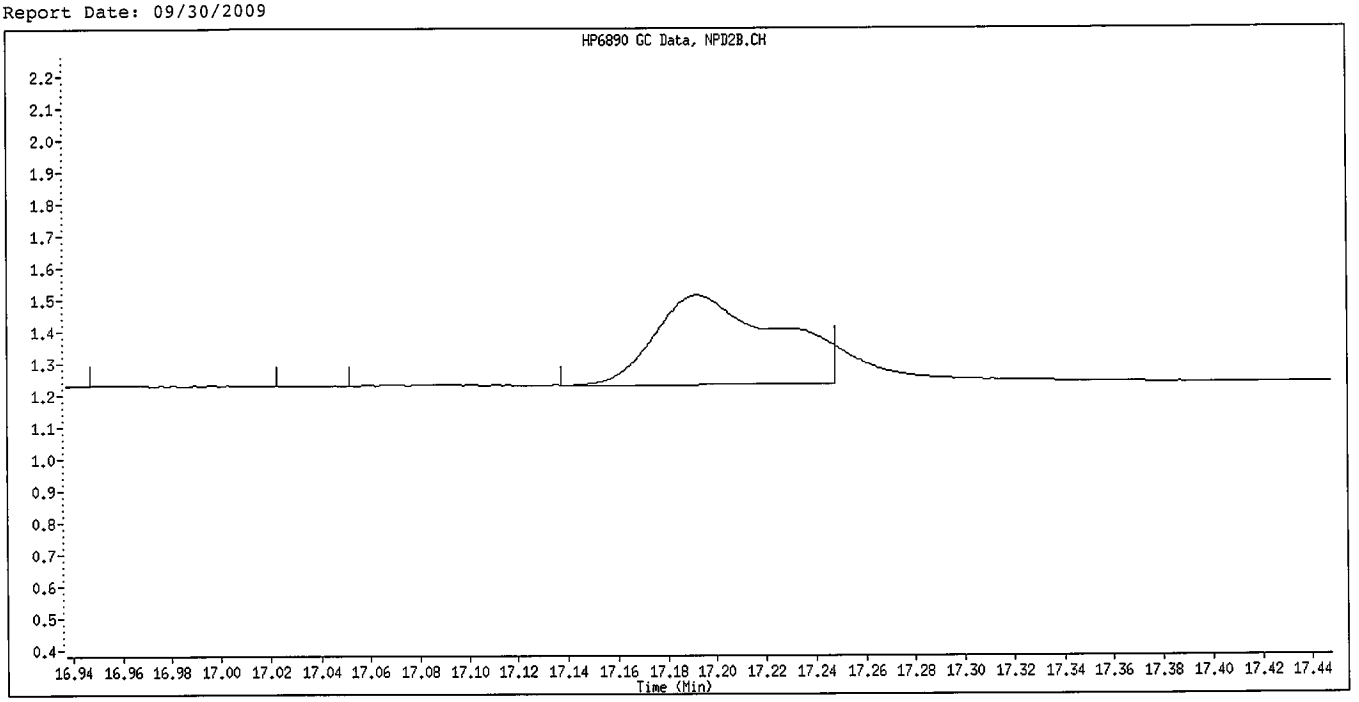
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



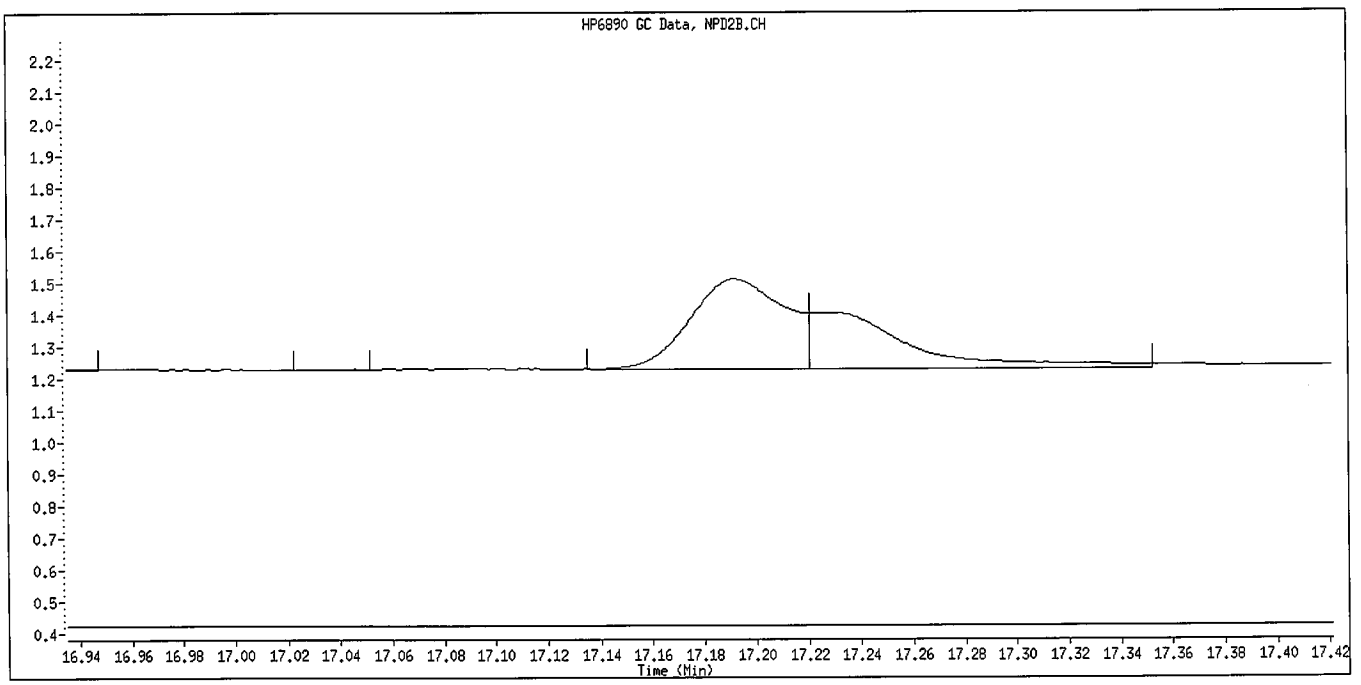
Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\008F0801.D
Date : 29-SEP-2009 15:35
Client ID: 8141 L2 GSV1082
Sample Info: 8141 L2 GSV1082
Column phase: RTx-OPPest

Instrument: GC_D.i
Operator: TLW
Column diameter: 0.32

Data File Name: 008F0801.D
Inj. Date and Time: 29-SEP-2009 15:35
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV1082
Compound Name: Sulfotepp
CAS #:
Report Date: 09/30/2009



Original Integration

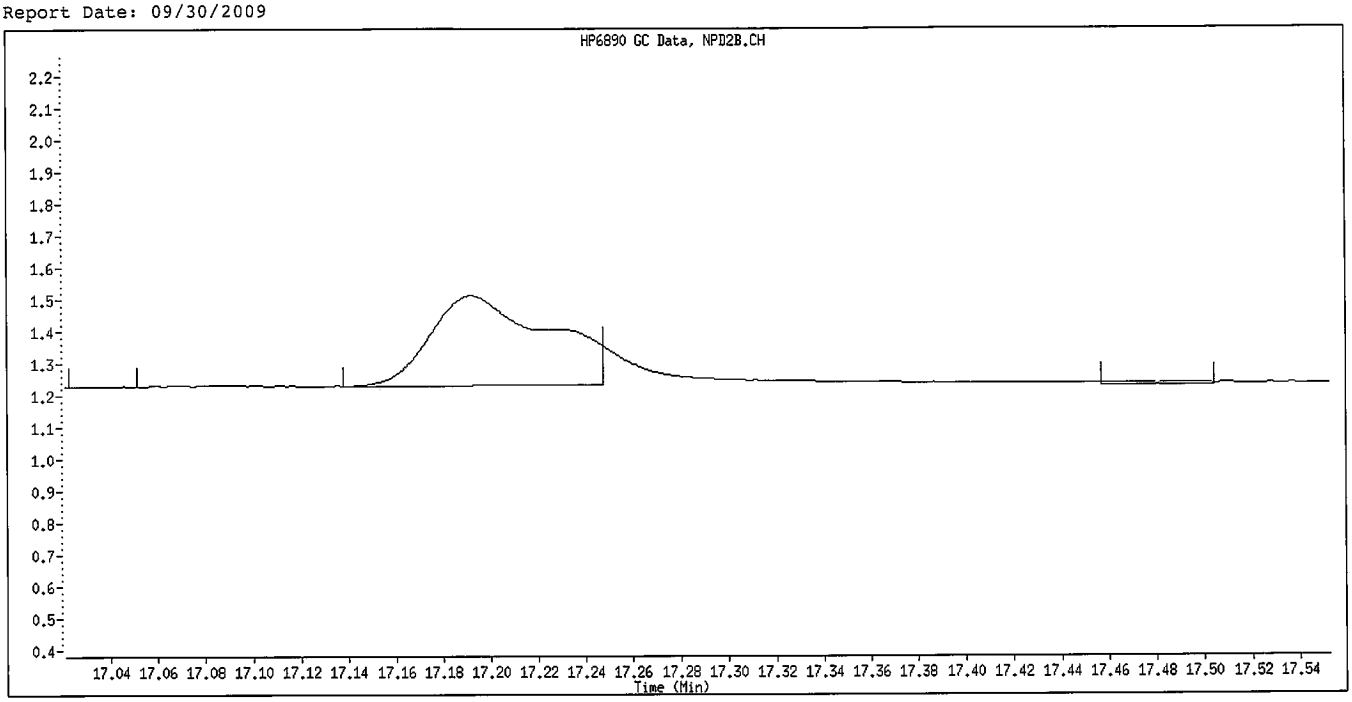


Manual Integration

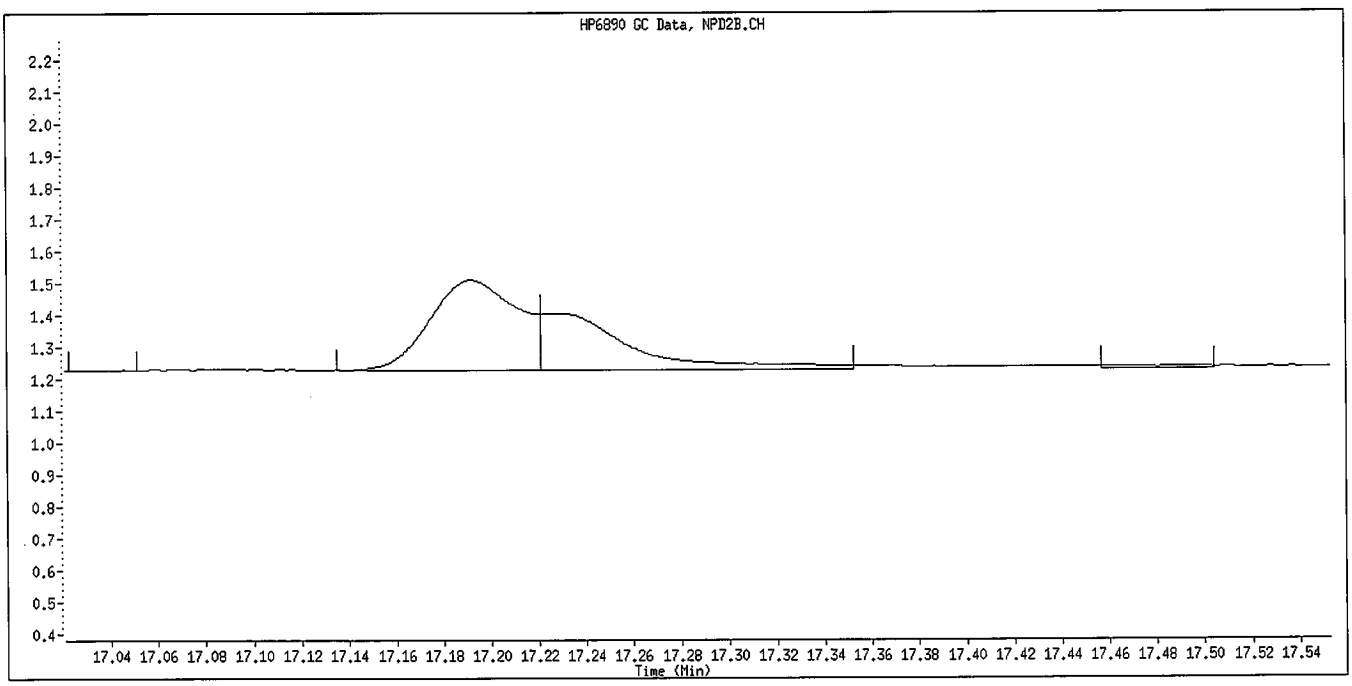
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

Data File Name: 008F0801.D
Inj. Date and Time: 29-SEP-2009 15:35
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV1082
Compound Name: Phorate
CAS #:
Report Date: 09/30/2009



Original Integration



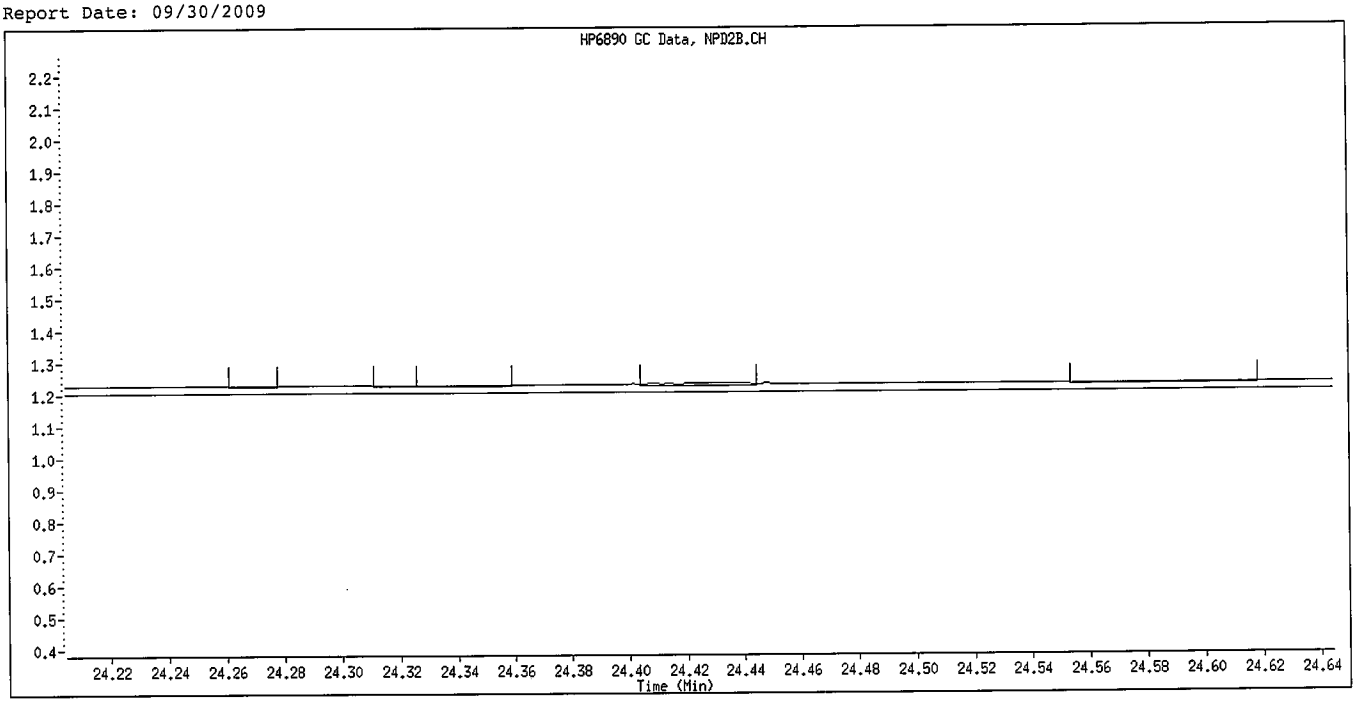
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

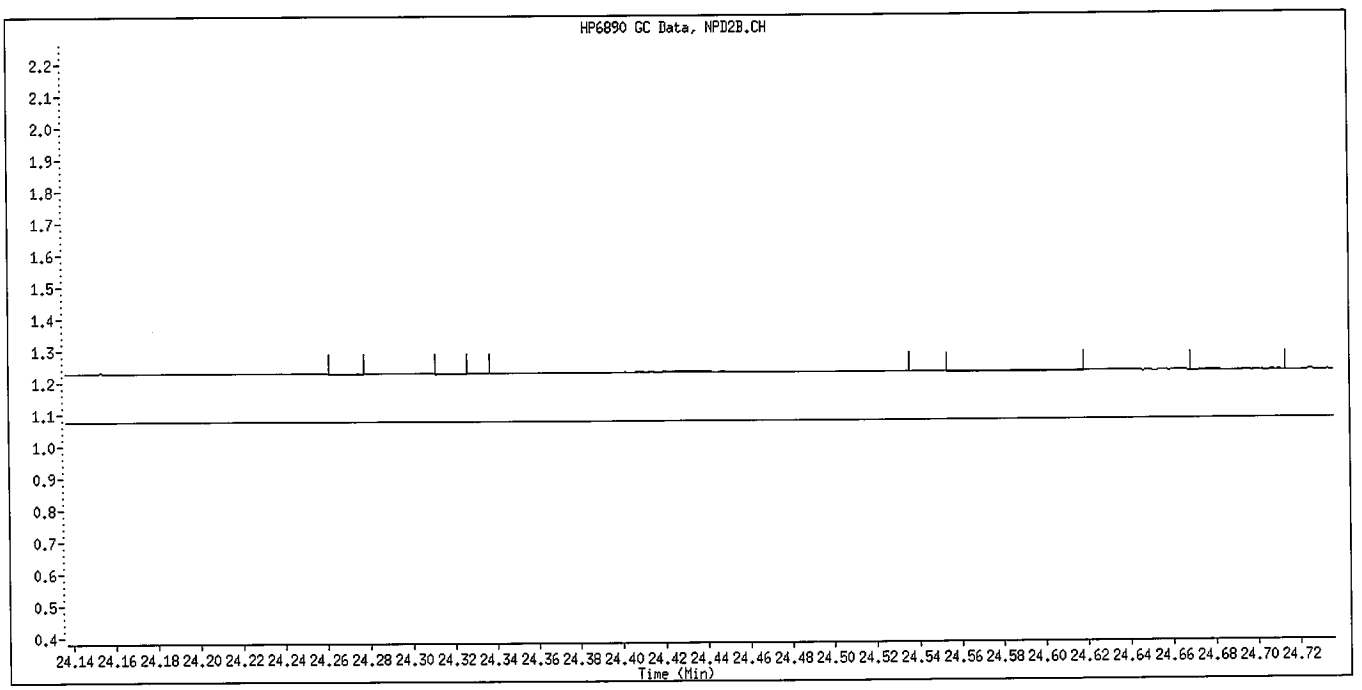
9/30/09

Table of Contents

Data File Name: 008F0801.D
Inj. Date and Time: 29-SEP-2009 15:35
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV1082
Compound Name: Anilazine
CAS #:
Report Date: 09/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\009F0901.D
Lab Smp Id: 8141 L1 GSV1083 Client Smp ID: 8141 L1 GSV1083
Inj Date : 29-SEP-2009 16:12
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 L1 GSV1083
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Meth Date : 30-Sep-2009 08:44 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 15:35 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	6.729	6.726	(0.417)	28392	0.20000	0.2041
	2 Dichlorvos	8.909	8.903	(0.552)	22631	0.20000	0.2285
$	3 Chlormefos	12.839	12.838	(0.795)	21044	0.20000	0.2221
	4 Mevinphos	12.965	12.953	(0.803)	10365	0.20000	0.1742
	5 Demeton-O	15.905	15.901	(0.985)	3629	0.06500	0.06163
	6 Thionazin	16.034	16.027	(0.993)	15395	0.20000	0.1797
*	7 Tributylphosphate	16.154	16.146	(1.000)	166089	2.00000	
	8 Ethoprop	16.298	16.290	(1.009)	42901	0.20000	0.1966
	9 Naled	16.885	16.873	(1.045)	7830	0.20000	0.3479
	10 Sulfotepp	17.194	17.189	(1.064)	28344	0.20000	0.04546(M)
	11 Phorate	17.219	17.225	(1.066)	27735	0.20000	0.2102(M)
	12 Demeton-S	17.943	17.914	(1.111)	7597	0.13600	0.1362
	13 Simazine	18.319	18.324	(1.134)	103	0.20000	0.3393
	14 Atrazine / Propazine	18.418	18.391	(1.140)	11556	0.40000	0.4081
	15 Dimethoate	18.574	18.518	(1.150)	7995	0.20000	0.2014
	16 Diazinon	18.927	18.919	(1.172)	16730	0.20000	0.2034
	17 Disulfoton	19.198	19.182	(1.188)	16960	0.20000	0.2033
	18 Methyl Parathion	21.110	21.081	(0.736)	8492	0.20000	0.2048
	19 Ronnel	21.186	21.170	(0.739)	18613	0.20000	0.1955
	20 Malathion	22.447	22.430	(0.783)	11736	0.20000	0.2014
	21 Chlorpyrifos	22.604	22.586	(0.788)	14294	0.20000	0.2039
	22 Trichloronate	22.781	22.757	(0.794)	14331	0.20000	0.2057
	23 Parathion	22.833	22.810	(0.796)	12594	0.20000	0.1994
	24 Fenthion	22.896	22.881	(0.798)	20759	0.20000	0.1934
	25 Merphos-A (Merphos)	23.394	23.412	(0.816)	431	0.20000	0.7612
	26 Anilazine	24.401	24.396	(0.851)	550	0.20000	0.2276
	27 Tetrachlorvinphos (stirophos)	25.845	25.828	(0.901)	8356	0.20000	0.2414
	28 Tokuthion	26.021	26.009	(0.907)	16596	0.20000	0.1810
	29 Merphos-B (Merphos oxone)	26.154	26.142	(0.912)	18717	0.20000	0.2325
	30 Carbophenothion methyl	26.986	26.976	(0.941)	11420	0.20000	0.2026
	31 Fensulfothion	27.230	27.214	(0.949)	9459	0.20000	0.2029
	32 Bolstar	27.333	27.326	(0.953)	15694	0.20000	0.1947
	33 Carbophenothion	27.446	27.440	(0.957)	12072	0.20000	0.2000

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.630	27.624	(0.963)	10333	0.20000	0.2025
$	35 Triphenyl phosphate	27.919	27.914	(0.973)	11466	0.20000	0.1913
	36 EPN	28.227	28.223	(0.984)	14715	0.20000	0.1990
	37 Phosmet	28.357	28.348	(0.989)	13126	0.20000	0.2060
*	38 TOCP	28.686	28.684	(1.000)	152602	2.00000	
	39 Azinphos-methyl	28.807	28.796	(1.004)	18426	0.20000	0.2082
	40 Azinphos-ethyl	29.116	29.106	(1.015)	24380	0.20000	0.2050
	41 Coumaphos	29.443	29.433	(1.026)	20151	0.20000	0.1978
M	42 Total Demeton				11226	0.20000	0.1978
M	43 Merphos				19148	0.20000	0.2012

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 009F0901.D
Lab Smp Id: 8141 L1 GSV1083
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Misc Info: IS GSV1076-09

Calibration Date: 29-SEP-2009
Calibration Time: 16:49
Client Smp ID: 8141 L1 GSV1083
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	168771	84386	337542	166089	-1.59
38 TOCP	129625	64813	259250	152602	17.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.15	15.65	16.65	16.15	0.04
38 TOCP	28.68	28.18	29.18	28.69	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.

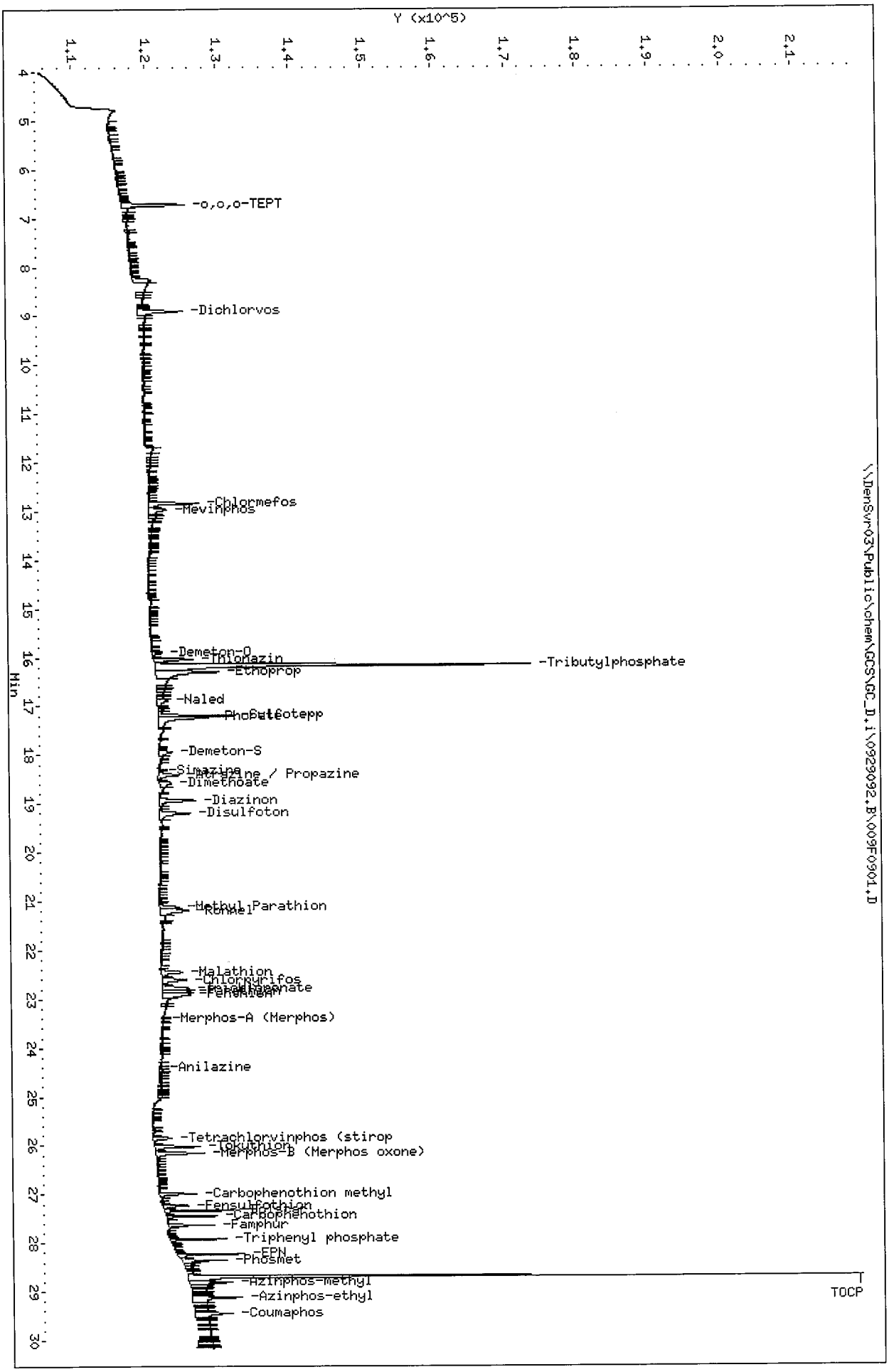
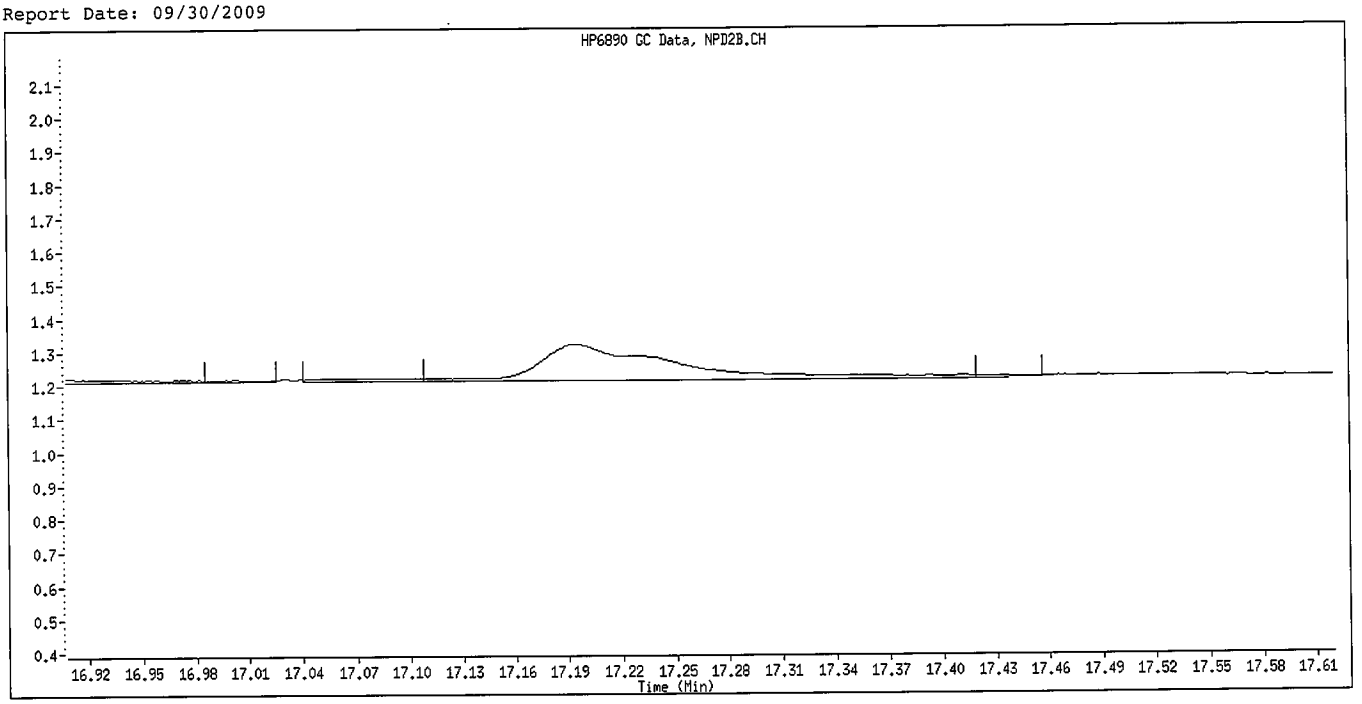
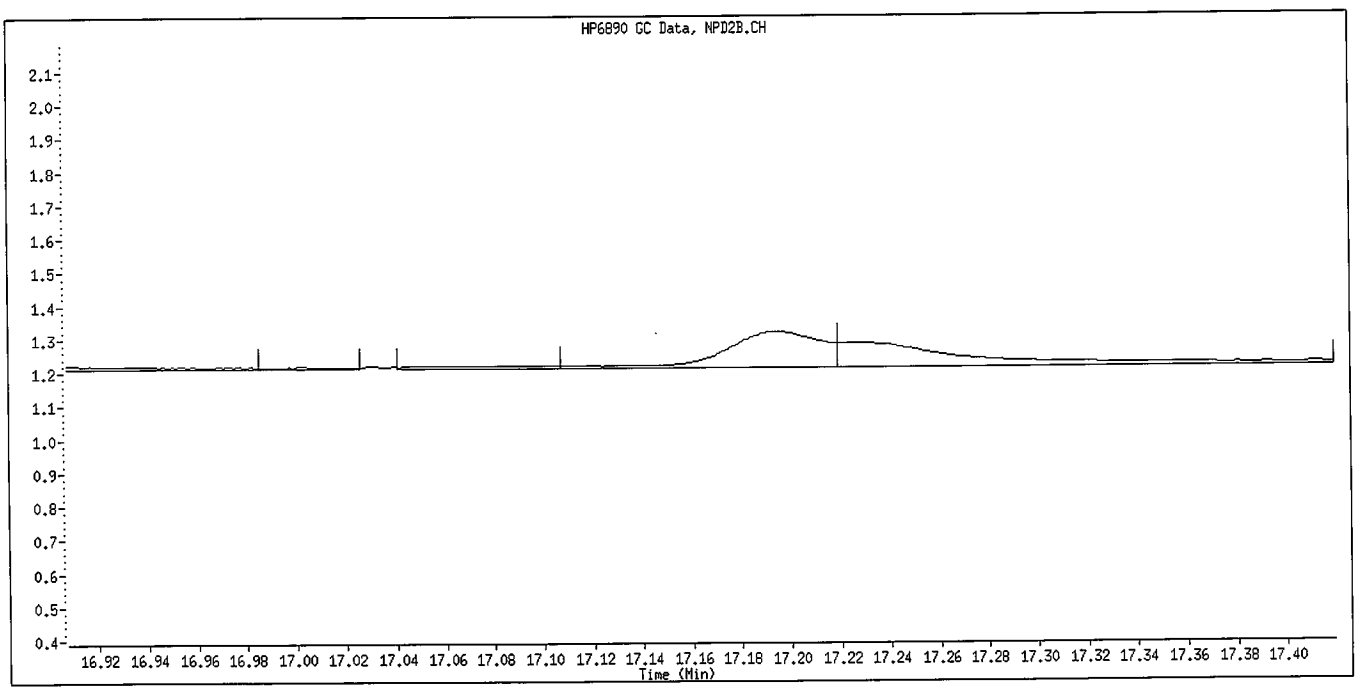

Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0929092,B\009F0901,D
Date : 29-SEP-2009 16:12
Client ID: 8141 L1 GSV1083
Sample Info: 8141 L1 GSV1083
Column phase: RTx-OPPest
Instrument: GC_D,i
Operator: TLW
Column diameter: 0,32
\\DenSvr03\Public\chem\GCS\GC_D,i\0929092,B\009F0901,D
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Mevinphos
-Chlormefos
-Demeton-O
-Tributylphosphate
-Naled
-Demeton-S
-Dimethoate
-Diazinon
-Disulfoton
-Methyl Parathion
-Malathion
-Merphos-A (Merphos)
-Anilazine
-Tetrachlorvinphos (stirop
-Merphos-B (Merphos oxone)
-Carbophenothion methyl
-Carbophenothion
-Famphur
-Triphenyl phosphate
-EPN
-Phosmet
-Azinphos-methyl
-Azinphos-ethyl
-Coumaphos
TOCP
Page 4

Table of Contents

Data File Name: 009F0901.D
Inj. Date and Time: 29-SEP-2009 16:12
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV1083
Compound Name: Sulfotepp
CAS #:
Report Date: 09/30/2009



Original Integration

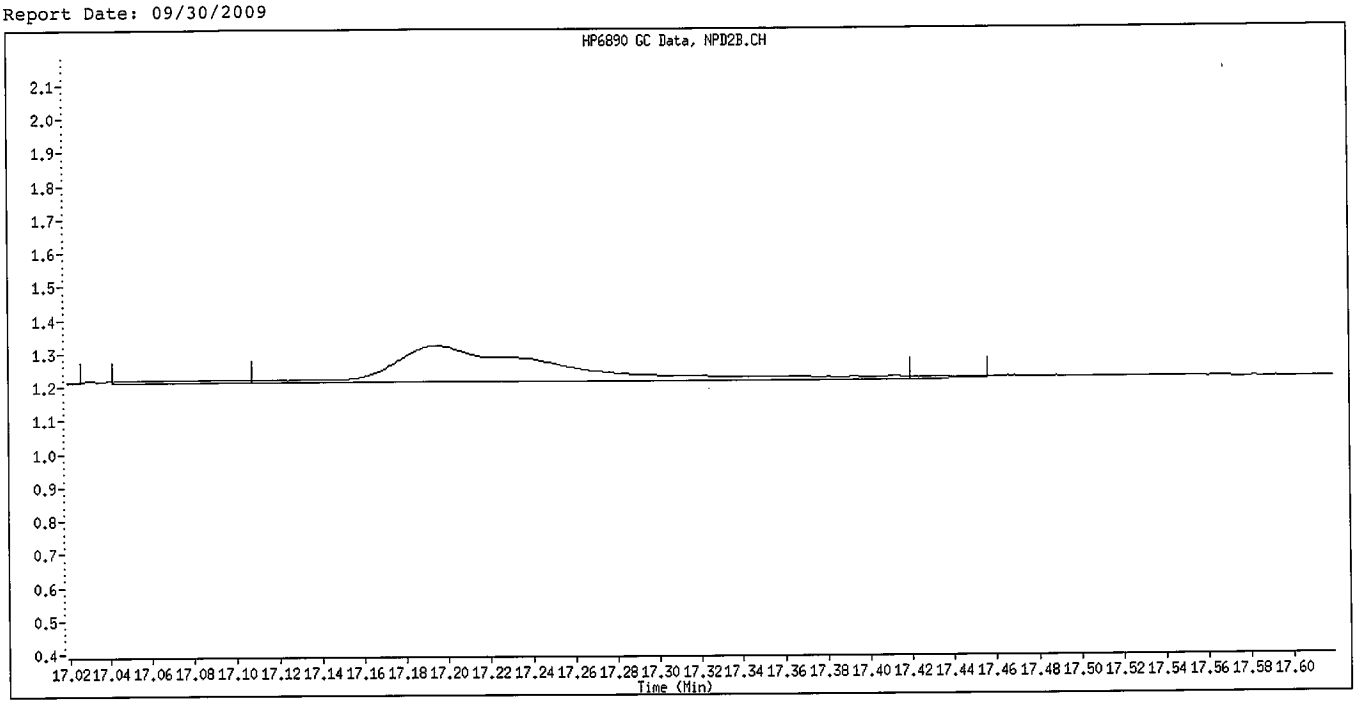


Manual Integration

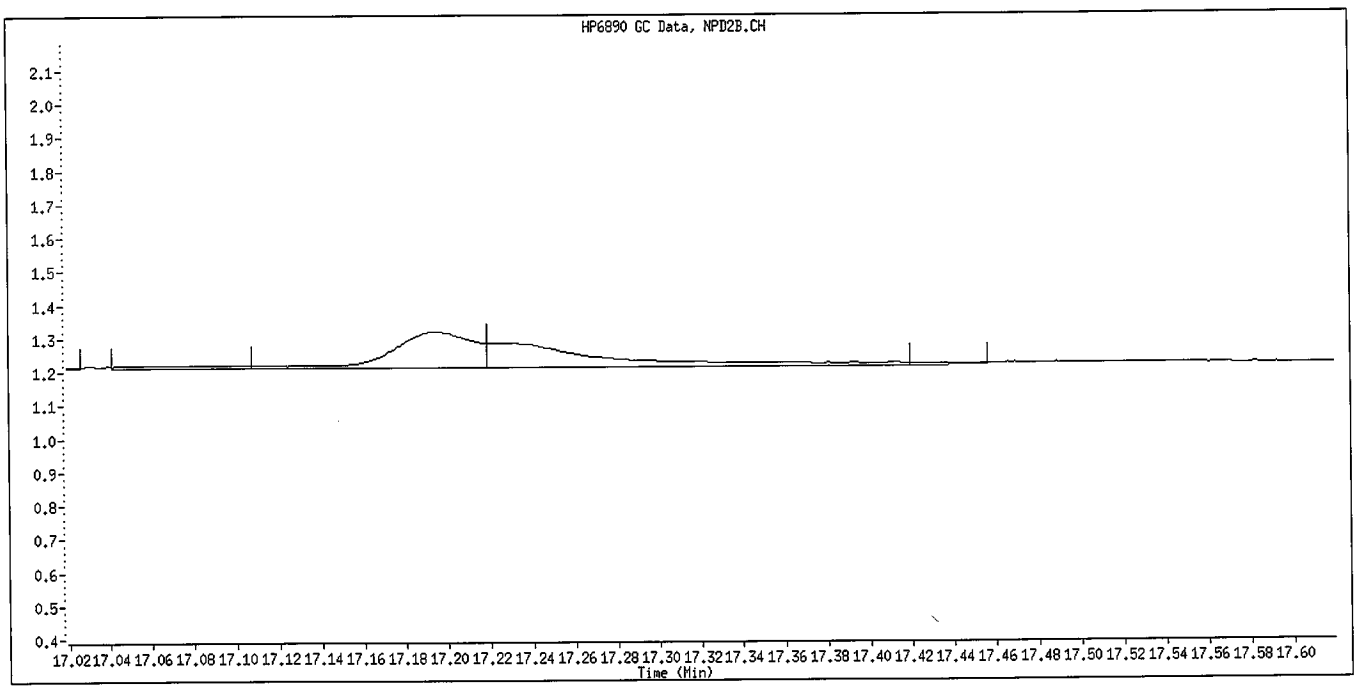
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

Data File Name: 009F0901.D
Inj. Date and Time: 29-SEP-2009 16:12
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV1083
Compound Name: Phorate
CAS #:
Report Date: 09/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\010F1001.D
Lab Smp Id: 8141 SS GSV1107 Client Smp ID: 8141 SS GSV1107
Inj Date : 29-SEP-2009 16:49
Operator : TLW Inst ID: GC_D.i
Smp Info : 8141 SS GSV1107
Misc Info : IS GSV1076-09
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Meth Date : 30-Sep-2009 08:51 GC_D.i Quant Type: ISTD
Cal Date : 29-SEP-2009 16:12 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	6.727	6.726	(0.417)	290395	2.00000	2.054
	2 Dichlorvos	8.904	8.903	(0.551)	182949	2.00000	1.818
$	3 Chlormefos	12.838	12.838	(0.795)	191110	2.00000	1.985
	4 Mevinphos	12.955	12.953	(0.802)	94676	2.00000	1.566
	5 Demeton-O	15.902	15.901	(0.985)	121900	0.65000	2.037
	6 Thionazin	16.028	16.027	(0.993)	178473	2.00000	2.050
*	7 Tributylphosphate	16.148	16.146	(1.000)	168771	2.00000	
	8 Ethoprop	16.291	16.290	(1.009)	197083	2.00000	1.857
	9 Naled	16.875	16.873	(1.045)	52510	2.00000	1.711
	10 Sulfotepp	17.190	17.189	(1.065)	212176	2.00000	1.746(M)
	11 Phorate	17.226	17.225	(1.067)	148292	2.00000	1.821(M)
	12 Demeton-S	17.922	17.914	(1.110)	4747	1.36000	0.09365
	13 Simazine	18.327	18.324	(1.135)	33861	2.00000	2.221
	14 Atrazine / Propazine	18.391	18.391	(1.139)	115761	4.00000	3.609
	15 Dimethoate	18.523	18.518	(1.147)	168267	2.00000	1.911
	16 Diazinon	18.921	18.919	(1.172)	144694	2.00000	1.731
	17 Disulfoton	19.183	19.182	(1.188)	160206	2.00000	1.890
	18 Methyl Parathion	21.083	21.081	(0.735)	123385	2.00000	1.888
	19 Ronnel	21.168	21.170	(0.738)	162555	2.00000	2.010
	20 Malathion	22.432	22.430	(0.782)	99352	2.00000	1.702
	21 Chlorpyrifos	22.586	22.586	(0.787)	140613	2.00000	1.871
	22 Trichloronate	22.760	22.757	(0.793)	137983	2.00000	1.726
	23 Parathion	22.812	22.810	(0.795)	143683	2.00000	1.966
	24 Fenthion	22.881	22.881	(0.798)	173970	2.00000	1.908
	25 Merphos-A (Merphos)	23.411	23.412	(0.816)	18424	2.00000	1.190
	26 Anilazine	24.410	24.396	(0.851)	6094	2.00000	1.157(M)
	27 Tetrachlorvinphos (stirophos)	25.831	25.828	(0.901)	83138	2.00000	1.704
	28 Tokuthion	26.012	26.009	(0.907)	149222	2.00000	1.916
	29 Merphos-B (Merphos oxone)	26.143	26.142	(0.911)	141233	2.00000	2.065
	30 Carbophenothion methyl	26.977	26.976	(0.941)	72868	2.00000	1.268
	31 Fensulfothion	27.215	27.214	(0.949)	99452	2.00000	1.949
	32 Bolstar	27.326	27.326	(0.953)	138340	2.00000	2.021
	33 Carbophenothion	27.440	27.440	(0.957)	117933	2.00000	1.980

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.624	27.624	(0.963)	117070	2.00000	1.978
$	35 Triphenyl phosphate	27.914	27.914	(0.973)	106386	2.00000	2.089
	36 EPN	28.222	28.223	(0.984)	127684	2.00000	2.033
	37 Phosmet	28.349	28.348	(0.988)	111795	2.00000	2.066
*	38 TOCP	28.683	28.684	(1.000)	129625	2.00000	
	39 Azinphos-methyl	28.797	28.796	(1.004)	92557	2.00000	1.786
	40 Azinphos-ethyl	29.107	29.106	(1.015)	107007	2.00000	1.963
	41 Coumaphos	29.433	29.433	(1.026)	98544	2.00000	1.924
M	42 Total Demeton				126647	2.00000	2.131
M	43 Merphos				159657	2.00000	1.809

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

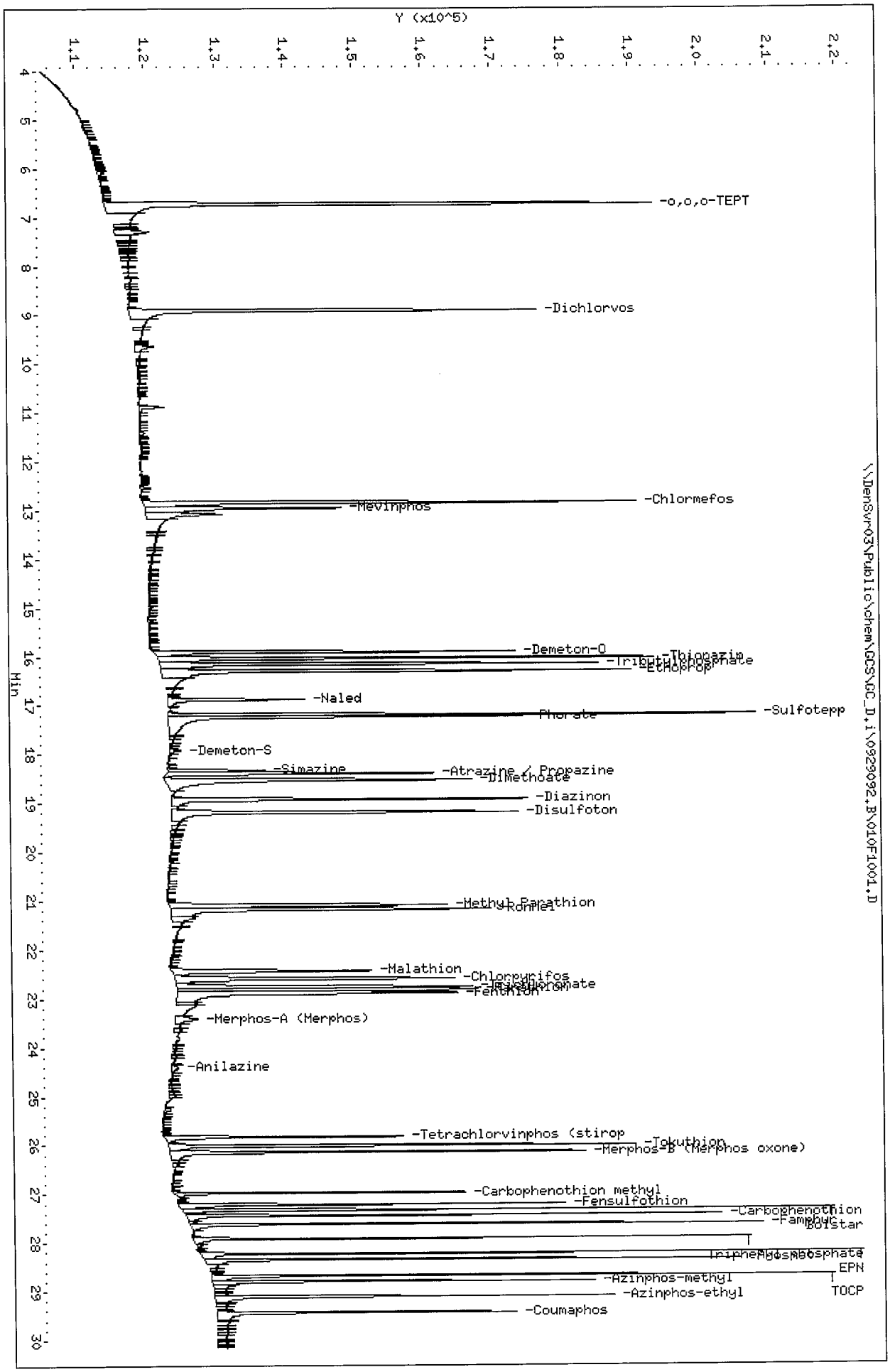
INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 010F1001.D
Lab Smp Id: 8141 SS GSV1107
Analysis Type: SV
Quant Type: ISTD
Operator: TLW
Calibration Date: 30-SEP-2009
Calibration Time: 03:08
Client Smp ID: 8141 SS GSV1107
Level:
Sample Type:
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0929092.B\8141A-2.m
Misc Info: IS GSV1076-09

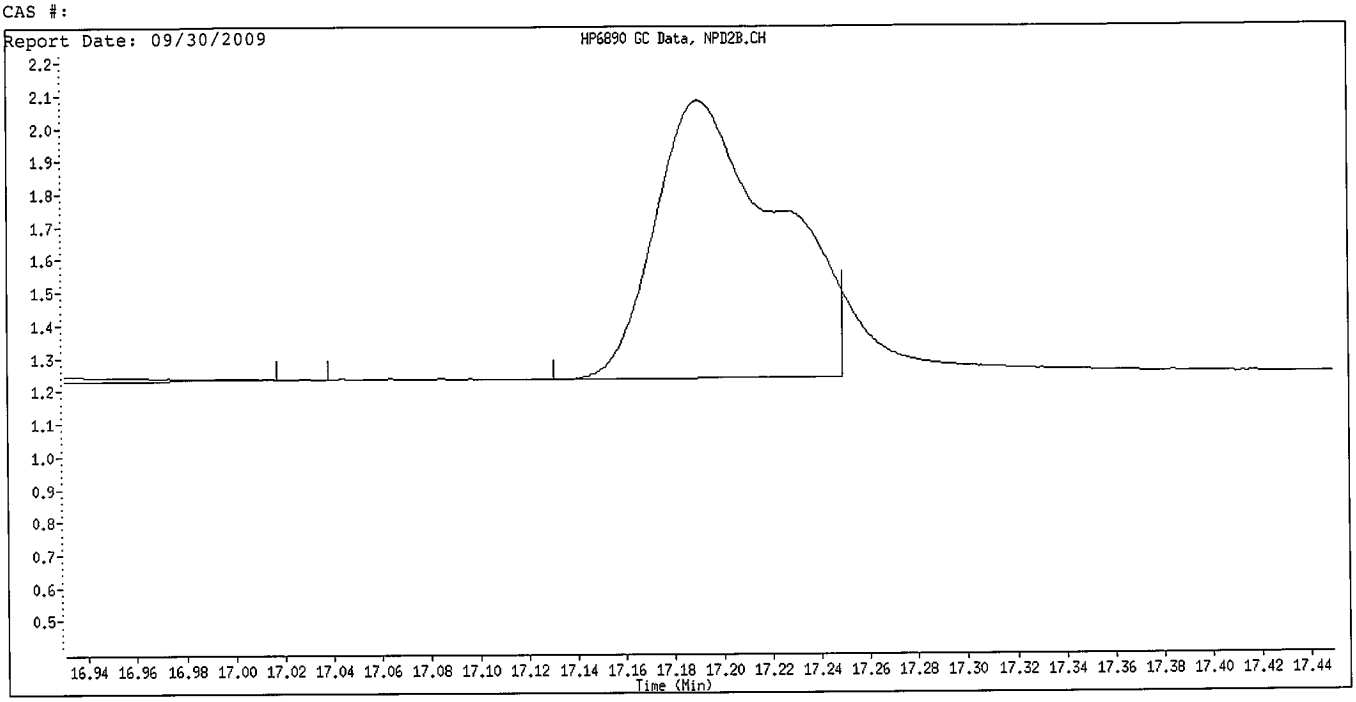
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	301065	150533	602130	168771	-43.94
38 TOCP	232028	116014	464056	129625	-44.13

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.14	15.64	16.64	16.15	0.05
38 TOCP	28.68	28.18	29.18	28.68	0.01

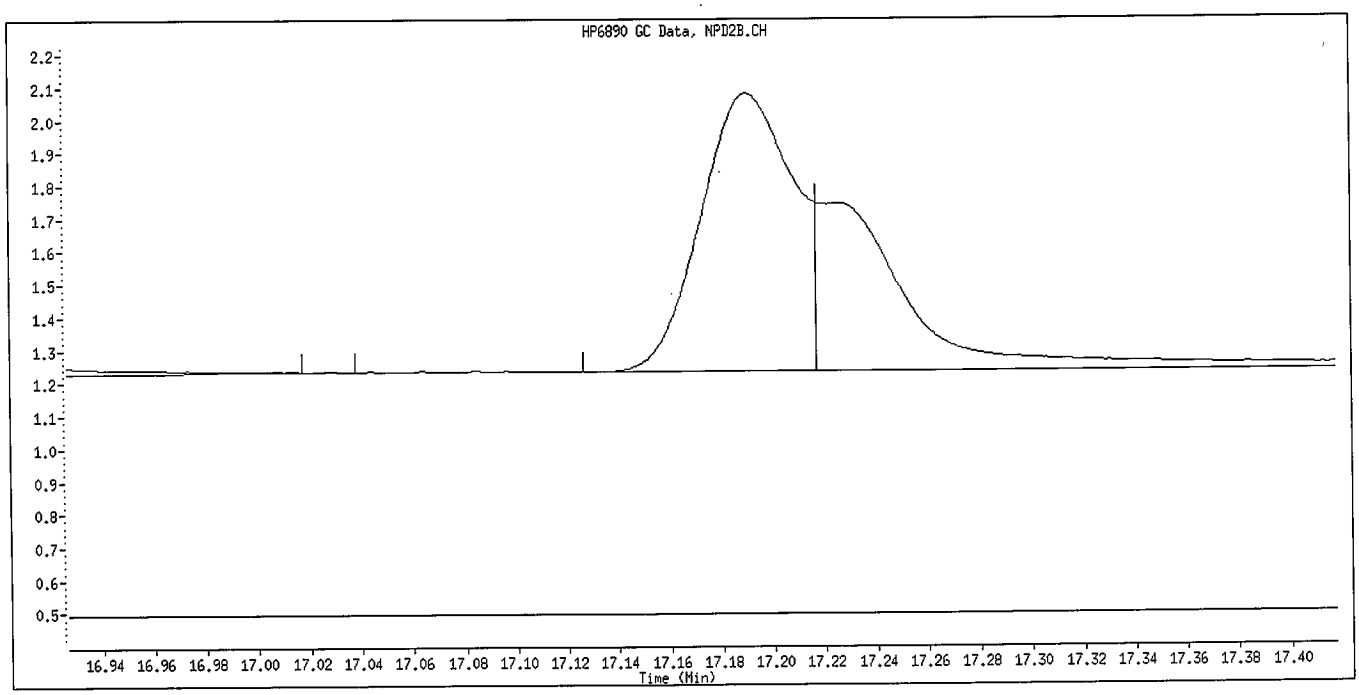
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.


Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0929092,B\010F1001.D
Date : 29-SEP-2009 16:49
Client ID: 8141 SS GSV107
Sample Info: 8141 SS GSV107
Column phase: RTx-OPPest
Instrument: GC_D,i
Operator: TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D,i\0929092,B\010F1001.D
Y (x10^5)
Min
-o,o,o-TEPT
-Dichlorvos
-Mevinphos
-Chlormefos
-Demeton-O
-Thionazin
-Tributylphosphate
-Ethoprop
-Naled
-Phorate
-Sulfotepp
-Demeton-S
-Simazine
-Atrazine / Propazine
-Dimethoate
-Diazinon
-Disulfoton
-Methyl Parathion
-Malathion
-Chlorpyrifos
-Fenchlorphos
-Merphos-A (Merphos)
-Anilazine
-Tetrachlorvinphos (stirop
-Tokuthion
-Merphos-B (Merphos oxone)
-Carbophenothion methyl
-Fensulfothion
-Carbophenothion
-Famphur
-Triphenylphosphate
EPN
-Azinphos-methyl
TOCP
-Azinphos-ethyl
-Coumaphos

Data File Name: 010F1001.D
Inj. Date and Time: 29-SEP-2009 16:49
Instrument ID: GC_D.i
Client ID: 8141 SS GSV1107
Compound Name: Sulfotepp
CAS #:



Original Integration

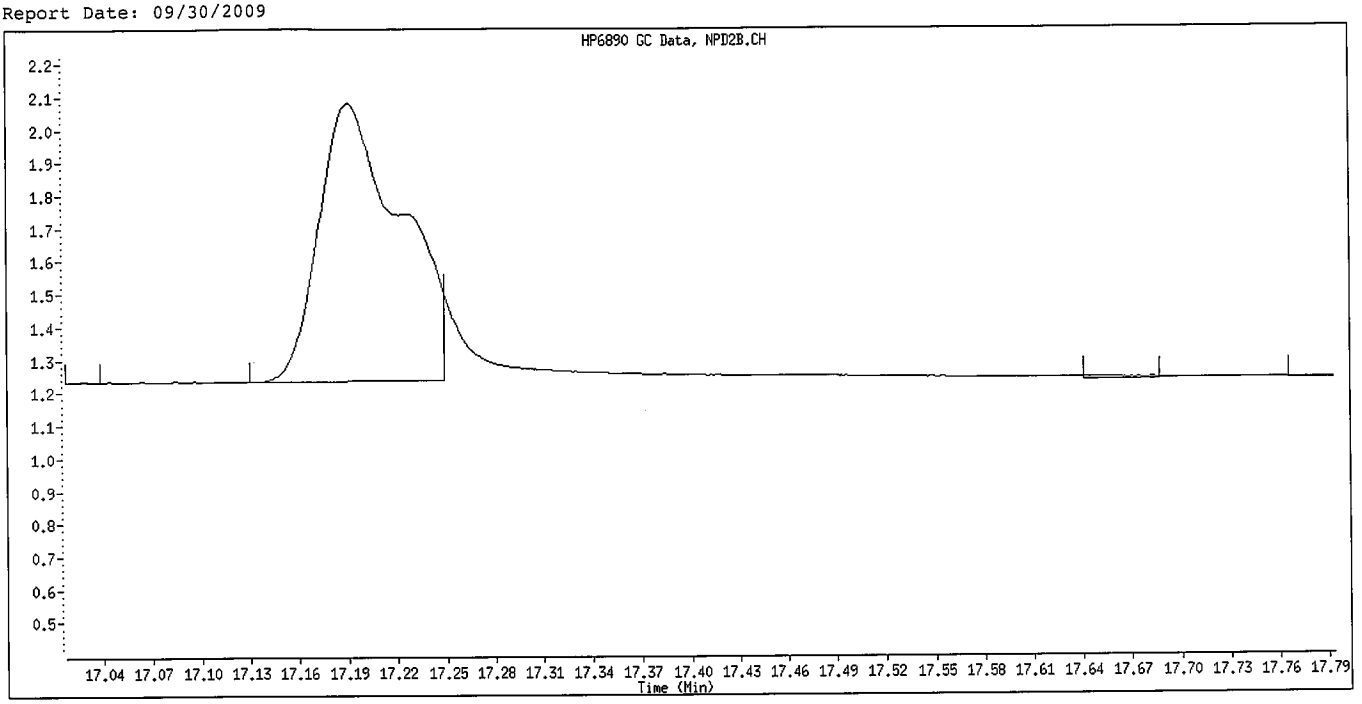


Manual Integration

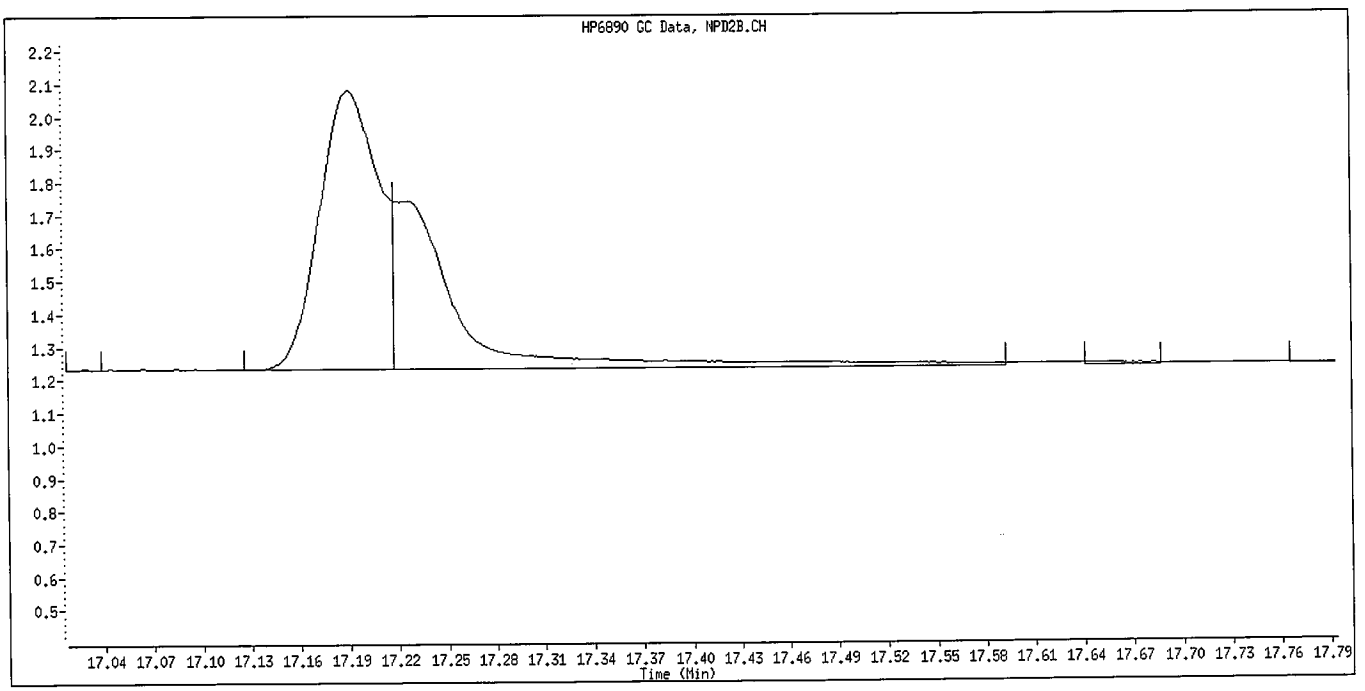
Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

9/30/09

Data File Name: 010F1001.D
Inj. Date and Time: 29-SEP-2009 16:49
Instrument ID: GC_D.i
Client ID: 8141 SS GSV1107
Compound Name: Phorate
CAS #:
Report Date: 09/30/2009



Original Integration



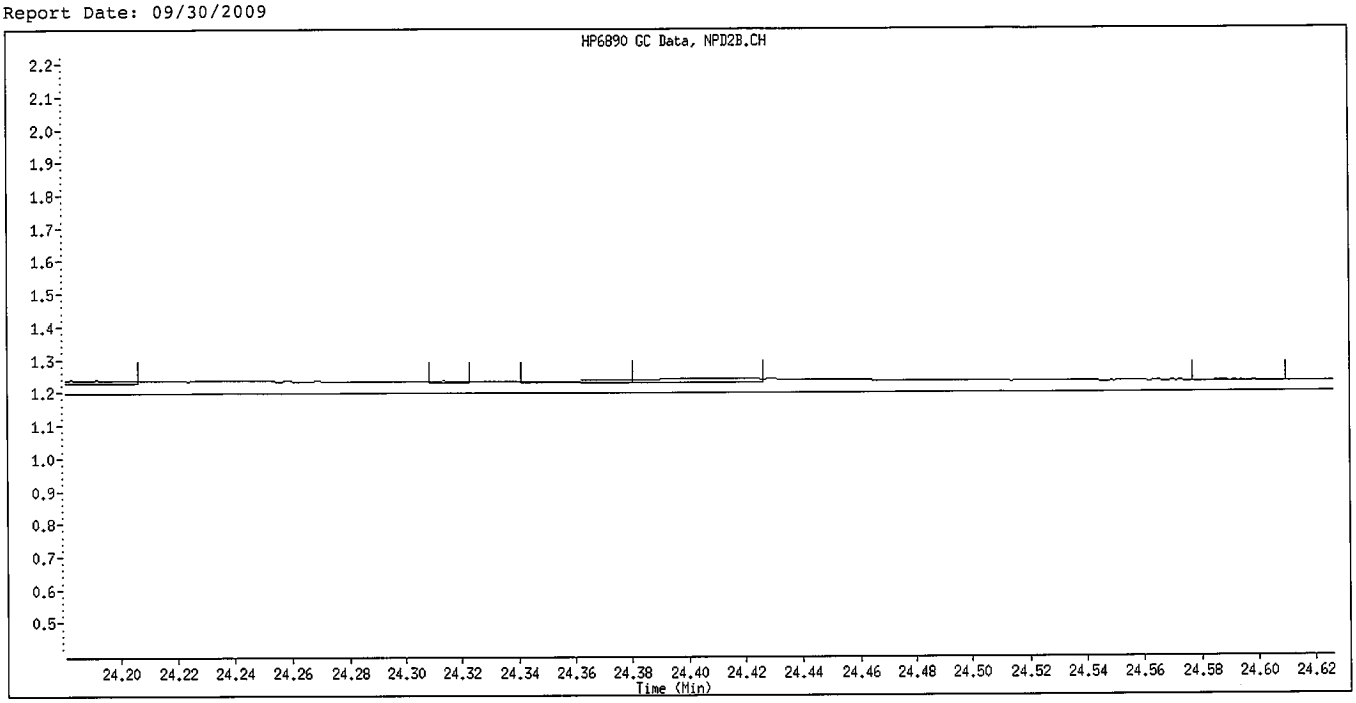
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

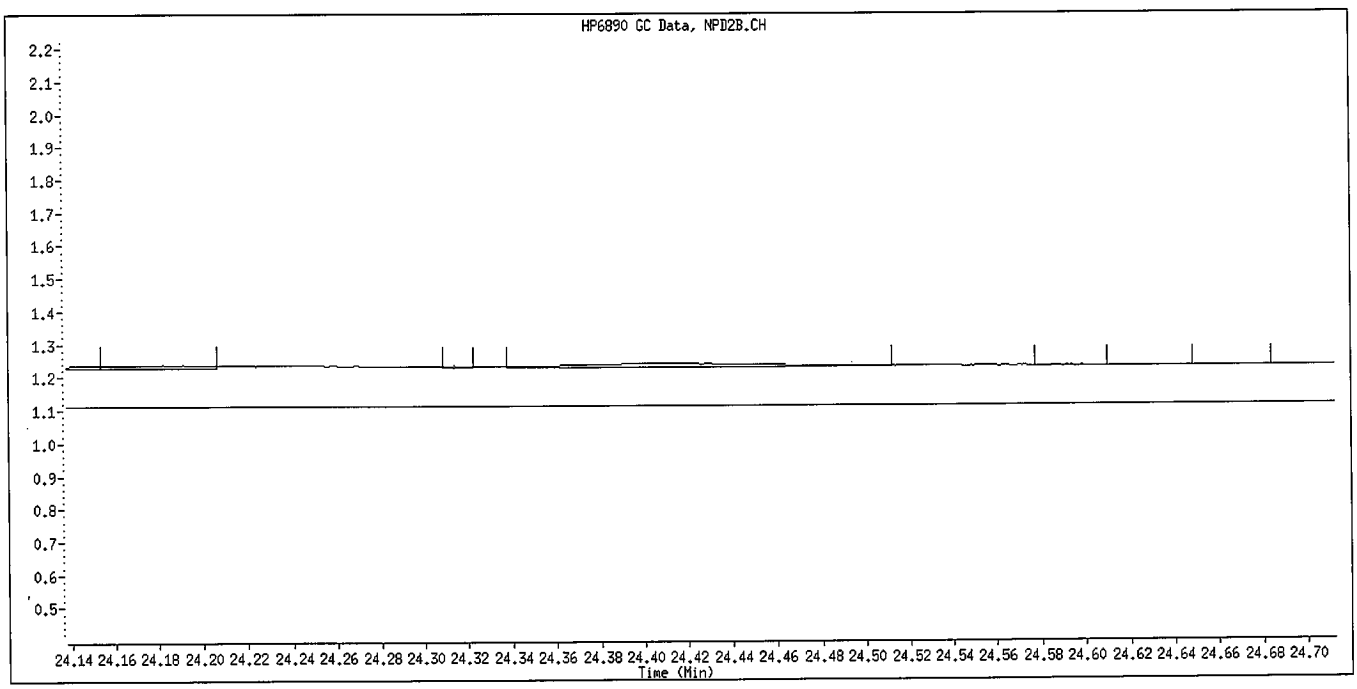
9/30/09

Table of Contents

Data File Name: 010F1001.D
Inj. Date and Time: 29-SEP-2009 16:49
Instrument ID: GC_D.i
Client ID: 8141 SS GSV1107
Compound Name: Anilazine
CAS #:
Report Date: 09/30/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

ge 9/30/09

Metals

Supporting Documentation

Sample Sequence, Instrument Printouts

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9I250174

Client: Northgate

Batch(es) #: 927138

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: 10/2/09

Metals Raw Data RoadMap

LotID		*Metal*	*WorkOrder*	*Anal Date*	*TestDesc*	*Batch*	*File Id*	*Instr*
D9I250174	1 D	SE	LLG321AL	20091002	6020TOTA	9271338	AG100109	024
D9I250174	1 S	SE	LLG321AK	20091002	6020TOTA	9271338	AG100109	024
D9I250174	1 D	AS	LLG321AJ	20091002	6020TOTA	9271338	AG100109	024
D9I250174	1 S	AS	LLG321AH	20091002	6020TOTA	9271338	AG100109	024
D9I250174	1	SE	LLG321AD	20091002	6020TOTA	9271338	AG100109	024
D9I250174	1	AS	LLG321AC	20091002	6020TOTA	9271338	AG100109	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9271338**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: Katie Stoltz

Prep Date: 09/29/09
Due Date: 10/07/09

Lot	Work Order			Initial Weight/Volume
D9I280000 Water	**LLL0W**	B	Due Date: SDG:	50 mL
D9I280000 Water	**LLL0W**	C	Due Date: SDG:	50 mL
D9I250174 Water	**LLG32** Total		Due Date: 10/07/09 SDG:	50 mL
D9I250174 Water	**LLG32** Total	S	Due Date: 10/07/09 SDG:	50 mL
D9I250174 Water	**LLG32** Total	D	Due Date: 10/07/09 SDG:	50 mL
D9I260177 Water	**LLKFN** Total		Due Date: 10/08/09 SDG:	50 mL
D9I260178 Water	**LLKFP** Total		Due Date: 10/08/09 SDG:	50 mL
D9I260178 Water	**LLKFR** Total		Due Date: 10/08/09 SDG:	50 mL

Comments:

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE SAMPLE

Checked 10/1/09

ICPMS ELEMENTS WITHIN THE BATCH:

AS SE

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH #	9271338	**ALLIQUOTTED BY:**	JRW
PREP DATE:	9.29.2009	**DIGESTED BY:**	KS

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS268

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: KS

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-5353-09	8/28/10	100uL	15
2008Cal-2	STD-4452-09	7/28/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H14024	3

TEMPERATURE CYCLES

Thermometer ID: 4116 Block & Cup # : 3;34

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	7:30	89	11:50	95
HNO3	12:00	95	12:30	95
HNO3				

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

COMMENTS:

I certify that all information above is correct and complete.

Signature: Katie Ott ***Date:*** 9.29.09

METALS
SAMPLE DATA
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ICP-MS Standard and Spike True Values

Element	Cal. Std. 100 ppb	Initial Calibration Standard	Continuing Calibration Standard	Interference Check Sample A	Interference Check Sample AB	Laboratory Control Sample and Duplicate	Matrix Spike Sample and Duplicate	Post Digestion Spike
Aluminum	100	40	50	100,000 Aluminum	--	40	40	200
Antimony	100	40	50	100,000 Calcium	100	40	40	200
Arsenic	100	40	50	100,000 Iron	100	40	40	200
Barium	100	40	50	100,000 Magnesium	100	40	40	200
Beryllium	100	40	50	100,000 Sodium	100	40	40	200
Cadmium	100	40	50	100,000 Phosphorus	100	40	40	200
Chromium	100	40	50	100,000 Potassium	100	40	40	200
Cobalt	100	40	50	100,000 Sulfur	100	40	40	200
Copper	100	40	50	200,000 Carbon	100	40	40	200
Lead	100	40	50	1,000,000 Chloride	100	40	40	200
Manganese	100	40	50	2000 Molybdenum	--	40	40	200
Molybdenum	100	40	50	2000 Titanium	100	40	40	200
Nickel	100	40	50		100	40	40	200
Selenium	100	40	50		100	40	40	200
Silver	100	40	50		100	40	40	50
Thallium	100	40	50		100	40	40	200
Tin	100	40	50		100	40	40	200
Uranium	100	40	50		100	40	40	200
Vanadium	100	40	50		100	40	40	200
Zinc	100	40	50		100	40	40	200

All units are ug/L.

Due to the presence of trace contaminants in the ICSA solution, the % recovery for the ICSAB solution is calculated by subtracting the levels in the ICSA from the ICSAB.

Quality Control Standards

ICV = Initial Calibration Verification (Second Source)
CCV = Continuing Calibration Verification

ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank

TestAmerica Denver

Standards Preparation Logbook Record

Oct-01-2009

Logbook: \\Densvr06\StdsLog\metals.std

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

STD2483-09, 1000 Zn (Inorganic Ventures)

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: C2-ZN02051 Vendor's Expiration Date: 05-01-2010
Solvent: 2% HNO3
Date Prep./Opened: 04-28-2009 Date Received: 04-28-2009
Date Expires(1): 05-01-2010 (None)
Date Expires(2): 05-01-2010 (None)
(METALS)-Inventory ID: 856

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1,000.0	1,000.0

STD5446-09, ICP-MS 1ppm Sn/Zn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 09-10-2009
Date Expires(1): 03-01-2010 (1 Year)

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	1.0000

Parent Std No.: STD2483-09, 1000 Zn (Inorganic Ventures) Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1,000.0	1.0000

STD5512-09, ICP-MS (024) INT STD BRC

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 250.00
Date Prep./Opened: 09-14-2009
Date Expires(1): 11-10-2009 (1 Year)
Date Expires(2): 12-01-2009 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD1469-09, Germanium Stock Aliquot Amount (ml): 0.7500
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	3,000.0

Parent Std No.: STD1972-09, Lithium 6 Stock Aliquot Amount (ml): 1.0000
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	4,000.0

Parent Std No.: STD1973-09, Indium Stock — Aliquot Amount (ml): 0.2500
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	1,000.0

Parent Std No.: STD6317-08, Scandium Stock — Aliquot Amount (ml): 0.5000
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	2,000.0

Parent Std No.: STD6318-08, Holmium Stock — Aliquot Amount (ml): 0.2500
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	1,000.0

STD5932-09, ICP-MS ICSA

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 50.000
Date Prep./Opened: 09-30-2009
Date Expires(1): 10-30-2009 (1 Month)
Date Expires(2): 08-01-2010 (None)
pipettes: Met 8

Parent Std No.: STD4542-09, ICPMS Interferent Check Standard — Aliquot Amount (ml): 5.0000
Parent Date Expires(1): 07-31-2010 Parent Date Expires(2): 08-01-2010

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

STD5957-09, ICP-MS BLANK

Analyst: DIAZL

Solvent: Water Volume (ml): 1,000.0
Date Prep./Opened: 10-01-2009
Date Expires(1): 11-01-2009 (1 Month)
Date Expires(2): 11-01-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD5956-09, NITRIC ACID — Aliquot Amount (ml): 50.000

Component	Initial Conc (%)	Final Conc (%)

HNO3	100.00	5.0000

STD5958-09, ICP-MS 10 ppm Sn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 03-01-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1198-09, 1000 mg/L Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

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

STD5959-09, ICP-MS 100 ppb cal

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 50.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

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.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	20.000	100.00

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5960-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 100.00
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

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.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)

Mo	20.000	50.000
Sb	20.000	50.000

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5961-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 — Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD5446-09, ICP-MS 1ppm Sn/Zn — Aliquot Amount (ml): 0.0900

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1.0000	0.0090
Sn	1.0000	0.0090

Parent Std No.: STD5959-09, ICP-MS 100 ppb cal — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 10-02-2009

Component	Initial Conc (ug/L)	Final Conc (mg/L)
Fe	5,000.0	0.0500
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
Sn	100.00	0.0010

STD5962-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (2 Days)
pipettes: Met 20 and Met 8

Parent Std No.: STD5961-09, ICP-MS RL STD Aliquot Amount (ml): 2.0000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	0.0090	0.0018
Sn	0.0090	0.0018
Fe	0.0500	0.0100
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
Sn	0.0010	0.0002

STD5963-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21, Met 20, and Met 8

Parent Std No.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD4542-09, ICPMS Interferent Check Standard Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 07-31-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	20.000	100.00

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5964-09, ICPMS LR STD 1000 ppb

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20 and Met 8

Parent Std No.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	1,000.0
Sb	20.000	1,000.0

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5965-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 02-27-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1213-09, ICPMS ICV SOLUTION A (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Al	10.000	40.000
As	10.000	40.000
Ba	10.000	40.000
Be	10.000	40.000
Cd	10.000	40.000

Co	10.000	40.000
Cr	10.000	40.000
Cu	10.000	40.000
Fe	250.00	1,000.0
Li	10.000	40.000
Mn	10.000	40.000
Ni	10.000	40.000
Pb	10.000	40.000
Se	10.000	40.000
Th	10.000	40.000
Tl	10.000	40.000
U	10.000	40.000
V	10.000	40.000
Zn	10.000	40.000

Parent Std No.: STD1214-09, ICPMS ICV SOLUTION B (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Ag	10.000	40.000
Mo	10.000	40.000
Sb	10.000	40.000
Sn	10.000	40.000
Zr	10.000	40.000

STD5966-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 50.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD1853-09, 1 mg/l Se Aliquot Amount (ml): 0.1000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1.0000	0.0020

STD5967-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 100.00
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 05-01-2010 (None)
pipettes: Met 20

Parent Std No.: STD3106-09, ICP-MS LLCCV 1 Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	0.5000	5.0000
Al	3.0000	30.000
As	0.5000	5.0000

Ba	0.1000	1.0000
Be	0.1000	1.0000
Ca	5.0000	50.000
Cd	0.1000	1.0000
Co	0.1000	1.0000
Cr	0.2000	2.0000
Cu	0.2000	2.0000
Fe	5.0000	50.000
K	10.000	100.00
Mg	5.0000	50.000
Mn	0.1000	1.0000
Na	5.0000	50.000
Ni	0.2000	2.0000
Pb	0.1000	1.0000
Se	0.5000	5.0000
Th	0.2000	2.0000
Tl	0.1000	1.0000
U	0.1000	1.0000
V	0.5000	5.0000
Zn	1.0000	10.000

Parent Std No.: STD3107-09, ICP-MS LLCCV 2 Aliquot Amount (ml): 1.0000

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	0.2000	2.0000
Sb	0.2000	2.0000
Sn	1.0000	10.000

Parent Std No.: STD3108-09, ICP-MS BRC LLCCV 1 Aliquot Amount (ml): 1.0000

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Nb	4.0000	40.000
Pd	0.1000	1.0000
Pt	0.1000	1.0000
W	0.5000	5.0000

File
AG100109

Reviewed By: LRD 10/01/2009

TestAmerica Denver

Standards Preparation Logbook Record

Oct-01-2009

Logbook: \\Densvr06\StdsLog\metals.std

STD5969-09, ALTCu

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 100.00

Date Prep./Opened: 09-30-2009

Date Expires(1): 04-01-2010 (1 Year)

1 ppb

Parent Std No.: STD5968-09, Cu 1mg/l Aliquot Amount (ml): 0.1000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Cu	1.0000	0.0010

File
093009

Reviewed By: LRD 10/01/2009

Page 1 of 1

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
3	Cal Blank				1.0	10/01/09 18:32		☐
4	100 ppb				1.0	10/01/09 18:35		☐
5	ICV				1.0	10/01/09 18:37		☐
6	RLIV				1.0	10/01/09 18:40		☐
7	ICB				1.0	10/01/09 18:43		☐
8	RL STD				1.0	10/01/09 18:45		☐
9	AFCEE RL				1.0	10/01/09 18:48		☐
10	ALTSe				1.0	10/01/09 18:51		☐
11	ICSA				1.0	10/01/09 18:54		☐
12	ICSAB				1.0	10/01/09 18:56		☐
13	RINSE				1.0	10/01/09 18:59		☐
14	LR1				1.0	10/01/09 19:02		☐
15	RINSE				1.0	10/01/09 19:04		☐
16	CCV				1.0	10/01/09 19:07		☐
17	CCB				1.0	10/01/09 19:10		☐
18	RLCV				1.0	10/01/09 19:13		☐
19	LR STD 1 100ppb RT 10/2/09				1.0	10/01/09 19:15		☐
20	RINSE				1.0	10/01/09 19:18		☐
21	LR STD 2 1000ppb RT 10/2/09				1.0	10/01/09 19:21		☐
22	RINSE				1.0	10/01/09 19:23		☐
23	LR STD 3 2000ppb RT 10/2/09				1.0	10/01/09 19:26		☐
24	RINSE				1.0	10/01/09 19:29		☐
25	LR STD 4 4000ppb RT 10/2/09				1.0	10/01/09 19:31		☐
26	RINSE				1.0	10/01/09 19:34		☐
27	LR STD Mn 20000ppb RT 10/2/09				1.0	10/01/09 19:37		☐
28	RINSE				1.0	10/01/09 19:39		☐
29	CCV				1.0	10/01/09 19:42		☐
30	CCB				1.0	10/01/09 19:45		☐
31	RLCV				1.0	10/01/09 19:48		☐
32	LLRLMBF	D9J010000	9274069	MD	1.0	10/01/09 19:50		☐
33	LLRLMCF	D9J010000	9274069	MD	1.0	10/01/09 19:53		☐
34	LLQ21F	D9I300280-1	9274069	MD	1.0	10/01/09 19:56		☐
35	LLQ28F	D9I300280-3	9274069	MD	1.0	10/01/09 19:59		☐
36	LLQ3EF	D9I300280-5	9274069	MD	1.0	10/01/09 20:01		☐
37	LLQ3EP5F	D9I300280	9274069		5.0	10/01/09 20:04		☐
38	LLQ3EZF	D9I300280-5	9274069		1.0	10/01/09 20:07		☐
39	LLQ3ESF	D9I300280-5	9274069	MD	1.0	10/01/09 20:10		☐
40	LLQ3EDF	D9I300280-5	9274069	MD	1.0	10/01/09 20:12		☐
41	CCV				1.0	10/01/09 20:15		☐
42	CCB				1.0	10/01/09 20:18		☐
43	RLCV				1.0	10/01/09 20:20		☐
44	LLRLGB	D9J010000	9274067	MS	1.0	10/01/09 20:23		☐
45	LLRLGC	D9J010000	9274067	MS	1.0	10/01/09 20:26		☐
46	LLQ23	D9I300280-2	9274067	MS	1.0	10/01/09 20:29		☐
47	LLQ3C	D9I300280-4	9274067	MS	1.0	10/01/09 20:31		☐
48	LLQ3F	D9I300280-6	9274067	MS	1.0	10/01/09 20:34		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
49	LLQ3FP5	D9I300280	9274067		5.0	10/01/09 20:37		
50	LLQ3FZ	D9I300280-6	9274067		1.0	10/01/09 20:40		
51	LLQ3FS	D9I300280-6	9274067	MS	1.0	10/01/09 20:42		
52	LLQ3FD	D9I300280-6	9274067	MS	1.0	10/01/09 20:45		
53	CCV				1.0	10/01/09 20:48		
54	CCB				1.0	10/01/09 20:51		
55	RLCV				1.0	10/01/09 20:53		
56	LLMR1B	D9I290000	9272144	MS	1.0	10/01/09 20:56		
57	LLMR1C	D9I290000	9272144	MS	1.0	10/01/09 20:59		
58	LLMR1L	D9I290000	9272144	MS	1.0	10/01/09 21:02		
59	LLMF0	D9I280196-5	9272144	MS	1.0	10/01/09 21:04		
60	LLMF1	D9I280196-6	9272144	MS	1.0	10/01/09 21:07		
61	LLMF2	D9I280196-7	9272144	MS	1.0	10/01/09 21:10		
62	CCV				1.0	10/01/09 21:12		
63	CCB				1.0	10/01/09 21:15		
64	RLCV				1.0	10/01/09 21:18		
65	LLCRDF	D9I230312-4	9267291	MD	1.0	10/01/09 21:21		
66	LLCRLF	D9I230312-7	9267291	MD	1.0	10/01/09 21:23		
67	LLCRMF	D9I230312-8	9267291	MD	1.0	10/01/09 21:26		
68	LLCRQF	D9I230312-9	9267291	MD	1.0	10/01/09 21:29		
69	LLCRKF	D9I230314-1	9267291	MD	1.0	10/01/09 21:32		
70	LLCRVF	D9I230314-2	9267291	MD	1.0	10/01/09 21:34		
71	LLCRWF	D9I230314-3	9267291	MD	1.0	10/01/09 21:37		
72	LLCR0F	D9I230314-4	9267291	MD	1.0	10/01/09 21:40		
73	CCV				1.0	10/01/09 21:43		
74	CCB				1.0	10/01/09 21:45		
75	RLCV				1.0	10/01/09 21:48		
76	LLPHAB	D9I300000	9273096	04	1.0	10/01/09 21:51		
77	LLPHAC	D9I300000	9273096	04	1.0	10/01/09 21:54		
78	LLHGT	D9I250219-1	9273096	04	1.0	10/01/09 21:56		
79	LLNCA	D9I290174-1	9273096	04	1.0	10/01/09 21:59		
80	LLNCAP5	D9I290174	9273096		5.0	10/01/09 22:02		
81	LLNCAZ	D9I290174-1	9273096		1.0	10/01/09 22:05		
82	LLNCAS	D9I290174-1	9273096	04	1.0	10/01/09 22:07		
83	LLNCAD	D9I290174-1	9273096	04	1.0	10/01/09 22:10		
84	LLNDC	D9I290182-1	9273096	04	1.0	10/01/09 22:13		
85	CCV				1.0	10/01/09 22:16		
86	CCB				1.0	10/01/09 22:18		
87	RLCV				1.0	10/01/09 22:21		
88	~~RINSE~~				~~1.0~~	~~10/01/09 22:24~~		
89	RINSE				1.0	10/01/09 22:26		
90	RINSE				1.0	10/01/09 22:29		
91	RINSE				1.0	10/01/09 22:32		
92	RINSE				1.0	10/01/09 22:35		
93	RINSE				1.0	10/01/09 22:37		
94	~~RINSE~~				~~1.0~~	~~10/01/09 22:40~~		

KF 10/2/09

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
95	~~Cal Blank~~				1.0	~~10/01/09 22:43~~	VF 10/2/09	
96	Cal Blank				1.0	10/01/09 22:46		
97	100 ppb				1.0	10/01/09 22:48		
98	CCV				1.0	10/01/09 22:51		
99	CCB				1.0	10/01/09 22:54		
100	RLCV				1.0	10/01/09 22:56		
101	LLL11B	D9I280000	9271349	46	1.0	10/01/09 22:59		
102	LLL11C	D9I280000	9271349	46	1.0	10/01/09 23:02		
103	LLFWA	D9I240357-1	9271349	46	1.0	10/01/09 23:05		
104	LLFWD	D9I240357-2	9271349	46	1.0	10/01/09 23:07		
105	LLFWE	D9I240357-3	9271349	46	1.0	10/01/09 23:10		
106	LLFWG	D9I240357-4	9271349	46	1.0	10/01/09 23:13	Take all but Cr, Ni, Co. VF 10/2/09	
107	CCV				1.0	10/01/09 23:16		
108	CCB				1.0	10/01/09 23:18		
109	RLCV				1.0	10/01/09 23:21		
110	LLFWGP5	D9I240357	9271349		5.0	10/01/09 23:24		
111	LLFWGZ	D9I240357-4	9271349		1.0	10/01/09 23:27		
112	LLFWGS	D9I240357-4	9271349	46	1.0	10/01/09 23:29		
113	LLFWGD	D9I240357-4	9271349	46	1.0	10/01/09 23:32		
114	LLFWK	D9I240357-5	9271349	46	1.0	10/01/09 23:35		
115	LLFWX	D9I240357-7	9271349	46	1.0	10/01/09 23:38		
116	CCV				1.0	10/01/09 23:40		
117	CCB				1.0	10/01/09 23:43		
118	RLCV				1.0	10/01/09 23:46		
119	LLPLDB	D9I300000	9273146	MS	1.0	10/01/09 23:49		
120	LLPLDC	D9I300000	9273146	MS	1.0	10/01/09 23:51		
121	LLH48	D9I250293-1	9273146	MS	1.0	10/01/09 23:54		
122	LLH48P5	D9I250293	9273146		5.0	10/01/09 23:57		
123	LLH48Z	D9I250293-1	9273146		1.0	10/02/09 00:00		
124	LLH48S	D9I250293-1	9273146	MS	1.0	10/02/09 00:02		
125	LLH48D	D9I250293-1	9273146	MS	1.0	10/02/09 00:05		
126	CCV				1.0	10/02/09 00:08		
127	CCB				1.0	10/02/09 00:11		
128	RLCV				1.0	10/02/09 00:13		
129	LLL1GB	D9I280000	9271341	46	1.0	10/02/09 00:16		
130	LLL1GC	D9I280000	9271341	46	1.0	10/02/09 00:19		
131	LLH4L	D9I250289-1	9271341	46	1.0	10/02/09 00:22		
132	LLH4LP5	D9I250289	9271341		5.0	10/02/09 00:24	Take all but Se. VF 10/2/09	
133	LLH4LZ	D9I250289-1	9271341		1.0	10/02/09 00:27		
134	LLH4LS	D9I250289-1	9271341	46	1.0	10/02/09 00:30		
135	LLH4LD	D9I250289-1	9271341	46	1.0	10/02/09 00:32		
136	LLH4P	D9I250289-2	9271341	46	1.0	10/02/09 00:35		
137	CCV				1.0	10/02/09 00:38		
138	CCB				1.0	10/02/09 00:41		
139	RLCV				1.0	10/02/09 00:43		
140	~~RINSE~~				1.0	~~10/02/09 00:46~~	VF 10/2/09	

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
141	~~RINSE~~				~~1.0~~	~~10/02/09 00:49~~		
142	RINSE				1.0	10/02/09 00:51		
143	RINSE				1.0	10/02/09 00:54		
144	RINSE				1.0	10/02/09 00:57		
145	RINSE				1.0	10/02/09 01:00		
146	RINSE				1.0	10/02/09 01:02		
147	~~Cal Blank~~				~~1.0~~	~~10/02/09 01:05~~	VF 10/2/09	
148	Cal Blank				1.0	10/02/09 01:08		
149	100 ppb				1.0	10/02/09 01:11		
150	CCV				1.0	10/02/09 01:13		
151	CCB				1.0	10/02/09 01:16		
152	RLCV				1.0	10/02/09 01:19		
153	LLL3TB	D9I280000	9271375	04	1.0	10/02/09 01:21		
154	LLL3TC	D9I280000	9271375	04	1.0	10/02/09 01:24		
155	LLH2Q	D9I250273-1	9271375	04	1.0	10/02/09 01:27		
156	LLH2QP5	D9I250273	9271375		5.0	10/02/09 01:30		
157	LLH2QZ	D9I250273-1	9271375		1.0	10/02/09 01:32		
158	LLH2QS	D9I250273-1	9271375	04	1.0	10/02/09 01:35		
159	LLH2QD	D9I250273-1	9271375	04	1.0	10/02/09 01:38		
160	LLH2V	D9I250273-2	9271375	04	1.0	10/02/09 01:41		
161	LLH3K	D9I250280-1	9271375	04	1.0	10/02/09 01:43		
162	LLH3KS	D9I250280-1	9271375	04	1.0	10/02/09 01:46		
163	CCV				1.0	10/02/09 01:49		
164	CCB				1.0	10/02/09 01:52		
165	RLCV				1.0	10/02/09 01:54		
166	LLH3KD	D9I250280-1	9271375	04	1.0	10/02/09 01:57		
167	LLH3R	D9I250280-2	9271375	04	1.0	10/02/09 02:00		
168	LLH3T	D9I250280-3	9271375	04	1.0	10/02/09 02:03		
169	LLH3V	D9I250280-4	9271375	04	1.0	10/02/09 02:05		
170	LLH3W	D9I250280-5	9271375	04	1.0	10/02/09 02:08		
171	LLH3X	D9I250280-6	9271375	04	1.0	10/02/09 02:11		
172	LLH4A	D9I250286-1	9271375	04	1.0	10/02/09 02:14		
173	LLH4D	D9I250286-2	9271375	04	1.0	10/02/09 02:17		
174	LLJ4F	D9I260141-1	9271375	04	1.0	10/02/09 02:19		
175	LLJ4P	D9I260141-2	9271375	04	1.0	10/02/09 02:22		
176	CCV				1.0	10/02/09 02:25		
177	CCB				1.0	10/02/09 02:28		
178	RLCV				1.0	10/02/09 02:30		
179	LLL51BF	D9I280000	9271393	MD	1.0	10/02/09 02:33		
180	LLL51CF	D9I280000	9271393	MD	1.0	10/02/09 02:36		
181	LLKE1F	D9I260174-1	9271393	MD	1.0	10/02/09 02:39		
182	LLKE1P5F	D9I260174	9271393		5.0	10/02/09 02:41		
183	LLKE1ZF	D9I260174-1	9271393		1.0	10/02/09 02:44		
184	LLKE1SF	D9I260174-1	9271393	MD	1.0	10/02/09 02:47		
185	CCV				1.0	10/02/09 02:50		
186	CCB				1.0	10/02/09 02:52		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
187	RLCV				1.0	10/02/09 02:55		
188	LLKE1DF	D9I260174-1	9271393	MD	1.0	10/02/09 02:58		
189	LLKE3F	D9I260174-2	9271393	MD	1.0	10/02/09 03:01		
190	LLKE4F	D9I260174-3	9271393	MD	1.0	10/02/09 03:04		
191	LLKE5F	D9I260174-4	9271393	MD	1.0	10/02/09 03:06		
192	LLKE6F	D9I260174-5	9271393	MD	1.0	10/02/09 03:09		
193	LLKE7F	D9I260174-6	9271393	MD	1.0	10/02/09 03:12		
194	CCV				1.0	10/02/09 03:15		
195	CCB				1.0	10/02/09 03:18		
196	RLCV				1.0	10/02/09 03:20		
197	~~LLL2HB~~	~~D9I280000~~	~~9271354~~	~~MS~~	~~1.0~~	~~10/02/09 03:23~~		
198	LLL2HC	D9I280000	9271354	MS	1.0	10/02/09 03:26		
199	LLJFA	D9I250319-1	9271354	MS	1.0	10/02/09 03:29		
200	LLJFAP5	D9I250319	9271354		5.0	10/02/09 03:31		
201	LLJFAZ	D9I250319-1	9271354		1.0	10/02/09 03:34		
202	LLJFAS	D9I250319-1	9271354	MS	1.0	10/02/09 03:37		
203	LLJFAD	D9I250319-1	9271354	MS	1.0	10/02/09 03:39		
204	LLJGD	D9I250319-2	9271354	MS	1.0	10/02/09 03:42		
205	LLJGF	D9I250319-3	9271354	MS	1.0	10/02/09 03:45		
206	LLJGG	D9I250319-4	9271354	MS	1.0	10/02/09 03:47		
207	CCV				1.0	10/02/09 03:50		
208	CCB				1.0	10/02/09 03:53		
209	RLCV				1.0	10/02/09 03:56		
210	RINSE				1.0	10/02/09 03:58		
211	RINSE				1.0	10/02/09 04:01		
212	RINSE				1.0	10/02/09 04:04		
213	RINSE				1.0	10/02/09 04:07		
214	RINSE				1.0	10/02/09 04:09		
215	RINSE				1.0	10/02/09 04:12		
216	RINSE				1.0	10/02/09 04:15		
217	~~Cal Blank~~				1.0	10/02/09 04:17	FF 10/2/09 Did not use.	
218	Cal Blank				1.0	10/02/09 04:20		
219	100 ppb				1.0	10/02/09 04:23		
220	CCV				1.0	10/02/09 04:26		
221	CCB				1.0	10/02/09 04:28		
222	RLCV				1.0	10/02/09 04:31		
223	LLL0WB	D9I280000	9271338	MS	1.0	10/02/09 04:34		
224	LLL0WC	D9I280000	9271338	MS	1.0	10/02/09 04:37		
225	LLG32 5X	D9I250174-1	9271338	MS	5.0	10/02/09 04:40		
226	LLG32P25	D9I250174	9271338		25.0	10/02/09 04:42		
227	LLG32Z	D9I250174-1	9271338		1.0	10/02/09 04:45		
228	LLG32S 5X	D9I250174-1	9271338	MS	5.0	10/02/09 04:48		
229	LLG32D 5X	D9I250174-1	9271338	MS	5.0	10/02/09 04:51		
230	LLKFN	D9I260177-1	9271338	MS	1.0	10/02/09 04:53		
231	LLKFP 5X	D9I260178-1	9271338	MS	5.0	10/02/09 04:56		
232	LLKFR 5X	D9I260178-2	9271338	MS	5.0	10/02/09 04:59		

Denver

RUN SUMMARY

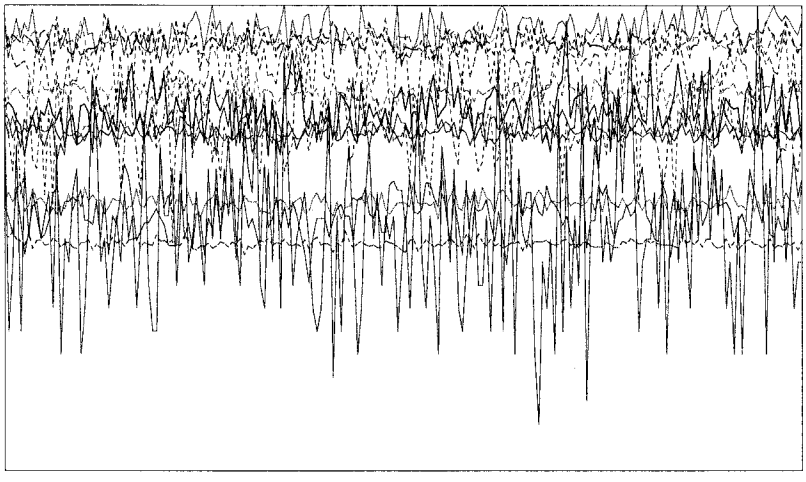
Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: **AG100109** **Analyst: TEL**

#	Sample ID	Lot No.	Batch	DF	Analyzed Date	Comment	Q
233	CCV			1.0	10/02/09 05:02		☐
234	CCB			1.0	10/02/09 05:05		☐
235	RLCV			1.0	10/02/09 05:07		☐

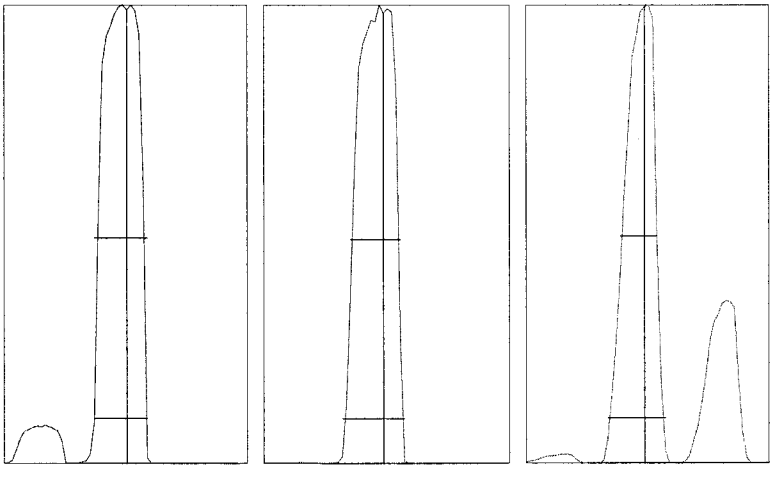
Tune Report

Tune File : NORM.U
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	1.5300 sec	
n:	200	
Oxide:	156/140	1.185%
Doubly Charged:	70/140	0.920%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1418.0	1485.4	4.29	0.80
7	20,000	19338.0	18865.5	3.47	1.30
59	50,000	30918.0	28938.0	2.77	1.60
63	200	126.0	110.7	9.12	1.00
70	500	347.0	388.5	6.55	2.00
75	20	9.0	10.5	31.63	1.70
78	500	429.0	432.8	5.29	2.00
89	50,000	45446.0	45999.3	2.12	1.60
115	50,000	40396.0	40695.5	2.21	2.20
118	200	144.0	147.9	9.54	2.00
137	5,000	4617.0	4614.9	2.35	2.20
205	50,000	24885.0	24518.4	1.76	3.30
238	50,000	37409.0	36295.4	1.68	4.60
156/140	2	1.156%	1.196%	6.45	
70/140	2	0.839%	0.953%	7.04	



m/z:	7	89	205
Height:	18,568	45,991	24,737
Axis:	7.05	89.00	205.00
W-50%:	0.65	0.60	0.45
W-10%:	0.6500	0.7500	0.700

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : Oct 01, 2009 17:59:12
Printed : Oct 01, 2009 17:59:14

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1600 W	Extract 1	:	0 V	AMU Gain	:	133
RF Matching	:	1.7 V	Extract 2	:	-175 V	AMU Offset	:	124
Smpl Depth	:	8 mm	Omega Bias-ce	:	-30 V	Axis Gain	:	1.0006
Torch-H	:	-0.8 mm	Omega Lens-ce	:	1.4 V	Axis Offset	:	-0.03
Torch-V	:	-0.3 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	0.83 L/min	QP Focus	:	7 V			
Makeup Gas	:	0.23 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1770 V
Sample Pump	:	--- rps	OctP RF	:	180 V	Pulse HV	:	1480 V
S/C Temp	:	2 degC	OctP Bias	:	-18 V			

===Reaction Cell===

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

Generated : Oct 01, 2009 17:59:12
Printed : Oct 01, 2009 17:59:17

P/A Factor Tuning Report

Acquired:Oct 1 2009 06:08 pm

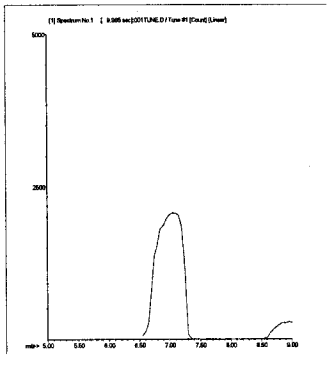
Mass[amu]	Element	P/A Factor
6	Li	0.053397
7	(Li)	Sensitivity too low
9	Be	0.059616
23	Na	0.066572
24	Mg	0.068529
27	Al	0.070000
39	K	0.069595
43	Ca	Sensitivity too low
45	Sc	0.070407
51	V	0.071744
52	Cr	0.073286
53	(Cr)	Sensitivity too low
55	Mn	0.074579
57	Fe	Sensitivity too low
59	Co	0.076853
60	Ni	0.077333
63	Cu	0.078465
66	Zn	0.078404
72	Ge	0.078192
75	As	0.077469
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
93	Nb	Sensitivity too low
95	Mo	0.078956
98	(Mo)	0.078577
99	(Mo)	0.079319
105	Pd	0.081369
106	(Cd)	0.081156
107	Ag	Sensitivity too low
108	(Cd)	0.081602
111	Cd	0.081657
115	In	0.081201
118	Sn	0.081109
121	Sb	0.081006
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
182	W	Sensitivity too low
195	Pt	Sensitivity too low
205	Tl	0.086508
206	(Pb)	0.085377
207	(Pb)	0.085402
208	Pb	0.084961
232	Th	0.084478
238	U	0.084465

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1770 V
Pulse HV: 1480 V

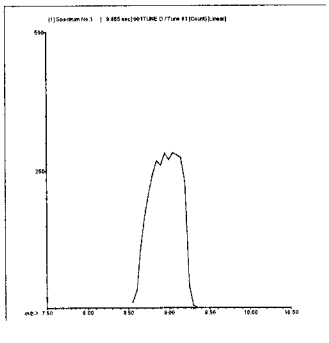
200.8 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\001TUNE.D
Date Acquired: Oct 1 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

Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
7 Li	21120	21123	21227	20965	21203	21084	0.50	5.00	
9 Be	2962	2982	2923	2978	2993	2936	1.04	5.00	
24 Mg	17300	17448	17205	17320	17121	17406	0.79	5.00	
59 Co	84694	85152	83905	84546	85214	84656	0.63	5.00	
115 In	1446742	1453303	1440055	1441477	1439772	1459106	0.62	5.00	
208 Pb	77660	78148	78258	77691	77999	76203	1.08	5.00	
238 U	155575	158923	156139	154005	154901	153908	1.33	5.00	

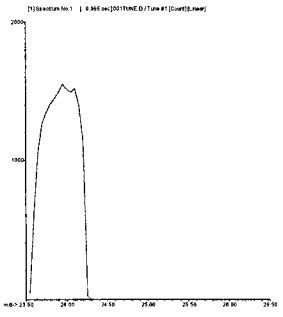


7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\AG100109.B\001TUNE.D



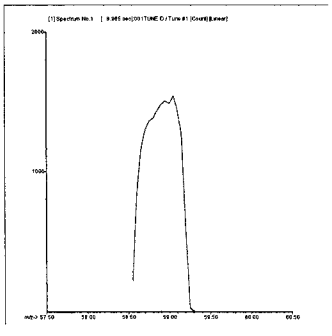
24 Mg

Mass Calib.

Actual: 24.00
Required: 23.90 - 24.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



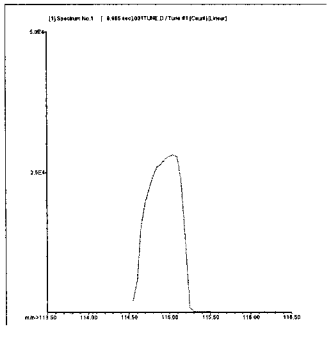
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



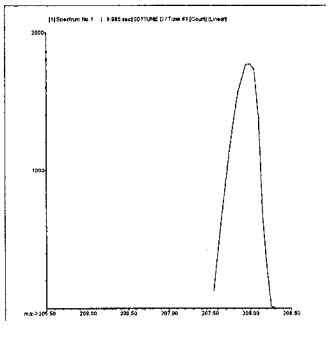
115 In

Mass Calib.

Actual: 115.00
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



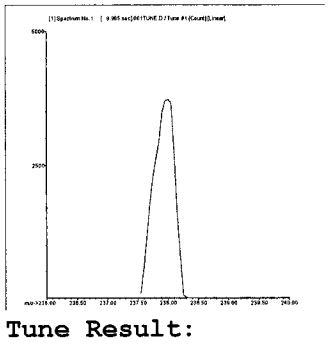
208 Pb

Mass Calib.

Actual: 207.95
Required: 207.90 - 208.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



238 U

Mass Calib.

Actual: 237.95
Required: 237.90 - 238.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:

Tune Result: Pass

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\002CALB.D\002CALB.D#
Date Acquired: Oct 1 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: Oct 01 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	-330	10.49
52	Cr	72	1	3414	7.36
55	Mn	72	1	763	24.66
59	Co	72	1	113	13.48
60	Ni	72	1	110	31.49
63	Cu	72	1	363	15.16
66	Zn	72	1	1211	2.65
75	As	72	1	43	14.84
78	Se	72	1	547	30.85
95	Mo	72	1	87	66.62
107	Ag	115	1	13	86.60
111	Cd	115	1	1	2229.70
118	Sn	115	1	223	28.44
121	Sb	115	1	41	26.06
137	Ba	115	1	24	43.84
205	Tl	165	1	257	19.13
208	Pb	165	1	299	4.51
232	Th	165	1	310	22.58
238	U	165	1	97	21.53

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	412395	1.23
45	Sc	1	1844727	0.81
72	Ge	1	917770	0.74
115	In	1	2585848	2.23
165	Ho	1	4169058	0.85

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

10/1/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\003CALB.D\003CALB.D#
Date Acquired: Oct 1 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: Oct 01 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	-149	226.83
52	Cr	72	1	3601	6.79
55	Mn	72	1	807	7.05
59	Co	72	1	87	56.92
60	Ni	72	1	103	14.78
63	Cu	72	1	377	9.32
66	Zn	72	1	566	4.91
75	As	72	1	39	19.25
78	Se	72	1	673	16.89
95	Mo	72	1	57	10.19
107	Ag	115	1	13	43.30
111	Cd	115	1	4	134.17
118	Sn	115	1	363	30.32
121	Sb	115	1	24	28.39
137	Ba	115	1	22	34.64
205	Tl	165	1	140	14.48
208	Pb	165	1	241	7.09
232	Th	165	1	333	4.58
238	U	165	1	44	30.31

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	424253	0.39
45	Sc	1	1877617	1.09
72	Ge	1	929620	1.01
115	In	1	2590490	0.87
165	Ho	1	4147526	1.71

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\AG100109.B\004ICAL.D\004ICAL.D#
Date Acquired: Oct 1 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: Oct 01 2009 06:32 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	56189	1.29
51	V	72	1	1135395	1.62
52	Cr	72	1	1155393	0.74
55	Mn	72	1	1288330	0.89
59	Co	72	1	1411854	0.17
60	Ni	72	1	317309	1.13
63	Cu	72	1	762107	0.71
66	Zn	72	1	178097	0.91
75	As	72	1	143339	0.56
78	Se	72	1	25361	2.25
95	Mo	72	1	395006	1.25
107	Ag	115	1	1137415	1.68
111	Cd	115	1	225410	1.21
118	Sn	115	1	629786	1.03
121	Sb	115	1	751086	0.43
137	Ba	115	1	303305	0.34
205	Tl	165	1	2230208	0.83
208	Pb	165	1	3097858	0.19
232	Th	165	1	2996395	3.47
238	U	165	1	3355338	0.64

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	418147	0.46	424253	98.6	30 - 120	
45	Sc	1	1864396	1.73	1877617	99.3	30 - 120	
72	Ge	1	927301	0.30	929620	99.8	30 - 120	
115	In	1	2591577	1.24	2590490	100.0	30 - 120	
165	Ho	1	4156902	1.09	4147526	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\AG100109.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\AG100109.B\005 ICV.D\005 ICV.D#
Date Acquired: Oct 1 2009 06:37 pm
Operator: TEL
Sample Name: ICV
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 01 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	40.59	ppb	1.42	40	101.5	90 - 110	
51 V	72	1	40.29	ppb	2.34	40	100.7	90 - 110	
52 Cr	72	1	40.83	ppb	2.20	40	102.1	90 - 110	
55 Mn	72	1	41.55	ppb	2.58	40	103.9	90 - 110	
59 Co	72	1	41.18	ppb	2.67	40	103.0	90 - 110	
60 Ni	72	1	41.76	ppb	2.25	40	104.4	90 - 110	
63 Cu	72	1	42.07	ppb	2.96	40	105.2	90 - 110	
66 Zn	72	1	40.97	ppb	2.52	40	102.4	90 - 110	
75 As	72	1	40.53	ppb	1.92	40	101.3	90 - 110	
78 Se	72	1	40.55	ppb	1.53	40	101.4	90 - 110	
95 Mo	72	1	41.17	ppb	3.35	40	102.9	90 - 110	
107 Ag	115	1	40.17	ppb	0.02	40	100.4	90 - 110	
111 Cd	115	1	41.17	ppb	1.39	40	102.9	90 - 110	
118 Sn	115	1	40.02	ppb	1.80	40	100.1	90 - 110	
121 Sb	115	1	39.26	ppb	0.33	40	98.2	90 - 110	
137 Ba	115	1	39.82	ppb	0.44	40	99.6	90 - 110	
205 Tl	165	1	41.67	ppb	1.16	40	104.2	90 - 110	
208 Pb	165	1	41.31	ppb	0.85	40	103.3	90 - 110	
232 Th	165	1	45.83	ppb	1.48	40	114.6	90 - 110	Fail
238 U	165	1	41.75	ppb	1.47	40	104.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	430781	0.40	424253	101.5	30 - 120	
45 Sc	1	1912182	0.89	1877617	101.8	30 - 120	
72 Ge	1	917159	1.75	929620	98.7	30 - 120	
115 In	1	2599203	0.96	2590490	100.3	30 - 120	
165 Ho	1	4115351	0.71	4147526	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\AG100109.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\AG100109.B\006WASH.D\006WASH.D#
Date Acquired: Oct 1 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: Oct 01 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	0.812 ppb	14.92	1.30	
51 V	72	1	5.199 ppb	3.44	6.50	
52 Cr	72	1	2.136 ppb	3.77	2.60	
55 Mn	72	1	1.068 ppb	4.03	1.30	
59 Co	72	1	1.055 ppb	1.33	1.30	
60 Ni	72	1	2.215 ppb	5.28	2.60	
63 Cu	72	1	2.193 ppb	1.46	2.60	
66 Zn	72	1	11.110 ppb	1.60	13.00	
75 As	72	1	5.266 ppb	2.56	6.50	
78 Se	72	1	5.144 ppb	17.16	6.50	
95 Mo	72	1	2.111 ppb	2.64	2.60	
107 Ag	115	1	5.302 ppb	0.95	6.50	
111 Cd	115	1	1.058 ppb	5.60	1.30	
118 Sn	115	1	10.350 ppb	0.13	13.00	
121 Sb	115	1	2.118 ppb	1.64	2.60	
137 Ba	115	1	1.034 ppb	1.50	1.30	
205 Tl	165	1	1.135 ppb	0.99	1.30	
208 Pb	165	1	1.073 ppb	1.68	1.30	
232 Th	165	1	2.843 ppb	3.53	2.60	
238 U	165	1	1.101 ppb	1.32	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	437590	1.28	424253	103.1	30 - 120	
45 Sc	1	1903029	0.10	1877617	101.4	30 - 120	
72 Ge	1	919247	0.90	929620	98.9	30 - 120	
115 In	1	2610439	0.36	2590490	100.8	30 - 120	
165 Ho	1	4158597	0.73	4147526	100.3	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\AG100109.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\AG100109.B\007 ICB.D\007 ICB.D#
Date Acquired: Oct 1 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: Oct 01 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	0.00	ppb	278.36	1.00	
52 Cr	72	1	-0.01	ppb	312.17	1.00	
55 Mn	72	1	0.02	ppb	88.96	1.00	
59 Co	72	1	0.00	ppb	30.73	1.00	
60 Ni	72	1	0.02	ppb	98.45	1.00	
63 Cu	72	1	0.03	ppb	32.92	1.00	
66 Zn	72	1	0.13	ppb	19.35	1.00	
75 As	72	1	0.00	ppb	713.76	1.00	
78 Se	72	1	-0.70	ppb	47.40	1.00	
95 Mo	72	1	0.03	ppb	49.91	1.00	
107 Ag	115	1	0.01	ppb	11.22	1.00	
111 Cd	115	1	0.00	ppb	161.52	1.00	
118 Sn	115	1	0.06	ppb	25.32	1.00	
121 Sb	115	1	0.08	ppb	14.33	1.00	
137 Ba	115	1	0.02	ppb	35.69	1.00	
205 Tl	165	1	0.02	ppb	8.96	1.00	
208 Pb	165	1	0.00	ppb	39.86	1.00	
232 Th	165	1	0.20	ppb	18.73	1.00	
238 U	165	1	0.00	ppb	26.02	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	440917	2.45	424253	103.9	30 - 120	
45 Sc	1	1961648	1.93	1877617	104.5	30 - 120	
72 Ge	1	951133	0.51	929620	102.3	30 - 120	
115 In	1	2626838	1.22	2590490	101.4	30 - 120	
165 Ho	1	4104472	0.62	4147526	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\AG100109.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\AG100109.B\008RLST.D\008RLST.D#
Date Acquired: Oct 1 2009 06:45 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: Oct 01 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	0.94	ppb	7.44	1	94.2	50 - 150	
51 V	72	1	0.99	ppb	0.67	1	98.9	50 - 150	
52 Cr	72	1	0.99	ppb	2.61	1	99.5	50 - 150	
55 Mn	72	1	1.07	ppb	0.95	1	106.7	50 - 150	
59 Co	72	1	1.06	ppb	1.51	1	106.0	50 - 150	
60 Ni	72	1	1.04	ppb	0.92	1	104.0	50 - 150	
63 Cu	72	1	1.06	ppb	3.64	1	105.9	50 - 150	
66 Zn	72	1	10.85	ppb	1.79	10	108.5	50 - 150	
75 As	72	1	1.05	ppb	4.28	1	104.5	50 - 150	
78 Se	72	1	1.03	ppb	24.35	1	102.5	50 - 150	
95 Mo	72	1	1.08	ppb	0.39	1	107.9	50 - 150	
107 Ag	115	1	1.00	ppb	2.95	1	99.8	50 - 150	
111 Cd	115	1	1.01	ppb	8.51	1	101.3	50 - 150	
118 Sn	115	1	10.49	ppb	0.40	10	104.9	50 - 150	
121 Sb	115	1	1.01	ppb	1.68	1	100.6	50 - 150	
137 Ba	115	1	0.99	ppb	1.48	1	99.0	50 - 150	
205 Tl	165	1	1.03	ppb	1.26	1	103.1	50 - 150	
208 Pb	165	1	1.04	ppb	1.02	1	103.7	50 - 150	
232 Th	165	1	1.08	ppb	1.05	1	108.4	50 - 150	
238 U	165	1	1.07	ppb	1.43	1	107.1	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	445045	0.40	424253	104.9	30 - 120	
45 Sc	1	1910372	1.18	1877617	101.7	30 - 120	
72 Ge	1	922983	1.19	929620	99.3	30 - 120	
115 In	1	2627930	0.44	2590490	101.4	30 - 120	
165 Ho	1	4116860	0.49	4147526	99.3	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\AG100109.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\AG100109.B\009AFCE.D\009AFCE.D#
Date Acquired: Oct 1 2009 06:48 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: Oct 01 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	0.22	ppb	34.75	0	118.4	80 - 120	
51 V	72	1	0.22	ppb	16.17	0	109.0	80 - 120	
52 Cr	72	1	0.22	ppb	12.14	0	111.6	80 - 120	
55 Mn	72	1	0.22	ppb	4.52	0	101.4	80 - 120	
59 Co	72	1	0.21	ppb	2.41	0	99.0	80 - 120	
60 Ni	72	1	0.21	ppb	6.80	0	102.8	80 - 120	
63 Cu	72	1	0.23	ppb	3.62	0	108.3	80 - 120	
66 Zn	72	1	2.09	ppb	3.90	2	96.3	80 - 120	
75 As	72	1	0.20	ppb	10.67	0	96.1	80 - 120	
78 Se	72	1	0.01	ppb	1930.20	0	6.1	80 - 120	
95 Mo	72	1	0.21	ppb	6.22	0	95.4	80 - 120	
107 Ag	115	1	0.19	ppb	14.55	0	96.8	80 - 120	
111 Cd	115	1	0.19	ppb	6.27	0	95.8	80 - 120	
118 Sn	115	1	2.07	ppb	3.66	2	98.9	80 - 120	
121 Sb	115	1	0.22	ppb	4.40	0	109.5	80 - 120	
137 Ba	115	1	0.20	ppb	6.71	0	102.2	80 - 120	
205 Tl	165	1	0.21	ppb	2.37	0	101.9	80 - 120	
208 Pb	165	1	0.21	ppb	0.14	0	101.7	80 - 120	
232 Th	165	1	0.25	ppb	2.92	0	113.7	80 - 120	
238 U	165	1	0.22	ppb	4.55	0	101.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	444927	1.05	424253	104.9	30 - 120	
45 Sc	1	1941365	0.98	1877617	103.4	30 - 120	
72 Ge	1	944785	2.54	929620	101.6	30 - 120	
115 In	1	2640251	0.46	2590490	101.9	30 - 120	
165 Ho	1	4151939	1.49	4147526	100.1	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\AG100109.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\AG100109.B\010SMPL.D\010SMPL.D#
Date Acquired: Oct 1 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: Oct 01 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	173.22	3600	
51 V	72	1	-0.02	-0.02	ppb	39.43	3600	
52 Cr	72	1	0.00	0.00	ppb	25237.00	3600	
55 Mn	72	1	0.01	0.01	ppb	80.75	3600	
59 Co	72	1	0.00	0.00	ppb	3678.60	3600	
60 Ni	72	1	0.00	0.00	ppb	927.74	3600	
63 Cu	72	1	0.02	0.02	ppb	82.16	3600	
66 Zn	72	1	0.73	0.73	ppb	2.56	3600	
75 As	72	1	0.01	0.01	ppb	20.29	3600	
78 Se	72	1	2.02	2.02	ppb	13.72	3600	
95 Mo	72	1	0.01	0.01	ppb	32.02	3600	
107 Ag	115	1	0.00	0.00	ppb	76.52	3600	
111 Cd	115	1	0.00	0.00	ppb	172.47	3600	
118 Sn	115	1	0.03	0.03	ppb	36.99	3600	
121 Sb	115	1	0.02	0.02	ppb	22.74	3600	
137 Ba	115	1	0.01	0.01	ppb	37.84	3600	
205 Tl	165	1	0.01	0.01	ppb	33.23	3600	
208 Pb	165	1	0.00	0.00	ppb	25.10	3600	
232 Th	165	1	0.02	0.02	ppb	23.72	1000	
238 U	165	1	0.00	0.00	ppb	55.20	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	448045	1.75	424253	105.6	30 - 120	
45 Sc	1	1970216	0.31	1877617	104.9	30 - 120	
72 Ge	1	947355	1.11	929620	101.9	30 - 120	
115 In	1	2624798	0.29	2590490	101.3	30 - 120	
165 Ho	1	4136620	1.26	4147526	99.7	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\AG100109.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\AG100109.B\011ICSA.D\011ICSA.D#
Date Acquired: Oct 1 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: Oct 01 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	0.02 ppb	86.80	1.00	
51 V	72	1	-0.21 ppb	115.93	1.00	
52 Cr	72	1	0.59 ppb	3.68	1.00	
55 Mn	72	1	3.52 ppb	1.21	1.00	
59 Co	72	1	1.48 ppb	0.57	1.00	
60 Ni	72	1	1.35 ppb	6.37	1.00	
63 Cu	72	1	1.40 ppb	3.82	1.00	
66 Zn	72	1	2.45 ppb	1.02	10.00	
75 As	72	1	0.37 ppb	8.38	1.00	
78 Se	72	1	0.01 ppb	6004.20	1.00	
95 Mo	72	1	2038.00 ppb	0.49	2000.00	
107 Ag	115	1	0.03 ppb	13.03	1.00	
111 Cd	115	1	0.11 ppb	182.64	1.00	
118 Sn	115	1	0.10 ppb	9.18	10.00	
121 Sb	115	1	0.29 ppb	5.22	1.00	
137 Ba	115	1	0.07 ppb	5.59	1.00	
205 Tl	165	1	0.04 ppb	24.24	1.00	
208 Pb	165	1	0.13 ppb	3.02	1.00	
232 Th	165	1	0.04 ppb	4.15	1.00	
238 U	165	1	0.01 ppb	9.14	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	278354	3.70	424253	65.6	30 - 120	
45 Sc	1	1383589	0.30	1877617	73.7	30 - 120	
72 Ge	1	702248	1.05	929620	75.5	30 - 120	
115 In	1	1963211	1.33	2590490	75.8	30 - 120	
165 Ho	1	3397050	0.26	4147526	81.9	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\AG100109.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\AG100109.B\012ICSB.D\012ICSB.D#
Date Acquired: Oct 1 2009 06:56 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: Oct 01 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	111.50	1.70	100	111.5	80 - 120	
51 V	72		1	95.04	2.07	100	95.0	80 - 120	
52 Cr	72		1	93.09	2.86	100	93.1	80 - 120	
55 Mn	72		1	98.40	2.13	100	98.4	80 - 120	
59 Co	72		1	94.00	0.64	100	94.0	80 - 120	
60 Ni	72		1	90.26	1.23	100	90.3	80 - 120	
63 Cu	72		1	89.74	2.04	100	89.7	80 - 120	
66 Zn	72		1	98.62	0.58	100	98.6	80 - 120	
75 As	72		1	100.50	0.47	100	100.5	80 - 120	
78 Se	72		1	105.60	2.20	100	105.6	80 - 120	
95 Mo	72		1	2186.00	1.73	2100	104.1	80 - 120	
107 Ag	115		1	87.41	2.66	100	87.4	80 - 120	
111 Cd	115		1	94.16	1.01	100	94.2	80 - 120	
118 Sn	115		1	99.21	0.90	100	99.2	80 - 120	
121 Sb	115		1	100.50	1.03	100	100.5	80 - 120	
137 Ba	115		1	99.86	1.46	100	99.9	80 - 120	
205 Tl	165		1	96.58	0.49	100	96.6	80 - 120	
208 Pb	165		1	95.57	1.30	100	95.6	80 - 120	
232 Th	165		1	111.10	0.37	100	111.1	80 - 120	
238 U	165		1	103.60	1.39	100	103.6	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	251332	2.59	424253	59.2	30 - 120	
45 Sc	1	1321075	0.71	1877617	70.4	30 - 120	
72 Ge	1	672340	1.12	929620	72.3	30 - 120	
115 In	1	1987321	1.05	2590490	76.7	30 - 120	
165 Ho	1	3390532	0.76	4147526	81.7	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\AG100109.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\AG100109.B\013SMPL.D\013SMPL.D#
Date Acquired: Oct 1 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: Oct 01 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	86.58	3600	
51 V	72	1	0.03	0.03	ppb	91.61	3600	
52 Cr	72	1	0.01	0.01	ppb	169.54	3600	
55 Mn	72	1	0.01	0.01	ppb	114.55	3600	
59 Co	72	1	0.01	0.01	ppb	48.11	3600	
60 Ni	72	1	0.01	0.01	ppb	115.70	3600	
63 Cu	72	1	0.03	0.03	ppb	43.33	3600	
66 Zn	72	1	0.41	0.41	ppb	6.69	3600	
75 As	72	1	0.01	0.01	ppb	74.60	3600	
78 Se	72	1	-0.44	-0.44	ppb	89.14	3600	
95 Mo	72	1	1.21	1.21	ppb	7.82	3600	
107 Ag	115	1	0.02	0.02	ppb	17.89	3600	
111 Cd	115	1	0.01	0.01	ppb	55.86	3600	
118 Sn	115	1	0.04	0.04	ppb	8.01	3600	
121 Sb	115	1	0.04	0.04	ppb	9.88	3600	
137 Ba	115	1	0.01	0.01	ppb	66.57	3600	
205 Tl	165	1	0.02	0.02	ppb	14.17	3600	
208 Pb	165	1	0.01	0.01	ppb	12.82	3600	
232 Th	165	1	0.57	0.57	ppb	23.06	1000	
238 U	165	1	0.02	0.02	ppb	4.88	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	407381	1.77	424253	96.0	30 - 120	
45 Sc	1	1795503	1.84	1877617	95.6	30 - 120	
72 Ge	1	913584	1.18	929620	98.3	30 - 120	
115 In	1	2543412	0.34	2590490	98.2	30 - 120	
165 Ho	1	4157495	0.97	4147526	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\AG100109.B\003CALB.D\003CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\014WASH.D\014WASH.D#
Date Acquired: Oct 1 2009 07:02 pm
Operator: TEL
Sample Name: LR1
Misc Info:
Vial Number: 2110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 01 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	1012.000 ppb	1.24	1.30	
51 V	72	1	924.700 ppb	1.60	6.50	
52 Cr	72	1	941.700 ppb	0.96	2.60	
55 Mn	72	1	958.800 ppb	1.60	1.30	
59 Co	72	1	974.400 ppb	1.33	1.30	
60 Ni	72	1	978.700 ppb	1.01	2.60	
63 Cu	72	1	945.200 ppb	0.49	2.60	
66 Zn	72	1	981.500 ppb	0.76	13.00	
75 As	72	1	989.300 ppb	1.40	6.50	
78 Se	72	1	1015.000 ppb	1.86	6.50	
95 Mo	72	1	985.600 ppb	2.05	2.60	
107 Ag	115	1	949.700 ppb	0.46	6.50	
111 Cd	115	1	986.100 ppb	0.36	1.30	
118 Sn	115	1	972.800 ppb	2.02	13.00	
121 Sb	115	1	949.700 ppb	2.03	2.60	
137 Ba	115	1	965.800 ppb	1.23	1.30	
205 Tl	165	1	970.700 ppb	1.48	1.30	
208 Pb	165	1	948.800 ppb	0.70	1.30	
232 Th	165	1	1057.000 ppb	0.79	2.60	
238 U	165	1	977.100 ppb	1.62	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	408751	1.37	424253	96.3	30 - 120	
45 Sc	1	1857060	0.98	1877617	98.9	30 - 120	
72 Ge	1	912352	0.89	929620	98.1	30 - 120	
115 In	1	2558921	1.38	2590490	98.8	30 - 120	
165 Ho	1	4171311	1.17	4147526	100.6	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\AG100109.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\AG100109.B\015SMPL.D\015SMPL.D#
Date Acquired: Oct 1 2009 07:04 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: Oct 01 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	0.11	0.11	ppb	63.64	3600	
51 V	72	1	0.12	0.12	ppb	8.02	3600	
52 Cr	72	1	0.08	0.08	ppb	29.85	3600	
55 Mn	72	1	0.08	0.08	ppb	24.69	3600	
59 Co	72	1	0.08	0.08	ppb	14.25	3600	
60 Ni	72	1	0.08	0.08	ppb	36.39	3600	
63 Cu	72	1	0.10	0.10	ppb	12.54	3600	
66 Zn	72	1	0.53	0.53	ppb	3.54	3600	
75 As	72	1	0.13	0.13	ppb	6.36	3600	
78 Se	72	1	0.21	0.21	ppb	269.36	3600	
95 Mo	72	1	0.71	0.71	ppb	2.15	3600	
107 Ag	115	1	0.11	0.11	ppb	13.04	3600	
111 Cd	115	1	0.08	0.08	ppb	9.01	3600	
118 Sn	115	1	0.93	0.93	ppb	7.52	3600	
121 Sb	115	1	0.44	0.44	ppb	6.36	3600	
137 Ba	115	1	0.07	0.07	ppb	8.38	3600	
205 Tl	165	1	0.25	0.25	ppb	18.30	3600	
208 Pb	165	1	0.09	0.09	ppb	16.22	3600	
232 Th	165	1	3.78	3.78	ppb	24.05	1000	
238 U	165	1	0.17	0.17	ppb	2.98	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	433543	0.20	424253	102.2	30 - 120	
45 Sc	1	1923376	1.21	1877617	102.4	30 - 120	
72 Ge	1	939701	1.08	929620	101.1	30 - 120	
115 In	1	2646594	1.98	2590490	102.2	30 - 120	
165 Ho	1	4233444	0.65	4147526	102.1	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\AG100109.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\AG100109.B\016 CCV.D\016 CCV.D#
Date Acquired: Oct 1 2009 07:07 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: Oct 01 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	50.27 ppb	2.65	50	100.5	90 - 110	
51 V	72	1	48.75 ppb	0.85	50	97.5	90 - 110	
52 Cr	72	1	49.09 ppb	1.82	50	98.2	90 - 110	
55 Mn	72	1	49.90 ppb	1.14	50	99.8	90 - 110	
59 Co	72	1	49.72 ppb	1.10	50	99.4	90 - 110	
60 Ni	72	1	50.49 ppb	1.36	50	101.0	90 - 110	
63 Cu	72	1	50.00 ppb	0.65	50	100.0	90 - 110	
66 Zn	72	1	49.42 ppb	0.69	50	98.8	90 - 110	
75 As	72	1	49.36 ppb	1.11	50	98.7	90 - 110	
78 Se	72	1	49.40 ppb	2.32	50	98.8	90 - 110	
95 Mo	72	1	48.66 ppb	1.22	50	97.3	90 - 110	
107 Ag	115	1	49.78 ppb	1.48	50	99.6	90 - 110	
111 Cd	115	1	49.69 ppb	1.84	50	99.4	90 - 110	
118 Sn	115	1	49.71 ppb	1.41	50	99.4	90 - 110	
121 Sb	115	1	49.47 ppb	1.48	50	98.9	90 - 110	
137 Ba	115	1	49.48 ppb	1.47	50	99.0	90 - 110	
205 Tl	165	1	50.18 ppb	0.78	50	100.4	90 - 110	
208 Pb	165	1	49.73 ppb	0.40	50	99.5	90 - 110	
232 Th	165	1	50.45 ppb	3.94	50	100.9	90 - 110	
238 U	165	1	49.80 ppb	1.07	50	99.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	441249	1.34	424253	104.0	30 - 120	
45 Sc	1	1943928	1.54	1877617	103.5	30 - 120	
72 Ge	1	956576	0.44	929620	102.9	30 - 120	
115 In	1	2657088	0.71	2590490	102.6	30 - 120	
165 Ho	1	4256240	1.14	4147526	102.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\017 CCB.D\017 CCB.D#
Date Acquired: Oct 1 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: Oct 01 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	0.011	ppb	173.22	1.00	
51 V	72	1	0.001	ppb	2695.20	1.00	
52 Cr	72	1	-0.007	ppb	148.95	1.00	
55 Mn	72	1	0.017	ppb	23.97	1.00	
59 Co	72	1	0.016	ppb	10.52	1.00	
60 Ni	72	1	0.020	ppb	43.66	1.00	
63 Cu	72	1	0.016	ppb	41.79	1.00	
66 Zn	72	1	0.525	ppb	3.65	1.00	
75 As	72	1	0.023	ppb	35.25	1.00	
78 Se	72	1	-0.249	ppb	118.76	1.00	
95 Mo	72	1	0.126	ppb	12.15	1.00	
107 Ag	115	1	0.021	ppb	10.63	1.00	
111 Cd	115	1	0.016	ppb	34.16	1.00	
118 Sn	115	1	0.266	ppb	12.84	1.00	
121 Sb	115	1	0.101	ppb	10.89	1.00	
137 Ba	115	1	0.019	ppb	47.95	1.00	
205 Tl	165	1	0.048	ppb	12.06	1.00	
208 Pb	165	1	0.019	ppb	20.68	1.00	
232 Th	165	1	1.011	ppb	17.40	1.00	Fail
238 U	165	1	0.027	ppb	7.17	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	446586	1.72	424253	105.3	30 - 120	
45 Sc	1	1952949	0.53	1877617	104.0	30 - 120	
72 Ge	1	942824	0.97	929620	101.4	30 - 120	
115 In	1	2649704	0.47	2590490	102.3	30 - 120	
165 Ho	1	4204942	1.35	4147526	101.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\018WASH.D\018WASH.D#
Date Acquired: Oct 1 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: Oct 01 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	0.923 ppb	23.81	1.30	
51 V	72	1	5.175 ppb	1.80	6.50	
52 Cr	72	1	2.057 ppb	2.73	2.60	
55 Mn	72	1	1.078 ppb	1.18	1.30	
59 Co	72	1	1.022 ppb	5.34	1.30	
60 Ni	72	1	2.184 ppb	1.80	2.60	
63 Cu	72	1	2.098 ppb	2.73	2.60	
66 Zn	72	1	10.810 ppb	0.94	13.00	
75 As	72	1	5.059 ppb	2.37	6.50	
78 Se	72	1	5.146 ppb	10.41	6.50	
95 Mo	72	1	2.056 ppb	5.86	2.60	
107 Ag	115	1	5.207 ppb	2.08	6.50	
111 Cd	115	1	1.075 ppb	3.84	1.30	
118 Sn	115	1	10.310 ppb	1.29	13.00	
121 Sb	115	1	1.972 ppb	1.18	2.60	
137 Ba	115	1	1.047 ppb	5.59	1.30	
205 Tl	165	1	1.126 ppb	0.87	1.30	
208 Pb	165	1	1.085 ppb	0.34	1.30	
232 Th	165	1	2.331 ppb	1.36	2.60	
238 U	165	1	1.087 ppb	1.17	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	462525	0.32	424253	109.0	30 - 120	
45 Sc	1	1984987	1.62	1877617	105.7	30 - 120	
72 Ge	1	965457	1.88	929620	103.9	30 - 120	
115 In	1	2661585	1.07	2590490	102.7	30 - 120	
165 Ho	1	4195336	0.48	4147526	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\019SMPL.D\019SMPL.D#
Date Acquired: Oct 1 2009 07:15 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 1
Misc Info: 100 PPB
Vial Number: 2201
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	96.25	96.25	ppb	1.95	3600	
51 V	72	1	98.03	98.03	ppb	2.38	3600	
52 Cr	72	1	98.35	98.35	ppb	2.38	3600	
55 Mn	72	1	99.85	99.85	ppb	2.34	3600	
59 Co	72	1	101.50	101.50	ppb	3.36	3600	
60 Ni	72	1	100.50	100.50	ppb	2.62	3600	
63 Cu	72	1	101.40	101.40	ppb	3.34	3600	
66 Zn	72	1	100.70	100.70	ppb	1.54	3600	
75 As	72	1	98.65	98.65	ppb	1.01	3600	
78 Se	72	1	99.06	99.06	ppb	2.61	3600	
95 Mo	72	1	96.94	96.94	ppb	1.12	3600	
107 Ag	115	1	98.38	98.38	ppb	1.26	3600	
111 Cd	115	1	97.03	97.03	ppb	0.83	3600	
118 Sn	115	1	98.43	98.43	ppb	0.85	3600	
121 Sb	115	1	97.06	97.06	ppb	0.47	3600	
137 Ba	115	1	96.69	96.69	ppb	1.13	3600	
205 Tl	165	1	98.34	98.34	ppb	1.02	3600	
208 Pb	165	1	98.00	98.00	ppb	1.51	3600	
232 Th	165	1	98.87	98.87	ppb	1.17	1000	
238 U	165	1	97.56	97.56	ppb	1.34	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	453798	2.18	424253	107.0	30 - 120	
45 Sc	1	1967336	1.45	1877617	104.8	30 - 120	
72 Ge	1	959835	1.81	929620	103.3	30 - 120	
115 In	1	2679709	0.42	2590490	103.4	30 - 120	
165 Ho	1	4198692	1.46	4147526	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\020SMPL.D\020SMPL.D#
Date Acquired: Oct 1 2009 07:18 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2202
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.02	0.02	ppb	100.32	3600	
51 V	72	1	0.04	0.04	ppb	74.13	3600	
52 Cr	72	1	0.02	0.02	ppb	155.17	3600	
55 Mn	72	1	0.02	0.02	ppb	28.61	3600	
59 Co	72	1	0.01	0.01	ppb	4.47	3600	
60 Ni	72	1	0.02	0.02	ppb	49.35	3600	
63 Cu	72	1	0.23	0.23	ppb	9.11	3600	
66 Zn	72	1	0.06	0.06	ppb	17.14	3600	
75 As	72	1	0.02	0.02	ppb	34.11	3600	
78 Se	72	1	-0.01	-0.01	ppb	2884.90	3600	
95 Mo	72	1	0.10	0.10	ppb	6.28	3600	
107 Ag	115	1	0.02	0.02	ppb	8.82	3600	
111 Cd	115	1	0.02	0.02	ppb	46.19	3600	
118 Sn	115	1	0.19	0.19	ppb	19.30	3600	
121 Sb	115	1	0.09	0.09	ppb	8.64	3600	
137 Ba	115	1	0.01	0.01	ppb	33.73	3600	
205 Tl	165	1	0.05	0.05	ppb	12.09	3600	
208 Pb	165	1	0.02	0.02	ppb	4.33	3600	
232 Th	165	1	1.54	1.54	ppb	22.07	1000	
238 U	165	1	0.02	0.02	ppb	9.28	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	466663	1.20	424253	110.0	30 - 120	
45 Sc	1	1982743	0.62	1877617	105.6	30 - 120	
72 Ge	1	948031	1.42	929620	102.0	30 - 120	
115 In	1	2626862	1.33	2590490	101.4	30 - 120	
165 Ho	1	4171845	0.88	4147526	100.6	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\AG100109.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\AG100109.B\021SMPL.D\021SMPL.D#
Date Acquired: Oct 1 2009 07:21 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 2
Misc Info: 1000 PPB
Vial Number: 2203
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	1,018.00	1018.00	ppb	1.15	3600	
51 V	72	1	925.70	925.70	ppb	2.20	3600	
52 Cr	72	1	931.90	931.90	ppb	2.22	3600	
55 Mn	72	1	951.20	951.20	ppb	1.72	3600	
59 Co	72	1	948.20	948.20	ppb	1.45	3600	
60 Ni	72	1	973.50	973.50	ppb	1.51	3600	
63 Cu	72	1	951.30	951.30	ppb	1.39	3600	
66 Zn	72	1	958.20	958.20	ppb	0.61	3600	
75 As	72	1	984.10	984.10	ppb	1.10	3600	
78 Se	72	1	1,012.00	1012.00	ppb	1.67	3600	
95 Mo	72	1	954.00	954.00	ppb	1.44	3600	
107 Ag	115	1	951.30	951.30	ppb	1.36	3600	
111 Cd	115	1	976.40	976.40	ppb	1.49	3600	
118 Sn	115	1	955.10	955.10	ppb	0.97	3600	
121 Sb	115	1	943.80	943.80	ppb	1.46	3600	
137 Ba	115	1	967.80	967.80	ppb	1.31	3600	
205 Tl	165	1	952.90	952.90	ppb	0.26	3600	
208 Pb	165	1	931.70	931.70	ppb	0.49	3600	
232 Th	165	1	1,031.00	1031.00	ppb	1.97	1000	>LDR
238 U	165	1	959.90	959.90	ppb	0.97	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	454694	0.83	424253	107.2	30 - 120	
45 Sc	1	1958310	0.83	1877617	104.3	30 - 120	
72 Ge	1	953449	1.24	929620	102.6	30 - 120	
115 In	1	2593185	1.34	2590490	100.1	30 - 120	
165 Ho	1	4163057	0.49	4147526	100.4	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\AG100109.B\003CALB.D\003CALB.D#

1 :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\AG100109.B\022SMPL.D\022SMPL.D#
Date Acquired: Oct 1 2009 07:23 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.07	0.07	ppb	80.67	3600	
51 V	72	1	0.10	0.10	ppb	23.20	3600	
52 Cr	72	1	0.17	0.17	ppb	8.58	3600	
55 Mn	72	1	0.09	0.09	ppb	21.89	3600	
59 Co	72	1	0.08	0.08	ppb	11.76	3600	
60 Ni	72	1	0.13	0.13	ppb	30.22	3600	
63 Cu	72	1	0.11	0.11	ppb	15.84	3600	
66 Zn	72	1	0.08	0.08	ppb	9.42	3600	
75 As	72	1	0.13	0.13	ppb	19.28	3600	
78 Se	72	1	-0.01	-0.01	ppb	1872.30	3600	
95 Mo	72	1	0.61	0.61	ppb	3.73	3600	
107 Ag	115	1	0.18	0.18	ppb	60.91	3600	
111 Cd	115	1	0.11	0.11	ppb	21.75	3600	
118 Sn	115	1	0.96	0.96	ppb	12.10	3600	
121 Sb	115	1	0.45	0.45	ppb	9.37	3600	
137 Ba	115	1	0.08	0.08	ppb	13.08	3600	
205 Tl	165	1	0.25	0.25	ppb	17.86	3600	
208 Pb	165	1	0.09	0.09	ppb	22.16	3600	
232 Th	165	1	4.20	4.20	ppb	24.82	1000	
238 U	165	1	0.17	0.17	ppb	4.50	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	467599	0.91	424253	110.2	30 - 120	
45 Sc	1	2001812	0.96	1877617	106.6	30 - 120	
72 Ge	1	967061	1.09	929620	104.0	30 - 120	
115 In	1	2639808	0.54	2590490	101.9	30 - 120	
165 Ho	1	4180597	0.75	4147526	100.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\023SMPL.D\023SMPL.D#
Date Acquired: Oct 1 2009 07:26 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 3
Misc Info: 2000 PPB
Vial Number: 2205
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	1,941.00	1941.00	ppb	2.31	3600	
51 V	72	1	1,849.00	1849.00	ppb	1.42	3600	
52 Cr	72	1	1,885.00	1885.00	ppb	2.59	3600	
55 Mn	72	1	1,902.00	1902.00	ppb	1.43	3600	
59 Co	72	1	1,908.00	1908.00	ppb	2.53	3600	
60 Ni	72	1	1,922.00	1922.00	ppb	1.25	3600	
63 Cu	72	1	1,916.00	1916.00	ppb	2.14	3600	
66 Zn	72	1	1,890.00	1890.00	ppb	0.23	3600	
75 As	72	1	1,926.00	1926.00	ppb	1.01	3600	
78 Se	72	1	2,018.00	2018.00	ppb	0.43	3600	
95 Mo	72	1	1,888.00	1888.00	ppb	1.54	3600	
107 Ag	115	1	1,893.00	1893.00	ppb	1.61	3600	
111 Cd	115	1	1,914.00	1914.00	ppb	1.05	3600	
118 Sn	115	1	1,932.00	1932.00	ppb	0.55	3600	
121 Sb	115	1	1,885.00	1885.00	ppb	1.12	3600	
137 Ba	115	1	1,902.00	1902.00	ppb	2.16	3600	
205 Tl	165	1	1,927.00	1927.00	ppb	0.41	3600	
208 Pb	165	1	1,878.00	1878.00	ppb	0.91	3600	
232 Th	165	1	2,082.00	2082.00	ppb	1.75	1000	>LDR
238 U	165	1	1,921.00	1921.00	ppb	1.41	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	467215	1.74	424253	110.1	30 - 120	
45 Sc	1	1937791	1.38	1877617	103.2	30 - 120	
72 Ge	1	944771	0.43	929620	101.6	30 - 120	
115 In	1	2552381	1.18	2590490	98.5	30 - 120	
165 Ho	1	4083581	0.94	4147526	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\AG100109.B\003CALB.D\003CALB.D#

1 :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\AG100109.B\024SMPL.D\024SMPL.D#
Date Acquired: Oct 1 2009 07:29 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2206
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.15	0.15	ppb	46.50	3600	
51 V	72	1	0.19	0.19	ppb	6.27	3600	
52 Cr	72	1	0.14	0.14	ppb	28.16	3600	
55 Mn	72	1	0.16	0.16	ppb	2.85	3600	
59 Co	72	1	0.17	0.17	ppb	14.56	3600	
60 Ni	72	1	0.18	0.18	ppb	27.04	3600	
63 Cu	72	1	0.19	0.19	ppb	24.76	3600	
66 Zn	72	1	0.13	0.13	ppb	28.21	3600	
75 As	72	1	0.27	0.27	ppb	14.01	3600	
78 Se	72	1	0.16	0.16	ppb	45.43	3600	
95 Mo	72	1	1.15	1.15	ppb	4.04	3600	
107 Ag	115	1	0.29	0.29	ppb	22.64	3600	
111 Cd	115	1	0.19	0.19	ppb	27.95	3600	
118 Sn	115	1	1.79	1.79	ppb	10.86	3600	
121 Sb	115	1	0.76	0.76	ppb	5.15	3600	
137 Ba	115	1	0.17	0.17	ppb	9.26	3600	
205 Tl	165	1	0.46	0.46	ppb	18.89	3600	
208 Pb	165	1	0.18	0.18	ppb	18.63	3600	
232 Th	165	1	5.34	5.34	ppb	24.49	1000	
238 U	165	1	0.33	0.33	ppb	5.11	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	482885	3.05	424253	113.8	30 - 120	
45 Sc	1	2032031	1.25	1877617	108.2	30 - 120	
72 Ge	1	970707	0.76	929620	104.4	30 - 120	
115 In	1	2663391	0.76	2590490	102.8	30 - 120	
165 Ho	1	4168305	1.61	4147526	100.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\025SMPL.D\025SMPL.D#
Date Acquired: Oct 1 2009 07:31 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 4
Misc Info: 4000 PPB
Vial Number: 2207
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	3,904.00	3904.00	ppb	0.22	3600	>LDR
51 V	72	1	3,786.00	3786.00	ppb	2.25	3600	>LDR
52 Cr	72	1	3,814.00	3814.00	ppb	1.66	3600	>LDR
55 Mn	72	1	3,862.00	3862.00	ppb	1.27	3600	>LDR
59 Co	72	1	3,903.00	3903.00	ppb	0.55	3600	>LDR
60 Ni	72	1	3,873.00	3873.00	ppb	0.54	3600	>LDR
63 Cu	72	1	3,828.00	3828.00	ppb	1.32	3600	>LDR
66 Zn	72	1	3,774.00	3774.00	ppb	0.95	3600	>LDR
75 As	72	1	3,873.00	3873.00	ppb	1.05	3600	>LDR
78 Se	72	1	4,177.00	4177.00	ppb	0.44	3600	>LDR
95 Mo	72	1	3,817.00	3817.00	ppb	1.21	3600	>LDR
107 Ag	115	1	3,848.00	3848.00	ppb	0.73	3600	>LDR
111 Cd	115	1	3,894.00	3894.00	ppb	1.21	3600	>LDR
118 Sn	115	1	3,914.00	3914.00	ppb	1.32	3600	>LDR
121 Sb	115	1	3,868.00	3868.00	ppb	0.22	3600	>LDR
137 Ba	115	1	3,874.00	3874.00	ppb	1.37	3600	>LDR
205 Tl	165	1	3,811.00	3811.00	ppb	0.20	3600	>LDR
208 Pb	165	1	3,736.00	3736.00	ppb	0.71	3600	>LDR
232 Th	165	1	4,187.00	4187.00	ppb	0.37	1000	>LDR
238 U	165	1	3,853.00	3853.00	ppb	0.51	3600	>LDR

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	469228	1.30	424253	110.6	30 - 120	
45 Sc	1	1971887	0.43	1877617	105.0	30 - 120	
72 Ge	1	935457	0.48	929620	100.6	30 - 120	
115 In	1	2464968	0.76	2590490	95.2	30 - 120	
165 Ho	1	4013358	0.57	4147526	96.8	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\AG100109.B\003CALB.D\003CALB.D#

20 :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\AG100109.B\026SMPL.D\026SMPL.D#
Date Acquired: Oct 1 2009 07:34 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2208
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.25	0.25	ppb	21.28	3600	
51 V	72	1	0.35	0.35	ppb	21.17	3600	
52 Cr	72	1	0.31	0.31	ppb	18.77	3600	
55 Mn	72	1	0.31	0.31	ppb	20.91	3600	
59 Co	72	1	0.33	0.33	ppb	18.14	3600	
60 Ni	72	1	0.29	0.29	ppb	30.15	3600	
63 Cu	72	1	0.35	0.35	ppb	23.12	3600	
66 Zn	72	1	0.33	0.33	ppb	29.26	3600	
75 As	72	1	0.42	0.42	ppb	14.32	3600	
78 Se	72	1	0.17	0.17	ppb	106.93	3600	
95 Mo	72	1	2.21	2.21	ppb	2.51	3600	
107 Ag	115	1	0.42	0.42	ppb	14.49	3600	
111 Cd	115	1	0.32	0.32	ppb	29.07	3600	
118 Sn	115	1	2.91	2.91	ppb	10.65	3600	
121 Sb	115	1	1.28	1.28	ppb	3.60	3600	
137 Ba	115	1	0.31	0.31	ppb	17.73	3600	
205 Tl	165	1	0.70	0.70	ppb	17.34	3600	
208 Pb	165	1	0.33	0.33	ppb	19.35	3600	
232 Th	165	1	6.19	6.19	ppb	22.52	1000	
238 U	165	1	0.58	0.58	ppb	2.54	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	494439	2.55	424253	116.5	30 - 120	
45 Sc	1	2029684	0.66	1877617	108.1	30 - 120	
72 Ge	1	972891	0.76	929620	104.7	30 - 120	
115 In	1	2642117	0.65	2590490	102.0	30 - 120	
165 Ho	1	4186534	0.50	4147526	100.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\027SMPL.D\027SMPL.D#
Date Acquired: Oct 1 2009 07:37 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD Mn
Misc Info: 20000 PPB
Vial Number: 2209
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.08	0.08	ppb	57.23	3600	
51 V	72	1	0.09	0.09	ppb	15.88	3600	
52 Cr	72	1	0.13	0.13	ppb	28.54	3600	
55 Mn	72	1	19,520.00	19520.00	ppb	0.30	3600	>LDR
59 Co	72	1	0.17	0.17	ppb	2.71	3600	
60 Ni	72	1	0.14	0.14	ppb	24.14	3600	
63 Cu	72	1	0.17	0.17	ppb	13.76	3600	
66 Zn	72	1	2.75	2.75	ppb	0.78	3600	
75 As	72	1	0.14	0.14	ppb	10.30	3600	
78 Se	72	1	0.07	0.07	ppb	860.39	3600	
95 Mo	72	1	0.46	0.46	ppb	4.82	3600	
107 Ag	115	1	0.16	0.16	ppb	7.07	3600	
111 Cd	115	1	0.08	0.08	ppb	14.85	3600	
118 Sn	115	1	0.92	0.92	ppb	19.94	3600	
121 Sb	115	1	0.38	0.38	ppb	5.82	3600	
137 Ba	115	1	0.13	0.13	ppb	9.33	3600	
205 Tl	165	1	0.18	0.18	ppb	10.02	3600	
208 Pb	165	1	0.13	0.13	ppb	8.93	3600	
232 Th	165	1	1.11	1.11	ppb	11.41	1000	
238 U	165	1	0.13	0.13	ppb	1.74	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	487624	1.70	424253	114.9	30 - 120	
45 Sc	1	2059213	0.54	1877617	109.7	30 - 120	
72 Ge	1	985180	0.89	929620	106.0	30 - 120	
115 In	1	2651984	0.71	2590490	102.4	30 - 120	
165 Ho	1	4150883	0.98	4147526	100.1	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\AG100109.B\003CALB.D\003CALB.D#

1 :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\AG100109.B\028SMPL.D\028SMPL.D#
Date Acquired: Oct 1 2009 07:39 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2210
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	86.59	3600	
51 V	72	1	0.03	0.03	ppb	79.66	3600	
52 Cr	72	1	0.04	0.04	ppb	89.44	3600	
55 Mn	72	1	2.01	2.01	ppb	16.19	3600	
59 Co	72	1	0.04	0.04	ppb	22.44	3600	
60 Ni	72	1	0.03	0.03	ppb	45.32	3600	
63 Cu	72	1	0.08	0.08	ppb	6.24	3600	
66 Zn	72	1	0.02	0.02	ppb	17.43	3600	
75 As	72	1	0.06	0.06	ppb	14.93	3600	
78 Se	72	1	0.34	0.34	ppb	106.96	3600	
95 Mo	72	1	0.18	0.18	ppb	14.44	3600	
107 Ag	115	1	0.03	0.03	ppb	16.11	3600	
111 Cd	115	1	0.03	0.03	ppb	53.95	3600	
118 Sn	115	1	0.55	0.55	ppb	16.24	3600	
121 Sb	115	1	0.19	0.19	ppb	10.37	3600	
137 Ba	115	1	0.03	0.03	ppb	26.08	3600	
205 Tl	165	1	0.06	0.06	ppb	0.68	3600	
208 Pb	165	1	0.03	0.03	ppb	5.14	3600	
232 Th	165	1	0.45	0.45	ppb	4.69	1000	
238 U	165	1	0.05	0.05	ppb	1.93	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	494145	1.15	424253	116.5	30 - 120	
45 Sc	1	2054958	0.57	1877617	109.4	30 - 120	
72 Ge	1	975042	1.77	929620	104.9	30 - 120	
115 In	1	2657589	0.09	2590490	102.6	30 - 120	
165 Ho	1	4131937	1.09	4147526	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\AG100109.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\AG100109.B\029 CCV.D\029 CCV.D#
Date Acquired: Oct 1 2009 07:42 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: Oct 01 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	47.95	ppb	1.60	50	95.9	90 - 110	
51 V	72	1	49.98	ppb	0.99	50	100.0	90 - 110	
52 Cr	72	1	50.43	ppb	2.00	50	100.9	90 - 110	
55 Mn	72	1	51.44	ppb	1.48	50	102.9	90 - 110	
59 Co	72	1	52.12	ppb	1.20	50	104.2	90 - 110	
60 Ni	72	1	51.50	ppb	1.17	50	103.0	90 - 110	
63 Cu	72	1	51.73	ppb	2.12	50	103.5	90 - 110	
66 Zn	72	1	49.82	ppb	1.96	50	99.6	90 - 110	
75 As	72	1	49.78	ppb	1.58	50	99.6	90 - 110	
78 Se	72	1	50.62	ppb	3.16	50	101.2	90 - 110	
95 Mo	72	1	49.10	ppb	1.69	50	98.2	90 - 110	
107 Ag	115	1	50.79	ppb	1.34	50	101.6	90 - 110	
111 Cd	115	1	49.31	ppb	1.56	50	98.6	90 - 110	
118 Sn	115	1	50.36	ppb	2.02	50	100.7	90 - 110	
121 Sb	115	1	49.68	ppb	0.72	50	99.4	90 - 110	
137 Ba	115	1	49.60	ppb	1.75	50	99.2	90 - 110	
205 Tl	165	1	50.43	ppb	1.34	50	100.9	90 - 110	
208 Pb	165	1	50.02	ppb	0.93	50	100.0	90 - 110	
232 Th	165	1	49.64	ppb	2.35	50	99.3	90 - 110	
238 U	165	1	50.27	ppb	1.05	50	100.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	495474	2.26	424253	116.8	30 - 120	
45 Sc	1	2043735	1.42	1877617	108.8	30 - 120	
72 Ge	1	975644	0.99	929620	105.0	30 - 120	
115 In	1	2654198	0.61	2590490	102.5	30 - 120	
165 Ho	1	4155379	0.59	4147526	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\AG100109.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\AG100109.B\030 CCB.D\030 CCB.D#
Date Acquired: Oct 1 2009 07:45 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: Oct 01 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	0.010	ppb	86.59	1.00	
51 V	72	1	0.023	ppb	179.34	1.00	
52 Cr	72	1	0.003	ppb	504.24	1.00	
55 Mn	72	1	0.200	ppb	8.82	1.00	
59 Co	72	1	0.024	ppb	8.20	1.00	
60 Ni	72	1	0.017	ppb	27.33	1.00	
63 Cu	72	1	0.034	ppb	25.52	1.00	
66 Zn	72	1	0.518	ppb	8.79	1.00	
75 As	72	1	0.041	ppb	24.36	1.00	
78 Se	72	1	-0.168	ppb	143.04	1.00	
95 Mo	72	1	0.104	ppb	7.50	1.00	
107 Ag	115	1	0.024	ppb	5.37	1.00	
111 Cd	115	1	0.013	ppb	19.88	1.00	
118 Sn	115	1	0.347	ppb	14.69	1.00	
121 Sb	115	1	0.122	ppb	11.64	1.00	
137 Ba	115	1	0.023	ppb	24.89	1.00	
205 Tl	165	1	0.054	ppb	15.69	1.00	
208 Pb	165	1	0.019	ppb	15.53	1.00	
232 Th	165	1	1.309	ppb	15.53	1.00	Fail
238 U	165	1	0.029	ppb	7.29	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	485022	0.55	424253	114.3	30 - 120	
45 Sc	1	2036196	0.25	1877617	108.4	30 - 120	
72 Ge	1	977050	0.64	929620	105.1	30 - 120	
115 In	1	2641500	0.53	2590490	102.0	30 - 120	
165 Ho	1	4128048	1.06	4147526	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\AG100109.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\AG100109.B\031WASH.D\031WASH.D#
Date Acquired: Oct 1 2009 07:48 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: Oct 01 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	0.953 ppb	26.91	1.30	
51 V	72	1	5.234 ppb	1.81	6.50	
52 Cr	72	1	2.132 ppb	2.35	2.60	
55 Mn	72	1	1.161 ppb	3.92	1.30	
59 Co	72	1	1.079 ppb	2.86	1.30	
60 Ni	72	1	2.158 ppb	4.04	2.60	
63 Cu	72	1	2.201 ppb	4.44	2.60	
66 Zn	72	1	11.000 ppb	0.70	13.00	
75 As	72	1	5.258 ppb	0.95	6.50	
78 Se	72	1	5.601 ppb	10.76	6.50	
95 Mo	72	1	2.081 ppb	1.45	2.60	
107 Ag	115	1	5.299 ppb	0.56	6.50	
111 Cd	115	1	1.067 ppb	2.52	1.30	
118 Sn	115	1	10.540 ppb	1.72	13.00	
121 Sb	115	1	2.047 ppb	0.94	2.60	
137 Ba	115	1	1.082 ppb	4.96	1.30	
205 Tl	165	1	1.122 ppb	1.73	1.30	
208 Pb	165	1	1.094 ppb	1.77	1.30	
232 Th	165	1	2.353 ppb	2.50	2.60	
238 U	165	1	1.092 ppb	0.96	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	496271	1.09	424253	117.0	30 - 120	
45 Sc	1	2060266	0.48	1877617	109.7	30 - 120	
72 Ge	1	975265	0.16	929620	104.9	30 - 120	
115 In	1	2645744	0.89	2590490	102.1	30 - 120	
165 Ho	1	4143290	1.56	4147526	99.9	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\AG100109.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: LRD

Date: 10/01/2009

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\096CALB.D\096CALB.D#
Date Acquired: Oct 1 2009 10:46 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: Oct 01 2009 10:44 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-117	214.88
52	Cr	72	1	3864	5.23
55	Mn	72	1	823	8.97
59	Co	72	1	107	14.15
60	Ni	72	1	153	25.98
63	Cu	72	1	3651	3.07
66	Zn	72	1	1889	2.36
75	As	72	1	51	3.01
78	Se	72	1	1220	5.38
95	Mo	72	1	287	11.92
107	Ag	115	1	27	57.15
111	Cd	115	1	6	419.43
118	Sn	115	1	650	11.28
121	Sb	115	1	84	34.73
137	Ba	115	1	47	32.06
205	Tl	165	1	120	12.47
208	Pb	165	1	293	11.65
232	Th	165	1	297	6.02
238	U	165	1	37	37.05

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	497821	0.49
45	Sc	1	2028015	1.12
72	Ge	1	952185	1.55
115	In	1	2535878	1.23
165	Ho	1	3780273	1.03

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\AG100109.B\097ICAL.D\097ICAL.D#
Date Acquired: Oct 1 2009 10:48 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: Oct 01 2009 10:46 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	60359	1.56
51	V	72	1	1204800	0.67
52	Cr	72	1	1207832	3.23
55	Mn	72	1	1357388	1.21
59	Co	72	1	1509411	1.57
60	Ni	72	1	336166	1.09
63	Cu	72	1	806265	1.15
66	Zn	72	1	177999	0.96
75	As	72	1	148201	0.95
78	Se	72	1	26917	1.71
95	Mo	72	1	391851	1.45
107	Ag	115	1	1126720	1.22
111	Cd	115	1	215255	2.05
118	Sn	115	1	613660	2.12
121	Sb	115	1	707419	1.76
137	Ba	115	1	297206	1.71
205	Tl	165	1	2007173	0.52
208	Pb	165	1	2741282	0.93
232	Th	165	1	2606070	2.92
238	U	165	1	2895153	0.44

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	499772	1.15	497821	100.4	30 - 120	
45	Sc	1	2019921	0.95	2028015	99.6	30 - 120	
72	Ge	1	942102	0.87	952185	98.9	30 - 120	
115	In	1	2538567	1.10	2535878	100.1	30 - 120	
165	Ho	1	3780173	0.85	3780273	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\AG100109.B\096CALB.D\096CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\098 CCV.D\098 CCV.D#
Date Acquired: Oct 1 2009 10:51 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: Oct 01 2009 10:49 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.45	ppb	0.20	50	100.9	90 - 110	
51 V	72	1	48.96	ppb	2.46	50	97.9	90 - 110	
52 Cr	72	1	49.31	ppb	1.01	50	98.6	90 - 110	
55 Mn	72	1	49.24	ppb	2.28	50	98.5	90 - 110	
59 Co	72	1	49.03	ppb	1.57	50	98.1	90 - 110	
60 Ni	72	1	50.78	ppb	1.48	50	101.6	90 - 110	
63 Cu	72	1	50.03	ppb	2.22	50	100.1	90 - 110	
66 Zn	72	1	48.95	ppb	2.20	50	97.9	90 - 110	
75 As	72	1	49.40	ppb	1.32	50	98.8	90 - 110	
78 Se	72	1	49.52	ppb	2.17	50	99.0	90 - 110	
95 Mo	72	1	49.68	ppb	0.53	50	99.4	90 - 110	
107 Ag	115	1	49.47	ppb	1.30	50	98.9	90 - 110	
111 Cd	115	1	49.47	ppb	1.80	50	98.9	90 - 110	
118 Sn	115	1	49.52	ppb	1.64	50	99.0	90 - 110	
121 Sb	115	1	49.69	ppb	2.12	50	99.4	90 - 110	
137 Ba	115	1	49.86	ppb	1.09	50	99.7	90 - 110	
205 Tl	165	1	50.89	ppb	2.07	50	101.8	90 - 110	
208 Pb	165	1	50.30	ppb	0.47	50	100.6	90 - 110	
232 Th	165	1	52.37	ppb	3.03	50	104.7	90 - 110	
238 U	165	1	51.05	ppb	1.28	50	102.1	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	497386	1.86	497821	99.9	30 - 120	
45 Sc	1	2009785	0.62	2028015	99.1	30 - 120	
72 Ge	1	946277	1.22	952185	99.4	30 - 120	
115 In	1	2543004	1.28	2535878	100.3	30 - 120	
165 Ho	1	3768341	1.34	3780273	99.7	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\AG100109.B\096CALB.D\096CALB.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\AG100109.B\099 CCB.D\099 CCB.D#
Date Acquired: Oct 1 2009 10:54 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: Oct 01 2009 10:49 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	0.016	ppb	100.24	1.00	
51 V	72	1	0.012	ppb	204.83	1.00	
52 Cr	72	1	0.003	ppb	574.01	1.00	
55 Mn	72	1	0.014	ppb	34.62	1.00	
59 Co	72	1	0.008	ppb	15.21	1.00	
60 Ni	72	1	0.000	ppb	2772.30	1.00	
63 Cu	72	1	-0.058	ppb	16.57	1.00	
66 Zn	72	1	-0.323	ppb	1.49	1.00	
75 As	72	1	0.017	ppb	28.20	1.00	
78 Se	72	1	-0.627	ppb	70.84	1.00	
95 Mo	72	1	0.020	ppb	23.38	1.00	
107 Ag	115	1	0.012	ppb	27.62	1.00	
111 Cd	115	1	0.013	ppb	60.43	1.00	
118 Sn	115	1	0.100	ppb	23.65	1.00	
121 Sb	115	1	0.054	ppb	19.18	1.00	
137 Ba	115	1	0.008	ppb	12.16	1.00	
205 Tl	165	1	0.038	ppb	6.18	1.00	
208 Pb	165	1	0.013	ppb	13.75	1.00	
232 Th	165	1	1.330	ppb	16.06	1.00	Fail
238 U	165	1	0.020	ppb	5.68	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	504088	0.39	497821	101.3	30 - 120	
45 Sc	1	2034723	0.30	2028015	100.3	30 - 120	
72 Ge	1	947996	1.02	952185	99.6	30 - 120	
115 In	1	2544365	1.12	2535878	100.3	30 - 120	
165 Ho	1	3780055	0.84	3780273	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\AG100109.B\096CALB.D\096CALB.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\AG100109.B\100WASH.D\100WASH.D#
Date Acquired: Oct 1 2009 10:56 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: Oct 01 2009 10:49 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	0.928 ppb	14.46	1.30	
51 V	72	1	5.181 ppb	1.70	6.50	
52 Cr	72	1	2.121 ppb	0.62	2.60	
55 Mn	72	1	1.056 ppb	2.93	1.30	
59 Co	72	1	1.013 ppb	4.80	1.30	
60 Ni	72	1	2.107 ppb	6.34	2.60	
63 Cu	72	1	1.992 ppb	2.81	2.60	
66 Zn	72	1	10.050 ppb	1.72	13.00	
75 As	72	1	5.201 ppb	1.17	6.50	
78 Se	72	1	4.294 ppb	19.68	6.50	
95 Mo	72	1	2.063 ppb	5.74	2.60	
107 Ag	115	1	5.231 ppb	1.17	6.50	
111 Cd	115	1	1.116 ppb	1.60	1.30	
118 Sn	115	1	10.310 ppb	2.04	13.00	
121 Sb	115	1	1.992 ppb	2.20	2.60	
137 Ba	115	1	1.077 ppb	3.59	1.30	
205 Tl	165	1	1.111 ppb	1.52	1.30	
208 Pb	165	1	1.090 ppb	1.88	1.30	
232 Th	165	1	2.362 ppb	2.55	2.60	
238 U	165	1	1.107 ppb	1.79	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	498992	1.80	497821	100.2	30 - 120	
45 Sc	1	2017855	1.23	2028015	99.5	30 - 120	
72 Ge	1	942446	0.78	952185	99.0	30 - 120	
115 In	1	2532130	0.55	2535878	99.9	30 - 120	
165 Ho	1	3767209	1.40	3780273	99.7	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\AG100109.B\096CALB.D\096CALB.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: 10/2/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\148CALB.D\148CALB.D#
Date Acquired: Oct 2 2009 01:08 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: Oct 02 2009 01:06 am
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-244	155.33
52	Cr	72	1	3784	3.35
55	Mn	72	1	707	2.80
59	Co	72	1	100	34.32
60	Ni	72	1	200	27.11
63	Cu	72	1	6088	2.65
66	Zn	72	1	1660	1.74
75	As	72	1	57	15.36
78	Se	72	1	1490	9.58
95	Mo	72	1	287	3.32
107	Ag	115	1	30	33.16
111	Cd	115	1	10	170.55
118	Sn	115	1	743	6.47
121	Sb	115	1	41	17.12
137	Ba	115	1	43	46.08
205	Tl	165	1	74	14.92
208	Pb	165	1	242	16.04
232	Th	165	1	213	36.73
238	U	165	1	26	66.31

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	488250	0.44
45	Sc	1	1934674	0.79
72	Ge	1	888023	0.71
115	In	1	2419559	1.22
165	Ho	1	3622281	1.01

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\AG100109.B\149ICAL.D\149ICAL.D#
Date Acquired: Oct 2 2009 01:11 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: Oct 02 2009 01:09 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	57370	1.01
51	V	72	1	1132928	1.14
52	Cr	72	1	1140310	1.94
55	Mn	72	1	1294043	1.67
59	Co	72	1	1396704	1.45
60	Ni	72	1	315529	1.40
63	Cu	72	1	758379	1.12
66	Zn	72	1	165107	0.89
75	As	72	1	138561	0.57
78	Se	72	1	25938	1.93
95	Mo	72	1	370901	0.41
107	Ag	115	1	1062098	0.87
111	Cd	115	1	204244	0.98
118	Sn	115	1	579800	1.07
121	Sb	115	1	668303	1.18
137	Ba	115	1	284936	0.45
205	Tl	165	1	1914641	0.77
208	Pb	165	1	2618094	0.43
232	Th	165	1	2552537	2.12
238	U	165	1	2761616	0.32

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	484053	0.73	488250	99.1	30 - 120	
45	Sc	1	1921111	0.56	1934674	99.3	30 - 120	
72	Ge	1	890368	0.32	888023	100.3	30 - 120	
115	In	1	2410922	0.65	2419559	99.6	30 - 120	
165	Ho	1	3599886	0.45	3622281	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\AG100109.B\148CALB.D\148CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\150 CCV.D\150 CCV.D#
Date Acquired: Oct 2 2009 01:13 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: Oct 02 2009 01:11 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	50.13 ppb	0.84	50	100.3	90 - 110	
51 V	72	1	48.92 ppb	0.53	50	97.8	90 - 110	
52 Cr	72	1	49.30 ppb	0.10	50	98.6	90 - 110	
55 Mn	72	1	48.28 ppb	0.21	50	96.6	90 - 110	
59 Co	72	1	49.39 ppb	1.23	50	98.8	90 - 110	
60 Ni	72	1	49.30 ppb	0.36	50	98.6	90 - 110	
63 Cu	72	1	49.81 ppb	0.65	50	99.6	90 - 110	
66 Zn	72	1	49.02 ppb	1.07	50	98.0	90 - 110	
75 As	72	1	49.42 ppb	0.73	50	98.8	90 - 110	
78 Se	72	1	47.23 ppb	4.97	50	94.5	90 - 110	
95 Mo	72	1	49.44 ppb	0.40	50	98.9	90 - 110	
107 Ag	115	1	49.95 ppb	2.51	50	99.9	90 - 110	
111 Cd	115	1	49.79 ppb	2.72	50	99.6	90 - 110	
118 Sn	115	1	49.97 ppb	2.93	50	99.9	90 - 110	
121 Sb	115	1	49.92 ppb	2.28	50	99.8	90 - 110	
137 Ba	115	1	49.46 ppb	2.37	50	98.9	90 - 110	
205 Tl	165	1	50.33 ppb	2.41	50	100.7	90 - 110	
208 Pb	165	1	50.10 ppb	1.70	50	100.2	90 - 110	
232 Th	165	1	51.84 ppb	1.91	50	103.7	90 - 110	
238 U	165	1	50.80 ppb	1.24	50	101.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	484341	0.57	488250	99.2	30 - 120	
45 Sc	1	1887206	1.32	1934674	97.5	30 - 120	
72 Ge	1	887220	0.13	888023	99.9	30 - 120	
115 In	1	2383756	1.84	2419559	98.5	30 - 120	
165 Ho	1	3574594	0.79	3622281	98.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\148CALB.D\148CALB.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\AG100109.B\151 CCB.D\151 CCB.D#
Date Acquired: Oct 2 2009 01:16 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: Oct 02 2009 01:11 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.029	ppb	35.10	1.00	
51 V	72	1	0.059	ppb	25.36	1.00	
52 Cr	72	1	-0.008	ppb	258.01	1.00	
55 Mn	72	1	0.009	ppb	47.50	1.00	
59 Co	72	1	0.011	ppb	13.03	1.00	
60 Ni	72	1	-0.015	ppb	65.78	1.00	
63 Cu	72	1	-0.031	ppb	176.37	1.00	
66 Zn	72	1	-0.297	ppb	5.16	1.00	
75 As	72	1	0.008	ppb	50.38	1.00	
78 Se	72	1	-0.081	ppb	298.01	1.00	
95 Mo	72	1	0.035	ppb	40.58	1.00	
107 Ag	115	1	0.015	ppb	4.07	1.00	
111 Cd	115	1	0.009	ppb	126.64	1.00	
118 Sn	115	1	0.056	ppb	53.83	1.00	
121 Sb	115	1	0.058	ppb	6.49	1.00	
137 Ba	115	1	0.001	ppb	1088.20	1.00	
205 Tl	165	1	0.042	ppb	12.58	1.00	
208 Pb	165	1	0.017	ppb	12.71	1.00	
232 Th	165	1	0.792	ppb	23.11	1.00	
238 U	165	1	0.021	ppb	15.52	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	487592	0.66	488250	99.9	30 - 120	
45 Sc	1	1907973	0.24	1934674	98.6	30 - 120	
72 Ge	1	883612	1.34	888023	99.5	30 - 120	
115 In	1	2407804	1.04	2419559	99.5	30 - 120	
165 Ho	1	3602772	0.46	3622281	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\AG100109.B\148CALB.D\148CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\152WASH.D\152WASH.D#
Date Acquired: Oct 2 2009 01:19 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: Oct 02 2009 01:11 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	0.981 ppb	11.10	1.30	
51 V	72	1	5.255 ppb	1.50	6.50	
52 Cr	72	1	2.088 ppb	1.50	2.60	
55 Mn	72	1	1.020 ppb	1.33	1.30	
59 Co	72	1	1.044 ppb	1.15	1.30	
60 Ni	72	1	2.061 ppb	1.84	2.60	
63 Cu	72	1	2.016 ppb	2.63	2.60	
66 Zn	72	1	10.630 ppb	0.52	13.00	
75 As	72	1	5.221 ppb	2.27	6.50	
78 Se	72	1	4.064 ppb	16.35	6.50	
95 Mo	72	1	1.992 ppb	0.18	2.60	
107 Ag	115	1	5.152 ppb	1.31	6.50	
111 Cd	115	1	1.030 ppb	1.68	1.30	
118 Sn	115	1	10.270 ppb	2.70	13.00	
121 Sb	115	1	1.968 ppb	2.26	2.60	
137 Ba	115	1	1.048 ppb	2.58	1.30	
205 Tl	165	1	1.104 ppb	0.70	1.30	
208 Pb	165	1	1.083 ppb	2.42	1.30	
232 Th	165	1	2.222 ppb	1.19	2.60	
238 U	165	1	1.112 ppb	0.90	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	484516	1.06	488250	99.2	30 - 120	
45 Sc	1	1907011	1.18	1934674	98.6	30 - 120	
72 Ge	1	874193	0.83	888023	98.4	30 - 120	
115 In	1	2394465	0.47	2419559	99.0	30 - 120	
165 Ho	1	3588975	0.70	3622281	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\AG100109.B\148CALB.D\148CALB.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: 10/2/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.D#
Date Acquired: Oct 2 2009 04:20 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: Oct 02 2009 04:18 am
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	7	86.61
51	V	72	1	-265	55.34
52	Cr	72	1	2244	4.29
55	Mn	72	1	573	6.39
59	Co	72	1	127	9.65
60	Ni	72	1	87	32.48
63	Cu	72	1	1683	3.32
66	Zn	72	1	2358	1.13
75	As	72	1	35	9.36
78	Se	72	1	787	2.10
95	Mo	72	1	190	19.09
107	Ag	115	1	13	114.68
111	Cd	115	1	-1	460.13
118	Sn	115	1	433	8.33
121	Sb	115	1	87	20.26
137	Ba	115	1	42	13.15
205	Tl	165	1	86	18.73
208	Pb	165	1	213	5.67
232	Th	165	1	183	16.96
238	U	165	1	37	24.23

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	331435	0.59
45	Sc	1	1316255	1.13
72	Ge	1	598993	0.76
115	In	1	1669391	1.19
165	Ho	1	2529503	0.39

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\AG100109.B\219ICAL.D\219ICAL.D#
Date Acquired: Oct 2 2009 04:23 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: Oct 02 2009 04:21 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	37429	1.46
51	V	72	1	753598	0.43
52	Cr	72	1	752212	1.29
55	Mn	72	1	855861	2.11
59	Co	72	1	946347	1.34
60	Ni	72	1	210483	1.83
63	Cu	72	1	502772	0.83
66	Zn	72	1	107630	1.39
75	As	72	1	93477	1.84
78	Se	72	1	17628	3.20
95	Mo	72	1	249696	0.72
107	Ag	115	1	713656	1.11
111	Cd	115	1	137526	0.27
118	Sn	115	1	397245	0.63
121	Sb	115	1	454145	0.72
137	Ba	115	1	200561	0.87
205	Tl	165	1	1373920	0.83
208	Pb	165	1	1861594	0.60
232	Th	165	1	1853754	2.15
238	U	165	1	1999565	0.32

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	327901	0.91	331435	98.9	30 - 120	
45	Sc	1	1293761	0.29	1316255	98.3	30 - 120	
72	Ge	1	586340	0.67	598993	97.9	30 - 120	
115	In	1	1689635	0.80	1669391	101.2	30 - 120	
165	Ho	1	2569735	0.20	2529503	101.6	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\AG100109.B\218CALB.D\218CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\220 CCV.D\220 CCV.D#
Date Acquired: Oct 2 2009 04:26 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: Oct 02 2009 04:24 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	50.16	ppb	1.34	50	100.3	90 - 110	
51 V	72	1	49.70	ppb	1.63	50	99.4	90 - 110	
52 Cr	72	1	49.69	ppb	1.23	50	99.4	90 - 110	
55 Mn	72	1	49.81	ppb	1.57	50	99.6	90 - 110	
59 Co	72	1	49.34	ppb	0.22	50	98.7	90 - 110	
60 Ni	72	1	50.51	ppb	2.18	50	101.0	90 - 110	
63 Cu	72	1	50.63	ppb	1.15	50	101.3	90 - 110	
66 Zn	72	1	50.35	ppb	0.49	50	100.7	90 - 110	
75 As	72	1	50.82	ppb	0.58	50	101.6	90 - 110	
78 Se	72	1	50.62	ppb	1.06	50	101.2	90 - 110	
95 Mo	72	1	49.90	ppb	0.90	50	99.8	90 - 110	
107 Ag	115	1	50.00	ppb	1.52	50	100.0	90 - 110	
111 Cd	115	1	49.41	ppb	0.83	50	98.8	90 - 110	
118 Sn	115	1	50.32	ppb	1.39	50	100.6	90 - 110	
121 Sb	115	1	50.18	ppb	1.03	50	100.4	90 - 110	
137 Ba	115	1	50.05	ppb	1.80	50	100.1	90 - 110	
205 Tl	165	1	50.79	ppb	1.68	50	101.6	90 - 110	
208 Pb	165	1	51.30	ppb	1.07	50	102.6	90 - 110	
232 Th	165	1	52.79	ppb	1.92	50	105.6	90 - 110	
238 U	165	1	52.18	ppb	1.27	50	104.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	324873	1.58	331435	98.0	30 - 120	
45 Sc	1	1285881	0.58	1316255	97.7	30 - 120	
72 Ge	1	581920	0.87	598993	97.1	30 - 120	
115 In	1	1678738	0.60	1669391	100.6	30 - 120	
165 Ho	1	2539785	0.68	2529503	100.4	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\221 CCB.D\221 CCB.D#
Date Acquired: Oct 2 2009 04:28 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 02 2009 04:24 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.009	ppb	291.23	1.00	
51 V	72	1	0.040	ppb	50.68	1.00	
52 Cr	72	1	0.023	ppb	62.65	1.00	
55 Mn	72	1	0.009	ppb	103.55	1.00	
59 Co	72	1	0.012	ppb	1.10	1.00	
60 Ni	72	1	0.000	ppb	4305.70	1.00	
63 Cu	72	1	0.103	ppb	12.10	1.00	
66 Zn	72	1	-1.290	ppb	1.13	1.00	
75 As	72	1	0.009	ppb	156.15	1.00	
78 Se	72	1	0.597	ppb	19.43	1.00	
95 Mo	72	1	0.023	ppb	120.78	1.00	
107 Ag	115	1	0.013	ppb	45.00	1.00	
111 Cd	115	1	0.017	ppb	17.68	1.00	
118 Sn	115	1	0.165	ppb	12.55	1.00	
121 Sb	115	1	0.085	ppb	18.25	1.00	
137 Ba	115	1	0.004	ppb	188.52	1.00	
205 Tl	165	1	0.035	ppb	20.06	1.00	
208 Pb	165	1	0.012	ppb	23.55	1.00	
232 Th	165	1	0.960	ppb	20.73	1.00	
238 U	165	1	0.018	ppb	13.57	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	324793	1.12	331435	98.0	30 - 120	
45 Sc	1	1287887	1.52	1316255	97.8	30 - 120	
72 Ge	1	594844	0.52	598993	99.3	30 - 120	
115 In	1	1672421	0.47	1669391	100.2	30 - 120	
165 Ho	1	2560393	0.60	2529503	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\222WASH.D\222WASH.D#
Date Acquired: Oct 2 2009 04:31 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 02 2009 04:24 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	1.184 ppb	13.93	1.30	
51 V	72	1	5.146 ppb	2.60	6.50	
52 Cr	72	1	2.027 ppb	0.35	2.60	
55 Mn	72	1	1.045 ppb	0.36	1.30	
59 Co	72	1	0.973 ppb	5.11	1.30	
60 Ni	72	1	2.137 ppb	3.42	2.60	
63 Cu	72	1	2.118 ppb	1.48	2.60	
66 Zn	72	1	9.344 ppb	2.31	13.00	
75 As	72	1	5.214 ppb	0.89	6.50	
78 Se	72	1	5.131 ppb	15.31	6.50	
95 Mo	72	1	1.955 ppb	5.47	2.60	
107 Ag	115	1	5.268 ppb	2.30	6.50	
111 Cd	115	1	1.050 ppb	1.94	1.30	
118 Sn	115	1	10.120 ppb	1.92	13.00	
121 Sb	115	1	1.949 ppb	0.98	2.60	
137 Ba	115	1	1.068 ppb	1.02	1.30	
205 Tl	165	1	1.087 ppb	2.59	1.30	
208 Pb	165	1	1.077 ppb	1.65	1.30	
232 Th	165	1	2.243 ppb	2.10	2.60	
238 U	165	1	1.093 ppb	1.19	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	325353	1.88	331435	98.2	30 - 120	
45 Sc	1	1288885	1.50	1316255	97.9	30 - 120	
72 Ge	1	595462	1.13	598993	99.4	30 - 120	
115 In	1	1683073	1.01	1669391	100.8	30 - 120	
165 Ho	1	2568625	0.67	2529503	101.5	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\223 BLK.D\223 BLK.D#
Date Acquired: Oct 2 2009 04:34 am
Operator: TEL
Sample Name: LLL0WB
Misc Info: BLANK 9271338 6020
Vial Number: 4101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 02 2009 04:24 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	-0.018 ppb	0.00	2.00	
51 V	72	1	0.027 ppb	125.82	2.00	
52 Cr	72	1	0.100 ppb	9.34	2.00	
55 Mn	72	1	0.056 ppb	19.58	2.00	
59 Co	72	1	-0.009 ppb	0.16	2.00	
60 Ni	72	1	0.048 ppb	56.46	2.00	
63 Cu	72	1	0.079 ppb	51.38	2.00	
66 Zn	72	1	1.224 ppb	2.53	2.00	
75 As	72	1	0.018 ppb	17.59	2.00	
78 Se	72	1	0.275 ppb	88.06	2.00	
95 Mo	72	1	-0.008 ppb	75.16	2.00	
107 Ag	115	1	0.003 ppb	58.42	2.00	
111 Cd	115	1	0.005 ppb	54.45	2.00	
118 Sn	115	1	0.122 ppb	18.59	2.00	
121 Sb	115	1	0.034 ppb	13.33	2.00	
137 Ba	115	1	0.006 ppb	73.06	2.00	
205 Tl	165	1	0.018 ppb	24.51	2.00	
208 Pb	165	1	0.019 ppb	12.97	2.00	
232 Th	165	1	0.148 ppb	17.68	2.00	
238 U	165	1	0.002 ppb	33.49	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	315462	0.68	331435	95.2	30 - 120	
45 Sc	1	1255176	0.96	1316255	95.4	30 - 120	
72 Ge	1	577024	0.32	598993	96.3	30 - 120	
115 In	1	1629043	1.30	1669391	97.6	30 - 120	
165 Ho	1	2517644	0.68	2529503	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\224 LCS.D\224 LCS.D#
Date Acquired: Oct 2 2009 04:37 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLL0WC
Misc Info: LCS
Vial Number: 4102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 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	41.64	3.80	40	104.1	80 - 120	
51 V	72	1	39.60	0.31	40	99.0	80 - 120	
52 Cr	72	1	40.09	0.83	40	100.2	80 - 120	
55 Mn	72	1	39.71	0.94	40	99.3	80 - 120	
59 Co	72	1	39.43	1.42	40	98.6	80 - 120	
60 Ni	72	1	40.11	1.07	40	100.3	80 - 120	
63 Cu	72	1	40.84	1.17	40	102.1	80 - 120	
66 Zn	72	1	37.70	0.46	40	94.3	80 - 120	
75 As	72	1	39.51	0.44	40	98.8	80 - 120	
78 Se	72	1	38.85	1.52	40	97.1	80 - 120	
95 Mo	72	1	40.21	0.65	40	100.5	80 - 120	
107 Ag	115	1	40.68	1.70	40	101.7	80 - 120	
111 Cd	115	1	40.00	1.37	40	100.0	80 - 120	
118 Sn	115	1	0.03	19.52	40	0.1	80 - 120	
121 Sb	115	1	40.51	1.95	40	101.3	80 - 120	
137 Ba	115	1	41.55	0.90	40	103.9	80 - 120	
205 Tl	165	1	40.81	1.70	40	102.0	80 - 120	
208 Pb	165	1	41.23	1.43	40	103.1	80 - 120	
232 Th	165	1	42.63	1.98	40	106.6	80 - 120	
238 U	165	1	42.13	1.68	40	105.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	312563	0.70	331435	94.3	30 - 120	
45 Sc	1	1246396	0.55	1316255	94.7	30 - 120	
72 Ge	1	561735	1.23	598993	93.8	30 - 120	
115 In	1	1617619	0.76	1669391	96.9	30 - 120	
165 Ho	1	2502656	1.11	2529503	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.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\AG100109.B\225AREF.D\225AREF.D#
Date Acquired: Oct 2 2009 04:40 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32 5X
Misc Info: D9I250174
Vial Number: 4103
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: AllRef
Dilution Factor: 5.00
Autodil Factor: Undiluted
Final Dil Factor: 5.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.06	0.01	ppb	251.86	3600	
51 V	72	1	-566.00	-113.20	ppb	5.98	3600	
52 Cr	72	1	23,900.00	4780.00	ppb	1.18	3600	>LDR
55 Mn	72	1	10.44	2.09	ppb	1.10	3600	
59 Co	72	1	0.87	0.17	ppb	1.09	3600	
60 Ni	72	1	8.10	1.62	ppb	2.00	3600	
63 Cu	72	1	3.95	0.79	ppb	2.48	3600	
66 Zn	72	1	-6.51	-1.30	ppb	1.97	3600	
75 As	72	1	86.60	17.32	ppb	2.66	3600	
78 Se	72	1	7.94	1.59	ppb	39.52	3600	
95 Mo	72	1	23.50	4.70	ppb	1.06	3600	
107 Ag	115	1	0.20	0.04	ppb	24.79	3600	
111 Cd	115	1	-0.50	-0.10	ppb	122.73	3600	
118 Sn	115	1	-0.18	-0.04	ppb	51.56	3600	
121 Sb	115	1	0.27	0.05	ppb	10.13	3600	
137 Ba	115	1	44.08	8.82	ppb	1.11	3600	
205 Tl	165	1	0.33	0.07	ppb	14.01	3600	
208 Pb	165	1	0.14	0.03	ppb	20.89	3600	
232 Th	165	1	3.04	0.61	ppb	21.53	1000	
238 U	165	1	24.31	4.86	ppb	0.40	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300392	1.08	331435	90.6	30 - 120	
45 Sc	1	1242555	0.55	1316255	94.4	30 - 120	
72 Ge	1	531237	0.07	598993	88.7	30 - 120	
115 In	1	1468998	1.20	1669391	88.0	30 - 120	
165 Ho	1	2323398	0.44	2529503	91.9	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\AG100109.B\218CALB.D\218CALB.D#

1 :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\AG100109.B\226SDIL.D\226SDIL.D#
Date Acquired: Oct 2 2009 04:42 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32P25
Misc Info: SERIAL DILUTION
Vial Number: 4104
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: SDIL
Dilution Factor: 5.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG100109.B\225AREF.D\225AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb	RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	-0.01 ppb	192.97	0.00	-362.1	90 - 110	
51 V	72	1	-34.55 ppb	5.16	-22.64	152.6	90 - 110	
52 Cr	72	1	933.40 ppb	0.90	956.00	97.6	90 - 110	
55 Mn	72	1	0.45 ppb	7.94	0.42	108.0	90 - 110	
59 Co	72	1	0.04 ppb	10.51	0.03	115.1	90 - 110	
60 Ni	72	1	0.48 ppb	14.20	0.32	147.1	90 - 110	
63 Cu	72	1	0.80 ppb	7.10	0.16	509.5	90 - 110	
66 Zn	72	1	-0.97 ppb	2.32	-0.26	373.8	90 - 110	
75 As	72	1	3.34 ppb	0.72	3.46	96.3	90 - 110	
78 Se	72	1	2.09 ppb	28.32	0.32	657.5	90 - 110	
95 Mo	72	1	0.83 ppb	9.07	0.94	88.7	90 - 110	
107 Ag	115	1	0.01 ppb	92.94	0.01	102.8	90 - 110	
111 Cd	115	1	0.00 ppb	120.00	-0.02	19.8	90 - 110	
118 Sn	115	1	-0.01 ppb	124.31	-0.01	140.9	90 - 110	
121 Sb	115	1	0.00 ppb	99.55	0.01	33.5	90 - 110	
137 Ba	115	1	1.76 ppb	1.49	1.76	99.7	90 - 110	
205 Tl	165	1	0.02 ppb	15.93	0.01	163.7	90 - 110	
208 Pb	165	1	0.00 ppb	20.51	0.01	86.6	90 - 110	
232 Th	165	1	0.08 ppb	14.73	0.12	68.3	90 - 110	
238 U	165	1	0.99 ppb	0.97	0.97	102.2	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	313885	0.99	331435	94.7	30 - 120	
45 Sc	1	1242020	1.43	1316255	94.4	30 - 120	
72 Ge	1	564561	0.50	598993	94.3	30 - 120	
115 In	1	1571637	0.27	1669391	94.1	30 - 120	
165 Ho	1	2476735	0.35	2529503	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\AG100109.B\218CALB.D\218CALB.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: 10/02/09 09:00:25

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LLG32P25** | Serial Dilution: **25.00** | Sample Dilution: **5.00**

Instrument: **Agilent7500**
File: AG100109 # 226
Acquired: 10/02/2009 04:42:00
Calibrated: 10/02/2009 04:20:00

Channel 272
Method 6020_
ICPMS_024

Matrix: AQUEOUS
Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9	3	-0.20910	0.05773	462		*	
7440-62-2	Vanadium	51	-251052	-863.50	-566.10			*	
7440-47-3	Chromium	52	6743280	23335	23900	2.36		*	
7439-96-5	Manganese	55	4254	11.275	10.440	8.00		*	
7440-48-4	Cobalt	59	483	0.99850	0.86770	15.1		*	
7440-02-0	Nickel	60	1047	11.910	8.0970	47.1		*	
7440-50-8	Copper	63	5468	20.110	3.9470	410		*	
7440-66-6	Zinc	66	1235	-24.335	-6.5110			*	
7440-38-2	Arsenic	75	3035	83.400	86.630	3.73	0.21	NC	☑
7782-49-2	Selenium	78	1080	52.200	7.9330	558	0.70	NC	☑
7439-98-7	Molybdenum	95	2184	20.855	23.500	11.3		*	
7440-22-4	Silver	107	67	0.20310	0.19760	2.78		*	
7440-43-9	Cadmium	111	-6	-0.09850	-0.49860			*	
7440-31-5	Tin	118	370	-0.25505	-0.18090			*	
7440-36-0	Antimony	121	97	0.08920	0.26640	66.5		*	
7440-39-3	Barium	137	3318	43.940	44.080	0.318		*	
7440-28-0	Thallium	205	367	0.53400	0.32630	63.7		*	
7439-92-1	Lead	208	296	0.12085	0.13960	13.4		*	
7440-61-1	Uranium	238	19189	24.845	24.310	2.20		*	
7440-29-1	Thorium	232	1664	2.0770	3.0420	31.7		*	
7439-93-2	Lithium	6			0			*	
7440-20-2	Scandium	45			0			*	
7440-74-6	Indium	115			0			*	
7440-56-4	Germanium	72			0			*	
7440-60-0	Holmium	165			0			*	

* Analyte not requested for this batch, no MDL

NC : Serial dilution concentration < 100 X MDL

E : Difference greater than Limit (10%)

Reviewed by: Date:

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\227PDS.D\227PDS.D#
Date Acquired: Oct 2 2009 04:45 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32Z
Misc Info: POST DIGESTION SPIKE
Vial Number: 4105
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 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	208.80	0.01	ppb	1.42	200	104.4	75 - 125	
51 V	72	1	95.15	-113.20	ppb	0.86	200	109.6	75 - 125	
52 Cr	72	1	4943.00	4780.00	ppb	1.49	200	99.3	75 - 125	
55 Mn	72	1	199.00	2.09	ppb	2.54	200	98.5	75 - 125	
59 Co	72	1	191.90	0.17	ppb	2.64	200	95.9	75 - 125	
60 Ni	72	1	185.20	1.62	ppb	2.70	200	91.9	75 - 125	
63 Cu	72	1	185.20	0.79	ppb	0.40	200	92.2	75 - 125	
66 Zn	72	1	188.00	-1.30	ppb	1.01	200	94.6	75 - 125	
75 As	72	1	217.10	17.32	ppb	1.79	200	99.9	75 - 125	
78 Se	72	1	194.40	1.59	ppb	2.83	200	96.4	75 - 125	
95 Mo	72	1	210.60	4.70	ppb	1.04	200	102.9	75 - 125	
107 Ag	115	1	38.72	0.04	ppb	1.89	50	77.4	75 - 125	
111 Cd	115	1	186.50	-0.10	ppb	3.06	200	93.3	75 - 125	
118 Sn	115	1	176.10	-0.04	ppb	2.16	200	88.1	75 - 125	
121 Sb	115	1	194.30	0.05	ppb	1.31	200	97.1	75 - 125	
137 Ba	115	1	207.00	8.81	ppb	1.90	200	99.1	75 - 125	
205 Tl	165	1	178.10	0.07	ppb	1.11	200	89.0	75 - 125	
208 Pb	165	1	174.80	0.03	ppb	1.15	200	87.4	75 - 125	
232 Th	165	1	0.06	0.61	ppb	14.09	200	0.0	75 - 125	
238 U	165	1	192.30	4.86	ppb	0.23	200	93.9	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	298185	0.45	331435	90.0	30 - 120	
45 Sc	1	1242944	0.22	1316255	94.4	30 - 120	
72 Ge	1	520652	1.41	598993	86.9	30 - 120	
115 In	1	1468348	1.60	1669391	88.0	30 - 120	
165 Ho	1	2348937	0.39	2529503	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\AG100109.B\218CALB.D\218CALB.D#

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

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 10/02/09 09:00:29

Department: 090 (Metals)

Source: Spreadsheet

Sample: **LLG32Z**

Spike Dilution: **1.00**

Sample Dilution: **5.00**

Instrument: **Agilent7500**
File: AG100109 # 227
Acquired: 10/02/2009 04:45:00
Calibrated: 10/02/2009 04:20:00

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	71047	208.80	0.01155	104	200		☑
7440-62-2	Vanadium	51	636639	95.150	-113.22	47.6	200		☑
7440-47-3	Chromium	52	32923000	4943.0	4780.0	81.5	200	*	☐
7439-96-5	Manganese	55	1511520	199.00	2.0880	98.5	200		☑
7440-48-4	Cobalt	59	1611790	191.90	0.17354	95.9	200		☑
7440-02-0	Nickel	60	345979	185.20	1.6194	91.8	200		☑
7440-50-8	Copper	63	825824	185.20	0.78940	92.2	200		☑
7440-66-6	Zinc	66	177843	188.00	-1.3022	94.0	200		☑
7440-38-2	Arsenic	75	180181	217.10	17.326	99.9	200		☑
7782-49-2	Selenium	78	29776	194.40	1.5866	96.4	200		☑
7439-98-7	Molybdenum	95	466777	210.60	4.7000	103	200		☐
7440-22-4	Silver	107	240119	38.720	0.03952	77.4	50.0		☐
7440-43-9	Cadmium	111	222841	186.50	-0.09972	93.2	200		☑
7440-31-5	Tin	118	607444	176.10	-0.03618	88.1	200		☐
7440-36-0	Antimony	121	766910	194.30	0.05328	97.1	200		☑
7440-39-3	Barium	137	360632	207.00	8.8160	99.1	200		☑
7440-28-0	Thallium	205	2236300	178.10	0.06526	89.0	200		☑
7439-92-1	Lead	208	2975230	174.80	0.02792	87.4	200		☑
7440-61-1	Uranium	238	3514710	192.30	4.8620	93.7	200		☑
7440-29-1	Thorium	232	1130	0.05667	0.60840				
7439-93-2	Lithium	6			0				
7440-20-2	Scandium	45			0				
7440-74-6	Indium	115			0				
7440-56-4	Germanium	72			0				
7440-60-0	Holmium	165			0				

Reviewed by: Date:

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\228_MS.D\228_MS.D#
Date Acquired: Oct 2 2009 04:48 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32S 5X
Misc Info: MATRIX SPIKE
Vial Number: 4106
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: MS
Prep Dil. Factor: 5.00
Autodil Factor: Undiluted
Final Dil Factor: 5.00

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	8.69	0.01	ppb	7.62	40	21.7	50 - 150	
51 V	72	1	-103.60	-113.20	ppb	8.51	40	141.5	50 - 150	
52 Cr	72	1	4755.00	4780.00	ppb	2.18	40	98.7	50 - 150	
55 Mn	72	1	9.75	2.09	ppb	0.46	40	23.2	50 - 150	
59 Co	72	1	7.73	0.17	ppb	1.80	40	19.2	50 - 150	
60 Ni	72	1	9.13	1.62	ppb	1.43	40	21.9	50 - 150	
63 Cu	72	1	8.87	0.79	ppb	1.82	40	21.7	50 - 150	
66 Zn	72	1	6.22	-1.30	ppb	0.88	40	16.1	50 - 150	
75 As	72	1	25.39	17.32	ppb	0.96	40	44.3	50 - 150	
78 Se	72	1	10.53	1.59	ppb	5.40	40	25.3	50 - 150	
95 Mo	72	1	13.15	4.70	ppb	1.19	40	29.4	50 - 150	
107 Ag	115	1	7.17	0.04	ppb	1.25	40	17.9	50 - 150	
111 Cd	115	1	7.62	-0.10	ppb	1.12	40	19.1	50 - 150	
118 Sn	115	1	0.34	-0.04	ppb	13.24	40	0.9	50 - 150	
121 Sb	115	1	8.31	0.05	ppb	1.66	40	20.7	50 - 150	
137 Ba	115	1	16.99	8.81	ppb	1.67	40	34.8	50 - 150	
205 Tl	165	1	7.31	0.07	ppb	0.44	40	18.2	50 - 150	
208 Pb	165	1	7.27	0.03	ppb	1.45	40	18.2	50 - 150	
232 Th	165	1	7.88	0.61	ppb	1.15	40	19.4	50 - 150	
238 U	165	1	12.75	4.86	ppb	0.99	40	28.4	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	303565	0.33	331435	91.6	30 - 120	
45 Sc	1	1237389	1.30	1316255	94.0	30 - 120	
72 Ge	1	532370	0.70	598993	88.9	30 - 120	
115 In	1	1485899	1.27	1669391	89.0	30 - 120	
165 Ho	1	2360147	0.38	2529503	93.3	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\229 MSD.D\229 MSD.D#
Date Acquired: Oct 2 2009 04:51 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32D 5X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 4107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: MSD
Dilution Factor: 5.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG100109.B\228 MS.D\228 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	8.31	ppb	6.40	8.69	4.47	20	
51 V	72	1	-102.20	ppb	22.39	-103.60	-1.36	20	
52 Cr	72	1	4853.00	ppb	1.18	4755.00	2.04	20	
55 Mn	72	1	9.84	ppb	0.53	9.75	0.92	20	
59 Co	72	1	7.97	ppb	0.37	7.72	3.11	20	
60 Ni	72	1	9.08	ppb	1.89	9.13	0.52	20	
63 Cu	72	1	9.05	ppb	0.30	8.87	2.03	20	
66 Zn	72	1	6.81	ppb	0.97	6.22	9.09	20	
75 As	72	1	25.80	ppb	1.92	25.39	1.60	20	
78 Se	72	1	12.12	ppb	8.01	10.53	14.04	20	
95 Mo	72	1	13.20	ppb	2.08	13.15	0.38	20	
107 Ag	115	1	7.35	ppb	2.52	7.17	2.56	20	
111 Cd	115	1	7.70	ppb	1.79	7.62	1.11	20	
118 Sn	115	1	0.11	ppb	40.10	0.34	104.07	20	
121 Sb	115	1	8.37	ppb	0.29	8.31	0.70	20	
137 Ba	115	1	17.06	ppb	0.31	16.99	0.41	20	
205 Tl	165	1	7.48	ppb	1.11	7.31	2.38	20	
208 Pb	165	1	7.47	ppb	1.14	7.27	2.67	20	
232 Th	165	1	8.21	ppb	1.60	7.88	4.09	20	
238 U	165	1	12.91	ppb	0.68	12.75	1.25	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299847	0.40	331435	90.5	30 - 120	
45 Sc	1	1241916	1.11	1316255	94.4	30 - 120	
72 Ge	1	530855	0.33	598993	88.6	30 - 120	
115 In	1	1482786	0.44	1669391	88.8	30 - 120	
165 Ho	1	2351233	0.64	2529503	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\230SMPL.D\230SMPL.D#
Date Acquired: Oct 2 2009 04:53 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLKFN
Misc Info: D9I260177
Vial Number: 4108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
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	1120.90	3600	
51 V	72	1	0.04	0.04	ppb	82.21	3600	
52 Cr	72	1	1.24	1.24	ppb	8.13	3600	
55 Mn	72	1	0.24	0.24	ppb	13.01	3600	
59 Co	72	1	0.07	0.07	ppb	24.32	3600	
60 Ni	72	1	0.02	0.02	ppb	42.60	3600	
63 Cu	72	1	1.08	1.08	ppb	7.08	3600	
66 Zn	72	1	1.07	1.07	ppb	9.08	3600	
75 As	72	1	0.00	0.00	ppb	206.28	3600	
78 Se	72	1	1.99	1.99	ppb	38.97	3600	
95 Mo	72	1	-0.01	-0.01	ppb	168.91	3600	
107 Ag	115	1	0.01	0.01	ppb	50.69	3600	
111 Cd	115	1	0.01	0.01	ppb	137.25	3600	
118 Sn	115	1	0.03	0.03	ppb	41.58	3600	
121 Sb	115	1	0.03	0.03	ppb	35.34	3600	
137 Ba	115	1	0.05	0.05	ppb	30.30	3600	
205 Tl	165	1	0.01	0.01	ppb	19.67	3600	
208 Pb	165	1	0.01	0.01	ppb	26.74	3600	
232 Th	165	1	0.24	0.24	ppb	27.90	1000	
238 U	165	1	0.01	0.01	ppb	12.65	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	305392	0.47	331435	92.1	30 - 120	
45 Sc	1	1203066	0.94	1316255	91.4	30 - 120	
72 Ge	1	554930	0.27	598993	92.6	30 - 120	
115 In	1	1589672	0.51	1669391	95.2	30 - 120	
165 Ho	1	2475887	0.64	2529503	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\231SMPL.D\231SMPL.D#
Date Acquired: Oct 2 2009 04:56 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLKFP 5X
Misc Info: D9I260178
Vial Number: 4109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: SA
Dilution Factor: 5.00
Autodil Factor: Undiluted
Final Dil Factor: 5.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.01	0.00	ppb	676.03	3600	
51 V	72	1	-480.35	-96.07	ppb	5.17	3600	
52 Cr	72	1	20,880.00	4176.00	ppb	0.80	3600	>LDR
55 Mn	72	1	2.44	0.49	ppb	3.25	3600	
59 Co	72	1	0.83	0.17	ppb	7.26	3600	
60 Ni	72	1	7.42	1.48	ppb	2.98	3600	
63 Cu	72	1	12.32	2.46	ppb	2.83	3600	
66 Zn	72	1	304.40	60.88	ppb	0.46	3600	
75 As	72	1	80.20	16.04	ppb	0.80	3600	
78 Se	72	1	24.96	4.99	ppb	7.27	3600	
95 Mo	72	1	24.85	4.97	ppb	2.88	3600	
107 Ag	115	1	0.13	0.03	ppb	30.94	3600	
111 Cd	115	1	0.15	0.03	ppb	144.19	3600	
118 Sn	115	1	-0.02	0.00	ppb	146.40	3600	
121 Sb	115	1	0.18	0.04	ppb	8.93	3600	
137 Ba	115	1	53.90	10.78	ppb	0.78	3600	
205 Tl	165	1	0.18	0.04	ppb	1.54	3600	
208 Pb	165	1	0.50	0.10	ppb	4.39	3600	
232 Th	165	1	0.14	0.03	ppb	7.96	1000	
238 U	165	1	22.83	4.57	ppb	1.04	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	289172	0.73	331435	87.2	30 - 120	
45 Sc	1	1218771	1.55	1316255	92.6	30 - 120	
72 Ge	1	522806	0.76	598993	87.3	30 - 120	
115 In	1	1462108	0.59	1669391	87.6	30 - 120	
165 Ho	1	2336026	0.59	2529503	92.4	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\AG100109.B\218CALB.D\218CALB.D#

1 :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\AG100109.B\232SMPL.D\232SMPL.D#
Date Acquired: Oct 2 2009 04:59 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLKFR 5X
Misc Info: D9I260178
Vial Number: 4110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: SA
Dilution Factor: 5.00
Autodil Factor: Undiluted
Final Dil Factor: 5.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	-0.04	-0.01	ppb	228.12	3600	
51 V	72	1	-539.00	-107.80	ppb	21.94	3600	
52 Cr	72	1	20,990.00	4198.00	ppb	1.02	3600	>LDR
55 Mn	72	1	2.45	0.49	ppb	8.08	3600	
59 Co	72	1	0.84	0.17	ppb	6.95	3600	
60 Ni	72	1	7.51	1.50	ppb	7.22	3600	
63 Cu	72	1	11.83	2.37	ppb	4.72	3600	
66 Zn	72	1	-6.27	-1.25	ppb	3.01	3600	
75 As	72	1	79.80	15.96	ppb	0.48	3600	
78 Se	72	1	18.94	3.79	ppb	7.30	3600	
95 Mo	72	1	25.69	5.14	ppb	1.67	3600	
107 Ag	115	1	0.13	0.03	ppb	16.08	3600	
111 Cd	115	1	-0.12	-0.02	ppb	267.59	3600	
118 Sn	115	1	-0.14	-0.03	ppb	82.38	3600	
121 Sb	115	1	0.10	0.02	ppb	13.66	3600	
137 Ba	115	1	55.70	11.14	ppb	1.75	3600	
205 Tl	165	1	0.17	0.03	ppb	4.07	3600	
208 Pb	165	1	0.19	0.04	ppb	9.00	3600	
232 Th	165	1	0.07	0.01	ppb	9.44	1000	
238 U	165	1	22.86	4.57	ppb	2.04	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	290302	0.85	331435	87.6	30 - 120	
45 Sc	1	1220369	1.01	1316255	92.7	30 - 120	
72 Ge	1	525750	1.20	598993	87.8	30 - 120	
115 In	1	1464948	0.26	1669391	87.8	30 - 120	
165 Ho	1	2336840	1.23	2529503	92.4	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\AG100109.B\218CALB.D\218CALB.D#

1 :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\AG100109.B\233 CCV.D\233 CCV.D#
Date Acquired: Oct 2 2009 05:02 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: Oct 02 2009 04:24 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	1.96	50	102.7	90 - 110	
51 V	72	1	49.23	ppb	1.30	50	98.5	90 - 110	
52 Cr	72	1	50.25	ppb	0.87	50	100.5	90 - 110	
55 Mn	72	1	48.72	ppb	0.69	50	97.4	90 - 110	
59 Co	72	1	48.70	ppb	0.61	50	97.4	90 - 110	
60 Ni	72	1	50.43	ppb	0.27	50	100.9	90 - 110	
63 Cu	72	1	51.63	ppb	1.62	50	103.3	90 - 110	
66 Zn	72	1	49.86	ppb	1.14	50	99.7	90 - 110	
75 As	72	1	50.34	ppb	0.46	50	100.7	90 - 110	
78 Se	72	1	52.29	ppb	0.09	50	104.6	90 - 110	
95 Mo	72	1	50.01	ppb	0.66	50	100.0	90 - 110	
107 Ag	115	1	49.98	ppb	1.19	50	100.0	90 - 110	
111 Cd	115	1	49.33	ppb	0.91	50	98.7	90 - 110	
118 Sn	115	1	49.46	ppb	0.54	50	98.9	90 - 110	
121 Sb	115	1	49.75	ppb	0.71	50	99.5	90 - 110	
137 Ba	115	1	50.20	ppb	0.16	50	100.4	90 - 110	
205 Tl	165	1	50.47	ppb	0.59	50	100.9	90 - 110	
208 Pb	165	1	50.79	ppb	0.94	50	101.6	90 - 110	
232 Th	165	1	50.58	ppb	3.09	50	101.2	90 - 110	
238 U	165	1	51.00	ppb	0.49	50	102.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	307479	0.81	331435	92.8	30 - 120	
45 Sc	1	1252348	1.28	1316255	95.1	30 - 120	
72 Ge	1	569675	0.54	598993	95.1	30 - 120	
115 In	1	1669353	0.41	1669391	100.0	30 - 120	
165 Ho	1	2563883	0.45	2529503	101.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.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\AG100109.B\234 CCB.D\234 CCB.D#
Date Acquired: Oct 2 2009 05:05 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: Oct 02 2009 04:24 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	0.021	ppb	80.86	1.00	
51 V	72	1	0.025	ppb	117.01	1.00	
52 Cr	72	1	0.298	ppb	19.34	1.00	
55 Mn	72	1	0.007	ppb	243.85	1.00	
59 Co	72	1	0.012	ppb	60.71	1.00	
60 Ni	72	1	0.024	ppb	43.13	1.00	
63 Cu	72	1	2.373	ppb	2.39	1.00	Fail
66 Zn	72	1	-1.250	ppb	6.48	1.00	
75 As	72	1	0.012	ppb	57.55	1.00	
78 Se	72	1	4.101	ppb	9.49	1.00	Fail ok nlc 5
95 Mo	72	1	0.012	ppb	91.95	1.00	
107 Ag	115	1	0.019	ppb	15.82	1.00	
111 Cd	115	1	0.009	ppb	136.25	1.00	
118 Sn	115	1	0.112	ppb	8.96	1.00	
121 Sb	115	1	0.063	ppb	8.25	1.00	
137 Ba	115	1	0.003	ppb	328.23	1.00	
205 Tl	165	1	0.035	ppb	8.12	1.00	
208 Pb	165	1	0.014	ppb	14.46	1.00	
232 Th	165	1	0.897	ppb	20.91	1.00	
238 U	165	1	0.019	ppb	7.74	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	302838	0.67	331435	91.4	30 - 120	
45 Sc	1	1227814	1.34	1316255	93.3	30 - 120	
72 Ge	1	568484	0.68	598993	94.9	30 - 120	
115 In	1	1642991	0.25	1669391	98.4	30 - 120	
165 Ho	1	2551490	1.15	2529503	100.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\235WASH.D\235WASH.D#
Date Acquired: Oct 2 2009 05:07 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: Oct 02 2009 04:24 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.952 ppb	27.86	1.30	
51 V	72	1	5.001 ppb	3.17	6.50	
52 Cr	72	1	2.171 ppb	3.43	2.60	
55 Mn	72	1	1.017 ppb	5.00	1.30	
59 Co	72	1	0.971 ppb	1.72	1.30	
60 Ni	72	1	2.024 ppb	5.04	2.60	
63 Cu	72	1	4.471 ppb	4.94	2.60	
66 Zn	72	1	9.178 ppb	1.35	13.00	
75 As	72	1	5.155 ppb	2.53	6.50	
78 Se	72	1	7.822 ppb	19.71	6.50	
95 Mo	72	1	1.969 ppb	4.85	2.60	
107 Ag	115	1	5.253 ppb	3.33	6.50	
111 Cd	115	1	1.047 ppb	6.26	1.30	
118 Sn	115	1	10.250 ppb	3.26	13.00	
121 Sb	115	1	1.942 ppb	2.44	2.60	
137 Ba	115	1	1.031 ppb	2.73	1.30	
205 Tl	165	1	1.107 ppb	1.51	1.30	
208 Pb	165	1	1.102 ppb	1.05	1.30	
232 Th	165	1	2.224 ppb	2.07	2.60	
238 U	165	1	1.101 ppb	1.56	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298556	0.85	331435	90.1	30 - 120	
45 Sc	1	1209189	1.24	1316255	91.9	30 - 120	
72 Ge	1	567608	1.14	598993	94.8	30 - 120	
115 In	1	1622972	0.97	1669391	97.2	30 - 120	
165 Ho	1	2512918	0.03	2529503	99.3	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\AG100109.B\218CALB.D\218CALB.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: D9I260177

Client: Northgate

Batch(es) #: 9271338

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: 10/2/09

Metals Raw Data RoadMap

LotID		*Metal*	*WorkOrder*	*Anal Date*	*TestDesc*	*Batch*	*File Id*	*Instr*
D9I260177	1	SE	LLKFN1AC	20091002	6020TOTA	9271338	AG100109	024
D9I260177	1	AS	LLKFN1AA	20091002	6020TOTA	9271338	AG100109	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9271338**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: Katie Stoltz

Prep Date: 09/29/09
Due Date: 10/07/09

Lot	Work Order			Initial Weight/Volume
D9I280000 Water	**LLL0W**	B	Due Date: SDG:	50 mL
D9I280000 Water	**LLL0W**	C	Due Date: SDG:	50 mL
D9I250174 Water	**LLG32** Total		Due Date: 10/07/09 SDG:	50 mL
D9I250174 Water	**LLG32** Total	S	Due Date: 10/07/09 SDG:	50 mL
D9I250174 Water	**LLG32** Total	D	Due Date: 10/07/09 SDG:	50 mL
D9I260177 Water	**LLKFN** Total		Due Date: 10/08/09 SDG:	50 mL
D9I260178 Water	**LLKFP** Total		Due Date: 10/08/09 SDG:	50 mL
D9I260178 Water	**LLKFR** Total		Due Date: 10/08/09 SDG:	50 mL

Comments:

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE SAMPLE

ICPMS ELEMENTS WITHIN THE BATCH:

AS SE

Checked 10/1/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH #	9271338	**ALLIQUOTTED BY:**	JRW
PREP DATE:	9.29.2009	**DIGESTED BY:**	KS

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS268

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: KS

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-5353-09	8/28/10	100uL	15
2008Cal-2	STD-4452-09	7/28/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H14024	3

TEMPERATURE CYCLES

Thermometer ID: 4116 Block & Cup # : 3;34

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	7:30	89	11:50	95
HNO3	12:00	95	12:30	95
HNO3				

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

COMMENTS:

I certify that all information above is correct and complete.

Signature: Katie Ott ***Date:*** 9.29.09

METALS
SAMPLE DATA
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ICP-MS Standard and Spike True Values

Element	Cal. Std. 100 ppb	Initial Calibration Standard	Continuing Calibration Standard	Interference Check Sample A	Interference Check Sample AB	Laboratory Control Sample and Duplicate	Matrix Spike Sample and Duplicate	Post Digestion Spike
Aluminum	100	40	50	100,000 Aluminum	--	40	40	200
Antimony	100	40	50	100,000 Calcium	100	40	40	200
Arsenic	100	40	50	100,000 Iron	100	40	40	200
Barium	100	40	50	100,000 Magnesium	100	40	40	200
Beryllium	100	40	50	100,000 Sodium	100	40	40	200
Cadmium	100	40	50	100,000 Phosphorus	100	40	40	200
Chromium	100	40	50	100,000 Potassium	100	40	40	200
Cobalt	100	40	50	100,000 Sulfur	100	40	40	200
Copper	100	40	50	200,000 Carbon	100	40	40	200
Lead	100	40	50	1,000,000 Chloride	100	40	40	200
Manganese	100	40	50	2000 Molybdenum	--	40	40	200
Molybdenum	100	40	50	2000 Titanium	100	40	40	200
Nickel	100	40	50		100	40	40	200
Selenium	100	40	50		100	40	40	200
Silver	100	40	50		100	40	40	50
Thallium	100	40	50		100	40	40	200
Tin	100	40	50		100	40	40	200
Uranium	100	40	50		100	40	40	200
Vanadium	100	40	50		100	40	40	200
Zinc	100	40	50		100	40	40	200

All units are ug/L.

Due to the presence of trace contaminants in the ICSA solution, the % recovery for the ICSAB solution is calculated by subtracting the levels in the ICSA from the ICSAB.

Quality Control Standards

ICV = Initial Calibration Verification (Second Source)
CCV = Continuing Calibration Verification

ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank

TestAmerica Denver

Standards Preparation Logbook Record

Oct-01-2009

Logbook: \\Densvr06\StdsLog\metals.std

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

STD2483-09, 1000 Zn (Inorganic Ventures)

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: C2-ZN02051 Vendor's Expiration Date: 05-01-2010
Solvent: 2% HNO3
Date Prep./Opened: 04-28-2009 Date Received: 04-28-2009
Date Expires(1): 05-01-2010 (None)
Date Expires(2): 05-01-2010 (None)
(METALS)-Inventory ID: 856

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1,000.0	1,000.0

STD5446-09, ICP-MS 1ppm Sn/Zn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 09-10-2009
Date Expires(1): 03-01-2010 (1 Year)

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	1.0000

Parent Std No.: STD2483-09, 1000 Zn (Inorganic Ventures) Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1,000.0	1.0000

STD5512-09, ICP-MS (024) INT STD BRC

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 250.00
Date Prep./Opened: 09-14-2009
Date Expires(1): 11-10-2009 (1 Year)
Date Expires(2): 12-01-2009 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD1469-09, Germanium Stock Aliquot Amount (ml): 0.7500
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	3,000.0

Parent Std No.: STD1972-09, Lithium 6 Stock Aliquot Amount (ml): 1.0000
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	4,000.0

Parent Std No.: STD1973-09, Indium Stock — Aliquot Amount (ml): 0.2500
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	1,000.0

Parent Std No.: STD6317-08, Scandium Stock — Aliquot Amount (ml): 0.5000
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	2,000.0

Parent Std No.: STD6318-08, Holmium Stock — Aliquot Amount (ml): 0.2500
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	1,000.0

STD5932-09, ICP-MS ICSA

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 50.000
Date Prep./Opened: 09-30-2009
Date Expires(1): 10-30-2009 (1 Month)
Date Expires(2): 08-01-2010 (None)
pipettes: Met 8

Parent Std No.: STD4542-09, ICPMS Interferent Check Standard — Aliquot Amount (ml): 5.0000
Parent Date Expires(1): 07-31-2010 Parent Date Expires(2): 08-01-2010

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

STD5957-09, ICP-MS BLANK

Analyst: DIAZL

Solvent: Water Volume (ml): 1,000.0
Date Prep./Opened: 10-01-2009
Date Expires(1): 11-01-2009 (1 Month)
Date Expires(2): 11-01-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD5956-09, NITRIC ACID — Aliquot Amount (ml): 50.000

Component	Initial Conc (%)	Final Conc (%)

HNO3	100.00	5.0000

STD5958-09, ICP-MS 10 ppm Sn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 03-01-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1198-09, 1000 mg/L Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

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

STD5959-09, ICP-MS 100 ppb cal

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 50.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

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.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	20.000	100.00

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5960-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 100.00
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

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.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)

Mo	20.000	50.000
Sb	20.000	50.000

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000

Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5961-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000

Date Prep./Opened: 10-01-2009

Date Expires(1): 10-02-2009 (1 Day)

pipettes: Met 21 and Met 8

Parent Std No.: STD5446-09, ICP-MS 1ppm Sn/Zn — Aliquot Amount (ml): 0.0900

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1.0000	0.0090
Sn	1.0000	0.0090

Parent Std No.: STD5959-09, ICP-MS 100 ppb cal — Aliquot Amount (ml): 0.1000

Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 10-02-2009

Component	Initial Conc (ug/L)	Final Conc (mg/L)
Fe	5,000.0	0.0500
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
Sn	100.00	0.0010

STD5962-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (2 Days)
pipettes: Met 20 and Met 8

Parent Std No.: STD5961-09, ICP-MS RL STD Aliquot Amount (ml): 2.0000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	0.0090	0.0018
Sn	0.0090	0.0018
Fe	0.0500	0.0100
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
Sn	0.0010	0.0002

STD5963-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21, Met 20, and Met 8

Parent Std No.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD4542-09, ICPMS Interferent Check Standard Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 07-31-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	20.000	100.00

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5964-09, ICPMS LR STD 1000 ppb

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20 and Met 8

Parent Std No.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	1,000.0
Sb	20.000	1,000.0

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5965-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 02-27-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1213-09, ICPMS ICV SOLUTION A (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Al	10.000	40.000
As	10.000	40.000
Ba	10.000	40.000
Be	10.000	40.000
Cd	10.000	40.000

Co	10.000	40.000
Cr	10.000	40.000
Cu	10.000	40.000
Fe	250.00	1,000.0
Li	10.000	40.000
Mn	10.000	40.000
Ni	10.000	40.000
Pb	10.000	40.000
Se	10.000	40.000
Th	10.000	40.000
Tl	10.000	40.000
U	10.000	40.000
V	10.000	40.000
Zn	10.000	40.000

Parent Std No.: STD1214-09, ICPMS ICV SOLUTION B (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Ag	10.000	40.000
Mo	10.000	40.000
Sb	10.000	40.000
Sn	10.000	40.000
Zr	10.000	40.000

STD5966-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 50.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD1853-09, 1 mg/l Se Aliquot Amount (ml): 0.1000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1.0000	0.0020

STD5967-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 100.00
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 05-01-2010 (None)
pipettes: Met 20

Parent Std No.: STD3106-09, ICP-MS LLCCV 1 Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	0.5000	5.0000
Al	3.0000	30.000
As	0.5000	5.0000

Ba	0.1000	1.0000
Be	0.1000	1.0000
Ca	5.0000	50.000
Cd	0.1000	1.0000
Co	0.1000	1.0000
Cr	0.2000	2.0000
Cu	0.2000	2.0000
Fe	5.0000	50.000
K	10.000	100.00
Mg	5.0000	50.000
Mn	0.1000	1.0000
Na	5.0000	50.000
Ni	0.2000	2.0000
Pb	0.1000	1.0000
Se	0.5000	5.0000
Th	0.2000	2.0000
Tl	0.1000	1.0000
U	0.1000	1.0000
V	0.5000	5.0000
Zn	1.0000	10.000

Parent Std No.: STD3107-09, ICP-MS LLCCV 2 Aliquot Amount (ml): 1.0000

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	0.2000	2.0000
Sb	0.2000	2.0000
Sn	1.0000	10.000

Parent Std No.: STD3108-09, ICP-MS BRC LLCCV 1 Aliquot Amount (ml): 1.0000

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Nb	4.0000	40.000
Pd	0.1000	1.0000
Pt	0.1000	1.0000
W	0.5000	5.0000

File
AG100109

Reviewed By: LRD 10/01/2009

TestAmerica Denver

Standards Preparation Logbook Record

Oct-01-2009

Logbook: \\Densvr06\StdsLog\metals.std

STD5969-09, ALTCu

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 100.00

Date Prep./Opened: 09-30-2009

Date Expires(1): 04-01-2010 (1 Year)

1 ppb

Parent Std No.: STD5968-09, Cu 1mg/l Aliquot Amount (ml): 0.1000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Cu	1.0000	0.0010

File
093009

Reviewed By: LRD 10/01/2009

Page 1 of 1

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
3	Cal Blank				1.0	10/01/09 18:32		☐
4	100 ppb				1.0	10/01/09 18:35		☐
5	ICV				1.0	10/01/09 18:37		☐
6	RLIV				1.0	10/01/09 18:40		☐
7	ICB				1.0	10/01/09 18:43		☐
8	RL STD				1.0	10/01/09 18:45		☐
9	AFCEE RL				1.0	10/01/09 18:48		☐
10	ALTSe				1.0	10/01/09 18:51		☐
11	ICSA				1.0	10/01/09 18:54		☐
12	ICSAB				1.0	10/01/09 18:56		☐
13	RINSE				1.0	10/01/09 18:59		☐
14	LR1				1.0	10/01/09 19:02		☐
15	RINSE				1.0	10/01/09 19:04		☐
16	CCV				1.0	10/01/09 19:07		☐
17	CCB				1.0	10/01/09 19:10		☐
18	RLCV				1.0	10/01/09 19:13		☐
19	LR STD 1 100ppb RT 10/2/09				1.0	10/01/09 19:15		☐
20	RINSE				1.0	10/01/09 19:18		☐
21	LR STD 2 1000 ppb RT 10/2/09				1.0	10/01/09 19:21		☐
22	RINSE				1.0	10/01/09 19:23		☐
23	LR STD 3 2000 ppb RT 10/2/09				1.0	10/01/09 19:26		☐
24	RINSE				1.0	10/01/09 19:29		☐
25	LR STD 4 4000 ppb RT 10/2/09				1.0	10/01/09 19:31		☐
26	RINSE				1.0	10/01/09 19:34		☐
27	LR STD Mn 20000 ppb RT 10/2/09				1.0	10/01/09 19:37		☐
28	RINSE				1.0	10/01/09 19:39		☐
29	CCV				1.0	10/01/09 19:42		☐
30	CCB				1.0	10/01/09 19:45		☐
31	RLCV				1.0	10/01/09 19:48		☐
32	LLRLMBF	D9J010000	9274069	MD	1.0	10/01/09 19:50		☐
33	LLRLMCF	D9J010000	9274069	MD	1.0	10/01/09 19:53		☐
34	LLQ21F	D9I300280-1	9274069	MD	1.0	10/01/09 19:56		☐
35	LLQ28F	D9I300280-3	9274069	MD	1.0	10/01/09 19:59		☐
36	LLQ3EF	D9I300280-5	9274069	MD	1.0	10/01/09 20:01		☐
37	LLQ3EP5F	D9I300280	9274069		5.0	10/01/09 20:04		☐
38	LLQ3EZF	D9I300280-5	9274069		1.0	10/01/09 20:07		☐
39	LLQ3ESF	D9I300280-5	9274069	MD	1.0	10/01/09 20:10		☐
40	LLQ3EDF	D9I300280-5	9274069	MD	1.0	10/01/09 20:12		☐
41	CCV				1.0	10/01/09 20:15		☐
42	CCB				1.0	10/01/09 20:18		☐
43	RLCV				1.0	10/01/09 20:20		☐
44	LLRLGB	D9J010000	9274067	MS	1.0	10/01/09 20:23		☐
45	LLRLGC	D9J010000	9274067	MS	1.0	10/01/09 20:26		☐
46	LLQ23	D9I300280-2	9274067	MS	1.0	10/01/09 20:29		☐
47	LLQ3C	D9I300280-4	9274067	MS	1.0	10/01/09 20:31		☐
48	LLQ3F	D9I300280-6	9274067	MS	1.0	10/01/09 20:34		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
49	LLQ3FP5	D9I300280	9274067		5.0	10/01/09 20:37		
50	LLQ3FZ	D9I300280-6	9274067		1.0	10/01/09 20:40		
51	LLQ3FS	D9I300280-6	9274067	MS	1.0	10/01/09 20:42		
52	LLQ3FD	D9I300280-6	9274067	MS	1.0	10/01/09 20:45		
53	CCV				1.0	10/01/09 20:48		
54	CCB				1.0	10/01/09 20:51		
55	RLCV				1.0	10/01/09 20:53		
56	LLMR1B	D9I290000	9272144	MS	1.0	10/01/09 20:56		
57	LLMR1C	D9I290000	9272144	MS	1.0	10/01/09 20:59		
58	LLMR1L	D9I290000	9272144	MS	1.0	10/01/09 21:02		
59	LLMF0	D9I280196-5	9272144	MS	1.0	10/01/09 21:04		
60	LLMF1	D9I280196-6	9272144	MS	1.0	10/01/09 21:07		
61	LLMF2	D9I280196-7	9272144	MS	1.0	10/01/09 21:10		
62	CCV				1.0	10/01/09 21:12		
63	CCB				1.0	10/01/09 21:15		
64	RLCV				1.0	10/01/09 21:18		
65	LLCRDF	D9I230312-4	9267291	MD	1.0	10/01/09 21:21		
66	LLCRLF	D9I230312-7	9267291	MD	1.0	10/01/09 21:23		
67	LLCRMF	D9I230312-8	9267291	MD	1.0	10/01/09 21:26		
68	LLCRQF	D9I230312-9	9267291	MD	1.0	10/01/09 21:29		
69	LLCRKF	D9I230314-1	9267291	MD	1.0	10/01/09 21:32		
70	LLCRVF	D9I230314-2	9267291	MD	1.0	10/01/09 21:34		
71	LLCRWF	D9I230314-3	9267291	MD	1.0	10/01/09 21:37		
72	LLCR0F	D9I230314-4	9267291	MD	1.0	10/01/09 21:40		
73	CCV				1.0	10/01/09 21:43		
74	CCB				1.0	10/01/09 21:45		
75	RLCV				1.0	10/01/09 21:48		
76	LLPHAB	D9I300000	9273096	04	1.0	10/01/09 21:51		
77	LLPHAC	D9I300000	9273096	04	1.0	10/01/09 21:54		
78	LLHGT	D9I250219-1	9273096	04	1.0	10/01/09 21:56		
79	LLNCA	D9I290174-1	9273096	04	1.0	10/01/09 21:59		
80	LLNCAP5	D9I290174	9273096		5.0	10/01/09 22:02		
81	LLNCAZ	D9I290174-1	9273096		1.0	10/01/09 22:05		
82	LLNCAS	D9I290174-1	9273096	04	1.0	10/01/09 22:07		
83	LLNCAD	D9I290174-1	9273096	04	1.0	10/01/09 22:10		
84	LLNDC	D9I290182-1	9273096	04	1.0	10/01/09 22:13		
85	CCV				1.0	10/01/09 22:16		
86	CCB				1.0	10/01/09 22:18		
87	RLCV				1.0	10/01/09 22:21		
88	~~RINSE~~				~~1.0~~	~~10/01/09 22:24~~		
89	RINSE				1.0	10/01/09 22:26		
90	RINSE				1.0	10/01/09 22:29		
91	RINSE				1.0	10/01/09 22:32		
92	RINSE				1.0	10/01/09 22:35		
93	RINSE				1.0	10/01/09 22:37		
94	~~RINSE~~				~~1.0~~	~~10/01/09 22:40~~		

KF 10/2/09

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
95	~~Cal Blank~~				1.0	~~10/01/09 22:43~~	VF 10/2/09	
96	Cal Blank				1.0	10/01/09 22:46		
97	100 ppb				1.0	10/01/09 22:48		
98	CCV				1.0	10/01/09 22:51		
99	CCB				1.0	10/01/09 22:54		
100	RLCV				1.0	10/01/09 22:56		
101	LLL11B	D9I280000	9271349	46	1.0	10/01/09 22:59		
102	LLL11C	D9I280000	9271349	46	1.0	10/01/09 23:02		
103	LLFWA	D9I240357-1	9271349	46	1.0	10/01/09 23:05		
104	LLFWD	D9I240357-2	9271349	46	1.0	10/01/09 23:07		
105	LLFWE	D9I240357-3	9271349	46	1.0	10/01/09 23:10		
106	LLFWG	D9I240357-4	9271349	46	1.0	10/01/09 23:13	Take all but Cr, Ni, Co. VF 10/2/09	
107	CCV				1.0	10/01/09 23:16		
108	CCB				1.0	10/01/09 23:18		
109	RLCV				1.0	10/01/09 23:21		
110	LLFWGP5	D9I240357	9271349		5.0	10/01/09 23:24		
111	LLFWGZ	D9I240357-4	9271349		1.0	10/01/09 23:27		
112	LLFWGS	D9I240357-4	9271349	46	1.0	10/01/09 23:29		
113	LLFWGD	D9I240357-4	9271349	46	1.0	10/01/09 23:32		
114	LLFWK	D9I240357-5	9271349	46	1.0	10/01/09 23:35		
115	LLFWX	D9I240357-7	9271349	46	1.0	10/01/09 23:38		
116	CCV				1.0	10/01/09 23:40		
117	CCB				1.0	10/01/09 23:43		
118	RLCV				1.0	10/01/09 23:46		
119	LLPLDB	D9I300000	9273146	MS	1.0	10/01/09 23:49		
120	LLPLDC	D9I300000	9273146	MS	1.0	10/01/09 23:51		
121	LLH48	D9I250293-1	9273146	MS	1.0	10/01/09 23:54		
122	LLH48P5	D9I250293	9273146		5.0	10/01/09 23:57		
123	LLH48Z	D9I250293-1	9273146		1.0	10/02/09 00:00		
124	LLH48S	D9I250293-1	9273146	MS	1.0	10/02/09 00:02		
125	LLH48D	D9I250293-1	9273146	MS	1.0	10/02/09 00:05		
126	CCV				1.0	10/02/09 00:08		
127	CCB				1.0	10/02/09 00:11		
128	RLCV				1.0	10/02/09 00:13		
129	LLL1GB	D9I280000	9271341	46	1.0	10/02/09 00:16		
130	LLL1GC	D9I280000	9271341	46	1.0	10/02/09 00:19		
131	LLH4L	D9I250289-1	9271341	46	1.0	10/02/09 00:22		
132	LLH4LP5	D9I250289	9271341		5.0	10/02/09 00:24	Take all but Se. VF 10/2/09	
133	LLH4LZ	D9I250289-1	9271341		1.0	10/02/09 00:27		
134	LLH4LS	D9I250289-1	9271341	46	1.0	10/02/09 00:30		
135	LLH4LD	D9I250289-1	9271341	46	1.0	10/02/09 00:32		
136	LLH4P	D9I250289-2	9271341	46	1.0	10/02/09 00:35		
137	CCV				1.0	10/02/09 00:38		
138	CCB				1.0	10/02/09 00:41		
139	RLCV				1.0	10/02/09 00:43		
140	~~RINSE~~				1.0	~~10/02/09 00:46~~	VF 10/2/09	

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
141	~~RINSE~~				~~1.0~~	~~10/02/09 00:49~~		
142	RINSE				1.0	10/02/09 00:51		
143	RINSE				1.0	10/02/09 00:54		
144	RINSE				1.0	10/02/09 00:57		
145	RINSE				1.0	10/02/09 01:00		
146	RINSE				1.0	10/02/09 01:02		
147	~~Cal Blank~~				~~1.0~~	~~10/02/09 01:05~~	VF 10/2/09	
148	Cal Blank				1.0	10/02/09 01:08		
149	100 ppb				1.0	10/02/09 01:11		
150	CCV				1.0	10/02/09 01:13		
151	CCB				1.0	10/02/09 01:16		
152	RLCV				1.0	10/02/09 01:19		
153	LLL3TB	D9I280000	9271375	04	1.0	10/02/09 01:21		
154	LLL3TC	D9I280000	9271375	04	1.0	10/02/09 01:24		
155	LLH2Q	D9I250273-1	9271375	04	1.0	10/02/09 01:27		
156	LLH2QP5	D9I250273	9271375		5.0	10/02/09 01:30		
157	LLH2QZ	D9I250273-1	9271375		1.0	10/02/09 01:32		
158	LLH2QS	D9I250273-1	9271375	04	1.0	10/02/09 01:35		
159	LLH2QD	D9I250273-1	9271375	04	1.0	10/02/09 01:38		
160	LLH2V	D9I250273-2	9271375	04	1.0	10/02/09 01:41		
161	LLH3K	D9I250280-1	9271375	04	1.0	10/02/09 01:43		
162	LLH3KS	D9I250280-1	9271375	04	1.0	10/02/09 01:46		
163	CCV				1.0	10/02/09 01:49		
164	CCB				1.0	10/02/09 01:52		
165	RLCV				1.0	10/02/09 01:54		
166	LLH3KD	D9I250280-1	9271375	04	1.0	10/02/09 01:57		
167	LLH3R	D9I250280-2	9271375	04	1.0	10/02/09 02:00		
168	LLH3T	D9I250280-3	9271375	04	1.0	10/02/09 02:03		
169	LLH3V	D9I250280-4	9271375	04	1.0	10/02/09 02:05		
170	LLH3W	D9I250280-5	9271375	04	1.0	10/02/09 02:08		
171	LLH3X	D9I250280-6	9271375	04	1.0	10/02/09 02:11		
172	LLH4A	D9I250286-1	9271375	04	1.0	10/02/09 02:14		
173	LLH4D	D9I250286-2	9271375	04	1.0	10/02/09 02:17		
174	LLJ4F	D9I260141-1	9271375	04	1.0	10/02/09 02:19		
175	LLJ4P	D9I260141-2	9271375	04	1.0	10/02/09 02:22		
176	CCV				1.0	10/02/09 02:25		
177	CCB				1.0	10/02/09 02:28		
178	RLCV				1.0	10/02/09 02:30		
179	LLL51BF	D9I280000	9271393	MD	1.0	10/02/09 02:33		
180	LLL51CF	D9I280000	9271393	MD	1.0	10/02/09 02:36		
181	LLKE1F	D9I260174-1	9271393	MD	1.0	10/02/09 02:39		
182	LLKE1P5F	D9I260174	9271393		5.0	10/02/09 02:41		
183	LLKE1ZF	D9I260174-1	9271393		1.0	10/02/09 02:44		
184	LLKE1SF	D9I260174-1	9271393	MD	1.0	10/02/09 02:47		
185	CCV				1.0	10/02/09 02:50		
186	CCB				1.0	10/02/09 02:52		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
187	RLCV				1.0	10/02/09 02:55		
188	LLKE1DF	D9I260174-1	9271393	MD	1.0	10/02/09 02:58		
189	LLKE3F	D9I260174-2	9271393	MD	1.0	10/02/09 03:01		
190	LLKE4F	D9I260174-3	9271393	MD	1.0	10/02/09 03:04		
191	LLKE5F	D9I260174-4	9271393	MD	1.0	10/02/09 03:06		
192	LLKE6F	D9I260174-5	9271393	MD	1.0	10/02/09 03:09		
193	LLKE7F	D9I260174-6	9271393	MD	1.0	10/02/09 03:12		
194	CCV				1.0	10/02/09 03:15		
195	CCB				1.0	10/02/09 03:18		
196	RLCV				1.0	10/02/09 03:20		
197	~~LLL2HB~~	~~D9I280000~~	~~9271354~~	~~MS~~	~~1.0~~	~~10/02/09 03:23~~		
198	LLL2HC	D9I280000	9271354	MS	1.0	10/02/09 03:26		
199	LLJFA	D9I250319-1	9271354	MS	1.0	10/02/09 03:29		
200	LLJFAP5	D9I250319	9271354		5.0	10/02/09 03:31		
201	LLJFAZ	D9I250319-1	9271354		1.0	10/02/09 03:34		
202	LLJFAS	D9I250319-1	9271354	MS	1.0	10/02/09 03:37		
203	LLJFAD	D9I250319-1	9271354	MS	1.0	10/02/09 03:39		
204	LLJGD	D9I250319-2	9271354	MS	1.0	10/02/09 03:42		
205	LLJGF	D9I250319-3	9271354	MS	1.0	10/02/09 03:45		
206	LLJGG	D9I250319-4	9271354	MS	1.0	10/02/09 03:47		
207	CCV				1.0	10/02/09 03:50		
208	CCB				1.0	10/02/09 03:53		
209	RLCV				1.0	10/02/09 03:56		
210	RINSE				1.0	10/02/09 03:58		
211	RINSE				1.0	10/02/09 04:01		
212	RINSE				1.0	10/02/09 04:04		
213	RINSE				1.0	10/02/09 04:07		
214	RINSE				1.0	10/02/09 04:09		
215	RINSE				1.0	10/02/09 04:12		
216	RINSE				1.0	10/02/09 04:15		
217	~~Cal Blank~~				1.0	10/02/09 04:17	FF 10/2/09 Did not use.	
218	Cal Blank				1.0	10/02/09 04:20		
219	100 ppb				1.0	10/02/09 04:23		
220	CCV				1.0	10/02/09 04:26		
221	CCB				1.0	10/02/09 04:28		
222	RLCV				1.0	10/02/09 04:31		
223	LLL0WB	D9I280000	9271338	MS	1.0	10/02/09 04:34		
224	LLL0WC	D9I280000	9271338	MS	1.0	10/02/09 04:37		
225	LLG32 5X	D9I250174-1	9271338	MS	5.0	10/02/09 04:40		
226	LLG32P25	D9I250174	9271338		25.0	10/02/09 04:42		
227	LLG32Z	D9I250174-1	9271338		1.0	10/02/09 04:45		
228	LLG32S 5X	D9I250174-1	9271338	MS	5.0	10/02/09 04:48		
229	LLG32D 5X	D9I250174-1	9271338	MS	5.0	10/02/09 04:51		
230	LLKFN	D9I260177-1	9271338	MS	1.0	10/02/09 04:53		
231	LLKFP 5X	D9I260178-1	9271338	MS	5.0	10/02/09 04:56		
232	LLKFR 5X	D9I260178-2	9271338	MS	5.0	10/02/09 04:59		

Denver

RUN SUMMARY

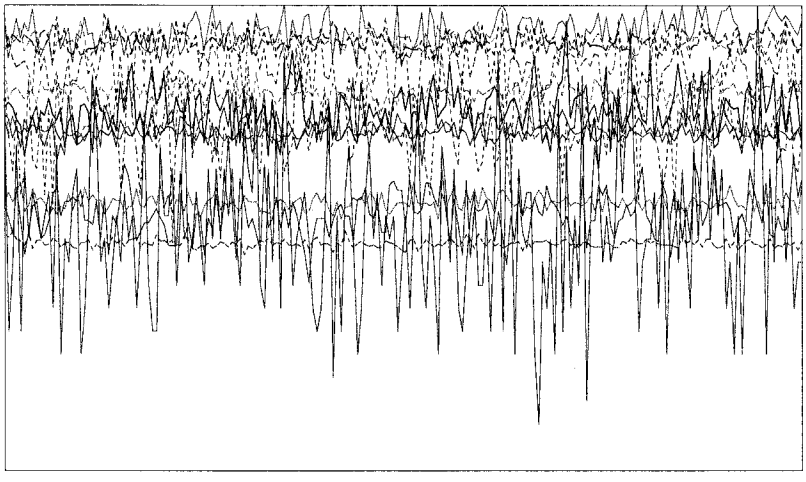
Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: **AG100109** **Analyst: TEL**

#	Sample ID	Lot No.	Batch	DF	Analyzed Date	Comment	Q
233	CCV			1.0	10/02/09 05:02		☐
234	CCB			1.0	10/02/09 05:05		☐
235	RLCV			1.0	10/02/09 05:07		☐

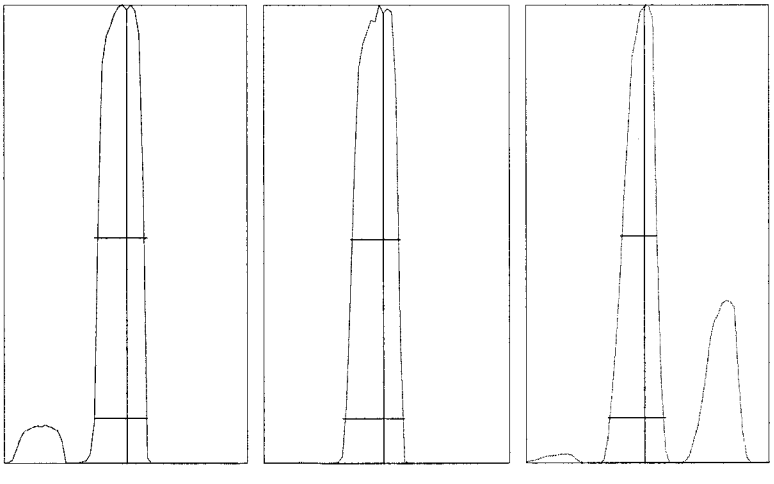
Tune Report

Tune File : NORM.U
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	1.5300 sec	
n:	200	
Oxide:	156/140	1.185%
Doubly Charged:	70/140	0.920%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1418.0	1485.4	4.29	0.80
7	20,000	19338.0	18865.5	3.47	1.30
59	50,000	30918.0	28938.0	2.77	1.60
63	200	126.0	110.7	9.12	1.00
70	500	347.0	388.5	6.55	2.00
75	20	9.0	10.5	31.63	1.70
78	500	429.0	432.8	5.29	2.00
89	50,000	45446.0	45999.3	2.12	1.60
115	50,000	40396.0	40695.5	2.21	2.20
118	200	144.0	147.9	9.54	2.00
137	5,000	4617.0	4614.9	2.35	2.20
205	50,000	24885.0	24518.4	1.76	3.30
238	50,000	37409.0	36295.4	1.68	4.60
156/140	2	1.156%	1.196%	6.45	
70/140	2	0.839%	0.953%	7.04	



m/z:	7	89	205
Height:	18,568	45,991	24,737
Axis:	7.05	89.00	205.00
W-50%:	0.65	0.60	0.45
W-10%:	0.6500	0.7500	0.700

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : Oct 01, 2009 17:59:12
Printed : Oct 01, 2009 17:59:14

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1600 W	Extract 1	:	0 V	AMU Gain	:	133
RF Matching	:	1.7 V	Extract 2	:	-175 V	AMU Offset	:	124
Smpl Depth	:	8 mm	Omega Bias-ce	:	-30 V	Axis Gain	:	1.0006
Torch-H	:	-0.8 mm	Omega Lens-ce	:	1.4 V	Axis Offset	:	-0.03
Torch-V	:	-0.3 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	0.83 L/min	QP Focus	:	7 V			
Makeup Gas	:	0.23 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1770 V
Sample Pump	:	--- rps	OctP RF	:	180 V	Pulse HV	:	1480 V
S/C Temp	:	2 degC	OctP Bias	:	-18 V			

===Reaction Cell===

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

Generated : Oct 01, 2009 17:59:12
Printed : Oct 01, 2009 17:59:17

P/A Factor Tuning Report

Acquired:Oct 1 2009 06:08 pm

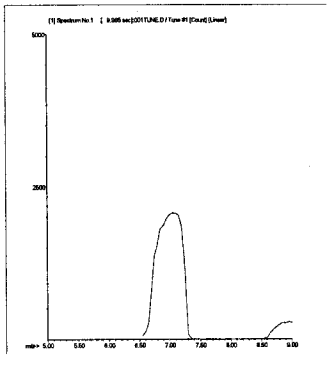
Mass[amu]	Element	P/A Factor
6	Li	0.053397
7	(Li)	Sensitivity too low
9	Be	0.059616
23	Na	0.066572
24	Mg	0.068529
27	Al	0.070000
39	K	0.069595
43	Ca	Sensitivity too low
45	Sc	0.070407
51	V	0.071744
52	Cr	0.073286
53	(Cr)	Sensitivity too low
55	Mn	0.074579
57	Fe	Sensitivity too low
59	Co	0.076853
60	Ni	0.077333
63	Cu	0.078465
66	Zn	0.078404
72	Ge	0.078192
75	As	0.077469
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
93	Nb	Sensitivity too low
95	Mo	0.078956
98	(Mo)	0.078577
99	(Mo)	0.079319
105	Pd	0.081369
106	(Cd)	0.081156
107	Ag	Sensitivity too low
108	(Cd)	0.081602
111	Cd	0.081657
115	In	0.081201
118	Sn	0.081109
121	Sb	0.081006
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
182	W	Sensitivity too low
195	Pt	Sensitivity too low
205	Tl	0.086508
206	(Pb)	0.085377
207	(Pb)	0.085402
208	Pb	0.084961
232	Th	0.084478
238	U	0.084465

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1770 V
Pulse HV: 1480 V

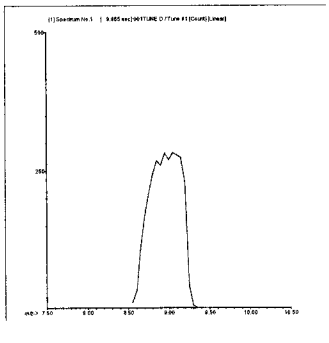
200.8 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\001TUNE.D
Date Acquired: Oct 1 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

Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
7 Li	21120	21123	21227	20965	21203	21084	0.50	5.00	
9 Be	2962	2982	2923	2978	2993	2936	1.04	5.00	
24 Mg	17300	17448	17205	17320	17121	17406	0.79	5.00	
59 Co	84694	85152	83905	84546	85214	84656	0.63	5.00	
115 In	1446742	1453303	1440055	1441477	1439772	1459106	0.62	5.00	
208 Pb	77660	78148	78258	77691	77999	76203	1.08	5.00	
238 U	155575	158923	156139	154005	154901	153908	1.33	5.00	

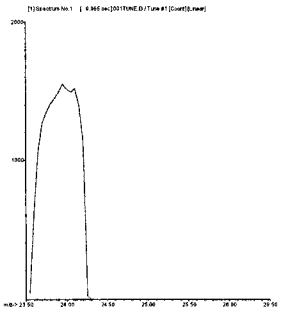


7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\AG100109.B\001TUNE.D



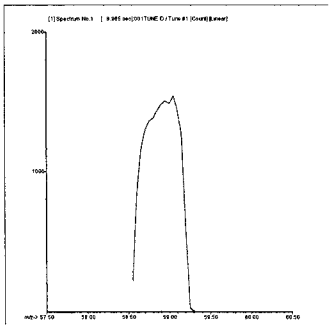
24 Mg

Mass Calib.

Actual: 24.00
Required: 23.90 - 24.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



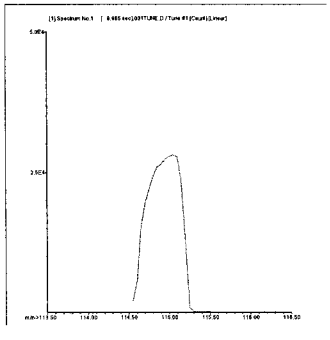
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



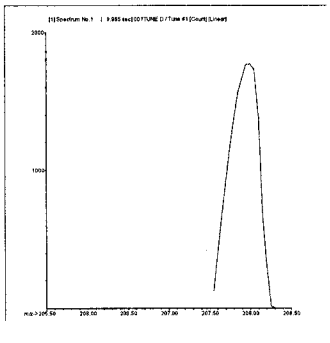
115 In

Mass Calib.

Actual: 115.00
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



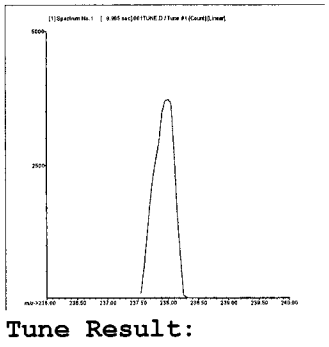
208 Pb

Mass Calib.

Actual: 207.95
Required: 207.90 - 208.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



238 U

Mass Calib.

Actual: 237.95
Required: 237.90 - 238.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:

Tune Result: Pass

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\002CALB.D\002CALB.D#
Date Acquired: Oct 1 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: Oct 01 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	-330	10.49
52	Cr	72	1	3414	7.36
55	Mn	72	1	763	24.66
59	Co	72	1	113	13.48
60	Ni	72	1	110	31.49
63	Cu	72	1	363	15.16
66	Zn	72	1	1211	2.65
75	As	72	1	43	14.84
78	Se	72	1	547	30.85
95	Mo	72	1	87	66.62
107	Ag	115	1	13	86.60
111	Cd	115	1	1	2229.70
118	Sn	115	1	223	28.44
121	Sb	115	1	41	26.06
137	Ba	115	1	24	43.84
205	Tl	165	1	257	19.13
208	Pb	165	1	299	4.51
232	Th	165	1	310	22.58
238	U	165	1	97	21.53

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	412395	1.23
45	Sc	1	1844727	0.81
72	Ge	1	917770	0.74
115	In	1	2585848	2.23
165	Ho	1	4169058	0.85

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

10/1/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\003CALB.D\003CALB.D#
Date Acquired: Oct 1 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: Oct 01 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	-149	226.83
52	Cr	72	1	3601	6.79
55	Mn	72	1	807	7.05
59	Co	72	1	87	56.92
60	Ni	72	1	103	14.78
63	Cu	72	1	377	9.32
66	Zn	72	1	566	4.91
75	As	72	1	39	19.25
78	Se	72	1	673	16.89
95	Mo	72	1	57	10.19
107	Ag	115	1	13	43.30
111	Cd	115	1	4	134.17
118	Sn	115	1	363	30.32
121	Sb	115	1	24	28.39
137	Ba	115	1	22	34.64
205	Tl	165	1	140	14.48
208	Pb	165	1	241	7.09
232	Th	165	1	333	4.58
238	U	165	1	44	30.31

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	424253	0.39
45	Sc	1	1877617	1.09
72	Ge	1	929620	1.01
115	In	1	2590490	0.87
165	Ho	1	4147526	1.71

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\AG100109.B\004ICAL.D\004ICAL.D#
Date Acquired: Oct 1 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: Oct 01 2009 06:32 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	56189	1.29
51	V	72	1	1135395	1.62
52	Cr	72	1	1155393	0.74
55	Mn	72	1	1288330	0.89
59	Co	72	1	1411854	0.17
60	Ni	72	1	317309	1.13
63	Cu	72	1	762107	0.71
66	Zn	72	1	178097	0.91
75	As	72	1	143339	0.56
78	Se	72	1	25361	2.25
95	Mo	72	1	395006	1.25
107	Ag	115	1	1137415	1.68
111	Cd	115	1	225410	1.21
118	Sn	115	1	629786	1.03
121	Sb	115	1	751086	0.43
137	Ba	115	1	303305	0.34
205	Tl	165	1	2230208	0.83
208	Pb	165	1	3097858	0.19
232	Th	165	1	2996395	3.47
238	U	165	1	3355338	0.64

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	418147	0.46	424253	98.6	30 - 120	
45	Sc	1	1864396	1.73	1877617	99.3	30 - 120	
72	Ge	1	927301	0.30	929620	99.8	30 - 120	
115	In	1	2591577	1.24	2590490	100.0	30 - 120	
165	Ho	1	4156902	1.09	4147526	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\AG100109.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\AG100109.B\005 ICV.D\005 ICV.D#
Date Acquired: Oct 1 2009 06:37 pm
Operator: TEL
Sample Name: ICV
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 01 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	40.59	ppb	1.42	40	101.5	90 - 110	
51 V	72	1	40.29	ppb	2.34	40	100.7	90 - 110	
52 Cr	72	1	40.83	ppb	2.20	40	102.1	90 - 110	
55 Mn	72	1	41.55	ppb	2.58	40	103.9	90 - 110	
59 Co	72	1	41.18	ppb	2.67	40	103.0	90 - 110	
60 Ni	72	1	41.76	ppb	2.25	40	104.4	90 - 110	
63 Cu	72	1	42.07	ppb	2.96	40	105.2	90 - 110	
66 Zn	72	1	40.97	ppb	2.52	40	102.4	90 - 110	
75 As	72	1	40.53	ppb	1.92	40	101.3	90 - 110	
78 Se	72	1	40.55	ppb	1.53	40	101.4	90 - 110	
95 Mo	72	1	41.17	ppb	3.35	40	102.9	90 - 110	
107 Ag	115	1	40.17	ppb	0.02	40	100.4	90 - 110	
111 Cd	115	1	41.17	ppb	1.39	40	102.9	90 - 110	
118 Sn	115	1	40.02	ppb	1.80	40	100.1	90 - 110	
121 Sb	115	1	39.26	ppb	0.33	40	98.2	90 - 110	
137 Ba	115	1	39.82	ppb	0.44	40	99.6	90 - 110	
205 Tl	165	1	41.67	ppb	1.16	40	104.2	90 - 110	
208 Pb	165	1	41.31	ppb	0.85	40	103.3	90 - 110	
232 Th	165	1	45.83	ppb	1.48	40	114.6	90 - 110	Fail
238 U	165	1	41.75	ppb	1.47	40	104.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	430781	0.40	424253	101.5	30 - 120	
45 Sc	1	1912182	0.89	1877617	101.8	30 - 120	
72 Ge	1	917159	1.75	929620	98.7	30 - 120	
115 In	1	2599203	0.96	2590490	100.3	30 - 120	
165 Ho	1	4115351	0.71	4147526	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\AG100109.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\AG100109.B\006WASH.D\006WASH.D#
Date Acquired: Oct 1 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: Oct 01 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	0.812 ppb	14.92	1.30	
51 V	72	1	5.199 ppb	3.44	6.50	
52 Cr	72	1	2.136 ppb	3.77	2.60	
55 Mn	72	1	1.068 ppb	4.03	1.30	
59 Co	72	1	1.055 ppb	1.33	1.30	
60 Ni	72	1	2.215 ppb	5.28	2.60	
63 Cu	72	1	2.193 ppb	1.46	2.60	
66 Zn	72	1	11.110 ppb	1.60	13.00	
75 As	72	1	5.266 ppb	2.56	6.50	
78 Se	72	1	5.144 ppb	17.16	6.50	
95 Mo	72	1	2.111 ppb	2.64	2.60	
107 Ag	115	1	5.302 ppb	0.95	6.50	
111 Cd	115	1	1.058 ppb	5.60	1.30	
118 Sn	115	1	10.350 ppb	0.13	13.00	
121 Sb	115	1	2.118 ppb	1.64	2.60	
137 Ba	115	1	1.034 ppb	1.50	1.30	
205 Tl	165	1	1.135 ppb	0.99	1.30	
208 Pb	165	1	1.073 ppb	1.68	1.30	
232 Th	165	1	2.843 ppb	3.53	2.60	
238 U	165	1	1.101 ppb	1.32	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	437590	1.28	424253	103.1	30 - 120	
45 Sc	1	1903029	0.10	1877617	101.4	30 - 120	
72 Ge	1	919247	0.90	929620	98.9	30 - 120	
115 In	1	2610439	0.36	2590490	100.8	30 - 120	
165 Ho	1	4158597	0.73	4147526	100.3	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\AG100109.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\AG100109.B\007 ICB.D\007 ICB.D#
Date Acquired: Oct 1 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: Oct 01 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	0.00	ppb	278.36	1.00	
52 Cr	72	1	-0.01	ppb	312.17	1.00	
55 Mn	72	1	0.02	ppb	88.96	1.00	
59 Co	72	1	0.00	ppb	30.73	1.00	
60 Ni	72	1	0.02	ppb	98.45	1.00	
63 Cu	72	1	0.03	ppb	32.92	1.00	
66 Zn	72	1	0.13	ppb	19.35	1.00	
75 As	72	1	0.00	ppb	713.76	1.00	
78 Se	72	1	-0.70	ppb	47.40	1.00	
95 Mo	72	1	0.03	ppb	49.91	1.00	
107 Ag	115	1	0.01	ppb	11.22	1.00	
111 Cd	115	1	0.00	ppb	161.52	1.00	
118 Sn	115	1	0.06	ppb	25.32	1.00	
121 Sb	115	1	0.08	ppb	14.33	1.00	
137 Ba	115	1	0.02	ppb	35.69	1.00	
205 Tl	165	1	0.02	ppb	8.96	1.00	
208 Pb	165	1	0.00	ppb	39.86	1.00	
232 Th	165	1	0.20	ppb	18.73	1.00	
238 U	165	1	0.00	ppb	26.02	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	440917	2.45	424253	103.9	30 - 120	
45 Sc	1	1961648	1.93	1877617	104.5	30 - 120	
72 Ge	1	951133	0.51	929620	102.3	30 - 120	
115 In	1	2626838	1.22	2590490	101.4	30 - 120	
165 Ho	1	4104472	0.62	4147526	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\AG100109.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\AG100109.B\008RLST.D\008RLST.D#
Date Acquired: Oct 1 2009 06:45 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: Oct 01 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	0.94	ppb	7.44	1	94.2	50 - 150	
51 V	72	1	0.99	ppb	0.67	1	98.9	50 - 150	
52 Cr	72	1	0.99	ppb	2.61	1	99.5	50 - 150	
55 Mn	72	1	1.07	ppb	0.95	1	106.7	50 - 150	
59 Co	72	1	1.06	ppb	1.51	1	106.0	50 - 150	
60 Ni	72	1	1.04	ppb	0.92	1	104.0	50 - 150	
63 Cu	72	1	1.06	ppb	3.64	1	105.9	50 - 150	
66 Zn	72	1	10.85	ppb	1.79	10	108.5	50 - 150	
75 As	72	1	1.05	ppb	4.28	1	104.5	50 - 150	
78 Se	72	1	1.03	ppb	24.35	1	102.5	50 - 150	
95 Mo	72	1	1.08	ppb	0.39	1	107.9	50 - 150	
107 Ag	115	1	1.00	ppb	2.95	1	99.8	50 - 150	
111 Cd	115	1	1.01	ppb	8.51	1	101.3	50 - 150	
118 Sn	115	1	10.49	ppb	0.40	10	104.9	50 - 150	
121 Sb	115	1	1.01	ppb	1.68	1	100.6	50 - 150	
137 Ba	115	1	0.99	ppb	1.48	1	99.0	50 - 150	
205 Tl	165	1	1.03	ppb	1.26	1	103.1	50 - 150	
208 Pb	165	1	1.04	ppb	1.02	1	103.7	50 - 150	
232 Th	165	1	1.08	ppb	1.05	1	108.4	50 - 150	
238 U	165	1	1.07	ppb	1.43	1	107.1	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	445045	0.40	424253	104.9	30 - 120	
45 Sc	1	1910372	1.18	1877617	101.7	30 - 120	
72 Ge	1	922983	1.19	929620	99.3	30 - 120	
115 In	1	2627930	0.44	2590490	101.4	30 - 120	
165 Ho	1	4116860	0.49	4147526	99.3	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\AG100109.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\AG100109.B\009AFCE.D\009AFCE.D#
Date Acquired: Oct 1 2009 06:48 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: Oct 01 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	0.22	ppb	34.75	0	118.4	80 - 120	
51 V	72	1	0.22	ppb	16.17	0	109.0	80 - 120	
52 Cr	72	1	0.22	ppb	12.14	0	111.6	80 - 120	
55 Mn	72	1	0.22	ppb	4.52	0	101.4	80 - 120	
59 Co	72	1	0.21	ppb	2.41	0	99.0	80 - 120	
60 Ni	72	1	0.21	ppb	6.80	0	102.8	80 - 120	
63 Cu	72	1	0.23	ppb	3.62	0	108.3	80 - 120	
66 Zn	72	1	2.09	ppb	3.90	2	96.3	80 - 120	
75 As	72	1	0.20	ppb	10.67	0	96.1	80 - 120	
78 Se	72	1	0.01	ppb	1930.20	0	6.1	80 - 120	
95 Mo	72	1	0.21	ppb	6.22	0	95.4	80 - 120	
107 Ag	115	1	0.19	ppb	14.55	0	96.8	80 - 120	
111 Cd	115	1	0.19	ppb	6.27	0	95.8	80 - 120	
118 Sn	115	1	2.07	ppb	3.66	2	98.9	80 - 120	
121 Sb	115	1	0.22	ppb	4.40	0	109.5	80 - 120	
137 Ba	115	1	0.20	ppb	6.71	0	102.2	80 - 120	
205 Tl	165	1	0.21	ppb	2.37	0	101.9	80 - 120	
208 Pb	165	1	0.21	ppb	0.14	0	101.7	80 - 120	
232 Th	165	1	0.25	ppb	2.92	0	113.7	80 - 120	
238 U	165	1	0.22	ppb	4.55	0	101.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	444927	1.05	424253	104.9	30 - 120	
45 Sc	1	1941365	0.98	1877617	103.4	30 - 120	
72 Ge	1	944785	2.54	929620	101.6	30 - 120	
115 In	1	2640251	0.46	2590490	101.9	30 - 120	
165 Ho	1	4151939	1.49	4147526	100.1	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\AG100109.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\AG100109.B\010SMPL.D\010SMPL.D#
Date Acquired: Oct 1 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: Oct 01 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	173.22	3600	
51 V	72	1	-0.02	-0.02	ppb	39.43	3600	
52 Cr	72	1	0.00	0.00	ppb	25237.00	3600	
55 Mn	72	1	0.01	0.01	ppb	80.75	3600	
59 Co	72	1	0.00	0.00	ppb	3678.60	3600	
60 Ni	72	1	0.00	0.00	ppb	927.74	3600	
63 Cu	72	1	0.02	0.02	ppb	82.16	3600	
66 Zn	72	1	0.73	0.73	ppb	2.56	3600	
75 As	72	1	0.01	0.01	ppb	20.29	3600	
78 Se	72	1	2.02	2.02	ppb	13.72	3600	
95 Mo	72	1	0.01	0.01	ppb	32.02	3600	
107 Ag	115	1	0.00	0.00	ppb	76.52	3600	
111 Cd	115	1	0.00	0.00	ppb	172.47	3600	
118 Sn	115	1	0.03	0.03	ppb	36.99	3600	
121 Sb	115	1	0.02	0.02	ppb	22.74	3600	
137 Ba	115	1	0.01	0.01	ppb	37.84	3600	
205 Tl	165	1	0.01	0.01	ppb	33.23	3600	
208 Pb	165	1	0.00	0.00	ppb	25.10	3600	
232 Th	165	1	0.02	0.02	ppb	23.72	1000	
238 U	165	1	0.00	0.00	ppb	55.20	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	448045	1.75	424253	105.6	30 - 120	
45 Sc	1	1970216	0.31	1877617	104.9	30 - 120	
72 Ge	1	947355	1.11	929620	101.9	30 - 120	
115 In	1	2624798	0.29	2590490	101.3	30 - 120	
165 Ho	1	4136620	1.26	4147526	99.7	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\AG100109.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\AG100109.B\011ICSA.D\011ICSA.D#
Date Acquired: Oct 1 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: Oct 01 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	0.02 ppb	86.80	1.00	
51 V	72	1	-0.21 ppb	115.93	1.00	
52 Cr	72	1	0.59 ppb	3.68	1.00	
55 Mn	72	1	3.52 ppb	1.21	1.00	
59 Co	72	1	1.48 ppb	0.57	1.00	
60 Ni	72	1	1.35 ppb	6.37	1.00	
63 Cu	72	1	1.40 ppb	3.82	1.00	
66 Zn	72	1	2.45 ppb	1.02	10.00	
75 As	72	1	0.37 ppb	8.38	1.00	
78 Se	72	1	0.01 ppb	6004.20	1.00	
95 Mo	72	1	2038.00 ppb	0.49	2000.00	
107 Ag	115	1	0.03 ppb	13.03	1.00	
111 Cd	115	1	0.11 ppb	182.64	1.00	
118 Sn	115	1	0.10 ppb	9.18	10.00	
121 Sb	115	1	0.29 ppb	5.22	1.00	
137 Ba	115	1	0.07 ppb	5.59	1.00	
205 Tl	165	1	0.04 ppb	24.24	1.00	
208 Pb	165	1	0.13 ppb	3.02	1.00	
232 Th	165	1	0.04 ppb	4.15	1.00	
238 U	165	1	0.01 ppb	9.14	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	278354	3.70	424253	65.6	30 - 120	
45 Sc	1	1383589	0.30	1877617	73.7	30 - 120	
72 Ge	1	702248	1.05	929620	75.5	30 - 120	
115 In	1	1963211	1.33	2590490	75.8	30 - 120	
165 Ho	1	3397050	0.26	4147526	81.9	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\AG100109.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\AG100109.B\012ICSB.D\012ICSB.D#
Date Acquired: Oct 1 2009 06:56 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: Oct 01 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	111.50	1.70	100	111.5	80 - 120	
51 V	72		1	95.04	2.07	100	95.0	80 - 120	
52 Cr	72		1	93.09	2.86	100	93.1	80 - 120	
55 Mn	72		1	98.40	2.13	100	98.4	80 - 120	
59 Co	72		1	94.00	0.64	100	94.0	80 - 120	
60 Ni	72		1	90.26	1.23	100	90.3	80 - 120	
63 Cu	72		1	89.74	2.04	100	89.7	80 - 120	
66 Zn	72		1	98.62	0.58	100	98.6	80 - 120	
75 As	72		1	100.50	0.47	100	100.5	80 - 120	
78 Se	72		1	105.60	2.20	100	105.6	80 - 120	
95 Mo	72		1	2186.00	1.73	2100	104.1	80 - 120	
107 Ag	115		1	87.41	2.66	100	87.4	80 - 120	
111 Cd	115		1	94.16	1.01	100	94.2	80 - 120	
118 Sn	115		1	99.21	0.90	100	99.2	80 - 120	
121 Sb	115		1	100.50	1.03	100	100.5	80 - 120	
137 Ba	115		1	99.86	1.46	100	99.9	80 - 120	
205 Tl	165		1	96.58	0.49	100	96.6	80 - 120	
208 Pb	165		1	95.57	1.30	100	95.6	80 - 120	
232 Th	165		1	111.10	0.37	100	111.1	80 - 120	
238 U	165		1	103.60	1.39	100	103.6	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	251332	2.59	424253	59.2	30 - 120	
45 Sc	1	1321075	0.71	1877617	70.4	30 - 120	
72 Ge	1	672340	1.12	929620	72.3	30 - 120	
115 In	1	1987321	1.05	2590490	76.7	30 - 120	
165 Ho	1	3390532	0.76	4147526	81.7	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\AG100109.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\AG100109.B\013SMPL.D\013SMPL.D#
Date Acquired: Oct 1 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: Oct 01 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	86.58	3600	
51 V	72	1	0.03	0.03	ppb	91.61	3600	
52 Cr	72	1	0.01	0.01	ppb	169.54	3600	
55 Mn	72	1	0.01	0.01	ppb	114.55	3600	
59 Co	72	1	0.01	0.01	ppb	48.11	3600	
60 Ni	72	1	0.01	0.01	ppb	115.70	3600	
63 Cu	72	1	0.03	0.03	ppb	43.33	3600	
66 Zn	72	1	0.41	0.41	ppb	6.69	3600	
75 As	72	1	0.01	0.01	ppb	74.60	3600	
78 Se	72	1	-0.44	-0.44	ppb	89.14	3600	
95 Mo	72	1	1.21	1.21	ppb	7.82	3600	
107 Ag	115	1	0.02	0.02	ppb	17.89	3600	
111 Cd	115	1	0.01	0.01	ppb	55.86	3600	
118 Sn	115	1	0.04	0.04	ppb	8.01	3600	
121 Sb	115	1	0.04	0.04	ppb	9.88	3600	
137 Ba	115	1	0.01	0.01	ppb	66.57	3600	
205 Tl	165	1	0.02	0.02	ppb	14.17	3600	
208 Pb	165	1	0.01	0.01	ppb	12.82	3600	
232 Th	165	1	0.57	0.57	ppb	23.06	1000	
238 U	165	1	0.02	0.02	ppb	4.88	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	407381	1.77	424253	96.0	30 - 120	
45 Sc	1	1795503	1.84	1877617	95.6	30 - 120	
72 Ge	1	913584	1.18	929620	98.3	30 - 120	
115 In	1	2543412	0.34	2590490	98.2	30 - 120	
165 Ho	1	4157495	0.97	4147526	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\AG100109.B\003CALB.D\003CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\014WASH.D\014WASH.D#
Date Acquired: Oct 1 2009 07:02 pm
Operator: TEL
Sample Name: LR1
Misc Info:
Vial Number: 2110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 01 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	1012.000 ppb	1.24	1.30	
51 V	72	1	924.700 ppb	1.60	6.50	
52 Cr	72	1	941.700 ppb	0.96	2.60	
55 Mn	72	1	958.800 ppb	1.60	1.30	
59 Co	72	1	974.400 ppb	1.33	1.30	
60 Ni	72	1	978.700 ppb	1.01	2.60	
63 Cu	72	1	945.200 ppb	0.49	2.60	
66 Zn	72	1	981.500 ppb	0.76	13.00	
75 As	72	1	989.300 ppb	1.40	6.50	
78 Se	72	1	1015.000 ppb	1.86	6.50	
95 Mo	72	1	985.600 ppb	2.05	2.60	
107 Ag	115	1	949.700 ppb	0.46	6.50	
111 Cd	115	1	986.100 ppb	0.36	1.30	
118 Sn	115	1	972.800 ppb	2.02	13.00	
121 Sb	115	1	949.700 ppb	2.03	2.60	
137 Ba	115	1	965.800 ppb	1.23	1.30	
205 Tl	165	1	970.700 ppb	1.48	1.30	
208 Pb	165	1	948.800 ppb	0.70	1.30	
232 Th	165	1	1057.000 ppb	0.79	2.60	
238 U	165	1	977.100 ppb	1.62	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	408751	1.37	424253	96.3	30 - 120	
45 Sc	1	1857060	0.98	1877617	98.9	30 - 120	
72 Ge	1	912352	0.89	929620	98.1	30 - 120	
115 In	1	2558921	1.38	2590490	98.8	30 - 120	
165 Ho	1	4171311	1.17	4147526	100.6	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\AG100109.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\AG100109.B\015SMPL.D\015SMPL.D#
Date Acquired: Oct 1 2009 07:04 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: Oct 01 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	0.11	0.11	ppb	63.64	3600	
51 V	72	1	0.12	0.12	ppb	8.02	3600	
52 Cr	72	1	0.08	0.08	ppb	29.85	3600	
55 Mn	72	1	0.08	0.08	ppb	24.69	3600	
59 Co	72	1	0.08	0.08	ppb	14.25	3600	
60 Ni	72	1	0.08	0.08	ppb	36.39	3600	
63 Cu	72	1	0.10	0.10	ppb	12.54	3600	
66 Zn	72	1	0.53	0.53	ppb	3.54	3600	
75 As	72	1	0.13	0.13	ppb	6.36	3600	
78 Se	72	1	0.21	0.21	ppb	269.36	3600	
95 Mo	72	1	0.71	0.71	ppb	2.15	3600	
107 Ag	115	1	0.11	0.11	ppb	13.04	3600	
111 Cd	115	1	0.08	0.08	ppb	9.01	3600	
118 Sn	115	1	0.93	0.93	ppb	7.52	3600	
121 Sb	115	1	0.44	0.44	ppb	6.36	3600	
137 Ba	115	1	0.07	0.07	ppb	8.38	3600	
205 Tl	165	1	0.25	0.25	ppb	18.30	3600	
208 Pb	165	1	0.09	0.09	ppb	16.22	3600	
232 Th	165	1	3.78	3.78	ppb	24.05	1000	
238 U	165	1	0.17	0.17	ppb	2.98	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	433543	0.20	424253	102.2	30 - 120	
45 Sc	1	1923376	1.21	1877617	102.4	30 - 120	
72 Ge	1	939701	1.08	929620	101.1	30 - 120	
115 In	1	2646594	1.98	2590490	102.2	30 - 120	
165 Ho	1	4233444	0.65	4147526	102.1	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\AG100109.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\AG100109.B\016 CCV.D\016 CCV.D#
Date Acquired: Oct 1 2009 07:07 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: Oct 01 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	50.27	ppb	2.65	50	100.5	90 - 110	
51 V	72	1	48.75	ppb	0.85	50	97.5	90 - 110	
52 Cr	72	1	49.09	ppb	1.82	50	98.2	90 - 110	
55 Mn	72	1	49.90	ppb	1.14	50	99.8	90 - 110	
59 Co	72	1	49.72	ppb	1.10	50	99.4	90 - 110	
60 Ni	72	1	50.49	ppb	1.36	50	101.0	90 - 110	
63 Cu	72	1	50.00	ppb	0.65	50	100.0	90 - 110	
66 Zn	72	1	49.42	ppb	0.69	50	98.8	90 - 110	
75 As	72	1	49.36	ppb	1.11	50	98.7	90 - 110	
78 Se	72	1	49.40	ppb	2.32	50	98.8	90 - 110	
95 Mo	72	1	48.66	ppb	1.22	50	97.3	90 - 110	
107 Ag	115	1	49.78	ppb	1.48	50	99.6	90 - 110	
111 Cd	115	1	49.69	ppb	1.84	50	99.4	90 - 110	
118 Sn	115	1	49.71	ppb	1.41	50	99.4	90 - 110	
121 Sb	115	1	49.47	ppb	1.48	50	98.9	90 - 110	
137 Ba	115	1	49.48	ppb	1.47	50	99.0	90 - 110	
205 Tl	165	1	50.18	ppb	0.78	50	100.4	90 - 110	
208 Pb	165	1	49.73	ppb	0.40	50	99.5	90 - 110	
232 Th	165	1	50.45	ppb	3.94	50	100.9	90 - 110	
238 U	165	1	49.80	ppb	1.07	50	99.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	441249	1.34	424253	104.0	30 - 120	
45 Sc	1	1943928	1.54	1877617	103.5	30 - 120	
72 Ge	1	956576	0.44	929620	102.9	30 - 120	
115 In	1	2657088	0.71	2590490	102.6	30 - 120	
165 Ho	1	4256240	1.14	4147526	102.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\017 CCB.D\017 CCB.D#
Date Acquired: Oct 1 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: Oct 01 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	0.011	ppb	173.22	1.00	
51 V	72	1	0.001	ppb	2695.20	1.00	
52 Cr	72	1	-0.007	ppb	148.95	1.00	
55 Mn	72	1	0.017	ppb	23.97	1.00	
59 Co	72	1	0.016	ppb	10.52	1.00	
60 Ni	72	1	0.020	ppb	43.66	1.00	
63 Cu	72	1	0.016	ppb	41.79	1.00	
66 Zn	72	1	0.525	ppb	3.65	1.00	
75 As	72	1	0.023	ppb	35.25	1.00	
78 Se	72	1	-0.249	ppb	118.76	1.00	
95 Mo	72	1	0.126	ppb	12.15	1.00	
107 Ag	115	1	0.021	ppb	10.63	1.00	
111 Cd	115	1	0.016	ppb	34.16	1.00	
118 Sn	115	1	0.266	ppb	12.84	1.00	
121 Sb	115	1	0.101	ppb	10.89	1.00	
137 Ba	115	1	0.019	ppb	47.95	1.00	
205 Tl	165	1	0.048	ppb	12.06	1.00	
208 Pb	165	1	0.019	ppb	20.68	1.00	
232 Th	165	1	1.011	ppb	17.40	1.00	Fail
238 U	165	1	0.027	ppb	7.17	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	446586	1.72	424253	105.3	30 - 120	
45 Sc	1	1952949	0.53	1877617	104.0	30 - 120	
72 Ge	1	942824	0.97	929620	101.4	30 - 120	
115 In	1	2649704	0.47	2590490	102.3	30 - 120	
165 Ho	1	4204942	1.35	4147526	101.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\018WASH.D\018WASH.D#
Date Acquired: Oct 1 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: Oct 01 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	0.923 ppb	23.81	1.30	
51 V	72	1	5.175 ppb	1.80	6.50	
52 Cr	72	1	2.057 ppb	2.73	2.60	
55 Mn	72	1	1.078 ppb	1.18	1.30	
59 Co	72	1	1.022 ppb	5.34	1.30	
60 Ni	72	1	2.184 ppb	1.80	2.60	
63 Cu	72	1	2.098 ppb	2.73	2.60	
66 Zn	72	1	10.810 ppb	0.94	13.00	
75 As	72	1	5.059 ppb	2.37	6.50	
78 Se	72	1	5.146 ppb	10.41	6.50	
95 Mo	72	1	2.056 ppb	5.86	2.60	
107 Ag	115	1	5.207 ppb	2.08	6.50	
111 Cd	115	1	1.075 ppb	3.84	1.30	
118 Sn	115	1	10.310 ppb	1.29	13.00	
121 Sb	115	1	1.972 ppb	1.18	2.60	
137 Ba	115	1	1.047 ppb	5.59	1.30	
205 Tl	165	1	1.126 ppb	0.87	1.30	
208 Pb	165	1	1.085 ppb	0.34	1.30	
232 Th	165	1	2.331 ppb	1.36	2.60	
238 U	165	1	1.087 ppb	1.17	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	462525	0.32	424253	109.0	30 - 120	
45 Sc	1	1984987	1.62	1877617	105.7	30 - 120	
72 Ge	1	965457	1.88	929620	103.9	30 - 120	
115 In	1	2661585	1.07	2590490	102.7	30 - 120	
165 Ho	1	4195336	0.48	4147526	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\019SMPL.D\019SMPL.D#
Date Acquired: Oct 1 2009 07:15 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 1
Misc Info: 100 PPB
Vial Number: 2201
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	96.25	96.25	ppb	1.95	3600	
51 V	72	1	98.03	98.03	ppb	2.38	3600	
52 Cr	72	1	98.35	98.35	ppb	2.38	3600	
55 Mn	72	1	99.85	99.85	ppb	2.34	3600	
59 Co	72	1	101.50	101.50	ppb	3.36	3600	
60 Ni	72	1	100.50	100.50	ppb	2.62	3600	
63 Cu	72	1	101.40	101.40	ppb	3.34	3600	
66 Zn	72	1	100.70	100.70	ppb	1.54	3600	
75 As	72	1	98.65	98.65	ppb	1.01	3600	
78 Se	72	1	99.06	99.06	ppb	2.61	3600	
95 Mo	72	1	96.94	96.94	ppb	1.12	3600	
107 Ag	115	1	98.38	98.38	ppb	1.26	3600	
111 Cd	115	1	97.03	97.03	ppb	0.83	3600	
118 Sn	115	1	98.43	98.43	ppb	0.85	3600	
121 Sb	115	1	97.06	97.06	ppb	0.47	3600	
137 Ba	115	1	96.69	96.69	ppb	1.13	3600	
205 Tl	165	1	98.34	98.34	ppb	1.02	3600	
208 Pb	165	1	98.00	98.00	ppb	1.51	3600	
232 Th	165	1	98.87	98.87	ppb	1.17	1000	
238 U	165	1	97.56	97.56	ppb	1.34	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	453798	2.18	424253	107.0	30 - 120	
45 Sc	1	1967336	1.45	1877617	104.8	30 - 120	
72 Ge	1	959835	1.81	929620	103.3	30 - 120	
115 In	1	2679709	0.42	2590490	103.4	30 - 120	
165 Ho	1	4198692	1.46	4147526	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\020SMPL.D\020SMPL.D#
Date Acquired: Oct 1 2009 07:18 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2202
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.02	0.02	ppb	100.32	3600	
51 V	72	1	0.04	0.04	ppb	74.13	3600	
52 Cr	72	1	0.02	0.02	ppb	155.17	3600	
55 Mn	72	1	0.02	0.02	ppb	28.61	3600	
59 Co	72	1	0.01	0.01	ppb	4.47	3600	
60 Ni	72	1	0.02	0.02	ppb	49.35	3600	
63 Cu	72	1	0.23	0.23	ppb	9.11	3600	
66 Zn	72	1	0.06	0.06	ppb	17.14	3600	
75 As	72	1	0.02	0.02	ppb	34.11	3600	
78 Se	72	1	-0.01	-0.01	ppb	2884.90	3600	
95 Mo	72	1	0.10	0.10	ppb	6.28	3600	
107 Ag	115	1	0.02	0.02	ppb	8.82	3600	
111 Cd	115	1	0.02	0.02	ppb	46.19	3600	
118 Sn	115	1	0.19	0.19	ppb	19.30	3600	
121 Sb	115	1	0.09	0.09	ppb	8.64	3600	
137 Ba	115	1	0.01	0.01	ppb	33.73	3600	
205 Tl	165	1	0.05	0.05	ppb	12.09	3600	
208 Pb	165	1	0.02	0.02	ppb	4.33	3600	
232 Th	165	1	1.54	1.54	ppb	22.07	1000	
238 U	165	1	0.02	0.02	ppb	9.28	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	466663	1.20	424253	110.0	30 - 120	
45 Sc	1	1982743	0.62	1877617	105.6	30 - 120	
72 Ge	1	948031	1.42	929620	102.0	30 - 120	
115 In	1	2626862	1.33	2590490	101.4	30 - 120	
165 Ho	1	4171845	0.88	4147526	100.6	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\AG100109.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\AG100109.B\021SMPL.D\021SMPL.D#
Date Acquired: Oct 1 2009 07:21 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 2
Misc Info: 1000 PPB
Vial Number: 2203
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	1,018.00	1018.00	ppb	1.15	3600	
51 V	72	1	925.70	925.70	ppb	2.20	3600	
52 Cr	72	1	931.90	931.90	ppb	2.22	3600	
55 Mn	72	1	951.20	951.20	ppb	1.72	3600	
59 Co	72	1	948.20	948.20	ppb	1.45	3600	
60 Ni	72	1	973.50	973.50	ppb	1.51	3600	
63 Cu	72	1	951.30	951.30	ppb	1.39	3600	
66 Zn	72	1	958.20	958.20	ppb	0.61	3600	
75 As	72	1	984.10	984.10	ppb	1.10	3600	
78 Se	72	1	1,012.00	1012.00	ppb	1.67	3600	
95 Mo	72	1	954.00	954.00	ppb	1.44	3600	
107 Ag	115	1	951.30	951.30	ppb	1.36	3600	
111 Cd	115	1	976.40	976.40	ppb	1.49	3600	
118 Sn	115	1	955.10	955.10	ppb	0.97	3600	
121 Sb	115	1	943.80	943.80	ppb	1.46	3600	
137 Ba	115	1	967.80	967.80	ppb	1.31	3600	
205 Tl	165	1	952.90	952.90	ppb	0.26	3600	
208 Pb	165	1	931.70	931.70	ppb	0.49	3600	
232 Th	165	1	1,031.00	1031.00	ppb	1.97	1000	>LDR
238 U	165	1	959.90	959.90	ppb	0.97	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	454694	0.83	424253	107.2	30 - 120	
45 Sc	1	1958310	0.83	1877617	104.3	30 - 120	
72 Ge	1	953449	1.24	929620	102.6	30 - 120	
115 In	1	2593185	1.34	2590490	100.1	30 - 120	
165 Ho	1	4163057	0.49	4147526	100.4	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\AG100109.B\003CALB.D\003CALB.D#

1 :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\AG100109.B\022SMPL.D\022SMPL.D#
Date Acquired: Oct 1 2009 07:23 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.07	0.07	ppb	80.67	3600	
51 V	72	1	0.10	0.10	ppb	23.20	3600	
52 Cr	72	1	0.17	0.17	ppb	8.58	3600	
55 Mn	72	1	0.09	0.09	ppb	21.89	3600	
59 Co	72	1	0.08	0.08	ppb	11.76	3600	
60 Ni	72	1	0.13	0.13	ppb	30.22	3600	
63 Cu	72	1	0.11	0.11	ppb	15.84	3600	
66 Zn	72	1	0.08	0.08	ppb	9.42	3600	
75 As	72	1	0.13	0.13	ppb	19.28	3600	
78 Se	72	1	-0.01	-0.01	ppb	1872.30	3600	
95 Mo	72	1	0.61	0.61	ppb	3.73	3600	
107 Ag	115	1	0.18	0.18	ppb	60.91	3600	
111 Cd	115	1	0.11	0.11	ppb	21.75	3600	
118 Sn	115	1	0.96	0.96	ppb	12.10	3600	
121 Sb	115	1	0.45	0.45	ppb	9.37	3600	
137 Ba	115	1	0.08	0.08	ppb	13.08	3600	
205 Tl	165	1	0.25	0.25	ppb	17.86	3600	
208 Pb	165	1	0.09	0.09	ppb	22.16	3600	
232 Th	165	1	4.20	4.20	ppb	24.82	1000	
238 U	165	1	0.17	0.17	ppb	4.50	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	467599	0.91	424253	110.2	30 - 120	
45 Sc	1	2001812	0.96	1877617	106.6	30 - 120	
72 Ge	1	967061	1.09	929620	104.0	30 - 120	
115 In	1	2639808	0.54	2590490	101.9	30 - 120	
165 Ho	1	4180597	0.75	4147526	100.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\023SMPL.D\023SMPL.D#
Date Acquired: Oct 1 2009 07:26 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 3
Misc Info: 2000 PPB
Vial Number: 2205
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	1,941.00	1941.00	ppb	2.31	3600	
51 V	72	1	1,849.00	1849.00	ppb	1.42	3600	
52 Cr	72	1	1,885.00	1885.00	ppb	2.59	3600	
55 Mn	72	1	1,902.00	1902.00	ppb	1.43	3600	
59 Co	72	1	1,908.00	1908.00	ppb	2.53	3600	
60 Ni	72	1	1,922.00	1922.00	ppb	1.25	3600	
63 Cu	72	1	1,916.00	1916.00	ppb	2.14	3600	
66 Zn	72	1	1,890.00	1890.00	ppb	0.23	3600	
75 As	72	1	1,926.00	1926.00	ppb	1.01	3600	
78 Se	72	1	2,018.00	2018.00	ppb	0.43	3600	
95 Mo	72	1	1,888.00	1888.00	ppb	1.54	3600	
107 Ag	115	1	1,893.00	1893.00	ppb	1.61	3600	
111 Cd	115	1	1,914.00	1914.00	ppb	1.05	3600	
118 Sn	115	1	1,932.00	1932.00	ppb	0.55	3600	
121 Sb	115	1	1,885.00	1885.00	ppb	1.12	3600	
137 Ba	115	1	1,902.00	1902.00	ppb	2.16	3600	
205 Tl	165	1	1,927.00	1927.00	ppb	0.41	3600	
208 Pb	165	1	1,878.00	1878.00	ppb	0.91	3600	
232 Th	165	1	2,082.00	2082.00	ppb	1.75	1000	>LDR
238 U	165	1	1,921.00	1921.00	ppb	1.41	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	467215	1.74	424253	110.1	30 - 120	
45 Sc	1	1937791	1.38	1877617	103.2	30 - 120	
72 Ge	1	944771	0.43	929620	101.6	30 - 120	
115 In	1	2552381	1.18	2590490	98.5	30 - 120	
165 Ho	1	4083581	0.94	4147526	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\AG100109.B\003CALB.D\003CALB.D#

1 :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\AG100109.B\024SMPL.D\024SMPL.D#
Date Acquired: Oct 1 2009 07:29 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2206
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.15	0.15	ppb	46.50	3600	
51 V	72	1	0.19	0.19	ppb	6.27	3600	
52 Cr	72	1	0.14	0.14	ppb	28.16	3600	
55 Mn	72	1	0.16	0.16	ppb	2.85	3600	
59 Co	72	1	0.17	0.17	ppb	14.56	3600	
60 Ni	72	1	0.18	0.18	ppb	27.04	3600	
63 Cu	72	1	0.19	0.19	ppb	24.76	3600	
66 Zn	72	1	0.13	0.13	ppb	28.21	3600	
75 As	72	1	0.27	0.27	ppb	14.01	3600	
78 Se	72	1	0.16	0.16	ppb	45.43	3600	
95 Mo	72	1	1.15	1.15	ppb	4.04	3600	
107 Ag	115	1	0.29	0.29	ppb	22.64	3600	
111 Cd	115	1	0.19	0.19	ppb	27.95	3600	
118 Sn	115	1	1.79	1.79	ppb	10.86	3600	
121 Sb	115	1	0.76	0.76	ppb	5.15	3600	
137 Ba	115	1	0.17	0.17	ppb	9.26	3600	
205 Tl	165	1	0.46	0.46	ppb	18.89	3600	
208 Pb	165	1	0.18	0.18	ppb	18.63	3600	
232 Th	165	1	5.34	5.34	ppb	24.49	1000	
238 U	165	1	0.33	0.33	ppb	5.11	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	482885	3.05	424253	113.8	30 - 120	
45 Sc	1	2032031	1.25	1877617	108.2	30 - 120	
72 Ge	1	970707	0.76	929620	104.4	30 - 120	
115 In	1	2663391	0.76	2590490	102.8	30 - 120	
165 Ho	1	4168305	1.61	4147526	100.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\025SMPL.D\025SMPL.D#
Date Acquired: Oct 1 2009 07:31 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 4
Misc Info: 4000 PPB
Vial Number: 2207
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	3,904.00	3904.00	ppb	0.22	3600	>LDR
51 V	72	1	3,786.00	3786.00	ppb	2.25	3600	>LDR
52 Cr	72	1	3,814.00	3814.00	ppb	1.66	3600	>LDR
55 Mn	72	1	3,862.00	3862.00	ppb	1.27	3600	>LDR
59 Co	72	1	3,903.00	3903.00	ppb	0.55	3600	>LDR
60 Ni	72	1	3,873.00	3873.00	ppb	0.54	3600	>LDR
63 Cu	72	1	3,828.00	3828.00	ppb	1.32	3600	>LDR
66 Zn	72	1	3,774.00	3774.00	ppb	0.95	3600	>LDR
75 As	72	1	3,873.00	3873.00	ppb	1.05	3600	>LDR
78 Se	72	1	4,177.00	4177.00	ppb	0.44	3600	>LDR
95 Mo	72	1	3,817.00	3817.00	ppb	1.21	3600	>LDR
107 Ag	115	1	3,848.00	3848.00	ppb	0.73	3600	>LDR
111 Cd	115	1	3,894.00	3894.00	ppb	1.21	3600	>LDR
118 Sn	115	1	3,914.00	3914.00	ppb	1.32	3600	>LDR
121 Sb	115	1	3,868.00	3868.00	ppb	0.22	3600	>LDR
137 Ba	115	1	3,874.00	3874.00	ppb	1.37	3600	>LDR
205 Tl	165	1	3,811.00	3811.00	ppb	0.20	3600	>LDR
208 Pb	165	1	3,736.00	3736.00	ppb	0.71	3600	>LDR
232 Th	165	1	4,187.00	4187.00	ppb	0.37	1000	>LDR
238 U	165	1	3,853.00	3853.00	ppb	0.51	3600	>LDR

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	469228	1.30	424253	110.6	30 - 120	
45 Sc	1	1971887	0.43	1877617	105.0	30 - 120	
72 Ge	1	935457	0.48	929620	100.6	30 - 120	
115 In	1	2464968	0.76	2590490	95.2	30 - 120	
165 Ho	1	4013358	0.57	4147526	96.8	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\AG100109.B\003CALB.D\003CALB.D#

20 :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\AG100109.B\026SMPL.D\026SMPL.D#
Date Acquired: Oct 1 2009 07:34 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2208
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.25	0.25	ppb	21.28	3600	
51 V	72	1	0.35	0.35	ppb	21.17	3600	
52 Cr	72	1	0.31	0.31	ppb	18.77	3600	
55 Mn	72	1	0.31	0.31	ppb	20.91	3600	
59 Co	72	1	0.33	0.33	ppb	18.14	3600	
60 Ni	72	1	0.29	0.29	ppb	30.15	3600	
63 Cu	72	1	0.35	0.35	ppb	23.12	3600	
66 Zn	72	1	0.33	0.33	ppb	29.26	3600	
75 As	72	1	0.42	0.42	ppb	14.32	3600	
78 Se	72	1	0.17	0.17	ppb	106.93	3600	
95 Mo	72	1	2.21	2.21	ppb	2.51	3600	
107 Ag	115	1	0.42	0.42	ppb	14.49	3600	
111 Cd	115	1	0.32	0.32	ppb	29.07	3600	
118 Sn	115	1	2.91	2.91	ppb	10.65	3600	
121 Sb	115	1	1.28	1.28	ppb	3.60	3600	
137 Ba	115	1	0.31	0.31	ppb	17.73	3600	
205 Tl	165	1	0.70	0.70	ppb	17.34	3600	
208 Pb	165	1	0.33	0.33	ppb	19.35	3600	
232 Th	165	1	6.19	6.19	ppb	22.52	1000	
238 U	165	1	0.58	0.58	ppb	2.54	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	494439	2.55	424253	116.5	30 - 120	
45 Sc	1	2029684	0.66	1877617	108.1	30 - 120	
72 Ge	1	972891	0.76	929620	104.7	30 - 120	
115 In	1	2642117	0.65	2590490	102.0	30 - 120	
165 Ho	1	4186534	0.50	4147526	100.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\027SMPL.D\027SMPL.D#
Date Acquired: Oct 1 2009 07:37 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD Mn
Misc Info: 20000 PPB
Vial Number: 2209
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.08	0.08	ppb	57.23	3600	
51 V	72	1	0.09	0.09	ppb	15.88	3600	
52 Cr	72	1	0.13	0.13	ppb	28.54	3600	
55 Mn	72	1	19,520.00	19520.00	ppb	0.30	3600	>LDR
59 Co	72	1	0.17	0.17	ppb	2.71	3600	
60 Ni	72	1	0.14	0.14	ppb	24.14	3600	
63 Cu	72	1	0.17	0.17	ppb	13.76	3600	
66 Zn	72	1	2.75	2.75	ppb	0.78	3600	
75 As	72	1	0.14	0.14	ppb	10.30	3600	
78 Se	72	1	0.07	0.07	ppb	860.39	3600	
95 Mo	72	1	0.46	0.46	ppb	4.82	3600	
107 Ag	115	1	0.16	0.16	ppb	7.07	3600	
111 Cd	115	1	0.08	0.08	ppb	14.85	3600	
118 Sn	115	1	0.92	0.92	ppb	19.94	3600	
121 Sb	115	1	0.38	0.38	ppb	5.82	3600	
137 Ba	115	1	0.13	0.13	ppb	9.33	3600	
205 Tl	165	1	0.18	0.18	ppb	10.02	3600	
208 Pb	165	1	0.13	0.13	ppb	8.93	3600	
232 Th	165	1	1.11	1.11	ppb	11.41	1000	
238 U	165	1	0.13	0.13	ppb	1.74	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	487624	1.70	424253	114.9	30 - 120	
45 Sc	1	2059213	0.54	1877617	109.7	30 - 120	
72 Ge	1	985180	0.89	929620	106.0	30 - 120	
115 In	1	2651984	0.71	2590490	102.4	30 - 120	
165 Ho	1	4150883	0.98	4147526	100.1	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\AG100109.B\003CALB.D\003CALB.D#

1 :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\AG100109.B\028SMPL.D\028SMPL.D#
Date Acquired: Oct 1 2009 07:39 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2210
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	86.59	3600	
51 V	72	1	0.03	0.03	ppb	79.66	3600	
52 Cr	72	1	0.04	0.04	ppb	89.44	3600	
55 Mn	72	1	2.01	2.01	ppb	16.19	3600	
59 Co	72	1	0.04	0.04	ppb	22.44	3600	
60 Ni	72	1	0.03	0.03	ppb	45.32	3600	
63 Cu	72	1	0.08	0.08	ppb	6.24	3600	
66 Zn	72	1	0.02	0.02	ppb	17.43	3600	
75 As	72	1	0.06	0.06	ppb	14.93	3600	
78 Se	72	1	0.34	0.34	ppb	106.96	3600	
95 Mo	72	1	0.18	0.18	ppb	14.44	3600	
107 Ag	115	1	0.03	0.03	ppb	16.11	3600	
111 Cd	115	1	0.03	0.03	ppb	53.95	3600	
118 Sn	115	1	0.55	0.55	ppb	16.24	3600	
121 Sb	115	1	0.19	0.19	ppb	10.37	3600	
137 Ba	115	1	0.03	0.03	ppb	26.08	3600	
205 Tl	165	1	0.06	0.06	ppb	0.68	3600	
208 Pb	165	1	0.03	0.03	ppb	5.14	3600	
232 Th	165	1	0.45	0.45	ppb	4.69	1000	
238 U	165	1	0.05	0.05	ppb	1.93	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	494145	1.15	424253	116.5	30 - 120	
45 Sc	1	2054958	0.57	1877617	109.4	30 - 120	
72 Ge	1	975042	1.77	929620	104.9	30 - 120	
115 In	1	2657589	0.09	2590490	102.6	30 - 120	
165 Ho	1	4131937	1.09	4147526	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\AG100109.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\AG100109.B\029 CCV.D\029 CCV.D#
Date Acquired: Oct 1 2009 07:42 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: Oct 01 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	47.95 ppb	1.60	50	95.9	90 - 110	
51 V	72	1	49.98 ppb	0.99	50	100.0	90 - 110	
52 Cr	72	1	50.43 ppb	2.00	50	100.9	90 - 110	
55 Mn	72	1	51.44 ppb	1.48	50	102.9	90 - 110	
59 Co	72	1	52.12 ppb	1.20	50	104.2	90 - 110	
60 Ni	72	1	51.50 ppb	1.17	50	103.0	90 - 110	
63 Cu	72	1	51.73 ppb	2.12	50	103.5	90 - 110	
66 Zn	72	1	49.82 ppb	1.96	50	99.6	90 - 110	
75 As	72	1	49.78 ppb	1.58	50	99.6	90 - 110	
78 Se	72	1	50.62 ppb	3.16	50	101.2	90 - 110	
95 Mo	72	1	49.10 ppb	1.69	50	98.2	90 - 110	
107 Ag	115	1	50.79 ppb	1.34	50	101.6	90 - 110	
111 Cd	115	1	49.31 ppb	1.56	50	98.6	90 - 110	
118 Sn	115	1	50.36 ppb	2.02	50	100.7	90 - 110	
121 Sb	115	1	49.68 ppb	0.72	50	99.4	90 - 110	
137 Ba	115	1	49.60 ppb	1.75	50	99.2	90 - 110	
205 Tl	165	1	50.43 ppb	1.34	50	100.9	90 - 110	
208 Pb	165	1	50.02 ppb	0.93	50	100.0	90 - 110	
232 Th	165	1	49.64 ppb	2.35	50	99.3	90 - 110	
238 U	165	1	50.27 ppb	1.05	50	100.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	495474	2.26	424253	116.8	30 - 120	
45 Sc	1	2043735	1.42	1877617	108.8	30 - 120	
72 Ge	1	975644	0.99	929620	105.0	30 - 120	
115 In	1	2654198	0.61	2590490	102.5	30 - 120	
165 Ho	1	4155379	0.59	4147526	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\AG100109.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\AG100109.B\030 CCB.D\030 CCB.D#
Date Acquired: Oct 1 2009 07:45 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: Oct 01 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	0.010	ppb	86.59	1.00	
51 V	72	1	0.023	ppb	179.34	1.00	
52 Cr	72	1	0.003	ppb	504.24	1.00	
55 Mn	72	1	0.200	ppb	8.82	1.00	
59 Co	72	1	0.024	ppb	8.20	1.00	
60 Ni	72	1	0.017	ppb	27.33	1.00	
63 Cu	72	1	0.034	ppb	25.52	1.00	
66 Zn	72	1	0.518	ppb	8.79	1.00	
75 As	72	1	0.041	ppb	24.36	1.00	
78 Se	72	1	-0.168	ppb	143.04	1.00	
95 Mo	72	1	0.104	ppb	7.50	1.00	
107 Ag	115	1	0.024	ppb	5.37	1.00	
111 Cd	115	1	0.013	ppb	19.88	1.00	
118 Sn	115	1	0.347	ppb	14.69	1.00	
121 Sb	115	1	0.122	ppb	11.64	1.00	
137 Ba	115	1	0.023	ppb	24.89	1.00	
205 Tl	165	1	0.054	ppb	15.69	1.00	
208 Pb	165	1	0.019	ppb	15.53	1.00	
232 Th	165	1	1.309	ppb	15.53	1.00	Fail
238 U	165	1	0.029	ppb	7.29	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	485022	0.55	424253	114.3	30 - 120	
45 Sc	1	2036196	0.25	1877617	108.4	30 - 120	
72 Ge	1	977050	0.64	929620	105.1	30 - 120	
115 In	1	2641500	0.53	2590490	102.0	30 - 120	
165 Ho	1	4128048	1.06	4147526	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\AG100109.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\AG100109.B\031WASH.D\031WASH.D#
Date Acquired: Oct 1 2009 07:48 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: Oct 01 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	0.953 ppb	26.91	1.30	
51 V	72	1	5.234 ppb	1.81	6.50	
52 Cr	72	1	2.132 ppb	2.35	2.60	
55 Mn	72	1	1.161 ppb	3.92	1.30	
59 Co	72	1	1.079 ppb	2.86	1.30	
60 Ni	72	1	2.158 ppb	4.04	2.60	
63 Cu	72	1	2.201 ppb	4.44	2.60	
66 Zn	72	1	11.000 ppb	0.70	13.00	
75 As	72	1	5.258 ppb	0.95	6.50	
78 Se	72	1	5.601 ppb	10.76	6.50	
95 Mo	72	1	2.081 ppb	1.45	2.60	
107 Ag	115	1	5.299 ppb	0.56	6.50	
111 Cd	115	1	1.067 ppb	2.52	1.30	
118 Sn	115	1	10.540 ppb	1.72	13.00	
121 Sb	115	1	2.047 ppb	0.94	2.60	
137 Ba	115	1	1.082 ppb	4.96	1.30	
205 Tl	165	1	1.122 ppb	1.73	1.30	
208 Pb	165	1	1.094 ppb	1.77	1.30	
232 Th	165	1	2.353 ppb	2.50	2.60	
238 U	165	1	1.092 ppb	0.96	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	496271	1.09	424253	117.0	30 - 120	
45 Sc	1	2060266	0.48	1877617	109.7	30 - 120	
72 Ge	1	975265	0.16	929620	104.9	30 - 120	
115 In	1	2645744	0.89	2590490	102.1	30 - 120	
165 Ho	1	4143290	1.56	4147526	99.9	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\AG100109.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: LRD

Date: 10/01/2009

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\096CALB.D\096CALB.D#
Date Acquired: Oct 1 2009 10:46 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: Oct 01 2009 10:44 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-117	214.88
52	Cr	72	1	3864	5.23
55	Mn	72	1	823	8.97
59	Co	72	1	107	14.15
60	Ni	72	1	153	25.98
63	Cu	72	1	3651	3.07
66	Zn	72	1	1889	2.36
75	As	72	1	51	3.01
78	Se	72	1	1220	5.38
95	Mo	72	1	287	11.92
107	Ag	115	1	27	57.15
111	Cd	115	1	6	419.43
118	Sn	115	1	650	11.28
121	Sb	115	1	84	34.73
137	Ba	115	1	47	32.06
205	Tl	165	1	120	12.47
208	Pb	165	1	293	11.65
232	Th	165	1	297	6.02
238	U	165	1	37	37.05

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	497821	0.49
45	Sc	1	2028015	1.12
72	Ge	1	952185	1.55
115	In	1	2535878	1.23
165	Ho	1	3780273	1.03

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\AG100109.B\097ICAL.D\097ICAL.D#
Date Acquired: Oct 1 2009 10:48 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: Oct 01 2009 10:46 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	60359	1.56
51	V	72	1	1204800	0.67
52	Cr	72	1	1207832	3.23
55	Mn	72	1	1357388	1.21
59	Co	72	1	1509411	1.57
60	Ni	72	1	336166	1.09
63	Cu	72	1	806265	1.15
66	Zn	72	1	177999	0.96
75	As	72	1	148201	0.95
78	Se	72	1	26917	1.71
95	Mo	72	1	391851	1.45
107	Ag	115	1	1126720	1.22
111	Cd	115	1	215255	2.05
118	Sn	115	1	613660	2.12
121	Sb	115	1	707419	1.76
137	Ba	115	1	297206	1.71
205	Tl	165	1	2007173	0.52
208	Pb	165	1	2741282	0.93
232	Th	165	1	2606070	2.92
238	U	165	1	2895153	0.44

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	499772	1.15	497821	100.4	30 - 120	
45	Sc	1	2019921	0.95	2028015	99.6	30 - 120	
72	Ge	1	942102	0.87	952185	98.9	30 - 120	
115	In	1	2538567	1.10	2535878	100.1	30 - 120	
165	Ho	1	3780173	0.85	3780273	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\AG100109.B\096CALB.D\096CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\098 CCV.D\098 CCV.D#
Date Acquired: Oct 1 2009 10:51 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: Oct 01 2009 10:49 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.45	ppb	0.20	50	100.9	90 - 110	
51 V	72	1	48.96	ppb	2.46	50	97.9	90 - 110	
52 Cr	72	1	49.31	ppb	1.01	50	98.6	90 - 110	
55 Mn	72	1	49.24	ppb	2.28	50	98.5	90 - 110	
59 Co	72	1	49.03	ppb	1.57	50	98.1	90 - 110	
60 Ni	72	1	50.78	ppb	1.48	50	101.6	90 - 110	
63 Cu	72	1	50.03	ppb	2.22	50	100.1	90 - 110	
66 Zn	72	1	48.95	ppb	2.20	50	97.9	90 - 110	
75 As	72	1	49.40	ppb	1.32	50	98.8	90 - 110	
78 Se	72	1	49.52	ppb	2.17	50	99.0	90 - 110	
95 Mo	72	1	49.68	ppb	0.53	50	99.4	90 - 110	
107 Ag	115	1	49.47	ppb	1.30	50	98.9	90 - 110	
111 Cd	115	1	49.47	ppb	1.80	50	98.9	90 - 110	
118 Sn	115	1	49.52	ppb	1.64	50	99.0	90 - 110	
121 Sb	115	1	49.69	ppb	2.12	50	99.4	90 - 110	
137 Ba	115	1	49.86	ppb	1.09	50	99.7	90 - 110	
205 Tl	165	1	50.89	ppb	2.07	50	101.8	90 - 110	
208 Pb	165	1	50.30	ppb	0.47	50	100.6	90 - 110	
232 Th	165	1	52.37	ppb	3.03	50	104.7	90 - 110	
238 U	165	1	51.05	ppb	1.28	50	102.1	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	497386	1.86	497821	99.9	30 - 120	
45 Sc	1	2009785	0.62	2028015	99.1	30 - 120	
72 Ge	1	946277	1.22	952185	99.4	30 - 120	
115 In	1	2543004	1.28	2535878	100.3	30 - 120	
165 Ho	1	3768341	1.34	3780273	99.7	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\AG100109.B\096CALB.D\096CALB.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\AG100109.B\099 CCB.D\099 CCB.D#
Date Acquired: Oct 1 2009 10:54 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: Oct 01 2009 10:49 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	0.016	ppb	100.24	1.00	
51 V	72	1	0.012	ppb	204.83	1.00	
52 Cr	72	1	0.003	ppb	574.01	1.00	
55 Mn	72	1	0.014	ppb	34.62	1.00	
59 Co	72	1	0.008	ppb	15.21	1.00	
60 Ni	72	1	0.000	ppb	2772.30	1.00	
63 Cu	72	1	-0.058	ppb	16.57	1.00	
66 Zn	72	1	-0.323	ppb	1.49	1.00	
75 As	72	1	0.017	ppb	28.20	1.00	
78 Se	72	1	-0.627	ppb	70.84	1.00	
95 Mo	72	1	0.020	ppb	23.38	1.00	
107 Ag	115	1	0.012	ppb	27.62	1.00	
111 Cd	115	1	0.013	ppb	60.43	1.00	
118 Sn	115	1	0.100	ppb	23.65	1.00	
121 Sb	115	1	0.054	ppb	19.18	1.00	
137 Ba	115	1	0.008	ppb	12.16	1.00	
205 Tl	165	1	0.038	ppb	6.18	1.00	
208 Pb	165	1	0.013	ppb	13.75	1.00	
232 Th	165	1	1.330	ppb	16.06	1.00	Fail
238 U	165	1	0.020	ppb	5.68	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	504088	0.39	497821	101.3	30 - 120	
45 Sc	1	2034723	0.30	2028015	100.3	30 - 120	
72 Ge	1	947996	1.02	952185	99.6	30 - 120	
115 In	1	2544365	1.12	2535878	100.3	30 - 120	
165 Ho	1	3780055	0.84	3780273	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\AG100109.B\096CALB.D\096CALB.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\AG100109.B\100WASH.D\100WASH.D#
Date Acquired: Oct 1 2009 10:56 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: Oct 01 2009 10:49 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	0.928 ppb	14.46	1.30	
51 V	72	1	5.181 ppb	1.70	6.50	
52 Cr	72	1	2.121 ppb	0.62	2.60	
55 Mn	72	1	1.056 ppb	2.93	1.30	
59 Co	72	1	1.013 ppb	4.80	1.30	
60 Ni	72	1	2.107 ppb	6.34	2.60	
63 Cu	72	1	1.992 ppb	2.81	2.60	
66 Zn	72	1	10.050 ppb	1.72	13.00	
75 As	72	1	5.201 ppb	1.17	6.50	
78 Se	72	1	4.294 ppb	19.68	6.50	
95 Mo	72	1	2.063 ppb	5.74	2.60	
107 Ag	115	1	5.231 ppb	1.17	6.50	
111 Cd	115	1	1.116 ppb	1.60	1.30	
118 Sn	115	1	10.310 ppb	2.04	13.00	
121 Sb	115	1	1.992 ppb	2.20	2.60	
137 Ba	115	1	1.077 ppb	3.59	1.30	
205 Tl	165	1	1.111 ppb	1.52	1.30	
208 Pb	165	1	1.090 ppb	1.88	1.30	
232 Th	165	1	2.362 ppb	2.55	2.60	
238 U	165	1	1.107 ppb	1.79	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	498992	1.80	497821	100.2	30 - 120	
45 Sc	1	2017855	1.23	2028015	99.5	30 - 120	
72 Ge	1	942446	0.78	952185	99.0	30 - 120	
115 In	1	2532130	0.55	2535878	99.9	30 - 120	
165 Ho	1	3767209	1.40	3780273	99.7	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\AG100109.B\096CALB.D\096CALB.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: 10/2/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\148CALB.D\148CALB.D#
Date Acquired: Oct 2 2009 01:08 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: Oct 02 2009 01:06 am
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-244	155.33
52	Cr	72	1	3784	3.35
55	Mn	72	1	707	2.80
59	Co	72	1	100	34.32
60	Ni	72	1	200	27.11
63	Cu	72	1	6088	2.65
66	Zn	72	1	1660	1.74
75	As	72	1	57	15.36
78	Se	72	1	1490	9.58
95	Mo	72	1	287	3.32
107	Ag	115	1	30	33.16
111	Cd	115	1	10	170.55
118	Sn	115	1	743	6.47
121	Sb	115	1	41	17.12
137	Ba	115	1	43	46.08
205	Tl	165	1	74	14.92
208	Pb	165	1	242	16.04
232	Th	165	1	213	36.73
238	U	165	1	26	66.31

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	488250	0.44
45	Sc	1	1934674	0.79
72	Ge	1	888023	0.71
115	In	1	2419559	1.22
165	Ho	1	3622281	1.01

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\AG100109.B\149ICAL.D\149ICAL.D#
Date Acquired: Oct 2 2009 01:11 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: Oct 02 2009 01:09 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	57370	1.01
51	V	72	1	1132928	1.14
52	Cr	72	1	1140310	1.94
55	Mn	72	1	1294043	1.67
59	Co	72	1	1396704	1.45
60	Ni	72	1	315529	1.40
63	Cu	72	1	758379	1.12
66	Zn	72	1	165107	0.89
75	As	72	1	138561	0.57
78	Se	72	1	25938	1.93
95	Mo	72	1	370901	0.41
107	Ag	115	1	1062098	0.87
111	Cd	115	1	204244	0.98
118	Sn	115	1	579800	1.07
121	Sb	115	1	668303	1.18
137	Ba	115	1	284936	0.45
205	Tl	165	1	1914641	0.77
208	Pb	165	1	2618094	0.43
232	Th	165	1	2552537	2.12
238	U	165	1	2761616	0.32

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	484053	0.73	488250	99.1	30 - 120	
45	Sc	1	1921111	0.56	1934674	99.3	30 - 120	
72	Ge	1	890368	0.32	888023	100.3	30 - 120	
115	In	1	2410922	0.65	2419559	99.6	30 - 120	
165	Ho	1	3599886	0.45	3622281	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\AG100109.B\148CALB.D\148CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\150 CCV.D\150 CCV.D#
Date Acquired: Oct 2 2009 01:13 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: Oct 02 2009 01:11 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	50.13 ppb	0.84	50	100.3	90 - 110	
51 V	72	1	48.92 ppb	0.53	50	97.8	90 - 110	
52 Cr	72	1	49.30 ppb	0.10	50	98.6	90 - 110	
55 Mn	72	1	48.28 ppb	0.21	50	96.6	90 - 110	
59 Co	72	1	49.39 ppb	1.23	50	98.8	90 - 110	
60 Ni	72	1	49.30 ppb	0.36	50	98.6	90 - 110	
63 Cu	72	1	49.81 ppb	0.65	50	99.6	90 - 110	
66 Zn	72	1	49.02 ppb	1.07	50	98.0	90 - 110	
75 As	72	1	49.42 ppb	0.73	50	98.8	90 - 110	
78 Se	72	1	47.23 ppb	4.97	50	94.5	90 - 110	
95 Mo	72	1	49.44 ppb	0.40	50	98.9	90 - 110	
107 Ag	115	1	49.95 ppb	2.51	50	99.9	90 - 110	
111 Cd	115	1	49.79 ppb	2.72	50	99.6	90 - 110	
118 Sn	115	1	49.97 ppb	2.93	50	99.9	90 - 110	
121 Sb	115	1	49.92 ppb	2.28	50	99.8	90 - 110	
137 Ba	115	1	49.46 ppb	2.37	50	98.9	90 - 110	
205 Tl	165	1	50.33 ppb	2.41	50	100.7	90 - 110	
208 Pb	165	1	50.10 ppb	1.70	50	100.2	90 - 110	
232 Th	165	1	51.84 ppb	1.91	50	103.7	90 - 110	
238 U	165	1	50.80 ppb	1.24	50	101.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	484341	0.57	488250	99.2	30 - 120	
45 Sc	1	1887206	1.32	1934674	97.5	30 - 120	
72 Ge	1	887220	0.13	888023	99.9	30 - 120	
115 In	1	2383756	1.84	2419559	98.5	30 - 120	
165 Ho	1	3574594	0.79	3622281	98.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\148CALB.D\148CALB.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\AG100109.B\151 CCB.D\151 CCB.D#
Date Acquired: Oct 2 2009 01:16 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: Oct 02 2009 01:11 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.029	ppb	35.10	1.00	
51 V	72	1	0.059	ppb	25.36	1.00	
52 Cr	72	1	-0.008	ppb	258.01	1.00	
55 Mn	72	1	0.009	ppb	47.50	1.00	
59 Co	72	1	0.011	ppb	13.03	1.00	
60 Ni	72	1	-0.015	ppb	65.78	1.00	
63 Cu	72	1	-0.031	ppb	176.37	1.00	
66 Zn	72	1	-0.297	ppb	5.16	1.00	
75 As	72	1	0.008	ppb	50.38	1.00	
78 Se	72	1	-0.081	ppb	298.01	1.00	
95 Mo	72	1	0.035	ppb	40.58	1.00	
107 Ag	115	1	0.015	ppb	4.07	1.00	
111 Cd	115	1	0.009	ppb	126.64	1.00	
118 Sn	115	1	0.056	ppb	53.83	1.00	
121 Sb	115	1	0.058	ppb	6.49	1.00	
137 Ba	115	1	0.001	ppb	1088.20	1.00	
205 Tl	165	1	0.042	ppb	12.58	1.00	
208 Pb	165	1	0.017	ppb	12.71	1.00	
232 Th	165	1	0.792	ppb	23.11	1.00	
238 U	165	1	0.021	ppb	15.52	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	487592	0.66	488250	99.9	30 - 120	
45 Sc	1	1907973	0.24	1934674	98.6	30 - 120	
72 Ge	1	883612	1.34	888023	99.5	30 - 120	
115 In	1	2407804	1.04	2419559	99.5	30 - 120	
165 Ho	1	3602772	0.46	3622281	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\AG100109.B\148CALB.D\148CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\152WASH.D\152WASH.D#
Date Acquired: Oct 2 2009 01:19 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: Oct 02 2009 01:11 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	0.981 ppb	11.10	1.30	
51 V	72	1	5.255 ppb	1.50	6.50	
52 Cr	72	1	2.088 ppb	1.50	2.60	
55 Mn	72	1	1.020 ppb	1.33	1.30	
59 Co	72	1	1.044 ppb	1.15	1.30	
60 Ni	72	1	2.061 ppb	1.84	2.60	
63 Cu	72	1	2.016 ppb	2.63	2.60	
66 Zn	72	1	10.630 ppb	0.52	13.00	
75 As	72	1	5.221 ppb	2.27	6.50	
78 Se	72	1	4.064 ppb	16.35	6.50	
95 Mo	72	1	1.992 ppb	0.18	2.60	
107 Ag	115	1	5.152 ppb	1.31	6.50	
111 Cd	115	1	1.030 ppb	1.68	1.30	
118 Sn	115	1	10.270 ppb	2.70	13.00	
121 Sb	115	1	1.968 ppb	2.26	2.60	
137 Ba	115	1	1.048 ppb	2.58	1.30	
205 Tl	165	1	1.104 ppb	0.70	1.30	
208 Pb	165	1	1.083 ppb	2.42	1.30	
232 Th	165	1	2.222 ppb	1.19	2.60	
238 U	165	1	1.112 ppb	0.90	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	484516	1.06	488250	99.2	30 - 120	
45 Sc	1	1907011	1.18	1934674	98.6	30 - 120	
72 Ge	1	874193	0.83	888023	98.4	30 - 120	
115 In	1	2394465	0.47	2419559	99.0	30 - 120	
165 Ho	1	3588975	0.70	3622281	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\AG100109.B\148CALB.D\148CALB.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: 10/2/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.D#
Date Acquired: Oct 2 2009 04:20 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: Oct 02 2009 04:18 am
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	7	86.61
51	V	72	1	-265	55.34
52	Cr	72	1	2244	4.29
55	Mn	72	1	573	6.39
59	Co	72	1	127	9.65
60	Ni	72	1	87	32.48
63	Cu	72	1	1683	3.32
66	Zn	72	1	2358	1.13
75	As	72	1	35	9.36
78	Se	72	1	787	2.10
95	Mo	72	1	190	19.09
107	Ag	115	1	13	114.68
111	Cd	115	1	-1	460.13
118	Sn	115	1	433	8.33
121	Sb	115	1	87	20.26
137	Ba	115	1	42	13.15
205	Tl	165	1	86	18.73
208	Pb	165	1	213	5.67
232	Th	165	1	183	16.96
238	U	165	1	37	24.23

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	331435	0.59
45	Sc	1	1316255	1.13
72	Ge	1	598993	0.76
115	In	1	1669391	1.19
165	Ho	1	2529503	0.39

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\AG100109.B\219ICAL.D\219ICAL.D#
Date Acquired: Oct 2 2009 04:23 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: Oct 02 2009 04:21 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	37429	1.46
51	V	72	1	753598	0.43
52	Cr	72	1	752212	1.29
55	Mn	72	1	855861	2.11
59	Co	72	1	946347	1.34
60	Ni	72	1	210483	1.83
63	Cu	72	1	502772	0.83
66	Zn	72	1	107630	1.39
75	As	72	1	93477	1.84
78	Se	72	1	17628	3.20
95	Mo	72	1	249696	0.72
107	Ag	115	1	713656	1.11
111	Cd	115	1	137526	0.27
118	Sn	115	1	397245	0.63
121	Sb	115	1	454145	0.72
137	Ba	115	1	200561	0.87
205	Tl	165	1	1373920	0.83
208	Pb	165	1	1861594	0.60
232	Th	165	1	1853754	2.15
238	U	165	1	1999565	0.32

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	327901	0.91	331435	98.9	30 - 120	
45	Sc	1	1293761	0.29	1316255	98.3	30 - 120	
72	Ge	1	586340	0.67	598993	97.9	30 - 120	
115	In	1	1689635	0.80	1669391	101.2	30 - 120	
165	Ho	1	2569735	0.20	2529503	101.6	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\AG100109.B\218CALB.D\218CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\220 CCV.D\220 CCV.D#
Date Acquired: Oct 2 2009 04:26 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: Oct 02 2009 04:24 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	50.16	ppb	1.34	50	100.3	90 - 110	
51 V	72	1	49.70	ppb	1.63	50	99.4	90 - 110	
52 Cr	72	1	49.69	ppb	1.23	50	99.4	90 - 110	
55 Mn	72	1	49.81	ppb	1.57	50	99.6	90 - 110	
59 Co	72	1	49.34	ppb	0.22	50	98.7	90 - 110	
60 Ni	72	1	50.51	ppb	2.18	50	101.0	90 - 110	
63 Cu	72	1	50.63	ppb	1.15	50	101.3	90 - 110	
66 Zn	72	1	50.35	ppb	0.49	50	100.7	90 - 110	
75 As	72	1	50.82	ppb	0.58	50	101.6	90 - 110	
78 Se	72	1	50.62	ppb	1.06	50	101.2	90 - 110	
95 Mo	72	1	49.90	ppb	0.90	50	99.8	90 - 110	
107 Ag	115	1	50.00	ppb	1.52	50	100.0	90 - 110	
111 Cd	115	1	49.41	ppb	0.83	50	98.8	90 - 110	
118 Sn	115	1	50.32	ppb	1.39	50	100.6	90 - 110	
121 Sb	115	1	50.18	ppb	1.03	50	100.4	90 - 110	
137 Ba	115	1	50.05	ppb	1.80	50	100.1	90 - 110	
205 Tl	165	1	50.79	ppb	1.68	50	101.6	90 - 110	
208 Pb	165	1	51.30	ppb	1.07	50	102.6	90 - 110	
232 Th	165	1	52.79	ppb	1.92	50	105.6	90 - 110	
238 U	165	1	52.18	ppb	1.27	50	104.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	324873	1.58	331435	98.0	30 - 120	
45 Sc	1	1285881	0.58	1316255	97.7	30 - 120	
72 Ge	1	581920	0.87	598993	97.1	30 - 120	
115 In	1	1678738	0.60	1669391	100.6	30 - 120	
165 Ho	1	2539785	0.68	2529503	100.4	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\221 CCB.D\221 CCB.D#
Date Acquired: Oct 2 2009 04:28 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 02 2009 04:24 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.009	ppb	291.23	1.00	
51 V	72	1	0.040	ppb	50.68	1.00	
52 Cr	72	1	0.023	ppb	62.65	1.00	
55 Mn	72	1	0.009	ppb	103.55	1.00	
59 Co	72	1	0.012	ppb	1.10	1.00	
60 Ni	72	1	0.000	ppb	4305.70	1.00	
63 Cu	72	1	0.103	ppb	12.10	1.00	
66 Zn	72	1	-1.290	ppb	1.13	1.00	
75 As	72	1	0.009	ppb	156.15	1.00	
78 Se	72	1	0.597	ppb	19.43	1.00	
95 Mo	72	1	0.023	ppb	120.78	1.00	
107 Ag	115	1	0.013	ppb	45.00	1.00	
111 Cd	115	1	0.017	ppb	17.68	1.00	
118 Sn	115	1	0.165	ppb	12.55	1.00	
121 Sb	115	1	0.085	ppb	18.25	1.00	
137 Ba	115	1	0.004	ppb	188.52	1.00	
205 Tl	165	1	0.035	ppb	20.06	1.00	
208 Pb	165	1	0.012	ppb	23.55	1.00	
232 Th	165	1	0.960	ppb	20.73	1.00	
238 U	165	1	0.018	ppb	13.57	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	324793	1.12	331435	98.0	30 - 120	
45 Sc	1	1287887	1.52	1316255	97.8	30 - 120	
72 Ge	1	594844	0.52	598993	99.3	30 - 120	
115 In	1	1672421	0.47	1669391	100.2	30 - 120	
165 Ho	1	2560393	0.60	2529503	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\222WASH.D\222WASH.D#
Date Acquired: Oct 2 2009 04:31 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 02 2009 04:24 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	1.184 ppb	13.93	1.30	
51 V	72	1	5.146 ppb	2.60	6.50	
52 Cr	72	1	2.027 ppb	0.35	2.60	
55 Mn	72	1	1.045 ppb	0.36	1.30	
59 Co	72	1	0.973 ppb	5.11	1.30	
60 Ni	72	1	2.137 ppb	3.42	2.60	
63 Cu	72	1	2.118 ppb	1.48	2.60	
66 Zn	72	1	9.344 ppb	2.31	13.00	
75 As	72	1	5.214 ppb	0.89	6.50	
78 Se	72	1	5.131 ppb	15.31	6.50	
95 Mo	72	1	1.955 ppb	5.47	2.60	
107 Ag	115	1	5.268 ppb	2.30	6.50	
111 Cd	115	1	1.050 ppb	1.94	1.30	
118 Sn	115	1	10.120 ppb	1.92	13.00	
121 Sb	115	1	1.949 ppb	0.98	2.60	
137 Ba	115	1	1.068 ppb	1.02	1.30	
205 Tl	165	1	1.087 ppb	2.59	1.30	
208 Pb	165	1	1.077 ppb	1.65	1.30	
232 Th	165	1	2.243 ppb	2.10	2.60	
238 U	165	1	1.093 ppb	1.19	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	325353	1.88	331435	98.2	30 - 120	
45 Sc	1	1288885	1.50	1316255	97.9	30 - 120	
72 Ge	1	595462	1.13	598993	99.4	30 - 120	
115 In	1	1683073	1.01	1669391	100.8	30 - 120	
165 Ho	1	2568625	0.67	2529503	101.5	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\223 BLK.D\223 BLK.D#
Date Acquired: Oct 2 2009 04:34 am
Operator: TEL
Sample Name: LLL0WB
Misc Info: BLANK 9271338 6020
Vial Number: 4101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 02 2009 04:24 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	-0.018 ppb	0.00	2.00	
51 V	72	1	0.027 ppb	125.82	2.00	
52 Cr	72	1	0.100 ppb	9.34	2.00	
55 Mn	72	1	0.056 ppb	19.58	2.00	
59 Co	72	1	-0.009 ppb	0.16	2.00	
60 Ni	72	1	0.048 ppb	56.46	2.00	
63 Cu	72	1	0.079 ppb	51.38	2.00	
66 Zn	72	1	1.224 ppb	2.53	2.00	
75 As	72	1	0.018 ppb	17.59	2.00	
78 Se	72	1	0.275 ppb	88.06	2.00	
95 Mo	72	1	-0.008 ppb	75.16	2.00	
107 Ag	115	1	0.003 ppb	58.42	2.00	
111 Cd	115	1	0.005 ppb	54.45	2.00	
118 Sn	115	1	0.122 ppb	18.59	2.00	
121 Sb	115	1	0.034 ppb	13.33	2.00	
137 Ba	115	1	0.006 ppb	73.06	2.00	
205 Tl	165	1	0.018 ppb	24.51	2.00	
208 Pb	165	1	0.019 ppb	12.97	2.00	
232 Th	165	1	0.148 ppb	17.68	2.00	
238 U	165	1	0.002 ppb	33.49	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	315462	0.68	331435	95.2	30 - 120	
45 Sc	1	1255176	0.96	1316255	95.4	30 - 120	
72 Ge	1	577024	0.32	598993	96.3	30 - 120	
115 In	1	1629043	1.30	1669391	97.6	30 - 120	
165 Ho	1	2517644	0.68	2529503	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\224 LCS.D\224 LCS.D#
Date Acquired: Oct 2 2009 04:37 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLL0WC
Misc Info: LCS
Vial Number: 4102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 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	41.64	3.80	40	104.1	80 - 120	
51 V	72	1	39.60	0.31	40	99.0	80 - 120	
52 Cr	72	1	40.09	0.83	40	100.2	80 - 120	
55 Mn	72	1	39.71	0.94	40	99.3	80 - 120	
59 Co	72	1	39.43	1.42	40	98.6	80 - 120	
60 Ni	72	1	40.11	1.07	40	100.3	80 - 120	
63 Cu	72	1	40.84	1.17	40	102.1	80 - 120	
66 Zn	72	1	37.70	0.46	40	94.3	80 - 120	
75 As	72	1	39.51	0.44	40	98.8	80 - 120	
78 Se	72	1	38.85	1.52	40	97.1	80 - 120	
95 Mo	72	1	40.21	0.65	40	100.5	80 - 120	
107 Ag	115	1	40.68	1.70	40	101.7	80 - 120	
111 Cd	115	1	40.00	1.37	40	100.0	80 - 120	
118 Sn	115	1	0.03	19.52	40	0.1	80 - 120	
121 Sb	115	1	40.51	1.95	40	101.3	80 - 120	
137 Ba	115	1	41.55	0.90	40	103.9	80 - 120	
205 Tl	165	1	40.81	1.70	40	102.0	80 - 120	
208 Pb	165	1	41.23	1.43	40	103.1	80 - 120	
232 Th	165	1	42.63	1.98	40	106.6	80 - 120	
238 U	165	1	42.13	1.68	40	105.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	312563	0.70	331435	94.3	30 - 120	
45 Sc	1	1246396	0.55	1316255	94.7	30 - 120	
72 Ge	1	561735	1.23	598993	93.8	30 - 120	
115 In	1	1617619	0.76	1669391	96.9	30 - 120	
165 Ho	1	2502656	1.11	2529503	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.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\AG100109.B\225AREF.D\225AREF.D#
Date Acquired: Oct 2 2009 04:40 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32 5X
Misc Info: D9I250174
Vial Number: 4103
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: AllRef
Dilution Factor: 5.00
Autodil Factor: Undiluted
Final Dil Factor: 5.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.06	0.01	ppb	251.86	3600	
51 V	72	1	-566.00	-113.20	ppb	5.98	3600	
52 Cr	72	1	23,900.00	4780.00	ppb	1.18	3600	>LDR
55 Mn	72	1	10.44	2.09	ppb	1.10	3600	
59 Co	72	1	0.87	0.17	ppb	1.09	3600	
60 Ni	72	1	8.10	1.62	ppb	2.00	3600	
63 Cu	72	1	3.95	0.79	ppb	2.48	3600	
66 Zn	72	1	-6.51	-1.30	ppb	1.97	3600	
75 As	72	1	86.60	17.32	ppb	2.66	3600	
78 Se	72	1	7.94	1.59	ppb	39.52	3600	
95 Mo	72	1	23.50	4.70	ppb	1.06	3600	
107 Ag	115	1	0.20	0.04	ppb	24.79	3600	
111 Cd	115	1	-0.50	-0.10	ppb	122.73	3600	
118 Sn	115	1	-0.18	-0.04	ppb	51.56	3600	
121 Sb	115	1	0.27	0.05	ppb	10.13	3600	
137 Ba	115	1	44.08	8.82	ppb	1.11	3600	
205 Tl	165	1	0.33	0.07	ppb	14.01	3600	
208 Pb	165	1	0.14	0.03	ppb	20.89	3600	
232 Th	165	1	3.04	0.61	ppb	21.53	1000	
238 U	165	1	24.31	4.86	ppb	0.40	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300392	1.08	331435	90.6	30 - 120	
45 Sc	1	1242555	0.55	1316255	94.4	30 - 120	
72 Ge	1	531237	0.07	598993	88.7	30 - 120	
115 In	1	1468998	1.20	1669391	88.0	30 - 120	
165 Ho	1	2323398	0.44	2529503	91.9	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\AG100109.B\218CALB.D\218CALB.D#

1 :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\AG100109.B\226SDIL.D\226SDIL.D#
Date Acquired: Oct 2 2009 04:42 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32P25
Misc Info: SERIAL DILUTION
Vial Number: 4104
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: SDIL
Dilution Factor: 5.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG100109.B\225AREF.D\225AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb	RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	-0.01 ppb	192.97	0.00	-362.1	90 - 110	
51 V	72	1	-34.55 ppb	5.16	-22.64	152.6	90 - 110	
52 Cr	72	1	933.40 ppb	0.90	956.00	97.6	90 - 110	
55 Mn	72	1	0.45 ppb	7.94	0.42	108.0	90 - 110	
59 Co	72	1	0.04 ppb	10.51	0.03	115.1	90 - 110	
60 Ni	72	1	0.48 ppb	14.20	0.32	147.1	90 - 110	
63 Cu	72	1	0.80 ppb	7.10	0.16	509.5	90 - 110	
66 Zn	72	1	-0.97 ppb	2.32	-0.26	373.8	90 - 110	
75 As	72	1	3.34 ppb	0.72	3.46	96.3	90 - 110	
78 Se	72	1	2.09 ppb	28.32	0.32	657.5	90 - 110	
95 Mo	72	1	0.83 ppb	9.07	0.94	88.7	90 - 110	
107 Ag	115	1	0.01 ppb	92.94	0.01	102.8	90 - 110	
111 Cd	115	1	0.00 ppb	120.00	-0.02	19.8	90 - 110	
118 Sn	115	1	-0.01 ppb	124.31	-0.01	140.9	90 - 110	
121 Sb	115	1	0.00 ppb	99.55	0.01	33.5	90 - 110	
137 Ba	115	1	1.76 ppb	1.49	1.76	99.7	90 - 110	
205 Tl	165	1	0.02 ppb	15.93	0.01	163.7	90 - 110	
208 Pb	165	1	0.00 ppb	20.51	0.01	86.6	90 - 110	
232 Th	165	1	0.08 ppb	14.73	0.12	68.3	90 - 110	
238 U	165	1	0.99 ppb	0.97	0.97	102.2	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	313885	0.99	331435	94.7	30 - 120	
45 Sc	1	1242020	1.43	1316255	94.4	30 - 120	
72 Ge	1	564561	0.50	598993	94.3	30 - 120	
115 In	1	1571637	0.27	1669391	94.1	30 - 120	
165 Ho	1	2476735	0.35	2529503	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\AG100109.B\218CALB.D\218CALB.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: 10/02/09 09:00:25

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LLG32P25** | Serial Dilution: **25.00** | Sample Dilution: **5.00**

Instrument: **Agilent7500**
File: AG100109 # 226
Acquired: 10/02/2009 04:42:00
Calibrated: 10/02/2009 04:20:00

Channel 272
Method 6020_
ICPMS_024

Matrix: AQUEOUS
Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9	3	-0.20910	0.05773	462		*	
7440-62-2	Vanadium	51	-251052	-863.50	-566.10			*	
7440-47-3	Chromium	52	6743280	23335	23900	2.36		*	
7439-96-5	Manganese	55	4254	11.275	10.440	8.00		*	
7440-48-4	Cobalt	59	483	0.99850	0.86770	15.1		*	
7440-02-0	Nickel	60	1047	11.910	8.0970	47.1		*	
7440-50-8	Copper	63	5468	20.110	3.9470	410		*	
7440-66-6	Zinc	66	1235	-24.335	-6.5110			*	
7440-38-2	Arsenic	75	3035	83.400	86.630	3.73	0.21	NC	☑
7782-49-2	Selenium	78	1080	52.200	7.9330	558	0.70	NC	☑
7439-98-7	Molybdenum	95	2184	20.855	23.500	11.3		*	
7440-22-4	Silver	107	67	0.20310	0.19760	2.78		*	
7440-43-9	Cadmium	111	-6	-0.09850	-0.49860			*	
7440-31-5	Tin	118	370	-0.25505	-0.18090			*	
7440-36-0	Antimony	121	97	0.08920	0.26640	66.5		*	
7440-39-3	Barium	137	3318	43.940	44.080	0.318		*	
7440-28-0	Thallium	205	367	0.53400	0.32630	63.7		*	
7439-92-1	Lead	208	296	0.12085	0.13960	13.4		*	
7440-61-1	Uranium	238	19189	24.845	24.310	2.20		*	
7440-29-1	Thorium	232	1664	2.0770	3.0420	31.7		*	
7439-93-2	Lithium	6			0			*	
7440-20-2	Scandium	45			0			*	
7440-74-6	Indium	115			0			*	
7440-56-4	Germanium	72			0			*	
7440-60-0	Holmium	165			0			*	

* Analyte not requested for this batch, no MDL

NC : Serial dilution concentration < 100 X MDL

E : Difference greater than Limit (10%)

Reviewed by: Date:

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\227PDS.D\227PDS.D#
Date Acquired: Oct 2 2009 04:45 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32Z
Misc Info: POST DIGESTION SPIKE
Vial Number: 4105
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 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	208.80	0.01	ppb	1.42	200	104.4	75 - 125	
51 V	72	1	95.15	-113.20	ppb	0.86	200	109.6	75 - 125	
52 Cr	72	1	4943.00	4780.00	ppb	1.49	200	99.3	75 - 125	
55 Mn	72	1	199.00	2.09	ppb	2.54	200	98.5	75 - 125	
59 Co	72	1	191.90	0.17	ppb	2.64	200	95.9	75 - 125	
60 Ni	72	1	185.20	1.62	ppb	2.70	200	91.9	75 - 125	
63 Cu	72	1	185.20	0.79	ppb	0.40	200	92.2	75 - 125	
66 Zn	72	1	188.00	-1.30	ppb	1.01	200	94.6	75 - 125	
75 As	72	1	217.10	17.32	ppb	1.79	200	99.9	75 - 125	
78 Se	72	1	194.40	1.59	ppb	2.83	200	96.4	75 - 125	
95 Mo	72	1	210.60	4.70	ppb	1.04	200	102.9	75 - 125	
107 Ag	115	1	38.72	0.04	ppb	1.89	50	77.4	75 - 125	
111 Cd	115	1	186.50	-0.10	ppb	3.06	200	93.3	75 - 125	
118 Sn	115	1	176.10	-0.04	ppb	2.16	200	88.1	75 - 125	
121 Sb	115	1	194.30	0.05	ppb	1.31	200	97.1	75 - 125	
137 Ba	115	1	207.00	8.81	ppb	1.90	200	99.1	75 - 125	
205 Tl	165	1	178.10	0.07	ppb	1.11	200	89.0	75 - 125	
208 Pb	165	1	174.80	0.03	ppb	1.15	200	87.4	75 - 125	
232 Th	165	1	0.06	0.61	ppb	14.09	200	0.0	75 - 125	
238 U	165	1	192.30	4.86	ppb	0.23	200	93.9	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	298185	0.45	331435	90.0	30 - 120	
45 Sc	1	1242944	0.22	1316255	94.4	30 - 120	
72 Ge	1	520652	1.41	598993	86.9	30 - 120	
115 In	1	1468348	1.60	1669391	88.0	30 - 120	
165 Ho	1	2348937	0.39	2529503	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\AG100109.B\218CALB.D\218CALB.D#

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

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 10/02/09 09:00:29

Department: 090 (Metals)

Source: Spreadsheet

Sample: **LLG32Z**

Spike Dilution: **1.00**

Sample Dilution: **5.00**

Instrument: **Agilent7500**
File: AG100109 # 227
Acquired: 10/02/2009 04:45:00
Calibrated: 10/02/2009 04:20:00

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	71047	208.80	0.01155	104	200		☑
7440-62-2	Vanadium	51	636639	95.150	-113.22	47.6	200		☑
7440-47-3	Chromium	52	32923000	4943.0	4780.0	81.5	200	*	☐
7439-96-5	Manganese	55	1511520	199.00	2.0880	98.5	200		☑
7440-48-4	Cobalt	59	1611790	191.90	0.17354	95.9	200		☑
7440-02-0	Nickel	60	345979	185.20	1.6194	91.8	200		☑
7440-50-8	Copper	63	825824	185.20	0.78940	92.2	200		☑
7440-66-6	Zinc	66	177843	188.00	-1.3022	94.0	200		☑
7440-38-2	Arsenic	75	180181	217.10	17.326	99.9	200		☑
7782-49-2	Selenium	78	29776	194.40	1.5866	96.4	200		☑
7439-98-7	Molybdenum	95	466777	210.60	4.7000	103	200		☐
7440-22-4	Silver	107	240119	38.720	0.03952	77.4	50.0		☐
7440-43-9	Cadmium	111	222841	186.50	-0.09972	93.2	200		☑
7440-31-5	Tin	118	607444	176.10	-0.03618	88.1	200		☐
7440-36-0	Antimony	121	766910	194.30	0.05328	97.1	200		☑
7440-39-3	Barium	137	360632	207.00	8.8160	99.1	200		☑
7440-28-0	Thallium	205	2236300	178.10	0.06526	89.0	200		☑
7439-92-1	Lead	208	2975230	174.80	0.02792	87.4	200		☑
7440-61-1	Uranium	238	3514710	192.30	4.8620	93.7	200		☑
7440-29-1	Thorium	232	1130	0.05667	0.60840				
7439-93-2	Lithium	6			0				
7440-20-2	Scandium	45			0				
7440-74-6	Indium	115			0				
7440-56-4	Germanium	72			0				
7440-60-0	Holmium	165			0				

Reviewed by: Date:

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\228_MS.D\228_MS.D#
Date Acquired: Oct 2 2009 04:48 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32S 5X
Misc Info: MATRIX SPIKE
Vial Number: 4106
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: MS
Prep Dil. Factor: 5.00
Autodil Factor: Undiluted
Final Dil Factor: 5.00

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	8.69	0.01	ppb	7.62	40	21.7	50 - 150	
51 V	72	1	-103.60	-113.20	ppb	8.51	40	141.5	50 - 150	
52 Cr	72	1	4755.00	4780.00	ppb	2.18	40	98.7	50 - 150	
55 Mn	72	1	9.75	2.09	ppb	0.46	40	23.2	50 - 150	
59 Co	72	1	7.73	0.17	ppb	1.80	40	19.2	50 - 150	
60 Ni	72	1	9.13	1.62	ppb	1.43	40	21.9	50 - 150	
63 Cu	72	1	8.87	0.79	ppb	1.82	40	21.7	50 - 150	
66 Zn	72	1	6.22	-1.30	ppb	0.88	40	16.1	50 - 150	
75 As	72	1	25.39	17.32	ppb	0.96	40	44.3	50 - 150	
78 Se	72	1	10.53	1.59	ppb	5.40	40	25.3	50 - 150	
95 Mo	72	1	13.15	4.70	ppb	1.19	40	29.4	50 - 150	
107 Ag	115	1	7.17	0.04	ppb	1.25	40	17.9	50 - 150	
111 Cd	115	1	7.62	-0.10	ppb	1.12	40	19.1	50 - 150	
118 Sn	115	1	0.34	-0.04	ppb	13.24	40	0.9	50 - 150	
121 Sb	115	1	8.31	0.05	ppb	1.66	40	20.7	50 - 150	
137 Ba	115	1	16.99	8.81	ppb	1.67	40	34.8	50 - 150	
205 Tl	165	1	7.31	0.07	ppb	0.44	40	18.2	50 - 150	
208 Pb	165	1	7.27	0.03	ppb	1.45	40	18.2	50 - 150	
232 Th	165	1	7.88	0.61	ppb	1.15	40	19.4	50 - 150	
238 U	165	1	12.75	4.86	ppb	0.99	40	28.4	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	303565	0.33	331435	91.6	30 - 120	
45 Sc	1	1237389	1.30	1316255	94.0	30 - 120	
72 Ge	1	532370	0.70	598993	88.9	30 - 120	
115 In	1	1485899	1.27	1669391	89.0	30 - 120	
165 Ho	1	2360147	0.38	2529503	93.3	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\229 MSD.D\229 MSD.D#
Date Acquired: Oct 2 2009 04:51 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32D 5X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 4107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: MSD
Dilution Factor: 5.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG100109.B\228 MS.D\228 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	8.31	ppb	6.40	8.69	4.47	20	
51 V	72	1	-102.20	ppb	22.39	-103.60	-1.36	20	
52 Cr	72	1	4853.00	ppb	1.18	4755.00	2.04	20	
55 Mn	72	1	9.84	ppb	0.53	9.75	0.92	20	
59 Co	72	1	7.97	ppb	0.37	7.72	3.11	20	
60 Ni	72	1	9.08	ppb	1.89	9.13	0.52	20	
63 Cu	72	1	9.05	ppb	0.30	8.87	2.03	20	
66 Zn	72	1	6.81	ppb	0.97	6.22	9.09	20	
75 As	72	1	25.80	ppb	1.92	25.39	1.60	20	
78 Se	72	1	12.12	ppb	8.01	10.53	14.04	20	
95 Mo	72	1	13.20	ppb	2.08	13.15	0.38	20	
107 Ag	115	1	7.35	ppb	2.52	7.17	2.56	20	
111 Cd	115	1	7.70	ppb	1.79	7.62	1.11	20	
118 Sn	115	1	0.11	ppb	40.10	0.34	104.07	20	
121 Sb	115	1	8.37	ppb	0.29	8.31	0.70	20	
137 Ba	115	1	17.06	ppb	0.31	16.99	0.41	20	
205 Tl	165	1	7.48	ppb	1.11	7.31	2.38	20	
208 Pb	165	1	7.47	ppb	1.14	7.27	2.67	20	
232 Th	165	1	8.21	ppb	1.60	7.88	4.09	20	
238 U	165	1	12.91	ppb	0.68	12.75	1.25	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299847	0.40	331435	90.5	30 - 120	
45 Sc	1	1241916	1.11	1316255	94.4	30 - 120	
72 Ge	1	530855	0.33	598993	88.6	30 - 120	
115 In	1	1482786	0.44	1669391	88.8	30 - 120	
165 Ho	1	2351233	0.64	2529503	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\230SMPL.D\230SMPL.D#
Date Acquired: Oct 2 2009 04:53 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLKFN
Misc Info: D9I260177
Vial Number: 4108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
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	1120.90	3600	
51 V	72	1	0.04	0.04	ppb	82.21	3600	
52 Cr	72	1	1.24	1.24	ppb	8.13	3600	
55 Mn	72	1	0.24	0.24	ppb	13.01	3600	
59 Co	72	1	0.07	0.07	ppb	24.32	3600	
60 Ni	72	1	0.02	0.02	ppb	42.60	3600	
63 Cu	72	1	1.08	1.08	ppb	7.08	3600	
66 Zn	72	1	1.07	1.07	ppb	9.08	3600	
75 As	72	1	0.00	0.00	ppb	206.28	3600	
78 Se	72	1	1.99	1.99	ppb	38.97	3600	
95 Mo	72	1	-0.01	-0.01	ppb	168.91	3600	
107 Ag	115	1	0.01	0.01	ppb	50.69	3600	
111 Cd	115	1	0.01	0.01	ppb	137.25	3600	
118 Sn	115	1	0.03	0.03	ppb	41.58	3600	
121 Sb	115	1	0.03	0.03	ppb	35.34	3600	
137 Ba	115	1	0.05	0.05	ppb	30.30	3600	
205 Tl	165	1	0.01	0.01	ppb	19.67	3600	
208 Pb	165	1	0.01	0.01	ppb	26.74	3600	
232 Th	165	1	0.24	0.24	ppb	27.90	1000	
238 U	165	1	0.01	0.01	ppb	12.65	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	305392	0.47	331435	92.1	30 - 120	
45 Sc	1	1203066	0.94	1316255	91.4	30 - 120	
72 Ge	1	554930	0.27	598993	92.6	30 - 120	
115 In	1	1589672	0.51	1669391	95.2	30 - 120	
165 Ho	1	2475887	0.64	2529503	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\231SMPL.D\231SMPL.D#
Date Acquired: Oct 2 2009 04:56 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLKFP 5X
Misc Info: D9I260178
Vial Number: 4109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: SA
Dilution Factor: 5.00
Autodil Factor: Undiluted
Final Dil Factor: 5.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.01	0.00	ppb	676.03	3600	
51 V	72	1	-480.35	-96.07	ppb	5.17	3600	
52 Cr	72	1	20,880.00	4176.00	ppb	0.80	3600	>LDR
55 Mn	72	1	2.44	0.49	ppb	3.25	3600	
59 Co	72	1	0.83	0.17	ppb	7.26	3600	
60 Ni	72	1	7.42	1.48	ppb	2.98	3600	
63 Cu	72	1	12.32	2.46	ppb	2.83	3600	
66 Zn	72	1	304.40	60.88	ppb	0.46	3600	
75 As	72	1	80.20	16.04	ppb	0.80	3600	
78 Se	72	1	24.96	4.99	ppb	7.27	3600	
95 Mo	72	1	24.85	4.97	ppb	2.88	3600	
107 Ag	115	1	0.13	0.03	ppb	30.94	3600	
111 Cd	115	1	0.15	0.03	ppb	144.19	3600	
118 Sn	115	1	-0.02	0.00	ppb	146.40	3600	
121 Sb	115	1	0.18	0.04	ppb	8.93	3600	
137 Ba	115	1	53.90	10.78	ppb	0.78	3600	
205 Tl	165	1	0.18	0.04	ppb	1.54	3600	
208 Pb	165	1	0.50	0.10	ppb	4.39	3600	
232 Th	165	1	0.14	0.03	ppb	7.96	1000	
238 U	165	1	22.83	4.57	ppb	1.04	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	289172	0.73	331435	87.2	30 - 120	
45 Sc	1	1218771	1.55	1316255	92.6	30 - 120	
72 Ge	1	522806	0.76	598993	87.3	30 - 120	
115 In	1	1462108	0.59	1669391	87.6	30 - 120	
165 Ho	1	2336026	0.59	2529503	92.4	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\AG100109.B\218CALB.D\218CALB.D#

1 :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\AG100109.B\232SMPL.D\232SMPL.D#
Date Acquired: Oct 2 2009 04:59 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLKFR 5X
Misc Info: D9I260178
Vial Number: 4110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: SA
Dilution Factor: 5.00
Autodil Factor: Undiluted
Final Dil Factor: 5.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	-0.04	-0.01	ppb	228.12	3600	
51 V	72	1	-539.00	-107.80	ppb	21.94	3600	
52 Cr	72	1	20,990.00	4198.00	ppb	1.02	3600	>LDR
55 Mn	72	1	2.45	0.49	ppb	8.08	3600	
59 Co	72	1	0.84	0.17	ppb	6.95	3600	
60 Ni	72	1	7.51	1.50	ppb	7.22	3600	
63 Cu	72	1	11.83	2.37	ppb	4.72	3600	
66 Zn	72	1	-6.27	-1.25	ppb	3.01	3600	
75 As	72	1	79.80	15.96	ppb	0.48	3600	
78 Se	72	1	18.94	3.79	ppb	7.30	3600	
95 Mo	72	1	25.69	5.14	ppb	1.67	3600	
107 Ag	115	1	0.13	0.03	ppb	16.08	3600	
111 Cd	115	1	-0.12	-0.02	ppb	267.59	3600	
118 Sn	115	1	-0.14	-0.03	ppb	82.38	3600	
121 Sb	115	1	0.10	0.02	ppb	13.66	3600	
137 Ba	115	1	55.70	11.14	ppb	1.75	3600	
205 Tl	165	1	0.17	0.03	ppb	4.07	3600	
208 Pb	165	1	0.19	0.04	ppb	9.00	3600	
232 Th	165	1	0.07	0.01	ppb	9.44	1000	
238 U	165	1	22.86	4.57	ppb	2.04	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	290302	0.85	331435	87.6	30 - 120	
45 Sc	1	1220369	1.01	1316255	92.7	30 - 120	
72 Ge	1	525750	1.20	598993	87.8	30 - 120	
115 In	1	1464948	0.26	1669391	87.8	30 - 120	
165 Ho	1	2336840	1.23	2529503	92.4	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\AG100109.B\218CALB.D\218CALB.D#

1 :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\AG100109.B\233 CCV.D\233 CCV.D#
Date Acquired: Oct 2 2009 05:02 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: Oct 02 2009 04:24 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	1.96	50	102.7	90 - 110	
51 V	72	1	49.23	ppb	1.30	50	98.5	90 - 110	
52 Cr	72	1	50.25	ppb	0.87	50	100.5	90 - 110	
55 Mn	72	1	48.72	ppb	0.69	50	97.4	90 - 110	
59 Co	72	1	48.70	ppb	0.61	50	97.4	90 - 110	
60 Ni	72	1	50.43	ppb	0.27	50	100.9	90 - 110	
63 Cu	72	1	51.63	ppb	1.62	50	103.3	90 - 110	
66 Zn	72	1	49.86	ppb	1.14	50	99.7	90 - 110	
75 As	72	1	50.34	ppb	0.46	50	100.7	90 - 110	
78 Se	72	1	52.29	ppb	0.09	50	104.6	90 - 110	
95 Mo	72	1	50.01	ppb	0.66	50	100.0	90 - 110	
107 Ag	115	1	49.98	ppb	1.19	50	100.0	90 - 110	
111 Cd	115	1	49.33	ppb	0.91	50	98.7	90 - 110	
118 Sn	115	1	49.46	ppb	0.54	50	98.9	90 - 110	
121 Sb	115	1	49.75	ppb	0.71	50	99.5	90 - 110	
137 Ba	115	1	50.20	ppb	0.16	50	100.4	90 - 110	
205 Tl	165	1	50.47	ppb	0.59	50	100.9	90 - 110	
208 Pb	165	1	50.79	ppb	0.94	50	101.6	90 - 110	
232 Th	165	1	50.58	ppb	3.09	50	101.2	90 - 110	
238 U	165	1	51.00	ppb	0.49	50	102.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	307479	0.81	331435	92.8	30 - 120	
45 Sc	1	1252348	1.28	1316255	95.1	30 - 120	
72 Ge	1	569675	0.54	598993	95.1	30 - 120	
115 In	1	1669353	0.41	1669391	100.0	30 - 120	
165 Ho	1	2563883	0.45	2529503	101.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.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\AG100109.B\234 CCB.D\234 CCB.D#
Date Acquired: Oct 2 2009 05:05 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: Oct 02 2009 04:24 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	0.021	ppb	80.86	1.00	
51 V	72	1	0.025	ppb	117.01	1.00	
52 Cr	72	1	0.298	ppb	19.34	1.00	
55 Mn	72	1	0.007	ppb	243.85	1.00	
59 Co	72	1	0.012	ppb	60.71	1.00	
60 Ni	72	1	0.024	ppb	43.13	1.00	
63 Cu	72	1	2.373	ppb	2.39	1.00	Fail
66 Zn	72	1	-1.250	ppb	6.48	1.00	
75 As	72	1	0.012	ppb	57.55	1.00	
78 Se	72	1	4.101	ppb	9.49	1.00	Fail ok nlc 5
95 Mo	72	1	0.012	ppb	91.95	1.00	
107 Ag	115	1	0.019	ppb	15.82	1.00	
111 Cd	115	1	0.009	ppb	136.25	1.00	
118 Sn	115	1	0.112	ppb	8.96	1.00	
121 Sb	115	1	0.063	ppb	8.25	1.00	
137 Ba	115	1	0.003	ppb	328.23	1.00	
205 Tl	165	1	0.035	ppb	8.12	1.00	
208 Pb	165	1	0.014	ppb	14.46	1.00	
232 Th	165	1	0.897	ppb	20.91	1.00	
238 U	165	1	0.019	ppb	7.74	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	302838	0.67	331435	91.4	30 - 120	
45 Sc	1	1227814	1.34	1316255	93.3	30 - 120	
72 Ge	1	568484	0.68	598993	94.9	30 - 120	
115 In	1	1642991	0.25	1669391	98.4	30 - 120	
165 Ho	1	2551490	1.15	2529503	100.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\235WASH.D\235WASH.D#
Date Acquired: Oct 2 2009 05:07 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: Oct 02 2009 04:24 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.952 ppb	27.86	1.30	
51 V	72	1	5.001 ppb	3.17	6.50	
52 Cr	72	1	2.171 ppb	3.43	2.60	
55 Mn	72	1	1.017 ppb	5.00	1.30	
59 Co	72	1	0.971 ppb	1.72	1.30	
60 Ni	72	1	2.024 ppb	5.04	2.60	
63 Cu	72	1	4.471 ppb	4.94	2.60	
66 Zn	72	1	9.178 ppb	1.35	13.00	
75 As	72	1	5.155 ppb	2.53	6.50	
78 Se	72	1	7.822 ppb	19.71	6.50	
95 Mo	72	1	1.969 ppb	4.85	2.60	
107 Ag	115	1	5.253 ppb	3.33	6.50	
111 Cd	115	1	1.047 ppb	6.26	1.30	
118 Sn	115	1	10.250 ppb	3.26	13.00	
121 Sb	115	1	1.942 ppb	2.44	2.60	
137 Ba	115	1	1.031 ppb	2.73	1.30	
205 Tl	165	1	1.107 ppb	1.51	1.30	
208 Pb	165	1	1.102 ppb	1.05	1.30	
232 Th	165	1	2.224 ppb	2.07	2.60	
238 U	165	1	1.101 ppb	1.56	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298556	0.85	331435	90.1	30 - 120	
45 Sc	1	1209189	1.24	1316255	91.9	30 - 120	
72 Ge	1	567608	1.14	598993	94.8	30 - 120	
115 In	1	1622972	0.97	1669391	97.2	30 - 120	
165 Ho	1	2512918	0.03	2529503	99.3	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\AG100109.B\218CALB.D\218CALB.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: D9I260178

Client: Northgate

Batch(es) #: 9271328

Associated Samples: 1, 2

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

Signature/Date: 10/2/09

Metals Raw Data RoadMap

LotID		*Metal*	*WorkOrder*	*Anal Date*	*TestDesc*	*Batch*	*File Id*	*Instr*
D9I260178	1	SE	LLKFP1AC	20091002	6020TOTA	9271338	AG100109	024
D9I260178	1	AS	LLKFP1AA	20091002	6020TOTA	9271338	AG100109	024
D9I260178	2	SE	LLKFR1AC	20091002	6020TOTA	9271338	AG100109	024
D9I260178	2	AS	LLKFR1AA	20091002	6020TOTA	9271338	AG100109	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9271338**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: Katie Stoltz

Prep Date: 09/29/09
Due Date: 10/07/09

Lot	Work Order			Initial Weight/Volume
D9I280000 Water	**LLL0W**	B	Due Date: SDG:	50 mL
D9I280000 Water	**LLL0W**	C	Due Date: SDG:	50 mL
D9I250174 Water	**LLG32** Total		Due Date: 10/07/09 SDG:	50 mL
D9I250174 Water	**LLG32** Total	S	Due Date: 10/07/09 SDG:	50 mL
D9I250174 Water	**LLG32** Total	D	Due Date: 10/07/09 SDG:	50 mL
D9I260177 Water	**LLKFN** Total		Due Date: 10/08/09 SDG:	50 mL
D9I260178 Water	**LLKFP** Total		Due Date: 10/08/09 SDG:	50 mL
D9I260178 Water	**LLKFR** Total		Due Date: 10/08/09 SDG:	50 mL

Comments:

B-BLANK; C-CHECK SAMPLE; L-CHECK SAMPLE DUPLICATE; P-SERIAL DILUTION; S-MATRIX SPIKE SAMPLE; D-MATRIX SPIKE DUPLICATE SAMPLE

ICPMS ELEMENTS WITHIN THE BATCH:

AS SE

Checked 10/1/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH #	9271338	**ALLIQUOTTED BY:**	JRW
PREP DATE:	9.29.2009	**DIGESTED BY:**	KS

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS268

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: KS

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-5353-09	8/28/10	100uL	15
2008Cal-2	STD-4452-09	7/28/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H14024	3

TEMPERATURE CYCLES

Thermometer ID: 4116 Block & Cup # : 3;34

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	7:30	89	11:50	95
HNO3	12:00	95	12:30	95
HNO3				

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

COMMENTS:

I certify that all information above is correct and complete.

Signature: Katie Ott ***Date:*** 9.29.09

METALS
SAMPLE DATA
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ICP-MS Standard and Spike True Values

Element	Cal. Std. 100 ppb	Initial Calibration Standard	Continuing Calibration Standard	Interference Check Sample A	Interference Check Sample AB	Laboratory Control Sample and Duplicate	Matrix Spike Sample and Duplicate	Post Digestion Spike
Aluminum	100	40	50	100,000 Aluminum	--	40	40	200
Antimony	100	40	50	100,000 Calcium	100	40	40	200
Arsenic	100	40	50	100,000 Iron	100	40	40	200
Barium	100	40	50	100,000 Magnesium	100	40	40	200
Beryllium	100	40	50	100,000 Sodium	100	40	40	200
Cadmium	100	40	50	100,000 Phosphorus	100	40	40	200
Chromium	100	40	50	100,000 Potassium	100	40	40	200
Cobalt	100	40	50	100,000 Sulfur	100	40	40	200
Copper	100	40	50	200,000 Carbon	100	40	40	200
Lead	100	40	50	1,000,000 Chloride	100	40	40	200
Manganese	100	40	50	2000 Molybdenum	--	40	40	200
Molybdenum	100	40	50	2000 Titanium	100	40	40	200
Nickel	100	40	50		100	40	40	200
Selenium	100	40	50		100	40	40	200
Silver	100	40	50		100	40	40	50
Thallium	100	40	50		100	40	40	200
Tin	100	40	50		100	40	40	200
Uranium	100	40	50		100	40	40	200
Vanadium	100	40	50		100	40	40	200
Zinc	100	40	50		100	40	40	200

All units are ug/L.

Due to the presence of trace contaminants in the ICSA solution, the % recovery for the ICSAB solution is calculated by subtracting the levels in the ICSA from the ICSAB.

Quality Control Standards

ICV = Initial Calibration Verification (Second Source)
CCV = Continuing Calibration Verification

ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank

TestAmerica Denver

Standards Preparation Logbook Record

Oct-01-2009

Logbook: \\Densvr06\StdsLog\metals.std

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

STD2483-09, 1000 Zn (Inorganic Ventures)

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: C2-ZN02051 Vendor's Expiration Date: 05-01-2010
Solvent: 2% HNO3
Date Prep./Opened: 04-28-2009 Date Received: 04-28-2009
Date Expires(1): 05-01-2010 (None)
Date Expires(2): 05-01-2010 (None)
(METALS)-Inventory ID: 856

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1,000.0	1,000.0

STD5446-09, ICP-MS 1ppm Sn/Zn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 09-10-2009
Date Expires(1): 03-01-2010 (1 Year)

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	1.0000

Parent Std No.: STD2483-09, 1000 Zn (Inorganic Ventures) Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1,000.0	1.0000

STD5512-09, ICP-MS (024) INT STD BRC

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 250.00
Date Prep./Opened: 09-14-2009
Date Expires(1): 11-10-2009 (1 Year)
Date Expires(2): 12-01-2009 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD1469-09, Germanium Stock Aliquot Amount (ml): 0.7500
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	3,000.0

Parent Std No.: STD1972-09, Lithium 6 Stock Aliquot Amount (ml): 1.0000
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	4,000.0

Parent Std No.: STD1973-09, Indium Stock — Aliquot Amount (ml): 0.2500
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	1,000.0

Parent Std No.: STD6317-08, Scandium Stock — Aliquot Amount (ml): 0.5000
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	2,000.0

Parent Std No.: STD6318-08, Holmium Stock — Aliquot Amount (ml): 0.2500
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	1,000.0

STD5932-09, ICP-MS ICSA

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 50.000
Date Prep./Opened: 09-30-2009
Date Expires(1): 10-30-2009 (1 Month)
Date Expires(2): 08-01-2010 (None)
pipettes: Met 8

Parent Std No.: STD4542-09, ICPMS Interferent Check Standard — Aliquot Amount (ml): 5.0000
Parent Date Expires(1): 07-31-2010 Parent Date Expires(2): 08-01-2010

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

STD5957-09, ICP-MS BLANK

Analyst: DIAZL

Solvent: Water Volume (ml): 1,000.0
Date Prep./Opened: 10-01-2009
Date Expires(1): 11-01-2009 (1 Month)
Date Expires(2): 11-01-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD5956-09, NITRIC ACID — Aliquot Amount (ml): 50.000

Component	Initial Conc (%)	Final Conc (%)

HNO3	100.00	5.0000

STD5958-09, ICP-MS 10 ppm Sn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 03-01-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1198-09, 1000 mg/L Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

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

STD5959-09, ICP-MS 100 ppb cal

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 50.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

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.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	20.000	100.00

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5960-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 100.00
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

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.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)

Mo	20.000	50.000
Sb	20.000	50.000

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5961-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 — Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD5446-09, ICP-MS 1ppm Sn/Zn — Aliquot Amount (ml): 0.0900

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	1.0000	0.0090
Sn	1.0000	0.0090

Parent Std No.: STD5959-09, ICP-MS 100 ppb cal — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 10-02-2009

Component	Initial Conc (ug/L)	Final Conc (mg/L)
Fe	5,000.0	0.0500
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
Sn	100.00	0.0010

STD5962-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (2 Days)
pipettes: Met 20 and Met 8

Parent Std No.: STD5961-09, ICP-MS RL STD Aliquot Amount (ml): 2.0000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	0.0090	0.0018
Sn	0.0090	0.0018
Fe	0.0500	0.0100
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
Sn	0.0010	0.0002

STD5963-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21, Met 20, and Met 8

Parent Std No.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD4542-09, ICPMS Interferent Check Standard Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 07-31-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	20.000	100.00

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5964-09, ICPMS LR STD 1000 ppb

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20 and Met 8

Parent Std No.: STD4452-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 07-28-2010 Parent Date Expires(2): 08-01-2010

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.: STD5353-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 09-08-2010 Parent Date Expires(2): 10-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	1,000.0
Sb	20.000	1,000.0

Parent Std No.: STD5958-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 10-02-2009 Parent Date Expires(2): 03-01-2010

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

STD5965-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 10.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 02-27-2010 (None)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21 and Met 8

Parent Std No.: STD1213-09, ICPMS ICV SOLUTION A (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Al	10.000	40.000
As	10.000	40.000
Ba	10.000	40.000
Be	10.000	40.000
Cd	10.000	40.000

Co	10.000	40.000
Cr	10.000	40.000
Cu	10.000	40.000
Fe	250.00	1,000.0
Li	10.000	40.000
Mn	10.000	40.000
Ni	10.000	40.000
Pb	10.000	40.000
Se	10.000	40.000
Th	10.000	40.000
Tl	10.000	40.000
U	10.000	40.000
V	10.000	40.000
Zn	10.000	40.000

Parent Std No.: STD1214-09, ICPMS ICV SOLUTION B (High Purity) Aliquot Amount (ml): 0.0400
Parent Date Expires(1): 02-27-2010 Parent Date Expires(2): 02-27-2010

Component	Initial Conc (ug/ml)	Final Conc (ug/L)
Ag	10.000	40.000
Mo	10.000	40.000
Sb	10.000	40.000
Sn	10.000	40.000
Zr	10.000	40.000

STD5966-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 50.000
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD1853-09, 1 mg/l Se Aliquot Amount (ml): 0.1000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Se	1.0000	0.0020

STD5967-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 100.00
Date Prep./Opened: 10-01-2009
Date Expires(1): 10-02-2009 (1 Day)
Date Expires(2): 05-01-2010 (None)
pipettes: Met 20

Parent Std No.: STD3106-09, ICP-MS LLCCV 1 Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 05-01-2010 Parent Date Expires(2): 05-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Ag	0.5000	5.0000
Al	3.0000	30.000
As	0.5000	5.0000

Ba	0.1000	1.0000
Be	0.1000	1.0000
Ca	5.0000	50.000
Cd	0.1000	1.0000
Co	0.1000	1.0000
Cr	0.2000	2.0000
Cu	0.2000	2.0000
Fe	5.0000	50.000
K	10.000	100.00
Mg	5.0000	50.000
Mn	0.1000	1.0000
Na	5.0000	50.000
Ni	0.2000	2.0000
Pb	0.1000	1.0000
Se	0.5000	5.0000
Th	0.2000	2.0000
Tl	0.1000	1.0000
U	0.1000	1.0000
V	0.5000	5.0000
Zn	1.0000	10.000

Parent Std No.: STD3107-09, ICP-MS LLCCV 2 Aliquot Amount (ml): 1.0000

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	0.2000	2.0000
Sb	0.2000	2.0000
Sn	1.0000	10.000

Parent Std No.: STD3108-09, ICP-MS BRC LLCCV 1 Aliquot Amount (ml): 1.0000

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Nb	4.0000	40.000
Pd	0.1000	1.0000
Pt	0.1000	1.0000
W	0.5000	5.0000

File
AG100109

Reviewed By: LRD 10/01/2009

TestAmerica Denver

Standards Preparation Logbook Record

Oct-01-2009

Logbook: \\Densvr06\StdsLog\metals.std

STD5969-09, ALTCu

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H14024 Volume (ml): 100.00

Date Prep./Opened: 09-30-2009

Date Expires(1): 04-01-2010 (1 Year)

1 ppb

Parent Std No.: STD5968-09, Cu 1mg/l Aliquot Amount (ml): 0.1000

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Cu	1.0000	0.0010

File
093009

Reviewed By: LRD 10/01/2009

Page 1 of 1

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
3	Cal Blank				1.0	10/01/09 18:32		☐
4	100 ppb				1.0	10/01/09 18:35		☐
5	ICV				1.0	10/01/09 18:37		☐
6	RLIV				1.0	10/01/09 18:40		☐
7	ICB				1.0	10/01/09 18:43		☐
8	RL STD				1.0	10/01/09 18:45		☐
9	AFCEE RL				1.0	10/01/09 18:48		☐
10	ALTSe				1.0	10/01/09 18:51		☐
11	ICSA				1.0	10/01/09 18:54		☐
12	ICSAB				1.0	10/01/09 18:56		☐
13	RINSE				1.0	10/01/09 18:59		☐
14	LR1				1.0	10/01/09 19:02		☐
15	RINSE				1.0	10/01/09 19:04		☐
16	CCV				1.0	10/01/09 19:07		☐
17	CCB				1.0	10/01/09 19:10		☐
18	RLCV				1.0	10/01/09 19:13		☐
19	LR STD 1 100ppb RT 10/2/09				1.0	10/01/09 19:15		☐
20	RINSE				1.0	10/01/09 19:18		☐
21	LR STD 2 1000ppb RT 10/2/09				1.0	10/01/09 19:21		☐
22	RINSE				1.0	10/01/09 19:23		☐
23	LR STD 3 2000ppb RT 10/2/09				1.0	10/01/09 19:26		☐
24	RINSE				1.0	10/01/09 19:29		☐
25	LR STD 4 4000ppb RT 10/2/09				1.0	10/01/09 19:31		☐
26	RINSE				1.0	10/01/09 19:34		☐
27	LR STD Mn 20000ppb RT 10/2/09				1.0	10/01/09 19:37		☐
28	RINSE				1.0	10/01/09 19:39		☐
29	CCV				1.0	10/01/09 19:42		☐
30	CCB				1.0	10/01/09 19:45		☐
31	RLCV				1.0	10/01/09 19:48		☐
32	LLRLMBF	D9J010000	9274069	MD	1.0	10/01/09 19:50		☐
33	LLRLMCF	D9J010000	9274069	MD	1.0	10/01/09 19:53		☐
34	LLQ21F	D9I300280-1	9274069	MD	1.0	10/01/09 19:56		☐
35	LLQ28F	D9I300280-3	9274069	MD	1.0	10/01/09 19:59		☐
36	LLQ3EF	D9I300280-5	9274069	MD	1.0	10/01/09 20:01		☐
37	LLQ3EP5F	D9I300280	9274069		5.0	10/01/09 20:04		☐
38	LLQ3EZF	D9I300280-5	9274069		1.0	10/01/09 20:07		☐
39	LLQ3ESF	D9I300280-5	9274069	MD	1.0	10/01/09 20:10		☐
40	LLQ3EDF	D9I300280-5	9274069	MD	1.0	10/01/09 20:12		☐
41	CCV				1.0	10/01/09 20:15		☐
42	CCB				1.0	10/01/09 20:18		☐
43	RLCV				1.0	10/01/09 20:20		☐
44	LLRLGB	D9J010000	9274067	MS	1.0	10/01/09 20:23		☐
45	LLRLGC	D9J010000	9274067	MS	1.0	10/01/09 20:26		☐
46	LLQ23	D9I300280-2	9274067	MS	1.0	10/01/09 20:29		☐
47	LLQ3C	D9I300280-4	9274067	MS	1.0	10/01/09 20:31		☐
48	LLQ3F	D9I300280-6	9274067	MS	1.0	10/01/09 20:34		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
49	LLQ3FP5	D9I300280	9274067		5.0	10/01/09 20:37		☐
50	LLQ3FZ	D9I300280-6	9274067		1.0	10/01/09 20:40		☐
51	LLQ3FS	D9I300280-6	9274067	MS	1.0	10/01/09 20:42		☐
52	LLQ3FD	D9I300280-6	9274067	MS	1.0	10/01/09 20:45		☐
53	CCV				1.0	10/01/09 20:48		☐
54	CCB				1.0	10/01/09 20:51		☐
55	RLCV				1.0	10/01/09 20:53		☐
56	LLMR1B	D9I290000	9272144	MS	1.0	10/01/09 20:56		☐
57	LLMR1C	D9I290000	9272144	MS	1.0	10/01/09 20:59		☐
58	LLMR1L	D9I290000	9272144	MS	1.0	10/01/09 21:02		☐
59	LLMF0	D9I280196-5	9272144	MS	1.0	10/01/09 21:04		☐
60	LLMF1	D9I280196-6	9272144	MS	1.0	10/01/09 21:07		☐
61	LLMF2	D9I280196-7	9272144	MS	1.0	10/01/09 21:10		☐
62	CCV				1.0	10/01/09 21:12		☐
63	CCB				1.0	10/01/09 21:15		☐
64	RLCV				1.0	10/01/09 21:18		☐
65	LLCRDF	D9I230312-4	9267291	MD	1.0	10/01/09 21:21		☐
66	LLCRLF	D9I230312-7	9267291	MD	1.0	10/01/09 21:23		☐
67	LLCRMF	D9I230312-8	9267291	MD	1.0	10/01/09 21:26		☐
68	LLCRQF	D9I230312-9	9267291	MD	1.0	10/01/09 21:29		☐
69	LLCRKF	D9I230314-1	9267291	MD	1.0	10/01/09 21:32		☐
70	LLCRVF	D9I230314-2	9267291	MD	1.0	10/01/09 21:34		☐
71	LLCRWF	D9I230314-3	9267291	MD	1.0	10/01/09 21:37		☐
72	LLCR0F	D9I230314-4	9267291	MD	1.0	10/01/09 21:40		☐
73	CCV				1.0	10/01/09 21:43		☐
74	CCB				1.0	10/01/09 21:45		☐
75	RLCV				1.0	10/01/09 21:48		☐
76	LLPHAB	D9I300000	9273096	04	1.0	10/01/09 21:51		☐
77	LLPHAC	D9I300000	9273096	04	1.0	10/01/09 21:54		☐
78	LLHGT	D9I250219-1	9273096	04	1.0	10/01/09 21:56		☐
79	LLNCA	D9I290174-1	9273096	04	1.0	10/01/09 21:59		☐
80	LLNCAP5	D9I290174	9273096		5.0	10/01/09 22:02		☐
81	LLNCAZ	D9I290174-1	9273096		1.0	10/01/09 22:05		☐
82	LLNCAS	D9I290174-1	9273096	04	1.0	10/01/09 22:07		☐
83	LLNCAD	D9I290174-1	9273096	04	1.0	10/01/09 22:10		☐
84	LLNDC	D9I290182-1	9273096	04	1.0	10/01/09 22:13		☐
85	CCV				1.0	10/01/09 22:16		☐
86	CCB				1.0	10/01/09 22:18		☐
87	RLCV				1.0	10/01/09 22:21		☐
88	~~RINSE~~				~~1.0~~	~~10/01/09 22:24~~		☐
89	RINSE				1.0	~~10/01/09~~ 22:26		☐
90	RINSE				1.0	10/01/09 22:29		☐
91	RINSE				1.0	10/01/09 22:32		☐
92	RINSE				1.0	10/01/09 22:35		☐
93	RINSE				1.0	10/01/09 22:37		☐
94	~~RINSE~~				~~1.0~~	~~10/01/09 22:40~~		☐

KF 10/2/09

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
95	~~Cal Blank~~				1.0	~~10/01/09 22:43~~	VF 10/2/09	
96	Cal Blank				1.0	10/01/09 22:46		
97	100 ppb				1.0	10/01/09 22:48		
98	CCV				1.0	10/01/09 22:51		
99	CCB				1.0	10/01/09 22:54		
100	RLCV				1.0	10/01/09 22:56		
101	LLL11B	D9I280000	9271349	46	1.0	10/01/09 22:59		
102	LLL11C	D9I280000	9271349	46	1.0	10/01/09 23:02		
103	LLFWA	D9I240357-1	9271349	46	1.0	10/01/09 23:05		
104	LLFWD	D9I240357-2	9271349	46	1.0	10/01/09 23:07		
105	LLFWE	D9I240357-3	9271349	46	1.0	10/01/09 23:10		
106	LLFWG	D9I240357-4	9271349	46	1.0	10/01/09 23:13	Take all but Cr, Ni, Co. VF 10/2/09	
107	CCV				1.0	10/01/09 23:16		
108	CCB				1.0	10/01/09 23:18		
109	RLCV				1.0	10/01/09 23:21		
110	LLFWGP5	D9I240357	9271349		5.0	10/01/09 23:24		
111	LLFWGZ	D9I240357-4	9271349		1.0	10/01/09 23:27		
112	LLFWGS	D9I240357-4	9271349	46	1.0	10/01/09 23:29		
113	LLFWGD	D9I240357-4	9271349	46	1.0	10/01/09 23:32		
114	LLFWK	D9I240357-5	9271349	46	1.0	10/01/09 23:35		
115	LLFWX	D9I240357-7	9271349	46	1.0	10/01/09 23:38		
116	CCV				1.0	10/01/09 23:40		
117	CCB				1.0	10/01/09 23:43		
118	RLCV				1.0	10/01/09 23:46		
119	LLPLDB	D9I300000	9273146	MS	1.0	10/01/09 23:49		
120	LLPLDC	D9I300000	9273146	MS	1.0	10/01/09 23:51		
121	LLH48	D9I250293-1	9273146	MS	1.0	10/01/09 23:54		
122	LLH48P5	D9I250293	9273146		5.0	10/01/09 23:57		
123	LLH48Z	D9I250293-1	9273146		1.0	10/02/09 00:00		
124	LLH48S	D9I250293-1	9273146	MS	1.0	10/02/09 00:02		
125	LLH48D	D9I250293-1	9273146	MS	1.0	10/02/09 00:05		
126	CCV				1.0	10/02/09 00:08		
127	CCB				1.0	10/02/09 00:11		
128	RLCV				1.0	10/02/09 00:13		
129	LLL1GB	D9I280000	9271341	46	1.0	10/02/09 00:16		
130	LLL1GC	D9I280000	9271341	46	1.0	10/02/09 00:19		
131	LLH4L	D9I250289-1	9271341	46	1.0	10/02/09 00:22		
132	LLH4LP5	D9I250289	9271341		5.0	10/02/09 00:24	Take all but Se. VF 10/2/09	
133	LLH4LZ	D9I250289-1	9271341		1.0	10/02/09 00:27		
134	LLH4LS	D9I250289-1	9271341	46	1.0	10/02/09 00:30		
135	LLH4LD	D9I250289-1	9271341	46	1.0	10/02/09 00:32		
136	LLH4P	D9I250289-2	9271341	46	1.0	10/02/09 00:35		
137	CCV				1.0	10/02/09 00:38		
138	CCB				1.0	10/02/09 00:41		
139	RLCV				1.0	10/02/09 00:43		
140	~~RINSE~~				1.0	~~10/02/09 00:46~~	VF 10/2/09	

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
141	~~RINSE~~				~~1.0~~	~~10/02/09 00:49~~		
142	RINSE				1.0	10/02/09 00:51		
143	RINSE				1.0	10/02/09 00:54		
144	RINSE				1.0	10/02/09 00:57		
145	RINSE				1.0	10/02/09 01:00		
146	RINSE				1.0	10/02/09 01:02		
147	~~Cal Blank~~				~~1.0~~	~~10/02/09 01:05~~	VF 10/2/09	
148	Cal Blank				1.0	10/02/09 01:08		
149	100 ppb				1.0	10/02/09 01:11		
150	CCV				1.0	10/02/09 01:13		
151	CCB				1.0	10/02/09 01:16		
152	RLCV				1.0	10/02/09 01:19		
153	LLL3TB	D9I280000	9271375	04	1.0	10/02/09 01:21		
154	LLL3TC	D9I280000	9271375	04	1.0	10/02/09 01:24		
155	LLH2Q	D9I250273-1	9271375	04	1.0	10/02/09 01:27		
156	LLH2QP5	D9I250273	9271375		5.0	10/02/09 01:30		
157	LLH2QZ	D9I250273-1	9271375		1.0	10/02/09 01:32		
158	LLH2QS	D9I250273-1	9271375	04	1.0	10/02/09 01:35		
159	LLH2QD	D9I250273-1	9271375	04	1.0	10/02/09 01:38		
160	LLH2V	D9I250273-2	9271375	04	1.0	10/02/09 01:41		
161	LLH3K	D9I250280-1	9271375	04	1.0	10/02/09 01:43		
162	LLH3KS	D9I250280-1	9271375	04	1.0	10/02/09 01:46		
163	CCV				1.0	10/02/09 01:49		
164	CCB				1.0	10/02/09 01:52		
165	RLCV				1.0	10/02/09 01:54		
166	LLH3KD	D9I250280-1	9271375	04	1.0	10/02/09 01:57		
167	LLH3R	D9I250280-2	9271375	04	1.0	10/02/09 02:00		
168	LLH3T	D9I250280-3	9271375	04	1.0	10/02/09 02:03		
169	LLH3V	D9I250280-4	9271375	04	1.0	10/02/09 02:05		
170	LLH3W	D9I250280-5	9271375	04	1.0	10/02/09 02:08		
171	LLH3X	D9I250280-6	9271375	04	1.0	10/02/09 02:11		
172	LLH4A	D9I250286-1	9271375	04	1.0	10/02/09 02:14		
173	LLH4D	D9I250286-2	9271375	04	1.0	10/02/09 02:17		
174	LLJ4F	D9I260141-1	9271375	04	1.0	10/02/09 02:19		
175	LLJ4P	D9I260141-2	9271375	04	1.0	10/02/09 02:22		
176	CCV				1.0	10/02/09 02:25		
177	CCB				1.0	10/02/09 02:28		
178	RLCV				1.0	10/02/09 02:30		
179	LLL51BF	D9I280000	9271393	MD	1.0	10/02/09 02:33		
180	LLL51CF	D9I280000	9271393	MD	1.0	10/02/09 02:36		
181	LLKE1F	D9I260174-1	9271393	MD	1.0	10/02/09 02:39		
182	LLKE1P5F	D9I260174	9271393		5.0	10/02/09 02:41		
183	LLKE1ZF	D9I260174-1	9271393		1.0	10/02/09 02:44		
184	LLKE1SF	D9I260174-1	9271393	MD	1.0	10/02/09 02:47		
185	CCV				1.0	10/02/09 02:50		
186	CCB				1.0	10/02/09 02:52		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
187	RLCV				1.0	10/02/09 02:55		
188	LLKE1DF	D9I260174-1	9271393	MD	1.0	10/02/09 02:58		
189	LLKE3F	D9I260174-2	9271393	MD	1.0	10/02/09 03:01		
190	LLKE4F	D9I260174-3	9271393	MD	1.0	10/02/09 03:04		
191	LLKE5F	D9I260174-4	9271393	MD	1.0	10/02/09 03:06		
192	LLKE6F	D9I260174-5	9271393	MD	1.0	10/02/09 03:09		
193	LLKE7F	D9I260174-6	9271393	MD	1.0	10/02/09 03:12		
194	CCV				1.0	10/02/09 03:15		
195	CCB				1.0	10/02/09 03:18		
196	RLCV				1.0	10/02/09 03:20		
197	~~LLL2HB~~	~~D9I280000~~	~~9271354~~	~~MS~~	~~1.0~~	~~10/02/09 03:23~~		
198	LLL2HC	D9I280000	9271354	MS	1.0	10/02/09 03:26		
199	LLJFA	D9I250319-1	9271354	MS	1.0	10/02/09 03:29		
200	LLJFAP5	D9I250319	9271354		5.0	10/02/09 03:31		
201	LLJFAZ	D9I250319-1	9271354		1.0	10/02/09 03:34		
202	LLJFAS	D9I250319-1	9271354	MS	1.0	10/02/09 03:37		
203	LLJFAD	D9I250319-1	9271354	MS	1.0	10/02/09 03:39		
204	LLJGD	D9I250319-2	9271354	MS	1.0	10/02/09 03:42		
205	LLJGF	D9I250319-3	9271354	MS	1.0	10/02/09 03:45		
206	LLJGG	D9I250319-4	9271354	MS	1.0	10/02/09 03:47		
207	CCV				1.0	10/02/09 03:50		
208	CCB				1.0	10/02/09 03:53		
209	RLCV				1.0	10/02/09 03:56		
210	RINSE				1.0	10/02/09 03:58		
211	RINSE				1.0	10/02/09 04:01		
212	RINSE				1.0	10/02/09 04:04		
213	RINSE				1.0	10/02/09 04:07		
214	RINSE				1.0	10/02/09 04:09		
215	RINSE				1.0	10/02/09 04:12		
216	RINSE				1.0	10/02/09 04:15		
217	~~Cal Blank~~				1.0	10/02/09 04:17	FF 10/2/09 Did not use.	
218	Cal Blank				1.0	10/02/09 04:20		
219	100 ppb				1.0	10/02/09 04:23		
220	CCV				1.0	10/02/09 04:26		
221	CCB				1.0	10/02/09 04:28		
222	RLCV				1.0	10/02/09 04:31		
223	LLL0WB	D9I280000	9271338	MS	1.0	10/02/09 04:34		
224	LLL0WC	D9I280000	9271338	MS	1.0	10/02/09 04:37		
225	LLG32 5X	D9I250174-1	9271338	MS	5.0	10/02/09 04:40		
226	LLG32P25	D9I250174	9271338		25.0	10/02/09 04:42		
227	LLG32Z	D9I250174-1	9271338		1.0	10/02/09 04:45		
228	LLG32S 5X	D9I250174-1	9271338	MS	5.0	10/02/09 04:48		
229	LLG32D 5X	D9I250174-1	9271338	MS	5.0	10/02/09 04:51		
230	LLKFN	D9I260177-1	9271338	MS	1.0	10/02/09 04:53		
231	LLKFP 5X	D9I260178-1	9271338	MS	5.0	10/02/09 04:56		
232	LLKFR 5X	D9I260178-2	9271338	MS	5.0	10/02/09 04:59		

Denver RUN SUMMARY

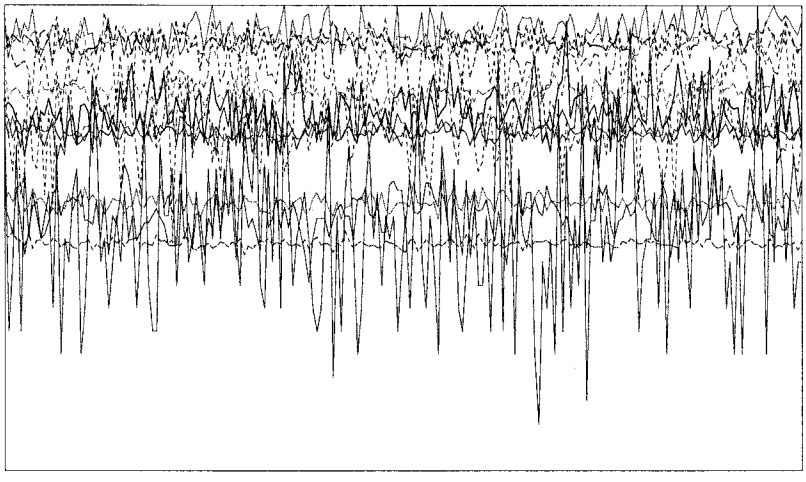
Method: 6020 (ICP/MS) ICPMS_024 (024) Reported: 10/02/09 08:59:02

File ID: AG100109 **Analyst: TEL**

#	Sample ID	Lot No.	Batch	DF	Analyzed Date	Comment	Q
233	CCV			1.0	10/02/09 05:02		☐
234	CCB			1.0	10/02/09 05:05		☐
235	RLCV			1.0	10/02/09 05:07		☐

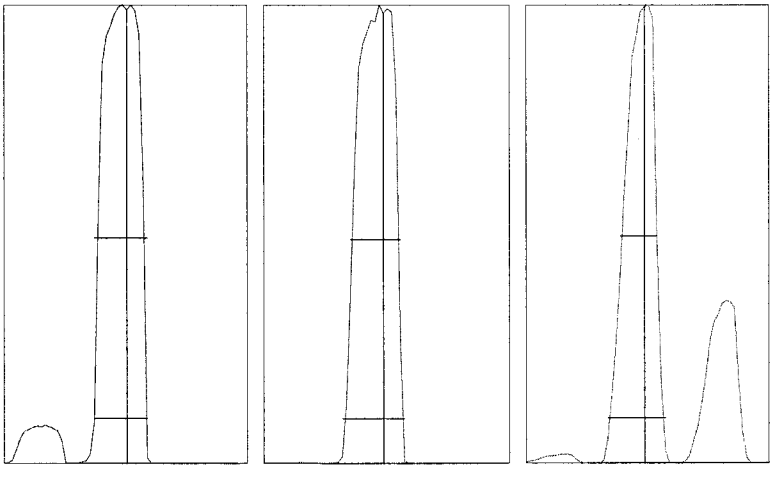
Tune Report

Tune File : NORM.U
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	1.5300 sec	
n:	200	
Oxide:	156/140	1.185%
Doubly Charged:	70/140	0.920%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1418.0	1485.4	4.29	0.80
7	20,000	19338.0	18865.5	3.47	1.30
59	50,000	30918.0	28938.0	2.77	1.60
63	200	126.0	110.7	9.12	1.00
70	500	347.0	388.5	6.55	2.00
75	20	9.0	10.5	31.63	1.70
78	500	429.0	432.8	5.29	2.00
89	50,000	45446.0	45999.3	2.12	1.60
115	50,000	40396.0	40695.5	2.21	2.20
118	200	144.0	147.9	9.54	2.00
137	5,000	4617.0	4614.9	2.35	2.20
205	50,000	24885.0	24518.4	1.76	3.30
238	50,000	37409.0	36295.4	1.68	4.60
156/140	2	1.156%	1.196%	6.45	
70/140	2	0.839%	0.953%	7.04	



m/z:	7	89	205
Height:	18,568	45,991	24,737
Axis:	7.05	89.00	205.00
W-50%:	0.65	0.60	0.45
W-10%:	0.6500	0.7500	0.700

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : Oct 01, 2009 17:59:12
Printed : Oct 01, 2009 17:59:14

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1600 W	Extract 1	:	0 V	AMU Gain	:	133
RF Matching	:	1.7 V	Extract 2	:	-175 V	AMU Offset	:	124
Smpl Depth	:	8 mm	Omega Bias-ce	:	-30 V	Axis Gain	:	1.0006
Torch-H	:	-0.8 mm	Omega Lens-ce	:	1.4 V	Axis Offset	:	-0.03
Torch-V	:	-0.3 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	0.83 L/min	QP Focus	:	7 V			
Makeup Gas	:	0.23 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1770 V
Sample Pump	:	--- rps	OctP RF	:	180 V	Pulse HV	:	1480 V
S/C Temp	:	2 degC	OctP Bias	:	-18 V			

===Reaction Cell===

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

Generated : Oct 01, 2009 17:59:12
Printed : Oct 01, 2009 17:59:17

P/A Factor Tuning Report

Acquired:Oct 1 2009 06:08 pm

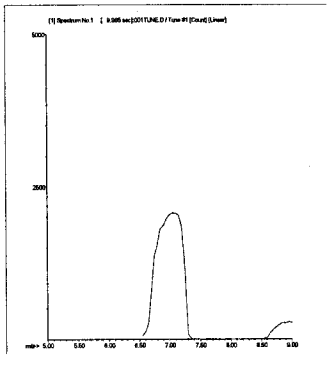
Mass[amu]	Element	P/A Factor
6	Li	0.053397
7	(Li)	Sensitivity too low
9	Be	0.059616
23	Na	0.066572
24	Mg	0.068529
27	Al	0.070000
39	K	0.069595
43	Ca	Sensitivity too low
45	Sc	0.070407
51	V	0.071744
52	Cr	0.073286
53	(Cr)	Sensitivity too low
55	Mn	0.074579
57	Fe	Sensitivity too low
59	Co	0.076853
60	Ni	0.077333
63	Cu	0.078465
66	Zn	0.078404
72	Ge	0.078192
75	As	0.077469
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
93	Nb	Sensitivity too low
95	Mo	0.078956
98	(Mo)	0.078577
99	(Mo)	0.079319
105	Pd	0.081369
106	(Cd)	0.081156
107	Ag	Sensitivity too low
108	(Cd)	0.081602
111	Cd	0.081657
115	In	0.081201
118	Sn	0.081109
121	Sb	0.081006
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
182	W	Sensitivity too low
195	Pt	Sensitivity too low
205	Tl	0.086508
206	(Pb)	0.085377
207	(Pb)	0.085402
208	Pb	0.084961
232	Th	0.084478
238	U	0.084465

===Detector Parameters===
Discriminator: 8.0 mV
Analog HV: 1770 V
Pulse HV: 1480 V

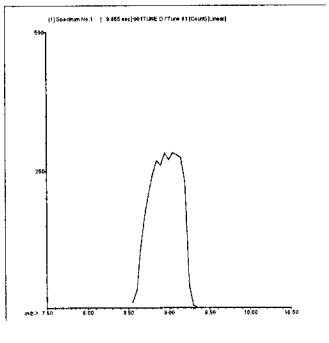
200.8 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\001TUNE.D
Date Acquired: Oct 1 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

Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
7 Li	21120	21123	21227	20965	21203	21084	0.50	5.00	
9 Be	2962	2982	2923	2978	2993	2936	1.04	5.00	
24 Mg	17300	17448	17205	17320	17121	17406	0.79	5.00	
59 Co	84694	85152	83905	84546	85214	84656	0.63	5.00	
115 In	1446742	1453303	1440055	1441477	1439772	1459106	0.62	5.00	
208 Pb	77660	78148	78258	77691	77999	76203	1.08	5.00	
238 U	155575	158923	156139	154005	154901	153908	1.33	5.00	

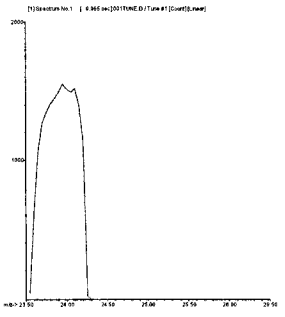


7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\AG100109.B\001TUNE.D



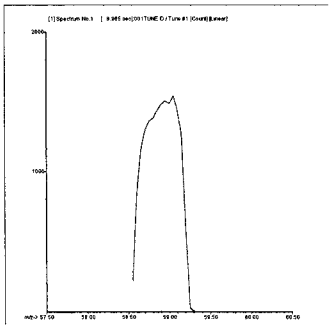
24 Mg

Mass Calib.

Actual:	24.00		
Required:	23.90	-	24.10
Flag:			

Peak Width

Actual:	0.60		
Required:	0.90		
Flag:			



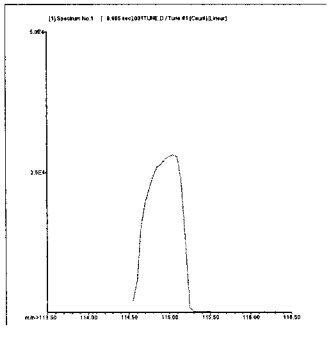
59 Co

Mass Calib.

Actual:	59.00		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.60		
Required:	0.90		
Flag:			



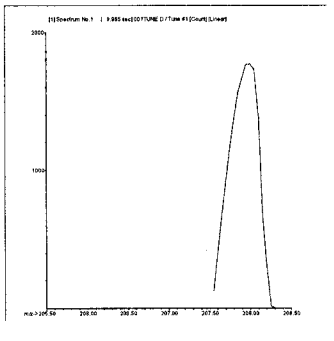
115 In

Mass Calib.

Actual:	115.00		
Required:	114.90	-	115.10
Flag:			

Peak Width

Actual:	0.60		
Required:	0.90		
Flag:			



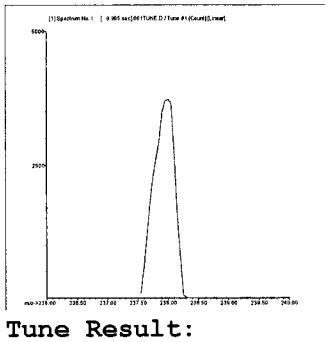
208 Pb

Mass Calib.

Actual:	207.95		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.60		
Required:	0.90		
Flag:			



238 U

Mass Calib.

Actual:	237.95		
Required:	237.90	-	238.10
Flag:			

Peak Width

Actual:	0.60		
Required:	0.90		
Flag:			

Tune Result: Pass

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\002CALB.D\002CALB.D#
Date Acquired: Oct 1 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: Oct 01 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	-330	10.49
52	Cr	72	1	3414	7.36
55	Mn	72	1	763	24.66
59	Co	72	1	113	13.48
60	Ni	72	1	110	31.49
63	Cu	72	1	363	15.16
66	Zn	72	1	1211	2.65
75	As	72	1	43	14.84
78	Se	72	1	547	30.85
95	Mo	72	1	87	66.62
107	Ag	115	1	13	86.60
111	Cd	115	1	1	2229.70
118	Sn	115	1	223	28.44
121	Sb	115	1	41	26.06
137	Ba	115	1	24	43.84
205	Tl	165	1	257	19.13
208	Pb	165	1	299	4.51
232	Th	165	1	310	22.58
238	U	165	1	97	21.53

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	412395	1.23
45	Sc	1	1844727	0.81
72	Ge	1	917770	0.74
115	In	1	2585848	2.23
165	Ho	1	4169058	0.85

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

10/1/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\003CALB.D\003CALB.D#
Date Acquired: Oct 1 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: Oct 01 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	-149	226.83
52	Cr	72	1	3601	6.79
55	Mn	72	1	807	7.05
59	Co	72	1	87	56.92
60	Ni	72	1	103	14.78
63	Cu	72	1	377	9.32
66	Zn	72	1	566	4.91
75	As	72	1	39	19.25
78	Se	72	1	673	16.89
95	Mo	72	1	57	10.19
107	Ag	115	1	13	43.30
111	Cd	115	1	4	134.17
118	Sn	115	1	363	30.32
121	Sb	115	1	24	28.39
137	Ba	115	1	22	34.64
205	Tl	165	1	140	14.48
208	Pb	165	1	241	7.09
232	Th	165	1	333	4.58
238	U	165	1	44	30.31

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	424253	0.39
45	Sc	1	1877617	1.09
72	Ge	1	929620	1.01
115	In	1	2590490	0.87
165	Ho	1	4147526	1.71

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\AG100109.B\004ICAL.D\004ICAL.D#
Date Acquired: Oct 1 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: Oct 01 2009 06:32 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	56189	1.29
51	V	72	1	1135395	1.62
52	Cr	72	1	1155393	0.74
55	Mn	72	1	1288330	0.89
59	Co	72	1	1411854	0.17
60	Ni	72	1	317309	1.13
63	Cu	72	1	762107	0.71
66	Zn	72	1	178097	0.91
75	As	72	1	143339	0.56
78	Se	72	1	25361	2.25
95	Mo	72	1	395006	1.25
107	Ag	115	1	1137415	1.68
111	Cd	115	1	225410	1.21
118	Sn	115	1	629786	1.03
121	Sb	115	1	751086	0.43
137	Ba	115	1	303305	0.34
205	Tl	165	1	2230208	0.83
208	Pb	165	1	3097858	0.19
232	Th	165	1	2996395	3.47
238	U	165	1	3355338	0.64

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	418147	0.46	424253	98.6	30 - 120	
45	Sc	1	1864396	1.73	1877617	99.3	30 - 120	
72	Ge	1	927301	0.30	929620	99.8	30 - 120	
115	In	1	2591577	1.24	2590490	100.0	30 - 120	
165	Ho	1	4156902	1.09	4147526	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\AG100109.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\AG100109.B\005 ICV.D\005 ICV.D#
Date Acquired: Oct 1 2009 06:37 pm
Operator: TEL
Sample Name: ICV
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 01 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	40.59	ppb	1.42	40	101.5	90 - 110	
51 V	72	1	40.29	ppb	2.34	40	100.7	90 - 110	
52 Cr	72	1	40.83	ppb	2.20	40	102.1	90 - 110	
55 Mn	72	1	41.55	ppb	2.58	40	103.9	90 - 110	
59 Co	72	1	41.18	ppb	2.67	40	103.0	90 - 110	
60 Ni	72	1	41.76	ppb	2.25	40	104.4	90 - 110	
63 Cu	72	1	42.07	ppb	2.96	40	105.2	90 - 110	
66 Zn	72	1	40.97	ppb	2.52	40	102.4	90 - 110	
75 As	72	1	40.53	ppb	1.92	40	101.3	90 - 110	
78 Se	72	1	40.55	ppb	1.53	40	101.4	90 - 110	
95 Mo	72	1	41.17	ppb	3.35	40	102.9	90 - 110	
107 Ag	115	1	40.17	ppb	0.02	40	100.4	90 - 110	
111 Cd	115	1	41.17	ppb	1.39	40	102.9	90 - 110	
118 Sn	115	1	40.02	ppb	1.80	40	100.1	90 - 110	
121 Sb	115	1	39.26	ppb	0.33	40	98.2	90 - 110	
137 Ba	115	1	39.82	ppb	0.44	40	99.6	90 - 110	
205 Tl	165	1	41.67	ppb	1.16	40	104.2	90 - 110	
208 Pb	165	1	41.31	ppb	0.85	40	103.3	90 - 110	
232 Th	165	1	45.83	ppb	1.48	40	114.6	90 - 110	Fail
238 U	165	1	41.75	ppb	1.47	40	104.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	430781	0.40	424253	101.5	30 - 120	
45 Sc	1	1912182	0.89	1877617	101.8	30 - 120	
72 Ge	1	917159	1.75	929620	98.7	30 - 120	
115 In	1	2599203	0.96	2590490	100.3	30 - 120	
165 Ho	1	4115351	0.71	4147526	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\AG100109.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\AG100109.B\006WASH.D\006WASH.D#
Date Acquired: Oct 1 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: Oct 01 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	0.812 ppb	14.92	1.30	
51 V	72	1	5.199 ppb	3.44	6.50	
52 Cr	72	1	2.136 ppb	3.77	2.60	
55 Mn	72	1	1.068 ppb	4.03	1.30	
59 Co	72	1	1.055 ppb	1.33	1.30	
60 Ni	72	1	2.215 ppb	5.28	2.60	
63 Cu	72	1	2.193 ppb	1.46	2.60	
66 Zn	72	1	11.110 ppb	1.60	13.00	
75 As	72	1	5.266 ppb	2.56	6.50	
78 Se	72	1	5.144 ppb	17.16	6.50	
95 Mo	72	1	2.111 ppb	2.64	2.60	
107 Ag	115	1	5.302 ppb	0.95	6.50	
111 Cd	115	1	1.058 ppb	5.60	1.30	
118 Sn	115	1	10.350 ppb	0.13	13.00	
121 Sb	115	1	2.118 ppb	1.64	2.60	
137 Ba	115	1	1.034 ppb	1.50	1.30	
205 Tl	165	1	1.135 ppb	0.99	1.30	
208 Pb	165	1	1.073 ppb	1.68	1.30	
232 Th	165	1	2.843 ppb	3.53	2.60	
238 U	165	1	1.101 ppb	1.32	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	437590	1.28	424253	103.1	30 - 120	
45 Sc	1	1903029	0.10	1877617	101.4	30 - 120	
72 Ge	1	919247	0.90	929620	98.9	30 - 120	
115 In	1	2610439	0.36	2590490	100.8	30 - 120	
165 Ho	1	4158597	0.73	4147526	100.3	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\AG100109.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\AG100109.B\007 ICB.D\007 ICB.D#
Date Acquired: Oct 1 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: Oct 01 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	0.00	ppb	278.36	1.00	
52 Cr	72	1	-0.01	ppb	312.17	1.00	
55 Mn	72	1	0.02	ppb	88.96	1.00	
59 Co	72	1	0.00	ppb	30.73	1.00	
60 Ni	72	1	0.02	ppb	98.45	1.00	
63 Cu	72	1	0.03	ppb	32.92	1.00	
66 Zn	72	1	0.13	ppb	19.35	1.00	
75 As	72	1	0.00	ppb	713.76	1.00	
78 Se	72	1	-0.70	ppb	47.40	1.00	
95 Mo	72	1	0.03	ppb	49.91	1.00	
107 Ag	115	1	0.01	ppb	11.22	1.00	
111 Cd	115	1	0.00	ppb	161.52	1.00	
118 Sn	115	1	0.06	ppb	25.32	1.00	
121 Sb	115	1	0.08	ppb	14.33	1.00	
137 Ba	115	1	0.02	ppb	35.69	1.00	
205 Tl	165	1	0.02	ppb	8.96	1.00	
208 Pb	165	1	0.00	ppb	39.86	1.00	
232 Th	165	1	0.20	ppb	18.73	1.00	
238 U	165	1	0.00	ppb	26.02	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	440917	2.45	424253	103.9	30 - 120	
45 Sc	1	1961648	1.93	1877617	104.5	30 - 120	
72 Ge	1	951133	0.51	929620	102.3	30 - 120	
115 In	1	2626838	1.22	2590490	101.4	30 - 120	
165 Ho	1	4104472	0.62	4147526	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\AG100109.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\AG100109.B\008RLST.D\008RLST.D#
Date Acquired: Oct 1 2009 06:45 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: Oct 01 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	0.94	ppb	7.44	1	94.2	50 - 150	
51 V	72	1	0.99	ppb	0.67	1	98.9	50 - 150	
52 Cr	72	1	0.99	ppb	2.61	1	99.5	50 - 150	
55 Mn	72	1	1.07	ppb	0.95	1	106.7	50 - 150	
59 Co	72	1	1.06	ppb	1.51	1	106.0	50 - 150	
60 Ni	72	1	1.04	ppb	0.92	1	104.0	50 - 150	
63 Cu	72	1	1.06	ppb	3.64	1	105.9	50 - 150	
66 Zn	72	1	10.85	ppb	1.79	10	108.5	50 - 150	
75 As	72	1	1.05	ppb	4.28	1	104.5	50 - 150	
78 Se	72	1	1.03	ppb	24.35	1	102.5	50 - 150	
95 Mo	72	1	1.08	ppb	0.39	1	107.9	50 - 150	
107 Ag	115	1	1.00	ppb	2.95	1	99.8	50 - 150	
111 Cd	115	1	1.01	ppb	8.51	1	101.3	50 - 150	
118 Sn	115	1	10.49	ppb	0.40	10	104.9	50 - 150	
121 Sb	115	1	1.01	ppb	1.68	1	100.6	50 - 150	
137 Ba	115	1	0.99	ppb	1.48	1	99.0	50 - 150	
205 Tl	165	1	1.03	ppb	1.26	1	103.1	50 - 150	
208 Pb	165	1	1.04	ppb	1.02	1	103.7	50 - 150	
232 Th	165	1	1.08	ppb	1.05	1	108.4	50 - 150	
238 U	165	1	1.07	ppb	1.43	1	107.1	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	445045	0.40	424253	104.9	30 - 120	
45 Sc	1	1910372	1.18	1877617	101.7	30 - 120	
72 Ge	1	922983	1.19	929620	99.3	30 - 120	
115 In	1	2627930	0.44	2590490	101.4	30 - 120	
165 Ho	1	4116860	0.49	4147526	99.3	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\AG100109.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\AG100109.B\009AFCE.D\009AFCE.D#
Date Acquired: Oct 1 2009 06:48 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: Oct 01 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	0.22	ppb	34.75	0	118.4	80 - 120	
51 V	72	1	0.22	ppb	16.17	0	109.0	80 - 120	
52 Cr	72	1	0.22	ppb	12.14	0	111.6	80 - 120	
55 Mn	72	1	0.22	ppb	4.52	0	101.4	80 - 120	
59 Co	72	1	0.21	ppb	2.41	0	99.0	80 - 120	
60 Ni	72	1	0.21	ppb	6.80	0	102.8	80 - 120	
63 Cu	72	1	0.23	ppb	3.62	0	108.3	80 - 120	
66 Zn	72	1	2.09	ppb	3.90	2	96.3	80 - 120	
75 As	72	1	0.20	ppb	10.67	0	96.1	80 - 120	
78 Se	72	1	0.01	ppb	1930.20	0	6.1	80 - 120	
95 Mo	72	1	0.21	ppb	6.22	0	95.4	80 - 120	
107 Ag	115	1	0.19	ppb	14.55	0	96.8	80 - 120	
111 Cd	115	1	0.19	ppb	6.27	0	95.8	80 - 120	
118 Sn	115	1	2.07	ppb	3.66	2	98.9	80 - 120	
121 Sb	115	1	0.22	ppb	4.40	0	109.5	80 - 120	
137 Ba	115	1	0.20	ppb	6.71	0	102.2	80 - 120	
205 Tl	165	1	0.21	ppb	2.37	0	101.9	80 - 120	
208 Pb	165	1	0.21	ppb	0.14	0	101.7	80 - 120	
232 Th	165	1	0.25	ppb	2.92	0	113.7	80 - 120	
238 U	165	1	0.22	ppb	4.55	0	101.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	444927	1.05	424253	104.9	30 - 120	
45 Sc	1	1941365	0.98	1877617	103.4	30 - 120	
72 Ge	1	944785	2.54	929620	101.6	30 - 120	
115 In	1	2640251	0.46	2590490	101.9	30 - 120	
165 Ho	1	4151939	1.49	4147526	100.1	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\AG100109.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\AG100109.B\010SMPL.D\010SMPL.D#
Date Acquired: Oct 1 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: Oct 01 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	173.22	3600	
51 V	72	1	-0.02	-0.02	ppb	39.43	3600	
52 Cr	72	1	0.00	0.00	ppb	25237.00	3600	
55 Mn	72	1	0.01	0.01	ppb	80.75	3600	
59 Co	72	1	0.00	0.00	ppb	3678.60	3600	
60 Ni	72	1	0.00	0.00	ppb	927.74	3600	
63 Cu	72	1	0.02	0.02	ppb	82.16	3600	
66 Zn	72	1	0.73	0.73	ppb	2.56	3600	
75 As	72	1	0.01	0.01	ppb	20.29	3600	
78 Se	72	1	2.02	2.02	ppb	13.72	3600	
95 Mo	72	1	0.01	0.01	ppb	32.02	3600	
107 Ag	115	1	0.00	0.00	ppb	76.52	3600	
111 Cd	115	1	0.00	0.00	ppb	172.47	3600	
118 Sn	115	1	0.03	0.03	ppb	36.99	3600	
121 Sb	115	1	0.02	0.02	ppb	22.74	3600	
137 Ba	115	1	0.01	0.01	ppb	37.84	3600	
205 Tl	165	1	0.01	0.01	ppb	33.23	3600	
208 Pb	165	1	0.00	0.00	ppb	25.10	3600	
232 Th	165	1	0.02	0.02	ppb	23.72	1000	
238 U	165	1	0.00	0.00	ppb	55.20	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	448045	1.75	424253	105.6	30 - 120	
45 Sc	1	1970216	0.31	1877617	104.9	30 - 120	
72 Ge	1	947355	1.11	929620	101.9	30 - 120	
115 In	1	2624798	0.29	2590490	101.3	30 - 120	
165 Ho	1	4136620	1.26	4147526	99.7	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\AG100109.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\AG100109.B\011ICSA.D\011ICSA.D#
Date Acquired: Oct 1 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: Oct 01 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	0.02 ppb	86.80	1.00	
51	V	72	1	-0.21 ppb	115.93	1.00	
52	Cr	72	1	0.59 ppb	3.68	1.00	
55	Mn	72	1	3.52 ppb	1.21	1.00	
59	Co	72	1	1.48 ppb	0.57	1.00	
60	Ni	72	1	1.35 ppb	6.37	1.00	
63	Cu	72	1	1.40 ppb	3.82	1.00	
66	Zn	72	1	2.45 ppb	1.02	10.00	
75	As	72	1	0.37 ppb	8.38	1.00	
78	Se	72	1	0.01 ppb	6004.20	1.00	
95	Mo	72	1	2038.00 ppb	0.49	2000.00	
107	Ag	115	1	0.03 ppb	13.03	1.00	
111	Cd	115	1	0.11 ppb	182.64	1.00	
118	Sn	115	1	0.10 ppb	9.18	10.00	
121	Sb	115	1	0.29 ppb	5.22	1.00	
137	Ba	115	1	0.07 ppb	5.59	1.00	
205	Tl	165	1	0.04 ppb	24.24	1.00	
208	Pb	165	1	0.13 ppb	3.02	1.00	
232	Th	165	1	0.04 ppb	4.15	1.00	
238	U	165	1	0.01 ppb	9.14	1.00	

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	278354	3.70	424253	65.6	30 - 120	
45	Sc	1	1383589	0.30	1877617	73.7	30 - 120	
72	Ge	1	702248	1.05	929620	75.5	30 - 120	
115	In	1	1963211	1.33	2590490	75.8	30 - 120	
165	Ho	1	3397050	0.26	4147526	81.9	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\AG100109.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\AG100109.B\012ICSB.D\012ICSB.D#
Date Acquired: Oct 1 2009 06:56 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: Oct 01 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	111.50	1.70	100	111.5	80 - 120	
51 V	72		1	95.04	2.07	100	95.0	80 - 120	
52 Cr	72		1	93.09	2.86	100	93.1	80 - 120	
55 Mn	72		1	98.40	2.13	100	98.4	80 - 120	
59 Co	72		1	94.00	0.64	100	94.0	80 - 120	
60 Ni	72		1	90.26	1.23	100	90.3	80 - 120	
63 Cu	72		1	89.74	2.04	100	89.7	80 - 120	
66 Zn	72		1	98.62	0.58	100	98.6	80 - 120	
75 As	72		1	100.50	0.47	100	100.5	80 - 120	
78 Se	72		1	105.60	2.20	100	105.6	80 - 120	
95 Mo	72		1	2186.00	1.73	2100	104.1	80 - 120	
107 Ag	115		1	87.41	2.66	100	87.4	80 - 120	
111 Cd	115		1	94.16	1.01	100	94.2	80 - 120	
118 Sn	115		1	99.21	0.90	100	99.2	80 - 120	
121 Sb	115		1	100.50	1.03	100	100.5	80 - 120	
137 Ba	115		1	99.86	1.46	100	99.9	80 - 120	
205 Tl	165		1	96.58	0.49	100	96.6	80 - 120	
208 Pb	165		1	95.57	1.30	100	95.6	80 - 120	
232 Th	165		1	111.10	0.37	100	111.1	80 - 120	
238 U	165		1	103.60	1.39	100	103.6	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	251332	2.59	424253	59.2	30 - 120	
45 Sc	1	1321075	0.71	1877617	70.4	30 - 120	
72 Ge	1	672340	1.12	929620	72.3	30 - 120	
115 In	1	1987321	1.05	2590490	76.7	30 - 120	
165 Ho	1	3390532	0.76	4147526	81.7	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\AG100109.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\AG100109.B\013SMPL.D\013SMPL.D#
Date Acquired: Oct 1 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: Oct 01 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	86.58	3600	
51 V	72	1	0.03	0.03	ppb	91.61	3600	
52 Cr	72	1	0.01	0.01	ppb	169.54	3600	
55 Mn	72	1	0.01	0.01	ppb	114.55	3600	
59 Co	72	1	0.01	0.01	ppb	48.11	3600	
60 Ni	72	1	0.01	0.01	ppb	115.70	3600	
63 Cu	72	1	0.03	0.03	ppb	43.33	3600	
66 Zn	72	1	0.41	0.41	ppb	6.69	3600	
75 As	72	1	0.01	0.01	ppb	74.60	3600	
78 Se	72	1	-0.44	-0.44	ppb	89.14	3600	
95 Mo	72	1	1.21	1.21	ppb	7.82	3600	
107 Ag	115	1	0.02	0.02	ppb	17.89	3600	
111 Cd	115	1	0.01	0.01	ppb	55.86	3600	
118 Sn	115	1	0.04	0.04	ppb	8.01	3600	
121 Sb	115	1	0.04	0.04	ppb	9.88	3600	
137 Ba	115	1	0.01	0.01	ppb	66.57	3600	
205 Tl	165	1	0.02	0.02	ppb	14.17	3600	
208 Pb	165	1	0.01	0.01	ppb	12.82	3600	
232 Th	165	1	0.57	0.57	ppb	23.06	1000	
238 U	165	1	0.02	0.02	ppb	4.88	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	407381	1.77	424253	96.0	30 - 120	
45 Sc	1	1795503	1.84	1877617	95.6	30 - 120	
72 Ge	1	913584	1.18	929620	98.3	30 - 120	
115 In	1	2543412	0.34	2590490	98.2	30 - 120	
165 Ho	1	4157495	0.97	4147526	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\AG100109.B\003CALB.D\003CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\014WASH.D\014WASH.D#
Date Acquired: Oct 1 2009 07:02 pm
Operator: TEL
Sample Name: LR1
Misc Info:
Vial Number: 2110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 01 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	1012.000 ppb	1.24	1.30	
51 V	72	1	924.700 ppb	1.60	6.50	
52 Cr	72	1	941.700 ppb	0.96	2.60	
55 Mn	72	1	958.800 ppb	1.60	1.30	
59 Co	72	1	974.400 ppb	1.33	1.30	
60 Ni	72	1	978.700 ppb	1.01	2.60	
63 Cu	72	1	945.200 ppb	0.49	2.60	
66 Zn	72	1	981.500 ppb	0.76	13.00	
75 As	72	1	989.300 ppb	1.40	6.50	
78 Se	72	1	1015.000 ppb	1.86	6.50	
95 Mo	72	1	985.600 ppb	2.05	2.60	
107 Ag	115	1	949.700 ppb	0.46	6.50	
111 Cd	115	1	986.100 ppb	0.36	1.30	
118 Sn	115	1	972.800 ppb	2.02	13.00	
121 Sb	115	1	949.700 ppb	2.03	2.60	
137 Ba	115	1	965.800 ppb	1.23	1.30	
205 Tl	165	1	970.700 ppb	1.48	1.30	
208 Pb	165	1	948.800 ppb	0.70	1.30	
232 Th	165	1	1057.000 ppb	0.79	2.60	
238 U	165	1	977.100 ppb	1.62	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	408751	1.37	424253	96.3	30 - 120	
45 Sc	1	1857060	0.98	1877617	98.9	30 - 120	
72 Ge	1	912352	0.89	929620	98.1	30 - 120	
115 In	1	2558921	1.38	2590490	98.8	30 - 120	
165 Ho	1	4171311	1.17	4147526	100.6	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\AG100109.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\AG100109.B\015SMPL.D\015SMPL.D#
Date Acquired: Oct 1 2009 07:04 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: Oct 01 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	0.11	0.11	ppb	63.64	3600	
51 V	72	1	0.12	0.12	ppb	8.02	3600	
52 Cr	72	1	0.08	0.08	ppb	29.85	3600	
55 Mn	72	1	0.08	0.08	ppb	24.69	3600	
59 Co	72	1	0.08	0.08	ppb	14.25	3600	
60 Ni	72	1	0.08	0.08	ppb	36.39	3600	
63 Cu	72	1	0.10	0.10	ppb	12.54	3600	
66 Zn	72	1	0.53	0.53	ppb	3.54	3600	
75 As	72	1	0.13	0.13	ppb	6.36	3600	
78 Se	72	1	0.21	0.21	ppb	269.36	3600	
95 Mo	72	1	0.71	0.71	ppb	2.15	3600	
107 Ag	115	1	0.11	0.11	ppb	13.04	3600	
111 Cd	115	1	0.08	0.08	ppb	9.01	3600	
118 Sn	115	1	0.93	0.93	ppb	7.52	3600	
121 Sb	115	1	0.44	0.44	ppb	6.36	3600	
137 Ba	115	1	0.07	0.07	ppb	8.38	3600	
205 Tl	165	1	0.25	0.25	ppb	18.30	3600	
208 Pb	165	1	0.09	0.09	ppb	16.22	3600	
232 Th	165	1	3.78	3.78	ppb	24.05	1000	
238 U	165	1	0.17	0.17	ppb	2.98	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	433543	0.20	424253	102.2	30 - 120	
45 Sc	1	1923376	1.21	1877617	102.4	30 - 120	
72 Ge	1	939701	1.08	929620	101.1	30 - 120	
115 In	1	2646594	1.98	2590490	102.2	30 - 120	
165 Ho	1	4233444	0.65	4147526	102.1	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\AG100109.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\AG100109.B\016 CCV.D\016 CCV.D#
Date Acquired: Oct 1 2009 07:07 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: Oct 01 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	50.27 ppb	2.65	50	100.5	90 - 110	
51 V	72	1	48.75 ppb	0.85	50	97.5	90 - 110	
52 Cr	72	1	49.09 ppb	1.82	50	98.2	90 - 110	
55 Mn	72	1	49.90 ppb	1.14	50	99.8	90 - 110	
59 Co	72	1	49.72 ppb	1.10	50	99.4	90 - 110	
60 Ni	72	1	50.49 ppb	1.36	50	101.0	90 - 110	
63 Cu	72	1	50.00 ppb	0.65	50	100.0	90 - 110	
66 Zn	72	1	49.42 ppb	0.69	50	98.8	90 - 110	
75 As	72	1	49.36 ppb	1.11	50	98.7	90 - 110	
78 Se	72	1	49.40 ppb	2.32	50	98.8	90 - 110	
95 Mo	72	1	48.66 ppb	1.22	50	97.3	90 - 110	
107 Ag	115	1	49.78 ppb	1.48	50	99.6	90 - 110	
111 Cd	115	1	49.69 ppb	1.84	50	99.4	90 - 110	
118 Sn	115	1	49.71 ppb	1.41	50	99.4	90 - 110	
121 Sb	115	1	49.47 ppb	1.48	50	98.9	90 - 110	
137 Ba	115	1	49.48 ppb	1.47	50	99.0	90 - 110	
205 Tl	165	1	50.18 ppb	0.78	50	100.4	90 - 110	
208 Pb	165	1	49.73 ppb	0.40	50	99.5	90 - 110	
232 Th	165	1	50.45 ppb	3.94	50	100.9	90 - 110	
238 U	165	1	49.80 ppb	1.07	50	99.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	441249	1.34	424253	104.0	30 - 120	
45 Sc	1	1943928	1.54	1877617	103.5	30 - 120	
72 Ge	1	956576	0.44	929620	102.9	30 - 120	
115 In	1	2657088	0.71	2590490	102.6	30 - 120	
165 Ho	1	4256240	1.14	4147526	102.6	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\017 CCB.D\017 CCB.D#
Date Acquired: Oct 1 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: Oct 01 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	0.011	ppb	173.22	1.00	
51 V	72	1	0.001	ppb	2695.20	1.00	
52 Cr	72	1	-0.007	ppb	148.95	1.00	
55 Mn	72	1	0.017	ppb	23.97	1.00	
59 Co	72	1	0.016	ppb	10.52	1.00	
60 Ni	72	1	0.020	ppb	43.66	1.00	
63 Cu	72	1	0.016	ppb	41.79	1.00	
66 Zn	72	1	0.525	ppb	3.65	1.00	
75 As	72	1	0.023	ppb	35.25	1.00	
78 Se	72	1	-0.249	ppb	118.76	1.00	
95 Mo	72	1	0.126	ppb	12.15	1.00	
107 Ag	115	1	0.021	ppb	10.63	1.00	
111 Cd	115	1	0.016	ppb	34.16	1.00	
118 Sn	115	1	0.266	ppb	12.84	1.00	
121 Sb	115	1	0.101	ppb	10.89	1.00	
137 Ba	115	1	0.019	ppb	47.95	1.00	
205 Tl	165	1	0.048	ppb	12.06	1.00	
208 Pb	165	1	0.019	ppb	20.68	1.00	
232 Th	165	1	1.011	ppb	17.40	1.00	Fail
238 U	165	1	0.027	ppb	7.17	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	446586	1.72	424253	105.3	30 - 120	
45 Sc	1	1952949	0.53	1877617	104.0	30 - 120	
72 Ge	1	942824	0.97	929620	101.4	30 - 120	
115 In	1	2649704	0.47	2590490	102.3	30 - 120	
165 Ho	1	4204942	1.35	4147526	101.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\018WASH.D\018WASH.D#
Date Acquired: Oct 1 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: Oct 01 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	0.923 ppb	23.81	1.30	
51 V	72	1	5.175 ppb	1.80	6.50	
52 Cr	72	1	2.057 ppb	2.73	2.60	
55 Mn	72	1	1.078 ppb	1.18	1.30	
59 Co	72	1	1.022 ppb	5.34	1.30	
60 Ni	72	1	2.184 ppb	1.80	2.60	
63 Cu	72	1	2.098 ppb	2.73	2.60	
66 Zn	72	1	10.810 ppb	0.94	13.00	
75 As	72	1	5.059 ppb	2.37	6.50	
78 Se	72	1	5.146 ppb	10.41	6.50	
95 Mo	72	1	2.056 ppb	5.86	2.60	
107 Ag	115	1	5.207 ppb	2.08	6.50	
111 Cd	115	1	1.075 ppb	3.84	1.30	
118 Sn	115	1	10.310 ppb	1.29	13.00	
121 Sb	115	1	1.972 ppb	1.18	2.60	
137 Ba	115	1	1.047 ppb	5.59	1.30	
205 Tl	165	1	1.126 ppb	0.87	1.30	
208 Pb	165	1	1.085 ppb	0.34	1.30	
232 Th	165	1	2.331 ppb	1.36	2.60	
238 U	165	1	1.087 ppb	1.17	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	462525	0.32	424253	109.0	30 - 120	
45 Sc	1	1984987	1.62	1877617	105.7	30 - 120	
72 Ge	1	965457	1.88	929620	103.9	30 - 120	
115 In	1	2661585	1.07	2590490	102.7	30 - 120	
165 Ho	1	4195336	0.48	4147526	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\019SMPL.D\019SMPL.D#
Date Acquired: Oct 1 2009 07:15 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 1
Misc Info: 100 PPB
Vial Number: 2201
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	96.25	96.25	ppb	1.95	3600	
51 V	72	1	98.03	98.03	ppb	2.38	3600	
52 Cr	72	1	98.35	98.35	ppb	2.38	3600	
55 Mn	72	1	99.85	99.85	ppb	2.34	3600	
59 Co	72	1	101.50	101.50	ppb	3.36	3600	
60 Ni	72	1	100.50	100.50	ppb	2.62	3600	
63 Cu	72	1	101.40	101.40	ppb	3.34	3600	
66 Zn	72	1	100.70	100.70	ppb	1.54	3600	
75 As	72	1	98.65	98.65	ppb	1.01	3600	
78 Se	72	1	99.06	99.06	ppb	2.61	3600	
95 Mo	72	1	96.94	96.94	ppb	1.12	3600	
107 Ag	115	1	98.38	98.38	ppb	1.26	3600	
111 Cd	115	1	97.03	97.03	ppb	0.83	3600	
118 Sn	115	1	98.43	98.43	ppb	0.85	3600	
121 Sb	115	1	97.06	97.06	ppb	0.47	3600	
137 Ba	115	1	96.69	96.69	ppb	1.13	3600	
205 Tl	165	1	98.34	98.34	ppb	1.02	3600	
208 Pb	165	1	98.00	98.00	ppb	1.51	3600	
232 Th	165	1	98.87	98.87	ppb	1.17	1000	
238 U	165	1	97.56	97.56	ppb	1.34	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	453798	2.18	424253	107.0	30 - 120	
45 Sc	1	1967336	1.45	1877617	104.8	30 - 120	
72 Ge	1	959835	1.81	929620	103.3	30 - 120	
115 In	1	2679709	0.42	2590490	103.4	30 - 120	
165 Ho	1	4198692	1.46	4147526	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\020SMPL.D\020SMPL.D#
Date Acquired: Oct 1 2009 07:18 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2202
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.02	0.02	ppb	100.32	3600	
51 V	72	1	0.04	0.04	ppb	74.13	3600	
52 Cr	72	1	0.02	0.02	ppb	155.17	3600	
55 Mn	72	1	0.02	0.02	ppb	28.61	3600	
59 Co	72	1	0.01	0.01	ppb	4.47	3600	
60 Ni	72	1	0.02	0.02	ppb	49.35	3600	
63 Cu	72	1	0.23	0.23	ppb	9.11	3600	
66 Zn	72	1	0.06	0.06	ppb	17.14	3600	
75 As	72	1	0.02	0.02	ppb	34.11	3600	
78 Se	72	1	-0.01	-0.01	ppb	2884.90	3600	
95 Mo	72	1	0.10	0.10	ppb	6.28	3600	
107 Ag	115	1	0.02	0.02	ppb	8.82	3600	
111 Cd	115	1	0.02	0.02	ppb	46.19	3600	
118 Sn	115	1	0.19	0.19	ppb	19.30	3600	
121 Sb	115	1	0.09	0.09	ppb	8.64	3600	
137 Ba	115	1	0.01	0.01	ppb	33.73	3600	
205 Tl	165	1	0.05	0.05	ppb	12.09	3600	
208 Pb	165	1	0.02	0.02	ppb	4.33	3600	
232 Th	165	1	1.54	1.54	ppb	22.07	1000	
238 U	165	1	0.02	0.02	ppb	9.28	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	466663	1.20	424253	110.0	30 - 120	
45 Sc	1	1982743	0.62	1877617	105.6	30 - 120	
72 Ge	1	948031	1.42	929620	102.0	30 - 120	
115 In	1	2626862	1.33	2590490	101.4	30 - 120	
165 Ho	1	4171845	0.88	4147526	100.6	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\AG100109.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\AG100109.B\021SMPL.D\021SMPL.D#
Date Acquired: Oct 1 2009 07:21 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 2
Misc Info: 1000 PPB
Vial Number: 2203
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	1,018.00	1018.00	ppb	1.15	3600	
51 V	72	1	925.70	925.70	ppb	2.20	3600	
52 Cr	72	1	931.90	931.90	ppb	2.22	3600	
55 Mn	72	1	951.20	951.20	ppb	1.72	3600	
59 Co	72	1	948.20	948.20	ppb	1.45	3600	
60 Ni	72	1	973.50	973.50	ppb	1.51	3600	
63 Cu	72	1	951.30	951.30	ppb	1.39	3600	
66 Zn	72	1	958.20	958.20	ppb	0.61	3600	
75 As	72	1	984.10	984.10	ppb	1.10	3600	
78 Se	72	1	1,012.00	1012.00	ppb	1.67	3600	
95 Mo	72	1	954.00	954.00	ppb	1.44	3600	
107 Ag	115	1	951.30	951.30	ppb	1.36	3600	
111 Cd	115	1	976.40	976.40	ppb	1.49	3600	
118 Sn	115	1	955.10	955.10	ppb	0.97	3600	
121 Sb	115	1	943.80	943.80	ppb	1.46	3600	
137 Ba	115	1	967.80	967.80	ppb	1.31	3600	
205 Tl	165	1	952.90	952.90	ppb	0.26	3600	
208 Pb	165	1	931.70	931.70	ppb	0.49	3600	
232 Th	165	1	1,031.00	1031.00	ppb	1.97	1000	>LDR
238 U	165	1	959.90	959.90	ppb	0.97	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	454694	0.83	424253	107.2	30 - 120	
45 Sc	1	1958310	0.83	1877617	104.3	30 - 120	
72 Ge	1	953449	1.24	929620	102.6	30 - 120	
115 In	1	2593185	1.34	2590490	100.1	30 - 120	
165 Ho	1	4163057	0.49	4147526	100.4	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\AG100109.B\003CALB.D\003CALB.D#

1 :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\AG100109.B\022SMPL.D\022SMPL.D#
Date Acquired: Oct 1 2009 07:23 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.07	0.07	ppb	80.67	3600	
51 V	72	1	0.10	0.10	ppb	23.20	3600	
52 Cr	72	1	0.17	0.17	ppb	8.58	3600	
55 Mn	72	1	0.09	0.09	ppb	21.89	3600	
59 Co	72	1	0.08	0.08	ppb	11.76	3600	
60 Ni	72	1	0.13	0.13	ppb	30.22	3600	
63 Cu	72	1	0.11	0.11	ppb	15.84	3600	
66 Zn	72	1	0.08	0.08	ppb	9.42	3600	
75 As	72	1	0.13	0.13	ppb	19.28	3600	
78 Se	72	1	-0.01	-0.01	ppb	1872.30	3600	
95 Mo	72	1	0.61	0.61	ppb	3.73	3600	
107 Ag	115	1	0.18	0.18	ppb	60.91	3600	
111 Cd	115	1	0.11	0.11	ppb	21.75	3600	
118 Sn	115	1	0.96	0.96	ppb	12.10	3600	
121 Sb	115	1	0.45	0.45	ppb	9.37	3600	
137 Ba	115	1	0.08	0.08	ppb	13.08	3600	
205 Tl	165	1	0.25	0.25	ppb	17.86	3600	
208 Pb	165	1	0.09	0.09	ppb	22.16	3600	
232 Th	165	1	4.20	4.20	ppb	24.82	1000	
238 U	165	1	0.17	0.17	ppb	4.50	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	467599	0.91	424253	110.2	30 - 120	
45 Sc	1	2001812	0.96	1877617	106.6	30 - 120	
72 Ge	1	967061	1.09	929620	104.0	30 - 120	
115 In	1	2639808	0.54	2590490	101.9	30 - 120	
165 Ho	1	4180597	0.75	4147526	100.8	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\023SMPL.D\023SMPL.D#
Date Acquired: Oct 1 2009 07:26 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 3
Misc Info: 2000 PPB
Vial Number: 2205
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	1,941.00	1941.00	ppb	2.31	3600	
51 V	72	1	1,849.00	1849.00	ppb	1.42	3600	
52 Cr	72	1	1,885.00	1885.00	ppb	2.59	3600	
55 Mn	72	1	1,902.00	1902.00	ppb	1.43	3600	
59 Co	72	1	1,908.00	1908.00	ppb	2.53	3600	
60 Ni	72	1	1,922.00	1922.00	ppb	1.25	3600	
63 Cu	72	1	1,916.00	1916.00	ppb	2.14	3600	
66 Zn	72	1	1,890.00	1890.00	ppb	0.23	3600	
75 As	72	1	1,926.00	1926.00	ppb	1.01	3600	
78 Se	72	1	2,018.00	2018.00	ppb	0.43	3600	
95 Mo	72	1	1,888.00	1888.00	ppb	1.54	3600	
107 Ag	115	1	1,893.00	1893.00	ppb	1.61	3600	
111 Cd	115	1	1,914.00	1914.00	ppb	1.05	3600	
118 Sn	115	1	1,932.00	1932.00	ppb	0.55	3600	
121 Sb	115	1	1,885.00	1885.00	ppb	1.12	3600	
137 Ba	115	1	1,902.00	1902.00	ppb	2.16	3600	
205 Tl	165	1	1,927.00	1927.00	ppb	0.41	3600	
208 Pb	165	1	1,878.00	1878.00	ppb	0.91	3600	
232 Th	165	1	2,082.00	2082.00	ppb	1.75	1000	>LDR
238 U	165	1	1,921.00	1921.00	ppb	1.41	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	467215	1.74	424253	110.1	30 - 120	
45 Sc	1	1937791	1.38	1877617	103.2	30 - 120	
72 Ge	1	944771	0.43	929620	101.6	30 - 120	
115 In	1	2552381	1.18	2590490	98.5	30 - 120	
165 Ho	1	4083581	0.94	4147526	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\AG100109.B\003CALB.D\003CALB.D#

1 :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\AG100109.B\024SMPL.D\024SMPL.D#
Date Acquired: Oct 1 2009 07:29 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2206
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.15	0.15	ppb	46.50	3600	
51 V	72	1	0.19	0.19	ppb	6.27	3600	
52 Cr	72	1	0.14	0.14	ppb	28.16	3600	
55 Mn	72	1	0.16	0.16	ppb	2.85	3600	
59 Co	72	1	0.17	0.17	ppb	14.56	3600	
60 Ni	72	1	0.18	0.18	ppb	27.04	3600	
63 Cu	72	1	0.19	0.19	ppb	24.76	3600	
66 Zn	72	1	0.13	0.13	ppb	28.21	3600	
75 As	72	1	0.27	0.27	ppb	14.01	3600	
78 Se	72	1	0.16	0.16	ppb	45.43	3600	
95 Mo	72	1	1.15	1.15	ppb	4.04	3600	
107 Ag	115	1	0.29	0.29	ppb	22.64	3600	
111 Cd	115	1	0.19	0.19	ppb	27.95	3600	
118 Sn	115	1	1.79	1.79	ppb	10.86	3600	
121 Sb	115	1	0.76	0.76	ppb	5.15	3600	
137 Ba	115	1	0.17	0.17	ppb	9.26	3600	
205 Tl	165	1	0.46	0.46	ppb	18.89	3600	
208 Pb	165	1	0.18	0.18	ppb	18.63	3600	
232 Th	165	1	5.34	5.34	ppb	24.49	1000	
238 U	165	1	0.33	0.33	ppb	5.11	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	482885	3.05	424253	113.8	30 - 120	
45 Sc	1	2032031	1.25	1877617	108.2	30 - 120	
72 Ge	1	970707	0.76	929620	104.4	30 - 120	
115 In	1	2663391	0.76	2590490	102.8	30 - 120	
165 Ho	1	4168305	1.61	4147526	100.5	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\025SMPL.D\025SMPL.D#
Date Acquired: Oct 1 2009 07:31 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD 4
Misc Info: 4000 PPB
Vial Number: 2207
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	3,904.00	3904.00	ppb	0.22	3600	>LDR
51 V	72	1	3,786.00	3786.00	ppb	2.25	3600	>LDR
52 Cr	72	1	3,814.00	3814.00	ppb	1.66	3600	>LDR
55 Mn	72	1	3,862.00	3862.00	ppb	1.27	3600	>LDR
59 Co	72	1	3,903.00	3903.00	ppb	0.55	3600	>LDR
60 Ni	72	1	3,873.00	3873.00	ppb	0.54	3600	>LDR
63 Cu	72	1	3,828.00	3828.00	ppb	1.32	3600	>LDR
66 Zn	72	1	3,774.00	3774.00	ppb	0.95	3600	>LDR
75 As	72	1	3,873.00	3873.00	ppb	1.05	3600	>LDR
78 Se	72	1	4,177.00	4177.00	ppb	0.44	3600	>LDR
95 Mo	72	1	3,817.00	3817.00	ppb	1.21	3600	>LDR
107 Ag	115	1	3,848.00	3848.00	ppb	0.73	3600	>LDR
111 Cd	115	1	3,894.00	3894.00	ppb	1.21	3600	>LDR
118 Sn	115	1	3,914.00	3914.00	ppb	1.32	3600	>LDR
121 Sb	115	1	3,868.00	3868.00	ppb	0.22	3600	>LDR
137 Ba	115	1	3,874.00	3874.00	ppb	1.37	3600	>LDR
205 Tl	165	1	3,811.00	3811.00	ppb	0.20	3600	>LDR
208 Pb	165	1	3,736.00	3736.00	ppb	0.71	3600	>LDR
232 Th	165	1	4,187.00	4187.00	ppb	0.37	1000	>LDR
238 U	165	1	3,853.00	3853.00	ppb	0.51	3600	>LDR

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	469228	1.30	424253	110.6	30 - 120	
45 Sc	1	1971887	0.43	1877617	105.0	30 - 120	
72 Ge	1	935457	0.48	929620	100.6	30 - 120	
115 In	1	2464968	0.76	2590490	95.2	30 - 120	
165 Ho	1	4013358	0.57	4147526	96.8	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\AG100109.B\003CALB.D\003CALB.D#

20 :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\AG100109.B\026SMPL.D\026SMPL.D#
Date Acquired: Oct 1 2009 07:34 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2208
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	0.25	0.25	ppb	21.28	3600	
51 V	72	1	0.35	0.35	ppb	21.17	3600	
52 Cr	72	1	0.31	0.31	ppb	18.77	3600	
55 Mn	72	1	0.31	0.31	ppb	20.91	3600	
59 Co	72	1	0.33	0.33	ppb	18.14	3600	
60 Ni	72	1	0.29	0.29	ppb	30.15	3600	
63 Cu	72	1	0.35	0.35	ppb	23.12	3600	
66 Zn	72	1	0.33	0.33	ppb	29.26	3600	
75 As	72	1	0.42	0.42	ppb	14.32	3600	
78 Se	72	1	0.17	0.17	ppb	106.93	3600	
95 Mo	72	1	2.21	2.21	ppb	2.51	3600	
107 Ag	115	1	0.42	0.42	ppb	14.49	3600	
111 Cd	115	1	0.32	0.32	ppb	29.07	3600	
118 Sn	115	1	2.91	2.91	ppb	10.65	3600	
121 Sb	115	1	1.28	1.28	ppb	3.60	3600	
137 Ba	115	1	0.31	0.31	ppb	17.73	3600	
205 Tl	165	1	0.70	0.70	ppb	17.34	3600	
208 Pb	165	1	0.33	0.33	ppb	19.35	3600	
232 Th	165	1	6.19	6.19	ppb	22.52	1000	
238 U	165	1	0.58	0.58	ppb	2.54	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	494439	2.55	424253	116.5	30 - 120	
45 Sc	1	2029684	0.66	1877617	108.1	30 - 120	
72 Ge	1	972891	0.76	929620	104.7	30 - 120	
115 In	1	2642117	0.65	2590490	102.0	30 - 120	
165 Ho	1	4186534	0.50	4147526	100.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.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\AG100109.B\027SMPL.D\027SMPL.D#
Date Acquired: Oct 1 2009 07:37 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR STD Mn
Misc Info: 20000 PPB
Vial Number: 2209
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 2009 06:35 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.08	0.08	ppb	57.23	3600	
51 V	72	1	0.09	0.09	ppb	15.88	3600	
52 Cr	72	1	0.13	0.13	ppb	28.54	3600	
55 Mn	72	1	19,520.00	19520.00	ppb	0.30	3600	>LDR
59 Co	72	1	0.17	0.17	ppb	2.71	3600	
60 Ni	72	1	0.14	0.14	ppb	24.14	3600	
63 Cu	72	1	0.17	0.17	ppb	13.76	3600	
66 Zn	72	1	2.75	2.75	ppb	0.78	3600	
75 As	72	1	0.14	0.14	ppb	10.30	3600	
78 Se	72	1	0.07	0.07	ppb	860.39	3600	
95 Mo	72	1	0.46	0.46	ppb	4.82	3600	
107 Ag	115	1	0.16	0.16	ppb	7.07	3600	
111 Cd	115	1	0.08	0.08	ppb	14.85	3600	
118 Sn	115	1	0.92	0.92	ppb	19.94	3600	
121 Sb	115	1	0.38	0.38	ppb	5.82	3600	
137 Ba	115	1	0.13	0.13	ppb	9.33	3600	
205 Tl	165	1	0.18	0.18	ppb	10.02	3600	
208 Pb	165	1	0.13	0.13	ppb	8.93	3600	
232 Th	165	1	1.11	1.11	ppb	11.41	1000	
238 U	165	1	0.13	0.13	ppb	1.74	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	487624	1.70	424253	114.9	30 - 120	
45 Sc	1	2059213	0.54	1877617	109.7	30 - 120	
72 Ge	1	985180	0.89	929620	106.0	30 - 120	
115 In	1	2651984	0.71	2590490	102.4	30 - 120	
165 Ho	1	4150883	0.98	4147526	100.1	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\AG100109.B\003CALB.D\003CALB.D#

1 :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\AG100109.B\028SMPL.D\028SMPL.D#
Date Acquired: Oct 1 2009 07:39 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 2210
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 01 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	86.59	3600	
51 V	72	1	0.03	0.03	ppb	79.66	3600	
52 Cr	72	1	0.04	0.04	ppb	89.44	3600	
55 Mn	72	1	2.01	2.01	ppb	16.19	3600	
59 Co	72	1	0.04	0.04	ppb	22.44	3600	
60 Ni	72	1	0.03	0.03	ppb	45.32	3600	
63 Cu	72	1	0.08	0.08	ppb	6.24	3600	
66 Zn	72	1	0.02	0.02	ppb	17.43	3600	
75 As	72	1	0.06	0.06	ppb	14.93	3600	
78 Se	72	1	0.34	0.34	ppb	106.96	3600	
95 Mo	72	1	0.18	0.18	ppb	14.44	3600	
107 Ag	115	1	0.03	0.03	ppb	16.11	3600	
111 Cd	115	1	0.03	0.03	ppb	53.95	3600	
118 Sn	115	1	0.55	0.55	ppb	16.24	3600	
121 Sb	115	1	0.19	0.19	ppb	10.37	3600	
137 Ba	115	1	0.03	0.03	ppb	26.08	3600	
205 Tl	165	1	0.06	0.06	ppb	0.68	3600	
208 Pb	165	1	0.03	0.03	ppb	5.14	3600	
232 Th	165	1	0.45	0.45	ppb	4.69	1000	
238 U	165	1	0.05	0.05	ppb	1.93	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	494145	1.15	424253	116.5	30 - 120	
45 Sc	1	2054958	0.57	1877617	109.4	30 - 120	
72 Ge	1	975042	1.77	929620	104.9	30 - 120	
115 In	1	2657589	0.09	2590490	102.6	30 - 120	
165 Ho	1	4131937	1.09	4147526	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\AG100109.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\AG100109.B\029 CCV.D\029 CCV.D#
Date Acquired: Oct 1 2009 07:42 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: Oct 01 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	47.95 ppb	1.60	50	95.9	90 - 110	
51 V	72	1	49.98 ppb	0.99	50	100.0	90 - 110	
52 Cr	72	1	50.43 ppb	2.00	50	100.9	90 - 110	
55 Mn	72	1	51.44 ppb	1.48	50	102.9	90 - 110	
59 Co	72	1	52.12 ppb	1.20	50	104.2	90 - 110	
60 Ni	72	1	51.50 ppb	1.17	50	103.0	90 - 110	
63 Cu	72	1	51.73 ppb	2.12	50	103.5	90 - 110	
66 Zn	72	1	49.82 ppb	1.96	50	99.6	90 - 110	
75 As	72	1	49.78 ppb	1.58	50	99.6	90 - 110	
78 Se	72	1	50.62 ppb	3.16	50	101.2	90 - 110	
95 Mo	72	1	49.10 ppb	1.69	50	98.2	90 - 110	
107 Ag	115	1	50.79 ppb	1.34	50	101.6	90 - 110	
111 Cd	115	1	49.31 ppb	1.56	50	98.6	90 - 110	
118 Sn	115	1	50.36 ppb	2.02	50	100.7	90 - 110	
121 Sb	115	1	49.68 ppb	0.72	50	99.4	90 - 110	
137 Ba	115	1	49.60 ppb	1.75	50	99.2	90 - 110	
205 Tl	165	1	50.43 ppb	1.34	50	100.9	90 - 110	
208 Pb	165	1	50.02 ppb	0.93	50	100.0	90 - 110	
232 Th	165	1	49.64 ppb	2.35	50	99.3	90 - 110	
238 U	165	1	50.27 ppb	1.05	50	100.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	495474	2.26	424253	116.8	30 - 120	
45 Sc	1	2043735	1.42	1877617	108.8	30 - 120	
72 Ge	1	975644	0.99	929620	105.0	30 - 120	
115 In	1	2654198	0.61	2590490	102.5	30 - 120	
165 Ho	1	4155379	0.59	4147526	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\AG100109.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\AG100109.B\030 CCB.D\030 CCB.D#
Date Acquired: Oct 1 2009 07:45 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: Oct 01 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	0.010	ppb	86.59	1.00	
51 V	72	1	0.023	ppb	179.34	1.00	
52 Cr	72	1	0.003	ppb	504.24	1.00	
55 Mn	72	1	0.200	ppb	8.82	1.00	
59 Co	72	1	0.024	ppb	8.20	1.00	
60 Ni	72	1	0.017	ppb	27.33	1.00	
63 Cu	72	1	0.034	ppb	25.52	1.00	
66 Zn	72	1	0.518	ppb	8.79	1.00	
75 As	72	1	0.041	ppb	24.36	1.00	
78 Se	72	1	-0.168	ppb	143.04	1.00	
95 Mo	72	1	0.104	ppb	7.50	1.00	
107 Ag	115	1	0.024	ppb	5.37	1.00	
111 Cd	115	1	0.013	ppb	19.88	1.00	
118 Sn	115	1	0.347	ppb	14.69	1.00	
121 Sb	115	1	0.122	ppb	11.64	1.00	
137 Ba	115	1	0.023	ppb	24.89	1.00	
205 Tl	165	1	0.054	ppb	15.69	1.00	
208 Pb	165	1	0.019	ppb	15.53	1.00	
232 Th	165	1	1.309	ppb	15.53	1.00	Fail
238 U	165	1	0.029	ppb	7.29	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	485022	0.55	424253	114.3	30 - 120	
45 Sc	1	2036196	0.25	1877617	108.4	30 - 120	
72 Ge	1	977050	0.64	929620	105.1	30 - 120	
115 In	1	2641500	0.53	2590490	102.0	30 - 120	
165 Ho	1	4128048	1.06	4147526	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\AG100109.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\AG100109.B\031WASH.D\031WASH.D#
Date Acquired: Oct 1 2009 07:48 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: Oct 01 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	0.953 ppb	26.91	1.30	
51 V	72	1	5.234 ppb	1.81	6.50	
52 Cr	72	1	2.132 ppb	2.35	2.60	
55 Mn	72	1	1.161 ppb	3.92	1.30	
59 Co	72	1	1.079 ppb	2.86	1.30	
60 Ni	72	1	2.158 ppb	4.04	2.60	
63 Cu	72	1	2.201 ppb	4.44	2.60	
66 Zn	72	1	11.000 ppb	0.70	13.00	
75 As	72	1	5.258 ppb	0.95	6.50	
78 Se	72	1	5.601 ppb	10.76	6.50	
95 Mo	72	1	2.081 ppb	1.45	2.60	
107 Ag	115	1	5.299 ppb	0.56	6.50	
111 Cd	115	1	1.067 ppb	2.52	1.30	
118 Sn	115	1	10.540 ppb	1.72	13.00	
121 Sb	115	1	2.047 ppb	0.94	2.60	
137 Ba	115	1	1.082 ppb	4.96	1.30	
205 Tl	165	1	1.122 ppb	1.73	1.30	
208 Pb	165	1	1.094 ppb	1.77	1.30	
232 Th	165	1	2.353 ppb	2.50	2.60	
238 U	165	1	1.092 ppb	0.96	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	496271	1.09	424253	117.0	30 - 120	
45 Sc	1	2060266	0.48	1877617	109.7	30 - 120	
72 Ge	1	975265	0.16	929620	104.9	30 - 120	
115 In	1	2645744	0.89	2590490	102.1	30 - 120	
165 Ho	1	4143290	1.56	4147526	99.9	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\AG100109.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: LRD

Date: 10/01/2009

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\096CALB.D\096CALB.D#
Date Acquired: Oct 1 2009 10:46 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: Oct 01 2009 10:44 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-117	214.88
52	Cr	72	1	3864	5.23
55	Mn	72	1	823	8.97
59	Co	72	1	107	14.15
60	Ni	72	1	153	25.98
63	Cu	72	1	3651	3.07
66	Zn	72	1	1889	2.36
75	As	72	1	51	3.01
78	Se	72	1	1220	5.38
95	Mo	72	1	287	11.92
107	Ag	115	1	27	57.15
111	Cd	115	1	6	419.43
118	Sn	115	1	650	11.28
121	Sb	115	1	84	34.73
137	Ba	115	1	47	32.06
205	Tl	165	1	120	12.47
208	Pb	165	1	293	11.65
232	Th	165	1	297	6.02
238	U	165	1	37	37.05

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	497821	0.49
45	Sc	1	2028015	1.12
72	Ge	1	952185	1.55
115	In	1	2535878	1.23
165	Ho	1	3780273	1.03

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\AG100109.B\097ICAL.D\097ICAL.D#
Date Acquired: Oct 1 2009 10:48 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: Oct 01 2009 10:46 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	60359	1.56
51	V	72	1	1204800	0.67
52	Cr	72	1	1207832	3.23
55	Mn	72	1	1357388	1.21
59	Co	72	1	1509411	1.57
60	Ni	72	1	336166	1.09
63	Cu	72	1	806265	1.15
66	Zn	72	1	177999	0.96
75	As	72	1	148201	0.95
78	Se	72	1	26917	1.71
95	Mo	72	1	391851	1.45
107	Ag	115	1	1126720	1.22
111	Cd	115	1	215255	2.05
118	Sn	115	1	613660	2.12
121	Sb	115	1	707419	1.76
137	Ba	115	1	297206	1.71
205	Tl	165	1	2007173	0.52
208	Pb	165	1	2741282	0.93
232	Th	165	1	2606070	2.92
238	U	165	1	2895153	0.44

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	499772	1.15	497821	100.4	30 - 120	
45	Sc	1	2019921	0.95	2028015	99.6	30 - 120	
72	Ge	1	942102	0.87	952185	98.9	30 - 120	
115	In	1	2538567	1.10	2535878	100.1	30 - 120	
165	Ho	1	3780173	0.85	3780273	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\AG100109.B\096CALB.D\096CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\098 CCV.D\098 CCV.D#
Date Acquired: Oct 1 2009 10:51 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: Oct 01 2009 10:49 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	50.45	ppb	0.20	50	100.9	90 - 110	
51 V	72	1	48.96	ppb	2.46	50	97.9	90 - 110	
52 Cr	72	1	49.31	ppb	1.01	50	98.6	90 - 110	
55 Mn	72	1	49.24	ppb	2.28	50	98.5	90 - 110	
59 Co	72	1	49.03	ppb	1.57	50	98.1	90 - 110	
60 Ni	72	1	50.78	ppb	1.48	50	101.6	90 - 110	
63 Cu	72	1	50.03	ppb	2.22	50	100.1	90 - 110	
66 Zn	72	1	48.95	ppb	2.20	50	97.9	90 - 110	
75 As	72	1	49.40	ppb	1.32	50	98.8	90 - 110	
78 Se	72	1	49.52	ppb	2.17	50	99.0	90 - 110	
95 Mo	72	1	49.68	ppb	0.53	50	99.4	90 - 110	
107 Ag	115	1	49.47	ppb	1.30	50	98.9	90 - 110	
111 Cd	115	1	49.47	ppb	1.80	50	98.9	90 - 110	
118 Sn	115	1	49.52	ppb	1.64	50	99.0	90 - 110	
121 Sb	115	1	49.69	ppb	2.12	50	99.4	90 - 110	
137 Ba	115	1	49.86	ppb	1.09	50	99.7	90 - 110	
205 Tl	165	1	50.89	ppb	2.07	50	101.8	90 - 110	
208 Pb	165	1	50.30	ppb	0.47	50	100.6	90 - 110	
232 Th	165	1	52.37	ppb	3.03	50	104.7	90 - 110	
238 U	165	1	51.05	ppb	1.28	50	102.1	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	497386	1.86	497821	99.9	30 - 120	
45 Sc	1	2009785	0.62	2028015	99.1	30 - 120	
72 Ge	1	946277	1.22	952185	99.4	30 - 120	
115 In	1	2543004	1.28	2535878	100.3	30 - 120	
165 Ho	1	3768341	1.34	3780273	99.7	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\AG100109.B\096CALB.D\096CALB.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\AG100109.B\099 CCB.D\099 CCB.D#
Date Acquired: Oct 1 2009 10:54 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: Oct 01 2009 10:49 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	0.016	ppb	100.24	1.00	
51 V	72	1	0.012	ppb	204.83	1.00	
52 Cr	72	1	0.003	ppb	574.01	1.00	
55 Mn	72	1	0.014	ppb	34.62	1.00	
59 Co	72	1	0.008	ppb	15.21	1.00	
60 Ni	72	1	0.000	ppb	2772.30	1.00	
63 Cu	72	1	-0.058	ppb	16.57	1.00	
66 Zn	72	1	-0.323	ppb	1.49	1.00	
75 As	72	1	0.017	ppb	28.20	1.00	
78 Se	72	1	-0.627	ppb	70.84	1.00	
95 Mo	72	1	0.020	ppb	23.38	1.00	
107 Ag	115	1	0.012	ppb	27.62	1.00	
111 Cd	115	1	0.013	ppb	60.43	1.00	
118 Sn	115	1	0.100	ppb	23.65	1.00	
121 Sb	115	1	0.054	ppb	19.18	1.00	
137 Ba	115	1	0.008	ppb	12.16	1.00	
205 Tl	165	1	0.038	ppb	6.18	1.00	
208 Pb	165	1	0.013	ppb	13.75	1.00	
232 Th	165	1	1.330	ppb	16.06	1.00	Fail
238 U	165	1	0.020	ppb	5.68	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	504088	0.39	497821	101.3	30 - 120	
45 Sc	1	2034723	0.30	2028015	100.3	30 - 120	
72 Ge	1	947996	1.02	952185	99.6	30 - 120	
115 In	1	2544365	1.12	2535878	100.3	30 - 120	
165 Ho	1	3780055	0.84	3780273	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\AG100109.B\096CALB.D\096CALB.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\AG100109.B\100WASH.D\100WASH.D#
Date Acquired: Oct 1 2009 10:56 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: Oct 01 2009 10:49 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	0.928 ppb	14.46	1.30	
51 V	72	1	5.181 ppb	1.70	6.50	
52 Cr	72	1	2.121 ppb	0.62	2.60	
55 Mn	72	1	1.056 ppb	2.93	1.30	
59 Co	72	1	1.013 ppb	4.80	1.30	
60 Ni	72	1	2.107 ppb	6.34	2.60	
63 Cu	72	1	1.992 ppb	2.81	2.60	
66 Zn	72	1	10.050 ppb	1.72	13.00	
75 As	72	1	5.201 ppb	1.17	6.50	
78 Se	72	1	4.294 ppb	19.68	6.50	
95 Mo	72	1	2.063 ppb	5.74	2.60	
107 Ag	115	1	5.231 ppb	1.17	6.50	
111 Cd	115	1	1.116 ppb	1.60	1.30	
118 Sn	115	1	10.310 ppb	2.04	13.00	
121 Sb	115	1	1.992 ppb	2.20	2.60	
137 Ba	115	1	1.077 ppb	3.59	1.30	
205 Tl	165	1	1.111 ppb	1.52	1.30	
208 Pb	165	1	1.090 ppb	1.88	1.30	
232 Th	165	1	2.362 ppb	2.55	2.60	
238 U	165	1	1.107 ppb	1.79	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	498992	1.80	497821	100.2	30 - 120	
45 Sc	1	2017855	1.23	2028015	99.5	30 - 120	
72 Ge	1	942446	0.78	952185	99.0	30 - 120	
115 In	1	2532130	0.55	2535878	99.9	30 - 120	
165 Ho	1	3767209	1.40	3780273	99.7	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\AG100109.B\096CALB.D\096CALB.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: 10/2/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\148CALB.D\148CALB.D#
Date Acquired: Oct 2 2009 01:08 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: Oct 02 2009 01:06 am
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-244	155.33
52	Cr	72	1	3784	3.35
55	Mn	72	1	707	2.80
59	Co	72	1	100	34.32
60	Ni	72	1	200	27.11
63	Cu	72	1	6088	2.65
66	Zn	72	1	1660	1.74
75	As	72	1	57	15.36
78	Se	72	1	1490	9.58
95	Mo	72	1	287	3.32
107	Ag	115	1	30	33.16
111	Cd	115	1	10	170.55
118	Sn	115	1	743	6.47
121	Sb	115	1	41	17.12
137	Ba	115	1	43	46.08
205	Tl	165	1	74	14.92
208	Pb	165	1	242	16.04
232	Th	165	1	213	36.73
238	U	165	1	26	66.31

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	488250	0.44
45	Sc	1	1934674	0.79
72	Ge	1	888023	0.71
115	In	1	2419559	1.22
165	Ho	1	3622281	1.01

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\AG100109.B\149ICAL.D\149ICAL.D#
Date Acquired: Oct 2 2009 01:11 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: Oct 02 2009 01:09 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	57370	1.01
51	V	72	1	1132928	1.14
52	Cr	72	1	1140310	1.94
55	Mn	72	1	1294043	1.67
59	Co	72	1	1396704	1.45
60	Ni	72	1	315529	1.40
63	Cu	72	1	758379	1.12
66	Zn	72	1	165107	0.89
75	As	72	1	138561	0.57
78	Se	72	1	25938	1.93
95	Mo	72	1	370901	0.41
107	Ag	115	1	1062098	0.87
111	Cd	115	1	204244	0.98
118	Sn	115	1	579800	1.07
121	Sb	115	1	668303	1.18
137	Ba	115	1	284936	0.45
205	Tl	165	1	1914641	0.77
208	Pb	165	1	2618094	0.43
232	Th	165	1	2552537	2.12
238	U	165	1	2761616	0.32

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	484053	0.73	488250	99.1	30 - 120	
45	Sc	1	1921111	0.56	1934674	99.3	30 - 120	
72	Ge	1	890368	0.32	888023	100.3	30 - 120	
115	In	1	2410922	0.65	2419559	99.6	30 - 120	
165	Ho	1	3599886	0.45	3622281	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\AG100109.B\148CALB.D\148CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\150 CCV.D\150 CCV.D#
Date Acquired: Oct 2 2009 01:13 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: Oct 02 2009 01:11 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	50.13 ppb	0.84	50	100.3	90 - 110	
51 V	72	1	48.92 ppb	0.53	50	97.8	90 - 110	
52 Cr	72	1	49.30 ppb	0.10	50	98.6	90 - 110	
55 Mn	72	1	48.28 ppb	0.21	50	96.6	90 - 110	
59 Co	72	1	49.39 ppb	1.23	50	98.8	90 - 110	
60 Ni	72	1	49.30 ppb	0.36	50	98.6	90 - 110	
63 Cu	72	1	49.81 ppb	0.65	50	99.6	90 - 110	
66 Zn	72	1	49.02 ppb	1.07	50	98.0	90 - 110	
75 As	72	1	49.42 ppb	0.73	50	98.8	90 - 110	
78 Se	72	1	47.23 ppb	4.97	50	94.5	90 - 110	
95 Mo	72	1	49.44 ppb	0.40	50	98.9	90 - 110	
107 Ag	115	1	49.95 ppb	2.51	50	99.9	90 - 110	
111 Cd	115	1	49.79 ppb	2.72	50	99.6	90 - 110	
118 Sn	115	1	49.97 ppb	2.93	50	99.9	90 - 110	
121 Sb	115	1	49.92 ppb	2.28	50	99.8	90 - 110	
137 Ba	115	1	49.46 ppb	2.37	50	98.9	90 - 110	
205 Tl	165	1	50.33 ppb	2.41	50	100.7	90 - 110	
208 Pb	165	1	50.10 ppb	1.70	50	100.2	90 - 110	
232 Th	165	1	51.84 ppb	1.91	50	103.7	90 - 110	
238 U	165	1	50.80 ppb	1.24	50	101.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	484341	0.57	488250	99.2	30 - 120	
45 Sc	1	1887206	1.32	1934674	97.5	30 - 120	
72 Ge	1	887220	0.13	888023	99.9	30 - 120	
115 In	1	2383756	1.84	2419559	98.5	30 - 120	
165 Ho	1	3574594	0.79	3622281	98.7	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\148CALB.D\148CALB.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\AG100109.B\151 CCB.D\151 CCB.D#
Date Acquired: Oct 2 2009 01:16 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: Oct 02 2009 01:11 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.029	ppb	35.10	1.00	
51 V	72	1	0.059	ppb	25.36	1.00	
52 Cr	72	1	-0.008	ppb	258.01	1.00	
55 Mn	72	1	0.009	ppb	47.50	1.00	
59 Co	72	1	0.011	ppb	13.03	1.00	
60 Ni	72	1	-0.015	ppb	65.78	1.00	
63 Cu	72	1	-0.031	ppb	176.37	1.00	
66 Zn	72	1	-0.297	ppb	5.16	1.00	
75 As	72	1	0.008	ppb	50.38	1.00	
78 Se	72	1	-0.081	ppb	298.01	1.00	
95 Mo	72	1	0.035	ppb	40.58	1.00	
107 Ag	115	1	0.015	ppb	4.07	1.00	
111 Cd	115	1	0.009	ppb	126.64	1.00	
118 Sn	115	1	0.056	ppb	53.83	1.00	
121 Sb	115	1	0.058	ppb	6.49	1.00	
137 Ba	115	1	0.001	ppb	1088.20	1.00	
205 Tl	165	1	0.042	ppb	12.58	1.00	
208 Pb	165	1	0.017	ppb	12.71	1.00	
232 Th	165	1	0.792	ppb	23.11	1.00	
238 U	165	1	0.021	ppb	15.52	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	487592	0.66	488250	99.9	30 - 120	
45 Sc	1	1907973	0.24	1934674	98.6	30 - 120	
72 Ge	1	883612	1.34	888023	99.5	30 - 120	
115 In	1	2407804	1.04	2419559	99.5	30 - 120	
165 Ho	1	3602772	0.46	3622281	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\AG100109.B\148CALB.D\148CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\152WASH.D\152WASH.D#
Date Acquired: Oct 2 2009 01:19 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: Oct 02 2009 01:11 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	0.981 ppb	11.10	1.30	
51 V	72	1	5.255 ppb	1.50	6.50	
52 Cr	72	1	2.088 ppb	1.50	2.60	
55 Mn	72	1	1.020 ppb	1.33	1.30	
59 Co	72	1	1.044 ppb	1.15	1.30	
60 Ni	72	1	2.061 ppb	1.84	2.60	
63 Cu	72	1	2.016 ppb	2.63	2.60	
66 Zn	72	1	10.630 ppb	0.52	13.00	
75 As	72	1	5.221 ppb	2.27	6.50	
78 Se	72	1	4.064 ppb	16.35	6.50	
95 Mo	72	1	1.992 ppb	0.18	2.60	
107 Ag	115	1	5.152 ppb	1.31	6.50	
111 Cd	115	1	1.030 ppb	1.68	1.30	
118 Sn	115	1	10.270 ppb	2.70	13.00	
121 Sb	115	1	1.968 ppb	2.26	2.60	
137 Ba	115	1	1.048 ppb	2.58	1.30	
205 Tl	165	1	1.104 ppb	0.70	1.30	
208 Pb	165	1	1.083 ppb	2.42	1.30	
232 Th	165	1	2.222 ppb	1.19	2.60	
238 U	165	1	1.112 ppb	0.90	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	484516	1.06	488250	99.2	30 - 120	
45 Sc	1	1907011	1.18	1934674	98.6	30 - 120	
72 Ge	1	874193	0.83	888023	98.4	30 - 120	
115 In	1	2394465	0.47	2419559	99.0	30 - 120	
165 Ho	1	3588975	0.70	3622281	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\AG100109.B\148CALB.D\148CALB.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: 10/2/09

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.D#
Date Acquired: Oct 2 2009 04:20 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: Oct 02 2009 04:18 am
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	7	86.61
51	V	72	1	-265	55.34
52	Cr	72	1	2244	4.29
55	Mn	72	1	573	6.39
59	Co	72	1	127	9.65
60	Ni	72	1	87	32.48
63	Cu	72	1	1683	3.32
66	Zn	72	1	2358	1.13
75	As	72	1	35	9.36
78	Se	72	1	787	2.10
95	Mo	72	1	190	19.09
107	Ag	115	1	13	114.68
111	Cd	115	1	-1	460.13
118	Sn	115	1	433	8.33
121	Sb	115	1	87	20.26
137	Ba	115	1	42	13.15
205	Tl	165	1	86	18.73
208	Pb	165	1	213	5.67
232	Th	165	1	183	16.96
238	U	165	1	37	24.23

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	331435	0.59
45	Sc	1	1316255	1.13
72	Ge	1	598993	0.76
115	In	1	1669391	1.19
165	Ho	1	2529503	0.39

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\AG100109.B\219ICAL.D\219ICAL.D#
Date Acquired: Oct 2 2009 04:23 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: Oct 02 2009 04:21 am
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	37429	1.46
51	V	72	1	753598	0.43
52	Cr	72	1	752212	1.29
55	Mn	72	1	855861	2.11
59	Co	72	1	946347	1.34
60	Ni	72	1	210483	1.83
63	Cu	72	1	502772	0.83
66	Zn	72	1	107630	1.39
75	As	72	1	93477	1.84
78	Se	72	1	17628	3.20
95	Mo	72	1	249696	0.72
107	Ag	115	1	713656	1.11
111	Cd	115	1	137526	0.27
118	Sn	115	1	397245	0.63
121	Sb	115	1	454145	0.72
137	Ba	115	1	200561	0.87
205	Tl	165	1	1373920	0.83
208	Pb	165	1	1861594	0.60
232	Th	165	1	1853754	2.15
238	U	165	1	1999565	0.32

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	327901	0.91	331435	98.9	30 - 120	
45	Sc	1	1293761	0.29	1316255	98.3	30 - 120	
72	Ge	1	586340	0.67	598993	97.9	30 - 120	
115	In	1	1689635	0.80	1669391	101.2	30 - 120	
165	Ho	1	2569735	0.20	2529503	101.6	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\AG100109.B\218CALB.D\218CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\220 CCV.D\220 CCV.D#
Date Acquired: Oct 2 2009 04:26 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: Oct 02 2009 04:24 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	50.16	ppb	1.34	50	100.3	90 - 110	
51 V	72	1	49.70	ppb	1.63	50	99.4	90 - 110	
52 Cr	72	1	49.69	ppb	1.23	50	99.4	90 - 110	
55 Mn	72	1	49.81	ppb	1.57	50	99.6	90 - 110	
59 Co	72	1	49.34	ppb	0.22	50	98.7	90 - 110	
60 Ni	72	1	50.51	ppb	2.18	50	101.0	90 - 110	
63 Cu	72	1	50.63	ppb	1.15	50	101.3	90 - 110	
66 Zn	72	1	50.35	ppb	0.49	50	100.7	90 - 110	
75 As	72	1	50.82	ppb	0.58	50	101.6	90 - 110	
78 Se	72	1	50.62	ppb	1.06	50	101.2	90 - 110	
95 Mo	72	1	49.90	ppb	0.90	50	99.8	90 - 110	
107 Ag	115	1	50.00	ppb	1.52	50	100.0	90 - 110	
111 Cd	115	1	49.41	ppb	0.83	50	98.8	90 - 110	
118 Sn	115	1	50.32	ppb	1.39	50	100.6	90 - 110	
121 Sb	115	1	50.18	ppb	1.03	50	100.4	90 - 110	
137 Ba	115	1	50.05	ppb	1.80	50	100.1	90 - 110	
205 Tl	165	1	50.79	ppb	1.68	50	101.6	90 - 110	
208 Pb	165	1	51.30	ppb	1.07	50	102.6	90 - 110	
232 Th	165	1	52.79	ppb	1.92	50	105.6	90 - 110	
238 U	165	1	52.18	ppb	1.27	50	104.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	324873	1.58	331435	98.0	30 - 120	
45 Sc	1	1285881	0.58	1316255	97.7	30 - 120	
72 Ge	1	581920	0.87	598993	97.1	30 - 120	
115 In	1	1678738	0.60	1669391	100.6	30 - 120	
165 Ho	1	2539785	0.68	2529503	100.4	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\221 CCB.D\221 CCB.D#
Date Acquired: Oct 2 2009 04:28 am
Operator: TEL
Sample Name: CCB
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 02 2009 04:24 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.009	ppb	291.23	1.00	
51 V	72	1	0.040	ppb	50.68	1.00	
52 Cr	72	1	0.023	ppb	62.65	1.00	
55 Mn	72	1	0.009	ppb	103.55	1.00	
59 Co	72	1	0.012	ppb	1.10	1.00	
60 Ni	72	1	0.000	ppb	4305.70	1.00	
63 Cu	72	1	0.103	ppb	12.10	1.00	
66 Zn	72	1	-1.290	ppb	1.13	1.00	
75 As	72	1	0.009	ppb	156.15	1.00	
78 Se	72	1	0.597	ppb	19.43	1.00	
95 Mo	72	1	0.023	ppb	120.78	1.00	
107 Ag	115	1	0.013	ppb	45.00	1.00	
111 Cd	115	1	0.017	ppb	17.68	1.00	
118 Sn	115	1	0.165	ppb	12.55	1.00	
121 Sb	115	1	0.085	ppb	18.25	1.00	
137 Ba	115	1	0.004	ppb	188.52	1.00	
205 Tl	165	1	0.035	ppb	20.06	1.00	
208 Pb	165	1	0.012	ppb	23.55	1.00	
232 Th	165	1	0.960	ppb	20.73	1.00	
238 U	165	1	0.018	ppb	13.57	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	324793	1.12	331435	98.0	30 - 120	
45 Sc	1	1287887	1.52	1316255	97.8	30 - 120	
72 Ge	1	594844	0.52	598993	99.3	30 - 120	
115 In	1	1672421	0.47	1669391	100.2	30 - 120	
165 Ho	1	2560393	0.60	2529503	101.2	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\222WASH.D\222WASH.D#
Date Acquired: Oct 2 2009 04:31 am
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 02 2009 04:24 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	1.184 ppb	13.93	1.30	
51 V	72	1	5.146 ppb	2.60	6.50	
52 Cr	72	1	2.027 ppb	0.35	2.60	
55 Mn	72	1	1.045 ppb	0.36	1.30	
59 Co	72	1	0.973 ppb	5.11	1.30	
60 Ni	72	1	2.137 ppb	3.42	2.60	
63 Cu	72	1	2.118 ppb	1.48	2.60	
66 Zn	72	1	9.344 ppb	2.31	13.00	
75 As	72	1	5.214 ppb	0.89	6.50	
78 Se	72	1	5.131 ppb	15.31	6.50	
95 Mo	72	1	1.955 ppb	5.47	2.60	
107 Ag	115	1	5.268 ppb	2.30	6.50	
111 Cd	115	1	1.050 ppb	1.94	1.30	
118 Sn	115	1	10.120 ppb	1.92	13.00	
121 Sb	115	1	1.949 ppb	0.98	2.60	
137 Ba	115	1	1.068 ppb	1.02	1.30	
205 Tl	165	1	1.087 ppb	2.59	1.30	
208 Pb	165	1	1.077 ppb	1.65	1.30	
232 Th	165	1	2.243 ppb	2.10	2.60	
238 U	165	1	1.093 ppb	1.19	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	325353	1.88	331435	98.2	30 - 120	
45 Sc	1	1288885	1.50	1316255	97.9	30 - 120	
72 Ge	1	595462	1.13	598993	99.4	30 - 120	
115 In	1	1683073	1.01	1669391	100.8	30 - 120	
165 Ho	1	2568625	0.67	2529503	101.5	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\223 BLK.D\223 BLK.D#
Date Acquired: Oct 2 2009 04:34 am
Operator: TEL
Sample Name: LLL0WB
Misc Info: BLANK 9271338 6020
Vial Number: 4101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Oct 02 2009 04:24 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	-0.018 ppb	0.00	2.00	
51 V	72	1	0.027 ppb	125.82	2.00	
52 Cr	72	1	0.100 ppb	9.34	2.00	
55 Mn	72	1	0.056 ppb	19.58	2.00	
59 Co	72	1	-0.009 ppb	0.16	2.00	
60 Ni	72	1	0.048 ppb	56.46	2.00	
63 Cu	72	1	0.079 ppb	51.38	2.00	
66 Zn	72	1	1.224 ppb	2.53	2.00	
75 As	72	1	0.018 ppb	17.59	2.00	
78 Se	72	1	0.275 ppb	88.06	2.00	
95 Mo	72	1	-0.008 ppb	75.16	2.00	
107 Ag	115	1	0.003 ppb	58.42	2.00	
111 Cd	115	1	0.005 ppb	54.45	2.00	
118 Sn	115	1	0.122 ppb	18.59	2.00	
121 Sb	115	1	0.034 ppb	13.33	2.00	
137 Ba	115	1	0.006 ppb	73.06	2.00	
205 Tl	165	1	0.018 ppb	24.51	2.00	
208 Pb	165	1	0.019 ppb	12.97	2.00	
232 Th	165	1	0.148 ppb	17.68	2.00	
238 U	165	1	0.002 ppb	33.49	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	315462	0.68	331435	95.2	30 - 120	
45 Sc	1	1255176	0.96	1316255	95.4	30 - 120	
72 Ge	1	577024	0.32	598993	96.3	30 - 120	
115 In	1	1629043	1.30	1669391	97.6	30 - 120	
165 Ho	1	2517644	0.68	2529503	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\224 LCS.D\224 LCS.D#
Date Acquired: Oct 2 2009 04:37 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLL0WC
Misc Info: LCS
Vial Number: 4102
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 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	41.64	3.80	40	104.1	80 - 120	
51 V	72	1	39.60	0.31	40	99.0	80 - 120	
52 Cr	72	1	40.09	0.83	40	100.2	80 - 120	
55 Mn	72	1	39.71	0.94	40	99.3	80 - 120	
59 Co	72	1	39.43	1.42	40	98.6	80 - 120	
60 Ni	72	1	40.11	1.07	40	100.3	80 - 120	
63 Cu	72	1	40.84	1.17	40	102.1	80 - 120	
66 Zn	72	1	37.70	0.46	40	94.3	80 - 120	
75 As	72	1	39.51	0.44	40	98.8	80 - 120	
78 Se	72	1	38.85	1.52	40	97.1	80 - 120	
95 Mo	72	1	40.21	0.65	40	100.5	80 - 120	
107 Ag	115	1	40.68	1.70	40	101.7	80 - 120	
111 Cd	115	1	40.00	1.37	40	100.0	80 - 120	
118 Sn	115	1	0.03	19.52	40	0.1	80 - 120	
121 Sb	115	1	40.51	1.95	40	101.3	80 - 120	
137 Ba	115	1	41.55	0.90	40	103.9	80 - 120	
205 Tl	165	1	40.81	1.70	40	102.0	80 - 120	
208 Pb	165	1	41.23	1.43	40	103.1	80 - 120	
232 Th	165	1	42.63	1.98	40	106.6	80 - 120	
238 U	165	1	42.13	1.68	40	105.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	312563	0.70	331435	94.3	30 - 120	
45 Sc	1	1246396	0.55	1316255	94.7	30 - 120	
72 Ge	1	561735	1.23	598993	93.8	30 - 120	
115 In	1	1617619	0.76	1669391	96.9	30 - 120	
165 Ho	1	2502656	1.11	2529503	98.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.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\AG100109.B\225AREF.D\225AREF.D#
Date Acquired:	Oct 2 2009 04:40 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LLG32 5X
Misc Info:	D9I250174
Vial Number:	4103
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Oct 02 2009 04:24 am
Sample Type:	AllRef
Dilution Factor:	5.00
Autodil Factor:	Undiluted
Final Dil Factor:	5.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.06	0.01	ppb	251.86	3600	
51 V	72	1	-566.00	-113.20	ppb	5.98	3600	
52 Cr	72	1	23,900.00	4780.00	ppb	1.18	3600	>LDR
55 Mn	72	1	10.44	2.09	ppb	1.10	3600	
59 Co	72	1	0.87	0.17	ppb	1.09	3600	
60 Ni	72	1	8.10	1.62	ppb	2.00	3600	
63 Cu	72	1	3.95	0.79	ppb	2.48	3600	
66 Zn	72	1	-6.51	-1.30	ppb	1.97	3600	
75 As	72	1	86.60	17.32	ppb	2.66	3600	
78 Se	72	1	7.94	1.59	ppb	39.52	3600	
95 Mo	72	1	23.50	4.70	ppb	1.06	3600	
107 Ag	115	1	0.20	0.04	ppb	24.79	3600	
111 Cd	115	1	-0.50	-0.10	ppb	122.73	3600	
118 Sn	115	1	-0.18	-0.04	ppb	51.56	3600	
121 Sb	115	1	0.27	0.05	ppb	10.13	3600	
137 Ba	115	1	44.08	8.82	ppb	1.11	3600	
205 Tl	165	1	0.33	0.07	ppb	14.01	3600	
208 Pb	165	1	0.14	0.03	ppb	20.89	3600	
232 Th	165	1	3.04	0.61	ppb	21.53	1000	
238 U	165	1	24.31	4.86	ppb	0.40	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300392	1.08	331435	90.6	30 - 120	
45 Sc	1	1242555	0.55	1316255	94.4	30 - 120	
72 Ge	1	531237	0.07	598993	88.7	30 - 120	
115 In	1	1468998	1.20	1669391	88.0	30 - 120	
165 Ho	1	2323398	0.44	2529503	91.9	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\AG100109.B\218CALB.D\218CALB.D#

1 :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\AG100109.B\226SDIL.D\226SDIL.D#
Date Acquired: Oct 2 2009 04:42 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32P25
Misc Info: SERIAL DILUTION
Vial Number: 4104
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: SDIL
Dilution Factor: 5.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG100109.B\225AREF.D\225AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb	RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	-0.01 ppb	192.97	0.00	-362.1	90 - 110	
51 V	72	1	-34.55 ppb	5.16	-22.64	152.6	90 - 110	
52 Cr	72	1	933.40 ppb	0.90	956.00	97.6	90 - 110	
55 Mn	72	1	0.45 ppb	7.94	0.42	108.0	90 - 110	
59 Co	72	1	0.04 ppb	10.51	0.03	115.1	90 - 110	
60 Ni	72	1	0.48 ppb	14.20	0.32	147.1	90 - 110	
63 Cu	72	1	0.80 ppb	7.10	0.16	509.5	90 - 110	
66 Zn	72	1	-0.97 ppb	2.32	-0.26	373.8	90 - 110	
75 As	72	1	3.34 ppb	0.72	3.46	96.3	90 - 110	
78 Se	72	1	2.09 ppb	28.32	0.32	657.5	90 - 110	
95 Mo	72	1	0.83 ppb	9.07	0.94	88.7	90 - 110	
107 Ag	115	1	0.01 ppb	92.94	0.01	102.8	90 - 110	
111 Cd	115	1	0.00 ppb	120.00	-0.02	19.8	90 - 110	
118 Sn	115	1	-0.01 ppb	124.31	-0.01	140.9	90 - 110	
121 Sb	115	1	0.00 ppb	99.55	0.01	33.5	90 - 110	
137 Ba	115	1	1.76 ppb	1.49	1.76	99.7	90 - 110	
205 Tl	165	1	0.02 ppb	15.93	0.01	163.7	90 - 110	
208 Pb	165	1	0.00 ppb	20.51	0.01	86.6	90 - 110	
232 Th	165	1	0.08 ppb	14.73	0.12	68.3	90 - 110	
238 U	165	1	0.99 ppb	0.97	0.97	102.2	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	313885	0.99	331435	94.7	30 - 120	
45 Sc	1	1242020	1.43	1316255	94.4	30 - 120	
72 Ge	1	564561	0.50	598993	94.3	30 - 120	
115 In	1	1571637	0.27	1669391	94.1	30 - 120	
165 Ho	1	2476735	0.35	2529503	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\AG100109.B\218CALB.D\218CALB.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: 10/02/09 09:00:25

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LLG32P25** | Serial Dilution: **25.00** | Sample Dilution: **5.00**

Instrument: **Agilent7500**
File: AG100109 # 226
Acquired: 10/02/2009 04:42:00
Calibrated: 10/02/2009 04:20:00

Channel 272
Method 6020_
ICPMS_024

Matrix: AQUEOUS
Units: ug/L

CASN	Analyte Name	M/S	Area	Dilution	Sample	%Diff.	MDL	Flag	Q
7440-41-7	Beryllium	9	3	-0.20910	0.05773	462		*	
7440-62-2	Vanadium	51	-251052	-863.50	-566.10			*	
7440-47-3	Chromium	52	6743280	23335	23900	2.36		*	
7439-96-5	Manganese	55	4254	11.275	10.440	8.00		*	
7440-48-4	Cobalt	59	483	0.99850	0.86770	15.1		*	
7440-02-0	Nickel	60	1047	11.910	8.0970	47.1		*	
7440-50-8	Copper	63	5468	20.110	3.9470	410		*	
7440-66-6	Zinc	66	1235	-24.335	-6.5110			*	
7440-38-2	Arsenic	75	3035	83.400	86.630	3.73	0.21	NC	☑
7782-49-2	Selenium	78	1080	52.200	7.9330	558	0.70	NC	☑
7439-98-7	Molybdenum	95	2184	20.855	23.500	11.3		*	
7440-22-4	Silver	107	67	0.20310	0.19760	2.78		*	
7440-43-9	Cadmium	111	-6	-0.09850	-0.49860			*	
7440-31-5	Tin	118	370	-0.25505	-0.18090			*	
7440-36-0	Antimony	121	97	0.08920	0.26640	66.5		*	
7440-39-3	Barium	137	3318	43.940	44.080	0.318		*	
7440-28-0	Thallium	205	367	0.53400	0.32630	63.7		*	
7439-92-1	Lead	208	296	0.12085	0.13960	13.4		*	
7440-61-1	Uranium	238	19189	24.845	24.310	2.20		*	
7440-29-1	Thorium	232	1664	2.0770	3.0420	31.7		*	
7439-93-2	Lithium	6			0			*	
7440-20-2	Scandium	45			0			*	
7440-74-6	Indium	115			0			*	
7440-56-4	Germanium	72			0			*	
7440-60-0	Holmium	165			0			*	

* Analyte not requested for this batch, no MDL

NC : Serial dilution concentration < 100 X MDL

E : Difference greater than Limit (10%)

Reviewed by: Date:

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\227PDS.D\227PDS.D#
Date Acquired: Oct 2 2009 04:45 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32Z
Misc Info: POST DIGESTION SPIKE
Vial Number: 4105
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 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	208.80	0.01	ppb	1.42	200	104.4	75 - 125	
51 V	72	1	95.15	-113.20	ppb	0.86	200	109.6	75 - 125	
52 Cr	72	1	4943.00	4780.00	ppb	1.49	200	99.3	75 - 125	
55 Mn	72	1	199.00	2.09	ppb	2.54	200	98.5	75 - 125	
59 Co	72	1	191.90	0.17	ppb	2.64	200	95.9	75 - 125	
60 Ni	72	1	185.20	1.62	ppb	2.70	200	91.9	75 - 125	
63 Cu	72	1	185.20	0.79	ppb	0.40	200	92.2	75 - 125	
66 Zn	72	1	188.00	-1.30	ppb	1.01	200	94.6	75 - 125	
75 As	72	1	217.10	17.32	ppb	1.79	200	99.9	75 - 125	
78 Se	72	1	194.40	1.59	ppb	2.83	200	96.4	75 - 125	
95 Mo	72	1	210.60	4.70	ppb	1.04	200	102.9	75 - 125	
107 Ag	115	1	38.72	0.04	ppb	1.89	50	77.4	75 - 125	
111 Cd	115	1	186.50	-0.10	ppb	3.06	200	93.3	75 - 125	
118 Sn	115	1	176.10	-0.04	ppb	2.16	200	88.1	75 - 125	
121 Sb	115	1	194.30	0.05	ppb	1.31	200	97.1	75 - 125	
137 Ba	115	1	207.00	8.81	ppb	1.90	200	99.1	75 - 125	
205 Tl	165	1	178.10	0.07	ppb	1.11	200	89.0	75 - 125	
208 Pb	165	1	174.80	0.03	ppb	1.15	200	87.4	75 - 125	
232 Th	165	1	0.06	0.61	ppb	14.09	200	0.0	75 - 125	
238 U	165	1	192.30	4.86	ppb	0.23	200	93.9	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	298185	0.45	331435	90.0	30 - 120	
45 Sc	1	1242944	0.22	1316255	94.4	30 - 120	
72 Ge	1	520652	1.41	598993	86.9	30 - 120	
115 In	1	1468348	1.60	1669391	88.0	30 - 120	
165 Ho	1	2348937	0.39	2529503	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\AG100109.B\218CALB.D\218CALB.D#

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

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 10/02/09 09:00:29

Department: 090 (Metals)

Source: Spreadsheet

Sample: **LLG32Z**

Spike Dilution: **1.00**

Sample Dilution: **5.00**

Instrument: **Agilent7500**
File: AG100109 # 227
Acquired: 10/02/2009 04:45:00
Calibrated: 10/02/2009 04:20:00

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	71047	208.80	0.01155	104	200		☑
7440-62-2	Vanadium	51	636639	95.150	-113.22	47.6	200		☑
7440-47-3	Chromium	52	32923000	4943.0	4780.0	81.5	200	*	☐
7439-96-5	Manganese	55	1511520	199.00	2.0880	98.5	200		☑
7440-48-4	Cobalt	59	1611790	191.90	0.17354	95.9	200		☑
7440-02-0	Nickel	60	345979	185.20	1.6194	91.8	200		☑
7440-50-8	Copper	63	825824	185.20	0.78940	92.2	200		☑
7440-66-6	Zinc	66	177843	188.00	-1.3022	94.0	200		☑
7440-38-2	Arsenic	75	180181	217.10	17.326	99.9	200		☑
7782-49-2	Selenium	78	29776	194.40	1.5866	96.4	200		☑
7439-98-7	Molybdenum	95	466777	210.60	4.7000	103	200		☐
7440-22-4	Silver	107	240119	38.720	0.03952	77.4	50.0		☐
7440-43-9	Cadmium	111	222841	186.50	-0.09972	93.2	200		☑
7440-31-5	Tin	118	607444	176.10	-0.03618	88.1	200		☐
7440-36-0	Antimony	121	766910	194.30	0.05328	97.1	200		☑
7440-39-3	Barium	137	360632	207.00	8.8160	99.1	200		☑
7440-28-0	Thallium	205	2236300	178.10	0.06526	89.0	200		☑
7439-92-1	Lead	208	2975230	174.80	0.02792	87.4	200		☑
7440-61-1	Uranium	238	3514710	192.30	4.8620	93.7	200		☑
7440-29-1	Thorium	232	1130	0.05667	0.60840				
7439-93-2	Lithium	6			0				
7440-20-2	Scandium	45			0				
7440-74-6	Indium	115			0				
7440-56-4	Germanium	72			0				
7440-60-0	Holmium	165			0				

Reviewed by: Date:

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\228_MS.D\228_MS.D#
Date Acquired: Oct 2 2009 04:48 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32S 5X
Misc Info: MATRIX SPIKE
Vial Number: 4106
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: MS
Prep Dil. Factor: 5.00
Autodil Factor: Undiluted
Final Dil Factor: 5.00

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	8.69	0.01	ppb	7.62	40	21.7	50 - 150	
51 V	72	1	-103.60	-113.20	ppb	8.51	40	141.5	50 - 150	
52 Cr	72	1	4755.00	4780.00	ppb	2.18	40	98.7	50 - 150	
55 Mn	72	1	9.75	2.09	ppb	0.46	40	23.2	50 - 150	
59 Co	72	1	7.73	0.17	ppb	1.80	40	19.2	50 - 150	
60 Ni	72	1	9.13	1.62	ppb	1.43	40	21.9	50 - 150	
63 Cu	72	1	8.87	0.79	ppb	1.82	40	21.7	50 - 150	
66 Zn	72	1	6.22	-1.30	ppb	0.88	40	16.1	50 - 150	
75 As	72	1	25.39	17.32	ppb	0.96	40	44.3	50 - 150	
78 Se	72	1	10.53	1.59	ppb	5.40	40	25.3	50 - 150	
95 Mo	72	1	13.15	4.70	ppb	1.19	40	29.4	50 - 150	
107 Ag	115	1	7.17	0.04	ppb	1.25	40	17.9	50 - 150	
111 Cd	115	1	7.62	-0.10	ppb	1.12	40	19.1	50 - 150	
118 Sn	115	1	0.34	-0.04	ppb	13.24	40	0.9	50 - 150	
121 Sb	115	1	8.31	0.05	ppb	1.66	40	20.7	50 - 150	
137 Ba	115	1	16.99	8.81	ppb	1.67	40	34.8	50 - 150	
205 Tl	165	1	7.31	0.07	ppb	0.44	40	18.2	50 - 150	
208 Pb	165	1	7.27	0.03	ppb	1.45	40	18.2	50 - 150	
232 Th	165	1	7.88	0.61	ppb	1.15	40	19.4	50 - 150	
238 U	165	1	12.75	4.86	ppb	0.99	40	28.4	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	303565	0.33	331435	91.6	30 - 120	
45 Sc	1	1237389	1.30	1316255	94.0	30 - 120	
72 Ge	1	532370	0.70	598993	88.9	30 - 120	
115 In	1	1485899	1.27	1669391	89.0	30 - 120	
165 Ho	1	2360147	0.38	2529503	93.3	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\229 MSD.D\229 MSD.D#
Date Acquired: Oct 2 2009 04:51 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLG32D 5X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 4107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: MSD
Dilution Factor: 5.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG100109.B\228 MS.D\228 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	8.31	ppb	6.40	8.69	4.47	20	
51 V	72	1	-102.20	ppb	22.39	-103.60	-1.36	20	
52 Cr	72	1	4853.00	ppb	1.18	4755.00	2.04	20	
55 Mn	72	1	9.84	ppb	0.53	9.75	0.92	20	
59 Co	72	1	7.97	ppb	0.37	7.72	3.11	20	
60 Ni	72	1	9.08	ppb	1.89	9.13	0.52	20	
63 Cu	72	1	9.05	ppb	0.30	8.87	2.03	20	
66 Zn	72	1	6.81	ppb	0.97	6.22	9.09	20	
75 As	72	1	25.80	ppb	1.92	25.39	1.60	20	
78 Se	72	1	12.12	ppb	8.01	10.53	14.04	20	
95 Mo	72	1	13.20	ppb	2.08	13.15	0.38	20	
107 Ag	115	1	7.35	ppb	2.52	7.17	2.56	20	
111 Cd	115	1	7.70	ppb	1.79	7.62	1.11	20	
118 Sn	115	1	0.11	ppb	40.10	0.34	104.07	20	
121 Sb	115	1	8.37	ppb	0.29	8.31	0.70	20	
137 Ba	115	1	17.06	ppb	0.31	16.99	0.41	20	
205 Tl	165	1	7.48	ppb	1.11	7.31	2.38	20	
208 Pb	165	1	7.47	ppb	1.14	7.27	2.67	20	
232 Th	165	1	8.21	ppb	1.60	7.88	4.09	20	
238 U	165	1	12.91	ppb	0.68	12.75	1.25	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299847	0.40	331435	90.5	30 - 120	
45 Sc	1	1241916	1.11	1316255	94.4	30 - 120	
72 Ge	1	530855	0.33	598993	88.6	30 - 120	
115 In	1	1482786	0.44	1669391	88.8	30 - 120	
165 Ho	1	2351233	0.64	2529503	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\230SMPL.D\230SMPL.D#
Date Acquired: Oct 2 2009 04:53 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLKFN
Misc Info: D9I260177
Vial Number: 4108
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
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	1120.90	3600	
51 V	72	1	0.04	0.04	ppb	82.21	3600	
52 Cr	72	1	1.24	1.24	ppb	8.13	3600	
55 Mn	72	1	0.24	0.24	ppb	13.01	3600	
59 Co	72	1	0.07	0.07	ppb	24.32	3600	
60 Ni	72	1	0.02	0.02	ppb	42.60	3600	
63 Cu	72	1	1.08	1.08	ppb	7.08	3600	
66 Zn	72	1	1.07	1.07	ppb	9.08	3600	
75 As	72	1	0.00	0.00	ppb	206.28	3600	
78 Se	72	1	1.99	1.99	ppb	38.97	3600	
95 Mo	72	1	-0.01	-0.01	ppb	168.91	3600	
107 Ag	115	1	0.01	0.01	ppb	50.69	3600	
111 Cd	115	1	0.01	0.01	ppb	137.25	3600	
118 Sn	115	1	0.03	0.03	ppb	41.58	3600	
121 Sb	115	1	0.03	0.03	ppb	35.34	3600	
137 Ba	115	1	0.05	0.05	ppb	30.30	3600	
205 Tl	165	1	0.01	0.01	ppb	19.67	3600	
208 Pb	165	1	0.01	0.01	ppb	26.74	3600	
232 Th	165	1	0.24	0.24	ppb	27.90	1000	
238 U	165	1	0.01	0.01	ppb	12.65	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	305392	0.47	331435	92.1	30 - 120	
45 Sc	1	1203066	0.94	1316255	91.4	30 - 120	
72 Ge	1	554930	0.27	598993	92.6	30 - 120	
115 In	1	1589672	0.51	1669391	95.2	30 - 120	
165 Ho	1	2475887	0.64	2529503	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\AG100109.B\218CALB.D\218CALB.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\AG100109.B\231SMPL.D\231SMPL.D#
Date Acquired: Oct 2 2009 04:56 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLKFP 5X
Misc Info: D9I260178
Vial Number: 4109
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: SA
Dilution Factor: 5.00
Autodil Factor: Undiluted
Final Dil Factor: 5.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.01	0.00	ppb	676.03	3600	
51 V	72	1	-480.35	-96.07	ppb	5.17	3600	
52 Cr	72	1	20,880.00	4176.00	ppb	0.80	3600	>LDR
55 Mn	72	1	2.44	0.49	ppb	3.25	3600	
59 Co	72	1	0.83	0.17	ppb	7.26	3600	
60 Ni	72	1	7.42	1.48	ppb	2.98	3600	
63 Cu	72	1	12.32	2.46	ppb	2.83	3600	
66 Zn	72	1	304.40	60.88	ppb	0.46	3600	
75 As	72	1	80.20	16.04	ppb	0.80	3600	
78 Se	72	1	24.96	4.99	ppb	7.27	3600	
95 Mo	72	1	24.85	4.97	ppb	2.88	3600	
107 Ag	115	1	0.13	0.03	ppb	30.94	3600	
111 Cd	115	1	0.15	0.03	ppb	144.19	3600	
118 Sn	115	1	-0.02	0.00	ppb	146.40	3600	
121 Sb	115	1	0.18	0.04	ppb	8.93	3600	
137 Ba	115	1	53.90	10.78	ppb	0.78	3600	
205 Tl	165	1	0.18	0.04	ppb	1.54	3600	
208 Pb	165	1	0.50	0.10	ppb	4.39	3600	
232 Th	165	1	0.14	0.03	ppb	7.96	1000	
238 U	165	1	22.83	4.57	ppb	1.04	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	289172	0.73	331435	87.2	30 - 120	
45 Sc	1	1218771	1.55	1316255	92.6	30 - 120	
72 Ge	1	522806	0.76	598993	87.3	30 - 120	
115 In	1	1462108	0.59	1669391	87.6	30 - 120	
165 Ho	1	2336026	0.59	2529503	92.4	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\AG100109.B\218CALB.D\218CALB.D#

1 :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\AG100109.B\232SMPL.D\232SMPL.D#
Date Acquired: Oct 2 2009 04:59 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LLKFR 5X
Misc Info: D9I260178
Vial Number: 4110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Oct 02 2009 04:24 am
Sample Type: SA
Dilution Factor: 5.00
Autodil Factor: Undiluted
Final Dil Factor: 5.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	-0.04	-0.01	ppb	228.12	3600	
51 V	72	1	-539.00	-107.80	ppb	21.94	3600	
52 Cr	72	1	20,990.00	4198.00	ppb	1.02	3600	>LDR
55 Mn	72	1	2.45	0.49	ppb	8.08	3600	
59 Co	72	1	0.84	0.17	ppb	6.95	3600	
60 Ni	72	1	7.51	1.50	ppb	7.22	3600	
63 Cu	72	1	11.83	2.37	ppb	4.72	3600	
66 Zn	72	1	-6.27	-1.25	ppb	3.01	3600	
75 As	72	1	79.80	15.96	ppb	0.48	3600	
78 Se	72	1	18.94	3.79	ppb	7.30	3600	
95 Mo	72	1	25.69	5.14	ppb	1.67	3600	
107 Ag	115	1	0.13	0.03	ppb	16.08	3600	
111 Cd	115	1	-0.12	-0.02	ppb	267.59	3600	
118 Sn	115	1	-0.14	-0.03	ppb	82.38	3600	
121 Sb	115	1	0.10	0.02	ppb	13.66	3600	
137 Ba	115	1	55.70	11.14	ppb	1.75	3600	
205 Tl	165	1	0.17	0.03	ppb	4.07	3600	
208 Pb	165	1	0.19	0.04	ppb	9.00	3600	
232 Th	165	1	0.07	0.01	ppb	9.44	1000	
238 U	165	1	22.86	4.57	ppb	2.04	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	290302	0.85	331435	87.6	30 - 120	
45 Sc	1	1220369	1.01	1316255	92.7	30 - 120	
72 Ge	1	525750	1.20	598993	87.8	30 - 120	
115 In	1	1464948	0.26	1669391	87.8	30 - 120	
165 Ho	1	2336840	1.23	2529503	92.4	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\AG100109.B\218CALB.D\218CALB.D#

1 :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\AG100109.B\233 CCV.D\233 CCV.D#
Date Acquired: Oct 2 2009 05:02 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: Oct 02 2009 04:24 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	1.96	50	102.7	90 - 110	
51 V	72	1	49.23	ppb	1.30	50	98.5	90 - 110	
52 Cr	72	1	50.25	ppb	0.87	50	100.5	90 - 110	
55 Mn	72	1	48.72	ppb	0.69	50	97.4	90 - 110	
59 Co	72	1	48.70	ppb	0.61	50	97.4	90 - 110	
60 Ni	72	1	50.43	ppb	0.27	50	100.9	90 - 110	
63 Cu	72	1	51.63	ppb	1.62	50	103.3	90 - 110	
66 Zn	72	1	49.86	ppb	1.14	50	99.7	90 - 110	
75 As	72	1	50.34	ppb	0.46	50	100.7	90 - 110	
78 Se	72	1	52.29	ppb	0.09	50	104.6	90 - 110	
95 Mo	72	1	50.01	ppb	0.66	50	100.0	90 - 110	
107 Ag	115	1	49.98	ppb	1.19	50	100.0	90 - 110	
111 Cd	115	1	49.33	ppb	0.91	50	98.7	90 - 110	
118 Sn	115	1	49.46	ppb	0.54	50	98.9	90 - 110	
121 Sb	115	1	49.75	ppb	0.71	50	99.5	90 - 110	
137 Ba	115	1	50.20	ppb	0.16	50	100.4	90 - 110	
205 Tl	165	1	50.47	ppb	0.59	50	100.9	90 - 110	
208 Pb	165	1	50.79	ppb	0.94	50	101.6	90 - 110	
232 Th	165	1	50.58	ppb	3.09	50	101.2	90 - 110	
238 U	165	1	51.00	ppb	0.49	50	102.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	307479	0.81	331435	92.8	30 - 120	
45 Sc	1	1252348	1.28	1316255	95.1	30 - 120	
72 Ge	1	569675	0.54	598993	95.1	30 - 120	
115 In	1	1669353	0.41	1669391	100.0	30 - 120	
165 Ho	1	2563883	0.45	2529503	101.4	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.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\AG100109.B\234 CCB.D\234 CCB.D#
Date Acquired: Oct 2 2009 05:05 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: Oct 02 2009 04:24 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	0.021	ppb	80.86	1.00	
51 V	72	1	0.025	ppb	117.01	1.00	
52 Cr	72	1	0.298	ppb	19.34	1.00	
55 Mn	72	1	0.007	ppb	243.85	1.00	
59 Co	72	1	0.012	ppb	60.71	1.00	
60 Ni	72	1	0.024	ppb	43.13	1.00	
63 Cu	72	1	2.373	ppb	2.39	1.00	Fail
66 Zn	72	1	-1.250	ppb	6.48	1.00	
75 As	72	1	0.012	ppb	57.55	1.00	
78 Se	72	1	4.101	ppb	9.49	1.00	Fail ok nlc 5
95 Mo	72	1	0.012	ppb	91.95	1.00	
107 Ag	115	1	0.019	ppb	15.82	1.00	
111 Cd	115	1	0.009	ppb	136.25	1.00	
118 Sn	115	1	0.112	ppb	8.96	1.00	
121 Sb	115	1	0.063	ppb	8.25	1.00	
137 Ba	115	1	0.003	ppb	328.23	1.00	
205 Tl	165	1	0.035	ppb	8.12	1.00	
208 Pb	165	1	0.014	ppb	14.46	1.00	
232 Th	165	1	0.897	ppb	20.91	1.00	
238 U	165	1	0.019	ppb	7.74	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	302838	0.67	331435	91.4	30 - 120	
45 Sc	1	1227814	1.34	1316255	93.3	30 - 120	
72 Ge	1	568484	0.68	598993	94.9	30 - 120	
115 In	1	1642991	0.25	1669391	98.4	30 - 120	
165 Ho	1	2551490	1.15	2529503	100.9	30 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
Tune File# 2 C:\ICPCHEM\1\7500\
Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\AG100109.B\218CALB.D\218CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG100109.B\235WASH.D\235WASH.D#
Date Acquired: Oct 2 2009 05:07 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: Oct 02 2009 04:24 am
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.952 ppb	27.86	1.30	
51 V	72	1	5.001 ppb	3.17	6.50	
52 Cr	72	1	2.171 ppb	3.43	2.60	
55 Mn	72	1	1.017 ppb	5.00	1.30	
59 Co	72	1	0.971 ppb	1.72	1.30	
60 Ni	72	1	2.024 ppb	5.04	2.60	
63 Cu	72	1	4.471 ppb	4.94	2.60	
66 Zn	72	1	9.178 ppb	1.35	13.00	
75 As	72	1	5.155 ppb	2.53	6.50	
78 Se	72	1	7.822 ppb	19.71	6.50	
95 Mo	72	1	1.969 ppb	4.85	2.60	
107 Ag	115	1	5.253 ppb	3.33	6.50	
111 Cd	115	1	1.047 ppb	6.26	1.30	
118 Sn	115	1	10.250 ppb	3.26	13.00	
121 Sb	115	1	1.942 ppb	2.44	2.60	
137 Ba	115	1	1.031 ppb	2.73	1.30	
205 Tl	165	1	1.107 ppb	1.51	1.30	
208 Pb	165	1	1.102 ppb	1.05	1.30	
232 Th	165	1	2.224 ppb	2.07	2.60	
238 U	165	1	1.101 ppb	1.56	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298556	0.85	331435	90.1	30 - 120	
45 Sc	1	1209189	1.24	1316255	91.9	30 - 120	
72 Ge	1	567608	1.14	598993	94.8	30 - 120	
115 In	1	1622972	0.97	1669391	97.2	30 - 120	
165 Ho	1	2512918	0.03	2529503	99.3	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\AG100109.B\218CALB.D\218CALB.D#

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